```
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
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```
HH      HH  EEEEEEEEEE    AAAAAA    DDDDDDDD    EEEEEEEEEE  RRRRRRRR
HH      HH  EEEEEEEEEE    AAAAAA    DDDDDDDD    EEEEEEEEEE  RRRRRRRR
HH      HH  EE           AA      AA  DD      DD  EE          RR      RR
HH      HH  EE           AA      AA  DD      DD  EE          RR      RR
HH      HH  EE           AA      AA  DD      DD  EE          RR      RR
HH      HH  EE           AA      AA  DD      DD  EE          RR      RR
HHHHHHHHHH  EEEEEEEE     AA      AA  DD      DD  EEEEEEEE    RRRRRRRR
HHHHHHHHHH  EEEEEEEE     AA      AA  DD      DD  EEEEEEEE    RRRRRRRR
HH      HH  EE           AAAAAAAAAA  DD      DD  EE          RR  RR
HH      HH  EE           AAAAAAAAAA  DD      DD  EE          RR  RR
HH      HH  EE           AA      AA  DD      DD  EE          RR    RR        ....
HH      HH  EE           AA      AA  DD      DD  EE          RR    RR        ....
HH      HH  EEEEEEEEEE   AA      AA  DDDDDDDD    EEEEEEEEEE  RR      RR      ....
HH      HH  EEEEEEEEEE   AA      AA  DDDDDDDD    EEEEEEEEEE  RR      RR      ....

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
```

```
%TITLE 'HEADER -- handle headers (titles) for examples, figures, tables.'
MODULE header ( IDENT = 'V04-000'
                %BLISS32 [, ADDRESSING_MODE (EXTERNAL    = LONG_RELATIVE,
                                             NONEXTERNAL = LONG_RELATIVE)]
                ) =
BEGIN
!
!****************************************************************************
!*                                                                          *
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!*                                                                          *
!****************************************************************************
!

!++
! FACILITY:     DSR (Digital Standard RUNOFF) / DSRPLUS
!
! ABSTRACT:
!
!       Handles headers (titles) for examples, figures, tables.
!
! ENVIRONMENT:  Transportable
!
! AUTHOR:       Keith A. Dawson        CREATION DATE:  18-April-1982

```

```
;    44          0043  1 %SBTTL 'Revision History'
;    45          0044  1 ! MODIFIED BY:
;    46          0045  1 !
;    47          0046  1 !       016     KFA00016        Ken Alden       04-Aug-1983
;    48          0047  1 !               Added logic to prevent user from enabling a chapter
;    49          0048  1 !                or appendix if already in the type of page numbering
;    50          0049  1 !                scheme.
;    51          0050  1 !               Added handling for disable appendix.
;    52          0051  1 !
;    53          0052  1 !       015     KFA00015        Ken Alden       04-Aug-1983
;    54          0053  1 !               Because I replaced this module in CMS, this minor
;    55          0054  1 !                change makes it a new ident.  Basically all I did
;    56          0055  1 !                was make the enable feature bump the page counters
;    57          0056  1 !                as actually doing a chapter/appendix would have done.
;    58          0057  1 !
;    59          0058  1 !       014     KFA00014        Ken Alden       03-Aug-1983
;    60          0059  1 !               Added the .DIS/ENABLE CHAPTER functionality.
;    61          0060  1 !
;    62          0061  1 !       013     RER00013        Ron Randall     7-Jul-1983                                      ; F
;    63          0062  1 !               Fixed footnote outputting bug.
;    64          0063  1 !
;    65          0064  1 !       012     RER00012        Ron Randall     14-Jun-1983                                     ;
;    66          0065  1 !               Added logic to prevent HEADER from initiating a chapter
;    67          0066  1 !               or appendix until all pending footnotes are output.
;    68          0067  1 !
;    69          0068  1 !       011     KFA00011        Ken Alden       9-Jun-1983
;    70          0069  1 !               Fixed .NO CHAPTER bug by adding a RETURN statement.
;    71          0070  1 !
;    72          0071  1 !       010     KAD0010         Keith Dawson    18-May-1983
;    73          0072  1 !               Added support for FLIP Phase 1. Existing FLIP books were
;    74          0073  1 !                 built using a DSRFLIP and BIND that have a 4-bit
;    75          0074  1 !                 ($TINY_INTEGER) field for TOCTXT_CODE. This field is too
;    76          0075  1 !                 small for new DSRPLUS table-of-contents data types. FLIP
;    77          0076  1 !                 Phase 2 support will have to use new, not-yet-defined fields
;    78          0077  1 !                 for these data types.
;    79          0078  1 !
;    80          0079  1 !       009     KFA00009        Ken Alden       3-May-1983
;    81          0080  1 !               Added the external calls for pagen and npagen.
;    82          0081  1 !
;    83          0082  1 !       008     REM00008        Ray Marshall    April-1983
;    84          0083  1 !               Made many changes to allow chapters and appendices to be
;    85          0084  1 !                 controlled from the ECC data structures for DSR as they have
;    86          0085  1 !                 been for some time now for DSRPLUS.  This was done to decouple
;    87          0086  1 !                 these two forms of output from each other.
;    88          0087  1 !
;    89          0088  1 !       007     KFA00007        Ken Alden       28-Mar-1983
;    90          0089  1 !               Testpage amounts have now been refigured and when
;    91          0090  1 !                 the user says "TP = 0" that is what they will get!
;    92          0091  1 !
;    93          0092  1 !       006     RER00006        Ron Randall     07-Mar-1983
;    94          0093  1 !               Global edit of all modules. Updated module names, idents,
;    95          0094  1 !               copyright dates. Changed require files to BLISS library.
;    96          0095  1 !--
;    97          0096  1
```

```
;    99          0097  1 %SBTTL 'Module Level Declarations'
;   100          0098  1 !
;   101          0099  1 ! TABLE OF CONTENTS:
;   102          0100  1 !
;   103          0101  1 FORWARD ROUTINE
;   104          0102  1     header      : NOVALUE,      !Generates calls to OUTHDR for headers
;   105          0103  1                                 ! (counters/captions) of header levels,
;   106          0104  1                                 ! examples, figures, and tables.
;   107          0105  1     set_ecc     : NOVALUE;      !Sets values of some (common) OUTHDR formals.
;   108          0106  1 !
;   109          0107  1 ! INCLUDE FILES:
;   110          0108  1 !
;   111          0109  1 LIBRARY 'NXPORT:XPORT';                 ! XPORT Library
;   112          0110  1 REQUIRE 'REQ:RNODEF';                   ! RUNOFF variant definitions
;   113          0241  1
;   114        U 0242  1 %IF DSRPLUS %THEN
;   115        U 0243  1 LIBRARY 'REQ:DPLLIB';                 ! DSRPLUS BLISS Library
;   116          0244  1 %ELSE
;   117          0245  1 LIBRARY 'REQ:DSRLIB';                 ! DSR BLISS Library
;   118          0246  1 %FI
;   119          0247  1
;   120          0248  1 !
;   121          0249  1 ! OWN STORAGE:
;   122          0250  1 !
;   123          0251  1 OWN
;   124          0252  1         lines_before,           lines_after,            test_page_amount,
;   125          0253  1         counter_major_type,     counter_minor_type,
;   126          0254  1         counter_value,          counter_display_code,   counter_spaces_after,
;   127          0255  1         counter_pre_string_length,      counter_pre_string_ptr,
;   128          0256  1         counter_post_string_length,     counter_post_string_ptr,
;   129          0257  1         caption_major_type,     caption_minor_type,     caption_case,
;   130          0258  1         caption_is_centered,    caption_is_flush_right, caption_is_run_in,
;   131          0259  1         caption_is_bold,        caption_is_underlined,  put_into_mem_file,
;   132          0260  1         autosubtitle,           brn_open,               break_before_caption,
;   133          0261  1         lines_between,          new_page,               startodd,
;   134          0262  1         tocpage;
;   135          0263  1 !
;   136          0264  1 ! EXTERNAL REFERENCES:
;   137          0265  1 !
;   138          0266  1 EXTERNAL LITERAL
;   139          0267  1     rnfinm;
;   140          0268  1
;   141          0269  1 EXTERNAL
;   142          0270  1     ecc         : $ecc_blockvector,
;   143          0271  1     fnct        : fnct_definition,
;   144          0272  1     gca         : gca_definition,
;   145          0273  1     hct         : hct_definition,
;   146          0274  1     hlc         : hlc_definition,
;   147          0275  1     hllist      : counted_list,
;   148          0276  1     ira         : fixed_string,
;   149          0277  1     numprm      : numprm_define,
;   150          0278  1
;   151        U 0279  1 %IF dsrplus %THEN
;   152        U 0280  1     npagen      : page_definition,
;   153        U 0281  1     pagen       : page_definition,
;   154          0282  1 %FI
;   155          0283  1
```

```
;  156          0284  1     pdt         : ref pdt_definition,
;  157          0285  1     sca         : sca_definition;
;  158          0286  1
;  159          0287  1 EXTERNAL ROUTINE
;  160          0288  1     erma,
;  161          0289  1     outcha,
;  162          0290  1     outhdr,
;  163          0291  1     botpag,
;  164          0292  1     foobot,
;  165          0293  1     toppag,
;  166          0294  1
;  167        U 0295  1 %IF DSRPLUS %THEN
;  168        U 0296  1     puttpg,
;  169          0297  1 %FI
;  170          0298  1     skpsep;
;  171          0299  1
```

```
;  173     0300  1 %SBTTL 'HEADER -- set up call to OUTHDR to generate (number and) header'
;  174     0301  1 GLOBAL ROUTINE header (handler) : NOVALUE =
;  175     0302  1
;  176     0303  1 !++
;  177     0304  1 ! FUNCTIONAL DESCRIPTION:
;  178     0305  1 !
;  179     0306  1 !       HEADER sets up the formal arguments to call OUTHDR and generate a
;  180     0307  1 !       header (in the output and/or binary file) for .HEADER <any> commands,
;  181     0308  1 !       where <any> is LEVEL, EXAMPLE, FIGURE, or TABLE.
;  182     0309  1 !
;  183     0310  1 ! FORMAL PARAMETERS:
;  184     0311  1 !
;  185     0312  1 !       handler - Defines which sort of header is to be generated.
;  186     0313  1 !
;  187     0314  1 ! IMPLICIT INPUTS:      None
;  188     0315  1 !
;  189     0316  1 ! IMPLICIT OUTPUTS:     None
;  190     0317  1 !
;  191     0318  1 ! ROUTINE VALUE:
;  192     0319  1 ! COMPLETION CODES:     None
;  193     0320  1 !
;  194     0321  1 ! SIDE EFFECTS:         None
;  195     0322  1 !--
;  196     0323  1
;  197     0324  2     BEGIN
;  198     0325  2     !
;  199     0326  2     ! Preset those OUTHDR formals that are common,
;  200     0327  2     ! or that are not yet implemented.
;  201     0328  2     !
;  202     0329  2     counter_major_type = maj_runoff;
;  203     0330  2     caption_major_type = maj_runoff;
;  204     0331  2     put_into_mem_file  = true;          ! NYI!!**DEBUG**!!
;  205     0332  2     brn_open = .gca_btc;
;  206     0333  2
;  207     0334  2     SELECT .handler OF
;  208     0335  2         SET
;  209     0336  2
;  210     0337  2         [h_header_level, h_set_level] :
;  211     0338  2             !
;  212     0339  2             ! Process the number given as a parameter on the .HL or
;  213     0340  2             !
;  214     0341  3             BEGIN
;  215     0342  3             !
;  216     0343  3             ! .SET LEVEL command
;  217     0344  3             !
;  218     0345  3             IF  .num_sign NEQ 0
;  219     0346  3             THEN
;  220     0347  3                 !
;  221     0348  3                 ! Process a relative header level.
;  222     0349  3                 !
;  223     0350  3                 num_value = .hllist [cl_index] + .num_value
;  224     0351  3             ELSE
;  225     0352  3
;  226     0353  3                 IF  .num_length EQL 0
;  227     0354  3                 THEN
;  228     0355  3                     !
;  229     0356  3                     ! Continue on at same level.
```

```
;  230     0357  3                    !
;  231     0358  3                    num_value = .hllist [cl_index];
;  232     0359  3
;  233     0360  3
;  234     0361  3                ! Validate resultant header level.
;  235     0362  3                !
;  236     0363  3                IF  (.num_value LEQ 0) OR
;  237     0364  4                    (.num_value GTR .hllist [cl_max_index])
;  238     0365  3                THEN
;  239     0366  3                    !
;  240     0367  3                    ! Illegal header number.
;  241     0368  3                    !
;  242     0369  4                    BEGIN
;  243     0370  4                    erma (rnfinm, false);
;  244     0371  4                    !
;  245     0372  4                    ! Stay at current level.
;  246     0373  4                    !
;  247     0374  4                    num_value = .hllist [cl_index];
;  248     0375  3                    END;
;  249     0376  3
;  250     0377  2                END;
;  251     0378  2
;  252     0379  2            [h_header_level] :
;  253     0380  2                !
;  254     0381  2                ! Bump counter at specified level.
;  255     0382  2                !
;  256     0383  3                BEGIN
;  257     0384  3                hllist [.num_value] = .hllist [.num_value] + 1;
;  258     0385  3
;  259     0386  3                !
;  260     0387  3                ! Zero all higher numbered counters.
;  261     0388  3                !
;  262     0389  3                INCR I FROM (.num_value + 1) TO .hllist [cl_max_index] DO
;  263     0390  3                    hllist [.I] = 0;
;  264     0391  3
;  265     0392  2                END;
;  266     0393  2
;  267     0394  2            [h_header_level, h_set_level] :
;  268     0395  2                !
;  269     0396  2                ! Set desired level.
;  270     0397  2                !
;  271     0398  2                hllist [cl_index] = .num_value;
;  272     0399  2
;  273     0400  2            [h_set_level] : RETURN;
;  274     0401  2
;  275     0402  2            [h_header_level] :
;  276     0403  3                BEGIN
;  277     0404  3                BIND
;  278     0405  3                    style_block = ecc [hcoll_offset + .hllist [cl_index], 0,0,0,0]
;  279     0406  3                                : $ecc_block;
;  280     0407  3
;  281     0408  3                counter_minor_type = min_hl_inf;
;  282     0409  3                caption_minor_type =
;  283     0410  4                    (IF .style_block [ecc$v_unnumbered]
;  284     0411  4                     THEN
;  285     0412  4                         min_hl_txt_u
;  286     0413  4                     ELSE
```

```
;  287          0414  3                       min_hl_txt);
;  288          0415  3
;  289          0416  3               set_ecc (.handler, style_block);
;  290          0417  2               END;
;  291          0418  2
;  292        U 0419  2 %IF DSRPLUS %THEN
;  293        U 0420  2           [h_header_exampl] :
;  294        U 0421  2               BEGIN
;  295        U 0422  2               BIND
;  296        U 0423  2                   style_block = ecc [examp_offset, 0,0,0,0] : $ecc_block;
;  297        U 0424  2
;  298        U 0425  2               counter_minor_type = min_examp_inf;
;  299        U 0426  2               caption_minor_type =
;  300        U 0427  2                   (IF .style_block [ecc$v_unnumbered]
;  301        U 0428  2                    THEN
;  302        U 0429  2                        min_examp_txt_u
;  303        U 0430  2                    ELSE
;  304        U 0431  2                        min_examp_txt);
;  305        U 0432  2
;  306        U 0433  2               set_ecc (.handler, style_block);
;  307        U 0434  2               END;
;  308        U 0435  2
;  309        U 0436  2           [h_header_figure] :
;  310        U 0437  2               BEGIN
;  311        U 0438  2               BIND
;  312        U 0439  2                   style_block = ecc [figur_offset, 0,0,0,0] : $ecc_block;
;  313        U 0440  2
;  314        U 0441  2               counter_minor_type = min_figur_inf;
;  315        U 0442  2               caption_minor_type =
;  316        U 0443  2                   (IF .style_block [ecc$v_unnumbered]
;  317        U 0444  2                    THEN
;  318        U 0445  2                        min_figur_txt_u
;  319        U 0446  2                    ELSE
;  320        U 0447  2                        min_figur_txt);
;  321        U 0448  2
;  322        U 0449  2               set_ecc (.handler, style_block);
;  323        U 0450  2               END;
;  324        U 0451  2
;  325        U 0452  2           [h_header_table] :
;  326        U 0453  2               BEGIN
;  327        U 0454  2               BIND
;  328        U 0455  2                   style_block = ecc [table_offset, 0,0,0,0] : $ecc_block;
;  329        U 0456  2
;  330        U 0457  2               counter_minor_type = min_table_inf;
;  331        U 0458  2               caption_minor_type =
;  332        U 0459  2                   (IF .style_block [ecc$v_unnumbered]
;  333        U 0460  2                    THEN
;  334        U 0461  2                        min_table_txt_u
;  335        U 0462  2                    ELSE
;  336        U 0463  2                        min_table_txt);
;  337        U 0464  2
;  338        U 0465  2               set_ecc (.handler, style_block);
;  339        U 0466  2               END;
;  340          0467  2 %FI
;  341          0468  2
;  342          0469  2           [h_chapter] :
;  343          0470  3               BEGIN
```

```
            BIND
                style_block = ecc [chap_offset, 0,0,0,0] : $ecc_block;

            counter_minor_type = min_chapt_inf;
            caption_minor_type =
                (IF  .style_block [ecc$v_unnumbered]
                 THEN
                     min_chapt_txt_u
                 ELSE
                     min_chapt_txt);

! ** This code is needed for FLIP Phase 1 support.
%IF FLIP %THEN
            IF  (.gca_op_dev EQL op_dev_flip)
            THEN
                caption_minor_type = min_chapt;
%FI
! **

            set_ecc (.handler, style_block);
            END;

%IF DSRPLUS %THEN
        [h_no_chapter, h_disable_chapt, h_disable_appen] :
            BEGIN
            gca_chapt          = false;   ! Turn off chapter oriented-ness.
            npagen [sct_typ] = 0;         ! Normal page numbers
            pagen  [sct_typ] = 0;         ! Normal page numbers

            IF .gca_btc
            THEN

%IF FLIP %THEN
                puttpg (pagen, flip$k_tocpag);
%ELSE
                puttpg (pagen, -1);
%FI

            RETURN;
            END;

        [h_enable_append] :
            BEGIN
            IF .pagen [sct_typ] EQL sct_append ! Already in an Appendix
            THEN
                RETURN;
            gca_chapt          = true;    ! Turn off chapter oriented-ness.
            npagen [sct_typ] = sct_append;  ! Normal page numbers
            pagen  [sct_typ] = sct_append;      ! Normal page numbers
            pagen  [sct_number] = .ecc [append_offset,ecc$h_counter] + 1;
            npagen  [sct_number] = .ecc [append_offset,ecc$h_counter] + 1;
            IF .gca_btc
            THEN

%IF FLIP %THEN
                puttpg (pagen, flip$k_tocpag);
%ELSE
```

```
;  401          U 0528  2                   puttpg (pagen, -1);
;  402          U 0529  2 %FI
;  403          U 0530  2
;  404          U 0531  2               RETURN;
;  405          U 0532  2               END;
;  406          U 0533  2
;  407          U 0534  2           [h_enable_chapte] :
;  408          U 0535  2               BEGIN
;  409          U 0536  2               IF .pagen [sct_typ] EQL sct_chapt ! Already in a Chapter
;  410          U 0537  2               THEN
;  411          U 0538  2                   RETURN;
;  412          U 0539  2               gca_chapt        = true;    ! Turn off chapter oriented-ness.
;  413          U 0540  2               npagen [sct_typ] = sct_chapt;  ! Normal page numbers
;  414          U 0541  2               pagen  [sct_typ] = sct_chapt;       ! Normal page numbers
;  415          U 0542  2               pagen  [sct_number] = .ecc [chap_offset,ecc$h_counter] + 1;
;  416          U 0543  2               npagen  [sct_number] = .ecc [chap_offset,ecc$h_counter] + 1;
;  417          U 0544  2               IF .gca_btc
;  418          U 0545  2               THEN
;  419          U 0546  2
;  420          U 0547  2 %IF FLIP %THEN
;  421          U 0548  2                   puttpg (pagen, flip$k_tocpag);
;  422          U 0549  2 %ELSE
;  423          U 0550  2                   puttpg (pagen, -1);
;  424          U 0551  2 %FI
;  425          U 0552  2
;  426          U 0553  2               RETURN;
;  427          U 0554  2               END;
;  428            0555  2 %FI
;  429            0556  2
;  430            0557  2           [h_appendix] :
;  431            0558  3               BEGIN
;  432            0559  3               BIND
;  433            0560  3                   style_block = ecc [append_offset, 0,0,0,0] : $ecc_block;
;  434            0561  3
;  435            0562  3               counter_minor_type = min_append_inf;
;  436            0563  3               caption_minor_type =
;  437            0564  4                   (IF  .style_block [ecc$v_unnumbered]
;  438            0565  4                    THEN
;  439            0566  4                        min_append_txt_u
;  440            0567  4                    ELSE
;  441            0568  3                        min_append_txt);
;  442            0569  3
;  443            0570  3 ! ** This code is needed for FLIP Phase 1 support.
;  444          U 0571  3 %IF FLIP %THEN
;  445          U 0572  3               IF  (.gca_op_dev EQL op_dev_flip)
;  446          U 0573  3               THEN
;  447          U 0574  3                   caption_minor_type = min_append;
;  448            0575  3 %FI
;  449            0576  3 ! **
;  450            0577  3
;  451            0578  3               set_ecc (.handler, style_block);
;  452            0579  2               END;
;  453            0580  2
;  454            0581  2           TES;
;  455            0582  2
;  456            0583  2     !
;  457            0584  2     ! Skip any spaces, tabs, or commas in the input.
```

```
;  458          0585  2      !
;  459          0586  2      skpsep (ira);
;  460          0587  2
;  461          0588  3      IF  (.handler EQL h_chapter) OR (.handler EQL h_appendix)
;  462          0589  2      THEN
;  463          0590  3          BEGIN
;  464          0591  3          !
;  465          0592  3          ! Loop over all remaining footnotes.
;  466          0593  3          !
;  467          0594  3          WHILE .fnct_count GTR 0 DO
;  468          0595  4              BEGIN
;  469          0596  4              !
;  470          0597  4              ! Get rid of as many footnotes as possible.
;  471          0598  4              !
;  472          0599  4              foobot ();
;  473          0600  4              !
;  474          0601  4              ! Finish the bottom of the page except for last one,
;  475          0602  4              ! which is taken care of by OUTCHA.
;  476          0603  4              !
;  477          0604  4              IF .fnct_count GTR 0
;  478          0605  4              THEN
;  479          0606  5                  BEGIN
;  480          0607  5                  botpag ();
;  481          0608  5                  !
;  482          0609  5                  ! Because not all footnotes were output, we have to
;  483          0610  5                  ! start a new page, and keep trying.
;  484          0611  5                  !
;  485          0612  5                  toppag ();
;  486          0613  4                  END;
;  487          0614  4
;  488          0615  3              END;
;  489          0616  3
;  490          0617  3          outcha (
;  491          0618  3          .lines_before,          .lines_after,          .test_page_amount,
;  492          0619  3          .counter_major_type,    .counter_minor_type,
;  493          0620  3          .counter_value,         .counter_display_code, .counter_spaces_after,
;  494          0621  3          .counter_pre_string_length,    .counter_pre_string_ptr,
;  495          0622  3          .counter_post_string_length,   .counter_post_string_ptr,
;  496          0623  3          .caption_major_type,    .caption_minor_type,   .caption_case,
;  497          0624  3          .caption_is_centered,   .caption_is_flush_right,.caption_is_run_in,
;  498          0625  3          .caption_is_bold,       .caption_is_underlined,.put_into_mem_file,
;  499          0626  3          .autosubtitle,          .brn_open,             .break_before_caption,
;  500          0627  3          .lines_between,         .new_page,             .startodd,
;  501          0628  3          .tocpage
;  502          0629  3          );
;  503          0630  3          END
;  504          0631  2      ELSE
;  505          0632  3          BEGIN
;  506          0633  3          outhdr (
;  507          0634  3          .lines_before,          .lines_after,          .test_page_amount,
;  508          0635  3          .counter_major_type,    .counter_minor_type,
;  509          0636  3          .counter_value,         .counter_display_code, .counter_spaces_after,
;  510          0637  3          .counter_pre_string_length,    .counter_pre_string_ptr,
;  511          0638  3          .counter_post_string_length,   .counter_post_string_ptr,
;  512          0639  3          .caption_major_type,    .caption_minor_type,   .caption_case,
;  513          0640  3          .caption_is_centered,   .caption_is_flush_right,.caption_is_run_in,
;  514          0641  3          .caption_is_bold,       .caption_is_underlined,.put_into_mem_file,
```

```
;  515          0642  3          .autosubtitle,          .brn_open,              .break_before_caption,
;  516          0643  3          .lines_between,         .new_page,              .startodd,
;  517          0644  3          .tocpage
;  518          0645  3          );
;  519          0646  2          END;
;  520          0647  2
;  521          0648  2 !+
;  522          0649  2 ! Post-processing after the header has been generated.
;  523          0650  2 !-
;  524          0651  2      SELECT .handler OF
;  525          0652  2          SET
;  526          0653  2
;  527          0654  2          [h_header_level] :
;  528          0655  3              BEGIN
;  529          0656  3              !
;  530          0657  3              ! Turn fill on if AUTOJUST, else leave it the way it was.
;  531          0658  3              !
;  532          0659  3              sca_fill = (.gca_autojust OR .sca_fill);
;  533          0660  3              !
;  534          0661  3              ! Turn justify on if AUTOJUST, else leave it the way it was.
;  535          0662  3              !
;  536          0663  3              sca_justify = (.gca_autojust OR .sca_justify);
;  537          0664  3              sca_crock   =  .gca_autojust;
;  538          0665  2              END;
;  539          0666  2
;  540        U 0667  2 %IF DSRPLUS %THEN
;  541        U 0668  2          [h_header_exampl] : 0;
;  542        U 0669  2          [h_header_figure] : 0;
;  543        U 0670  2          [h_header_table]  : 0;
;  544        U 0671  2          [h_no_chapter]    : 0;
;  545          0672  2 %FI
;  546          0673  2
;  547          0674  2          [h_appendix] : 0;
;  548          0675  2          [h_chapter]  : 0;
;  549          0676  2
;  550          0677  2          TES;
;  551          0678  2
;  552          0679  1      END;                          ! End of HEADER


                                                                .TITLE  HEADER HEADER -- handle headers (titles) for ex
;                                                                       amples,
                                                                .IDENT  \V04-000\

                                                                .PSECT  $OWN$,NOEXE,2

                                                    00000 LINES_BEFORE:
                                                                .BLKB   4
                                                    00004 LINES_AFTER:
                                                                .BLKB   4
                                                    00008 TEST_PAGE_AMOUNT:
                                                                .BLKB   4
                                                    0000C COUNTER_MAJOR_TYPE:
                                                                .BLKB   4
                                                    00010 COUNTER_MINOR_TYPE:
                                                                .BLKB   4
                                                    00014 COUNTER_VALUE:
```

```
                                                        .BLKB   4
                                00018 COUNTER_DISPLAY_CODE:
                                                        .BLKB   4
                                0001C COUNTER_SPACES_AFTER:
                                                        .BLKB   4
                                00020 COUNTER_PRE_STRING_LENGTH:
                                                        .BLKB   4
                                00024 COUNTER_PRE_STRING_PTR:
                                                        .BLKB   4
                                00028 COUNTER_POST_STRING_LENGTH:
                                                        .BLKB   4
                                0002C COUNTER_POST_STRING_PTR:
                                                        .BLKB   4
                                00030 CAPTION_MAJOR_TYPE:
                                                        .BLKB   4
                                00034 CAPTION_MINOR_TYPE:
                                                        .BLKB   4
                                00038 CAPTION_CASE:
                                                        .BLKB   4
                                0003C CAPTION_IS_CENTERED:
                                                        .BLKB   4
                                00040 CAPTION_IS_FLUSH_RIGHT:
                                                        .BLKB   4
                                00044 CAPTION_IS_RUN_IN:
                                                        .BLKB   4
                                00048 CAPTION_IS_BOLD:
                                                        .BLKB   4
                                0004C CAPTION_IS_UNDERLINED:
                                                        .BLKB   4
                                00050 PUT_INTO_MEM_FILE:
                                                        .BLKB   4
                                00054 AUTOSUBTITLE:
                                                        .BLKB   4
                                00058 BRN_OPEN:
                                                        .BLKB   4
                                0005C BREAK_BEFORE_CAPTION:
                                                        .BLKB   4
                                00060 LINES_BETWEEN:
                                                        .BLKB   4
                                00064 NEW_PAGE:
                                                        .BLKB   4
                                00068 STARTODD:
                                                        .BLKB   4
                                0006C TOCPAGE:          .BLKB   4

                                                        .EXTRN  RNFINM, ECC, FNCT
                                                        .EXTRN  GCA, HCT, HLC, HLLIST
                                                        .EXTRN  IRA, NUMPRM, PDT
                                                        .EXTRN  SCA, ERMA, OUTCHA
                                                        .EXTRN  OUTHDR, BOTPAG, FOOBOT
                                                        .EXTRN  TOPPAG, SKPSEP

                                                        .PSECT  $CODE$,NOWRT,2

                                      03FC 00000        .ENTRY  HEADER, Save R2,R3,R4,R5,R6,R7,R8,R9        ; 0301
59 00000000G   EF   9E 00002        MOVAB   FNCT, R9                                                    ;
58 00000000G   EF   9E 00009        MOVAB   SCA+104, R8                                                 ;
```

```
                        57 00000000V  EF   9E 00010           MOVAB   SET_ECC, R7                          :
                        56 00000000G  EF   9E 00017           MOVAB   ECC+108, R6                          :
                        55 00000000G  EF   9E 0001E           MOVAB   NUMPRM+4, R5                         :
                        54 00000000G  EF   9E 00025           MOVAB   HLLIST+4, R4                         :
                        53 00000000'  EF   9E 0002C           MOVAB   COUNTER_MINOR_TYPE, R3               :
                  FC    A3            02   D0 00033           MOVL    #2, COUNTER_MAJOR_TYPE               : 0329
                  20    A3            02   D0 00037           MOVL    #2, CAPTION_MAJOR_TYPE               : 0330
                  40    A3            01   D0 0003B           MOVL    #1, PUT_INTO_MEM_FILE                : 0331
   48   A3 00000000G  EF              01   00   EF 0003F      EXTZV   #0, #1, GCA+124, BRN_OPEN            : 0332
                        52        04  AC   D0 00049           MOVL    HANDLER, R2                          : 0334
             00000061   8F            52   D1 0004D           CMPL    R2, #97                              : 0337
                                      09   13 00054           BEQL    1$                                   :
             000000B8   8F            52   D1 00056           CMPL    R2, #184                             :
                                      2F   12 0005D           BNEQ    5$                                   :
                                  04  A5   D5 0005F 1$:       TSTL    NUMPRM+8                             : 0345
                                      05   13 00062           BEQL    2$                                   :
                        65            64   C0 00064           ADDL2   HLLIST+4, NUMPRM+4                   : 0350
                                      08   11 00067           BRB     3$                                   :
                                  08  A5   D5 00069 2$:       TSTL    NUMPRM+12                            : 0353
                                      03   12 0006C           BNEQ    3$                                   :
                        65            64   D0 0006E           MOVL    HLLIST+4, NUMPRM+4                   : 0358
                        50            65   D0 00071 3$:       MOVL    NUMPRM+4, R0                         : 0363
                                      06   15 00074           BLEQ    4$                                   :
                  FC    A4            50   D1 00076           CMPL    R0, HLLIST                           : 0364
                                      12   15 0007A           BLEQ    5$                                   :
                                      7E   D4 0007C 4$:       CLRL    -(SP)                                : 0370
                           00000000G  8F   DD 0007E           PUSHL   #RNFINM                              :
             00000000G  EF            02   FB 00084           CALLS   #2, ERMA                             :
                        65            64   D0 0008B           MOVL    HLLIST+4, NUMPRM+4                   : 0374
             00000061   8F            52   D1 0008E 5$:       CMPL    R2, #97                              : 0379
                                      13   12 00095           BNEQ    8$                                   :
                        50            65   D0 00097           MOVL    NUMPRM+4, R0                         : 0384
                                    6440   D6 0009A           INCL    HLLIST+4[R0]                         :
                        51        FC  A4   D0 0009D           MOVL    HLLIST, R1                           : 0389
                                      03   11 000A1           BRB     7$                                   :
                                    6440   D4 000A3 6$:       CLRL    HLLIST+4[I]                          : 0390
               F9       50            51   F3 000A6 7$:       AOBLEQ  R1, I, 6$                            :
             00000061   8F            52   D1 000AA 8$:       CMPL    R2, #97                              : 0394
                                      09   13 000B1           BEQL    9$                                   :
             000000B8   8F            52   D1 000B3           CMPL    R2, #184                             :
                                      03   12 000BA           BNEQ    10$                                  :
                        64            65   D0 000BC 9$:       MOVL    NUMPRM+4, HLLIST+4                   : 0398
             000000B8   8F            52   D1 000BF 10$:      CMPL    R2, #184                             : 0400
                                      01   12 000C6           BNEQ    11$                                  :
                                           04 000C8           RET                                          :
             00000061   8F            52   D1 000C9 11$:      CMPL    R2, #97                              : 0402
                                      1F   12 000D0           BNEQ    14$                                  :
               50       64            24   C5 000D2           MULL3   #36, HLLIST+4, R0                    : 0405
                                      63   D4 000D6           CLRL    COUNTER_MINOR_TYPE                   : 0408
               05     6640            02   E1 000D8           BBC     #2, ECC+108[R0], 12$                 : 0410
                        51            06   D0 000DD           MOVL    #6, R1                               :
                                      03   11 000E0           BRB     13$                                  :
                        51            02   D0 000E2 12$:      MOVL    #2, R1                               :
                  24    A3            51   D0 000E5 13$:      MOVL    R1, CAPTION_MINOR_TYPE               :
                                    6640   9F 000E9           PUSHAB  ECC+108[R0]                          : 0416
                                      52   DD 000EC           PUSHL   R2                                   :
                        67            02   FB 000EE           CALLS   #2, SET_ECC                          :
```

```
                0D              52 D1 000F1 14$:   CMPL    R2, #13                                  ; 0469
                                1E 12 000F4        BNEQ    17$
                63              10 D0 000F6        MOVL    #16, COUNTER_MINOR_TYPE                  ; 0474
      05   00FC C6              02 E1 000F9        BBC     #2, STYLE_BLOCK, 15$                     ; 0476
                50              12 D0 000FF        MOVL    #18, R0
                                03 11 00102        BRB     16$
                50              11 D0 00104 15$:   MOVL    #17, R0
           24   A3              50 D0 00107 16$:   MOVL    R0, CAPTION_MINOR_TYPE
                         00FC   C6 9F 0010B        PUSHAB  STYLE_BLOCK                              ; 0490
                                52 DD 0010F        PUSHL   R2
                67              02 FB 00111        CALLS   #2, SET_ECC
                01              52 D1 00114 17$:   CMPL    R2, #1                                   ; 0557
                                1E 12 00117        BNEQ    20$
                63              13 D0 00119        MOVL    #19, COUNTER_MINOR_TYPE                  ; 0562
      05   0120 C6              02 E1 0011C        BBC     #2, STYLE_BLOCK, 18$                     ; 0564
                50              15 D0 00122        MOVL    #21, R0
                                03 11 00125        BRB     19$
                50              14 D0 00127 18$:   MOVL    #20, R0
           24   A3              50 D0 0012A 19$:   MOVL    R0, CAPTION_MINOR_TYPE
                         0120   C6 9F 0012E        PUSHAB  STYLE_BLOCK                              ; 0578
                                52 DD 00132        PUSHL   R2
                67              02 FB 00134        CALLS   #2, SET_ECC
                      00000000G EF 9F 00137 20$:   PUSHAB  IRA                                      ; 0586
       00000000G EF             01 FB 0013D        CALLS   #1, SKPSEP
                0D              52 D1 00144        CMPL    R2, #13                                  ; 0588
                                05 13 00147        BEQL    21$
                01              52 D1 00149        CMPL    R2, #1
                                5F 12 0014C        BNEQ    23$
                                69 D5 0014E 21$:   TSTL    FNCT                                     ; 0594
                                1B 15 00150        BLEQ    22$
       00000000G EF             00 FB 00152        CALLS   #0,  OOBOT                               ; 0599
                                69 D5 00159        TSTL    FNCT                                     ; 0604
                                F1 15 0015B        BLEQ    21$
       00000000G EF             00 FB 0015D        CALLS   #0, BOTPAG                               ; 0607
       00000000G EF             00 FB 00164        CALLS   #0, TOPPAG                               ; 0612
                                E1 11 0016B        BRB     21$                                      ; 0594
                7E       58     A3 7D 0016D 22$:   MOVQ    STARTODD, -(SP)                          ; 0627
                7E       50     A3 7D 00171        MOVQ    LINES_BETWEEN, -(SP)
                7E       48     A3 7D 00175        MOVQ    BRN_OPEN, -(SP)                          ; 0626
                7E       40     A3 7D 00179        MOVQ    PUT_INTO_MEM_FILE, -(SP)                 ; 0625
                7E       38     A3 7D 0017D        MOVQ    CAPTION_IS_BOLD, -(SP)
                7E       30     A3 7D 00181        MOVQ    CAPTION_IS_FLUSH_RIGHT, -(SP)            ; 0624
                7E       28     A3 7D 00185        MOVQ    CAPTION_CASE, -(SP)                      ; 0623
                7E       20     A3 7D 00189        MOVQ    CAPTION_MAJOR_TYPE, -(SP)
                7E       18     A3 7D 0018D        MOVQ    COUNTER_POST_STRING_LENGTH, -(SP)        ; 0622
                7E       10     A3 7D 00191        MOVQ    COUNTER_PRE_STRING_LENGTH, -(SP)         ; 0621
                7E       08     A3 7D 00195        MOVQ    COUNTER_DISPLAY_CODE, -(SP)              ; 0620
                7E              63 7D 00199        MOVQ    COUNTER_MINOR_TYPE, -(SP)                ; 0619
                7E       F8     A3 7D 0019C        MOVQ    TEST_PAGE_AMOUNT, -(SP)                  ; 0618
                7E       F0     A3 7D 001A0        MOVQ    LINES_BEFORE, -(SP)
       00000000G EF             1C FB 001A4        CALLS   #28, OUTCHA
                                3E 11 001AB        BRB     24$                                      ; 0588
                7E       58     A3 7D 001AD 23$:   MOVQ    STARTODD, -(SP)                          ; 0643
                7E       50     A3 7D 001B1        MOVQ    LINES_BETWEEN, -(SP)
                7E       48     A3 7D 001B5        MOVQ    BRN_OPEN, -(SP)                          ; 0642
                7E       40     A3 7D 001B9        MOVQ    PUT_INTO_MEM_FILE, -(SP)                 ; 0641
                7E       38     A3 7D 001BD        MOVQ    CAPTION_IS_BOLD, -(SP)
```

```
                          7E      30   A3  7D 001C1         MOVQ    CAPTION_IS_FLUSH_RIGHT, -(SP)          ; 0640
                          7E      28   A3  7D 001C5         MOVQ    CAPTION_CASE, -(SP)                    ; 0639
                          7E      20   A3  7D 001C9         MOVQ    CAPTION_MAJOR_TYPE, -(SP)              ;
                          7E      18   A3  7D 001CD         MOVQ    COUNTER_POST_STRING_LENGTH, -(SP)      ; 0638
                          7E      10   A3  7D 001D1         MOVQ    COUNTER_PRE_STRING_LENGTH, -(SP)       ; 0637
                          7E      08   A3  7D 001D5         MOVQ    COUNTER_DISPLAY_CODE, -(SP)            ; 0636
                          7E           63  7D 001D9         MOVQ    COUNTER_MINOR_TYPE, -(SP)              ; 0635
                          7E      F8   A3  7D 001DC         MOVQ    TEST_PAGE_AMOUNT, -(SP)                ; 0634
                          7E      F0   A3  7D 001E0         MOVQ    LINES_BEFORE, -(SP)                    ;
             00000000G    EF           1C  FB 001E4         CALLS   #28, OUTHDR                            ;
             00000061     8F           52  D1 001EB 24$:    CMPL    R2, #97                                ; 0654
                                       13  12 001F2         BNEQ    25$                                    ;
                          50 00000000G FF  D0 001F4         MOVL    @GCA+16, R0                            ; 0659
                     00   B8           50  C8 001FB         BISL2   R0, @SCA+104                           ;
                     FC   B8           50  C8 001FF         BISL2   R0, @SCA+100                           ; 0663
                     08   B8           50  D0 00203         MOVL    R0, @SCA+112                           ; 0664
                                           04 00207 25$:    RET                                            ; 0679

; Routine Size:  520 bytes,    Routine Base:  $CODE$ + 0000


;  553         0680  1
```

```
;  555     0681  1 %SBTTL 'SET_ECC -- set up OUTHDR formals from the ECC area'
;  556     0682  1 ROUTINE set_ecc (handler, style_block) : NOVALUE =
;  557     0683  1
;  558     0684  1 !++
;  559     0685  1 ! FUNCTIONAL DESCRIPTION:
;  560     0686  1 !
;  561     0687  1 !       SET_ECC sets the values of the formal parameters in a call to OUTHDR:
;  562     0688  1 !       the ones that are stored in the ECC (Entity Counter/Caption) area.
;  563     0689  1 !
;  564     0690  1 ! FORMAL PARAMETERS:
;  565     0691  1 !
;  566     0692  1 !       handler -       Indicates what command is being processed.
;  567     0693  1 !
;  568     0694  1 !       style_block -   The address of that segment of the ECC blockvector
;  569     0695  1 !                       that will be used to update the OUTHDR formals.
;  570     0696  1 !
;  571     0697  1 ! IMPLICIT INPUTS:      None
;  572     0698  1 !
;  573     0699  1 ! IMPLICIT OUTPUTS:
;  574     0700  1 !
;  575     0701  1 !       The following module-level OWN variables, used as OUTHDR formals,
;  576     0702  1 !       are updated:
;  577     0703  1 !
;  578     0704  1 !       lines_before,           lines_after,            test_page_amount,
;  579     0705  1 !       counter_major_type,     counter_minor_type,
;  580     0706  1 !       counter_value,          counter_display_code,   counter_spaces_after,
;  581     0707  1 !       counter_pre_string_length,      counter_pre_string_ptr,
;  582     0708  1 !       counter_post_string_length,     counter_post_string_ptr,
;  583     0709  1 !       caption_major_type,     caption_minor_type,     caption_case,
;  584     0710  1 !       caption_is_centered,    caption_is_flush_right, caption_is_run_in,
;  585     0711  1 !       caption_is_bold,        caption_is_underlined,  put_into_mem_file,
;  586     0712  1 !       autosubtitle,           brn_open,               break_before_caption,
;  587     0713  1 !       lines_between,          new_page,               startodd,
;  588     0714  1 !       tocpage
;  589     0715  1 !
;  590     0716  1 ! ROUTINE VALUE:
;  591     0717  1 ! COMPLETION CODES:     None
;  592     0718  1 !
;  593     0719  1 ! SIDE EFFECTS:         None
;  594     0720  1 !--
;  595     0721  1
;  596     0722  2     BEGIN
;  597     0723  2     BIND
;  598     0724  2         sb = .style_block : $ecc_block;
;  599     0725  2
;  600     0726  2     !
;  601     0727  2     ! Increment the entity counter.
;  602     0728  2     !
;  603     0729  2     sb [ecc$h_counter] = .sb [ecc$h_counter] + 1;
;  604     0730  2     lines_before =
;  605     0731  4        (IF  (.sb [ecc$h_before] GTR 0) AND (NOT .sca_sect_empty)
;  606     0732  3         THEN
;  607     0733  4             (MAX (1, .sb [ecc$h_before] - (.sca_spacing - 1)))
;  608     0734  2         ELSE 0);
;  609     0735  2
;  610     0736  2     lines_between = .sb [ecc$h_between];
;  611     0737  2     lines_after =
```

```
;  612        0738  3          (IF   .sb [ecc$h_after] GTR 0
;  613        0739  3           THEN
;  614        0740  4               (MAX (1, .sb [ecc$h_after] - (.sca_spacing - 1)))
;  615        0741  2           ELSE 0);
;  616        0742  2
;  617        0743  3       IF   (.handler EQL h_chapter) OR (.handler EQL h_appendix)
;  618        0744  2       THEN
;  619        0745  3           BEGIN
;  620        0746  3           lines_before = .sb [ecc$h_before];
;  621        0747  3           lines_after  = .sb [ecc$h_after];
;  622        0748  2           END;
;  623        0749  2
;  624        0750  2       test_page_amount           = .sb [ecc$h_testpage];
;  625        0751  2       counter_value              = .sb [ecc$h_counter];
;  626        0752  2       counter_display_code       = .sb [ecc$h_display_desc];
;  627        0753  2       counter_spaces_after       = .sb [ecc$h_spaces];
;  628        0754  2       counter_pre_string_length  = .sb [ecc$h_pre_len];
;  629        0755  2       counter_pre_string_ptr     = .sb [ecc$a_pre_ptr];
;  630        0756  2       counter_post_string_length = .sb [ecc$h_post_len];
;  631        0757  2       counter_post_string_ptr    = .sb [ecc$a_post_ptr];
;  632        0758  2       caption_case =
;  633        0759  3           (CASE .sb [ecc$h_case]
;  634        0760  3            FROM ecc$k_leavecase TO ecc$k_allcap OF
;  635        0761  3               SET
;  636        0762  3               [ecc$k_leavecase] : leave_case;
;  637        0763  3               [ecc$k_firstcap]  : first_caps;
;  638        0764  3               [ecc$k_allcap]    : force_upper;
;  639        0765  2               TES);
;  640        0766  2
;  641        0767  2       caption_is_centered        = (.sb [ecc$h_position] eql ecc$k_center);
;  642        0768  2       caption_is_flush_right     = (.sb [ecc$h_position] eql ecc$k_right);
;  643        0769  2       break_before_caption       = .sb[ecc$v_break];
;  644        0770  2       tocpage                    = .sb [ecc$v_tocpage];
;  645        0771  2       startodd                   = .sb [ecc$v_startodd];
;  646        0772  2       new_page                   = .sb [ecc$v_page];
;  647        0773  2       caption_is_run_in          = .sb [ecc$h_runin];
;  648        0774  2       caption_is_bold            = .sb [ecc$v_bold];
;  649        0775  2       caption_is_underlined      = .sb [ecc$v_underline];
;  650        0776  2       autosubtitle =
;  651        0777  3          (IF   .handler EQL h_header_level
;  652        0778  3           THEN
;  653        0779  4               (.gca_autosubt GEQ .hllist [cl_index] AND .hct_subtitle)
;  654        0780  3           ELSE
;  655        0781  2               FALSE);
;  656        0782  2
;  657        0783  1       END;                                   ! End of SET_ECC


                                         003C 00000 SET_ECC:.WORD   Save R2,R3,R4,R5                      ; 0682
                       55 00000000G  EF   9E 00002         MOVAB   SCA+124, R5                           ;
                       54 00000000'  EF   9E 00009         MOVAB   LINES_BEFORE, R4                      ;
                       50        08  AC   D0 00010         MOVL    STYLE_BLOCK, R0                       ; 0724
     51       0C    A0 20            18   EE 00014         EXTV    #24, #32, 12(R0), R1                  ; 0729
                                     51   D6 0001A         INCL    R1                                    ;
```

```
0C   A0        20        18        51  F0 0001C       INSV    R1, #24, #32, 12(R0)                    ;
     53   04   A0        10        18  EE 00022       EXTV    #24, #16, 4(R0), R3                     ; 0731
                                   12  15 00028       BLEQ    1$                                      ;
                         0E   38   A5  E8 0002A       BLBS    SCA+180, 1$                             ;
               51        53   00   B5  C3 0002E       SUBL3   @SCA+124, R3, R1                        ; 0733
                                   51  D6 00033       INCL    R1                                      ;
                                   07  14 00035       BGTR    2$                                      ;
                         51        01  D0 00037       MOVL    #1, R1                                  ;
                                   02  11 0003A       BRB     2$                                      ;
                                   51  D4 0003C 1$:   CLRL    R1                                      ; 0731
                         64        51  D0 0003E 2$:   MOVL    R1, LINES_BEFORE                        ;
                    60   A4   09   A0  32 00041       CVTWL   9(R0), LINES_BETWEEN                    ; 0736
                         52   05   A0  32 00046       CVTWL   5(R0), R2                               ; 0738
                                   0E  15 0004A       BLEQ    3$                                      ;
               51        52   00   B5  C3 0004C       SUBL3   @SCA+124, R2, R1                        ; 0740
                                   51  D6 00051       INCL    R1                                      ;
                                   07  14 00053       BGTR    4$                                      ;
                         51        01  D0 00055       MOVL    #1, R1                                  ;
                                   02  11 00058       BRB     4$                                      ;
                                   51  D4 0005A 3$:   CLRL    R1                                      ; 0738
                    04   A4        51  D0 0005C 4$:   MOVL    R1, LINES_AFTER                         ;
                         0D   04   AC  D1 00060       CMPL    HANDLER, #13                            ; 0743
                                   06  13 00064       BEQL    5$                                      ;
                         01   04   AC  D1 00066       CMPL    HANDLER, #1                             ;
                                   07  12 0006A       BNEQ    6$                                      ;
                         64        53  D0 0006C 5$:   MOVL    R3, LINES_BEFORE                        ; 0746
                    04   A4        52  D0 0006F       MOVL    R2, LINES_AFTER                         ; 0747
                    08   A4   0D   A0  32 00073 6$:   CVTWL   13(R0), TEST_PAGE_AMOUNT                ; 0750
14   A4   0C   A0        20        18  EE 00078       EXTV    #24, #32, 12(R0), COUNTER_VALUE         ; 0751
18   A4   10   A0        10        18  EE 0007F       EXTV    #24, #16, 16(R0), COUNTER_DISPLAY_CODE  ; 0752
1C   A4   08   A0        10        18  EE 00086       EXTV    #24, #16, 8(R0), COUNTER_SPACES_AFTER   ; 0753
                    20   A4   15   A0  32 0008D       CVTWL   21(R0), COUNTER_PRE_STRING_LENGTH       ; 0754
24   A4   14   A0        20        18  EF 00092       EXTZV   #24, #32, 20(R0), COUNTER_PRE_STRING_PTR ; 0755
28   A4   18   A0        10        18  EE 00099       EXTV    #24, #16, 24(R0), -                     ; 0756
                                                              COUNTER_POST_STRING_LENGTH              ;
2C   A4   1C   A0        20        08  EF 000A0       EXTZV   #8, #32, 28(R0), COUNTER_POST_STRING_PTR ; 0757
               02        00   03   A0  8F 000A7       CASEB   3(R0), #0, #2                           ; 0759
             000F      000A    0006       000AC 7$:   .WORD   8$-7$,-                                 ;
                                                              9$-7$,-                                 ;
                                                              10$-7$                                  ;
                                   51  D4 000B2 8$:   CLRL    R1                                      ;
                                   08  11 000B4       BRB     11$                                     ;
                         51        02  D0 000B6 9$:   MOVL    #2, R1                                  ;
                                   03  11 000B9       BRB     11$                                     ;
                         51        01  D0 000BB 10$:  MOVL    #1, R1                                  ;
                    38   A4        51  D0 000BE 11$:  MOVL    R1, CAPTION_CASE                        ;
                                   51  D4 000C2       CLRL    R1                                      ; 0767
                         02   04   A0  91 000C4       CMPB    4(R0), #2                               ;
                                   02  12 000C8       BNEQ    12$                                     ;
                                   51  D6 000CA       INCL    R1                                      ;
                    3C   A4        51  D0 000CC 12$:  MOVL    R1, CAPTION_IS_CENTERED                 ;
                                   51  D4 000D0       CLRL    R1                                      ; 0768
                         01   04   A0  91 000D2       CMPB    4(R0), #1                               ;
                                   02  12 000D6       BNEQ    13$                                     ;
                                   51  D6 000D8       INCL    R1                                      ;
                    40   A4        51  D0 000DA 13$:  MOVL    R1, CAPTION_IS_FLUSH_RIGHT              ;
5C   A4        60        01        03  EF 000DE       EXTZV   #3, #1, (R0), BREAK_BEFORE_CAPTION      ; 0769
```

```
  6C   A4          60           01           04  EF 000E4         EXTZV   #4, #1, (R0), TOCPAGE              ; 0770
  68   A4          60           01           06  EF 000EA         EXTZV   #6, #1, (R0), STARTODD             ; 0771
  64   A4          60           01           05  EF 000F0         EXTZV   #5, #1, (R0), NEW_PAGE             ; 0772
                        44      A4      02   A0  98 000F6         CVTBL   2(R0), CAPTION_IS_RUN_IN           ; 0773
  48   A4          60           01           00  EF 000FB         EXTZV   #0, #1, (R0), CAPTION_IS_BOLD      ; 0774
  4C   A4          60           01           01  EF 00101         EXTZV   #1, #1, (R0), CAPTION_IS_UNDERLINED ; 0775
              00000061    8F           04    AC  D1 00107         CMPL    HANDLER, #97                       ; 0777
                                             1D  12 0010F         BNEQ    15$                                ;
                                             50  D4 00111         CLRL    R0                                 ; 0779
              00000000G   EF 00000000G   FF  D1 00113         CMPL    @GCA+8, HLLIST+4                   ;
                                             02  19 0011E         BLSS    14$                                ;
                                             50  D6 00120         INCL    R0                                 ;
                          51 00000000G   FF  D2 00122 14$:    MCOML   @HCT+24, R1                        ;
                          50                 51  CA 00129         BICL2   R1, R0                             ;
                                             02  11 0012C         BRB     16$                                ;
                                             50  D4 0012E 15$:    CLRL    R0                                 ; 0777
                        54      A4           50  D0 00130 16$:    MOVL    R0, AUTOSUBTITLE                   ;
                                             04     00134         RET                                        ; 0783

; Routine Size:  309 bytes,    Routine Base:  $CODE$ + 0208


;  658          0784  1
;  659          0785  1 END                                          ! End of module
;  660          0786  0 ELUDOM
```

```
;                                 PSECT SUMMARY
;
;      Name                        Bytes                    Attributes
;
;  $OWN$                             112  NOVEC,  WRT,  RD ,NOEXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)
;  $CODE$                            829  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]XPORT.L32;1           590         0         0        252       00:00.2
;  _$255$DUA28:[RUNOFF.SRC]DSRLIB.L32;1     1248        84         6         86       00:00.2


;                                  COMMAND QUALIFIERS
```

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

; Size:          829 code + 112 data bytes
; Run Time:        00:15.2
; Elapsed Time:    00:32.6
; Lines/CPU Min:    3112
; Lexemes/CPU-Min: 16510
; Memory Used:  148 pages
; Compilation Complete
```