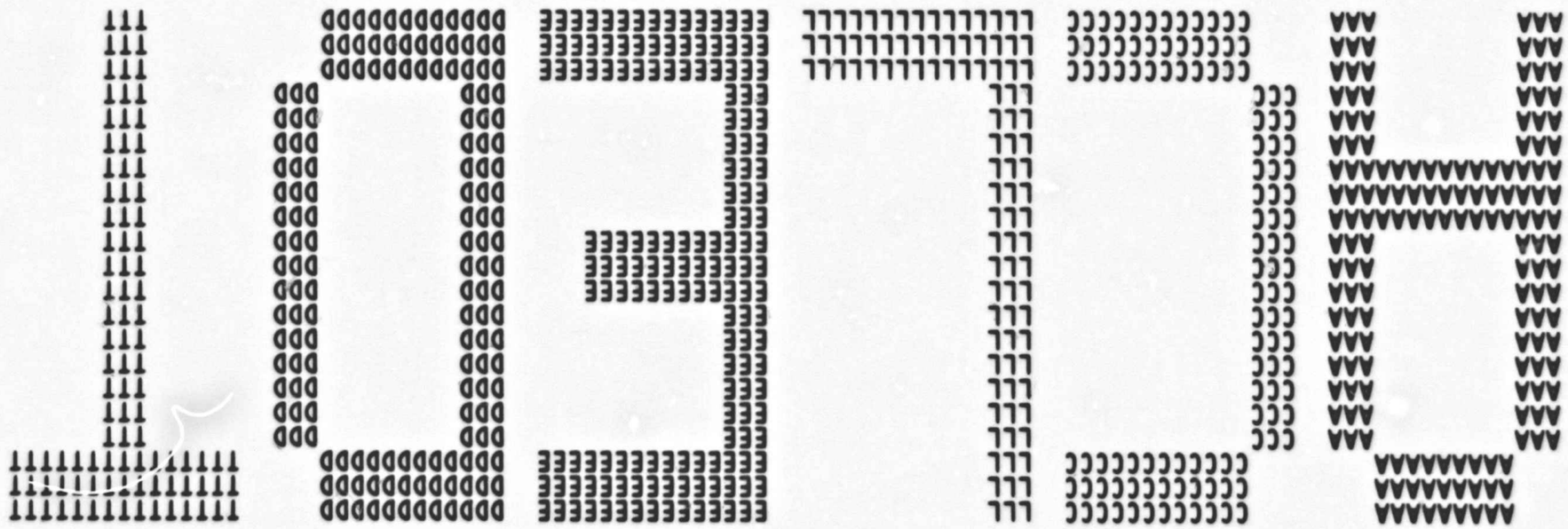

```
  AAAAAA    EEEEEEEEEE  DDDDDDDD    MM      MM    AAAAAA     IIIIII    NN      NN
  AAAAAA    EEEEEEEEEE  DDDDDDDD    MM      MM    AAAAAA     IIIIII    NN      NN
AA      AA  EE          DD      DD  MMMM  MMMM  AA      AA      II      NN      NN
AA      AA  EE          DD      DD  MMMM  MMMM  AA      AA      II      NN      NN
AA      AA  EE          DD      DD  MM  MM  MM  AA      AA      II      NNNN    NN
AA      AA  EE          DD      DD  MM  MM  MM  AA      AA      II      NNNN    NN
AA      AA  EEEEEEEE    DD      DD  MM      MM  AA      AA      II      NN  NN  NN
AA      AA  EEEEEEEE    DD      DD  MM      MM  AA      AA      II      NN  NN  NN
AAAAAAAAAA  EE          DD      DD  MM      MM  AAAAAAAAAA      II      NN    NNNN
AAAAAAAAAA  EE          DD      DD  MM      MM  AAAAAAAAAA      II      NN    NNNN
AA      AA  EE          DD      DD  MM      MM  AA      AA      II      NN      NN      ....
AA      AA  EE          DD      DD  MM      MM  AA      AA      II      NN      NN      ....
AA      AA  EEEEEEEEEE  DDDDDDDD    MM      MM  AA      AA    IIIIII    NN      NN      ....
AA      AA  EEEEEEEEEE  DDDDDDDD    MM      MM  AA      AA    IIIIII    NN      NN      ....

LL              IIIIII      SSSSSSSS
LL              IIIIII      SSSSSSSS
LL                II      SS
LL                II      SS
LL                II      SS
LL                II      SS
LL                II        SSSSSS
LL                II        SSSSSS
LL                II              SS
LL                II              SS
LL                II              SS
LL                II              SS
LLLLLLLLLL      IIIIII    SSSSSSSS
LLLLLLLLLL      IIIIII    SSSSSSSS
```

```
;     1        0001  0 MODULE AED$MAIN (
;     2        0002  0                 LANGUAGE (BLISS32),
;     3        0003  0                 IDENT = 'V04-000'
;     4        0004  0                 ) =
;     5        0005  1 BEGIN
;     6        0006  1
;     7        0007  1 !*****************************************************************************
;     8        0008  1 !*                                                                           *
;     9        0009  1 !*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                                 *
;    10        0010  1 !*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.                   *
;    11        0011  1 !*  ALL RIGHTS RESERVED.                                                     *
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;    14        0014  1 !*  ONLY IN  ACCORDANCE WITH  THE  TERMS  OF  SUCH  LICENSE  AND WITH THE  *
;    15        0015  1 !*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR  ANY  OTHER   *
;    16        0016  1 !*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY   *
;    17        0017  1 !*  OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF  THE  SOFTWARE IS  HEREBY   *
;    18        0018  1 !*  TRANSFERRED.                                                             *
;    19        0019  1 !*                                                                           *
;    20        0020  1 !*  THE INFORMATION IN THIS SOFTWARE IS  SUBJECT TO CHANGE WITHOUT NOTICE   *
;    21        0021  1 !*  AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT   *
;    22        0022  1 !*  CORPORATION.                                                             *
;    23        0023  1 !*                                                                           *
;    24        0024  1 !*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE  OR  RELIABILITY OF ITS   *
;    25        0025  1 !*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.                  *
;    26        0026  1 !*                                                                           *
;    27        0027  1 !*                                                                           *
;    28        0028  1 !*****************************************************************************
;    29        0029  1
;    30        0030  1 !++
;    31        0031  1 !
;    32        0032  1 ! FACILITY:     Miscellaneous utilities
;    33        0033  1 !
;    34        0034  1 ! ABSTRACT:
;    35        0035  1 !
;    36        0036  1 !       This module contains the routines for processing the user's input and
;    37        0037  1 !       updating the object's ACL in the appropriate manner.
;    38        0038  1 !
;    39        0039  1 ! ENVIRONMENT:
;    40        0040  1 !
;    41        0041  1 !       VAX/VMS operating system, user mode utilities.
;    42        0042  1 !
;    43        0043  1 !--
;    44        0044  1 !
;    45        0045  1 !
;    46        0046  1 ! AUTHOR:       L. Mark Pilant          CREATION DATE:  12-Nov-1982  9:50
;    47        0047  1 !
;    48        0048  1 ! MODIFIED BY:
;    49        0049  1 !
;    50        0050  1 !       V03-016 LMP0291         L. Mark Pilant,         31-Jul-1984  13:15
;    51        0051  1 !               Correct a bug that caused the editor to loop forever in the
;    52        0052  1 !               ACE after the one being deleted was more than one line.
;    53        0053  1 !
;    54        0054  1 !       V03-015 LMP0268         L. Mark Pilant,         28-Jun-1984  15:01
;    55        0055  1 !               Don't explicitly save the journal file on a QUIT.
;    56        0056  1 !
;    57        0057  1 !       V03-014 LMP0267         L. Mark Pilant,         28-Jun-1984  12:15
```

```
;    58          0058  1 !               Add support for an ADVANCE FIELD key.
;    59          0059  1 !
;    60          0060  1 !       V03-013 LMP0250         L. Mark Pilant,         4-May-1984  15:42
;    61          0061  1 !               Fix a bug introduced by LMP0238 that caused the wrong item
;    62          0062  1 !               code to be used when updating ACLs.
;    63          0063  1 !
;    64          0064  1 !       V03-012 LMP0238         L. Mark Pilant,         19-Apr-1984  13:32
;    65          0065  1 !               Use the size of the ACE for twiddling, when possible.
;    66          0066  1 !
;    67          0067  1 !       V03-011 LMP0230         L. Mark Pilant,         16-Apr-1984  9:25
;    68          0068  1 !               Track changes made to the $CHANGE_ACL system service.
;    69          0069  1 !
;    70          0070  1 !       V03-010 LMP0213         L. Mark Pilant,         24-Mar-1984  12:23
;    71          0071  1 !               Add support for locking and unlocking the object's ACL.
;    72          0072  1 !
;    73          0073  1 !       V03-009 LMP0193         L. Mark Pilant,         15-Feb-1984  9:59
;    74          0074  1 !               Add support for additional editor actions: delete to EOL,
;    75          0075  1 !               reset, and quit.  Also move the actual ACL updating to the
;    76          0076  1 !               session termination routine.
;    77          0077  1 !
;    78          0078  1 !       V03-008 LMP0172         L. Mark Pilant,         28-Nov-1983  12:11
;    79          0079  1 !               Numerous bug fixes, support for VT2xx terminals, and a
;    80          0080  1 !               session keystroke logger.
;    81          0081  1 !
;    82          0082  1 !       V03-007 LMP0161         L. Mark Pilant,         5-Oct-1983  10:36
;    83          0083  1 !               Make sure that the modified ACE gets written out when
;    84          0084  1 !               crossing ACE boundaries during a search operation.
;    85          0085  1 !
;    86          0086  1 !       V03-006 LMP0147         L. Mark Pilant,         29-Aug-1983  12:46
;    87          0087  1 !               Fix a bug that caused the display to be incorrect when
;    88          0088  1 !               un-deleting an ACE as the last line.  Also fix a bug that
;    89          0089  1 !               caused te display to be wrong when a ^U is given in the
;    90          0090  1 !               middle of a line.
;    91          0091  1 !
;    92          0092  1 !       V03-005 LMP0138         L. Mark Pilant,         16-Aug-1983  13:23
;    93          0093  1 !               Misc fixes to prompting mode input.
;    94          0094  1 !
;    95          0095  1 !       V03-004 LMP0103         L. Mark Pilant,         20-Apr-1983  11:23
;    96          0096  1 !               Add support for HIDDEN ACEs.  Also misc fixes to prompting.
;    97          0097  1 !
;    98          0098  1 !       V03-003 LMP0081         L. Mark Pilant,         16-Feb-1983  10:20
;    99          0099  1 !               Correct some minor bugs with the string searching routines.
;   100          0100  1 !
;   101          0101  1 !       V03-002 LMP0076         L. Mark Pilant,         1-Feb-1983  13:07
;   102          0102  1 !               Add support for a key definition file.
;   103          0103  1 !
;   104          0104  1 !       V03-001 LMP0074         L. Mark Pilant,         21-Jan-1983  16:54
;   105          0105  1 !               Random fixes and support for RMS journaling ACE's.
;   106          0106  1 !
;   107          0107  1 !**
;   108          0108  1
;   109          0109  1 LIBRARY 'SYS$LIBRARY:LIB.L32';
;   110          0110  1 LIBRARY 'SYS$LIBRARY:TPAMAC.L32';
;   111          0111  1 REQUIRE 'SRC$:ACLEDTDEF';
```

```
;  113          0564  1 FORWARD ROUTINE
;  114          0565  1         AED_PROCESSACL  : NOVALUE,              ! Main processing routine
;  115          0566  1
;  116          0567  1 ! The following are routines called based upon the editor action desired.
;  117          0568  1
;  118          0569  1         ACT_RUB_CHR,
;  119          0570  1         ACT_RUB_WRD,
;  120          0571  1         ACT_RUB_BOL,
;  121          0572  1         ACT_DEL_CHR,
;  122          0573  1         ACT_DEL_WRD,
;  123          0574  1         ACT_DEL_EOL,
;  124          0575  1         ACT_DEL_ACE,
;  125          0576  1         ACT_UNDEL_CHR,
;  126          0577  1         ACT_UNDEL_WRD,
;  127          0578  1         ACT_UNDEL_LIN,
;  128          0579  1         ACT_UNDEL_ACE,
;  129          0580  1         ACT_MOVE_WRD,
;  130          0581  1         ACT_MOVE_ACE,
;  131          0582  1         ACT_MOVE_BOL,
;  132          0583  1         ACT_MOVE_EOL,
;  133          0584  1         ACT_UP,
;  134          0585  1         ACT_DOWN,
;  135          0586  1         ACT_RIGHT,
;  136          0587  1         ACT_LEFT,
;  137          0588  1         ACT_TOP,
;  138          0589  1         ACT_BOTTOM,
;  139          0590  1         ACT_FIND_STR,
;  140          0591  1         ACT_FIND_NXT,
;  141          0592  1         ACT_ADV_FIELD,
;  142          0593  1         ACT_SEL_FIELD,
;  143          0594  1         ACT_SEL_ITEM,
;  144          0595  1         ACT_HELP,
;  145          0596  1         ACT_REFRESH,
;  146          0597  1         ACT_ENTER,
;  147          0598  1         ACT_INSERT,
;  148          0599  1         ACT_EXIT,
;  149          0600  1
;  150          0601  1 ! The following are common ACE text manipulating routines.
;  151          0602  1
;  152          0603  1         FINISH_ACE      : NOVALUE;             ! Tie off the ACE
;  153          0604  1
;  154          0605  1 EXTERNAL ROUTINE
;  155          0606  1         AED_PUTOUTPUT,                         ! General purpose output routine
;  156          0607  1         AED_GIVEHELP,                          ! Interactive help routine
;  157          0608  1         AED_UPDATEACL,                         ! Update file's ACL
;  158          0609  1         AED_SET_CURSOR,                        ! Set cursor position
;  159          0610  1         AED_SELECTFIELD : NOVALUE,             ! Select next ACE field
;  160          0611  1         AED_SELECTITEM  : NOVALUE,             ! Select next ACE item
;  161          0612  1         AED_SETACETYPE  : NOVALUE,             ! Set ACE type text
;  162          0613  1         AED_COMPRESS    : NOVALUE,             ! Compress the display
;  163          0614  1         AED_POSITION    : NOVALUE,             ! Position to selected line
;  164          0615  1         AED_COPSEGMENT,                        ! Copy segment to working storage
;  165          0616  1         AED_REPSEGMENT,                        ! Replace with working storage segment
;  166          0617  1         AED_SEGSPLIT,                          ! Split segment into two pieces
;  167          0618  1         AED_SEGCOMBINE,                        ! Combine two line segments
;  168          0619  1         AED_DECODEKEY;                         ! Key action decoder
;  169          0620  1
```

```
;  170          0621  1 ! Macros to make working with line segments easier.
;  171          0622  1
;  172          0623  1 MACRO
;  173          0624  1         BUFFER_CHAR = INPUT_BUFFER[.BUFFER_INDEX] %;
;  174          0625  1
;  175          0626  1 ! Storage used by all the routines in this module.
;  176          0627  1
;  177          0628  1 OWN
;  178          0629  1         BUFFER_INDEX,                                   ! Index into input storage
;  179          0630  1         ECHO_DESC       : $BBLOCK [DSC$C_S_BLN],        ! Text echoing descr
;  180          0631  1         TEMP_LINE,                                      ! Temp copy of line number
;  181          0632  1         REMOVED_LINE    : REF $BBLOCK,                  ! Address of line removed
;  182          0633  1         REMOVED_ACE     : REF $BBLOCK,                  ! Address of ACE removed
;  183          0634  1         NEW_TEXT_LINE   : REF $BBLOCK,                  ! Address of new line storage
;  184          0635  1         CHAR_PROCESSED,                                 ! Chars checked by ACL parser
;  185          0636  1         APPEND_INDEX,                                   ! Index for combining segments
;  186          0637  1         DUMMY_LINE      : REF $BBLOCK,                  ! Temp line pointer
;  187          0638  1         TERM_CHAR       : VECTOR [1,BYTE],              ! Character/code input
;  188          0639  1         SEARCH_SIZE     : VECTOR [1,WORD],              ! Search string size
;  189          0640  1         SEARCH_STRING   : VECTOR [512,BYTE];            ! Search string buffer
;  190          0641  1
;  191          0642  1 BIND
;  192          0643  1         SEGMENT_SIZE    = AED_T_CURLINE[LINE_W_SIZE] : WORD,
;  193          0644  1                                                         ! Input line segment size
;  194          0645  1         INPUT_BUFFER    = AED_T_CURLINE[LINE_T_TEXT] : VECTOR [,BYTE];
;  195          0646  1                                                         ! Input line segment text
```

```
;   197          0647  1 %SBTTL  'AED_PROCESSACL - main processing loop'
;   198          0648  1 GLOBAL ROUTINE AED_PROCESSACL : NOVALUE =
;   199          0649  1
;   200          0650  1 !++
;   201          0651  1 !
;   202          0652  1 ! FUNCTIONAL DESCRIPTION:
;   203          0653  1 !
;   204          0654  1 !       This routine is the main processing loop for the ACL editor.  It
;   205          0655  1 !       accepts the users input, which may be a new ACE or modifications
;   206          0656  1 !       to an existing ACE, and updates the in core ACL as appropriate.
;   207          0657  1 !
;   208          0658  1 ! CALLING SEQUENCE:
;   209          0659  1 !       AED_PROCESSACL ()
;   210          0660  1 !
;   211          0661  1 ! INPUT PARAMETERS:
;   212          0662  1 !       none
;   213          0663  1 !
;   214          0664  1 ! IMPLICIT INPUTS:
;   215          0665  1 !       AED_W_TERMIN: terminal input channel
;   216          0666  1 !       AED_Q_LINETABLE: input line text queue
;   217          0667  1 !       AED_L_CURACE: address of current ACE
;   218          0668  1 !
;   219          0669  1 ! OUTPUT PARAMETERS:
;   220          0670  1 !       none
;   221          0671  1 !
;   222          0672  1 ! IMPLICIT OUTPUTS:
;   223          0673  1 !       AED_L_FIRSTLINE: address of first line segment of ACE
;   224          0674  1 !       AED_L_LASTLINE: address of last line segment of ACE
;   225          0675  1 !
;   226          0676  1 ! ROUTINE VALUE:
;   227          0677  1 !       none
;   228          0678  1 !
;   229          0679  1 ! SIDE EFFECTS:
;   230          0680  1 !       The object's ACL is appropriately modified.
;   231          0681  1 !
;   232          0682  1 !--
;   233          0683  1
;   234          0684  2 BEGIN
;   235          0685  2
;   236          0686  2 LABEL
;   237          0687  2         INPUT;                                  ! User input loop
;   238          0688  2
;   239          0689  2 LOCAL
;   240          0690  2         LOCAL_STATUS,                           ! Local routine exit status
;   241          0691  2         SPLIT_SEGMENT   : REF $BBLOCK,          ! Pointer to remaining text
;   242          0692  2         SPLIT_SIZE;                             ! Size of remaining text
;   243          0693  2
;   244          0694  2 ! Initialize all variables and flags.
;   245          0695  2
;   246          0696  2 CH$FILL (0, DSC$C_S_BLN, ECHO_DESC);
;   247          0697  2 CH$MOVE (DSC$C_S_BLN, ECHO_DESC, AED_Q_DEL_WORD);
;   248          0698  2 CH$MOVE (DSC$C_S_BLN, ECHO_DESC, AED_Q_DEL_LINE);
;   249          0699  2 AED_B_DEL_CHAR = 0;
;   250          0700  2 BUFFER_INDEX = 0;
;   251          0701  2
;   252          0702  2 ! Set up initial display variables.
;   253          0703  2
```

```
;  254          0704  2 AED_Q_DEL_ACE[LINE_L_FLINK] = AED_Q_DEL_ACE[LINE_L_FLINK];
;  255          0705  2 AED_Q_DEL_ACE[LINE_L_BLINK] = AED_Q_DEL_ACE[LINE_L_FLINK];
;  256          0706  2
;  257          0707  2 AED_L_FLAGS[AED_V_FIRSTCHAR] = 1;
;  258          0708  2
;  259          0709  2 AED_L_FLAGS[AED_V_ACERROR] = 1;                    ! Clear message area
;  260          0710  2
;  261          0711  2 ! If there is no ACL (the display is empty), set up to append the text
;  262          0712  2 ! entered.  Otherwise, set up to modify the first segment of the display.
;  263          0713  2
;  264          0714  2 IF .AED_Q_LINETABLE[LINE_L_FLINK] EQLA AED_Q_LINETABLE[LINE_L_FLINK]
;  265          0715  2 THEN
;  266          0716  3     BEGIN
;  267          0717  3     AED_L_FLAGS[AED_V_ENDACL] = 1;                  ! At the end of the ACL
;  268          0718  3     AED_L_FLAGS[AED_V_INSERTEXT] = 1;
;  269          0719  3     AED_W_TOTALSIZE = SEGMENT_SIZE = 0;
;  270          0720  3     INSQUE (AED_T_CURLINE[LINE_L_FLINK], .AED_Q_LINETABLE[LINE_L_BLINK]);
;  271          0721  3     AED_L_FIRSTLINE = AED_L_LASTLINE = AED_T_CURLINE;
;  272          0722  3     AED_L_FIRSTLINE[LINE_Q_FLAGS] = LINE_M_BEGINACE;
;  273          0723  3     AED_L_CURACE = 0;
;  274          0724  3     IF .AED_L_FLAGS[AED_V_PROMPT]
;  275          0725  3     THEN
;  276          0726  4         BEGIN
;  277          0727  4         AED_B_ACETYPE = 0;
;  278          0728  4         AED_L_FLAGS[AED_V_NOITEMSEL] = 0;
;  279          0729  4         AED_SELECTFIELD (BUFFER_INDEX);
;  280          0730  4         ECHO_DESC[DSC$W_LENGTH] = .AED_T_CURLINE[LINE_W_SIZE];
;  281          0731  4         ECHO_DESC[DSC$A_POINTER] = AED_T_CURLINE[LINE_T_TEXT];
;  282          0732  4         SCR$SET_CURSOR (.AED_B_LINE, 1);
;  283          0733  4         AED_PUTOUTPUT (ECHO_DESC);
;  284          0734  4         SCR$ERASE_LINE (.AED_B_LINE, .SEGMENT_SIZE + 1);
;  285          0735  4         AED_B_COLUMN = .BUFFER_INDEX + 1;
;  286          0736  4         AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  287          0737  3         END;
;  288          0738  3     END
;  289          0739  2 ELSE
;  290          0740  3     BEGIN
;  291          0741  3     AED_COPSEGMENT (.AED_Q_LINETABLE[LINE_L_FLINK]);
;  292          0742  3     INSQUE (AED_T_CURLINE[LINE_L_FLINK], AED_Q_LINETABLE[LINE_L_FLINK]);
;  293          0743  3     AED_L_FIRSTLINE = AED_L_LASTLINE = AED_T_CURLINE;
;  294          0744  3     AED_W_TOTALSIZE = .AED_T_FIRSTLINE[LINE_W_SIZE];
;  295          0745  3     UNTIL .AED_L_LASTLINE[LINE_V_ENDACE]
;  296          0746  3     DO
;  297          0747  4         BEGIN
;  298          0748  4         IF .AED_L_LASTLINE EQLA AED_T_CURLINE
;  299          0749  4         THEN AED_T_LASTLINE = .AED_T_LASTLINE[LINE_L_FLINK];
;  300          0750  4         AED_L_LASTLINE = .AED_L_LASTLINE[LINE_L_FLINK];
;  301          0751  4         AED_W_TOTALSIZE = .AED_W_TOTALSIZE + .AED_L_LASTLINE[LINE_W_SIZE];
;  302          0752  3         END;
;  303          0753  3     AED_L_CURACE = .AED_L_FIRSTLINE[LINE_L_BINACE];
;  304          0754  3     IF .AED_L_FLAGS[AED_V_PROMPT]
;  305          0755  3     THEN
;  306          0756  4         BEGIN
;  307          0757  4         AED_L_FLAGS[AED_V_NOITEMSEL] = 1;
;  308          0758  4         AED_SELECTFIELD (BUFFER_INDEX);
;  309          0759  4         AED_B_COLUMN = .BUFFER_INDEX + 1;
;  310          0760  4         AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
```

```
3          END;
2      END;
2  AED_L_BEGINLINE = .AED_Q_LINETABLE[LINE_L_FLINK];
2
2  ! Loop getting characters from the user until an End-Of-File is seen.  When
2  ! an EOF is seen, it indicates the end of the session.
2
2  WHILE 1
2  DO
3      INPUT: BEGIN
3      TERM_CHAR = AED_DECODEKEY ();
3      IF .TERM_CHAR EQL 0 THEN RETURN;
3      IF .AED_L_FLAGS[AED_V_ACERROR] AND .AED_L_FLAGS[AED_V_SCOPE]
3      THEN
4          BEGIN
4          SCR$ERASE_PAGE (21, 1);
4          AED_SET_CURSOR (.AED_B_LINE, .BUFFER_INDEX + 1);
4          AED_L_FLAGS[AED_V_ACERROR] = 0;
3          END;
3
3  ! Choose the appropriate action based upon the character typed.
3
3      WHILE .AED_L_FLAGS[AED_V_ACTIONKEY]
3      DO
4          BEGIN
4          CASE .TERM_CHAR FROM 1 TO KEY_C_MAX_CODE-1 OF
4          SET
4
4  ! Actions to delete text.
4
4          [KEY_C_RUB_CHR]:          ACT_RUB_CHR ();
4
4          [KEY_C_RUB_WRD]:
5              BEGIN
5              LOCAL_STATUS = ACT_RUB_WRD ();
5              IF NOT .LOCAL_STATUS THEN RETURN;
4              END;
4
4          [KEY_C_RUB_BOL]:          ACT_RUB_BOL ();
4
4          [KEY_C_DEL_CHR]:          ACT_DEL_CHR ();
4
4          [KEY_C_DEL_WRD]:
5              BEGIN
5              LOCAL_STATUS = ACT_DEL_WRD ();
5              IF NOT .LOCAL_STATUS THEN RETURN;
4              END;
4
4          [KEY_C_DEL_EOL]:
5              BEGIN
5              LOCAL_STATUS = ACT_DEL_EOL ();
5              IF NOT .LOCAL_STATUS THEN RETURN;
4              END;
4
4          [KEY_C_DEL_ACE]:
5              BEGIN
5              LOCAL_STATUS = ACT_DEL_ACE ();
```

```
;   368          0818  5              IF NOT .LOCAL_STATUS THEN RETURN;
;   369          0819  4              END;
;   370          0820  4
;   371          0821  4 ! Actions to restore deleted text.
;   372          0822  4
;   373          0823  4          [KEY_C_UNDEL_CHR]:      ACT_UNDEL_CHR ();
;   374          0824  4
;   375          0825  4          [KEY_C_UNDEL_WRD]:      ACT_UNDEL_WRD ();
;   376          0826  4
;   377          0827  4          [KEY_C_UNDEL_LIN]:      ACT_UNDEL_LIN ();
;   378          0828  4
;   379          0829  4          [KEY_C_UNDEL_ACE]:
;   380          0830  5              BEGIN
;   381          0831  5              LOCAL_STATUS = ACT_UNDEL_ACE ();
;   382          0832  5              IF NOT .LOCAL_STATUS THEN RETURN;
;   383          0833  4              END;
;   384          0834  4
;   385          0835  4 ! Actions to move through the ACL independant of the direction.
;   386          0836  4
;   387          0837  4          [KEY_C_UP]:
;   388          0838  5              BEGIN
;   389          0839  5              LOCAL_STATUS = ACT_UP ();
;   390          0840  5              IF NOT .LOCAL_STATUS THEN RETURN;
;   391          0841  4              END;
;   392          0842  4
;   393          0843  4          [KEY_C_DOWN]:
;   394          0844  5              BEGIN
;   395          0845  5              LOCAL_STATUS = ACT_DOWN ();
;   396          0846  5              IF NOT .LOCAL_STATUS THEN RETURN;
;   397          0847  4              END;
;   398          0848  4
;   399          0849  4          [KEY_C_RIGHT]:  ACT_RIGHT ();
;   400          0850  4
;   401          0851  4          [KEY_C_LEFT]:   ACT_LEFT ();
;   402          0852  4
;   403          0853  4          [KEY_C_TOP]:
;   404          0854  5              BEGIN
;   405          0855  5              LOCAL_STATUS = ACT_TOP ();
;   406          0856  5              IF NOT .LOCAL_STATUS THEN RETURN;
;   407          0857  4              END;
;   408          0858  4
;   409          0859  4          [KEY_C_BOTTOM]:
;   410          0860  5              BEGIN
;   411          0861  5              LOCAL_STATUS = ACT_BOTTOM ();
;   412          0862  5              IF NOT .LOCAL_STATUS THEN RETURN;
;   413          0863  4              END;
;   414          0864  4
;   415          0865  4 ! Set the direction of the move.
;   416          0866  4
;   417          0867  4          [KEY_C_ADVANCE]:
;   418          0868  5              BEGIN
;   419          0869  5              AED_L_FLAGS[AED_V_BACKWARD] = 0;
;   420          0870  5              AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;   421          0871  5              TERM_CHAR = 0;
;   422          0872  4              END;
;   423          0873  4
;   424          0874  4          [KEY_C_BACKUP]:
```

```
;  425     0875  5              BEGIN
;  426     0876  5              AED_L_FLAGS[AED_V_BACKWARD] = 1;
;  427     0877  5              AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  428     0878  5              TERM_CHAR = 0;
;  429     0879  4              END;
;  430     0880  4
;  431     0881  4 ! Advance through the ACL based upon the direction chosen.
;  432     0882  4
;  433     0883  4          [KEY_C_MOVE_WRD]:       ACT_MOVE_WRD ();
;  434     0884  4
;  435     0885  4          [KEY_C_MOVE_BOL]:       ACT_MOVE_BOL ();
;  436     0886  4
;  437     0887  4          [KEY_C_MOVE_EOL]:       ACT_MOVE_EOL ();
;  438     0888  4
;  439     0889  4          [KEY_C_MOVE_ACE]:
;  440     0890  5              BEGIN
;  441     0891  5              LOCAL_STATUS = ACT_MOVE_ACE ();
;  442     0892  5              IF NOT .LOCAL_STATUS THEN RETURN;
;  443     0893  4              END;
;  444     0894  4
;  445     0895  4          [KEY_C_FIND_STR]:
;  446     0896  5              BEGIN
;  447     0897  5              LOCAL_STATUS = ACT_FIND_STR ();
;  448     0898  5              IF NOT .LOCAL_STATUS THEN RETURN;
;  449     0899  4              END;
;  450     0900  4
;  451     0901  4          [KEY_C_FIND_NXT]:
;  452     0902  5              BEGIN
;  453     0903  5              LOCAL_STATUS = ACT_FIND_NXT ();
;  454     0904  5              IF NOT .LOCAL_STATUS THEN RETURN;
;  455     0905  4              END;
;  456     0906  4
;  457     0907  4 ! Advance through an ACE using fields and items.
;  458     0908  4
;  459     0909  4          [KEY_C_ADV_FIELD]:
;  460     0910  5              BEGIN
;  461     0911  5              LOCAL_STATUS = ACT_ADV_FIELD ();
;  462     0912  5              IF NOT .LOCAL_STATUS THEN RETURN;
;  463     0913  4              END;
;  464     0914  4
;  465     0915  4          [KEY_C_SEL_FIELD]:
;  466     0916  5              BEGIN
;  467     0917  5              LOCAL_STATUS = ACT_SEL_FIELD ();
;  468     0918  5              IF NOT .LOCAL_STATUS THEN RETURN;
;  469     0919  4              END;
;  470     0920  4
;  471     0921  4          [KEY_C_SEL_ITEM]:
;  472     0922  5              BEGIN
;  473     0923  5              LOCAL_STATUS = ACT_SEL_ITEM ();
;  474     0924  5              IF NOT .LOCAL_STATUS THEN RETURN;
;  475     0925  4              END;
;  476     0926  4
;  477     0927  4 ! Miscellaneous editor actions.
;  478     0928  4
;  479     0929  4          [KEY_C_GOLD]:
;  480     0930  5              BEGIN
;  481     0931  5              AED_L_FLAGS[AED_V_GOLDKEY] = 1;
```

```
;  482          0932  5              AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  483          0933  5              TERM_CHAR = 0;
;  484          0934  4              END;
;  485          0935  4
;  486          0936  4          [KEY_C_HELP]:
;  487          0937  5              BEGIN
;  488          0938  5              AED_L_FLAGS[AED_V_ACEFORMAT] = 0;
;  489          0939  5              ACT_HELP ();
;  490          0940  4              END;
;  491          0941  4
;  492          0942  4          [KEY_C_HELPFMT]:
;  493          0943  5              BEGIN
;  494          0944  5              AED_L_FLAGS[AED_V_ACEFORMAT] = 1;
;  495          0945  5              ACT_HELP ();
;  496          0946  4              END;
;  497          0947  4
;  498          0948  4          [KEY_C_ENTER]:
;  499          0949  5              BEGIN
;  500          0950  5              LOCAL_STATUS = ACT_ENTER ();
;  501          0951  5              IF NOT .LOCAL_STATUS THEN RETURN;
;  502          0952  4              END;
;  503          0953  4
;  504          0954  4          [KEY_C_INSERT]:
;  505          0955  5              BEGIN
;  506          0956  5              LOCAL_STATUS = ACT_INSERT ();
;  507          0957  5              IF NOT .LOCAL_STATUS THEN RETURN;
;  508          0958  4              END;
;  509          0959  4
;  510          0960  4          [KEY_C_REFRESH]:        ACT_REFRESH (0);
;  511          0961  4
;  512          0962  4          [KEY_C_RESET]:          ACT_REFRESH (1);
;  513          0963  4
;  514          0964  4          [KEY_C_EXIT]:
;  515          0965  5              BEGIN
;  516          0966  5              LOCAL_STATUS = ACT_EXIT (0);
;  517          0967  5              IF NOT .LOCAL_STATUS THEN RETURN;
;  518          0968  4              END;
;  519          0969  4
;  520          0970  4          [KEY_C_QUIT]:
;  521          0971  5              BEGIN
;  522          0972  5              ACT_EXIT (1);
;  523          0973  5              RETURN;
;  524          0974  4              END;
;  525          0975  4
;  526          0976  4          [KEY_C_OVERSTRIKE]:
;  527          0977  5              BEGIN
;  528          0978  5              AED_L_FLAGS[AED_V_OVERSTRIKE] = NOT .AED_L_FLAGS[AED_V_OVERSTRIKE];
;  529          0979  5              LEAVE INPUT;
;  530          0980  4              END;
;  531          0981  4
;  532          0982  4          [KEY_C_DEBUG]:
;  533          0983  5              BEGIN
;  534          0984  5              LOCAL       PREV_HANDLER;
;  535          0985  5              EXTERNAL ROUTINE    LIB$SIGNAL : ADDRESSING_MODE (GENERAL);
;  536          0986  5
;  537          0987  5 ! If the debugger is not present, this is a no-op.
;  538          0988  5
```

```
;  539          0989  5              $SETEXV (VECTOR = 0, PRVHND = PREV_HANDLER);
;  540          0990  5              IF .PREV_HANDLER EQL 0 THEN LEAVE INPUT;
;  541          0991  5              $SETEXV (VECTOR = 0, ADDRES = .PREV_HANDLER);
;  542          0992  5
;  543          0993  5          ! Enter the debugger.
;  544          0994  5
;  545          0995  5              SCR$SET_CURSOR (21, 1);
;  546          0996  5              LIB$SIGNAL (SS$_DEBUG);
;  547          0997  5              SCR$SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  548          0998  5              LEAVE INPUT;
;  549          0999  4              END;
;  550          1000  4
;  551          1001  4          ! End of the ACTIONKEY case statement.
;  552          1002  4
;  553          1003  4          [INRANGE,OUTRANGE]:     LEAVE INPUT;
;  554          1004  4
;  555          1005  4          TES;
;  556          1006  3          END;
;  557          1007  3
;  558          1008  3          ! See if it is necessary to continue.
;  559          1009  3
;  560          1010  3          IF .TERM_CHAR EQL 0 THEN LEAVE INPUT;
;  561          1011  3
;  562          1012  3          ! If the current ACE is marked as untouchable, no modifications are allowed.
;  563          1013  3
;  564          1014  3          IF .AED_L_FIRSTLINE[LINE_V_NOTOUCH]
;  565          1015  3          THEN
;  566          1016  4              BEGIN
;  567          1017  4              SIGNAL (AED$_NOMODIFY);
;  568          1018  4              LEAVE INPUT;
;  569          1019  3              END;
;  570          1020  3
;  571          1021  3          ! Carriage return - terminate current line segment
;  572          1022  3
;  573          1023  3          IF NOT .AED_L_FLAGS[AED_V_ACTIONKEY]
;  574          1024  3          THEN SELECTONE .TERM_CHAR OF
;  575          1025  3          SET
;  576          1026  3              [%X'0D']:
;  577          1027  4                  BEGIN
;  578          1028  4
;  579          1029  4          ! Tie off the end of the current segment.
;  580          1030  4
;  581          1031  4                  AED_L_FLAGS[AED_V_FIRSTCHAR] = 0;
;  582          1032  4                  IF .AED_L_FLAGS[AED_V_PROMPT]
;  583          1033  4                  AND .BUFFER_INDEX GEQ .SEGMENT_SIZE
;  584          1034  4                  THEN
;  585          1035  5                      BEGIN
;  586          1036  5                      IF .INPUT_BUFFER[.BUFFER_INDEX - 1] NEQ ','
;  587          1037  5                      AND .INPUT_BUFFER[.BUFFER_INDEX - 1] NEQ '='
;  588          1038  5                      AND .INPUT_BUFFER[.BUFFER_INDEX - 1] NEQ ')'
;  589          1039  5                      AND NOT .AED_L_FLAGS[AED_V_OPENUIC]
;  590          1040  5                      AND .AED_B_FIELD LSS 2
;  591          1041  5                      AND .SEGMENT_SIZE GTR 0
;  592          1042  5                      THEN
;  593          1043  6                          BEGIN
;  594          1044  6                          BUFFER_CHAR = ',';
;  595          1045  6                          ECHO_DESC[DSC$W_LENGTH] = 1;
```

```
;  596          1046  6                    ECHO_DESC[DSC$A_POINTER] = BUFFER_CHAR;
;  597          1047  6                    AED_PUTOUTPUT (ECHO_DESC);
;  598          1048  6                    AED_B_COLUMN = .AED_B_COLUMN + 1;
;  599          1049  6                    BUFFER_INDEX = .BUFFER_INDEX + 1;
;  600          1050  6                    SEGMENT_SIZE = .SEGMENT_SIZE + 1;
;  601          1051  5                    END;
;  602          1052  4                END;
;  603          1053  4
;  604          1054  4 ! Split the line.
;  605          1055  4
;  606          1056  4                NEW_TEXT_LINE = AED_SEGSPLIT (BUFFER_INDEX, 1, 0, 0);
;  607          1057  4
;  608          1058  4 ! See if a new prompt string is necessary.
;  609          1059  4
;  610          1060  4                IF .AED_L_FLAGS[AED_V_PROMPT]
;  611          1061  4                AND NOT .AED_L_FLAGS[AED_V_OPENUIC]
;  612          1062  4                AND NOT .AED_L_FLAGS[AED_V_NOITEMSEL]
;  613          1063  4                AND .AED_L_LASTLINE EQLA AED_T_CURLINE[LINE_L_FLINK]
;  614          1064  4                AND .AED_L_FIRSTLINE[LINE_L_BLINK] EQL 0
;  615          1065  4                THEN
;  616          1066  5                    BEGIN
;  617          1067  5                    AED_L_FLAGS[AED_V_NOITEMSEL] = 0;
;  618          1068  5                    AED_SELECTFIELD (BUFFER_INDEX);
;  619          1069  5                    ECHO_DESC[DSC$W_LENGTH] = .AED_T_CURLINE[LINE_W_SIZE];
;  620          1070  5                    ECHO_DESC[DSC$A_POINTER] = AED_T_CURLINE[LINE_T_TEXT];
;  621          1071  5                    SCR$SET_CURSOR (.AED_B_LINE, 1);
;  622          1072  5                    AED_PUTOUTPUT (ECHO_DESC);
;  623          1073  5                    SCR$ERASE_LINE (.AED_B_LINE, .SEGMENT_SIZE + 1);
;  624          1074  5                    AED_B_COLUMN = .BUFFER_INDEX + 1;
;  625          1075  4                    END;
;  626          1076  4                AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  627          1077  4                AED_L_FLAGS[AED_V_INSERTEXT] = 1;
;  628          1078  4                AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  629          1079  4                LEAVE INPUT;
;  630          1080  3                END;
;  631          1081  3
;  632          1082  3 ! All other characters
;  633          1083  3
;  634          1084  3            [OTHERWISE]:
;  635          1085  4                BEGIN
;  636          1086  4
;  637          1087  4 ! Check for special characters.
;  638          1088  4
;  639          1089  4                IF .TERM_CHAR LSS ' ' THEN LEAVE INPUT;     ! Ignore control chars
;  640          1090  4                AED_L_FLAGS[AED_V_MODIFIED] = 1;
;  641          1091  4                AED_L_FLAGS[AED_V_FIRSTCHAR] = 0;
;  642          1092  4                IF .TERM_CHAR GEQ 'a' AND .TERM_CHAR LEQ 'z'
;  643          1093  4                OR .TERM_CHAR GEQ %X'E0' AND .TERM_CHAR LEQ %X'FE'
;  644          1094  4                THEN TERM_CHAR = .TERM_CHAR - 32;   ! Lower to upper case letters
;  645          1095  4
;  646          1096  4 ! Echo the character just typed at the current position or split the line and
;  647          1097  4 ! echo the character.
;  648          1098  4
;  649          1099  5                IF (.BUFFER_INDEX GEQ .AED_L_PAGEWIDTH)
;  650          1100  5                OR (NOT .AED_L_FLAGS[AED_V_OVERSTRIKE]
;  651          1101  5                    AND .SEGMENT_SIZE GEQ .AED_L_PAGEWIDTH)
;  652          1102  4                THEN AED_SEGSPLIT (BUFFER_INDEX, 0, 0, 0);
```

```
;  653          1103  4
;  654          1104  4                ECHO_DESC[DSC$W_LENGTH] = 1;
;  655          1105  4                ECHO_DESC[DSC$A_POINTER] = TERM_CHAR;
;  656          1106  4                AED_PUTOUTPUT (ECHO_DESC);
;  657          1107  4
;  658          1108  4 ! If the character was entered in insert mode, move all of the characters
;  659          1109  4 ! over one position.
;  660          1110  4
;  661          1111  4                IF .BUFFER_INDEX  LSS .SEGMENT_SIZE
;  662          1112  4                AND NOT .AED_L_FLAGS[AED_V_OVERSTRIKE]
;  663          1113  4                THEN
;  664          1114  5                    BEGIN
;  665          1115  5                    ECHO_DESC[DSC$W_LENGTH] = .SEGMENT_SIZE - .BUFFER_INDEX;
;  666          1116  5                    ECHO_DESC[DSC$A_POINTER] = BUFFER_CHAR;
;  667          1117  5                    AED_PUTOUTPUT (ECHO_DESC);
;  668          1118  5                    AED_SET_CURSOR (.AED_B_LINE, .BUFFER_INDEX + 2);
;  669          1119  5                    CH$COPY (.ECHO_DESC[DSC$W_LENGTH], BUFFER_CHAR,
;  670          1120  5                             0,
;  671          1121  5                             512 - .BUFFER_INDEX - 1, INPUT_BUFFER[.BUFFER_INDEX + 1]);
;  672          1122  4                    END;
;  673          1123  4
;  674          1124  4                IF .TERM_CHAR EQL '[' THEN AED_L_FLAGS[AED_V_OPENUIC] = 1;
;  675          1125  4                IF .TERM_CHAR EQL ']' THEN AED_L_FLAGS[AED_V_OPENUIC] = 0;
;  676          1126  4
;  677          1127  4 ! Now put the entered character into the line buffer.
;  678          1128  4
;  679          1129  4                BUFFER_CHAR = .TERM_CHAR;
;  680          1130  4                BUFFER_INDEX = .BUFFER_INDEX + 1;
;  681          1131  4                AED_B_COLUMN = .BUFFER_INDEX + 1;
;  682          1132  4
;  683          1133  4 ! If in insert mode, the segment size has grown by one character.
;  684          1134  4
;  685          1135  4                IF NOT .AED_L_FLAGS[AED_V_OVERSTRIKE]
;  686          1136  4                OR .BUFFER_INDEX GEQ .SEGMENT_SIZE
;  687          1137  4                THEN SEGMENT_SIZE = .SEGMENT_SIZE + 1;
;  688          1138  4                AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  689          1139  3                END;
;  690          1140  3            TES;
;  691          1141  2            END;
;  692          1142  2
;  693          1143  2 RETURN;
;  694          1144  1 END;                                    ! End of routine AED_PROCESSACL


                                                        .TITLE  AED$MAIN
                                                        .IDENT  \V04-000\

                                                        .PSECT  AED_COMMON,NOEXE,  OVR,0

                                                00000 AED_L_FLAGS:
                                                                .BLKB   4
                                                00004 AED_B_OPTIONS:
                                                                .BLKB   1
                                                00005           .BLKB   3
                                                00008 AED_L_OBJTYP:
                                                                .BLKB   4
                                                0000C AED_Q_OBJNAM:
```

```
                        .BLKB   8
00014 AED_L_WORSTERR:
                        .BLKB   4
00018 AED_L_PAGEWIDTH:
                        .BLKB   4
0001C AED_L_PAGESIZE:
                        .BLKB   4
00020 AED_B_COLUMN:
                        .BLKB   1
00021                   .BLKB   3
00024 AED_B_LINE:
                        .BLKB   1
00025                   .BLKB   3
00028 AED_B_SAVE_COL:
                        .BLKB   1
00029                   .BLKB   3
0002C AED_B_SAVE_LIN:
                        .BLKB   1
0002D                   .BLKB   3
00030 AED_Q_LINETABLE:
                        .BLKB   12
0003C AED_L_CURACE:
                        .BLKB   4
00040 AED_L_FIRSTLINE:
                        .BLKB   4
00044 AED_L_LASTLINE:
                        .BLKB   4
00048 AED_L_BEGINLINE:
                        .BLKB   4
0004C AED_W_INPUTLEN:
                        .BLKB   2
0004E                   .BLKB   2
00050 AED_Q_DEL_ACE:
                        .BLKB   8
00058 AED_Q_DEL_LINE:
                        .BLKB   8
00060 AED_Q_DEL_WORD:
                        .BLKB   8
00068 AED_B_DEL_CHAR:
                        .BLKB   1
00069                   .BLKB   3
0006C AED_A_ACLBUFFER:
                        .BLKB   4
00070 AED_Q_OUTLINE:
                        .BLKB   8
00078 AED_W_OBJCHAN:
                        .BLKB   2
0007A                   .BLKB   2
0007C AED_W_TERMIN:
                        .BLKB   2
0007E                   .BLKB   2
00080 AED_W_TERMOUT:
                        .BLKB   2
00082                   .BLKB   2
00084 AED_W_IOSB:
                        .BLKB   8
0008C AED_L_STATUS:
```

```
                        .BLKB   4
00090 AED_B_FIELD:
                        .BLKB   1
00091                   .BLKB   3
00094 AED_W_FIELDBEG:
                        .BLKB   2
00096                   .BLKB   2
00098 AED_W_FIELDEND:
                        .BLKB   2
0009A                   .BLKB   2
0009C AED_B_ITEM:
                        .BLKB   1
0009D                   .BLKB   3
000A0 AED_W_ITEMBEG:
                        .BLKB   2
000A2                   .BLKB   2
000A4 AED_W_ITEMEND:
                        .BLKB   2
000A6                   .BLKB   2
000A8 AED_B_ACETYPE:
                        .BLKB   1
000A9                   .BLKB   3
000AC AED_W_JOURNAL:
                        .BLKB   2
000AE                   .BLKB   2
000B0 AED_T_CURLINE:
                        .BLKB   532
002C4 AED_W_TOTALSIZE:
                        .BLKB   2
002C6                   .BLKB   2
002C8 JOURNAL_FAB:
                        .BLKB   80
00318 JOURNAL_NAM:
                        .BLKB   96
00378 JOURNAL_RAB:
                        .BLKB   68
003BC JOURNAL_XABPRO:
                        .BLKB   88
00414 JOURNAL_BUFFER:
                        .BLKB   10
0041E                   .BLKB   2
00420 JOURNAL_INDEX:
                        .BLKB   4
00424 RECOVER_FAB:
                        .BLKB   80
00474 RECOVER_NAM:
                        .BLKB   96
004D4 RECOVER_RAB:
                        .BLKB   68
00518 RECOVER_BUFFER:
                        .BLKB   10
00522                   .BLKB   2
00524 RECOVER_INDEX:
                        .BLKB   4

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

```
00000 BUFFER_INDEX:
                .BLKB   4
00004 ECHO_DESC:
                .BLKB   8
0000C TEMP_LINE:
                .BLKB   4
00010 REMOVED_LINE:
                .BLKB   4
00014 REMOVED_ACE:
                .BLKB   4
00018 NEW_TEXT_LINE:
                .BLKB   4
0001C CHAR_PROCESSED:
                .BLKB   4
00020 APPEND_INDEX:
                .BLKB   4
00024 DUMMY_LINE:
                .BLKB   4
00028 TERM_CHAR:
                .BLKB   1
00029           .BLKB   3
0002C SEARCH_SIZE:
                .BLKB   2
0002E           .BLKB   2
00030 SEARCH_STRING:
                .BLKB   512

        SEGMENT_SIZE=       AED_T_CURLINE+8
        INPUT_BUFFER=       AED_T_CURLINE+20
                .EXTRN  CLI$GET_VALUE, CLI$PRESENT
                .EXTRN  LIB$FREE_VM, LIB$GET_VM
                .EXTRN  LIB$TPARSE, SCR$DOWN_SCROLL
                .EXTRN  SCR$ERASE_LINE, SCR$ERASE_PAGE
                .EXTRN  SCR$SET_CURSOR, SCR$SET_SCROLL
                .EXTRN  SCR$UP_SCROLL, AED$_OBJLOCKED
                .EXTRN  AED$_BADKEEP, AED$_LOCATERR
                .EXTRN  AED$_INIREADERR
                .EXTRN  AED$_JOUWRITERR
                .EXTRN  AED$_JOUOPENOUT
                .EXTRN  AED$_JOUCLOSOUT
                .EXTRN  AED$_RECREADERR
                .EXTRN  AED$_RECOPENIN, AED$_RECLOSEIN
                .EXTRN  AED$_BADUIC, AED$_BADGRPMEM
                .EXTRN  AED$_SYNTAX, AED$_BADTYPE
                .EXTRN  AED$_NOITEMSEL, AED$_MUSTENTER
                .EXTRN  AED$_INIOPENIN, AED$_INICLOSIN
                .EXTRN  AED$_DEFSYNTAX, AED$_NODELETE
                .EXTRN  AED$_NOMODIFY, AED$_NOHIDDEN
                .EXTRN  AED$_DUPLICATE, AED$_NOCOMBINE
                .EXTRN  AED$_NODEFAULT, AED$_NOCTRLCHAR
                .EXTRN  AED$_NOTFOUND, AED$_CONTROL_C
                .EXTRN  AED$_ACLUPDATED
                .EXTRN  AED$_NOCHANGE, AED_PUTOUTPUT
                .EXTRN  AED_GIVEHELP, AED_UPDATEACL
                .EXTRN  AED_SET_CURSOR, AED_SELECTFIELD
                .EXTRN  AED_SELECTITEM, AED_SETACETYPE
                .EXTRN  AED_COMPRESS, AED_POSITION
```

```
                                                        .EXTRN  AED_COPSEGMENT, AED_REPSEGMENT
                                                        .EXTRN  AED_SEGSPLIT, AED_SEGCOMBINE
                                                        .EXTRN  AED_DECODEKEY, LIB$SIGNAL
                                                        .EXTRN  SYS$SETEXV

                                                        .PSECT  $CODE$,NOWRT,2

                                        0FFC 00000      .ENTRY  AED_PROCESSACL, Save R2,R3,R4,R5,R6,R7,R8,-      ; 0648
                                                                R9,R10,R11
                                    5B 00000000G  00 9E 00002   MOVAB   SCR$ERASE_LINE, R11                      ;
                                    5A      0000G CF 9E 00009   MOVAB   AED_PUTOUTPUT, R10                       ;
                                    59 00000000G  00 9E 0000E   MOVAB   SCR$SET_CURSOR, R9                       ;
                                    58      0000' CF 9E 00015   MOVAB   BUFFER_INDEX, R8                        ;
                                    57      0000' CF 9E 0001A   MOVAB   AED_L_FLAGS, R7                         ;
                                    5E            04 C2 0001F   SUBL2   #4, SP                                  ;
                08          00      6E            00 2C 00022   MOVC5   #0, (SP), #0, #8, ECHO_DESC            ; 0696
                                              04    A8  00027   ;
                        60  A7  04    A8            08 28 00029   MOVC3   #8, ECHO_DESC, AED_Q_DEL_WORD       ; 0697
                        58  A7  04    A8            08 28 0002F   MOVC3   #8, ECHO_DESC, AED_Q_DEL_LINE       ; 0698
                                          68        A7 94 00035   CLRB    AED_B_DEL_CHAR                        ; 0699
                                          68        D4 00038   CLRL    BUFFER_INDEX                          ; 0700
                                50  A7        50    A7 9E 0003A   MOVAB   AED_Q_DEL_ACE, AED_Q_DEL_ACE         ; 0704
                                54  A7        50    A7 9E 0003F   MOVAB   AED_Q_DEL_ACE, AED_Q_DEL_ACE+4       ; 0705
                                          67      1040  8F  A8 00044   BISW2   #4160, AED_L_FLAGS                 ; 0707
                                          50        30  A7 9E 00049   MOVAB   AED_Q_LINETABLE, R0                 ; 0714
                                          50        30  A7 D1 0004D   CMPL    AED_Q_LINETABLE, R0                 ;
                                                    69  12 00051   BNEQ    2$                                  ;
                                          67      4020  8F  A8 00053   BISW2   #16416, AED_L_FLAGS               ; 0718
                                                  00B8  C7  B4 00058   CLRW    SEGMENT_SIZE                      ; 0719
                                                  02C4  C7  B4 0005C   CLRW    AED_W_TOTALSIZE                   ;
                            34  B7                00B0  C7  0E 00060   INSQUE  AED_T_CURLINE, @AED_Q_LINETABLE+4  ; 0720
                                50                00B0  C7  9E 00066   MOVAB   AED_T_CURLINE, R0                  ; 0721
                            44  A7                    50  D0 0006B   MOVL    R0, AED_L_LASTLINE                ;
                            40  A7                    50  D0 0006F   MOVL    R0, AED_L_FIRSTLINE               ;
                            0A  A0                    01  B0 00073   MOVW    #1, 10(R0)                        ; 0722
                                              3C  A7    D4 00077   CLRL    AED_L_CURACE                      ; 0723
                                              01  A7    95 0007A   TSTB    AED_L_FLAGS+1                     ; 0724
                                                    03  19 0007D   BLSS    1$                                ;
                                                00AE    31 0007F   BRW     7$                                ;
                                              00A8  C7  94 00082 1$:  CLRB    AED_B_ACETYPE                     ; 0727
                                02  A7                08  8A 00086   BICB2   #8, AED_L_FLAGS+2                ; 0728
                                                    58  DD 0008A   PUSHL   R8                                 ; 0729
                            0000G  CF                01  FB 0008C   CALLS   #1, AED_SELECTFIELD               ;
                                04  A8            00B8  C7  B0 00091   MOVW    AED_T_CURLINE+8, ECHO_DESC        ; 0730
                                08  A8            00C4  C7  9E 00097   MOVAB   AED_T_CURLINE+20, ECHO_DESC+4    ; 0731
                                                    01  DD 0009D   PUSHL   #1                                  ; 0732
                                        7E        24  A7  9A 0009F   MOVZBL  AED_B_LINE, -(SP)                  ;
                                        69            02  FB 000A3   CALLS   #2, SCR$SET_CURSOR               ;
                                              04      A8  9F 000A6   PUSHAB  ECHO_DESC                          ; 0733
                                        6A            01  FB 000A9   CALLS   #1, AED_PUTOUTPUT                ;
                                        7E      00B8  C7  3C 000AC   MOVZWL  SEGMENT_SIZE, -(SP)               ; 0734
                                                    6E  D6 000B1   INCL    (SP)                               ;
                                        7E        24  A7  9A 000B3   MOVZBL  AED_B_LINE, -(SP)                  ;
                                        6B            02  FB 000B7   CALLS   #2, SCR$ERASE_LINE              ;
                                                    62  11 000BA   BRB     6$                                 ; 0735
                                              30    A7  DD 000BC 2$:  PUSHL   AED_Q_LINETABLE                  ; 0741
                            0000G  CF                01  FB 000BF   CALLS   #1, AED_COPSEGMENT               ;
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                    30  A7      00B0  C7  0E 000C4       INSQUE  AED_T_CURLINE, AED_Q_LINETABLE                 ; 0742
                        50      00B0  C7  9E 000CA       MOVAB   AED_T_CURLINE, R0                              ; 0743
                    44  A7            50  D0 000CF       MOVL    R0, AED_L_LASTLINE                             ;
                    40  A7            50  D0 000D3       MOVL    R0, AED_L_FIRSTLINE                            ;
                        51        40  A7  D0 000D7       MOVL    AED_L_FIRSTLINE, R1                            ; 0744
                  02C4  C7        08  A1  B0 000DB       MOVW    8(R1), AED_W_TOTALSIZE                         ;
                        50        44  A7  D0 000E1       MOVL    AED_L_LASTLINE, R0                             ; 0745
            1F          0A        A0  01  E0 000E5 3$:   BBS     #1, 10(R0), 5$                                 ;
                        52      00B0  C7  9E 000EA       MOVAB   AED_T_CURLINE, R2                              ; 0748
                        52            50  D1 000EF       CMPL    R0, R2                                         ;
                                      04  12 000F2       BNEQ    4$                                             ;
                    44  A7            60  D0 000F4       MOVL    (R0), AED_L_LASTLINE                           ; 0749
                    44  A7        44  B7  D0 000F8 4$:   MOVL    @AED_L_LASTLINE, AED_L_LASTLINE                ; 0750
                        50        44  A7  D0 000FD       MOVL    AED_L_LASTLINE, R0                             ; 0751
                  02C4  C7        08  A0  A0 00101       ADDW2   8(R0), AED_W_TOTALSIZE                         ;
                                      DC  11 00107       BRB     3$                                             ; 0745
                    3C  A7        0C  A1  D0 00109 5$:   MOVL    12(R1), AED_L_CURACE                           ; 0753
                                  01  A7  95 0010E       TSTB    AED_L_FLAGS+1                                  ; 0754
                                      1D  18 00111       BGEQ    7$                                             ;
                    02  A7            08  88 00113       BISB2   #8, AED_L_FLAGS+2                              ; 0757
                                      58  DD 00117       PUSHL   R8                                             ; 0758
                 0000G  CF            01  FB 00119       CALLS   #1, AED_SELECTFIELD                            ;
            20  A7      68            01  81 0011E 6$:   ADDB3   #1, BUFFER_INDEX, AED_B_COLUMN                 ; 0759
                        7E        20  A7  9A 00123       MOVZBL  AED_B_COLUMN, -(SP)                            ; 0760
                        7E        24  A7  9A 00127       MOVZBL  AED_B_LINE, -(SP)                              ;
                 0000G  CF            02  FB 0012B       CALLS   #2, AED_SET_CURSOR                             ;
                    48  A7        30  A7  D0 00130 7$:   MOVL    AED_Q_LINETABLE, AED_L_BEGINLINE               ; 0763
                 0000G  CF            00  FB 00135 8$:   CALLS   #0, AED_DECODEKEY                              ; 0771
                    28  A8            50  90 0013A       MOVB    R0, TERM_CHAR                                  ;
                                      01  12 0013E       BNEQ    9$                                             ; 0772
                                          04 00140       RET                                                    ;
            20          67            06  E1 00141 9$:   BBC     #6, AED_L_FLAGS, 10$                           ; 0773
            1C          67            03  E1 00145       BBC     #3, AED_L_FLAGS, 10$                           ;
                                      01  DD 00149       PUSHL   #1                                             ; 0776
                                      15  DD 0014B       PUSHL   #21                                            ;
             00000000G  00            02  FB 0014D       CALLS   #2, SCR$ERASE_PAGE                             ;
            7E          68            01  C1 00154       ADDL3   #1, BUFFER_INDEX, -(SP)                        ; 0777
                        7E        24  A7  9A 00158       MOVZBL  AED_B_LINE, -(SP)                              ;
                 0000G  CF            02  FB 0015C       CALLS   #2, AED_SET_CURSOR                             ;
                        67        40  8F  8A 00161       BICB2   #64, AED_L_FLAGS                               ; 0778
            03      02  A7            05  E0 00165 10$:  BBS     #5, AED_L_FLAGS+2, 11$                         ; 0783
                                    01B2  31 0016A       BRW     68$                                            ;
                    28  01        28  A8  8F 0016D 11$:  CASEB   TERM_CHAR, #1, #40                             ; 0786
 00F4       012A      0124      0117       00172 12$:    .WORD   49$-12$,-                                      ;
 0109       009B      007F      00FB       0017A                 51$-12$,-                                      ;
 00CC       008D      0071      0102       00182                 52$-12$,-                                      ;
 006A       00BE      00D2      00C5       0018A                 41$-12$,-                                      ;
 00E6       00ED      00D8      0086       00192                 43$-12$,-                                      ;
 0135       0110      013C      0078       0019A                 21$-12$,-                                      ;
 00A9       00A2      FFC3      FFC3       001A2                 25$-12$,-                                      ;
 016E       0167      00B7      00B0       001AA                 46$-12$,-                                      ;
 0094       0063      005C      00DF       001B2                 45$-12$,-                                      ;
 015F       0151      0147      0143       001BA                 19$-12$,-                                      ;
                                0055       001C2                 23$-12$,-                                      ;
                                                                 33$-12$,-                                      ;
                                                                 31$-12$,-                                      ;
                                                                 34$-12$,-                                      ;
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                                                              30$-12$,-                  ;
                                                              17$-12$,-                  ;
                                                              22$-12$,-                  ;
                                                              35$-12$,-                  ;
                                                              39$-12$,-                  ;
                                                              37$-12$,-                  ;
                                                              20$-12$,-                  ;
                                                              56$-12$,-                  ;
                                                              47$-12$,-                  ;
                                                              55$-12$,-                  ;
                                                              8$-12$,-                   ;
                                                              8$-12$,-                   ;
                                                              26$-12$,-                  ;
                                                              27$-12$,-                  ;
                                                              28$-12$,-                  ;
                                                              29$-12$,-                  ;
                                                              65$-12$,-                  ;
                                                              66$-12$,-                  ;
                                                              36$-12$,-                  ;
                                                              14$-12$,-                  ;
                                                              15$-12$,-                  ;
                                                              24$-12$,-                  ;
                                                              58$-12$,-                  ;
                                                              59$-12$,-                  ;
                                                              62$-12$,-                  ;
                                                              64$-12$,-                  ;
                                                              13$-12$                    ;
                     FF6E   31 001C4        BRW     8$                                   ; 1003
       0000V   CF      00   FB 001C7 13$:   CALLS   #0, ACT_RUB_CHR                      ; 0791
                       97   11 001CC        BRB     10$                                  ;
       0000V   CF      00   FB 001CE 14$:   CALLS   #0, ACT_RUB_WRD                      ; 0795
                       67   11 001D3        BRB     32$                                  ;
       0000V   CF      00   FB 001D5 15$:   CALLS   #0, ACT_RUB_BOL                      ; 0799
                       89   11 001DA 16$:   BRB     10$                                  ;
       0000V   CF      00   FB 001DC 17$:   CALLS   #0, ACT_DEL_CHR                      ; 0801
                       82   11 001E1 18$:   BRB     10$                                  ;
       0000V   CF      00   FB 001E3 19$:   CALLS   #0, ACT_DEL_WRD                      ; 0805
                       7A   11 001E8        BRB     40$                                  ;
       0000V   CF      00   FB 001EA 20$:   CALLS   #0, ACT_DEL_EOL                      ; 0811
                       7A   11 001EF        BRB     42$                                  ;
       0000V   CF      00   FB 001F1 21$:   CALLS   #0, ACT_DEL_ACE                      ; 0817
                       7A   11 001F6        BRB     44$                                  ;
       0000V   CF      00   FB 001F8 22$:   CALLS   #0, ACT_UNDEL_CHR                    ; 0823
                       5E   11 001FD        BRB     38$                                  ;
       0000V   CF      00   FB 001FF 23$:   CALLS   #0, ACT_UNDEL_WRD                    ; 0825
                       57   11 00204        BRB     38$                                  ;
       0000V   CF      00   FB 00206 24$:   CALLS   #0, ACT_UNDEL_LIN                    ; 0827
                       50   11 0020B        BRB     38$                                  ;
       0000V   CF      00   FB 0020D 25$:   CALLS   #0, ACT_UNDEL_ACE                    ; 0831
                       73   11 00212        BRB     48$                                  ;
       0000V   CF      00   FB 00214 26$:   CALLS   #0, ACT_UP                           ; 0839
                       6C   11 00219        BRB     48$                                  ;
       0000V   CF      00   FB 0021B 27$:   CALLS   #0, ACT_DOWN                         ; 0845
                       65   11 00220        BRB     48$                                  ;
       0000V   CF      00   FB 00222 28$:   CALLS   #0, ACT_RIGHT                        ; 0849
                       7C   11 00227        BRB     54$                                  ;
       0000V   CF      00   FB 00229 29$:   CALLS   #0, ACT_LEFT                         ; 0851
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                           75  11 0022E        BRB     54$                           ;
        0000V  CF          00  FB 00230  30$:  CALLS   #0, ACT_TOP                   ; 0855
                           7C  11 00235        BRB     57$                           ;
        0000V  CF          00  FB 00237  31$:  CALLS   #0, ACT_BOTTOM                ; 0861
                           75  11 0023C  32$:  BRB     57$                           ;
           01  A7          01  8A 0023E  33$:  BICB2   #1, AED_L_FLAGS+1             ; 0869
                           49  11 00242        BRB     50$                           ; 0870
           01  A7          01  88 00244  34$:  BISB2   #1, AED_L_FLAGS+1             ; 0876
                           43  11 00248        BRB     50$                           ; 0877
        0000V  CF          00  FB 0024A  35$:  CALLS   #0, ACT_MOVE_WRD              ; 0883
                           6F  11 0024F        BRB     61$                           ;
        0000V  CF          00  FB 00251  36$:  CALLS   #0, ACT_MOVE_BOL              ; 0885
                           82  11 00256        BRB     16$                           ;
        0000V  CF          00  FB 00258  37$:  CALLS   #0, ACT_MOVE_EOL              ; 0887
                           82  11 0025D  38$:  BRB     18$                           ;
        0000V  CF          00  FB 0025F  39$:  CALLS   #0, ACT_MOVE_ACE              ; 0891
                           64  11 00264  40$:  BRB     63$                           ;
        0000V  CF          00  FB 00266  41$:  CALLS   #0, ACT_FIND_STR              ; 0897
                           5D  11 0026B  42$:  BRB     63$                           ;
        0000V  CF          00  FB 0026D  43$:  CALLS   #0, ACT_FIND_NXT              ; 0903
                           56  11 00272  44$:  BRB     63$                           ;
        0000V  CF          00  FB 00274  45$:  CALLS   #0, ACT_ADV_FIELD             ; 0911
                           4F  11 00279        BRB     63$                           ;
        0000V  CF          00  FB 0027B  46$:  CALLS   #0, ACT_SEL_FIELD             ; 0917
                           48  11 00280        BRB     63$                           ;
        0000V  CF          00  FB 00282  47$:  CALLS   #0, ACT_SEL_ITEM              ; 0923
                           41  11 00287  48$:  BRB     63$                           ;
           01  A7          08  88 00289  49$:  BISB2   #8, AED_L_FLAGS+1             ; 0931
           02  A7          20  8A 0028D  50$:  BICB2   #32, AED_L_FLAGS+2            ; 0932
                      28   A8  94 00291        CLRB    TERM_CHAR                     ; 0933
                           2A  11 00294        BRB     61$                           ; 0786
           02  A7          10  8A 00296  51$:  BICB2   #16, AED_L_FLAGS+2            ; 0938
                           04  11 0029A        BRB     53$                           ; 0939
           02  A7          10  88 0029C  52$:  BISB2   #16, AED_L_FLAGS+2            ; 0944
        0000V  CF          00  FB 002A0  53$:  CALLS   #0, ACT_HELP                  ; 0945
                           19  11 002A5  54$:  BRB     61$                           ; 0786
        0000V  CF          00  FB 002A7  55$:  CALLS   #0, ACT_ENTER                 ; 0950
                           1C  11 002AC        BRB     63$                           ;
        0000V  CF          00  FB 002AE  56$:  CALLS   #0, ACT_INSERT                ; 0956
                           15  11 002B3  57$:  BRB     63$                           ;
                           7E  D4 002B5  58$:  CLRL    -(SP)                         ; 0960
                           02  11 002B7        BRB     60$                           ;
                           01  DD 002B9  59$:  PUSHL   #1                            ; 0962
        0000V  CF          01  FB 002BB  60$:  CALLS   #1, ACT_REFRESH               ;
                         FEA2  31 002C0  61$:  BRW     10$                           ;
                           7E  D4 002C3  62$:  CLRL    -(SP)                         ; 0966
        0000V  CF          01  FB 002C5        CALLS   #1, ACT_EXIT                  ;
               56          50  D0 002CA  63$:  MOVL    R0, LOCAL_STATUS              ;
               F0          56  E8 002CD        BLBS    LOCAL_STATUS, 61$             ; 0967
                               04 002D0        RET                                   ;
                           01  DD 002D1  64$:  PUSHL   #1                            ; 0972
        0000V  CF          01  FB 002D3        CALLS   #1, ACT_EXIT                  ;
                               04 002D8        RET                                   ; 0971
           02  A7     80   8F  8C 002D9  65$:  XORB2   #128, AED_L_FLAGS+2           ; 0978
                           3D  11 002DE        BRB     67$                           ; 0979
                           5E  DD 002E0  66$:  PUSHL   SP                            ; 0989
                           7E  7C 002E2        CLRQ    -(SP)                         ;
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                                          7E   D4 002E4          CLRL    -(SP)                                            ;
                       00000000G  00      04   FB 002E6          CALLS   #4, SYS$SETEXV                                   ;
                                          6E   D5 002ED          TSTL    PREV_HANDLER                                     ; 0990
                                          74   13 002EF          BEQL    71$                                              ;
                                          7E   7C 002F1          CLRQ    -(SP)                                            ; 0991
                                  08      AE   DD 002F3          PUSHL   PREV_HANDLER                                     ;
                                          7E   D4 002F6          CLRL    -(SP)                                            ;
                       00000000G  00      04   FB 002F8          CALLS   #4, SYS$SETEXV                                   ;
                                          01   DD 002FF          PUSHL   #1                                               ;
                                          15   DD 00301          PUSHL   #21                                              ; 0995
                                  69      02   FB 00303          CALLS   #2, SCR$SET_CURSOR                               ;
                                  7E  046C  8F 3C 00306          MOVZWL  #1132, -(SP)                                     ; 0996
                       00000000G  00      01   FB 0030B          CALLS   #1, LIB$SIGNAL                                   ;
                                  7E   20  A7  9A 00312          MOVZBL  AED_B_COLUMN, -(SP)                              ; 0997
                                  7E   24  A7  9A 00316          MOVZBL  AED_B_LINE, -(SP)                                ;
                                  69      02   FB 0031A          CALLS   #2, SCR$SET_CURSOR                               ;
                                          5C   11 0031D 67$:     BRB     72$                                              ; 0998
                                       28  A8  95 0031F 68$:     TSTB    TERM_CHAR                                        ; 1010
                                          57   13 00322          BEQL    72$                                              ;
                                  50   40  A7  D0 00324          MOVL    AED_L_FIRSTLINE, R0                              ; 1014
                  51       0A     A0      04   E1 00328          BBC     #4, 10(R0), 73$                                  ;
                  12              67      03   E1 0032D          BBC     #3, AED_L_FLAGS, 69$                             ; 1017
                                          01   DD 00331          PUSHL   #1                                               ;
                                          15   DD 00333          PUSHL   #21                                              ;
                       00000000G  00      02   FB 00335          CALLS   #2, SCR$ERASE_PAGE                               ;
                                          01   DD 0033C          PUSHL   #1                                               ;
                                          15   DD 0033E          PUSHL   #21                                              ;
                                  69      02   FB 00340          CALLS   #2, SCR$SET_CURSOR                               ;
                                 00000000G  8F DD 00343 69$:     PUSHL   #AED$_NOMODIFY                                   ;
                       00000000G  00      01   FB 00349          CALLS   #1, LIB$SIGNAL                                   ;
                  0B              67      03   E1 00350          BBC     #3, AED_L_FLAGS, 70$                             ;
                                  7E   20  A7  9A 00354          MOVZBL  AED_B_COLUMN, -(SP)                              ;
                                  7E   24  A7  9A 00358          MOVZBL  AED_B_LINE, -(SP)                                ;
                                  69      02   FB 0035C          CALLS   #2, SCR$SET_CURSOR                               ;
                                 00000000*  8F D5 0035F 70$:     TSTL    #<AED$_NOMODIFY&7>                               ;
                                          14   13 00365 71$:     BEQL    72$                                              ;
00000000*  8F        14   A7      03      00   ED 00367          CMPZV   #0, #3, AED_L_WORSTERR, #<AED$_NOMODIFY&7>       ;
                                          08   18 00371          BGEQ    72$                                              ;
                           14     A7 00000000G  8F D0 00373      MOVL    #AED$_NOMODIFY, AED_L_WORSTERR                   ;
                                        FDB7   31 0037B 72$:     BRW     8$                                               ; 1018
                  F8       02     A7      05   E0 0037E 73$:     BBS     #5, AED_L_FLAGS+2, 72$                           ; 1023
                                  51   28  A8  9A 00383          MOVZBL  TERM_CHAR, R1                                    ; 1024
                                  0D      51   91 00387          CMPB    R1, #13                                          ; 1026
                                          03   13 0038A          BEQL    74$                                              ;
                                        00DC   31 0038C          BRW     77$                                              ;
                           01     A7      10   8A 0038F 74$:     BICB2   #16, AED_L_FLAGS+1                               ; 1031
                                          57   18 00393          BGEQ    75$                                              ; 1032
           68    00B8     C7      10      00   ED 00395          CMPZV   #0, #16, SEGMENT_SIZE, BUFFER_INDEX              ; 1033
                                          4E   14 0039C          BGTR    75$                                              ;
                                  50  00C4 C7  9E 0039E          MOVAB   INPUT_BUFFER, R0                                 ; 1036
                                  50      68   C0 003A3          ADDL2   BUFFER_INDEX, R0                                 ;
                                  2C   FF  A0  91 003A6          CMPB    -1(R0), #44                                      ;
                                          40   13 003AA          BEQL    75$                                              ;
                                  3D   FF  A0  91 003AC          CMPB    -1(R0), #61                                      ; 1037
                                          3A   13 003B0          BEQL    75$                                              ;
                                  29   FF  A0  91 003B2          CMPB    -1(R0), #41                                      ; 1038
                                          34   13 003B6          BEQL    75$                                              ;
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               30       02   A7  E8 003B8        BLBS    AED_L_FLAGS+2, 75$                    ; 1039
               02     0090   C7  91 003BC        CMPB    AED_B_FIELD, #2                       ; 1040
                             29  1E 003C1        BGEQU   75$                                   ;
                      00B8   C7  B5 003C3        TSTW    SEGMENT_SIZE                          ; 1041
                             23  13 003C7        BEQL    75$                                   ;
               50     00C4   C7  9E 003C9        MOVAB   INPUT_BUFFER, R0                      ; 1043
          00 B840            2C  90 003CE        MOVB    #44, @BUFFER_INDEX[R0]                ; 1044
          04   A8            01  B0 003D3        MOVW    #1, ECHO_DESC                         ; 1045
          08   A8       00 B840  9E 003D7        MOVAB   @BUFFER_INDEX[R0], ECHO_DESC+4        ; 1046
                        04   A8  9F 003DD        PUSHAB  ECHO_DESC                             ; 1047
               6A            01  FB 003E0        CALLS   #1, AED_PUTOUTPUT                     ;
                        20   A7  96 003E3        INCB    AED_B_COLUMN                          ; 1048
                             68  D6 003E6        INCL    BUFFER_INDEX                          ; 1049
                      00B8   C7  B6 003E8        INCW    SEGMENT_SIZE                          ; 1050
                             7E  7C 003EC  75$:  CLRQ    -(SP)                                 ; 1056
                             01  DD 003EE        PUSHL   #1                                    ;
                             58  DD 003F0        PUSHL   R8                                    ;
        0000G  CF            04  FB 003F2        CALLS   #4, AED_SEGSPLIT                      ;
           18  A8            50  D0 003F7        MOVL    R0, NEW_TEXT_LINE                     ;
                        01   A7  95 003FB        TSTB    AED_L_FLAGS+1                         ; 1060
                             56  18 003FE        BGEQ    76$                                   ;
               52       02   A7  E8 00400        BLBS    AED_L_FLAGS+2, 76$                    ; 1061
     4D        02   A7       03  E0 00404        BBS     #3, AED_L_FLAGS+2, 76$                ; 1062
               50     00B0   C7  9E 00409        MOVAB   AED_T_CURLINE, R0                     ; 1063
               50       44   A7  D1 0040E        CMPL    AED_L_LASTLINE, R0                    ;
                             42  12 00412        BNEQ    76$                                   ;
               50       40   A7  D0 00414        MOVL    AED_L_FIRSTLINE, R0                   ; 1064
                        0C   A0  D5 00418        TSTL    12(R0)                                ;
                             39  12 0041B        BNEQ    76$                                   ;
           02  A7            08  8A 0041D        BICB2   #8, AED_L_FLAGS+2                     ; 1067
                             58  DD 00421        PUSHL   R8                                    ; 1068
        0000G  CF            01  FB 00423        CALLS   #1, AED_SELECTFIELD                   ;
           04  A8     00B8   C7  B0 00428        MOVW    AED_T_CURLINE+8, ECHO_DESC            ; 1069
           08  A8     00C4   C7  9E 0042E        MOVAB   AED_T_CURLINE+20, ECHO_DESC+4         ; 1070
                             01  DD 00434        PUSHL   #1                                    ; 1071
               7E       24   A7  9A 00436        MOVZBL  AED_B_LINE, -(SP)                     ;
               69            02  FB 0043A        CALLS   #2, SCR$SET_CURSOR                    ;
                        04   A8  9F 0043D        PUSHAB  ECHO_DESC                             ; 1072
               6A            01  FB 00440        CALLS   #1, AED_PUTOUTPUT                     ;
               7E     00B8   C7  3C 00443        MOVZWL  SEGMENT_SIZE, -(SP)                   ; 1073
                             6E  D6 00448        INCL    (SP)                                  ;
               7E       24   A7  9A 0044A        MOVZBL  AED_B_LINE, -(SP)                     ;
               6B            02  FB 0044E        CALLS   #2, SCR$ERASE_LINE                    ;
 20   A7       68            01  81 00451        ADDB3   #1, BUFFER_INDEX, AED_B_COLUMN        ; 1074
               7E       20   A7  9A 00456  76$:  MOVZBL  AED_B_COLUMN, -(SP)                   ; 1076
               7E       24   A7  9A 0045A        MOVZBL  AED_B_LINE, -(SP)                     ;
        0000G  CF            02  FB 0045E        CALLS   #2, AED_SET_CURSOR                    ;
           01  A7       40   8F  88 00463        BISB2   #64, AED_L_FLAGS+1                    ; 1077
                           00E0  31 00468        BRW     88$                                   ; 1078
               20            51  91 0046B  77$:  CMPB    R1, #32                               ; 1089
                             03  1E 0046E        BGEQU   78$                                   ;
                           FCC2  31 00470        BRW     8$                                    ;
               67       80   8F  88 00473  78$:  BISB2   #128, AED_L_FLAGS                     ; 1090
           01  A7            10  8A 00477        BICB2   #16, AED_L_FLAGS+1                    ; 1091
           61  8F            51  91 0047B        CMPB    R1, #97                               ; 1092
                             06  1F 0047F        BLSSU   79$                                   ;
           7A  8F            51  91 00481        CMPB    R1, #122                              ;
```

```
                                              0C   1B 00485      BLEQU   80$                                       ;
                         E0    8F             51   91 00487 79$: CMPB    R1, #224                                  ; 1093
                                              0A   1F 0048B      BLSSU   81$                                       ;
                         FE    8F             51   91 0048D      CMPB    R1, #254                                  ;
                                              04   1A 00491      BGTRU   81$                                       ;
                         28    A8             20   82 00493 80$: SUBB2   #32, TERM_CHAR                            ; 1094
                         18    A7             68   D1 00497 81$: CMPL    BUFFER_INDEX, AED_L_PAGEWIDTH             ; 1099
                                              0F   18 0049B      BGEQ    82$                                       ;
                                        02    A7   95 0049D      TSTB    AED_L_FLAGS+2                             ; 1100
                                              15   19 004A0      BLSS    83$                                       ;
   18   A7     00B8   C7              10      00   ED 004A2      CMPZV   #0, #16, SEGMENT_SIZE, AED_L_PAGEWIDTH    ; 1101
                                              0B   19 004AA      BLSS    83$                                       ;
                                              7E   7C 004AC 82$: CLRQ    -(SP)                                     ; 1102
                                              7E   D4 004AE      CLRL    -(SP)                                     ;
                                              58   DD 004B0      PUSHL   R8                                        ;
                      0000G    CF             04   FB 004B2      CALLS   #4, AED_SEGSPLIT                          ;
                         04    A8             01   B0 004B7 83$: MOVW    #1, ECHO_DESC                             ; 1104
                         08    A8       28    A8   9E 004BB      MOVAB   TERM_CHAR, ECHO_DESC+4                    ; 1105
                                        04    A8   9F 004C0      PUSHAB  ECHO_DESC                                 ; 1106
                               6A             01   FB 004C3      CALLS   #1, AED_PUTOUTPUT                         ;
                               50             68   D0 004C6      MOVL    BUFFER_INDEX, R0                          ; 1111
        50     00B8   C7       10             00   ED 004C9      CMPZV   #0, #16, SEGMENT_SIZE, R0                 ;
                                              3E   15 004D0      BLEQ    84$                                       ;
                                        02    A7   95 004D2      TSTB    AED_L_FLAGS+2                             ; 1112
                                              39   19 004D5      BLSS    84$                                       ;
              04    A8    00B8    C7          50   A3 004D7      SUBW3   R0, SEGMENT_SIZE, ECHO_DESC               ; 1115
                         08    A8   00C4 C740      9E 004DE      MOVAB   INPUT_BUFFER[R0], ECHO_DESC+4             ; 1116
                                        04    A8   9F 004E5      PUSHAB  ECHO_DESC                                 ; 1117
                               6A             01   FB 004E8      CALLS   #1, AED_PUTOUTPUT                         ;
                   7E          68             02   C1 004EB      ADDL3   #2, BUFFER_INDEX, -(SP)                   ; 1118
                               7E       24    A7   9A 004EF      MOVZBL  AED_B_LINE, -(SP)                         ;
                      0000G    CF             02   FB 004F3      CALLS   #2, AED_SET_CURSOR                        ;
                               50             68   D0 004F8      MOVL    BUFFER_INDEX, R0                          ; 1119
                   51 000001FF 8F             50   C3 004FB      SUBL3   R0, #511, R1                              ; 1121
        51         00    00C4 C740      04    A8   2C 00503      MOVC5   ECHO_DESC, INPUT_BUFFER[R0], #0, R1, -    ;
                                    00C5 C740         0050C              INPUT_BUFFER+1[R0]                        ;
                               51       28    A8   9A 00510 84$: MOVZBL  TERM_CHAR, R1                             ; 1124
                         5B    8F             51   91 00514      CMPB    R1, #91                                   ;
                                              04   12 00518      BNEQ    85$                                       ;
                         02    A7             01   88 0051A      BISB2   #1, AED_L_FLAGS+2                         ;
                         5D    8F             51   91 0051E 85$: CMPB    R1, #93                                   ; 1125
                                              04   12 00522      BNEQ    86$                                       ;
                         02    A7             01   8A 00524      BICB2   #1, AED_L_FLAGS+2                         ;
                               50     00C4    C7   9E 00528 86$: MOVAB   INPUT_BUFFER, R0                          ;
                         00 B840              51   90 0052D      MOVB    R1, @BUFFER_INDEX[R0]                     ; 1129
                                              68   D6 00532      INCL    BUFFER_INDEX                              ; 1130
                   20    A7    68             01   81 00534      ADDB3   #1, BUFFER_INDEX, AED_B_COLUMN            ; 1131
                                        02    A7   95 00539      TSTB    AED_L_FLAGS+2                             ; 1135
                                              09   18 0053C      BGEQ    87$                                       ;
        68     00B8   C7       10             00   ED 0053E      CMPZV   #0, #16, SEGMENT_SIZE, BUFFER_INDEX       ; 1136
                                              04   14 00545      BGTR    88$                                       ;
                                      00B8    C7   B6 00547 87$: INCW    SEGMENT_SIZE                              ; 1137
                         01    A7             08   8A 0054B 88$: BICB2   #8, AED_L_FLAGS+1                         ; 1138
                                            FBE3   31 0054F      BRW     8$                                        ; 0768
                                                   04 00552      RET                                               ; 1144

; Routine Size:  1363 bytes,    Routine Base:  $CODE$ + 0000
```

```
;  696          1145  1 %SBTTL  'ACT_RUB_CHR - rubout a single character'
;  697          1146  1 ROUTINE ACT_RUB_CHR =
;  698          1147  1
;  699          1148  1 !++
;  700          1149  1 !
;  701          1150  1 ! FUNCTIONAL DESCRIPTION:
;  702          1151  1 !
;  703          1152  1 !       This routine deletes the character immediately preceeding the current
;  704          1153  1 !       cursor position.  The deleted character is placed in storage for
;  705          1154  1 !       later retrieval.
;  706          1155  1 !
;  707          1156  1 ! CALLING SEQUENCE:
;  708          1157  1 !       ACT_RUB_CHR ()
;  709          1158  1 !
;  710          1159  1 ! INPUT PARAMETERS:
;  711          1160  1 !       none
;  712          1161  1 !
;  713          1162  1 ! IMPLICIT INPUTS:
;  714          1163  1 !       OWN storage
;  715          1164  1 !
;  716          1165  1 ! OUTPUT PARAMETERS:
;  717          1166  1 !       none
;  718          1167  1 !
;  719          1168  1 ! IMPLICIT OUTPUTS:
;  720          1169  1 !       none
;  721          1170  1 !
;  722          1171  1 ! ROUTINE VALUE:
;  723          1172  1 !       1 if successful
;  724          1173  1 !       error status otherwise
;  725          1174  1 !
;  726          1175  1 ! SIDE EFFECTS:
;  727          1176  1 !       The line segment table is updated as necessary, ACE line pointers
;  728          1177  1 !       are updated, and the object's ACL is updated as necessary.
;  729          1178  1 !
;  730          1179  1 !--
;  731          1180  1
;  732          1181  2 BEGIN
;  733          1182  2
;  734          1183  2 LOCAL
;  735          1184  2         PREV_LINE       : REF $BBLOCK,          ! Addr of previous segment
;  736          1185  2         COMBINED_LINE   : REF $BBLOCK;          ! Addr of combined segments
;  737          1186  2
;  738          1187  2 ! If the current ACE is marked as untouchable, no modifications are allowed.
;  739          1188  2
;  740          1189  2 IF .AED_L_FIRSTLINE[LINE_V_NOTOUCH]
;  741          1190  2 THEN
;  742          1191  3     BEGIN
;  743          1192  3     SIGNAL (AED$_NOMODIFY);
;  744          1193  3     AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  745          1194  3     AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  746          1195  3     TERM_CHAR = 0;
;  747          1196  3     RETURN 1;
;  748          1197  2     END;
;  749          1198  2 AED_L_FLAGS[AED_V_MODIFIED] = 1;
;  750          1199  2 AED_L_FLAGS[AED_V_FIRSTCHAR] = 0;
;  751          1200  2
;  752          1201  2 IF .BUFFER_INDEX GTR 0
```

```
2 THEN
3     BEGIN
3
3 ! Delete the previous character.
3
3     AED_B_DEL_CHAR = .INPUT_BUFFER[.BUFFER_INDEX - 1];
3     IF .AED_B_DEL_CHAR EQL '[' THEN AED_L_FLAGS[AED_V_OPENUIC] = 0;
3     IF .AED_B_DEL_CHAR EQL ']' THEN AED_L_FLAGS[AED_V_OPENUIC] = 0;
3     SCR$SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN - 1);
3     IF .BUFFER_INDEX LSS .SEGMENT_SIZE
3     THEN
4         BEGIN
4         ECHO_DESC[DSC$W_LENGTH] = .SEGMENT_SIZE - .BUFFER_INDEX;
4         ECHO_DESC[DSC$A_POINTER] = BUFFER_CHAR;
4         AED_PUTOUTPUT (ECHO_DESC);
4         CH$COPY (.ECHO_DESC[DSC$W_LENGTH], BUFFER_CHAR,
4               0,
4               512 - .BUFFER_INDEX + 1, INPUT_BUFFER[.BUFFER_INDEX - 1]);
3         END;
3     BUFFER_INDEX = .BUFFER_INDEX - 1;
3     AED_B_COLUMN = .BUFFER_INDEX + 1;
3     SEGMENT_SIZE = .SEGMENT_SIZE - 1;
3     SCR$ERASE_LINE (.AED_B_LINE, .SEGMENT_SIZE + 1);
3     AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
3     END
3
3 ! Combine the current and previous line segments.
3
2 ELSE AED_SEGCOMBINE (BUFFER_INDEX, 0);
2
2 AED_L_FLAGS[AED_V_GOLDKEY] = 0;
2 AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
2 TERM_CHAR = 0;
2 RETURN 1;
2
1 END;                                         ! End of routine ACT_RUB_CHR
```

```
                                   03FC 00000 ACT_RUB_CHR:
                                                  .WORD   Save R2,R3,R4,R5,R6,R7,R8,R9          ; 1146
               59 00000000G  8F   D0 00002        MOVL    #AED$_NOMODIFY, R9                    ;
               58 00000000G  00   9E 00009        MOVAB   SCR$SET_CURSOR, R8                    ;
               57       0000'  CF   9E 00010        MOVAB   BUFFER_INDEX, R7                      ;
               56       0000'  CF   9E 00015        MOVAB   AED_L_FLAGS, R6                       ;
               50          40  A6   D0 0001A        MOVL    AED_L_FIRSTLINE, R0                   ; 1189
       49         0A  A0       04   E1 0001E        BBC     #4, 10(R0), 4$                        ;
       12             66       03   E1 00023        BBC     #3, AED_L_FLAGS, 1$                   ; 1192
                                01   DD 00027        PUSHL   #1                                    ;
                                15   DD 00029        PUSHL   #21                                   ;
          00000000G  00        02   FB 0002B        CALLS   #2, SCR$ERASE_PAGE                    ;
                                01   DD 00032        PUSHL   #1                                    ;
                                15   DD 00034        PUSHL   #21                                   ;
                     68        02   FB 00036        CALLS   #2, SCR$SET_CURSOR                    ;
                                59   DD 00039 1$:    PUSHL   R9                                    ;
```

```
                    00000000G  00        01  FB 0003B       CALLS   #1, LIB$SIGNAL                                  ;
                0B             66        03  E1 00042       BBC     #3, AED_L_FLAGS, 2$                             ;
                               7E   20   A6  9A 00046       MOVZBL  AED_B_COLUMN, -(SP)                             ;
                               7E   24   A6  9A 0004A       MOVZBL  AED_B_LINE, -(SP)                               ;
                               68        02  FB 0004E       CALLS   #2, SCR$SET_CURSOR                              ;
                           00000000*     8F  D5 00051  2$:  TSTL    #<AED$_NOMODIFY&7>                              ;
                                         10  13 00057       BEQL    3$                                              ;
00000000*  8F     14  A6           03    00  ED 00059       CMPZV   #0, #3, AED_L_WORSTERR, #<AED$_NOMODIFY&7>      ;
                                         04  18 00063       BGEQ    3$                                              ;
                  14  A6                 59  D0 00065       MOVL    R9, AED_L_WORSTERR                              ;
                                       00A9  31 00069  3$:  BRW     10$                                             ; 1193
                      66           80    8F  88 0006C  4$:  BISB2   #128, AED_L_FLAGS                               ; 1198
                  01  A6                 10  8A 00070       BICB2   #16, AED_L_FLAGS+1                              ; 1199
                      50                 67  D0 00074       MOVL    BUFFER_INDEX, R0                                ; 1201
                                         03  14 00077       BGTR    5$                                              ;
                                       0090  31 00079       BRW     9$                                              ;
                  68  A6         00C3  C640  90 0007C  5$:  MOVB    INPUT_BUFFER-1[R0], AED_B_DEL_CHAR              ; 1207
                  5B  8F           68    A6  91 00083       CMPB    AED_B_DEL_CHAR, #91                             ; 1208
                                         04  12 00088       BNEQ    6$                                              ;
                  02  A6                 01  8A 0008A       BICB2   #1, AED_L_FLAGS+2                               ;
                  5D  8F           68    A6  91 0008E  6$:  CMPB    AED_B_DEL_CHAR, #93                             ; 1209
                                         04  12 00093       BNEQ    7$                                              ;
                  02  A6                 01  8A 00095       BICB2   #1, AED_L_FLAGS+2                               ;
                      7E           20    A6  9A 00099  7$:  MOVZBL  AED_B_COLUMN, -(SP)                             ; 1210
                                         6E  D7 0009D       DECL    (SP)                                            ;
                      7E           24    A6  9A 0009F       MOVZBL  AED_B_LINE, -(SP)                               ;
                      68                 02  FB 000A3       CALLS   #2, SCR$SET_CURSOR                              ;
                      50                 67  D0 000A6       MOVL    BUFFER_INDEX, R0                                ; 1211
50       00B8  C6                   10   00  ED 000A9       CMPZV   #0, #16, SEGMENT_SIZE, R0                       ;
                                         2E  15 000B0       BLEQ    8$                                              ;
          04  A7        00B8  C6         50  A3 000B2       SUBW3   R0, SEGMENT_SIZE, ECHO_DESC                     ; 1214
                        08    A7   00C4 C640 9E 000B9       MOVAB   INPUT_BUFFER[R0], ECHO_DESC+4                   ; 1215
                                     04  A7  9F 000C0       PUSHAB  ECHO_DESC                                       ; 1216
                        0000G CF         01  FB 000C3       CALLS   #1, AED_PUTOUTPUT                               ;
                              50         67  D0 000C8       MOVL    BUFFER_INDEX, R0                                ; 1217
              51  00000201    8F         50  C3 000CB       SUBL3   R0, #513, R1                                    ; 1219
51            00      00C4  C640     04  A7  2C 000D3       MOVC5   ECHO_DESC, INPUT_BUFFER[R0], #0, R1, -          ;
                                   00C3 C640    000DC               INPUT_BUFFER-1[R0]                              ;
                                         67  D7 000E0  8$:  DECL    BUFFER_INDEX                                    ; 1221
          20  A6              67         01  81 000E2       ADDB3   #1, BUFFER_INDEX, AED_B_COLUMN                  ; 1222
                                   00B8  C6  B7 000E7       DECW    SEGMENT_SIZE                                    ; 1223
                              7E   00B8  C6  3C 000EB       MOVZWL  SEGMENT_SIZE, -(SP)                             ; 1224
                                         6E  D6 000F0       INCL    (SP)                                            ;
                              7E     24  A6  9A 000F2       MOVZBL  AED_B_LINE, -(SP)                               ;
                    00000000G 00         02  FB 000F6       CALLS   #2, SCR$ERASE_LINE                              ;
                              7E     20  A6  9A 000FD       MOVZBL  AED_B_COLUMN, -(SP)                             ; 1225
                              7E     24  A6  9A 00101       MOVZBL  AED_B_LINE, -(SP)                               ;
                        0000G CF         02  FB 00105       CALLS   #2, AED_SET_CURSOR                              ;
                                         09  11 0010A       BRB     10$                                             ; 1201
                                         7E  D4 0010C  9$:  CLRL    -(SP)                                           ; 1230
                                         57  DD 0010E       PUSHL   R7                                              ;
                        0000G CF         02  FB 00110       CALLS   #2, AED_SEGCOMBINE                              ;
                        01    A6   2008  8F  AA 00115 10$:  BICW2   #8200, AED_L_FLAGS+1                            ; 1233
                                     28  A7  94 0011B       CLRB    TERM_CHAR                                       ; 1234
                              50         01  D0 0011E       MOVL    #1, R0                                          ; 1235
                                             04 00121       RET                                                     ; 1237
```

; Routine Size: 290 bytes,   Routine Base: $CODE$ + 0553

```
;  790          1238  1 %SBTTL  'ACT_RUB_WRD - rubout previous word'
;  791          1239  1 ROUTINE ACT_RUB_WRD =
;  792          1240  1
;  793          1241  1 !++
;  794          1242  1 !
;  795          1243  1 ! FUNCTIONAL DESCRIPTION:
;  796          1244  1 !
;  797          1245  1 !       This routine deletes the word (all characters stopping with the first
;  798          1246  1 !       non alphanumeric character) immediately preceeding the current cursor
;  799          1247  1 !       position.  The deleted word is placed in storage for later retrieval.
;  800          1248  1 !
;  801          1249  1 ! CALLING SEQUENCE:
;  802          1250  1 !       ACT_RUB_WRD ()
;  803          1251  1 !
;  804          1252  1 ! INPUT PARAMETERS:
;  805          1253  1 !       none
;  806          1254  1 !
;  807          1255  1 ! IMPLICIT INPUTS:
;  808          1256  1 !       DWN storage
;  809          1257  1 !
;  810          1258  1 ! OUTPUT PARAMETERS:
;  811          1259  1 !       none
;  812          1260  1 !
;  813          1261  1 ! IMPLICIT OUTPUTS:
;  814          1262  1 !       none
;  815          1263  1 !
;  816          1264  1 ! ROUTINE VALUE:
;  817          1265  1 !       1 if successful
;  818          1266  1 !       error status otherwise
;  819          1267  1 !
;  820          1268  1 ! SIDE EFFECTS:
;  821          1269  1 !       The line segment table is updated as necessary, ACE line pointers
;  822          1270  1 !       are updated, and the object's ACL is updated as necessary.
;  823          1271  1 !
;  824          1272  1 !--
;  825          1273  1
;  826          1274  2 BEGIN
;  827          1275  2
;  828          1276  2 LOCAL
;  829          1277  2         DEL_WORD_BEGIN,                         ! Beginning offset of word
;  830          1278  2         DEL_WORD_END;                           ! End offset of word
;  831          1279  2
;  832          1280  2 ! If the current ACE is marked as untouchable, no modifications are allowed.
;  833          1281  2
;  834          1282  2 IF .AED_L_FIRSTLINE[LINE_V_NOTOUCH]
;  835          1283  2 THEN
;  836          1284  3     BEGIN
;  837          1285  3     SIGNAL (AED$_NOMODIFY);
;  838          1286  3     AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  839          1287  3     AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  840          1288  3     TERM_CHAR = 0;
;  841          1289  3     RETURN 1;
;  842          1290  2     END;
;  843          1291  2
;  844          1292  2 ! Deallocate anything in the saved word buffer.
;  845          1293  2
;  846          1294  2 IF .AED_Q_DEL_WORD[DSC$W_LENGTH] NEQ 0
```

```
;  847        P 1295  2 THEN DEALLOCATE (.AED_Q_DEL_WORD[DSC$W_LENGTH],
;  848          1296  2                  AED_Q_DEL_WORD[DSC$A_POINTER]);
;  849          1297  2 AED_Q_DEL_WORD[DSC$W_LENGTH] = 0;
;  850          1298  2
;  851          1299  2 AED_L_FLAGS[AED_V_MODIFIED] = 1;          ! ACE has been modified
;  852          1300  2 AED_L_FLAGS[AED_V_FIRSTCHAR] = 0;
;  853          1301  2
;  854          1302  2 IF .BUFFER_INDEX GTR 0
;  855          1303  2 THEN
;  856          1304  3     BEGIN
;  857          1305  3
;  858          1306  3 ! Delete the previous word.
;  859          1307  3
;  860          1308  3     DEL_WORD_END = .BUFFER_INDEX;
;  861          1309  3     BUFFER_INDEX = .BUFFER_INDEX - 2;   ! Backup over delimiter
;  862          1310  3     IF .BUFFER_INDEX GEQ 0
;  863          1311  3     THEN
;  864          1312  4         BEGIN
;  865          1313  5         WHILE (.BUFFER_CHAR GEQ 'A' AND .BUFFER_CHAR LEQ 'Z')
;  866          1314  5            OR (.BUFFER_CHAR GEQ '0' AND .BUFFER_CHAR LEQ '9')
;  867          1315  4         DO
;  868          1316  5             BEGIN
;  869          1317  5             BUFFER_INDEX = .BUFFER_INDEX - 1;
;  870          1318  5             IF .BUFFER_INDEX LSS 0 THEN EXITLOOP;
;  871          1319  4             END;
;  872          1320  4         END
;  873          1321  3     ELSE BUFFER_INDEX = -1;
;  874          1322  3     BUFFER_INDEX = .BUFFER_INDEX + 1;   ! First char of word
;  875          1323  3     DEL_WORD_BEGIN = .BUFFER_INDEX;
;  876          1324  3     AED_B_COLUMN = .BUFFER_INDEX + 1;
;  877          1325  3     AED_Q_DEL_WORD[DSC$W_LENGTH] = .DEL_WORD_END - .DEL_WORD_BEGIN;
;  878        P 1326  3     AED_L_STATUS = ALLOCATE (.AED_Q_DEL_WORD[DSC$W_LENGTH],
;  879          1327  3                             AED_Q_DEL_WORD[DSC$A_POINTER]);
;  880          1328  3     IF NOT .AED_L_STATUS
;  881          1329  3     THEN
;  882          1330  4         BEGIN
;  883          1331  4         SIGNAL (.AED_L_STATUS);
;  884          1332  4         AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  885          1333  4         AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  886          1334  4         TERM_CHAR = 0;
;  887          1335  4         RETURN 0;
;  888          1336  3         END;
;  889          1337  3     CH$MOVE (.AED_Q_DEL_WORD[DSC$W_LENGTH],
;  890          1338  3              INPUT_BUFFER[.DEL_WORD_BEGIN],
;  891          1339  3              .AED_Q_DEL_WORD[DSC$A_POINTER]);
;  892          1340  3     AED_L_FLAGS[AED_V_ROBWORD] = 1;
;  893          1341  3     ECHO_DESC[DSC$W_LENGTH] = .SEGMENT_SIZE - .DEL_WORD_END;
;  894          1342  3     ECHO_DESC[DSC$A_POINTER] = INPUT_BUFFER[.DEL_WORD_END];
;  895          1343  3     IF .ECHO_DESC[DSC$W_LENGTH] GEQ 1
;  896          1344  3     THEN
;  897          1345  4         BEGIN
;  898          1346  4         SCR$SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  899          1347  4         AED_PUTOUTPUT (ECHO_DESC);
;  900          1348  3         END;
;  901          1349  3     CH$COPY (.ECHO_DESC[DSC$W_LENGTH], INPUT_BUFFER[.DEL_WORD_END],
;  902          1350  3              0,
;  903          1351  3              512 - .BUFFER_INDEX, INPUT_BUFFER[.DEL_WORD_BEGIN]);
```

```
;  904    1352  3        SEGMENT_SIZE = .SEGMENT_SIZE - .AED_Q_DEL_WORD[DSC$W_LENGTH];
;  905    1353  3        SCR$ERASE_LINE (.AED_B_LINE, .SEGMENT_SIZE + 1);
;  906    1354  3        AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  907    1355  3        END
;  908    1356  3
;  909    1357  3   ! Combine the current and previous line segments.
;  910    1358  3
;  911    1359  2   ELSE AED_SEGCOMBINE (BUFFER_INDEX, 0);
;  912    1360  2
;  913    1361  2   AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  914    1362  2   AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  915    1363  2   TERM_CHAR = 0;
;  916    1364  2   RETURN 1;
;  917    1365  2
;  918    1366  1   END;                                              ! End of routine ACT_RUB_WRD



                                              0FFC 00000 ACT_RUB_WRD:
                                                               .WORD   Save R2,R3,R4,R5,R6,R7,R8,R9,R10,R11                ; 1239
                           5B 00000000G   00   9E 00002        MOVAB   SCR$SET_CURSOR, R11                                 :
                           5A       0000'   CF   9E 00009        MOVAB   BUFFER_INDEX, R10                                   :
                           59       0000'   CF   9E 0000E        MOVAB   AED_L_FLAGS, R9                                     :
                           5E                04   C2 00013        SUBL2   #4, SP                                              :
                           50          40   A9   D0 00016        MOVL    AED_L_FIRSTLINE, R0                                 ; 1282
                51       0A        A0        04   E1 0001A        BBC     #4, 10(R0), 4$                                      :
                12                 69        03   E1 0001F        BBC     #3, AED_L_FLAGS, 1$                                 ; 1285
                                             01   DD 00023        PUSHL   #1                                                  :
                                             15   DD 00025        PUSHL   #21                                                 :
                     00000000G   00          02   FB 00027        CALLS   #2, SCR$ERASE_PAGE                                  :
                                             01   DD 0002E        PUSHL   #1                                                  :
                                             15   DD 00030        PUSHL   #21                                                 :
                                 6B          02   FB 00032        CALLS   #2, SCR$SET_CURSOR                                  :
                                    00000000G   8F   DD 00035 1$:    PUSHL   #AED$_NOMODIFY                                      :
                     00000000G   00          01   FB 0003B        CALLS   #1, LIB$SIGNAL                                      :
                0B                 69        03   E1 00042        BBC     #3, AED_L_FLAGS, 2$                                 :
                                 7E    20    A9   9A 00046        MOVZBL  AED_B_COLUMN, -(SP)                                 :
                                 7E    24    A9   9A 0004A        MOVZBL  AED_B_LINE, -(SP)                                   :
                                 6B          02   FB 0004E        CALLS   #2, SCR$SET_CURSOR                                  :
                                    00000000*   8F   D5 00051 2$:    TSTL    #<AED$_NOMODIFY&7>                                  :
                                             14   13 00057        BEQL    3$                                                  :
00000000*   8F      14   A9              03   00   ED 00059        CMPZV   #0, #3, AED_L_WORSTERR, #<AED$_NOMODIFY&7>          :
                                             08   18 00063        BGEQ    3$                                                  :
                          14   A9 00000000G   8F   D0 00065        MOVL    #AED$_NOMODIFY, AED_L_WORSTERR                      :
                                           0165   31 0006D 3$:    BRW     19$                                                 ; 1286
                          50          60   A9   3C 00070 4$:    MOVZWL  AED_Q_DEL_WORD, R0                                  ; 1294
                                             11   13 00074        BEQL    5$                                                  :
                                      64   A9   9F 00076        PUSHAB  AED_Q_DEL_WORD+4                                    ; 1296
                     04   AE                 50   D0 00079        MOVL    R0, 4(SP)                                           :
                                      04   AE   9F 0007D        PUSHAB  4(SP)                                               :
                     00000000G   00          02   FB 00080        CALLS   #2, LIB$FREE_VM                                     :
                                      60   A9   B4 00087 5$:    CLRW    AED_Q_DEL_WORD                                      ; 1297
                          69          80   8F   88 0008A        BISB2   #128, AED_L_FLAGS                                   ; 1299
                     01   A9                 10   8A 0008E        BICB2   #16, AED_L_FLAGS+1                                  ; 1300
                          50                 6A   D0 00092        MOVL    BUFFER_INDEX, R0                                    ; 1302
```

```
                                        03  14 00095          BGTR    6$                                        :
                                      0132  31 00097          BRW     18$                                       :
                             57         50  D0 0009A 6$:      MOVL    R0, DEL_WORD_END                          : 1308
                             6A         02  C2 0009D          SUBL2   #2, BUFFER_INDEX                          : 1309
                                        28  19 000A0          BLSS    10$                                       : 1310
                             50         6A  D0 000A2          MOVL    BUFFER_INDEX, R0                          : 1313
                             51  00C4 C940  9A 000A5 7$:      MOVZBL  INPUT_BUFFER[R0], R1                      :
                        41   8F         51  91 000AB          CMPB    R1, #65                                   :
                                        06  1F 000AF          BLSSU   8$                                        :
                        5A   8F         51  91 000B1          CMPB    R1, #90                                   :
                                        0A  1B 000B5          BLEQU   9$                                        :
                             30         51  91 000B7 8$:      CMPB    R1, #48                                   : 1314
                                        11  1F 000BA          BLSSU   11$                                       :
                             39         51  91 000BC          CMPB    R1, #57                                   :
                                        0C  1A 000BF          BGTRU   11$                                       :
                                        6A  D7 000C1 9$:      DECL    BUFFER_INDEX                              : 1317
                             50         6A  D0 000C3          MOVL    BUFFER_INDEX, R0                          : 1318
                                        DD  18 000C6          BGEQ    7$                                        :
                                        03  11 000C8          BRB     11$                                       :
                             6A         01  CE 000CA 10$:     MNEGL   #1, BUFFER_INDEX                          : 1321
                                        6A  D6 000CD 11$:     INCL    BUFFER_INDEX                              : 1322
                             56         6A  D0 000CF          MOVL    BUFFER_INDEX, DEL_WORD_BEGIN              : 1323
              20   A9        6A         01  81 000D2          ADDB3   #1, BUFFER_INDEX, AED_B_COLUMN            : 1324
              60   A9        57         56  A3 000D7          SUBW3   DEL_WORD_BEGIN, DEL_WORD_END, -           : 1325
                                                                      AED_Q_DEL_WORD                            :
                                   64   A9  9F 000DC          PUSHAB  AED_Q_DEL_WORD+4                          : 1327
                        04   AE    60   A9  3C 000DF          MOVZWL  AED_Q_DEL_WORD, 4(SP)                     :
                                   04   AE  9F 000E4          PUSHAB  4(SP)                                     :
                 00000000G   00         02  FB 000E7          CALLS   #2, LIB$GET_VM                            :
                             58         50  D0 000EE          MOVL    R0, VM_STATUS                             :
                             08         58  E9 000F1          BLBC    VM_STATUS, 12$                            :
   60   A9            00     6E         00  2C 000F4          MOVC5   #0, (SP), #0, AED_Q_DEL_WORD, -           :
                                   64   B9     000FA                  @AED_Q_DEL_WORD+4                         :
                      008C   C9         58  D0 000FC 12$:     MOVL    VM_STATUS, AED_L_STATUS                   :
                             57  008C   C9  E8 00101          BLBS    AED_L_STATUS, 16$                         : 1328
                      12     69         03  E1 00106          BBC     #3, AED_L_FLAGS, 13$                      : 1331
                                        01  DD 0010A          PUSHL   #1                                        :
                                        15  DD 0010C          PUSHL   #21                                       :
                 00000000G   00         02  FB 0010E          CALLS   #2, SCR$ERASE_PAGE                        :
                                        01  DD 00115          PUSHL   #1                                        :
                                        15  DD 00117          PUSHL   #21                                       :
                             6B         02  FB 00119          CALLS   #2, SCR$SET_CURSOR                        :
                                 008C   C9  DD 0011C 13$:     PUSHL   AED_L_STATUS                              :
                 00000000G   00         01  FB 00120          CALLS   #1, LIB$SIGNAL                            :
                      0B     69         03  E1 00127          BBC     #3, AED_L_FLAGS, 14$                      :
                             7E    20   A9  9A 0012B          MOVZBL  AED_B_COLUMN, -(SP)                       :
                             7E    24   A9  9A 0012F          MOVZBL  AED_B_LINE, -(SP)                         :
                             6B         02  FB 00133          CALLS   #2, SCR$SET_CURSOR                        :
                             50  008C   C9  D0 00136 14$:     MOVL    AED_L_STATUS, R0                          :
                             07         50  93 0013B          BITB    R0, #7                                    :
                                        11  13 0013E          BEQL    15$                                       :
        51            50     03         00  EF 00140          EXTZV   #0, #3, R0, R1                            :
        51       14   A9     03         00  ED 00145          CMPZV   #0, #3, AED_L_WORSTERR, R1                :
                                        04  18 0014B          BGEQ    15$                                       :
                        14   A9         50  D0 0014D          MOVL    R0, AED_L_WORSTERR                        :
                        01   A9  2008   8F  AA 00151 15$:     BICW2   #8200, AED_L_FLAGS+1                      : 1333
                                   28   AA  94 00157          CLRB    TERM_CHAR                                 : 1334
```

```
                                          0085  31 0015A        BRW     20$                                                  : 1335
      64    B9       00C4 C946       60    A9  28 0015D 16$:    MOVC3   AED_Q_DEL_WORD, INPUT_BUFFER-                        : 1339
                                                                        [DEL_WORD_BEGIN], @AED_Q_DEL_WORD+4
                       01   A9            02  88 00166          BISB2   #2, AED_L_FLAGS+1                                    : 1340
      04    AA       00B8   C9            57  A3 0016A          SUBW3   DEL_WORD_END, SEGMENT_SIZE, ECHO_DESC                : 1341
                       08   AA     00C4 C947  9E 00171          MOVAB   INPUT_BUFFER[DEL_WORD_END], ECHO_DESC+4              : 1342
                                     04   AA  B5 00178          TSTW    ECHO_DESC                                            : 1343
                                          13  13 0017B          BEQL    17$
                            7E       20   A9  9A 0017D          MOVZBL  AED_B_COLUMN, -(SP)                                  : 1346
                            7E       24   A9  9A 00181          MOVZBL  AED_B_LINE, -(SP)
                            6B            02  FB 00185          CALLS   #2, SCR$SET_CURSOR
                                     04   AA  9F 00188          PUSHAB  ECHO_DESC                                            : 1347
                    0000G   CF            01  FB 0018B          CALLS   #1, AED_PUTOUTPUT
                 50 00000200 8F           6A  C3 00190 17$:     SUBL3   BUFFER_INDEX, #512, R0                               : 1351
 50                 00       00C4 C947   04   AA  2C 00198      MOVC5   ECHO_DESC, INPUT_BUFFER[DEL_WORD_END], #0, -         :
                                   00C4 C946     001A1                  R0, INPUT_BUFFER[DEL_WORD_BEGIN]
                    00B8    C9       60   A9  A2 001A5          SUBW2   AED_Q_DEL_WORD, SEGMENT_SIZE                         : 1352
                            7E     00B8   C9  3C 001AB          MOVZWL  SEGMENT_SIZE, -(SP)                                  : 1353
                                          6E  D6 001B0          INCL    (SP)
                            7E       24   A9  9A 001B2          MOVZBL  AED_B_LINE, -(SP)
                00000000G   00            02  FB 001B6          CALLS   #2, SCR$ERASE_LINE
                            7E       20   A9  9A 001BD          MOVZBL  AED_B_COLUMN, -(SP)                                  : 1354
                            7E       24   A9  9A 001C1          MOVZBL  AED_B_LINE, -(SP)
                    0000G   CF            02  FB 001C5          CALLS   #2, AED_SET_CURSOR
                                          09  11 001CA          BRB     19$                                                  : 1302
                                          7E  D4 001CC 18$:     CLRL    -(SP)                                                : 1359
                                          5A  DD 001CE          PUSHL   R10
                    0000G   CF            02  FB 001D0          CALLS   #2, AED_SEGCOMBINE
                       01   A9     2008   8F  AA 001D5 19$:     BICW2   #8200, AED_L_FLAGS+1                                 : 1362
                                     28   AA  94 001DB          CLRB    TERM_CHAR                                            : 1363
                            50            01  D0 001DE          MOVL    #1, R0                                               : 1364
                                              04 001E1          RET
                                          50  D4 001E2 20$:     CLRL    R0                                                   : 1366
                                              04 001E4          RET

; Routine Size:  485 bytes,    Routine Base:  $CODE$ + 0675
```

```
;  920     1367  1 %SBTTL 'ACT_RUB_BOL - erase to beginning of line'
;  921     1368  1 ROUTINE ACT_RUB_BOL =
;  922     1369  1
;  923     1370  1 !++
;  924     1371  1 !
;  925     1372  1 ! FUNCTIONAL DESCRIPTION:
;  926     1373  1 !
;  927     1374  1 !       This routine deletes all characters between the current cursor
;  928     1375  1 !       position and the beginning of the line segment.  These characters
;  929     1376  1 !       are NOT stored.
;  930     1377  1 !
;  931     1378  1 ! CALLING SEQUENCE:
;  932     1379  1 !       ACT_RUB_BOL ()
;  933     1380  1 !
;  934     1381  1 ! INPUT PARAMETERS:
;  935     1382  1 !       none
;  936     1383  1 !
;  937     1384  1 ! IMPLICIT INPUTS:
;  938     1385  1 !       OWN storage
;  939     1386  1 !
;  940     1387  1 ! OUTPUT PARAMETERS:
;  941     1388  1 !       none
;  942     1389  1 !
;  943     1390  1 ! IMPLICIT OUTPUTS:
;  944     1391  1 !       none
;  945     1392  1 !
;  946     1393  1 ! ROUTINE VALUE:
;  947     1394  1 !       1 if successful
;  948     1395  1 !       error status otherwise
;  949     1396  1 !
;  950     1397  1 ! SIDE EFFECTS:
;  951     1398  1 !       The line segment table is updated as necessary, ACE line pointers
;  952     1399  1 !       are updated, and the object's ACL is updated as necessary.
;  953     1400  1 !
;  954     1401  1 !--
;  955     1402  1
;  956     1403  2 BEGIN
;  957     1404  2
;  958     1405  2 ! If the current ACE is marked as untouchable, no modifications are allowed.
;  959     1406  2
;  960     1407  2 IF .AED_L_FIRSTLINE[LINE_V_NOTOUCH]
;  961     1408  2 THEN
;  962     1409  3     BEGIN
;  963     1410  3     SIGNAL (AED$_NOMODIFY);
;  964     1411  3     AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  965     1412  3     AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  966     1413  3     TERM_CHAR = 0;
;  967     1414  3     RETURN 1;
;  968     1415  3     END;
;  969     1416  2
;  970     1417  2 ! If at the beginning of the line, this is a no-op.
;  971     1418  2
;  972     1419  2 IF .BUFFER_INDEX EQL 0
;  973     1420  2 THEN
;  974     1421  3     BEGIN
;  975     1422  3     AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  976     1423  3     AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
```

```
;  977          1424  3      TERM_CHAR = 0;
;  978          1425  3      RETURN 1;
;  979          1426  2      END;
;  980          1427  2
;  981          1428  2  ! Deallocate anything in the saved line buffer.
;  982          1429  2
;  983          1430  2  IF .AED_Q_DEL_LINE[DSC$W_LENGTH] NEQ 0
;  984          1431  2  THEN DEALLOCATE (.AED_Q_DEL_LINE[DSC$W_LENGTH], .AED_Q_DEL_LINE[DSC$A_POINTER]);
;  985          1432  2  AED_Q_DEL_LINE[DSC$W_LENGTH] = 0;
;  986          1433  2
;  987          1434  2  ! Delete to the beginning of the line.
;  988          1435  2
;  989          1436  2  AED_L_FLAGS[AED_V_DELBOL] = 1;                    ! Note direction of delete
;  990          1437  2
;  991          1438  2  AED_Q_DEL_LINE[DSC$W_LENGTH] = .BUFFER_INDEX;
;  992          1439  2  AED_L_STATUS = ALLOCATE (.AED_Q_DEL_LINE[DSC$W_LENGTH], AED_Q_DEL_LINE[DSC$A_POINTER]);
;  993          1440  2  IF NOT .AED_L_STATUS
;  994          1441  2  THEN
;  995          1442  3      BEGIN
;  996          1443  3      SIGNAL (.AED_L_STATUS);
;  997          1444  3      AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  998          1445  3      AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  999          1446  3      RETURN 0;
; 1000          1447  2      END;
; 1001          1448  2
; 1002          1449  2  ! Copy the deleted portion of the line.
; 1003          1450  2
; 1004          1451  2  CH$MOVE (.AED_Q_DEL_LINE[DSC$W_LENGTH], INPUT_BUFFER[0], .AED_Q_DEL_LINE[DSC$A_POINTER]);
; 1005          1452  2  SEGMENT_SIZE = .SEGMENT_SIZE - .BUFFER_INDEX;
; 1006          1453  2  CH$COPY (.SEGMENT_SIZE, BUFFER_CHAR, 0, 512, INPUT_BUFFER);
; 1007          1454  2  BUFFER_INDEX = 0;
; 1008          1455  2
; 1009          1456  2  ! Echo any remaining portion of the line.
; 1010          1457  2
; 1011          1458  2  IF .SEGMENT_SIZE GTR 0
; 1012          1459  2  THEN
; 1013          1460  3      BEGIN
; 1014          1461  3      ECHO_DESC[DSC$W_LENGTH] = .SEGMENT_SIZE;
; 1015          1462  3      ECHO_DESC[DSC$A_POINTER] = BUFFER_CHAR;
; 1016          1463  3      SCR$SET_CURSOR (.AED_B_LINE, 1);
; 1017          1464  3      AED_PUTOUTPUT (ECHO_DESC);
; 1018          1465  2      END;
; 1019          1466  2
; 1020          1467  2  ! Now clear the rest of the line.
; 1021          1468  2
; 1022          1469  2  SCR$ERASE_LINE (.AED_B_LINE, .SEGMENT_SIZE + 1);
; 1023          1470  2  AED_SET_CURSOR (.AED_B_LINE, 1);
; 1024          1471  2
; 1025          1472  2  AED_L_FLAGS[AED_V_FIRSTCHAR] = 0;
; 1026          1473  2  AED_L_FLAGS[AED_V_MODIFIED] = 1;
; 1027          1474  2  AED_B_COLUMN = .BUFFER_INDEX + 1;
; 1028          1475  2  AED_L_FLAGS[AED_V_GOLDKEY] = 0;
; 1029          1476  2  AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
; 1030          1477  2  TERM_CHAR = 0;
; 1031          1478  2  RETURN 1;
; 1032          1479  2
; 1033          1480  1  END;                                    ! End of routine ACT_RUB_BOL
```

```
                                                    0FFC 00000 ACT_RUB_BOL:
                                                               .WORD   Save R2,R3,R4,R5,R6,R7,R8,R9,R10,R11            ; 1368
                        5B 00000000G    8F    D0 00002         MOVL    #AED$_NOMODIFY, R11                             ;
                        5A 00000000G    00    9E 00009         MOVAB   SCR$ERASE_PAGE, R10                             ;
                        59 00000000G    00    9E 00010         MOVAB   SCR$SET_CURSOR, R9                              ;
                        58      0000'   CF    9E 00017         MOVAB   BUFFER_INDEX, R8                                ;
                        57      0000'   CF    9E 0001C         MOVAB   AED_L_FLAGS, R7                                 ;
                        5E              04    C2 00021         SUBL2   #4, SP                                          ;
                        50         40   A7    D0 00024         MOVL    AED_L_FIRSTLINE, R0                             ; 1407
               45       0A              A0    04 E1 00028      BBC     #4, 10(R0), 4$                                  ;
               0E                       67    03 E1 0002D      BBC     #3, AED_L_FLAGS, 1$                             ; 1410
                                        01    DD 00031         PUSHL   #1                                              ;
                                        15    DD 00033         PUSHL   #21                                             ;
                        6A              02    FB 00035         CALLS   #2, SCR$ERASE_PAGE                              ;
                                        01    DD 00038         PUSHL   #1                                              ;
                                        15    DD 0003A         PUSHL   #21                                             ;
                        69              02    FB 0003C         CALLS   #2, SCR$SET_CURSOR                              ;
                                        5B    DD 0003F 1$:     PUSHL   R11                                             ;
                  00000000G  00         01    FB 00041         CALLS   #1, LIB$SIGNAL                                  ;
               0B                       67    03 E1 00048      BBC     #3, AED_L_FLAGS, 2$                             ;
                        7E         20   A7    9A 0004C         MOVZBL  AED_B_COLUMN, -(SP)                             ;
                        7E         24   A7    9A 00050         MOVZBL  AED_B_LINE, -(SP)                               ;
                        69              02    FB 00054         CALLS   #2, SCR$SET_CURSOR                              ;
                           00000000*    8F    D5 00057 2$:     TSTL    #<AED$_NOMODIFY&7>                              ;
                                        10    13 0005D         BEQL    3$                                              ;
00000000*  8F       14  A7          03  00    ED 0005F         CMPZV   #0, #3, AED_L_WORSTERR, #<AED$_NOMODIFY&7>      ;
                                        04    18 00069         BGEQ    3$                                              ;
                    14  A7              5B    D0 0006B         MOVL    R11, AED_L_WORSTERR                             ;
                                   0111 31    00006F 3$:       BRW     12$                                             ; 1411
                                        68    D5 00072 4$:     TSTL    BUFFER_INDEX                                    ; 1419
                                        F9    13 00074         BEQL    3$                                              ;
                        50         58   A7    3C 00076         MOVZWL  AED_Q_DEL_LINE, R0                              ; 1430
                                        11    13 0007A         BEQL    5$                                              ;
                                   5C   A7    DD 0007C         PUSHL   AED_Q_DEL_LINE+4                                ; 1431
                    04  AE              50    D0 0007F         MOVL    R0, 4(SP)                                       ;
                                   04   AE    9F 00083         PUSHAB  4(SP)                                           ;
                  00000000G  00         02    FB 00086         CALLS   #2, LIB$FREE_VM                                 ;
                                   58   A7    B4 0008D 5$:     CLRW    AED_Q_DEL_LINE                                  ; 1432
                    01  A7              04    88 00090         BISB2   #4, AED_L_FLAGS+1                               ; 1436
                    58  A7              68    B0 00094         MOVW    BUFFER_INDEX, AED_Q_DEL_LINE                    ; 1438
                                   5C   A7    9F 00098         PUSHAB  AED_Q_DEL_LINE+4                                ; 1439
                    04  AE         58   A7    3C 0009B         MOVZWL  AED_Q_DEL_LINE, 4(SP)                           ;
                                   04   AE    9F 000A0         PUSHAB  4(SP)                                           ;
                  00000000G  00         02    FB 000A3         CALLS   #2, LIB$GET_VM                                  ;
                             56         50    D0 000AA         MOVL    R0, VM_STATUS                                   ;
                             08         56    E9 000AD         BLBC    VM_STATUS, 6$                                   ;
      58   A7          00               6E    00 2C 000B0      MOVC5   #0, (SP), #0, AED_Q_DEL_LINE, -                 ;
                                   5C   B7       000B6                 @AED_Q_DEL_LINE+4                               ;
                      008C  C7          56    D0 000B8 6$:     MOVL    VM_STATUS, AED_L_STATUS                         ;
                             4F   008C  C7    E8 000BD         BLBS    AED_L_STATUS, 10$                               ; 1440
               0E                       67    03 E1 000C2      BBC     #3, AED_L_FLAGS, 7$                             ; 1443
                                        01    DD 000C6         PUSHL   #1                                              ;
```

```
                              15 DD 000C8          PUSHL   #21                                              ;
                      6A      02 FB 000CA          CALLS   #2, SCR$ERASE_PAGE                               ;
                              01 DD 000CD          PUSHL   #1                                               ;
                              15 DD 000CF          PUSHL   #21                                              ;
                      69      02 FB 000D1          CALLS   #2, SCR$SET_CURSOR                               ;
                        008C  C7 DD 000D4 7$:      PUSHL   AED_L_STATUS                                     ;
            00000000G 00      01 FB 000D8          CALLS   #1, LIB$SIGNAL                                   ;
           0B         67      03 E1 000DF          BBC     #3, AED_L_FLAGS, 8$                              ;
                      7E   20 A7 9A 000E3          MOVZBL  AED_B_COLUMN, -(SP)                              ;
                      7E   24 A7 9A 000E7          MOVZBL  AED_B_LINE, -(SP)                                ;
                      69      02 FB 000EB          CALLS   #2, SCR$SET_CURSOR                               ;
                      50 008C C7 D0 000EE 8$:      MOVL    AED_L_STATUS, R0                                 ;
                      07      50 93 000F3          BITB    R0, #7                                           ;
                              11 13 000F6          BEQL    9$                                               ;
   51      50         03      00 EF 000F8          EXTZV   #0, #3, R0, R1                                   ;
   51   14 A7         03      00 ED 000FD          CMPZV   #0, #3, AED_L_WORSTERR, R1                       ;
                              04 18 00103          BGEQ    9$                                               ;
                14    A7      50 D0 00105          MOVL    R0, AED_L_WORSTERR                               ;
                01    A7 2008 8F AA 00109 9$:      BICW2   #8200, AED_L_FLAGS+1                             ; 1445
                              7F 11 0010F          BRB     13$                                              ; 1446
        5C B7   00C4  C7   58 A7 28 00111 10$:     MOVC3   AED_Q_DEL_LINE, INPUT_BUFFER, -                  ; 1451
                                                           @AED_Q_DEL_LINE+4                                ;
                00B8  C7      68 A2 00119          SUBW2   BUFFER_INDEX, SEGMENT_SIZE                       ; 1452
                      50 00C4 C7 9E 0011E          MOVAB   INPUT_BUFFER, R0                                 ; 1453
 0200 8F        00   00 B840 00B8 C7 2C 00123      MOVC5   SEGMENT_SIZE, @BUFFER_INDEX[R0], #0, #512, -     ;
                         00C4 C7    0012E          INPUT_BUFFER                                     ;
                              68 D4 00131          CLRL    BUFFER_INDEX                                     ; 1454
                      50 00B8 C7 3C 00133          MOVZWL  SEGMENT_SIZE, R0                                 ; 1458
                              1F 15 00138          BLEQ    11$                                              ;
                04    A8      50 B0 0013A          MOVW    R0, ECHO_DESC                                    ; 1461
                      50 00C4 C7 9E 0013E          MOVAB   INPUT_BUFFER, R0                                 ; 1462
        08 A8         50      68 C1 00143          ADDL3   BUFFER_INDEX, R0, ECHO_DESC+4                    ;
                              01 DD 00148          PUSHL   #1                                               ; 1463
                      7E   24 A7 9A 0014A          MOVZBL  AED_B_LINE, -(SP)                                ;
                      69      02 FB 0014E          CALLS   #2, SCR$SET_CURSOR                               ;
                           04 A8 9F 00151          PUSHAB  ECHO_DESC                                        ; 1464
                0000G CF      01 FB 00154          CALLS   #1, AED_PUTOUTPUT                                ;
                      7E 00B8 C7 3C 00159 11$:     MOVZWL  SEGMENT_SIZE, -(SP)                              ; 1469
                              6E D6 0015E          INCL    (SP)                                             ;
                      7E   24 A7 9A 00160          MOVZBL  AED_B_LINE, -(SP)                                ;
            00000000G 00      02 FB 00164          CALLS   #2, SCR$ERASE_LINE                               ;
                              01 DD 0016B          PUSHL   #1                                               ; 1470
                      7E   24 A7 9A 0016D          MOVZBL  AED_B_LINE, -(SP)                                ;
                0000G CF      02 FB 00171          CALLS   #2, AED_SET_CURSOR                               ;
                01    A7      10 8A 00176          BICB2   #16, AED_L_FLAGS+1                               ; 1472
                      67   80 8F 88 0017A          BISB2   #128, AED_L_FLAGS                                ; 1473
        20 A7         68      01 81 0017E          ADDB3   #1, BUFFER_INDEX, AED_B_COLUMN                   ; 1474
                01    A7 2008 8F AA 00183 12$:     BICW2   #8200, AED_L_FLAGS+1                             ; 1476
                           28 A8 94 00189          CLRB    TERM_CHAR                                        ; 1477
                      50      01 D0 0018C          MOVL    #1, R0                                           ; 1478
                                 04 0018F          RET                                                      ;
                              50 D4 00190 13$:     CLRL    R0                                               ; 1480
                                 04 00192          RET                                                      ;

; Routine Size:  403 bytes,    Routine Base:  $CODE$ + 085A
```

```
;  1035     1481  1 %SBTTL  'ACT_DEL_CHR - delete current character'
;  1036     1482  1 ROUTINE ACT_DEL_CHR =
;  1037     1483  1
;  1038     1484  1 !++
;  1039     1485  1 !
;  1040     1486  1 ! FUNCTIONAL DESCRIPTION:
;  1041     1487  1 !
;  1042     1488  1 !       This routine deletes the character immediately under the current
;  1043     1489  1 !       cursor position.  The deleted character is placed in storage for
;  1044     1490  1 !       later retrieval.
;  1045     1491  1 !
;  1046     1492  1 ! CALLING SEQUENCE:
;  1047     1493  1 !       ACT_DEL_CHR ()
;  1048     1494  1 !
;  1049     1495  1 ! INPUT PARAMETERS:
;  1050     1496  1 !       none
;  1051     1497  1 !
;  1052     1498  1 ! IMPLICIT INPUTS:
;  1053     1499  1 !       OWN storage
;  1054     1500  1 !
;  1055     1501  1 ! OUTPUT PARAMETERS:
;  1056     1502  1 !       none
;  1057     1503  1 !
;  1058     1504  1 ! IMPLICIT OUTPUTS:
;  1059     1505  1 !       none
;  1060     1506  1 !
;  1061     1507  1 ! ROUTINE VALUE:
;  1062     1508  1 !       1 if successful
;  1063     1509  1 !       error status otherwise
;  1064     1510  1 !
;  1065     1511  1 ! SIDE EFFECTS:
;  1066     1512  1 !       The line segment table is updated as necessary, ACE line pointers
;  1067     1513  1 !       are updated, and the object's ACL is updated as necessary.
;  1068     1514  1 !
;  1069     1515  1 !--
;  1070     1516  1
;  1071     1517  2 BEGIN
;  1072     1518  2
;  1073     1519  2 ! If the current ACE is marked as untouchable, no modifications are allowed.
;  1074     1520  2
;  1075     1521  2 IF .AED_L_FIRSTLINE[LINE_V_NOTOUCH]
;  1076     1522  2 THEN
;  1077     1523  3     BEGIN
;  1078     1524  3     SIGNAL (AED$_NOMODIFY);
;  1079     1525  3     AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  1080     1526  3     AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  1081     1527  3     TERM_CHAR = 0;
;  1082     1528  3     RETURN 1;
;  1083     1529  2     END;
;  1084     1530  2
;  1085     1531  2 ! Delete the character.
;  1086     1532  2
;  1087     1533  2 AED_B_DEL_CHAR = 0;
;  1088     1534  2
;  1089     1535  2 AED_L_FLAGS[AED_V_MODIFIED] = 1;
;  1090     1536  2 AED_L_FLAGS[AED_V_FIRSTCHAR] = 0;
;  1091     1537  2
```

```
2 IF .SEGMENT_SIZE GTR 0
2 AND .BUFFER_INDEX LSS .SEGMENT_SIZE
2 THEN
3      BEGIN
3      AED_B_DEL_CHAR = .BUFFER_CHAR;
3      IF .AED_B_DEL_CHAR EQL ']' THEN AED_L_FLAGS[AED_V_OPENUIC] = 1;
3      ECHO_DESC[DSC$W_LENGTH] = .SEGMENT_SIZE - .BUFFER_INDEX - 1;
3      ECHO_DESC[DSC$A_POINTER] = INPUT_BUFFER[.BUFFER_INDEX + 1];
3      IF .ECHO_DESC[DSC$W_LENGTH] GEQ 1
3      THEN AED_PUTOUTPUT (ECHO_DESC);
3      SCR$ERASE_LINE (.AED_B_LINE, .SEGMENT_SIZE);
3      AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
3      CH$COPY (.ECHO_DESC[DSC$W_LENGTH], INPUT_BUFFER[.BUFFER_INDEX + 1],
3               0,
3               512 - .BUFFER_INDEX, INPUT_BUFFER[.BUFFER_INDEX]);
3      SEGMENT_SIZE = .SEGMENT_SIZE - 1;
3      END
2 ELSE AED_SEGCOMBINE (BUFFER_INDEX, 1);
2
2 AED_L_FLAGS[AED_V_GOLDKEY] = 0;
2 AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
2 TERM_CHAR = 0;
2 RETURN 1;
2
1 END;                                                  ! End of routine ACT_DEL_CHR


                                   03FC 00000 ACT_DEL_CHR:
                                                    .WORD   Save R2,R3,R4,R5,R6,R7,R8,R9                         ; 1482
                59 00000000G   8F   D0 00002        MOVL    #AED$_NOMODIFY, R9                                   ;
                58 00000000G   00   9E 00009        MOVAB   SCR$SET_CURSOR, R8                                   ;
                57     0000'   CF   9E 00010        MOVAB   BUFFER_INDEX, R7                                     ;
                56     0000'   CF   9E 00015        MOVAB   AED_L_FLAGS, R6                                      ;
                50        40   A6   D0 0001A        MOVL    AED_L_FIRSTLINE, R0                                  ; 1521
          49      0A   A0      04   E1 0001E        BBC     #4, 10(R0), 4$                                       ;
          12           66      03   E1 00023        BBC     #3, AED_L_FLAGS, 1$                                  ; 1524
                               01   DD 00027        PUSHL   #1                                                   ;
                               15   DD 00029        PUSHL   #21                                                  ;
             00000000G   00    02   FB 0002B        CALLS   #2, SCR$ERASE_PAGE                                   ;
                               01   DD 00032        PUSHL   #1                                                   ;
                               15   DD 00034        PUSHL   #21                                                  ;
                         68    02   FB 00036        CALLS   #2, SCR$SET_CURSOR                                   ;
                               59   DD 00039 1$:    PUSHL   R9                                                   ;
             00000000G   00    01   FB 0003B        CALLS   #1, LIB$SIGNAL                                       ;
          0B             66    03   E1 00042        BBC     #3, AED_L_FLAGS, 2$                                  ;
                7E        20   A6   9A 00046        MOVZBL  AED_B_COLUMN, -(SP)                                  ;
                7E        24   A6   9A 0004A        MOVZBL  AED_B_LINE, -(SP)                                    ;
                         68    02   FB 0004E        CALLS   #2, SCR$SET_CURSOR                                   ;
                  00000000*    8F   D5 00051 2$:    TSTL    #<AED$_NOMODIFY&7>                                   ;
                               10   13 00057        BEQL    3$                                                   ;
00000000*  8F     14   A6      03   00 ED 00059     CMPZV   #0, #3, AED_L_WORSTERR, #<AED$_NOMODIFY&7>           ;
                               04   18 00063        BGEQ    3$                                                   ;
                    14   A6    59   D0 00065        MOVL    R9, AED_L_WORSTERR                                   ;
                         008C  31 00069 3$:         BRW     8$                                                   ; 1525
```

```
                                    68    A6   94 0006C 4$:     CLRB    AED_B_DEL_CHAR                                          ; 1533
                                66  80    8F   88 0006F         BISB2   #128, AED_L_FLAGS                                       ; 1535
                             01     A6       10 8A 00073         BICB2   #16, AED_L_FLAGS+1                                      ; 1536
                                51     00B8  C6 3C 00077         MOVZWL  SEGMENT_SIZE, R1                                        ; 1538
                                             71 15 0007C         BLEQ    7$                                                      ;
                                51           67 D1 0007E         CMPL    BUFFER_INDEX, R1                                        ; 1539
                                             6C 18 00081         BGEQ    7$                                                      ;
                                50           67 D0 00083         MOVL    BUFFER_INDEX, R0                                        ; 1542
                             68 A6     00C4 C640 90 00086         MOVB    INPUT_BUFFER[R0], AED_B_DEL_CHAR                        ;
                             5D 8F       68 A6   91 0008D         CMPB    AED_B_DEL_CHAR, #93                                     ; 1543
                                             04 12 00092         BNEQ    5$                                                      ;
                             02 A6                01 88 00094    BISB2   #1, AED_L_FLAGS+2                                       ;
                                51           50 C2 00098 5$:     SUBL2   R0, R1                                                  ; 1544
                          04 A7              51   01 A3 0009B    SUBW3   #1, R1, ECHO_DESC                                       ;
                             08 A7     00C5 C640 9E 000A0         MOVAB   INPUT_BUFFER+1[R0], ECHO_DESC+4                         ; 1545
                                04 A7        B5 000A7            TSTW    ECHO_DESC                                               ; 1546
                                             08 13 000AA         BEQL    6$                                                      ;
                                04 A7        9F 000AC            PUSHAB  ECHO_DESC                                               ; 1547
                          0000G CF           01 FB 000AF         CALLS   #1, AED_PUTOUTPUT                                       ;
                                7E     00B8  C6 3C 000B4 6$:     MOVZWL  SEGMENT_SIZE, -(SP)                                     ; 1548
                                7E       24  A6 9A 000B9         MOVZBL  AED_B_LINE, -(SP)                                       ;
                       00000000G 00          02 FB 000BD         CALLS   #2, SCR$ERASE_LINE                                      ;
                                7E       20  A6 9A 000C4         MOVZBL  AED_B_COLUMN, -(SP)                                     ; 1549
                                7E       24  A6 9A 000C8         MOVZBL  AED_B_LINE, -(SP)                                       ;
                          0000G CF           02 FB 000CC         CALLS   #2, AED_SET_CURSOR                                      ;
                                50           67 D0 000D1         MOVL    BUFFER_INDEX, R0                                        ; 1550
                       51 00000200 8F        50 C3 000D4         SUBL3   R0, #512, R1                                            ; 1552
51                     00    00C5 C640    04  A7 2C 000DC         MOVC5   ECHO_DESC, INPUT_BUFFER+1[R0], #0, R1, -                ;
                                      00C4 C640          000E5                 INPUT_BUFFER[R0]                                  ;
                                      00B8  C6   B7 000E9         DECW    SEGMENT_SIZE                                            ; 1553
                                            09   11 000ED         BRB     8$                                                      ; 1538
                                            01   DD 000EF 7$:     PUSHL   #1                                                      ; 1555
                                            57   DD 000F1         PUSHL   R7                                                      ;
                                0000G       CF   02 FB 000F3    CALLS   #2, AED_SEGCOMBINE                                      ;
                                  01        A6 8F AA 000F8 8$:    BICW2   #8200, AED_L_FLAGS+1                                    ; 1558
                                      28    A7 94 000FE         CLRB    TERM_CHAR                                               ; 1559
                                50          01 D0 00101         MOVL    #1, R0                                                  ; 1560
                                            04 00104            RET                                                             ; 1562

; Routine Size:  261 bytes,    Routine Base:  $CODE$ + 09ED
```

```
;  1118          1563  1 %SBTTL  'ACT_DEL_WRD - delete current word'
;  1119          1564  1 ROUTINE ACT_DEL_WRD =
;  1120          1565  1
;  1121          1566  1 !++
;  1122          1567  1 !
;  1123          1568  1 ! FUNCTIONAL DESCRIPTION:
;  1124          1569  1 !
;  1125          1570  1 !       This routine deletes the word (all characters until the first non
;  1126          1571  1 !       alphanumeric character) starting at the current cursor position.
;  1127          1572  1 !       The deleted word is placed in storage for later retrieval.
;  1128          1573  1 !
;  1129          1574  1 ! CALLING SEQUENCE:
;  1130          1575  1 !       ACT_DEL_WRD ()
;  1131          1576  1 !
;  1132          1577  1 ! INPUT PARAMETERS:
;  1133          1578  1 !       none
;  1134          1579  1 !
;  1135          1580  1 ! IMPLICIT INPUTS:
;  1136          1581  1 !       OWN storage
;  1137          1582  1 !
;  1138          1583  1 ! OUTPUT PARAMETERS:
;  1139          1584  1 !       none
;  1140          1585  1 !
;  1141          1586  1 ! IMPLICIT OUTPUTS:
;  1142          1587  1 !       none
;  1143          1588  1 !
;  1144          1589  1 ! ROUTINE VALUE:
;  1145          1590  1 !       1 if successful
;  1146          1591  1 !       error status otherwise
;  1147          1592  1 !
;  1148          1593  1 ! SIDE EFFECTS:
;  1149          1594  1 !       The line segment table is updated as necessary, ACE line pointers
;  1150          1595  1 !       are updated, and the object's ACL is updated as necessary.
;  1151          1596  1 !
;  1152          1597  1 !--
;  1153          1598  1
;  1154          1599  2 BEGIN
;  1155          1600  2
;  1156          1601  2 LOCAL
;  1157          1602  2         DEL_WORD_BEGIN,                         ! Beginning offset of word
;  1158          1603  2         DEL_WORD_END;                           ! End offset of word
;  1159          1604  2
;  1160          1605  2 ! If the current ACE is marked as untouchable, no modifications are allowed.
;  1161          1606  2
;  1162          1607  2 IF .AED_L_FIRSTLINE[LINE_V_NOTOUCH]
;  1163          1608  2 THEN
;  1164          1609  3     BEGIN
;  1165          1610  3     SIGNAL (AED$_NOMODIFY);
;  1166          1611  3     AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  1167          1612  3     AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  1168          1613  3     TERM_CHAR = 0;
;  1169          1614  3     RETURN 1;
;  1170          1615  2     END;
;  1171          1616  2
;  1172          1617  2 ! Deallocate anything in the saved word buffer.
;  1173          1618  2
;  1174          1619  2 IF .AED_Q_DEL_WORD[DSC$W_LENGTH] NEQ 0
```

```
;  1175          1620  2 THEN DEALLOCATE (.AED_Q_DEL_WORD[DSC$W_LENGTH], AED_Q_DEL_WORD[DSC$A_POINTER]);
;  1176          1621  2 AED_Q_DEL_WORD[DSC$W_LENGTH] = 0;
;  1177          1622  2
;  1178          1623  2 AED_L_FLAGS[AED_V_MODIFIED] = 1;
;  1179          1624  2 AED_L_FLAGS[AED_V_FIRSTCHAR] = 0;
;  1180          1625  2
;  1181          1626  2 ! Delete the word.
;  1182          1627  2
;  1183          1628  2 IF .SEGMENT_SIZE GTR 0
;  1184          1629  2 AND .BUFFER_INDEX LSS .SEGMENT_SIZE
;  1185          1630  2 THEN
;  1186          1631  3     BEGIN
;  1187          1632  3     DEL_WORD_BEGIN = .BUFFER_INDEX;
;  1188          1633  4     WHILE (.BUFFER_CHAR GEQ 'A' AND .BUFFER_CHAR LEQ 'Z')
;  1189          1634  4        OR (.BUFFER_CHAR GEQ '0' AND .BUFFER_CHAR LEQ '9')
;  1190          1635  3     DO
;  1191          1636  4         BEGIN
;  1192          1637  4         BUFFER_INDEX = .BUFFER_INDEX + 1;
;  1193          1638  4         IF .BUFFER_INDEX GEQ .SEGMENT_SIZE
;  1194          1639  4         THEN
;  1195          1640  5             BEGIN
;  1196          1641  5             BUFFER_INDEX = .BUFFER_INDEX - 1;
;  1197          1642  5             EXITLOOP;
;  1198          1643  4             END;
;  1199          1644  3         END;
;  1200          1645  3     BUFFER_INDEX = .BUFFER_INDEX + 1;   ! First char past delimiter
;  1201          1646  3     DEL_WORD_END = .BUFFER_INDEX;
;  1202          1647  3     AED_Q_DEL_WORD[DSC$W_LENGTH] = .DEL_WORD_END - .DEL_WORD_BEGIN;
;  1203        P 1648  3     AED_L_STATUS = ALLOCATE (.AED_Q_DEL_WORD[DSC$W_LENGTH],
;  1204          1649  3                              AED_Q_DEL_WORD[DSC$A_POINTER]);
;  1205          1650  3     IF NOT .AED_L_STATUS
;  1206          1651  3     THEN
;  1207          1652  4         BEGIN
;  1208          1653  4         SIGNAL (.AED_L_STATUS);
;  1209          1654  4         AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  1210          1655  4         RETURN 0;
;  1211          1656  3         END;
;  1212          1657  3     CH$MOVE (.AED_Q_DEL_WORD[DSC$W_LENGTH],
;  1213          1658  3              INPUT_BUFFER[.DEL_WORD_BEGIN],
;  1214          1659  3              .AED_Q_DEL_WORD[DSC$A_POINTER]);
;  1215          1660  3     AED_L_FLAGS[AED_V_ROBWORD] = 0;
;  1216          1661  3     ECHO_DESC[DSC$W_LENGTH] = .SEGMENT_SIZE - .DEL_WORD_END;
;  1217          1662  3     ECHO_DESC[DSC$A_POINTER] = INPUT_BUFFER[.DEL_WORD_END];
;  1218          1663  3     SEGMENT_SIZE = .SEGMENT_SIZE - .AED_Q_DEL_WORD[DSC$W_LENGTH];
;  1219          1664  3     IF .ECHO_DESC[DSC$W_LENGTH] GEQ 1
;  1220          1665  3     THEN
;  1221          1666  4         BEGIN
;  1222          1667  4         SCR$SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  1223          1668  4         AED_PUTOUTPUT (ECHO_DESC);
;  1224          1669  3         END;
;  1225          1670  3     CH$COPY (.ECHO_DESC[DSC$W_LENGTH], INPUT_BUFFER[.DEL_WORD_END],
;  1226          1671  3              0,
;  1227          1672  3              512 - .BUFFER_INDEX, INPUT_BUFFER[.DEL_WORD_BEGIN]);
;  1228          1673  3     BUFFER_INDEX = .DEL_WORD_BEGIN;
;  1229          1674  3     SCR$ERASE_LINE (.AED_B_LINE, .SEGMENT_SIZE + 1);
;  1230          1675  3     AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  1231          1676  3     END
```

```
; 1232          1677  2 ELSE AED_SEGCOMBINE (BUFFER_INDEX, 1);
; 1233          1678  2
; 1234          1679  2 AED_L_FLAGS[AED_V_GOLDKEY] = 0;
; 1235          1680  2 AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
; 1236          1681  2 TERM_CHAR = 0;
; 1237          1682  2 RETURN 1;
; 1238          1683  2
; 1239          1684  1 END;                                               ! End of routine ACT_DEL_WRD


                                        0FFC 00000 ACT_DEL_WRD:
                                                         .WORD   Save R2,R3,R4,R5,R6,R7,R8,R9,R10,R11                    ; 1564
                        5B 00000000G  00  9E 00002       MOVAB   SCR$SET_CURSOR, R11                                     ;
                        5A     0000'  CF  9E 00009       MOVAB   BUFFER_INDEX, R10                                       ;
                        59     0000'  CF  9E 0000E       MOVAB   AED_L_FLAGS, R9                                         ;
                        5E            04  C2 00013       SUBL2   #4, SP                                                  ;
                        50        40  A9  D0 00016       MOVL    AED_L_FIRSTLINE, R0                                     ; 1607
              51        0A  A0        04  E1 0001A       BBC     #4, 10(R0), 4$                                          ;
              12            69        03  E1 0001F       BBC     #3, AED_L_FLAGS, 1$                                     ; 1610
                                      01  DD 00023       PUSHL   #1                                                      ;
                                      15  DD 00025       PUSHL   #21                                                     ;
                   00000000G  00      02  FB 00027       CALLS   #2, SCR$ERASE_PAGE                                      ;
                                      01  DD 0002E       PUSHL   #1                                                      ;
                                      15  DD 00030       PUSHL   #21                                                     ;
                            6B        02  FB 00032       CALLS   #2, SCR$SET_CURSOR                                      ;
                           00000000G  8F  DD 00035  1$:  PUSHL   #AED$_NOMODIFY                                          ;
                   00000000G  00      01  FB 0003B       CALLS   #1, LIB$SIGNAL                                          ;
              0B            69        03  E1 00042       BBC     #3, AED_L_FLAGS, 2$                                     ;
                        7E        20  A9  9A 00046       MOVZBL  AED_B_COLUMN, -(SP)                                     ;
                        7E        24  A9  9A 0004A       MOVZBL  AED_B_LINE, -(SP)                                       ;
                        6B            02  FB 0004E       CALLS   #2, SCR$SET_CURSOR                                      ;
                           00000000*  8F  D5 00051  2$:  TSTL    #<AED$_NOMODIFY&7>                                      ;
                                      14  13 00057       BEQL    3$                                                      ;
00000000*  8F         14  A9          03  00  ED 00059       CMPZV   #0, #3, AED_L_WORSTERR, #<AED$_NOMODIFY&7>          ;
                                      08  18 00063       BGEQ    3$                                                      ;
                   14  A9 00000000G  8F  D0 00065       MOVL    #AED$_NOMODIFY, AED_L_WORSTERR                          ;
                                    015E  31 0006D  3$:  BRW     19$                                                     ; 1611
                        50        60  A9  3C 00070  4$:  MOVZWL  AED_Q_DEL_WORD, R0                                      ; 1619
                                      11  13 00074       BEQL    5$                                                      ;
                                  64  A9  9F 00076       PUSHAB  AED_Q_DEL_WORD+4                                        ; 1620
                   04  AE             50  D0 00079       MOVL    R0, 4(SP)                                               ;
                                  04  AE  9F 0007D       PUSHAB  4(SP)                                                   ;
                   00000000G  00      02  FB 00080       CALLS   #2, LIB$FREE_VM                                         ;
                                  60  A9  B4 00087  5$:  CLRW    AED_Q_DEL_WORD                                          ; 1621
                        69        80  8F  88 0008A       BISB2   #128, AED_L_FLAGS                                       ; 1623
                   01  A9             10  8A 0008E       BICB2   #16, AED_L_FLAGS+1                                      ; 1624
                        51      00B8  C9  3C 00092       MOVZWL  SEGMENT_SIZE, R1                                        ; 1628
                                      03  14 00097       BGTR    7$                                                      ;
                                    0129  31 00099  6$:  BRW     18$                                                     ;
                        51            6A  D1 0009C  7$:  CMPL    BUFFER_INDEX, R1                                        ; 1629
                                      F8  18 0009F       BGEQ    6$                                                      ;
                        57            6A  D0 000A1       MOVL    BUFFER_INDEX, DEL_WORD_BEGIN                            ; 1632
                        50      00C4  C9  9E 000A4  8$:  MOVAB   INPUT_BUFFER, R0                                        ; 1633
                        50   00 BA40  9A 000A9           MOVZBL  @BUFFER_INDEX[R0], R0                                   ;
```

```
                    41   8F           50  91 000AE       CMPB    R0, #65                                  ;
                                      06  1F 000B2       BLSSU   9$                                       ;
                    5A   8F           50  91 000B4       CMPB    R0, #90                                  ;
                                      0A  1B 000B3       BLEQU   10$                                      ;
                         30           50  91 000BA 9$:   CMPB    R0, #48                                  ; 1634
                                      0E  1F 000BD       BLSSU   11$                                      ;
                         39           50  91 000BF       CMPB    R0, #57                                  ;
                                      09  1A 000C2       BGTRU   11$                                      ;
                                      6A  D6 000C4 10$:  INCL    BUFFER_INDEX                             ; 1637
                         51           6A  D1 000C6       CMPL    BUFFER_INDEX, R1                         ; 1638
                                      D9  19 000C9       BLSS    8$                                       ;
                                      6A  D7 000CB       DECL    BUFFER_INDEX                             ; 1641
                                      6A  D6 000CD 11$:  INCL    BUFFER_INDEX                             ; 1645
                         56           6A  D0 000CF       MOVL    BUFFER_INDEX, DEL_WORD_END               ; 1646
           60   A9       56           57  A3 000D2       SUBW3   DEL_WORD_BEGIN, DEL_WORD_END, -          ; 1647
                                                                 AED_Q_DEL_WORD                           ;
                                 64   A9  9F 000D7       PUSHAB  AED_Q_DEL_WORD+4                         ; 1649
                    04   AE      60   A9  3C 000DA       MOVZWL  AED_Q_DEL_WORD, 4(SP)                    ;
                                 04   AE  9F 000DF       PUSHAB  4(SP)                                    ;
             00000000G   00           02  FB 000E2       CALLS   #2, LIB$GET_VM                           ;
                         58           50  D0 000E9       MOVL    R0, VM_STATUS                            ;
                         08           58  E9 000EC       BLBC    VM_STATUS, 12$                           ;
  60   A9           00   6E           00  2C 000EF       MOVC5   #0, (SP), #0, AED_Q_DEL_WORD, -          ;
                                 64   B9     000F5               @AED_Q_DEL_WORD+4                        ;
                  008C   C9           58  D0 000F7 12$:  MOVL    VM_STATUS, AED_L_STATUS                  ;
                         52    008C   C9  E8 000FC       BLBS    AED_L_STATUS, 16$                        ; 1650
                    12   69           03  E1 00101       BBC     #3, AED_L_FLAGS, 13$                     ; 1653
                                      01  DD 00105       PUSHL   #1                                       ;
                                      15  DD 00107       PUSHL   #21                                      ;
             00000000G   00           02  FB 00109       CALLS   #2, SCR$ERASE_PAGE                       ;
                                      01  DD 00110       PUSHL   #1                                       ;
                                      15  DD 00112       PUSHL   #21                                      ;
                         6B           02  FB 00114       CALLS   #2, SCR$SET_CURSOR                       ;
                               008C   C9  DD 00117 13$:  PUSHL   AED_L_STATUS                             ;
             00000000G   00           01  FB 0011B       CALLS   #1, LIB$SIGNAL                           ;
                    0B   69           03  E1 00122       BBC     #3, AED_L_FLAGS, 14$                     ;
                         7E      20   A9  9A 00126       MOVZBL  AED_B_COLUMN, -(SP)                      ;
                         7E      24   A9  9A 0012A       MOVZBL  AED_B_LINE, -(SP)                        ;
                         6B           02  FB 0012E       CALLS   #2, SCR$SET_CURSOR                       ;
                         50    008C   C9  D0 00131 14$:  MOVL    AED_L_STATUS, R0                         ;
                         07           50  93 00136       BITB    R0, #7                                   ;
                                      11  13 00139       BEQL    15$                                      ;
       51           50   03           00  EF 0013B       EXTZV   #0, #3, R0, R1                           ;
       51      14   A9   03           00  ED 00140       CMPZV   #0, #3, AED_L_WORSTERR, R1               ;
                                      04  18 00146       BGEQ    15$                                      ;
                    14   A9           50  D0 00148       MOVL    R0, AED_L_WORSTERR                       ;
                    01   A9           08  8A 0014C 15$:  BICB2   #8, AED_L_FLAGS+1                        ; 1654
                               0088   31  00150          BRW     20$                                      ; 1655
           64   B9  00C4 C947    60   A9  28 00153 16$:  MOVC3   AED_Q_DEL_WORD, INPUT_BUFFER-            ; 1659
                                                                 [DEL_WORD_BEGIN], @AED_Q_DEL_WORD+4      ;
                    01   A9           02  8A 0015C       BICB2   #2, AED_L_FLAGS+1                        ; 1660
           04   AA  00B8   C9         56  A3 00160       SUBW3   DEL_WORD_END, SEGMENT_SIZE, ECHO_DESC    ; 1661
                    08   AA    00C4 C946  9E 00167       MOVAB   INPUT_BUFFER[DEL_WORD_END], ECHO_DESC+4  ; 1662
                  00B8   C9      60   A9  A2 0016E       SUBW2   AED_Q_DEL_WORD, SEGMENT_SIZE             ; 1663
                                 04   AA  B5 00174       TSTW    ECHO_DESC                                ; 1664
                                      13  13 00177       BEQL    17$                                      ;
                         7E      20   A9  9A 00179       MOVZBL  AED_B_COLUMN, -(SP)                      ; 1667
```

```
                       7E      24  A9  9A 0017D        MOVZBL  AED_B_LINE, -(SP)                          ;
                       6B          02  FB 00181        CALLS   #2, SCR$SET_CURSOR                         ;
                               04  AA  9F 00184        PUSHAB  ECHO_DESC                                  ; 1668
                 0000G CF          01  FB 00187        CALLS   #1, AED_PUTOUTPUT                          ;
           50 00000200 8F          6A  C3 0018C 17$:   SUBL3   BUFFER_INDEX, #512, R0                     ; 1672
  50          00    00C4 C946  04  AA  2C 00194        MOVC5   ECHO_DESC, INPUT_BUFFER[DEL_WORD_END], #0, -;
                         00C4 C947        0019D                R0, INPUT_BUFFER[DEL_WORD_BEGIN]           ;
                       6A          57  D0 001A1        MOVL    DEL_WORD_BEGIN, BUFFER_INDEX               ; 1673
                       7E    00B8  C9  3C 001A4        MOVZWL  SEGMENT_SIZE, -(SP)                        ; 1674
                                   6E  D6 001A9        INCL    (SP)                                       ;
                       7E      24  A9  9A 001AB        MOVZBL  AED_B_LINE, -(SP)                          ;
             00000000G 00          02  FB 001AF        CALLS   #2, SCR$ERASE_LINE                         ;
                       7E      20  A9  9A 001B6        MOVZBL  AED_B_COLUMN, -(SP)                        ; 1675
                       7E      24  A9  9A 001BA        MOVZBL  AED_B_LINE, -(SP)                          ;
                 0000G CF          02  FB 001BE        CALLS   #2, AED_SET_CURSOR                         ;
                                   09  11 001C3        BRB     19$                                        ; 1628
                                   01  DD 001C5 18$:   PUSHL   #1                                         ; 1677
                                   5A  DD 001C7        PUSHL   R10                                        ;
                 0000G CF          02  FB 001C9        CALLS   #2, AED_SEGCOMBINE                         ;
                    01 A9    2008  8F  AA 001CE 19$:   BICW2   #8200, AED_L_FLAGS+1                       ; 1680
                               28  AA  94 001D4        CLRB    TERM_CHAR                                  ; 1681
                       50          01  D0 001D7        MOVL    #1, R0                                     ; 1682
                                       04 001DA        RET                                                ;
                               50  D4 001DB 20$:       CLRL    R0                                         ; 1684
                                       04 001DD        RET                                                ;

; Routine Size:  478 bytes,    Routine Base:  $CODE$ + 0AF2
```

```
;  1241          1685  1 %SBTTL  'ACT_DEL_EOL - delete to end of line'
;  1242          1686  1 ROUTINE ACT_DEL_EOL =
;  1243          1687  1
;  1244          1688  1 !++
;  1245          1689  1 !
;  1246          1690  1 ! FUNCTIONAL DESCRIPTION:
;  1247          1691  1 !
;  1248          1692  1 !       This routine deletes from the current position in the line to the
;  1249          1693  1 !       end of the current line segment.
;  1250          1694  1 !
;  1251          1695  1 ! CALLING SEQUENCE:
;  1252          1696  1 !       ACT_DEL_EOL ()
;  1253          1697  1 !
;  1254          1698  1 ! INPUT PARAMETERS:
;  1255          1699  1 !       none
;  1256          1700  1 !
;  1257          1701  1 ! IMPLICIT INPUTS:
;  1258          1702  1 !       OWN storage
;  1259          1703  1 !
;  1260          1704  1 ! OUTPUT PARAMETERS:
;  1261          1705  1 !       none
;  1262          1706  1 !
;  1263          1707  1 ! IMPLICIT OUTPUTS:
;  1264          1708  1 !       none
;  1265          1709  1 !
;  1266          1710  1 ! ROUTINE VALUE:
;  1267          1711  1 !       1 if successful
;  1268          1712  1 !       error status otherwise
;  1269          1713  1 !
;  1270          1714  1 ! SIDE EFFECTS:
;  1271          1715  1 !       The line segment table is updated as necessary.
;  1272          1716  1 !
;  1273          1717  1 !--
;  1274          1718  1
;  1275          1719  2 BEGIN
;  1276          1720  2
;  1277          1721  2 ! Check to see if the ACE is untouchable.  If so, it cannot be modified.
;  1278          1722  2
;  1279          1723  2 IF .AED_L_FIRSTLINE[LINE_V_NOTOUCH]
;  1280          1724  2 THEN
;  1281          1725  3     BEGIN
;  1282          1726  3     SIGNAL (AED$_NOMODIFY);
;  1283          1727  3     AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  1284          1728  3     AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  1285          1729  3     TERM_CHAR = 0;
;  1286          1730  3     RETURN 1;
;  1287          1731  2     END;
;  1288          1732  2
;  1289          1733  2 ! Delete anything currently in the saved line buffer.
;  1290          1734  2
;  1291          1735  2 IF .AED_Q_DEL_LINE[DSC$W_LENGTH] NEQ 0
;  1292          1736  2 THEN DEALLOCATE (.AED_Q_DEL_LINE[DSC$W_LENGTH], .AED_Q_DEL_LINE[DSC$A_POINTER]);
;  1293          1737  2 AED_Q_DEL_LINE[DSC$W_LENGTH] = 0;
;  1294          1738  2
;  1295          1739  2 ! Note that the line has been modified.
;  1296          1740  2
;  1297          1741  2 AED_L_FLAGS[AED_V_MODIFIED] = 1;
```

```
; 1298          1742  2 AED_L_FLAGS[AED_V_FIRSTCHAR] = 0;
; 1299          1743  2
; 1300          1744  2 ! Delete to the end of the line.
; 1301          1745  2
; 1302          1746  2 AED_L_FLAGS[AED_V_DELBOL] = 0;                              ! Note direction of delete
; 1303          1747  2
; 1304          1748  2 IF .SEGMENT_SIZE GTR 0
; 1305          1749  2 AND .BUFFER_INDEX LSS .SEGMENT_SIZE
; 1306          1750  2 THEN
; 1307          1751  3     BEGIN
; 1308        P 1752  3     AED_L_STATUS = ALLOCATE ((.SEGMENT_SIZE - .BUFFER_INDEX),
; 1309          1753  3                             AED_Q_DEL_LINE[DSC$A_POINTER]);
; 1310          1754  3     IF NOT .AED_L_STATUS
; 1311          1755  3     THEN
; 1312          1756  4         BEGIN
; 1313          1757  4         SIGNAL (.AED_L_STATUS);
; 1314          1758  4         AED_L_FLAGS[AED_V_GOLDKEY] = 0;
; 1315          1759  4         AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
; 1316          1760  4         TERM_CHAR = 0;
; 1317          1761  4         RETURN 0;
; 1318          1762  3         END;
; 1319          1763  3     AED_Q_DEL_LINE[DSC$W_LENGTH] = .SEGMENT_SIZE - .BUFFER_INDEX;
; 1320          1764  3     CH$MOVE (.AED_Q_DEL_LINE[DSC$W_LENGTH], INPUT_BUFFER[.BUFFER_INDEX],
; 1321          1765  3                                   .AED_Q_DEL_LINE[DSC$A_POINTER]);
; 1322          1766  3     SEGMENT_SIZE = .BUFFER_INDEX;
; 1323          1767  3     SCR$ERASE_LINE (.AED_B_LINE, .AED_B_COLUMN);
; 1324          1768  3     END
; 1325          1769  2 ELSE AED_SEGCOMBINE (BUFFER_INDEX, 1);
; 1326          1770  2
; 1327          1771  2 AED_L_FLAGS[AED_V_GOLDKEY] = 0;
; 1328          1772  2 AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
; 1329          1773  2 TERM_CHAR = 0;
; 1330          1774  2 RETURN 1;
; 1331          1775  2
; 1332          1776  1 END;


                                   0FFC 00000 ACT_DEL_EOL:
                                                   .WORD   Save R2,R3,R4,R5,R6,R7,R8,R9,R10,R11             ; 1686
                5B 00000000G  8F  D0 00002         MOVL    #AED$_NOMODIFY, R11                              ;
                5A 00000000G  00  9E 00009         MOVAB   SCR$ERASE_PAGE, R10                              ;
                59     0000'  CF  9E 00010         MOVAB   BUFFER_INDEX, R9                                 ;
                58 00000000G  00  9E 00015         MOVAB   SCR$SET_CURSOR, R8                               ;
                57     0000'  CF  9E 0001C         MOVAB   AED_L_FLAGS, R7                                  ;
                5E            04  C2 00021         SUBL2   #4, SP                                           ;
                50        40  A7  D0 00024         MOVL    AED_L_FIRSTLINE, R0                              ; 1723
       45       0A  A0        04  E1 00028         BBC     #4, 10(R0), 4$                                   ;
       0E           67        03  E1 0002D         BBC     #3, AED_L_FLAGS, 1$                              ; 1726
                              01  DD 00031         PUSHL   #1                                               ;
                              15  DD 00033         PUSHL   #21                                              ;
                    6A        02  FB 00035         CALLS   #2, SCR$ERASE_PAGE                               ;
                              01  DD 00038         PUSHL   #1                                               ;
                              15  DD 0003A         PUSHL   #21                                              ;
                    68        02  FB 0003C         CALLS   #2, SCR$SET_CURSOR                               ;
```

```
                                          5B  DD 0003F 1$:     PUSHL   R11                                              ;
                      00000000G  00       01  FB 00041         CALLS   #1, LIB$SIGNAL                                   ;
                  0B             67       03  E1 00048         BBC     #3, AED_L_FLAGS, 2$                              ;
                                 7E   20  A7  9A 0004C         MOVZBL  AED_B_COLUMN, -(SP)                              ;
                                 7E   24  A7  9A 00050         MOVZBL  AED_B_LINE, -(SP)                                ;
                                 68       02  FB 00054         CALLS   #2, SCR$SET_CURSOR                               ;
                                00000000* 8F  D5 00057 2$:     TSTL    #<AED$_NOMODIFY&7>                               ;
                                          10  13 0005D         BEQL    3$                                               ;
00000000*  8F        14  A7      03       00  ED 0005F         CMPZV   #0, #3, AED_L_WORSTERR, #<AED$_NOMODIFY&7>       ;
                                          04  18 00069         BGEQ    3$                                               ;
                          14  A7          5B  D0 0006B         MOVL    R11, AED_L_WORSTERR                              ;
                                        00E6  31 0006F 3$:     BRW     14$                                              ; 1727
                                 50   58  A7  3C 00072 4$:     MOVZWL  AED_Q_DEL_LINE, R0                               ; 1735
                                          11  13 00076         BEQL    5$                                               ;
                                      5C  A7  DD 00078         PUSHL   AED_Q_DEL_LINE+4                                 ; 1736
                          04  AE          50  D0 0007B         MOVL    R0, 4(SP)                                        ;
                                      04  AE  9F 0007F         PUSHAB  4(SP)                                            ;
                      00000000G  00       02  FB 00082         CALLS   #2, LIB$FREE_VM                                  ;
                                      58  A7  B4 00089 5$:     CLRW    AED_Q_DEL_LINE                                   ; 1737
                                 67   80  8F  88 0008C         BISB2   #128, AED_L_FLAGS                                ; 1741
                          01  A7          14  8A 00090         BICB2   #20, AED_L_FLAGS+1                               ; 1746
                                 50 00B8  C7  3C 00094         MOVZWL  SEGMENT_SIZE, R0                                 ; 1748
                                          03  14 00099         BGTR    7$                                               ;
                                        00B1  31 0009B 6$:     BRW     13$                                              ;
                                 50       69  D1 0009E 7$:     CMPL    BUFFER_INDEX, R0                                 ; 1749
                                          F8  18 000A1         BGEQ    6$                                               ;
                                      5C  A7  9F 000A3         PUSHAB  AED_Q_DEL_LINE+4                                 ; 1753
               04  AE            50       69  C3 000A6         SUBL3   BUFFER_INDEX, R0, 4(SP)                          ;
                                      04  AE  9F 000AB         PUSHAB  4(SP)                                            ;
                      00000000G  00       02  FB 000AE         CALLS   #2, LIB$GET_VM                                   ;
                                 56       50  D0 000B5         MOVL    R0, VM_STATUS                                    ;
                                 0F       56  E9 000B8         BLBC    VM_STATUS, 8$                                    ;
                                 50 00B8  C7  3C 000BB         MOVZWL  SEGMENT_SIZE, R0                                 ;
                                 50       69  C2 000C0         SUBL2   BUFFER_INDEX, R0                                 ;
        50                00     6E       00  2C 000C3         MOVC5   #0, (SP), #0, R0, @AED_Q_DEL_LINE+4              ;
                                      5C  B7     000C8                                                                  ;
                        008C  C7          56  D0 000CA 8$:     MOVL    VM_STATUS, AED_L_STATUS                          ;
                                 52 008C  C7  E8 000CF         BLBS    AED_L_STATUS, 12$                                ; 1754
                          0E     67       03  E1 000D4         BBC     #3, AED_L_FLAGS, 9$                              ; 1757
                                          01  DD 000D8         PUSHL   #1                                               ;
                                          15  DD 000DA         PUSHL   #21                                              ;
                                 6A       02  FB 000DC         CALLS   #2, SCR$ERASE_PAGE                               ;
                                          01  DD 000DF         PUSHL   #1                                               ;
                                          15  DD 000E1         PUSHL   #21                                              ;
                                 68       02  FB 000E3         CALLS   #2, SCR$SET_CURSOR                               ;
                                    008C  C7  DD 000E6 9$:     PUSHL   AED_L_STATUS                                     ;
                      00000000G  00       01  FB 000EA         CALLS   #1, LIB$SIGNAL                                   ;
                          0B     67       03  E1 000F1         BBC     #3, AED_L_FLAGS, 10$                             ;
                                 7E   20  A7  9A 000F5         MOVZBL  AED_B_COLUMN, -(SP)                              ;
                                 7E   24  A7  9A 000F9         MOVZBL  AED_B_LINE, -(SP)                                ;
                                 68       02  FB 000FD         CALLS   #2, SCR$SET_CURSOR                               ;
                                 50 008C  C7  D0 00100 10$:    MOVL    AED_L_STATUS, R0                                 ;
                                 07       50  93 00105         BITB    R0, #7                                           ;
                                          11  13 00108         BEQL    11$                                              ;
        51                50     03       00  EF 0010A         EXTZV   #0, #3, R0, R1                                   ;
        51       14       A7     03       00  ED 0010F         CMPZV   #0, #3, AED_L_WORSTERR, R1                       ;
                                          04  18 00115         BGEQ    11$                                              ;
```

```
                    14   A7              50 D0 00117         MOVL    R0, AED_L_WORSTERR                             ;
                    01   A7        2008  8F AA 0011B 11$:    BICW2   #8200, AED_L_FLAGS+1                           ; 1759
                                     28  A9 94 00121         CLRB    TERM_CHAR                                      ; 1760
                                         3F 11 00124         BRB     15$                                            ; 1761
                         56              69 D0 00126 12$:    MOVL    BUFFER_INDEX, R6                               ; 1763
      58   A7      00B8  C7              56 A3 00129         SUBW3   R6, SEGMENT_SIZE, AED_Q_DEL_LINE               ;
      5C   B7      00C4 C746         58  A7 28 00130         MOVC3   AED_Q_DEL_LINE, INPUT_BUFFER[R6], -            ; 1765
                                                                     @AED_Q_DEL_LINE+4                              ;
                   00B8  C7              56 B0 00139         MOVW    R6, SEGMENT_SIZE                               ; 1766
                         7E          20  A7 9A 0013E         MOVZBL  AED_B_COLUMN, -(SP)                            ; 1767
                         7E          24  A7 9A 00142         MOVZBL  AED_B_LINE, -(SP)                              ;
              00000000G  00              02 FB 00146         CALLS   #2, SCR$ERASE_LINE                             ;
                                         09 11 0014D         BRB     14$                                            ; 1748
                                         01 DD 0014F 13$:    PUSHL   #1                                             ; 1769
                                         59 DD 00151         PUSHL   R9                                             ;
                  0000G  CF              02 FB 00153         CALLS   #2, AED_SEGCOMBINE                             ;
                    01   A7        2008  8F AA 00158 14$:    BICW2   #8200, AED_L_FLAGS+1                           ; 1772
                                     28  A9 94 0015E         CLRB    TERM_CHAR                                      ; 1773
                         50              01 D0 00161         MOVL    #1, R0                                         ; 1774
                                            04 00164         RET                                                    ;
                                         50 D4 00165 15$:    CLRL    R0                                             ; 1776
                                            04 00167         RET                                                    ;

; Routine Size:  360 bytes,    Routine Base:  $CODE$ + 0CD0
```

```
;  1334     1777  1 %SBTTL  'ACT_DEL_ACE - delete current ACE'
;  1335     1778  1 ROUTINE ACT_DEL_ACE =
;  1336     1779  1
;  1337     1780  1 !++
;  1338     1781  1 !
;  1339     1782  1 ! FUNCTIONAL DESCRIPTION:
;  1340     1783  1 !
;  1341     1784  1 !       This routine deletes the current ACE (bounded by the first and last
;  1342     1785  1 !       line segment pointers) and stores it for later retrieval.  The ACE
;  1343     1786  1 !       is also deleted from the object's ACL is necessary.
;  1344     1787  1 !
;  1345     1788  1 ! CALLING SEQUENCE:
;  1346     1789  1 !       ACT_DEL_ACE ()
;  1347     1790  1 !
;  1348     1791  1 ! INPUT PARAMETERS:
;  1349     1792  1 !       none
;  1350     1793  1 !
;  1351     1794  1 ! IMPLICIT INPUTS:
;  1352     1795  1 !       OWN storage
;  1353     1796  1 !
;  1354     1797  1 ! OUTPUT PARAMETERS:
;  1355     1798  1 !       none
;  1356     1799  1 !
;  1357     1800  1 ! IMPLICIT OUTPUTS:
;  1358     1801  1 !       none
;  1359     1802  1 !
;  1360     1803  1 ! ROUTINE VALUE:
;  1361     1804  1 !       1 if successful
;  1362     1805  1 !       error status otherwise
;  1363     1806  1 !
;  1364     1807  1 ! SIDE EFFECTS:
;  1365     1808  1 !       The line segment table is updated as necessary, ACE line pointers
;  1366     1809  1 !       are updated, and the object's ACL is updated as necessary.
;  1367     1810  1 !
;  1368     1811  1 !--
;  1369     1812  1
;  1370     1813  2 BEGIN
;  1371     1814  2
;  1372     1815  2 ! Check to see if the ACE is untouchable.  If so, it cannot be deleted.
;  1373     1816  2
;  1374     1817  2 IF .AED_L_FIRSTLINE[LINE_V_NOTOUCH]
;  1375     1818  2 THEN
;  1376     1819  3     BEGIN
;  1377     1820  3     SIGNAL (AED$_NOMODIFY);
;  1378     1821  3     AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  1379     1822  3     AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  1380     1823  3     TERM_CHAR = 0;
;  1381     1824  3     RETURN 1;
;  1382     1825  2     END;
;  1383     1826  2
;  1384     1827  2 ! Delete anything currently in the delete ACE buffer.
;  1385     1828  2
;  1386     1829  2 UNTIL REMQUE (.AED_Q_DEL_ACE[LINE_L_FLINK], REMOVED_LINE)
;  1387     1830  2 DO
;  1388     1831  3     BEGIN
;  1389     1832  3     REMOVED_ACE = .REMOVED_LINE[LINE_L_BINACE];
;  1390     1833  3     IF .REMOVED_LINE[LINE_V_BEGINACE]
```

```
;  1391          1834  3      AND .REMOVED_ACE NEQ 0
;  1392          1835  3      THEN DEALLOCATE (.REMOVED_ACE[ACE$B_SIZE], REMOVED_ACE);
;  1393        P 1836  3      DEALLOCATE (.REMOVED_LINE[LINE_W_SIZE] + $BYTEOFFSET (LINE_T_TEXT),
;  1394          1837  3                  REMOVED_LINE);
;  1395          1838  2      END;
;  1396          1839  2  NEW_TEXT_LINE = AED_REPSEGMENT ();
;  1397          1840  2  AED_POSITION (.AED_L_FIRSTLINE);
;  1398          1841  2  AED_L_BEGINLINE = .AED_L_BEGINLINE[LINE_L_BLINK];
;  1399          1842  2  TEMP_LINE = .AED_B_LINE - 1;
;  1400          1843  2  NEW_TEXT_LINE = .AED_L_FIRSTLINE;
;  1401          1844  2  DO
;  1402          1845  3      BEGIN
;  1403          1846  3      AED_L_FIRSTLINE = .AED_L_FIRSTLINE[LINE_L_FLINK];
;  1404          1847  3      REMQUE (NEW_TEXT_LINE[LINE_L_FLINK], REMOVED_LINE);
;  1405          1848  3      IF NOT .REMOVED_LINE[LINE_V_DUMMY]
;  1406          1849  3      THEN INSQUE (REMOVED_LINE[LINE_L_FLINK],
;  1407          1850  3                   .AED_Q_DEL_ACE[LINE_L_BLINK]);
;  1408          1851  3      TEMP_LINE = .TEMP_LINE + 1;
;  1409          1852  3      NEW_TEXT_LINE = .AED_L_FIRSTLINE;
;  1410          1853  3      END
;  1411          1854  2  UNTIL .REMOVED_LINE EQL .AED_L_LASTLINE;
;  1412          1855  2  AED_L_STATUS = AED_UPDATEACL (0);
;  1413          1856  2  AED_L_FLAGS[AED_V_INSERT] = AED_L_FLAGS[AED_V_INSERTEXT] = 0;
;  1414          1857  2  AED_L_FLAGS[AED_V_MODIFIED] = 0;
;  1415          1858  2  IF NOT .AED_L_STATUS
;  1416          1859  2  THEN
;  1417          1860  3      BEGIN
;  1418          1861  3      AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  1419          1862  3      RETURN 0;
;  1420          1863  2      END;
;  1421          1864  2  IF .AED_L_FIRSTLINE EQLA AED_Q_LINETABLE[LINE_L_FLINK]
;  1422          1865  2  THEN
;  1423          1866  3      BEGIN
;  1424          1867  3      BUFFER_INDEX = 0;
;  1425          1868  3      AED_L_FLAGS[AED_V_ENDACL] = 1;
;  1426          1869  3      AED_L_FLAGS[AED_V_INSERTEXT] = 1;
;  1427          1870  3      AED_W_TOTALSIZE = SEGMENT_SIZE = 0;
;  1428          1871  3      INSQUE (AED_T_CURLINE[LINE_L_FLINK],
;  1429          1872  3                  .AED_Q_LINETABLE[LINE_L_BLINK]);
;  1430          1873  3      AED_L_FIRSTLINE = AED_L_LASTLINE = AED_T_CURLINE;
;  1431          1874  3      AED_L_FIRSTLINE[LINE_W_FLAGS] = LINE_M_BEGINACE;
;  1432          1875  3      AED_L_CURACE = 0;
;  1433          1876  3      IF .AED_L_FLAGS[AED_V_PROMPT]
;  1434          1877  3      THEN
;  1435          1878  4          BEGIN
;  1436          1879  4          AED_B_ACETYPE = 0;
;  1437          1880  4          AED_L_FLAGS[AED_V_NOITEMSEL] = 0;
;  1438          1881  4          AED_SELECTFIELD (BUFFER_INDEX);
;  1439          1882  3          END;
;  1440          1883  3      END
;  1441          1884  2  ELSE
;  1442          1885  3      BEGIN
;  1443          1886  3      BUFFER_INDEX = 0;
;  1444          1887  3      AED_COPSEGMENT (.AED_L_FIRSTLINE);
;  1445          1888  3      INSQUE (AED_T_CURLINE[LINE_L_FLINK],
;  1446          1889  3                  .AED_L_FIRSTLINE[LINE_L_BLINK]);
;  1447          1890  3      AED_L_FIRSTLINE = AED_L_LASTLINE = AED_T_CURLINE;
```

```
;  1448          1891  3     AED_W_TOTALSIZE = .AED_L_FIRSTLINE[LINE_W_SIZE];
;  1449          1892  3     UNTIL .AED_L_LASTLINE[LINE_V_ENDACE]
;  1450          1893  3     DO
;  1451          1894  4         BEGIN
;  1452          1895  4         IF .AED_L_LASTLINE EQLA AED_T_CURLINE
;  1453          1896  4         THEN AED_L_LASTLINE = .AED_L_LASTLINE[LINE_L_FLINK];
;  1454          1897  4         AED_L_LASTLINE = .AED_L_LASTLINE[LINE_L_FLINK];
;  1455          1898  4         AED_W_TOTALSIZE = .AED_W_TOTALSIZE + .AED_L_LASTLINE[LINE_W_SIZE];
;  1456          1899  3         END;
;  1457          1900  3     AED_L_CURACE = .AED_L_FIRSTLINE[LINE_L_BINACE];
;  1458          1901  2     END;
;  1459          1902  2 AED_B_COLUMN = .BUFFER_INDEX + 1;
;  1460          1903  2 AED_L_BEGINLINE = .AED_L_BEGINLINE[LINE_L_FLINK];
;  1461          1904  2
;  1462          1905  2 ! Now repaint the display.  This is done by either scrolling down and repainting
;  1463          1906  2 ! the first part of the display or repainting from the current position to the
;  1464          1907  2 ! end of the display (or the end of the ACL).
;  1465          1908  2
;  1466          1909  2 IF .AED_B_LINE LEQ 10
;  1467          1910  2 THEN
;  1468          1911  3     BEGIN
;  1469          1912  3     INCR J FROM 0 TO .TEMP_LINE - .AED_B_LINE
;  1470          1913  3     DO
;  1471          1914  4         BEGIN
;  1472          1915  4         IF .J EQL 0 THEN SCR$SET_CURSOR (20,1);          ! **** TEMP ****
;  1473          1916  4         SCR$UP_SCROLL ();
;  1474          1917  3         END;
;  1475          1918  3     NEW_TEXT_LINE = .AED_L_BEGINLINE;
;  1476          1919  3     INCR J FROM 1 TO .AED_B_LINE
;  1477          1920  3     DO
;  1478          1921  4         BEGIN
;  1479          1922  4         ECHO_DESC[DSC$W_LENGTH] = .NEW_TEXT_LINE[LINE_W_SIZE];
;  1480          1923  4         ECHO_DESC[DSC$A_POINTER] = NEW_TEXT_LINE[LINE_T_TEXT];
;  1481          1924  4         SCR$SET_CURSOR (.J, 1);
;  1482          1925  4         AED_PUTOUTPUT (ECHO_DESC);
;  1483          1926  4         SCR$ERASE_LINE (.J, .ECHO_DESC[DSC$W_LENGTH] + 1);
;  1484          1927  4         IF .NEW_TEXT_LINE[LINE_V_REPLACE] THEN NEW_TEXT_LINE = .NEW_TEXT_LINE[LINE_L_FLINK];
;  1485          1928  4         NEW_TEXT_LINE = .NEW_TEXT_LINE[LINE_L_FLINK];
;  1486          1929  3         END;
;  1487          1930  3     END
;  1488          1931  2 ELSE
;  1489          1932  3     BEGIN
;  1490          1933  3     IF .AED_L_FLAGS[AED_V_ENDACL]
;  1491          1934  3     THEN NEW_TEXT_LINE = AED_T_CURLINE
;  1492          1935  3     ELSE NEW_TEXT_LINE = .AED_T_CURLINE[LINE_L_FLINK];
;  1493          1936  3     INCR J FROM .AED_B_LINE TO 20
;  1494          1937  3     DO
;  1495          1938  4         BEGIN
;  1496          1939  4         IF .NEW_TEXT_LINE EQLA AED_Q_LINETABLE[LINE_L_FLINK]
;  1497          1940  4         THEN
;  1498          1941  5             BEGIN
;  1499          1942  5             IF .J LSS 20 THEN SCR$ERASE_PAGE (.J, 1);
;  1500          1943  5             EXITLOOP;
;  1501          1944  4             END;
;  1502          1945  4         ECHO_DESC[DSC$W_LENGTH] = .NEW_TEXT_LINE[LINE_W_SIZE];
;  1503          1946  4         ECHO_DESC[DSC$A_POINTER] = NEW_TEXT_LINE[LINE_T_TEXT];
;  1504          1947  4         SCR$SET_CURSOR (.J, 1);
```

```
; 1505        1948  4            AED_PUTOUTPUT (ECHO_DESC);
; 1506        1949  4            SCR$ERASE_LINE (.J, .ECHO_DESC[DSC$W_LENGTH] + 1);
; 1507        1950  4            NEW_TEXT_LINE = .NEW_TEXT_LINE[LINE_L_FLINK];
; 1508        1951  3            END;
; 1509        1952  2        END;
; 1510        1953  2  AED_L_FLAGS[AED_V_FIRSTCHAR] = 1;
; 1511        1954  2  AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
; 1512        1955  2  AED_L_FLAGS[AED_V_GOLDKEY] = 0;
; 1513        1956  2  AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
; 1514        1957  2  TERM_CHAR = 0;
; 1515        1958  2  RETURN 1;
; 1516        1959  2
; 1517        1960  1  END;                                                   ! End of routine ACT_DEL_ACE



                                              OFFC 00000 ACT_DEL_ACE:
                                                                .WORD   Save R2,R3,R4,R5,R6,R7,R8,R9,R10,R11          ; 1778
                           5B 00000000G  00  9E 00002           MOVAB   SCR$ERASE_LINE, R11                           ;
                           5A 00000000G  00  9E 00009           MOVAB   LIB$FREE_VM, R10                              ;
                           59 00000000G  8F  D0 00010           MOVL    #AED$_NOMODIFY, R9                            ;
                           58 00000000G  00  9E 00017           MOVAB   SCR$ERASE_PAGE, R8                            ;
                           57 00000000G  00  9E 0001E           MOVAB   SCR$SET_CURSOR, R7                            ;
                           56     0000'  CF  9E 00025           MOVAB   NEW_TEXT_LINE, R6                             ;
                           55     0000'  CF  9E 0002A           MOVAB   AED_L_FIRSTLINE, R5                           ;
                           5E            04  C2 0002F           SUBL2   #4, SP                                        ;
                           50            65  D0 00032           MOVL    AED_L_FIRSTLINE, R0                           ; 1817
               47      0A  A0            04  E1 00035           BBC     #4, 10(R0), 4$                                ;
               0E      C0  A5            03  E1 0003A           BBC     #3, AED_L_FLAGS, 1$                           ; 1820
                                         01  DD 0003F           PUSHL   #1                                            ;
                                         15  DD 00041           PUSHL   #21                                           ;
                           68            02  FB 00043           CALLS   #2, SCR$ERASE_PAGE                            ;
                                         01  DD 00046           PUSHL   #1                                            ;
                                         15  DD 00048           PUSHL   #21                                           ;
                           67            02  FB 0004A           CALLS   #2, SCR$SET_CURSOR                            ;
                                         59  DD 0004D 1$:       PUSHL   R9                                            ;
                    00000000G  00        01  FB 0004F           CALLS   #1, LIB$SIGNAL                                ;
               0B      C0  A5            03  E1 00056           BBC     #3, AED_L_FLAGS, 2$                           ;
                           7E      E0    A5  9A 0005B           MOVZBL  AED_B_COLUMN, -(SP)                           ;
                           7E      E4    A5  9A 0005F           MOVZBL  AED_B_LINE, -(SP)                             ;
                           67            02  FB 00063           CALLS   #2, SCR$SET_CURSOR                            ;
                             00000000*   8F  D5 00066 2$:       TSTL    #<AED$_NOMODIFY&7>                            ;
                                         10  13 0006C           BEQL    3$                                            ;
00000000*  8F     D4   A5                03  00  ED 0006E       CMPZV   #0, #3, AED_L_WORSTERR, #<AED$_NOMODIFY&7>    ;
                                         04  18 00078           BGEQ    3$                                            ;
                      D4   A5            59  D0 0007A           MOVL    R9, AED_L_WORSTERR                            ;
                                       021A  31 0007E 3$:       BRW     28$                                           ; 1821
                      F8   A6      10    B5  0F 00081 4$:       REMQUE  @AED_Q_DEL_ACE, REMOVED_LINE                  ; 1829
                                         35  1D 00086           BVS     6$                                            ;
                           50      F8    A6  D0 00088           MOVL    REMOVED_LINE, R0                              ; 1832
                      FC   A6      0C    A0  D0 0008C           MOVL    12(R0), REMOVED_ACE                           ;
                           10      0A    A0  E9 00091           BLBC    10(R0), 5$                                    ; 1833
                                         0E  13 00095           BEQL    5$                                            ; 1834
                                   FC    A6  9F 00097           PUSHAB  REMOVED_ACE                                   ; 1835
                      04   AE      FC    B6  9A 0009A           MOVZBL  @REMOVED_ACE, 4(SP)                           ;
```

```
                      04    AE  9F 0009F        PUSHAB  4(SP)                                    ;
            6A              02  FB 000A2        CALLS   #2, LIB$FREE_VM                          ;
                      F8    A6  9F 000A5 5$:    PUSHAB  REMOVED_LINE                             ; 1837
            50        F8    A6  D0 000A8        MOVL    REMOVED_LINE, R0                         ;
     04     AE        08    A0  3C 000AC        MOVZWL  8(R0), 4(SP)                             ;
     04     AE              14  C0 000B1        ADDL2   #20, 4(SP)                               ;
                      04    AE  9F 000B5        PUSHAB  4(SP)                                    ;
            6A              02  FB 000B8        CALLS   #2, LIB$FREE_VM                          ;
                            C4  11 000BB        BRB     4$                                       ; 1829
  0000G     CF              00  FB 000BD 6$:    CALLS   #0, AED_REPSEGMENT                       ; 1839
            66              50  D0 000C2        MOVL    R0, NEW_TEXT_LINE                        ;
                            65  DD 000C5        PUSHL   AED_L_FIRSTLINE                          ; 1840
  0000G     CF              01  FB 000C7        CALLS   #1, AED_POSITION                         ;
            50        08    A5  D0 000CC        MOVL    AED_L_BEGINLINE, R0                      ; 1841
     08     A5        04    A0  D0 000D0        MOVL    4(R0), AED_L_BEGINLINE                   ;
     F4     A6        E4    A5  9A 000D5        MOVZBL  AED_B_LINE, TEMP_LINE                    ; 1842
                      F4    A6  D7 000DA        DECL    TEMP_LINE                                ;
            66              65  D0 000DD        MOVL    AED_L_FIRSTLINE, NEW_TEXT_LINE           ; 1843
            51              65  D0 000E0        MOVL    AED_L_FIRSTLINE, R1                      ; 1846
            65              61  D0 000E3 7$:    MOVL    (R1), AED_L_FIRSTLINE                    ;
     F8     A6        00    B6  0F 000E6        REMQUE  @NEW_TEXT_LINE, REMOVED_LINE             ; 1847
            50        F8    A6  D0 000EB        MOVL    REMOVED_LINE, R0                         ; 1848
 04         0A        A0    02  E0 000EF        BBS     #2, 10(R0), 8$                           ;
     14     B5              60  0E 000F4        INSQUE  (R0), @AED_Q_DEL_ACE+4                   ; 1850
                      F4    A6  D6 000F8 8$:    INCL    TEMP_LINE                                ; 1851
            51              65  D0 000FB        MOVL    AED_L_FIRSTLINE, R1                      ; 1852
            66              51  D0 000FE        MOVL    R1, NEW_TEXT_LINE                        ;
     04     A5        F8    A6  D1 00101        CMPL    REMOVED_LINE, AED_L_LASTLINE             ; 1854
                            DB  12 00106        BNEQ    7$                                       ;
                            7E  D4 00108        CLRL    -(SP)                                    ; 1855
  0000G     CF              01  FB 0010A        CALLS   #1, AED_UPDATEACL                        ;
     4C     A5              50  D0 0010F        MOVL    R0, AED_L_STATUS                         ;
     C0     A5      6080    8F  AA 00113        BICW2   #24704, AED_L_FLAGS                      ; 1856
            07        4C    A5  E8 00119        BLBS    AED_L_STATUS, 9$                         ; 1858
     C1     A5              08  8A 0011D        BICB2   #8, AED_L_FLAGS+1                        ; 1861
                          0184  31 00121        BRW     29$                                      ; 1862
                      E8    A6  D4 00124 9$:    CLRL    BUFFER_INDEX                             ; 1867
            50        F0    A5  9E 00127        MOVAB   AED_Q_LINETABLE, R0                      ; 1864
            50              65  D1 0012B        CMPL    AED_L_FIRSTLINE, R0                      ;
                            3A  12 0012E        BNEQ    10$                                      ;
     C0     A5      4020    8F  A8 00130        BISW2   #16416, AED_L_FLAGS                      ; 1869
                      78    A5  B4 00136        CLRW    SEGMENT_SIZE                             ; 1870
                    0284    C5  B4 00139        CLRW    AED_W_TOTALSIZE                          ;
     F4     B5        70    A5  0E 0013D        INSQUE  AED_T_CURLINE, @AED_Q_LINETABLE+4        ; 1872
            50        70    A5  9E 00142        MOVAB   AED_T_CURLINE, R0                        ; 1873
     04     A5              50  D0 00146        MOVL    R0, AED_L_LASTLINE                       ;
            65              50  D0 0014A        MOVL    R0, AED_L_FIRSTLINE                      ;
     0A     A0              01  B0 0014D        MOVW    #1, 10(R0)                               ; 1874
                      FC    A5  D4 00151        CLRL    AED_L_CURACE                             ; 1875
                      C1    A5  95 00154        TSTB    AED_L_FLAGS+1                            ; 1876
                            60  18 00157        BGEQ    14$                                      ;
                      68    A5  94 00159        CLRB    AED_B_ACETYPE                            ; 1879
     C2     A5              08  8A 0015C        BICB2   #8, AED_L_FLAGS+2                        ; 1880
                      E8    A6  9F 00160        PUSHAB  BUFFER_INDEX                             ; 1881
  0000G     CF              01  FB 00163        CALLS   #1, AED_SELECTFIELD                      ;
                            4F  11 00168        BRB     14$                                      ; 1864
                            65  DD 0016A 10$:   PUSHL   AED_L_FIRSTLINE                          ; 1887
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                0000G  CF              01 FB 0016C          CALLS   #1, AED_COPSEGMENT
                       50              65 D0 00171          MOVL    AED_L_FIRSTLINE, R0                     ; 1889
                  04   B0        70    A5 0E 00174          INSQUE  AED_T_CURLINE, @4(R0)
                       50        70    A5 9E 00179          MOVAB   AED_T_CURLINE, R0                       ; 1890
                  04   A5              50 D0 0017D          MOVL    R0, AED_L_LASTLINE
                       65              50 D0 00181          MOVL    R0, AED_L_FIRSTLINE
                       51              65 D0 00184          MOVL    AED_L_FIRSTLINE, R1                     ; 1891
                0284   C5        08    A1 B0 00187          MOVW    8(R1), AED_W_TOTALSIZE
                       50        04    A5 D0 0018D          MOVL    AED_L_LASTLINE, R0                      ; 1892
          1E      0A   A0              01 E0 00191 11$:     BBS     #1, 10(R0), 13$
                       52        70    A5 9E 00196          MOVAB   AED_T_CURLINE, R2                       ; 1895
                       52              50 D1 0019A          CMPL    R0, R2
                                       04 12 0019D          BNEQ    12$
                  04   A5              60 D0 0019F          MOVL    (R0), AED_L_LASTLINE                    ; 1896
                  04   A5        04    B5 D0 001A3 12$:     MOVL    @AED_L_LASTLINE, AED_L_LASTLINE         ; 1897
                       50        04    A5 D0 001A8          MOVL    AED_L_LASTLINE, R0                      ; 1898
                0284   C5        08    A0 A0 001AC          ADDW2   8(R0), AED_W_TOTALSIZE
                                       DD 11 001B2          BRB     11$                                     ; 1892
                  FC   A5        0C    A1 D0 001B4 13$:     MOVL    12(R1), AED_L_CURACE                    ; 1900
          E0    A5      E8       A6    01 81 001B9 14$:     ADDB3   #1, BUFFER_INDEX, AED_B_COLUMN          ; 1902
                  08   A5        08    B5 D0 001BF          MOVL    @AED_L_BEGINLINE, AED_L_BEGINLINE       ; 1903
                       52        E4    A5 9A 001C4          MOVZBL  AED_B_LINE, R2                          ; 1909
                       0A              52 91 001C8          CMPB    R2, #10
                                       65 1A 001CB          BGTRU   21$
          54        F4   A6              52 C3 001CD          SUBL3   R2, TEMP_LINE, R4                       ; 1912
                       53              01 CE 001D2          MNEGL   #1, J
                                       10 11 001D5          BRB     17$
                                       07 12 001D7 15$:     BNEQ    16$                                     ; 1915
                                       01 DD 001D9          PUSHL   #1
                                       14 DD 001DB          PUSHL   #20
                       67              02 FB 001DD          CALLS   #2, SCR$SET_CURSOR
            00000000G  00              00 FB 001E0 16$:     CALLS   #0, SCR$UP_SCROLL                       ; 1916
      EC               53              54 F3 001E7 17$:     AOBLEQ  R4, J, 15$                              ; 1912
                       66        08    A5 D0 001EB          MOVL    AED_L_BEGINLINE, NEW_TEXT_LINE          ; 1918
                       53        E4    A5 9A 001EF          MOVZBL  AED_B_LINE, R3                          ; 1919
                                       52 D4 001F3          CLRL    J
                                       35 11 001F5          BRB     20$
                       50              66 D0 001F7 18$:     MOVL    NEW_TEXT_LINE, R0                       ; 1922
                  EC   A6        08    A0 B0 001FA          MOVW    8(R0), ECHO_DESC
                  F0   A6        14    A0 9E 001FF          MOVAB   20(R0), ECHO_DESC+4                     ; 1923
                                       01 DD 00204          PUSHL   #1                                      ; 1924
                                       52 DD 00206          PUSHL   J
                       67              02 FB 002C8          CALLS   #2, SCR$SET_CURSOR
                                  EC   A6 9F 0020B          PUSHAB  ECHO_DESC                               ; 1925
                0000G  CF              01 FB 0020E          CALLS   #1, AED_PUTOUTPUT
                       7E        EC    A6 3C 00213          MOVZWL  ECHO_DESC, -(SP)                        ; 1926
                                       6E D6 00217          INCL    (SP)
                                       52 DD 00219          PUSHL   J
                       6B              02 FB 0021B          CALLS   #2, SCR$ERASE_LINE
                       50              66 D0 0021E          MOVL    NEW_TEXT_LINE, R0                       ; 1927
          03        0A   A0              03 E1 00221          BBC     #3, 10(R0), 19$
                       66              60 D0 00226          MOVL    (R0), NEW_TEXT_LINE
                       76              96 D0 00229 19$:     MOVL    @NEW_TEXT_LINE, NEW_TEXT_LINE           ; 1928
      C7               52              53 F3 0022C 20$:     AOBLEQ  R3, J, 18$                              ; 1919
                                       58 11 00230          BRB     27$                                     ; 1909
          06        C0   A5              05 E1 00232 21$:     BBC     #5, AED_L_FLAGS, 22$                    ; 1933
                       66        70    A5 9E 00237          MOVAB   AED_T_CURLINE, NEW_TEXT_LINE            ; 1934
```

```
                                        04  11 0023B        BRB     23$                                         ;
                66          70          A5  D0 0023D 22$:   MOVL    AED_T_CURLINE, NEW_TEXT_LINE                ; 1935
                                        52  D7 00241 23$:   DECL    J                                           ; 1936
                                        41  11 00243        BRB     26$                                         ;
                50          F0          A5  9E 00245 24$:   MOVAB   AED_Q_LINETABLE, R0                         ; 1939
                50                      66  D1 00249        CMPL    NEW_TEXT_LINE, R0                           ;
                                        0E  12 0024C        BNEQ    25$                                         ;
                14                      52  D1 0024E        CMPL    J, #20                                      ; 1942
                                        37  18 00251        BGEQ    27$                                         ;
                                        01  DD 00253        PUSHL   #1                                          ;
                                        52  DD 00255        PUSHL   J                                           ;
                68                      02  FB 00257        CALLS   #2, SCR$ERASE_PAGE                          ;
                                        2E  11 0025A        BRB     27$                                         ; 1941
                50                      66  D0 0025C 25$:   MOVL    NEW_TEXT_LINE, R0                           ; 1945
           EC   A6          08          A0  B0 0025F        MOVW    8(R0), ECHO_DESC                            ;
           F0   A6          14          A0  9E 00264        MOVAB   20(R0), ECHO_DESC+4                         ; 1946
                                        01  DD 00269        PUSHL   #1                                          ; 1947
                                        52  DD 0026B        PUSHL   J                                           ;
                67                      02  FB 0026D        CALLS   #2, SCR$SET_CURSOR                          ;
                            EC          A6  9F 00270        PUSHAB  ECHO_DESC                                   ; 1948
           0000G CF                     01  FB 00273        CALLS   #1, AED_PUTOUTPUT                           ;
                7E          EC          A6  3C 00278        MOVZWL  ECHO_DESC, -(SP)                            ; 1949
                                        6E  D6 0027C        INCL    (SP)                                        ;
                                        52  DD 0027E        PUSHL   J                                           ;
                6B                      02  FB 00280        CALLS   #2, SCR$ERASE_LINE                          ;
                76                      96  D0 00283        MOVL    @NEW_TEXT_LINE, NEW_TEXT_LINE               ; 1950
      BB        52                      14  F3 00286 26$:   AOBLEQ  #20, J, 24$                                 ; 1936
           C1   A5                      10  88 0028A 27$:   BISB2   #16, AED_L_FLAGS+1                          ; 1953
                7E          E0          A5  9A 0028E        MOVZBL  AED_B_COLUMN, -(SP)                         ; 1954
                7E          E4          A5  9A 00292        MOVZBL  AED_B_LINE, -(SP)                           ;
           0000G CF                     02  FB 00296        CALLS   #2, AED_SET_CURSOR                          ;
           C1   A5        2008          8F  AA 0029B 28$:   BICW2   #8200, AED_L_FLAGS+1                        ; 1956
                            10          A6  94 002A1        CLRB    TERM_CHAR                                   ; 1957
                50                      01  D0 002A4        MOVL    #1, R0                                      ; 1958
                                        04     002A7        RET                                                 ;
                                        50  D4 002A8 29$:   CLRL    R0                                          ; 1960
                                        04     002AA        RET                                                 ;

; Routine Size:  683 bytes,    Routine Base:  $CODE$ + 0E38
```

```
;  1519          1961  1 %SBTTL  'ACT_UNDEL_CHR - insert deleted character'
;  1520          1962  1 ROUTINE ACT_UNDEL_CHR =
;  1521          1963  1
;  1522          1964  1 !++
;  1523          1965  1 !
;  1524          1966  1 ! FUNCTIONAL DESCRIPTION:
;  1525          1967  1 !
;  1526          1968  1 !       This routine retrieves the previously deleted character and inserts
;  1527          1969  1 !       it into the line segment at the current cursor position.  The
;  1528          1970  1 !       cursor position is unchanged.
;  1529          1971  1 !
;  1530          1972  1 ! CALLING SEQUENCE:
;  1531          1973  1 !       ACT_UNDEL_CHR ()
;  1532          1974  1 !
;  1533          1975  1 ! INPUT PARAMETERS:
;  1534          1976  1 !       none
;  1535          1977  1 !
;  1536          1978  1 ! IMPLICIT INPUTS:
;  1537          1979  1 !       OWN storage
;  1538          1980  1 !
;  1539          1981  1 ! OUTPUT PARAMETERS:
;  1540          1982  1 !       none
;  1541          1983  1 !
;  1542          1984  1 ! IMPLICIT OUTPUTS:
;  1543          1985  1 !       none
;  1544          1986  1 !
;  1545          1987  1 ! ROUTINE VALUE:
;  1546          1988  1 !       1 if successful
;  1547          1989  1 !       error status otherwise
;  1548          1990  1 !
;  1549          1991  1 ! SIDE EFFECTS:
;  1550          1992  1 !       The line segment table is updated as necessary, ACE line pointers
;  1551          1993  1 !       are updated, and the object's ACL is updated as necessary.
;  1552          1994  1 !
;  1553          1995  1 !--
;  1554          1996  1
;  1555          1997  2 BEGIN
;  1556          1998  2
;  1557          1999  2 AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  1558          2000  2 IF .AED_B_DEL_CHAR EQL 0
;  1559          2001  2 THEN
;  1560          2002  3     BEGIN
;  1561          2003  3     AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  1562          2004  3     AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  1563          2005  3     TERM_CHAR = 0;
;  1564          2006  3     RETURN 1;
;  1565          2007  2     END;
;  1566          2008  2
;  1567          2009  2 ! If the current ACE is marked as untouchable, no modificaticns are allowed.
;  1568          2010  2
;  1569          2011  2 IF .AED_L_FIRSTLINE[LINE_V_NOTOUCH]
;  1570          2012  2 THEN
;  1571          2013  3     BEGIN
;  1572          2014  3     SIGNAL (AED$_NOMODIFY);
;  1573          2015  3     AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  1574          2016  3     AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  1575          2017  3     TERM_CHAR = 0;
```

```
; 1576          2018  3      RETURN 1;
; 1577          2019  2      END;
; 1578          2020  2
; 1579          2021  2  ! Retrieve the deleted character.
; 1580          2022  2
; 1581          2023  2  AED_L_FLAGS[AED_V_GOLDKEY] = 0;
; 1582          2024  2  AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
; 1583          2025  2  TERM_CHAR = .AED_B_DEL_CHAR;
; 1584          2026  2  RETURN 1;
; 1585          2027  2
; 1586          2028  1  END;                                                   ! End of routine ACT_UNDEL_CHR



                                                   001C 00000 ACT_UNDEL_CHR:
                                                                   .WORD    Save R2,R3,R4                          ; 1962
                           54 00000000G     8F     D0 00002        MOVL     #AED$_NOMODIFY, R4                     ;
                           53 00000000G     00     9E 00009        MOVAB    SCR$SET_CURSOR, R3                     ;
                           52      0000'    CF     9E 00010        MOVAB    AED_L_FLAGS, R2                        ;
                     02    A2               20     8A 00015        BICB2    #32, AED_L_FLAGS+2                     ; 1999
                                   68       A2     95 00019        TSTB     AED_B_DEL_CHAR                         ; 2000
                                            4F     13 0001C        BEQL     3$                                     ;
                           50      40       A2     D0 0001E        MOVL     AED_L_FIRSTLINE, R0                    ; 2011
                 52        0A      A0       04     E1 00022        BBC      #4, 10(R0), 4$                         ;
                 12        62               03     E1 00027        BBC      #3, AED_L_FLAGS, 1$                    ; 2014
                                            01     DD 0002B        PUSHL    #1                                     ;
                                            15     DD 0002D        PUSHL    #21                                    ;
            00000000G      00               02     FB 0002F        CALLS    #2, SCR$ERASE_PAGE                     ;
                                            01     DD 00036        PUSHL    #1                                     ;
                                            15     DD 00038        PUSHL    #21                                    ;
                           63               02     FB 0003A        CALLS    #2, SCR$SET_CURSOR                     ;
                                            54     DD 0003D 1$:    PUSHL    R4                                     ;
            00000000G      00               01     FB 0003F        CALLS    #1, LIB$SIGNAL                         ;
                 0B        62               03     E1 00046        BBC      #3, AED_L_FLAGS, 2$                    ;
                           7E      20       A2     9A 0004A        MOVZBL   AED_B_COLUMN, -(SP)                    ;
                           7E      24       A2     9A 0004E        MOVZBL   AED_B_LINE, -(SP)                      ;
                           63               02     FB 00052        CALLS    #2, SCR$SET_CURSOR                     ;
                             00000000*      8F     D5 00055 2$:    TSTL     #<AED$_NOMODIFY&7>                     ;
                                            10     13 0005B        BEQL     3$                                     ;
00000000*  8F       14   A2        03               00     ED 0005D        CMPZV    #0, #3, AED_L_WORSTERR, #<AED$_NOMODIFY&7> ;
                                            04     18 00067        BGEQ     3$                                     ;
                     14    A2               54     D0 00069        MOVL     R4, AED_L_WORSTERR                     ;
                     01    A2      2008     8F     AA 0006D 3$:    BICW2    #8200, AED_L_FLAGS+1                   ; 2016
                                   0000'    CF     94 00073        CLRB     TERM_CHAR                              ; 2017
                                            0C     11 00077        BRB      5$                                     ; 2018
                     01    A2      2008     8F     AA 00079 4$:    BICW2    #8200, AED_L_FLAGS+1                   ; 2024
                  0000'    CF      68       A2     90 0007F        MOVB     AED_B_DEL_CHAR, TERM_CHAR              ; 2025
                           50               01     D0 00085 5$:    MOVL     #1, R0                                 ; 2026
                                            04        00088        RET                                             ; 2028

; Routine Size:  137 bytes,    Routine Base:  $CODE$ + 10E3
```

```
;  1588          2029  1 %SBTTL  'ACT_UNDEL_WRD - insert deleted word'
;  1589          2030  1 ROUTINE ACT_UNDEL_WRD =
;  1590          2031  1
;  1591          2032  1 !++
;  1592          2033  1 !
;  1593          2034  1 ! FUNCTIONAL DESCRIPTION:
;  1594          2035  1 !
;  1595          2036  1 !       This routine retrieves the previously deleted word and inserts it
;  1596          2037  1 !       into the current line segment starting at the current cursor position.
;  1597          2038  1 !       If a delete word was used previously, the cursor position is not
;  1598          2039  1 !       changed.  If a rubout word was used, the cursor is moved to the end
;  1599          2040  1 !       in the retrieved word.
;  1600          2041  1 !
;  1601          2042  1 ! CALLING SEQUENCE:
;  1602          2043  1 !       ACT_UNDEL_WRD ()
;  1603          2044  1 !
;  1604          2045  1 ! INPUT PARAMETERS:
;  1605          2046  1 !       none
;  1606          2047  1 !
;  1607          2048  1 ! IMPLICIT INPUTS:
;  1608          2049  1 !       OWN storage
;  1609          2050  1 !
;  1610          2051  1 ! OUTPUT PARAMETERS:
;  1611          2052  1 !       none
;  1612          2053  1 !
;  1613          2054  1 ! IMPLICIT OUTPUTS:
;  1614          2055  1 !       none
;  1615          2056  1 !
;  1616          2057  1 ! ROUTINE VALUE:
;  1617          2058  1 !       1 if successful
;  1618          2059  1 !       error status otherwise
;  1619          2060  1 !
;  1620          2061  1 ! SIDE EFFECTS:
;  1621          2062  1 !       The line segment table is updated as necessary, ACE line pointers
;  1622          2063  1 !       are updated, and the object's ACL is updated as necessary.
;  1623          2064  1 !
;  1624          2065  1 !--
;  1625          2066  1
;  1626          2067  2 BEGIN
;  1627          2068  2
;  1628          2069  2 ! If the current ACE is marked as untouchable, no modifications are allowed.
;  1629          2070  2
;  1630          2071  2 IF .AED_L_FIRSTLINE[LINE_V_NOTOUCH]
;  1631          2072  2 THEN
;  1632          2073  3     BEGIN
;  1633          2074  3     SIGNAL (AED$_NOMODIFY);
;  1634          2075  3     AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  1635          2076  3     AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  1636          2077  3     TERM_CHAR = 0;
;  1637          2078  3     RETURN 1;
;  1638          2079  2     END;
;  1639          2080  2
;  1640          2081  2 ! Retrieve the deleted word.
;  1641          2082  2
;  1642          2083  2 CH$COPY (.SEGMENT_SIZE - .BUFFER_INDEX,
;  1643          2084  2           INPUT_BUFFER[.BUFFER_INDEX],
;  1644          2085  2           0,
```

```
2           512 - .BUFFER_INDEX - .AED_Q_DEL_WORD[DSC$W_LENGTH],
2           INPUT_BUFFER[.BUFFER_INDEX +
2                   .AED_Q_DEL_WORD[DSC$W_LENGTH]]);
2  CH$MOVE (.AED_Q_DEL_WORD[DSC$W_LENGTH],
2           .AED_Q_DEL_WORD[DSC$A_POINTER],
2           INPUT_BUFFER[.BUFFER_INDEX]);
2  SEGMENT_SIZE = .SEGMENT_SIZE + .AED_Q_DEL_WORD[DSC$W_LENGTH];
2  ECHO_DESC[DSC$W_LENGTH] = .SEGMENT_SIZE - .BUFFER_INDEX;
2  ECHO_DESC[DSC$A_POINTER] = INPUT_BUFFER[.BUFFER_INDEX];
2  IF .AED_L_FLAGS[AED_V_RUBWORD]
2  THEN BUFFER_INDEX = .BUFFER_INDEX + .AED_Q_DEL_WORD[DSC$W_LENGTH];
2  IF .SEGMENT_SIZE GEQ .AED_L_PAGEWIDTH
2  THEN AED_SEGSPLIT (BUFFER_INDEX, 0, 1, 0)
2  ELSE AED_PUTOUTPUT (ECHO_DESC);
2  AED_B_COLUMN = .BUFFER_INDEX + 1;
2  AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
2  IF .AED_Q_DEL_WORD[DSC$W_LENGTH] NEQ 0
2  THEN
3      BEGIN
3      AED_L_FLAGS[AED_V_MODIFIED] = 1;
3      AED_L_FLAGS[AED_V_FIRSTCHAR] = 0;
2      END;
2  AED_L_FLAGS[AED_V_GOLDKEY] = 0;
2  AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
2  TERM_CHAR = 0;
2  RETURN 1;
2
1  END;                                             ! End of routine ACT_UNDEL_WRD
```

```
                                                   OFFC 00000 ACT_UNDEL_WRD:
                                                                .WORD   Save R2,R3,R4,R5,R6,R7,R8,R9,R10,R11          ; 2030
                             5B 00000000G  00  9E 00002         MOVAB   SCR$SET_CURSOR, R11                           ;
                             5A     0000'  CF  9E 00009         MOVAB   BUFFER_INDEX, R10                             ;
                             59     0000'  CF  9E 0000E         MOVAB   AED_L_FLAGS, R9                               ;
                             50        40  A9  D0 00013         MOVL    AED_L_FIRSTLINE, R0                           ; 2071
                  51     0A  A0            04  E1 00017         BBC     #4, 10(R0), 4$                                ;
                  12         69            03  E1 0001C         BBC     #3, AED_L_FLAGS, 1$                           ; 2074
                                           01  DD 00020         PUSHL   #1                                            ;
                                           15  DD 00022         PUSHL   #21                                           ;
                     00000000G  00         02  FB 00024         CALLS   #2, SCR$ERASE_PAGE                            ;
                                           01  DD 0002B         PUSHL   #1                                            ;
                                           15  DD 0002D         PUSHL   #21                                           ;
                                6B         02  FB 0002F         CALLS   #2, SCR$SET_CURSOR                            ;
                                00000000G  8F  DD 00032 1$:     PUSHL   #AED$_NOMODIFY                                ;
                     00000000G  00         01  FB 00038         CALLS   #1, LIB$SIGNAL                                ;
                  0B            69         03  E1 0003F         BBC     #3, AED_L_FLAGS, 2$                           ;
                             7E        20  A9  9A 00043         MOVZBL  AED_B_COLUMN, -(SP)                           ;
                             7E        24  A9  9A 00047         MOVZBL  AED_B_LINE, -(SP)                             ;
                                6B         02  FB 0004B         CALLS   #2, SCR$SET_CURSOR                            ;
                                00000000*  8F  D5 0004E 2$:     TSTL    #<AED$_NOMODIFY&7>                            ;
                                           14  13 00054         BEQL    3$                                            ;
00000000*  8F      14  A9       03         00  ED 00056         CMPZV   #0, #3, AED_L_WORSTERR, #<AED$_NOMODIFY&7>    ;
                                           08  18 00060         BGEQ    3$                                            ;
```

```
                                14   A9 00000000G   8F   D0 00062          MOVL    #AED$_NOMODIFY, AED_L_WORSTERR                ;
                                          0087      31   0006A 3$:        BRW     8$                                            ; 2075
                                  56        6A      D0   0006D 4$:        MOVL    BUFFER_INDEX, R6                              ; 2083
                                  52      00B8      C9   00070            MOVZWL  SEGMENT_SIZE, R2                              ;
                                  52        56      C2   00075            SUBL2   R6, R2                                        ;
                                  58      00C4 C946 9E   00078            MOVAB   INPUT_BUFFER[R6], R8                          ; 2084
                                  57        60      A9   3C   0007E        MOVZWL  AED_Q_DEL_WORD, R7                            ; 2086
                                  51      FE00 C746 9E   00082            MOVAB   -512(R7)[R6], R1                              ;
                                  51        51      CE   00088            MNEGL   R1, R1                                        ;
                          50              56      C1   0008B            ADDL3   R7, R6, R0                                    ; 2088
                51        00              68      52   2C   0008F        MOVC5   R2, (R8), #0, R1, INPUT_BUFFER[R0]            ;
                                                  00C4 C940 00094          ;
                          68        64    B9      57   28   00098        MOVC3   R7, @AED_Q_DEL_WORD+4, (R8)                   ; 2091
                                  00B8    C9      57   A0   0009D        ADDW2   R7, SEGMENT_SIZE                              ; 2092
                    04    AA      00B8    C9      56   A3   000A2        SUBW3   R6, SEGMENT_SIZE, ECHO_DESC                   ; 2093
                            08      AA            58   D0   000A9        MOVL    R8, ECHO_DESC+4                               ; 2094
                          03        01    A9      01   E1   000AD        BBC     #1, AED_L_FLAGS+1, 5$                         ; 2095
                                          6A      57   C0   000B2        ADDL2   R7, BUFFER_INDEX                              ; 2096
          18    A9      00B8    C9              10   00   ED 000B5 5$:    CMPZV   #0, #16, SEGMENT_SIZE, AED_L_PAGEWIDTH        ; 2097
                                                    0E   19   000BD        BLSS    6$                                            ;
                                          7E        01   7D   000BF        MOVQ    #1, -(SP)                                     ; 2098
                                                    7E   D4   000C2        CLRL    -(SP)                                         ;
                                                    5A   DD   000C4        PUSHL   R10                                           ;
                                0000G     CF            04   FB   000C6        CALLS   #4, AED_SEGSPLIT                              ;
                                                        08   11   000CB        BRB     7$                                            ;
                                                04      AA   9F   000CD 6$:    PUSHAB  ECHO_DESC                                     ; 2099
                                0000G     CF            01   FB   000D0        CALLS   #1, AED_PUTOUTPUT                             ;
                    20    A9              6A            01   81   000D5 7$:    ADDB3   #1, BUFFER_INDEX, AED_B_COLUMN        ; 2100
                                          7E      20    A9   9A   000DA        MOVZBL  AED_B_COLUMN, -(SP)                   ; 2101
                                          7E      24    A9   9A   000DE        MOVZBL  AED_B_LINE, -(SP)                     ;
                                0000G     CF            02   FB   000E2        CALLS   #2, AED_SET_CURSOR                    ;
                                                60      A9   B5   000E7        TSTW    AED_Q_DEL_WORD                        ; 2102
                                                    08   13   000EA        BEQL    8$                                    ;
                                          69        80    8F   88   000EC        BISB2   #128, AED_L_FLAGS                     ; 2105
                                01        A9            10   8A   000F0        BICB2   #16, AED_L_FLAGS+1                    ; 2106
                                01        A9      2008  8F   AA   000F4 8$:    BICW2   #8200, AED_L_FLAGS+1                  ; 2109
                                                  28      AA   94   000FA        CLRB    TERM_CHAR                             ; 2110
                                          50            01   D0   000FD        MOVL    #1, R0                                ; 2111
                                                        04   00100            RET                                           ; 2113

; Routine Size:  257 bytes,    Routine Base:  $CODE$ + 116C
```

```
;  1674     2114  1 %SBTTL  'ACT_UNDEL_LIN - insert deleted line'
;  1675     2115  1 ROUTINE ACT_UNDEL_LIN =
;  1676     2116  1
;  1677     2117  1 !++
;  1678     2118  1 !
;  1679     2119  1 ! FUNCTIONAL DESCRIPTION:
;  1680     2120  1 !
;  1681     2121  1 !       This routine retrieves the previously deleted line and inserts it
;  1682     2122  1 !       into the current line segment starting at the current cursor position.
;  1683     2123  1 !       If a delete line was used previously, the cursor position is not
;  1684     2124  1 !       changed.  If a rubout line was used, the cursor is moved to the end
;  1685     2125  1 !       in the retrieved line.
;  1686     2126  1 !
;  1687     2127  1 ! CALLING SEQUENCE:
;  1688     2128  1 !       ACT_UNDEL_LIN ()
;  1689     2129  1 !
;  1690     2130  1 ! INPUT PARAMETERS:
;  1691     2131  1 !       none
;  1692     2132  1 !
;  1693     2133  1 ! IMPLICIT INPUTS:
;  1694     2134  1 !       OWN storage
;  1695     2135  1 !
;  1696     2136  1 ! OUTPUT PARAMETERS:
;  1697     2137  1 !       none
;  1698     2138  1 !
;  1699     2139  1 ! IMPLICIT OUTPUTS:
;  1700     2140  1 !       none
;  1701     2141  1 !
;  1702     2142  1 ! ROUTINE VALUE:
;  1703     2143  1 !       1 if successful
;  1704     2144  1 !       error status otherwise
;  1705     2145  1 !
;  1706     2146  1 ! SIDE EFFECTS:
;  1707     2147  1 !       The line segment table is updated as necessary, ACE line pointers
;  1708     2148  1 !       are updated, and the object's ACL is updated as necessary.
;  1709     2149  1 !
;  1710     2150  1 !--
;  1711     2151  1
;  1712     2152  2 BEGIN
;  1713     2153  2
;  1714     2154  2 ! If the current ACE is marked as untouchable, no modifications are allowed.
;  1715     2155  2
;  1716     2156  2 IF .AED_L_FIRSTLINE[LINE_V_NOTOUCH]
;  1717     2157  2 THEN
;  1718     2158  3     BEGIN
;  1719     2159  3     SIGNAL (AED$_NOMODIFY);
;  1720     2160  3     AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  1721     2161  3     AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  1722     2162  3     TERM_CHAR = 0;
;  1723     2163  3     RETURN 1;
;  1724     2164  2     END;
;  1725     2165  2
;  1726     2166  2 ! Retrieve the deleted line.
;  1727     2167  2
;  1728     2168  2 CH$COPY (.SEGMENT_SIZE - .BUFFER_INDEX,
;  1729     2169  2           INPUT_BUFFER[.BUFFER_INDEX],
;  1730     2170  2           0,
```

```
; 1731      2171 2              512 - .BUFFER_INDEX - .AED_Q_DEL_LINE[DSC$W_LENGTH],
; 1732      2172 2              INPUT_BUFFER[.BUFFER_INDEX + .AED_Q_DEL_LINE[DSC$W_LENGTH]]);
; 1733      2173 2 CH$MOVE (.AED_Q_DEL_LINE[DSC$W_LENGTH],
; 1734      2174 2              .AED_Q_DEL_LINE[DSC$A_POINTER],
; 1735      2175 2              INPUT_BUFFER[.BUFFER_INDEX]);
; 1736      2176 2 SEGMENT_SIZE = .SEGMENT_SIZE + .AED_Q_DEL_LINE[DSC$W_LENGTH];
; 1737      2177 2 ECHO_DESC[DSC$W_LENGTH] = .SEGMENT_SIZE - .BUFFER_INDEX;
; 1738      2178 2 ECHO_DESC[DSC$A_POINTER] = INPUT_BUFFER[.BUFFER_INDEX];
; 1739      2179 2 IF .AED_L_FLAGS[AED_V_DELBOL]
; 1740      2180 2 THEN BUFFER_INDEX = .BUFFER_INDEX + .AED_Q_DEL_LINE[DSC$W_LENGTH];
; 1741      2181 2 IF .SEGMENT_SIZE GEQ .AED_L_PAGEWIDTH
; 1742      2182 2 THEN AED_SEGSPLIT (BUFFER_INDEX, 0, 1, 0)
; 1743      2183 2 ELSE AED_PUTOUTPUT (ECHO_DESC);
; 1744      2184 2 AED_B_COLUMN = .BUFFER_INDEX + 1;
; 1745      2185 2 AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
; 1746      2186 2 IF .AED_Q_DEL_LINE[DSC$W_LENGTH] NEQ 0
; 1747      2187 2 THEN
; 1748      2188 3     BEGIN
; 1749      2189 3     AED_L_FLAGS[AED_V_MODIFIED] = 1;
; 1750      2190 3     AED_L_FLAGS[AED_V_FIRSTCHAR] = 0;
; 1751      2191 2     END;
; 1752      2192 2 AED_L_FLAGS[AED_V_GOLDKEY] = 0;
; 1753      2193 2 AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
; 1754      2194 2 TERM_CHAR = 0;
; 1755      2195 2 RETURN 1;
; 1756      2196 2
; 1757      2197 1 END;                                              ! End of routine ACT_UNDEL_LIN


                                          0FFC 00000 ACT_UNDEL_LIN:
                                                           .WORD    Save R2,R3,R4,R5,R6,R7,R8,R9,R10,R11              ; 2115
                         5B 00000000G  00   9E 00002       MOVAB    SCR$SET_CURSOR, R11                               ;
                         5A     0000'  CF   9E 00009       MOVAB    BUFFER_INDEX, R10                                 ;
                         59     0000'  CF   9E 0000E       MOVAB    AED_L_FLAGS, R9                                   ;
                         50        40  A9   D0 00013       MOVL     AED_L_FIRSTLINE, R0                               ; 2156
                  51          0A   A0   04  E1 00017       BBC      #4, 10(R0), 4$                                    ;
                  12               69   03  E1 0001C       BBC      #3, AED_L_FLAGS, 1$                               ; 2159
                                        01  DD 00020       PUSHL    #1                                                ;
                                        15  DD 00022       PUSHL    #21                                               ;
                     00000000G     00   02  FB 00024       CALLS    #2, SCR$ERASE_PAGE                                ;
                                        01  DD 0002B       PUSHL    #1                                                ;
                                        15  DD 0002D       PUSHL    #21                                               ;
                         6B             02  FB 0002F       CALLS    #2, SCR$SET_CURSOR                                ;
                            00000000G   8F  DD 00032 1$:   PUSHL    #AED$_NOMODIFY                                    ;
                     00000000G     00   01  FB 00038       CALLS    #1, LIB$SIGNAL                                    ;
                  0B               69   03  E1 0003F       BBC      #3, AED_L_FLAGS, 2$                               ;
                         7E        20   A9  9A 00043       MOVZBL   AED_B_COLUMN, -(SP)                               ;
                         7E        24   A9  9A 00047       MOVZBL   AED_B_LINE, -(SP)                                 ;
                         6B             02  FB 0004B       CALLS    #2, SCR$SET_CURSOR                                ;
                            00000000*   8F  D5 0004E 2$:   TSTL     #<AED$_NOMODIFY&7>                                ;
                                        14  13 00054       BEQL     3$                                                ;
00000000*  8F        14   A9       03   00  ED 00056       CMPZV    #0, #3, AED_L_WORSTERR, #<AED$_NOMODIFY&7>        ;
                                        08  18 00060       BGEQ     3$                                                ;
                   14   A9 00000000G    8F  D0 00062       MOVL     #AED$_NOMODIFY, AED_L_WORSTERR                    ;
```

```
                                    0087  31 0006A 3$:     BRW     8$                                              ; 2160
                      56              6A  D0 0006D 4$:     MOVL    BUFFER_INDEX, R6                                ; 2168
                      52      00B8    C9  3C 00070         MOVZWL  SEGMENT_SIZE, R2                                ;
                      52              56  C2 00075         SUBL2   R6, R2                                          ;
                      58      00C4 C946   9E 00078         MOVAB   INPUT_BUFFER[R6], R8                            ; 2169
                      57        58    A9  3C 0007E         MOVZWL  AED_Q_DEL_LINE, R7                              ; 2171
                      51      FE00 C746   9E 00082         MOVAB   -512(R7)[R6], R1                                ;
                      51              51  CE 00088         MNEGL   R1, R1                                          ;
                 50   56              57  C1 0008B         ADDL3   R7, R6, R0                                      ; 2172
        51       00   68              52  2C 0008F         MOVC5   R2, (R8), #0, R1, INPUT_BUFFER[R0]              ;
                              00C4 C940      00094                                                                 ;
                 68     5C    B9      57  28 00098         MOVC3   R7, @AED_Q_DEL_LINE+4, (R8)                     ; 2175
                      00B8    C9      57  A0 0009D         ADDW2   R7, SEGMENT_SIZE                                ; 2176
           04    AA   00B8    C9      56  A3 000A2         SUBW3   R6, SEGMENT_SIZE, ECHO_DESC                     ; 2177
                        08    AA      58  D0 000A9         MOVL    R8, ECHO_DESC+4                                 ; 2178
                 03     01    A9      02  E1 000AD         BBC     #2, AED_L_FLAGS+1, 5$                           ; 2179
                              6A      57  C0 000B2         ADDL2   R7, BUFFER_INDEX                                ; 2180
  18    A9   00B8    C9       10      00  ED 000B5 5$:     CMPZV   #0, #16, SEGMENT_SIZE, AED_L_PAGEWIDTH          ; 2181
                                      0E  19 000BD         BLSS    6$                                              ;
                              7E      01  7D 000BF         MOVQ    #1, -(SP)                                       ; 2182
                                      7E  D4 000C2         CLRL    -(SP)                                           ;
                                      5A  DD 000C4         PUSHL   R10                                             ;
                 0000G   CF           04  FB 000C6         CALLS   #4, AED_SEGSPLIT                                ;
                                      08  11 000CB         BRB     7$                                              ;
                                04    AA  9F 000CD 6$:     PUSHAB  ECHO_DESC                                       ; 2183
                 0000G   CF           01  FB 000D0         CALLS   #1, AED_PUTOUTPUT                               ;
           20    A9           6A      01  81 000D5 7$:     ADDB3   #1, BUFFER_INDEX, AED_B_COLUMN                  ; 2184
                              7E  20  A9  9A 000DA         MOVZBL  AED_B_COLUMN, -(SP)                             ; 2185
                              7E  24  A9  9A 000DE         MOVZBL  AED_B_LINE, -(SP)                               ;
                 0000G   CF           02  FB 000E2         CALLS   #2, AED_SET_CURSOR                              ;
                                58    A9  B5 000E7         TSTW    AED_Q_DEL_LINE                                  ; 2186
                                      08  13 000EA         BEQL    8$                                              ;
                      69        80    8F  88 000EC         BISB2   #128, AED_L_FLAGS                               ; 2189
                 01   A9              10  8A 000F0         BICB2   #16, AED_L_FLAGS+1                              ; 2190
                 01   A9      2008    8F  AA 000F4 8$:     BICW2   #8200, AED_L_FLAGS+1                            ; 2193
                                28    AA  94 000FA         CLRB    TERM_CHAR                                       ; 2194
                      50              01  D0 000FD         MOVL    #1, R0                                          ; 2195
                                      04     00100         RET                                                     ; 2197

; Routine Size:  257 bytes,    Routine Base:  $CODE$ + 126D
```

```
;1759          2198  1 %SBTTL  'ACT_UNDEL_ACE - insert deleted ACE'
;1760          2199  1 ROUTINE ACT_UNDEL_ACE =
;1761          2200  1
;1762          2201  1 !++
;1763          2202  1 !
;1764          2203  1 ! FUNCTIONAL DESCRIPTION:
;1765          2204  1 !
;1766          2205  1 !       This routine retrieves the previously deleted ACE and inserts it
;1767          2206  1 !       into the ACL before the first line of the current ACE.
;1768          2207  1 !
;1769          2208  1 ! CALLING SEQUENCE:
;1770          2209  1 !       ACT_UNDEL_ACE ()
;1771          2210  1 !
;1772          2211  1 ! INPUT PARAMETERS:
;1773          2212  1 !       none
;1774          2213  1 !
;1775          2214  1 ! IMPLICIT INPUTS:
;1776          2215  1 !       OWN storage
;1777          2216  1 !
;1778          2217  1 ! OUTPUT PARAMETERS:
;1779          2218  1 !       none
;1780          2219  1 !
;1781          2220  1 ! IMPLICIT OUTPUTS:
;1782          2221  1 !       none
;1783          2222  1 !
;1784          2223  1 ! ROUTINE VALUE:
;1785          2224  1 !       1 if successful
;1786          2225  1 !       error status otherwise
;1787          2226  1 !
;1788          2227  1 ! SIDE EFFECTS:
;1789          2228  1 !       The line segment table is updated as necessary, ACE line pointers
;1790          2229  1 !       are updated, and the object's ACL is updated as necessary.
;1791          2230  1 !
;1792          2231  1 !--
;1793          2232  1
;1794          2233  2 BEGIN
;1795          2234  2
;1796          2235  2 LOCAL
;1797          2236  2         CURRENT_LINE    : REF $BBLOCK;          ! Address of current line segment
;1798          2237  2
;1799          2238  2 IF .AED_Q_DEL_ACE[LINE_L_FLINK] EQLA AED_Q_DEL_ACE[LINE_L_FLINK]
;1800          2239  2 THEN
;1801          2240  3     BEGIN
;1802          2241  3     AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;1803          2242  3     AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;1804          2243  3     TERM_CHAR = 0;
;1805          2244  3     RETURN 1;
;1806          2245  2     END;
;1807          2246  2 NEW_TEXT_LINE = AED_REPSEGMENT ();
;1808          2247  2 IF .AED_L_FLAGS[AED_V_MODIFIED]
;1809          2248  2 OR .AED_L_FLAGS[AED_V_INSERT]
;1810          2249  2 OR .AED_L_FLAGS[AED_V_INSERTEXT]
;1811          2250  2 THEN
;1812          2251  3     BEGIN
;1813          2252  3     FINISH_ACE ();
;1814          2253  3     IF .AED_L_FLAGS[AED_V_PROMPT]
;1815          2254  3     AND .AED_L_FLAGS[AED_V_FIRSTCHAR]
```

```
;  1816     2255  3     THEN
;  1817     2256  4         BEGIN
;  1818     2257  4         NEW_TEXT_LINE[LINE_V_DUMMY] = 1;
;  1819     2258  4         AED_W_TOTALSIZE = 0;
;  1820     2259  3         END;
;  1821     2260  3     AED_L_FLAGS[AED_V_INSERTEXT] = 0;
;  1822     2261  3     IF .AED_W_TOTALSIZE EQL 0
;  1823     2262  3     THEN NEW_TEXT_LINE = .NEW_TEXT_LINE[LINE_L_FLINK];
;  1824     2263  3     AED_COMPRESS ();
;  1825     2264  3     AED_L_STATUS = AED_UPDATEACL (.AED_W_TOTALSIZE);
;  1826     2265  3     IF NOT .AED_L_STATUS
;  1827     2266  3     THEN
;  1828     2267  4         BEGIN
;  1829     2268  4         AED_L_FLAGS[AED_V_ACERROR] = 1;
;  1830     2269  4         AED_POSITION (.AED_L_FIRSTLINE);
;  1831     2270  4         AED_COPSEGMENT (.AED_L_FIRSTLINE);
;  1832     2271  4         INSQUE (AED_T_CURLINE[LINE_L_FLINK],
;  1833     2272  4                 .AED_L_FIRSTLINE[LINE_L_BLINK]);
;  1834     2273  4         IF .AED_L_LASTLINE EQL .AED_L_FIRSTLINE
;  1835     2274  4         THEN AED_L_LASTLINE = AED_T_CURLINE;
;  1836     2275  4         IF .AED_L_BEGINLINE EQL .AED_L_FIRSTLINE
;  1837     2276  4         THEN AED_L_BEGINLINE = AED_T_CURLINE;
;  1838     2277  4         AED_L_FIRSTLINE = AED_T_CURLINE;
;  1839     2278  4         IF .AED_L_FIRSTLINE NEQ .AED_L_LASTLINE
;  1840     2279  4         AND .AED_L_FLAGS[AED_V_ENDACL]
;  1841     2280  4         THEN AED_L_FLAGS[AED_V_ENDACL] = 0;
;  1842     2281  4         BUFFER_INDEX = 0;
;  1843     2282  4         AED_B_COLUMN = 1;
;  1844     2283  4         AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  1845     2284  4         AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  1846     2285  4         AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  1847     2286  4         TERM_CHAR = 0;
;  1848     2287  4         RETURN 1;
;  1849     2288  3         END;
;  1850     2289  3     AED_L_FLAGS[AED_V_MODIFIED] = AED_L_FLAGS[AED_V_INSERT] = 0;
;  1851     2290  2     END;
;  1852     2291  2 AED_W_TOTALSIZE = 0;
;  1853     2292  2 AED_L_LASTLINE = .AED_L_FIRSTLINE[LINE_L_BLINK];
;  1854     2293  2 AED_L_FIRSTLINE = 0;
;  1855     2294  2 REMOVED_LINE = .AED_Q_DEL_ACE[LINE_L_FLINK];
;  1856     2295  2 CURRENT_LINE = .AED_Q_DEL_ACE[LINE_L_FLINK];
;  1857     2296  2 UNTIL .CURRENT_LINE EQLA AED_Q_DEL_ACE[LINE_L_FLINK]
;  1858     2297  2 DO
;  1859     2298  3     BEGIN
;  1860   P 2299  3     AED_L_STATUS = ALLOCATE (.CURRENT_LINE[LINE_W_SIZE] + $BYTEOFFSET (LINE_T_TEXT),
;  1861     2300  3                              NEW_TEXT_LINE);
;  1862     2301  3     IF NOT .AED_L_STATUS
;  1863     2302  3     THEN
;  1864     2303  4         BEGIN
;  1865     2304  4         SIGNAL (.AED_L_STATUS);
;  1866     2305  4         RETURN .AED_L_STATUS;
;  1867     2306  3         END;
;  1868     2307  3     CH$MOVE (.CURRENT_LINE[LINE_W_SIZE] + $BYTEOFFSET (LINE_T_TEXT),
;  1869     2308  3              .CURRENT_LINE, .NEW_TEXT_LINE);
;  1870     2309  3     INSQUE (NEW_TEXT_LINE[LINE_L_FLINK], AED_L_LASTLINE[LINE_L_FLINK]);
;  1871     2310  3     IF .AED_L_FIRSTLINE EQL 0 THEN AED_L_FIRSTLINE = .NEW_TEXT_LINE;
;  1872     2311  3     AED_L_LASTLINE = .NEW_TEXT_LINE;
```

```
;  1873          2312  3     AED_W_TOTALSIZE = .AED_W_TOTALSIZE + .NEW_TEXT_LINE[LINE_W_SIZE];
;  1874          2313  3     CURRENT_LINE = .CURRENT_LINE[LINE_L_FLINK];
;  1875          2314  2     END;
;  1876          2315  2 IF .AED_W_TOTALSIZE GTR 0 THEN AED_L_FLAGS[AED_V_FIRSTCHAR] = 0;
;  1877          2316  2 AED_L_FIRSTLINE[LINE_W_FLAGS] = LINE_M_BEGINACE;
;  1878          2317  2 AED_POSITION (.AED_L_FIRSTLINE);
;  1879          2318  2 AED_COPSEGMENT (.AED_L_FIRSTLINE);
;  1880          2319  2 INSQUE (AED_T_CURLINE[LINE_L_FLINK], .AED_L_FIRSTLINE[LINE_L_BLINK]);
;  1881          2320  2 IF .AED_L_FLAGS[AED_V_ENDACL]
;  1882          2321  2 THEN AED_L_CURACE = 0
;  1883          2322  2 ELSE AED_L_CURACE = .$BBLOCK [.AED_L_LASTLINE[LINE_L_FLINK], LINE_L_BINACE];
;  1884          2323  2 IF .AED_L_BEGINLINE EQL .AED_L_FIRSTLINE THEN AED_L_BEGINLINE = AED_T_CURLINE;
;  1885          2324  2 IF .AED_L_LASTLINE EQL .AED_L_FIRSTLINE THEN AED_L_LASTLINE = AED_T_CURLINE;
;  1886          2325  2 AED_L_FIRSTLINE = AED_T_CURLINE;
;  1887          2326  2 AED_L_FIRSTLINE[LINE_L_BINACE] = 0;
;  1888          2327  2 AED_L_FLAGS[AED_V_INSERT] = AED_L_FLAGS[AED_V_MODIFIED] = 1;
;  1889          2328  2
;  1890          2329  2 ! Determine where the last line of the newly added ACE falls.
;  1891          2330  2
;  1892          2331  2 TEMP_LINE = .AED_B_LINE;
;  1893          2332  2 NEW_TEXT_LINE = .AED_L_FIRSTLINE;
;  1894          2333  2 UNTIL .NEW_TEXT_LINE EQL .AED_L_LASTLINE
;  1895          2334  2 DO
;  1896          2335  3     BEGIN
;  1897          2336  3     TEMP_LINE = .TEMP_LINE + 1;
;  1898          2337  3     IF .NEW_TEXT_LINE[LINE_V_REPLACE] THEN NEW_TEXT_LINE = .NEW_TEXT_LINE[LINE_L_FLINK];
;  1899          2338  3     NEW_TEXT_LINE = .NEW_TEXT_LINE[LINE_L_FLINK];
;  1900          2339  2     END;
;  1901          2340  2
;  1902          2341  2 ! Now repaint the display.  This is done by either scrolling down and repainting
;  1903          2342  2 ! the first part of the display or repainting from the current position to the
;  1904          2343  2 ! end of the display (or the end of the ACL).
;  1905          2344  2
;  1906          2345  2 IF .AED_B_LINE GTR 1
;  1907          2346  2 THEN
;  1908          2347  3     BEGIN
;  1909          2348  3     IF .TEMP_LINE LEQ 10
;  1910          2349  3     THEN
;  1911          2350  4         BEGIN
;  1912          2351  4         INCR J FROM 0 TO .TEMP_LINE - .AED_B_LINE
;  1913          2352  4         DO
;  1914          2353  5             BEGIN
;  1915          2354  5             IF .J EQL 0 THEN SCR$SET_CURSOR (1,1);      ! **** TEMP ****
;  1916          2355  5             SCR$DOWN_SCROLL ();
;  1917          2356  4             END;
;  1918          2357  4         NEW_TEXT_LINE = .AED_L_BEGINLINE;
;  1919          2358  4         INCR J FROM 1 TO .TEMP_LINE
;  1920          2359  4         DO
;  1921          2360  5             BEGIN
;  1922          2361  5             ECHO_DESC[DSC$W_LENGTH] = .NEW_TEXT_LINE[LINE_W_SIZE];
;  1923          2362  5             ECHO_DESC[DSC$A_POINTER] = NEW_TEXT_LINE[LINE_T_TEXT];
;  1924          2363  5             SCR$SET_CURSOR (.J, 1);
;  1925          2364  5             AED_PUTOUTPUT (ECHO_DESC);
;  1926          2365  5             SCR$ERASE_LINE (.J, .ECHO_DESC[DSC$W_LENGTH] + 1);
;  1927          2366  5             IF .NEW_TEXT_LINE[LINE_V_REPLACE] THEN NEW_TEXT_LINE = .NEW_TEXT_LINE[LINE_L_FLINK];
;  1928          2367  5             NEW_TEXT_LINE = .NEW_TEXT_LINE[LINE_L_FLINK];
;  1929          2368  4             END;
```

```
;  1930          2369  4          END
;  1931          2370  3      ELSE
;  1932          2371  4          BEGIN
;  1933          2372  4          NEW_TEXT_LINE = .AED_T_CURLINE[LINE_L_FLINK];
;  1934          2373  4          INCR J FROM .AED_B_LINE TO 20
;  1935          2374  4          DO
;  1936          2375  5              BEGIN
;  1937          2376  5              ECHO_DESC[DSC$W_LENGTH] = .NEW_TEXT_LINE[LINE_W_SIZE];
;  1938          2377  5              ECHO_DESC[DSC$A_POINTER] = NEW_TEXT_LINE[LINE_T_TEXT];
;  1939          2378  5              SCR$SET_CURSOR (.J, 1);
;  1940          2379  5              AED_PUTOUTPUT (ECHO_DESC);
;  1941          2380  5              SCR$ERASE_LINE (.J, .ECHO_DESC[DSC$W_LENGTH] + 1);
;  1942          2381  5              NEW_TEXT_LINE = .NEW_TEXT_LINE[LINE_L_FLINK];
;  1943          2382  5              IF .NEW_TEXT_LINE EQ[A AED_Q_LINETABLE[LINE_L_FLINK] THEN EXITLOOP;
;  1944          2383  4              END;
;  1945          2384  3          END;
;  1946          2385  2      END;
;  1947          2386  2 BUFFER_INDEX = 0;
;  1948          2387  2 AED_B_COLUMN = 1;
;  1949          2388  2 AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  1950          2389  2 AED_L_FLAGS[AED_V_GOKEY] = 0;
;  1951          2390  2 AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  1952          2391  2 TERM_CHAR = 0;
;  1953          2392  2 RETURN 1;
;  1954          2393  2
;  1955          2394  1 END;                                          ! End of routine ACT_UNDEL_ACE


                                OFFC 00000 ACT_UNDEL_ACE:
                                           .WORD   Save R2,R3,R4,R5,R6,R7,R8,R9,R10,R11          ; 2199
                    5B 00000000G   00  9E 00002    MOVAB   SCR$SET_CURSOR, R11                   ;
                    5A      0000'  CF  9E 00009    MOVAB   NEW_TEXT_LINE, R10                    ;
                    59      0000'  CF  9E 0000E    MOVAB   AED_L_FIRSTLINE, R9                   ;
                    5E             04  C2 00013    SUBL2   #4, SP                                ;
                    50        10   A9  9E 00016    MOVAB   AED_Q_DEL_ACE, R0                     ; 2238
                    50        10   A9  D1 0001A    CMPL    AED_Q_DEL_ACE, R0                     ;
                                   03  12 0001E    BNEQ    1$                                    ;
                                 02B9  31 00020    BRW     39$                                   ;
              0000G CF               00  FB 00023 1$:     CALLS   #0, AED_REPSEGMENT            ; 2246
                    6A               50  D0 00028    MOVL    R0, NEW_TEXT_LINE                     ;
                                  C0   A9  95 0002B    TSTB    AED_L_FLAGS                           ; 2247
                                   0D  19 0002E    BLSS    2$                                    ;
           08       C1   A9           05  E0 00030    BBS     #5, AED_L_FLAGS+1, 2$                 ; 2248
           03       C1   A9           06  E0 00035    BBS     #6, AED_L_FLAGS+1, 2$                 ; 2249
                                 008C  31 0003A    BRW     9$                                    ;
              0000V CF               00  FB 0003D 2$:     CALLS   #0, FINISH_ACE                ; 2252
                                  C1   A9  95 00042    TSTB    AED_L_FLAGS+1                         ; 2253
                                   10  18 00045    BGEQ    3$                                    ;
           0B       C1   A9           04  E1 00047    BBC     #4, AED_L_FLAGS+1, 3$                 ; 2254
                    50               6A  D0 0004C    MOVL    NEW_TEXT_LINE, R0                     ; 2257
                 0A A0               04  88 0004F    BISB2   #4, 10(R0)                            ;
                              0284   C9  B4 00053    CLRW    AED_W_TOTALSIZE                       ; 2258
                    C1   A9     40   8F  8A 00057 3$:     BICB2   #64, AED_L_FLAGS+1            ; 2260
                              0284   C9  B5 0005C    TSTW    AED_W_TOTALSIZE                       ; 2261
```

```
                                  03  12 00060         BNEQ    4$                                          :
                      7A          9A  D0 00062         MOVL    @NEW_TEXT_LINE, NEW_TEXT_LINE               : 2262
              0000G   CF          00  FB 00065 4$:     CALLS   #0, AED_COMPRESS                            : 2263
                      7E   0284   C9  3C 0006A         MOVZWL  AED_W_TOTALSIZE, -(SP)                      : 2264
              0000G   CF          01  FB 0006F         CALLS   #1, AED_UPDATEACL                           :
                 4C   A9          50  D0 00074         MOVL    R0, AED_L_STATUS                            :
                      47     4C   A9  E8 00078         BLBS    AED_L_STATUS, 8$                            : 2265
                 C0   A9     40   8F  88 0007C         BISB2   #64, AED_L_FLAGS                            : 2268
                                  69  DD 00081         PUSHL   AED_L_FIRSTLINE                             : 2269
              0000G   CF          01  FB 00083         CALLS   #1, AED_POSITION                            :
                                  69  DD 00088         PUSHL   AED_L_FIRSTLINE                             : 2270
              0000G   CF          01  FB 0008A         CALLS   #1, AED_COPSEGMENT                          :
                      50          69  D0 0008F         MOVL    AED_L_FIRSTLINE, R0                         : 2272
                 04   B0     70   A9  0E 00092         INSQUE  AED_T_CURLINE, @4(R0)                       :
                      69     04   A9  D1 00097         CMPL    AED_L_LASTLINE, AED_L_FIRSTLINE             : 2273
                                  05  12 0009B         BNEQ    5$                                          :
                 04   A9     70   A9  9E 0009D         MOVAB   AED_T_CURLINE, AED_L_LASTLINE               : 2274
                      69     08   A9  D1 000A2 5$:     CMPL    AED_L_BEGINLINE, AED_L_FIRSTLINE            : 2275
                                  05  12 000A6         BNEQ    6$                                          :
                 08   A9     70   A9  9E 000A8         MOVAB   AED_T_CURLINE, AED_L_BEGINLINE              : 2276
                      69     70   A9  9E 000AD 6$:     MOVAB   AED_T_CURLINE, AED_L_FIRSTLINE              : 2277
                 04   A9          69  D1 000B1         CMPL    AED_L_FIRSTLINE, AED_L_LASTLINE             : 2278
                                  09  13 000B5         BEQL    7$                                          :
           04    C0   A9          05  E1 000B7         BBC     #5, AED_L_FLAGS, 7$                         : 2279
                 C0   A9          20  8A 000BC         BICB2   #32, AED_L_FLAGS                            : 2280
                                0205  31 000C0 7$:     BRW     38$                                         : 2281
                 C0   A9   2080   8F  AA 000C3 8$:     BICW2   #8320, AED_L_FLAGS                          : 2289
                           0284   C9  B4 000C9 9$:     CLRW    AED_W_TOTALSIZE                             : 2291
                      50          69  D0 000CD         MOVL    AED_L_FIRSTLINE, R0                         : 2292
                 04   A9     04   A0  D0 000D0         MOVL    4(R0), AED_L_LASTLINE                       :
                                  69  D4 000D5         CLRL    AED_L_FIRSTLINE                             : 2293
                 F8   AA     10   A9  D0 000D7         MOVL    AED_Q_DEL_ACE, REMOVED_LINE                 : 2294
                      56     10   A9  D0 000DC         MOVL    AED_Q_DEL_ACE, CURRENT_LINE                 : 2295
                      50     10   A9  9E 000E0 10$:    MOVAB   AED_Q_DEL_ACE, R0                           : 2296
                      50          56  D1 000E4         CMPL    CURRENT_LINE, R0                            :
                                  03  12 000E7         BNEQ    11$                                         :
                                009E  31 000E9         BRW     19$                                         :
                                  5A  DD 000EC 11$:    PUSHL   R10                                         : 2300
                      57     08   A6  3C 000EE         MOVZWL  8(CURRENT_LINE), R7                         :
                      57          14  C0 000F2         ADDL2   #20, R7                                     :
                 04   AE          57  D0 000F5         MOVL    R7, 4(SP)                                   :
                             04   AE  9F 000F9         PUSHAB  4(SP)                                       :
          00000000G   00          02  FB 000FC         CALLS   #2, LIB$GET_VM                              :
                      58          50  D0 00103         MOVL    R0, VM_STATUS                               :
                      07          58  E9 00106         BLBC    VM_STATUS, 12$                              :
   57      00         6E          00  2C 00109         MOVC5   #0, (SP), #0, R7, @NEW_TEXT_LINE            :
                             00   BA     0010E                                                             :
                 4C   A9          58  D0 00110 12$:    MOVL    VM_STATUS, AED_L_STATUS                     :
                      4E     4C   A9  E8 00114         BLBS    AED_L_STATUS, 17$                           : 2301
           12    C0   A9          03  E1 00118         BBC     #3, AED_L_FLAGS, 13$                        : 2304
                                  01  DD 0011D         PUSHL   #1                                          :
                                  15  DD 0011F         PUSHL   #21                                         :
          00000000G   00          02  FB 00121         CALLS   #2, SCR$ERASE_PAGE                          :
                                  01  DD 00128         PUSHL   #1                                          :
                                  15  DD 0012A         PUSHL   #21                                         :
                      6B          02  FB 0012C         CALLS   #2, SCR$SET_CURSOR                          :
                             4C   A9  DD 0012F 13$:    PUSHL   AED_L_STATUS                                :
```

```
            00000000G  00        01  FB 00132        CALLS   #1, LIB$SIGNAL                            ;
         0B        C0  A9        03  E1 00139        BBC     #3, AED_L_FLAGS, 14$                      ;
                       7E    E0  A9  9A 0013E        MOVZBL  AED_B_COLUMN, -(SP)                       ;
                       7E    E4  A9  9A 00142        MOVZBL  AED_B_LINE, -(SP)                         ;
                       6B        02  FB 00146        CALLS   #2, SCR$SET_CURSOR                        ;
                       50    4C  A9  D0 00149 14$:   MOVL    AED_L_STATUS, R0                          ;
                       07        50  93 0014D        BITB    R0, #7                                    ;
                       01            12 00150        BNEQ    15$                                       ;
                                 04     00152        RET                                               ;
51       50            03        00  EF 00153 15$:   EXTZV   #0, #3, R0, R1                            ;
51    D4 A9            03        00  ED 00158        CMPZV   #0, #3, AED_L_WORSTERR, R1                ;
                                 01  19 0015E        BLSS    16$                                       ;
                                 04     00160        RET                                               ;
                  D4   A9        50  D0 00161 16$:   MOVL    R0, AED_L_WORSTERR                        ;
                                 04     00165        RET                                               ; 2305
         00       BA   66        57  28 00166 17$:   MOVC3   R7, (CURRENT_LINE), @NEW_TEXT_LINE        ; 2308
                  04   B9    00  BA  0E 0016B        INSQUE  @NEW_TEXT_LINE, @AED_L_LASTLINE           ; 2309
                                 69  D5 00170        TSTL    AED_L_FIRSTLINE                           ; 2310
                                 03  12 00172        BNEQ    18$                                       ;
                       69        6A  D0 00174        MOVL    NEW_TEXT_LINE, AED_L_FIRSTLINE            ;
                       50        6A  D0 00177 18$:   MOVL    NEW_TEXT_LINE, R0                         ; 2311
                  04   A9        50  D0 0017A        MOVL    R0, AED_L_LASTLINE                        ;
                0284   C9    08  A0  A0 0017E        ADDW2   8(R0), AED_W_TOTALSIZE                    ; 2312
                       56        66  D0 00184        MOVL    (CURRENT_LINE), CURRENT_LINE              ; 2313
                               FF56  31 00187        BRW     10$                                       ; 2296
                           0284  C9  B5 0018A 19$:   TSTW    AED_W_TOTALSIZE                           ; 2315
                                 04  13 0018E        BEQL    20$                                       ;
                  C1   A9        10  8A 00190        BICB2   #16, AED_L_FLAGS+1                        ;
                       50        69  D0 00194 20$:   MOVL    AED_L_FIRSTLINE, R0                       ; 2316
                  0A   A0        01  B0 00197        MOVW    #1, 10(R0)                                ;
                                 50  DD 0019B        PUSHL   R0                                        ; 2317
               0000G   CF        01  FB 0019D        CALLS   #1, AED_POSITION                          ;
                                 69  DD 001A2        PUSHL   AED_L_FIRSTLINE                           ; 2318
               0000G   CF        01  FB 001A4        CALLS   #1, AED_COPSEGMENT                        ;
                       50        69  D0 001A9        MOVL    AED_L_FIRSTLINE, R0                       ; 2319
                  04   B0    70  A9  0E 001AC        INSQUE  AED_T_CURLINE, @4(R0)                     ;
         05       C0   A9        05  E1 001B1        BBC     #5, AED_L_FLAGS, 21$                      ; 2320
                             FC  A9  D4 001B6        CLRL    AED_L_CURACE                              ; 2321
                                 09  11 001B9        BRB     22$                                       ;
                       50    04  B9  D0 001BB 21$:   MOVL    @AED_L_LASTLINE, R0                       ; 2322
                  FC   A9    0C  A0  D0 001BF        MOVL    12(R0), AED_L_CURACE                      ;
                       69    08  A9  D1 001C4 22$:   CMPL    AED_L_BEGINLINE, AED_L_FIRSTLINE          ; 2323
                                 05  12 001C8        BNEQ    23$                                       ;
                  08   A9    70  A9  9E 001CA        MOVAB   AED_T_CURLINE, AED_L_BEGINLINE            ;
                       69    04  A9  D1 001CF 23$:   CMPL    AED_L_LASTLINE, AED_L_FIRSTLINE           ; 2324
                                 05  12 001D3        BNEQ    24$                                       ;
                  04   A9    70  A9  9E 001D5        MOVAB   AED_T_CURLINE, AED_L_LASTLINE             ;
                       69    70  A9  9E 001DA 24$:   MOVAB   AED_T_CURLINE, AED_L_FIRSTLINE            ; 2325
                       50        69  D0 001DE        MOVL    AED_L_FIRSTLINE, R0                       ; 2326
                             0C  A0  D4 001E1        CLRL    12(R0)                                    ;
                  C0   A9  2080  8F  A8 001E4        BISW2   #8320, AED_L_FLAGS                        ; 2327
                       52    E4  A9  9A 001EA        MOVZBL  AED_B_LINE, R2                            ; 2331
                  F4   AA        52  D0 001EE        MOVL    R2, TEMP_LINE                             ;
                       6A        50  D0 001F2        MOVL    R0, NEW_TEXT_LINE                         ; 2332
                       50        6A  D0 001F5 25$:   MOVL    NEW_TEXT_LINE, R0                         ; 2333
                  04   A9        50  D1 001F8        CMPL    R0, AED_L_LASTLINE                        ;
                                 10  13 001FC        BEQL    27$                                       ;
```

```
                                  F4  AA  D6 001FE          INCL    TEMP_LINE                                : 2336
       03          0A   A0            03  E1 00201          BBC     #3, 10(R0), 26$                          : 2337
                        6A            60  D0 00206          MOVL    (R0), NEW_TEXT_LINE                      :
                        7A            9A  D0 00209  26$:    MOVL    @NEW_TEXT_LINE, NEW_TEXT_LINE            : 2338
                                      E7  11 0020C          BRB     25$                                      : 2333
                        01            52  91 0020E  27$:    CMPB    R2, #1                                   : 2345
                                      6D  1B 00211          BLEQU   34$                                      :
                        0A        F4  AA  D1 00213          CMPL    TEMP_LINE, #10                           : 2348
                                      69  14 00217          BGTR    35$                                      :
       54          F4   AA            52  C3 00219          SUBL3   R2, TEMP_LINE, R4                        : 2351
                        53            01  CE 0021E          MNEGL   #1, J                                    :
                                      10  11 00221          BRB     30$                                      :
                                      07  12 00223  28$:    BNEQ    29$                                      : 2354
                                      01  DD 00225          PUSHL   #1                                       :
                                      01  DD 00227          PUSHL   #1                                       :
                        6B            02  FB 00229          CALLS   #2, SCR$SET_CURSOR                       :
            00000000G   00            00  FB 0022C  29$:    CALLS   #0, SCR$DOWN_SCROLL                      : 2355
       EC               53            54  F3 00233  30$:    AOBLEQ  R4, J, 28$                               : 2351
                        6A        08  A9  D0 00237          MOVL    AED_L_BEGINLINE, NEW_TEXT_LINE           : 2357
                        53        F4  AA  D0 0023B          MOVL    TEMP_LINE, R3                            : 2358
                                      52  D4 0023F          CLRL    J                                        :
                                      39  11 00241          BRB     33$                                      :
                        50            6A  D0 00243  31$:    MOVL    NEW_TEXT_LINE, R0                        : 2361
                   EC   AA        08  A0  B0 00246          MOVW    8(R0), ECHO_DESC                         :
                   F0   AA        14  A0  9E 0024B          MOVAB   20(R0), ECHO_DESC+4                      : 2362
                                      01  DD 00250          PUSHL   #1                                       : 2363
                                      52  DD 00252          PUSHL   J                                        :
                        6B            02  FB 00254          CALLS   #2, SCR$SET_CURSOR                       :
                                  EC  AA  9F 00257          PUSHAB  ECHO_DESC                                : 2364
                0000G   CF            01  FB 0025A          CALLS   #1, AED_PUTOUTPUT                        :
                        7E        EC  AA  3C 0025F          MOVZWL  ECHO_DESC, -(SP)                         : 2365
                                      6E  D6 00263          INCL    (SP)                                     :
                                      52  DD 00265          PUSHL   J                                        :
            00000000G   00            02  FB 00267          CALLS   #2, SCR$ERASE_LINE                       :
                        50            6A  D0 0026E          MOVL    NEW_TEXT_LINE, R0                        : 2366
       03          0A   A0            03  E1 00271          BBC     #3, 10(R0), 32$                          :
                        6A            60  D0 00276          MOVL    (R0), NEW_TEXT_LINE                      :
                        7A            9A  D0 00279  32$:    MOVL    @NEW_TEXT_LINE, NEW_TEXT_LINE            : 2367
       C3               52            53  F3 0027C  33$:    AOBLEQ  R3, J, 31$                               : 2358
                                      46  11 00280  34$:    BRB     38$                                      : 2348
                        6A        70  A9  D0 00282  35$:    MOVL    AED_T_CURLINE, NEW_TEXT_LINE             : 2372
                        53            6A  D0 00286          MOVL    NEW_TEXT_LINE, R3                        : 2376
                                      52  D7 00289          DECL    J                                        :
                                      37  11 0028B          BRB     37$                                      :
                   EC   AA        08  A3  B0 0028D  36$:    MOVW    8(R3), ECHO_DESC                         :
                   F0   AA        14  A3  9E 00292          MOVAB   20(R3), ECHO_DESC+4                      : 2377
                                      01  DD 00297          PUSHL   #1                                       : 2378
                                      52  DD 00299          PUSHL   J                                        :
                        6B            02  FB 0029B          CALLS   #2, SCR$SET_CURSOR                       :
                                  EC  AA  9F 0029E          PUSHAB  ECHO_DESC                                : 2379
                0000G   CF            01  FB 002A1          CALLS   #1, AED_PUTOUTPUT                        :
                        7E        EC  AA  3C 002A6          MOVZWL  ECHO_DESC, -(SP)                         : 2380
                                      6E  D6 002AA          INCL    (SP)                                     :
                                      52  DD 002AC          PUSHL   J                                        :
            00000000G   00            02  FB 002AE          CALLS   #2, SCR$ERASE_LINE                       :
                        7A            9A  D0 002B5          MOVL    @NEW_TEXT_LINE, NEW_TEXT_LINE            : 2381
                        53            6A  D0 002B8          MOVL    NEW_TEXT_LINE, R3                        : 2382
```

```
                                50      F0      A9  9E 002BB           MOVAB   AED_Q_LINETABLE, R0                      ;
                                50              53  D1 002BF           CMPL    R3, R0                                  ;
                                                04  13 002C2           BEQL    38$                                     ;
                            C5          52      14  F3 002C4 37$:      AOBLEQ  #20, J, 36$                             ; 2373
                                        E8      AA  D4 002C8 38$:      CLRL    BUFFER_INDEX                            ; 2386
                                EO      A9      01  90 002CB           MOVB    #1, AED_B_COLUMN                        ; 2387
                                        7E      E0  A9 9A 002CF         MOVZBL  AED_B_COLUMN, -(SP)                     ; 2388
                                        7E      E4  A9 9A 002D3         MOVZBL  AED_B_LINE, -(SP)                       ;
                              0000G     CF          02 FB 002D7         CALLS   #2, AED_SET_CURSOR                      ;
                                C1      A9      2008    8F  AA 002DC 39$:  BICW2   #8200, AED_C_FLAGS+1                ; 2390
                                                10      AA  94 002E2       CLRB    TERM_CHAR                           ; 2391
                                50                      01  D0 002E5       MOVL    #1, R0                              ; 2392
                                                            04 002E8       RET                                         ; 2394

; Routine Size:  745 bytes,    Routine Base:  $CODE$ + 136E
```

```
;  1957          2395  1 %SBTTL  'ACT_MOVE_WRD - move to word boundary'
;  1958          2396  1 ROUTINE ACT_MOVE_WRD =
;  1959          2397  1
;  1960          2398  1 !++
;  1961          2399  1 !
;  1962          2400  1 ! FUNCTIONAL DESCRIPTION:
;  1963          2401  1 !
;  1964          2402  1 !       This routine goes to the next word boundary (first non-alphanumeric
;  1965          2403  1 !       character) in either the forward or backward direction.
;  1966          2404  1 !
;  1967          2405  1 ! CALLING SEQUENCE:
;  1968          2406  1 !       ACT_MOVE_WRD ()
;  1969          2407  1 !
;  1970          2408  1 ! INPUT PARAMETERS:
;  1971          2409  1 !       none
;  1972          2410  1 !
;  1973          2411  1 ! IMPLICIT INPUTS:
;  1974          2412  1 !       OWN storage
;  1975          2413  1 !
;  1976          2414  1 ! OUTPUT PARAMETERS:
;  1977          2415  1 !       none
;  1978          2416  1 !
;  1979          2417  1 ! IMPLICIT OUTPUTS:
;  1980          2418  1 !       none
;  1981          2419  1 !
;  1982          2420  1 ! ROUTINE VALUE:
;  1983          2421  1 !       1 if successful
;  1984          2422  1 !       error status otherwise
;  1985          2423  1 !
;  1986          2424  1 ! SIDE EFFECTS:
;  1987          2425  1 !       The line segment table is updated as necessary, ACE line pointers
;  1988          2426  1 !       are updated, and the object's ACL is updated as necessary.
;  1989          2427  1 !
;  1990          2428  1 !--
;  1991          2429  1
;  1992          2430  2 BEGIN
;  1993          2431  2
;  1994          2432  2 IF NOT .AED_L_FLAGS[AED_V_BACKWARD]
;  1995          2433  2 THEN
;  1996          2434  3     BEGIN
;  1997          2435  3     IF .BUFFER_INDEX GEQ .SEGMENT_SIZE
;  1998          2436  3     THEN
;  1999          2437  4         BEGIN
;  2000          2438  4         AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  2001          2439  4         AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  2002          2440  4         TERM_CHAR = 0;
;  2003          2441  4         RETURN 1;
;  2004          2442  3         END;
;  2005          2443  4     WHILE (.BUFFER_CHAR GEQ 'A' AND .BUFFER_CHAR LEQ 'Z')
;  2006          2444  4        OR (.BUFFER_CHAR GEQ '0' AND .BUFFER_CHAR LEQ '9')
;  2007          2445  3     DO
;  2008          2446  4         BEGIN
;  2009          2447  4         BUFFER_INDEX = .BUFFER_INDEX + 1;
;  2010          2448  4         IF .BUFFER_INDEX GEQ .SEGMENT_SIZE
;  2011          2449  4         THEN
;  2012          2450  5             BEGIN
;  2013          2451  5             BUFFER_INDEX = .BUFFER_INDEX - 1;
```

```
2452  5                EXITLOOP;
2453  4                END;
2454  3            END;
2455  3        END
2456  2    ELSE
2457  3        BEGIN
2458  3        BUFFER_INDEX = .BUFFER_INDEX - 2;
2459  3        IF .BUFFER_INDEX GEQ 0
2460  3        THEN
2461  4            BEGIN
2462  5            WHILE (.BUFFER_CHAR GEQ 'A' AND .BUFFER_CHAR LEQ 'Z')
2463  5                OR (.BUFFER_CHAR GEQ '0' AND .BUFFER_CHAR LEQ '9')
2464  4            DO
2465  5                BEGIN
2466  5                BUFFER_INDEX = .BUFFER_INDEX - 1;
2467  5                IF .BUFFER_INDEX LSS 0 THEN EXITLOOP;
2468  4                END;
2469  4            END
2470  3        ELSE BUFFER_INDEX = -1;
2471  2        END;
2472  2    BUFFER_INDEX = .BUFFER_INDEX + 1;         ! First char of word
2473  2    AED_B_COLUMN = .BUFFER_INDEX + 1;
2474  2    AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
2475  2    AED_L_FLAGS[AED_V_GOLDKEY] = 0;
2476  2    AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
2477  2    TERM_CHAR = 0;
2478  2    RETURN 1;
2479  2
2480  1    END;                                                ! End of routine ACT_MOVE_WRD


                                        0004 00000 ACT_MOVE_WRD:
                                                         .WORD    Save R2                                        ; 2396
                         52     0000'   CF  9E 00002     MOVAB    BUFFER_INDEX, R2
                         38     0000'   CF  E8 00007     BLBS     AED_L_FLAGS+1, 4$                              ; 2432
 62    0000'   CF        10             00  ED 0000C     CMPZV    #0, #16, SEGMENT_SIZE, BUFFER_INDEX            ; 2435
                                        76  15 00013     BLEQ     10$                                            ;
                         50     0000'   CF  9E 00015 1$: MOVAB    INPUT_BUFFER, R0                               ; 2443
                         50       00 B240  9A 0001A      MOVZBL   @BUFFER_INDEX[R0], R0                          ;
                   41    8F             50  91 0001F     CMPB     R0, #65                                        ;
                                        06  1F 00023     BLSSU    2$                                             ;
                   5A    8F             50  91 00025     CMPB     R0, #90                                        ;
                                        0A  1B 00029     BLEQU    3$                                             ;
                         30             50  91 0002B 2$: CMPB     R0, #48                                        ; 2444
                                        44  1F 0002E     BLSSU    9$                                             ;
                         39             50  91 00030     CMPB     R0, #57                                        ;
                                        3F  1A 00033     BGTRU    9$                                             ;
                                        62  D6 00035 3$: INCL     BUFFER_INDEX                                   ; 2447
 62    0000'   CF        10             00  ED 00037     CMPZV    #0, #16, SEGMENT_SIZE, BUFFER_INDEX            ; 2448
                                        D5  14 0003E     BGTR     1$                                             ;
                                        62  D7 00040     DECL     BUFFER_INDEX                                   ; 2451
                                        30  11 00042     BRB      9$                                             ; 2450
                         62             02  C2 00044 4$: SUBL2    #2, BUFFER_INDEX                               ; 2458
                                        28  19 00047     BLSS     8$                                             ; 2459
```

```
                        51              62  D0 00049       MOVL    BUFFER_INDEX, R1                   ; 2462
                        50      0000'CF41   9A 0004C 5$:   MOVZBL  INPUT_BUFFER[R1], R0               ;
                 41     8F              50  91 00052       CMPB    R0, #65                            ;
                                        06  1F 00056       BLSSU   6$                                 ;
                 5A     8F              50  91 00058       CMPB    R0, #90                            ;
                                        0A  1B 0005C       BLEQU   7$                                 ;
                        30              50  91 0005E 6$:   CMPB    R0, #48                            ; 2463
                                        11  1F 00061       BLSSU   9$                                 ;
                        39              50  91 00063       CMPB    R0, #57                            ;
                                        0C  1A 00066       BGTRU   9$                                 ;
                                        62  D7 00068 7$:   DECL    BUFFER_INDEX                       ; 2466
                        51              62  D0 0006A       MOVL    BUFFER_INDEX, R1                   ; 2467
                                        DD  18 0006D       BGEQ    5$                                 ;
                                        03  11 0006F       BRB     9$                                 ;
                        62              01  CE 00071 8$:   MNEGL   #1, BUFFER_INDEX                   ; 2470
                                        62  D6 00074 9$:   INCL    BUFFER_INDEX                       ; 2472
      0000'   CF                        62                                                             
                                        01  81 00076       ADDB3   #1, BUFFER_INDEX, AED_B_COLUMN     ; 2473
                        7E      0000'   CF  9A 0007C       MOVZBL  AED_B_COLUMN, -(SP)                ; 2474
                        7E      0000'   CF  9A 00081       MOVZBL  AED_B_LINE, -(SP)                  ;
                 0000G  CF              02  FB 00086       CALLS   #2, AED_SET_CURSOR                 ;
                 0000'  CF      2008    8F  AA 0008B 10$:  BICW2   #8200, AED_L_FLAGS+1               ; 2476
                                  28    A2  94 00092       CLRB    TERM_CHAR                          ; 2477
                        50              01  D0 00095       MOVL    #1, R0                             ; 2478
                                            04 00098       RET                                        ; 2480

; Routine Size:  153 bytes,    Routine Base:  $CODE$ + 1657
```

```
;  2044          2481  1 %SBTTL  'ACT_MOVE_ACE - move to ACE boundary'
;  2045          2482  1 ROUTINE ACT_MOVE_ACE =
;  2046          2483  1
;  2047          2484  1 !++
;  2048          2485  1 !
;  2049          2486  1 ! FUNCTIONAL DESCRIPTION:
;  2050          2487  1 !
;  2051          2488  1 !       This routine advances or backs up over an ACE depending on the
;  2052          2489  1 !       state of the BACKWARD flag.
;  2053          2490  1 !
;  2054          2491  1 ! CALLING SEQUENCE:
;  2055          2492  1 !       ACT_MOVE_ACE ()
;  2056          2493  1 !
;  2057          2494  1 ! INPUT PARAMETERS:
;  2058          2495  1 !       none
;  2059          2496  1 !
;  2060          2497  1 ! IMPLICIT INPUTS:
;  2061          2498  1 !       OWN storage
;  2062          2499  1 !
;  2063          2500  1 ! OUTPUT PARAMETERS:
;  2064          2501  1 !       none
;  2065          2502  1 !
;  2066          2503  1 ! IMPLICIT OUTPUTS:
;  2067          2504  1 !       none
;  2068          2505  1 !
;  2069          2506  1 ! ROUTINE VALUE:
;  2070          2507  1 !       1 if successful
;  2071          2508  1 !       error status otherwise
;  2072          2509  1 !
;  2073          2510  1 ! SIDE EFFECTS:
;  2074          2511  1 !       The line segment table is updated as necessary, ACE line pointers
;  2075          2512  1 !       are updated, and the object's ACL is updated as necessary.
;  2076          2513  1 !
;  2077          2514  1 !--
;  2078          2515  1
;  2079          2516  2 BEGIN
;  2080          2517  2
;  2081          2518  2 NEW_TEXT_LINE = AED_REPSEGMENT ();
;  2082          2519  2 IF .AED_L_FLAGS[AED_V_MODIFIED]
;  2083          2520  2 OR .AED_L_FLAGS[AED_V_INSERT]
;  2084          2521  2 OR .AED_L_FLAGS[AED_V_INSERTEXT]
;  2085          2522  2 THEN
;  2086          2523  3     BEGIN
;  2087          2524  3     FINISH_ACE ();
;  2088          2525  3     IF .AED_L_FLAGS[AED_V_PROMPT]
;  2089          2526  3     AND .AED_L_FLAGS[AED_V_FIRSTCHAR]
;  2090          2527  3     THEN
;  2091          2528  4         BEGIN
;  2092          2529  4         NEW_TEXT_LINE[LINE_V_DUMMY] = 1;
;  2093          2530  4         AED_W_TOTALSIZE = 0;
;  2094          2531  3         END;
;  2095          2532  3     AED_L_FLAGS[AED_V_INSERTEXT] = 0;
;  2096          2533  3     IF .AED_W_TOTALSIZE EQL 0 THEN NEW_TEXT_LINE = .NEW_TEXT_LINE[LINE_L_FLINK];
;  2097          2534  3     AED_COMPRESS ();
;  2098          2535  3     AED_L_STATUS = AED_UPDATEACL (.AED_W_TOTALSIZE);
;  2099          2536  3     IF NOT .AED_L_STATUS
;  2100          2537  3     THEN
```

```
;  2101     2538  4          BEGIN
;  2102     2539  4          AED_L_FLAGS[AED_V_ACERROR] = 1;
;  2103     2540  4          AED_POSITION (.AED_L_FIRSTLINE);
;  2104     2541  4          AED_COPSEGMENT (.AED_L_FIRSTLINE);
;  2105     2542  4          INSQUE (AED_T_CURLINE[LINE_L_FLINK],
;  2106     2543  4                  .AED_L_FIRSTLINE[LINE_L_BLINK]);
;  2107     2544  4          IF .AED_L_LASTLINE EQL .AED_L_FIRSTLINE
;  2108     2545  4          THEN AED_L_LASTLINE = AED_T_CURLINE;
;  2109     2546  4          IF .AED_L_BEGINLINE EQL .AED_L_FIRSTLINE
;  2110     2547  4          THEN AED_L_BEGINLINE = AED_T_CURLINE;
;  2111     2548  4          AED_L_FIRSTLINE = AED_T_CURLINE;
;  2112     2549  4          IF .AED_L_FIRSTLINE NEQ .AED_L_LASTLINE
;  2113     2550  4          AND .AED_L_FLAGS[AED_V_ENDAC[]
;  2114     2551  4          THEN AED_L_FLAGS[AED_V_ENDACL] = 0;
;  2115     2552  4          BUFFER_INDEX = 0;
;  2116     2553  4          AED_B_COLUMN = 1;
;  2117     2554  4          AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  2118     2555  4          AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  2119     2556  4          AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  2120     2557  4          TERM_CHAR = 0;
;  2121     2558  4          RETURN 1;
;  2122     2559  3          END;
;  2123     2560  3      AED_L_FLAGS[AED_V_MODIFIED] = AED_L_FLAGS[AED_V_INSERT] = 0;
;  2124     2561  2      END;
;  2125     2562  2
;  2126     2563  2  IF NOT .AED_L_FLAGS[AED_V_BACKWARD]
;  2127     2564  2  THEN
;  2128     2565  3      BEGIN
;  2129     2566  3      AED_L_FIRSTLINE = .AED_L_LASTLINE[LINE_L_FLINK];
;  2130     2567  3      IF .AED_L_FIRSTLINE EQLA AED_Q_LINETAB[LINE_L_FLINK]
;  2131     2568  3      THEN AED_L_FLAGS[AED_V_ENDAC[] = 1;
;  2132     2569  3      AED_POSITION (.AED_L_FIRSTLINE);
;  2133     2570  3
;  2134     2571  3  ! If at the end of the ACL, set up to append.  Otherwise setup the next line.
;  2135     2572  3
;  2136     2573  3      IF .AED_L_FLAGS[AED_V_ENDACL]
;  2137     2574  3      THEN
;  2138     2575  4          BEGIN
;  2139     2576  4          BUFFER_INDEX = 0;
;  2140     2577  4          AED_B_COLUMN = 1;
;  2141     2578  4          AED_L_FLAGS[AED_V_INSERTEXT] = 1;
;  2142     2579  4          AED_W_TOTALSIZE = SEGMENT_SIZE = 0;
;  2143     2580  4          INSQUE (AED_T_CURLINE[LINE_L_FLINK],
;  2144     2581  4                  .AED_L_FIRSTLINE[LINE_L_BLINK]);
;  2145     2582  4          AED_L_FIRSTLINE = AED_L_LASTLINE = AED_T_CURLINE;
;  2146     2583  4          AED_L_FIRSTLINE[LINE_W_FLAGS] = LINE_M_BEGINACE;
;  2147     2584  4          AED_L_CURACE = 0;
;  2148     2585  4          IF .AED_L_FLAGS[AED_V_PROMPT]
;  2149     2586  4          THEN
;  2150     2587  5              BEGIN
;  2151     2588  5              AED_B_ACETYPE = 0;
;  2152     2589  5              AED_L_FLAGS[AED_V_NOITEMSEL] = 0;
;  2153     2590  5              AED_SELECTFIELD (BUFFER_INDEX);
;  2154     2591  5              ECHO_DESC[DSC$W_LENGTH] = .AED_T_CURLINE[LINE_W_SIZE];
;  2155     2592  5              ECHO_DESC[DSC$A_POINTER] = AED_T_CURLINE[LINE_T_TEXT];
;  2156     2593  5              SCR$SET_CURSOR (.AED_B_LINE, 1);
;  2157     2594  5              AED_PUTOUTPUT (ECHO_DESC);
```

```
;  2158          2595  5              SCR$ERASE_LINE (.AED_B_LINE, .SEGMENT_SIZE + 1);
;  2159          2596  5              AED_B_COLUMN = .BUFFER_INDEX + 1;
;  2160          2597  4              END;
;  2161          2598  4          END
;  2162          2599  3      ELSE
;  2163          2600  4          BEGIN
;  2164          2601  4          AED_COPSEGMENT (.AED_L_FIRSTLINE);
;  2165          2602  4          INSQUE (AED_T_CURLINE[LINE_L_FLINK],
;  2166          2603  4                  .AED_L_FIRSTLINE[LINE_L_BLINK]);
;  2167          2604  4          AED_L_FIRSTLINE = AED_L_LASTLINE = AED_T_CURLINE;
;  2168          2605  4          AED_W_TOTALSIZE = .AED_L_FIRSTLINE[LINE_W_SIZE];
;  2169          2606  4          UNTIL .AED_L_LASTLINE[LINE_V_ENDACE]
;  2170          2607  4          DO
;  2171          2608  5              BEGIN
;  2172          2609  5              IF .AED_L_LASTLINE EQLA AED_T_CURLINE
;  2173          2610  5              THEN AED_L_LASTLINE = .AED_L_LASTLINE[LINE_L_FLINK];
;  2174          2611  5              AED_L_LASTLINE = .AED_L_LASTLINE[LINE_L_FLINK];
;  2175          2612  5              AED_W_TOTALSIZE = .AED_W_TOTALSIZE + .AED_L_LASTLINE[LINE_W_SIZE];
;  2176          2613  4              END;
;  2177          2614  4          AED_L_CURACE = .AED_L_FIRSTLINE[LINE_L_BINACE];
;  2178          2615  4          BUFFER_INDEX = 0;
;  2179          2616  4          AED_B_COLUMN = 1;
;  2180          2617  3          END;
;  2181          2618  3      END
;  2182          2619  2  ELSE
;  2183          2620  3      BEGIN
;  2184          2621  3      AED_L_LASTLINE = AED_L_FIRSTLINE = .AED_L_FIRSTLINE[LINE_L_BLINK];
;  2185          2622  3      AED_W_TOTALSIZE = .AED_L_FIRSTLINE[LINE_W_SIZE];
;  2186          2623  3      UNTIL .AED_L_FIRSTLINE[LINE_V_BEGINACE]
;  2187          2624  3      DO
;  2188          2625  4          BEGIN
;  2189          2626  4          IF .AED_L_BEGINLINE EQLA .AED_L_FIRSTLINE
;  2190          2627  4          THEN AED_L_BEGINLINE = .AED_L_FIRSTLINE[LINE_L_BLINK];
;  2191          2628  4          AED_L_FIRSTLINE = .AED_L_FIRSTLINE[LINE_L_BLINK];
;  2192          2629  4          AED_W_TOTALSIZE = .AED_W_TOTALSIZE + .AED_L_FIRSTLINE[LINE_W_SIZE];
;  2193          2630  3          END;
;  2194          2631  3      AED_POSITION (.AED_L_FIRSTLINE);
;  2195          2632  3      AED_COPSEGMENT (.AED_L_FIRSTLINE);
;  2196          2633  3      INSQUE (AED_T_CURLINE[LINE_L_FLINK],
;  2197          2634  3              .AED_L_FIRSTLINE[LINE_L_BLINK]);
;  2198          2635  3      IF .AED_L_BEGINLINE EQL .AED_L_FIRSTLINE THEN AED_L_BEGINLINE = AED_T_CURLINE;
;  2199          2636  3      IF .AED_L_LASTLINE EQL .AED_L_FIRSTLINE THEN AED_L_LASTLINE = AED_T_CURLINE;
;  2200          2637  3      AED_L_FIRSTLINE = AED_T_CURLINE;
;  2201          2638  3      AED_W_TOTALSIZE = .AED_L_FIRSTLINE[LINE_W_SIZE];
;  2202          2639  3      AED_L_CURACE = .AED_L_FIRSTLINE[LINE_L_BINACE];
;  2203          2640  3      AED_L_FLAGS[AED_V_ENDACL] = 0;
;  2204          2641  3      AED_L_FLAGS[AED_V_INSERTEXT] = 0;
;  2205          2642  3      BUFFER_INDEX = 0;
;  2206          2643  3      AED_B_COLUMN = 1;
;  2207          2644  2      END;
;  2208          2645  2  AED_SET_CURSOR (.AED_B_LINE, .BUFFER_INDEX + 1);
;  2209          2646  2  AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  2210          2647  2  AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  2211          2648  2  TERM_CHAR = 0;
;  2212          2649  2  RETURN 1;
;  2213          2650  2
;  2214          2651  1  END;                                          ! End of routine ACT_MOVE_ACE
```

```
                                007C 00000 ACT_MOVE_ACE:
                                                  .WORD   Save R2,R3,R4,R5,R6                       ; 2482
            56      0000G  CF   9E 00002          MOVAB   AED_COPSEGMENT, R6                        ;
            55      0000G  CF   9E 00007          MOVAB   AED_POSITION, R5                          ;
            54      0000'  CF   9E 0000C          MOVAB   BUFFER_INDEX, R4                          ;
            53      0000'  CF   9E 00011          MOVAB   AED_L_FIRSTLINE, R3                       ;
      0000G  CF            00   FB 00016          CALLS   #0, AED_REPSEGMENT                        ; 2518
         18  A4            50   D0 0001B          MOVL    R0, NEW_TEXT_LINE                         ;
                    C0     A3   95 0001F          TSTB    AED_L_FLAGS                               ; 2519
                           0D   19 00022          BLSS    1$                                        ;
 08      C1  A3            05   E0 00024          BBS     #5, AED_L_FLAGS+1, 1$                     ; 2520
 03      C1  A3            06   E0 00029          BBS     #6, AED_L_FLAGS+1, 1$                     ; 2521
                         0095   31 0002E          BRW     8$                                        ;
      0000V  CF            00   FB 00031 1$:      CALLS   #0, FINISH_ACE                            ; 2524
                    C1     A3   95 00036          TSTB    AED_L_FLAGS+1                             ; 2525
                           11   18 00039          BGEQ    2$                                        ;
 0C      C1  A3            04   E1 0003B          BBC     #4, AED_L_FLAGS+1, 2$                     ; 2526
             50     18     A4   D0 00040          MOVL    NEW_TEXT_LINE, R0                         ; 2529
         0A  A0            04   88 00044          BISB2   #4, 10(R0)                                ;
                  0284     C3   B4 00048          CLRW    AED_W_TOTALSIZE                           ; 2530
         C1  A3     40     8F   8A 0004C 2$:      BICB2   #64, AED_L_FLAGS+1                        ; 2532
                  0284     C3   B5 00051          TSTW    AED_W_TOTALSIZE                           ; 2533
                           05   12 00055          BNEQ    3$                                        ;
         18  A4     18     B4   D0 00057          MOVL    @NEW_TEXT_LINE, NEW_TEXT_LINE             ;
      0000G  CF            00   FB 0005C 3$:      CALLS   #0, AED_COMPRESS                          ; 2534
             7E   0284     C3   3C 00061          MOVZWL  AED_W_TOTALSIZE, -(SP)                    ; 2535
      0000G  CF            01   FB 00066          CALLS   #1, AED_UPDATEACL                         ;
         4C  A3            50   D0 0006B          MOVL    R0, AED_L_STATUS                          ;
             4D     4C     A3   E8 0006F          BLBS    AED_L_STATUS, 7$                          ; 2536
         C0  A3     40     8F   88 00073          BISB2   #64, AED_L_FLAGS                          ; 2539
                           63   DD 00078          PUSHL   AED_L_FIRSTLINE                           ; 2540
             65            01   FB 0007A          CALLS   #1, AED_POSITION                          ;
                           63   DD 0007D          PUSHL   AED_L_FIRSTLINE                           ; 2541
             66            01   FB 0007F          CALLS   #1, AED_COPSEGMENT                        ;
             50            63   D0 00082          MOVL    AED_L_FIRSTLINE, R0                       ; 2543
         04  B0     70     A3   0E 00085          INSQUE  AED_T_CURLINE, @4(R0)                     ;
             63     04     A3   D1 0008A          CMPL    AED_L_LASTLINE, AED_L_FIRSTLINE           ; 2544
                           05   12 0008E          BNEQ    4$                                        ;
         04  A3     70     A3   9E 00090          MOVAB   AED_T_CURLINE, AED_L_LASTLINE             ; 2545
             63     08     A3   D1 00095 4$:      CMPL    AED_L_BEGINLINE, AED_L_FIRSTLINE          ; 2546
                           05   12 00099          BNEQ    5$                                        ;
         08  A3     70     A3   9E 0009B          MOVAB   AED_T_CURLINE, AED_L_BEGINLINE            ; 2547
             63     70     A3   9E 000A0 5$:      MOVAB   AED_T_CURLINE, AED_L_FIRSTLINE            ; 2548
         04  A3            63   D1 000A4          CMPL    AED_L_FIRSTLINE, AED_L_LASTLINE           ; 2549
                           09   13 000A8          BEQL    6$                                        ;
 04      C0  A3            05   E1 000AA          BBC     #5, AED_L_FLAGS, 6$                       ; 2550
         C0  A3            20   8A 000AF          BICB2   #32, AED_L_FLAGS                          ; 2551
                           64   D4 000B3 6$:      CLRL    BUFFER_INDEX                              ; 2552
         E0  A3            01   90 000B5          MOVB    #1, AED_B_COLUMN                          ; 2553
             7E     E0     A3   9A 000B9          MOVZBL  AED_B_COLUMN, -(SP)                       ; 2554
                         0171   31 000BD          BRW     24$                                       ;
         C0  A3   2080     8F   AA 000C0 7$:      BICW2   #8320, AED_L_FLAGS                        ; 2560
```

```
                   03         C1   A3  E9 000C6 8$:     BLBC    AED_L_FLAGS+1, 9$                            ; 2563
                            00E2   31  000CA            BRW     16$                                          ;
                   63         04   B3  D0 000CD 9$:     MOVL    @AED_L_LASTLINE, AED_L_FIRSTLINE             ; 2566
                   50         F0   A3  9E 000D1         MOVAB   AED_Q_LINETABLE, R0                          ; 2567
                   50              63  D1 000D5         CMPL    AED_L_FIRSTLINE, R0                          ;
                                   04  12 000D8         BNEQ    10$                                          ;
              C0   A3              20  88 000DA         BISB2   #32, AED_L_FLAGS                             ; 2568
                                   63  DD 000DE 10$:    PUSHL   AED_L_FIRSTLINE                              ; 2569
                   65              01  FB 000E0         CALLS   #1, AED_POSITION                             ;
        78    C0   A3              05  E1 000E3         BBC     #5, AED_L_FLAGS, 12$                         ; 2573
                                   64  D4 000E8         CLRL    BUFFER_INDEX                                 ; 2576
              E0   A3              01  90 000EA         MOVB    #1, AED_B_COLUMN                             ; 2577
              C1   A3         40   8F  88 000EE         BISB2   #64, AED_L_FLAGS+1                           ; 2578
                              78   A3  B4 000F3         CLRW    SEGMENT_SIZE                                 ; 2579
                            0284   C3  B4 000F6         CLRW    AED_W_TOTALSIZE                              ;
                   50              63  D0 000FA         MOVL    AED_L_FIRSTLINE, R0                          ; 2581
              04   B0         70   A3  0E 000FD         INSQUE  AED_T_CURLINE, @4(R0)                        ;
                   50         70   A3  9E 00102         MOVAB   AED_T_CURLINE, R0                            ; 2582
              04   A3              50  D0 00106         MOVL    R0, AED_L_LASTLINE                           ;
                   63              50  D0 0010A         MOVL    R0, AED_L_FIRSTLINE                          ;
              0A   A0              01  B0 0010D         MOVW    #1, 10(R0)                                   ; 2583
                              FC   A3  D4 00111         CLRL    AED_L_CURACE                                 ; 2584
                              C1   A3  95 00114         TSTB    AED_L_FLAGS+1                                ; 2585
                                   44  18 00117         BGEQ    11$                                          ;
                              68   A3  94 00119         CLRB    AED_B_ACETYPE                                ; 2588
              C2   A3              08  8A 0011C         BICB2   #8, AED_L_FLAGS+2                            ; 2589
                                   54  DD 00120         PUSHL   R4                                           ; 2590
           0000G   CF              01  FB 00122         CALLS   #1, AED_SELECTFIELD                          ;
              04   A4         78   A3  B0 00127         MOVW    AED_T_CURLINE+8, ECHO_DESC                   ; 2591
              08   A4       0084   C3  9E 0012C         MOVAB   AED_T_CURLINE+20, ECHO_DESC+4                ; 2592
                                   01  DD 00132         PUSHL   #1                                           ; 2593
                   7E         E4   A3  9A 00134         MOVZBL  AED_B_LINE, -(SP)                            ;
       00000000G   00              02  FB 00138         CALLS   #2, SCR$SET_CURSOR                           ;
                              04   A4  9F 0013F         PUSHAB  ECHO_DESC                                    ; 2594
           0000G   CF              01  FB 00142         CALLS   #1, AED_PUTOUTPUT                            ;
                   7E         78   A3  3C 00147         MOVZWL  SEGMENT_SIZE, -(SP)                          ; 2595
                                   6E  D6 0014B         INCL    (SP)                                         ;
                   7E         E4   A3  9A 0014D         MOVZBL  AED_B_LINE, -(SP)                            ;
       00000000G   00              02  FB 00151         CALLS   #2, SCR$ERASE_LINE                           ;
     E0    A3      64              01  81 00158         ADDB3   #1, BUFFER_INDEX, AED_B_COLUMN               ; 2596
                            00CD   31  0015D 11$:       BRW     23$                                          ; 2573
                                   63  DD 00160 12$:    PUSHL   AED_L_FIRSTLINE                              ; 2601
                   66              01  FB 00162         CALLS   #1, AED_COPSEGMENT                           ;
                   50              63  D0 00165         MOVL    AED_L_FIRSTLINE, R0                          ; 2603
              04   B0         70   A3  0E 00168         INSQUE  AED_T_CURLINE, @4(R0)                        ;
                   50         70   A3  9E 0016D         MOVAB   AED_T_CURLINE, R0                            ; 2604
              04   A3              50  D0 00171         MOVL    R0, AED_L_LASTLINE                           ;
                   63              50  D0 00175         MOVL    R0, AED_L_FIRSTLINE                          ;
                   52              63  D0 00178         MOVL    AED_L_FIRSTLINE, R2                          ; 2605
            0284   C3         08   A2  B0 0017B         MOVW    8(R2), AED_W_TOTALSIZE                       ;
                   51         04   A3  D0 00181         MOVL    AED_L_LASTLINE, R1                           ; 2606
        1E    0A   A1              01  E0 00185 13$:    BBS     #1, 10(R1), 15$                              ;
                   50         70   A3  9E 0018A         MOVAB   AED_T_CURLINE, R0                            ; 2609
                   50              51  D1 0018E         CMPL    R1, R0                                       ;
                                   04  12 00191         BNEQ    14$                                          ;
              04   A3              61  D0 00193         MOVL    (R1), AED_L_LASTLINE                         ; 2610
              04   A3         04   B3  D0 00197 14$:    MOVL    @AED_L_LASTLINE, AED_L_LASTLINE              ; 2611
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           51       04  A3  D0 0019C       MOVL    AED_L_LASTLINE, R1                          ; 2612
     0284  C3       08  A1  A0 001A0       ADDW2   8(R1), AED_W_TOTALSIZE                      ;
                        DD  11 001A6       BRB     13$                                         ; 2606
       FC  A3       0C  A2  D0 001A8 15$:  MOVL    12(R2), AED_L_CURACE                        ; 2614
                        78  11 001AD       BRB     22$                                         ; 2615
           50           63  D0 001AF 16$:  MOVL    AED_L_FIRSTLINE, R0                         ; 2621
           50       04  A0  D0 001B2       MOVL    4(R0), R0                                   ;
           63           50  D0 001B6       MOVL    R0, AED_L_FIRSTLINE                         ;
       04  A3           50  D0 001B9       MOVL    R0, AED_L_LASTLINE                          ;
           50           63  D0 001BD       MOVL    AED_L_FIRSTLINE, R0                         ; 2622
     0284  C3       08  A0  B0 001C0       MOVW    8(R0), AED_W_TOTALSIZE                      ;
           50           63  D0 001C6       MOVL    AED_L_FIRSTLINE, R0                         ; 2623
           1A       0A  A0  E8 001C9 17$:  BLBS    10(R0), 19$                                 ;
           50       08  A3  D1 001CD       CMPL    AED_L_BEGINLINE, R0                         ; 2626
                        05  12 001D1       BNEQ    18$                                         ;
       08  A3       04  A0  D0 001D3       MOVL    4(R0), AED_L_BEGINLINE                      ; 2627
           63       04  A0  D0 001D8 18$:  MOVL    4(R0), AED_L_FIRSTLINE                      ; 2628
           50           63  D0 001DC       MOVL    AED_L_FIRSTLINE, R0                         ; 2629
     0284  C3       08  A0  A0 001DF       ADDW2   8(R0), AED_W_TOTALSIZE                      ;
                        E2  11 001E5       BRB     17$                                         ; 2623
                        63  DD 001E7 19$:  PUSHL   AED_L_FIRSTLINE                             ; 2631
           65           01  FB 001E9       CALLS   #1, AED_POSITION                            ;
                        63  DD 001EC       PUSHL   AED_L_FIRSTLINE                             ; 2632
           66           01  FB 001EE       CALLS   #1, AED_COPSEGMENT                          ;
           50           63  D0 001F1       MOVL    AED_L_FIRSTLINE, R0                         ; 2634
       04  B0       70  A3  0E 001F4       INSQUE  AED_T_CURLINE, @4(R0)                       ;
           63       08  A3  D1 001F9       CMPL    AED_L_BEGINLINE, AED_L_FIRSTLINE            ; 2635
                        05  12 001FD       BNEQ    20$                                         ;
       08  A3       70  A3  9E 001FF       MOVAB   AED_T_CURLINE, AED_L_BEGINLINE              ;
           63       04  A3  D1 00204 20$:  CMPL    AED_L_LASTLINE, AED_L_FIRSTLINE             ; 2636
                        05  12 00208       BNEQ    21$                                         ;
       04  A3       70  A3  9E 0020A       MOVAB   AED_T_CURLINE, AED_L_LASTLINE               ;
           63       70  A3  9E 0020F 21$:  MOVAB   AED_T_CURLINE, AED_L_FIRSTLINE              ; 2637
           50           63  D0 00213       MOVL    AED_L_FIRSTLINE, R0                         ; 2638
     0284  C3       08  A0  B0 00216       MOVW    8(R0), AED_W_TOTALSIZE                      ;
       FC  A3       0C  A0  D0 0021C       MOVL    12(R0), AED_L_CURACE                        ; 2639
       C0  A3     4020  8F  AA 00221       BICW2   #16416, AED_L_FLAGS                         ; 2641
                        64  D4 00227 22$:  CLRL    BUFFER_INDEX                                ; 2642
       E0  A3           01  90 00229       MOVB    #1, AED_B_COLUMN                            ; 2643
  7E       64           01  C1 0022D 23$:  ADDL3   #1, BUFFER_INDEX, -(SP)                     ; 2645
           7E       E4  A3  9A 00231 24$:  MOVZBL  AED_B_LINE, -(SP)                           ;
    0000G  CF           02  FB 00235       CALLS   #2, AED_SET_CURSOR                          ;
       C1  A3     2008  8F  AA 0023A       BICW2   #8200, AED_L_FLAGS+1                        ; 2647
                28  A4  94 00240           CLRB    TERM_CHAR                                   ; 2648
           50           01  D0 00243       MOVL    #1, R0                                      ; 2649
                        04 00246           RET                                                 ; 2651

; Routine Size:  583 bytes,    Routine Base:  $CODE$ + 16F0
```

```
;  2216          2652  1 %SBTTL  'ACT_MOVE_BOL - move to beginning of line'
;  2217          2653  1 ROUTINE ACT_MOVE_BOL =
;  2218          2654  1
;  2219          2655  1 !++
;  2220          2656  1 !
;  2221          2657  1 ! FUNCTIONAL DESCRIPTION:
;  2222          2658  1 !
;  2223          2659  1 !       This routine positions the cursor to the beginning of the current
;  2224          2660  1 !       line segment.
;  2225          2661  1 !
;  2226          2662  1 ! CALLING SEQUENCE:
;  2227          2663  1 !       ACT_MOVE_BOL ()
;  2228          2664  1 !
;  2229          2665  1 ! INPUT PARAMETERS:
;  2230          2666  1 !       none
;  2231          2667  1 !
;  2232          2668  1 ! IMPLICIT INPUTS:
;  2233          2669  1 !       OWN storage
;  2234          2670  1 !
;  2235          2671  1 ! OUTPUT PARAMETERS:
;  2236          2672  1 !       none
;  2237          2673  1 !
;  2238          2674  1 ! IMPLICIT OUTPUTS:
;  2239          2675  1 !       none
;  2240          2676  1 !
;  2241          2677  1 ! ROUTINE VALUE:
;  2242          2678  1 !       1 if successful
;  2243          2679  1 !       error status otherwise
;  2244          2680  1 !
;  2245          2681  1 ! SIDE EFFECTS:
;  2246          2682  1 !       The line segment table is updated as necessary, ACE line pointers
;  2247          2683  1 !       are updated, and the object's ACL is updated as necessary.
;  2248          2684  1 !
;  2249          2685  1 !--
;  2250          2686  1
;  2251          2687  2 BEGIN
;  2252          2688  2
;  2253          2689  2 BUFFER_INDEX = 0;
;  2254          2690  2 AED_W_ITEMEND = 0;
;  2255          2691  2 AED_B_COLUMN = 1;
;  2256          2692  2 AED_SET_CURSOR (.AED_B_LINE, 1);
;  2257          2693  2 AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  2258          2694  2 AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  2259          2695  2 TERM_CHAR = 0;
;  2260          2696  2 RETURN 1;
;  2261          2697  2
;  2262          2698  1 END;                                          ! End of routine ACT_MOVE_BOL


                                        0000 00000 ACT_MOVE_BOL:
                                                   .WORD   Save nothing                         ; 2653
                                0000'   CF  D4 00002       CLRL    BUFFER_INDEX              ; 2689
                                0000'   CF  B4 00006       CLRW    AED_W_ITEMEND             ; 2690
                        0000'   CF         01  90 0000A    MOVB    #1, AED_B_COLUMN          ; 2691
```

```
                                01 DD 0000F         PUSHL   #1                              ; 2692
              7E        0000'   CF 9A 00011         MOVZBL  AED_B_LINE, -(SP)               ;
        0000G CF                02 FB 00016         CALLS   #2, AED_SET_CURSOR              ;
        0000' CF        2008    8F AA 0001B         BICW2   #8200, AED_L_FLAGS+1            ; 2694
                        0000'   CF 94 00022         CLRB    TERM_CHAR                       ; 2695
              50                01 D0 00026         MOVL    #1, R0                          ; 2696
                                   04 00029         RET                                     ; 2698

; Routine Size:  42 bytes,     Routine Base:  $CODE$ + 1937
```

```
1 %SBTTL  'ACT_MOVE_EOL - move to end of line'
1 ROUTINE ACT_MOVE_EOL =
1
1 !++
1 !
1 ! FUNCTIONAL DESCRIPTION:
1 !
1 !       This routine positions the cursor to the end of the current line
1 !       segment.
1 !
1 ! CALLING SEQUENCE:
1 !       ACT_MOVE_EOL ()
1 !
1 ! INPUT PARAMETERS:
1 !       none
1 !
1 ! IMPLICIT INPUTS:
1 !       OWN storage
1 !
1 ! OUTPUT PARAMETERS:
1 !       none
1 !
1 ! IMPLICIT OUTPUTS:
1 !       none
1 !
1 ! ROUTINE VALUE:
1 !       1 if successful
1 !       error status otherwise
1 !
1 ! SIDE EFFECTS:
1 !       The line segment table is updated as necessary, ACE line pointers
1 !       are updated, and the object's ACL is updated as necessary.
1 !
1 !--
1
2 BEGIN
2
2 BUFFER_INDEX = .SEGMENT_SIZE;
2 AED_W_ITEMEND = .BUFFER_INDEX;
2 AED_B_COLUMN = .BUFFER_INDEX + 1;
2 AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
2 AED_L_FLAGS[AED_V_GOLDKEY] = 0;
2 AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
2 TERM_CHAR = 0;
2 RETURN 1;
2
1 END;                                          ! End of routine ACT_MOVE_EOL
```

```
                                000C 00000 ACT_MOVE_EOL:
                                           .WORD   Save R2,R3                      ; 2700
        53      0000'   CF   9E 00002      MOVAB   BUFFER_INDEX, R3                ;
        52      0000'   CF   9E 00007      MOVAB   AED_B_COLUMN, R2                ;
        63      0098    C2   3C 0000C      MOVZWL  SEGMENT_SIZE, BUFFER_INDEX      ; 2736
```

```
                 0084   C2               63  B0 00011        MOVW    BUFFER_INDEX, AED_W_ITEMEND          ; 2737
        62              63               01  81 00016        ADDB3   #1, BUFFER_INDEX, AED_B_COLUMN       ; 2738
                        7E               62  9A 0001A        MOVZBL  AED_B_COLUMN, -(SP)                  ; 2739
                        7E        04     A2  9A 0001D        MOVZBL  AED_B_LINE, -(SP)                    ;
                 0000G  CF               02  FB 00021        CALLS   #2, AED_SET_CURSOR                   ;
                    E1  A2      2008     8F  AA 00026        BICW2   #8200, AED_L_FLAGS+1                 ; 2741
                                  28     A3  94 0002C        CLRB    TERM_CHAR                            ; 2742
                        50               01  D0 0002F        MOVL    #1, R0                               ; 2743
                                             04 00032        RET                                          ; 2745

; Routine Size:  51 bytes,    Routine Base:  $CODE$ + 0196
```

```
;  2312          2746  1 %SBTTL  'ACT_UP - move up to previous line'
;  2313          2747  1 ROUTINE ACT_UP =
;  2314          2748  1
;  2315          2749  1 !++
;  2316          2750  1 !
;  2317          2751  1 ! FUNCTIONAL DESCRIPTION:
;  2318          2752  1 !
;  2319          2753  1 !       This routine moves the cursor up to the previous line segment.  If
;  2320          2754  1 !       the current ACE has been modified but not entered, it is done before
;  2321          2755  1 !       moving the cursor.  The cursor position in the new line segment
;  2322          2756  1 !       is minimized with the current cursor position and the end of the
;  2323          2757  1 !       line segment.
;  2324          2758  1 !
;  2325          2759  1 ! CALLING SEQUENCE:
;  2326          2760  1 !       ACT_UP ()
;  2327          2761  1 !
;  2328          2762  1 ! INPUT PARAMETERS:
;  2329          2763  1 !       none
;  2330          2764  1 !
;  2331          2765  1 ! IMPLICIT INPUTS:
;  2332          2766  1 !       OWN storage
;  2333          2767  1 !
;  2334          2768  1 ! OUTPUT PARAMETERS:
;  2335          2769  1 !       none
;  2336          2770  1 !
;  2337          2771  1 ! IMPLICIT OUTPUTS:
;  2338          2772  1 !       none
;  2339          2773  1 !
;  2340          2774  1 ! ROUTINE VALUE:
;  2341          2775  1 !       1 if successful
;  2342          2776  1 !       error status otherwise
;  2343          2777  1 !
;  2344          2778  1 ! SIDE EFFECTS:
;  2345          2779  1 !       The line segment table is updated as necessary, ACE line pointers
;  2346          2780  1 !       are updated, and the object's ACL is updated as necessary.
;  2347          2781  1 !
;  2348          2782  1 !--
;  2349          2783  1
;  2350          2784  2 BEGIN
;  2351          2785  2
;  2352          2786  2 LOCAL
;  2353          2787  2         UP_LINE_SEGMENT : REF $BBLOCK;          ! Address of previous line
;  2354          2788  2
;  2355          2789  2 AED_L_FLAGS[AED_V_INSERTEXT] = 0;               ! No item selection
;  2356          2790  2
;  2357          2791  2 IF .AED_T_CURLINE[LINE_L_BLINK] NEQA AED_Q_LINETABLE[LINE_L_FLINK]
;  2358          2792  2 THEN
;  2359          2793  3     BEGIN
;  2360          2794  3     NEW_TEXT_LINE = AED_REPSEGMENT ();
;  2361          2795  3     IF .NEW_TEXT_LINE[LINE_V_BEGINACE]
;  2362          2796  3     THEN
;  2363          2797  4         BEGIN
;  2364          2798  4         IF .AED_L_FLAGS[AED_V_MODIFIED]
;  2365          2799  4         OR .AED_L_FLAGS[AED_V_INSERT]
;  2366          2800  4         OR .AED_L_FLAGS[AED_V_INSERTEXT]
;  2367          2801  4         THEN
;  2368          2802  5             BEGIN
```

```
;  2369          2803  5              FINISH_ACE ();
;  2370          2804  5              IF .AED_L_FLAGS[AED_V_PROMPT]
;  2371          2805  5              AND .AED_C_FLAGS[AED_V_FIRSTCHAR]
;  2372          2806  5              THEN
;  2373          2807  6                  BEGIN
;  2374          2808  6                  NEW_TEXT_LINE[LINE_V_DUMMY] = 1;
;  2375          2809  6                  AED_W_TOTALSIZE = 0;
;  2376          2810  5                  END;
;  2377          2811  5              AED_L_FLAGS[AED_V_INSERTEXT] = 0;
;  2378          2812  5              IF .AED_W_TOTALSIZE EQL 0
;  2379          2813  5              THEN NEW_TEXT_LINE = .NEW_TEXT_LINE[LINE_L_FLINK];
;  2380          2814  5              AED_COMPRESS ();
;  2381          2815  5              AED_L_STATUS = AED_UPDATEACL (.AED_W_TOTALSIZE);
;  2382          2816  5              IF NOT .AED_L_STATUS
;  2383          2817  5              THEN
;  2384          2818  6                  BEGIN
;  2385          2819  6                  AED_L_FLAGS[AED_V_ACERROR] = 1;
;  2386          2820  6                  AED_POSITION (.AED_L_FIRSTLINE);
;  2387          2821  6                  AED_COPSEGMENT (.AED_L_FIRSTLINE);
;  2388          2822  6                  INSQUE (AED_T_CURLINE[LINE_L_FLINK],
;  2389          2823  6                          .AED_C_FIRSTLINE[LINE_L_BLINK]);
;  2390          2824  6                  IF .AED_L_LASTLINE EQL .AED_L_FIRSTLINE
;  2391          2825  6                  THEN AED_C_LASTLINE = AED_T_CURLINE;
;  2392          2826  6                  IF .AED_C_BEGINLINE EQL .AED_L_FIRSTLINE
;  2393          2827  6                  THEN AED_C_BEGINLINE = AED_T_CURLINE;
;  2394          2828  6                  AED_L_FIRSTLINE = AED_T_CURLINE;
;  2395          2829  6                  IF .AED_L_FIRSTLINE NEQ .AED_L_LASTLINE
;  2396          2830  6                  AND .AED_C_FLAGS[AED_V_ENDAC[]
;  2397          2831  6                  THEN AED_L_FLAGS[AED_V_ENDACL] = 0;
;  2398          2832  6                  BUFFER_INDEX = 0;
;  2399          2833  6                  AED_B_COLUMN = 1;
;  2400          2834  6                  AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  2401          2835  6                  AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  2402          2836  6                  AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  2403          2837  6                  TERM_CHAR = 0;
;  2404          2838  6                  RETURN 1;
;  2405          2839  5                  END;
;  2406          2840  5              AED_L_FLAGS[AED_V_MODIFIED] = AED_L_FLAGS[AED_V_INSERT] = 0;
;  2407          2841  4              END;
;  2408          2842  3          END;
;  2409          2843  3      UP_LINE_SEGMENT = .NEW_TEXT_LINE[LINE_L_BLINK];
;  2410          2844  3      AED_POSITION (.UP_LINE_SEGMENT);
;  2411          2845  3      AED_COPSEGMENT (.UP_LINE_SEGMENT);
;  2412          2846  3      INSQUE (AED_T_CURLINE[LINE_L_FLINK], .UP_LINE_SEGMENT[LINE_L_BLINK]);
;  2413          2847  3      IF .AED_L_BEGINLINE EQL .UP_LINE_SEGMENT
;  2414          2848  3      THEN AED_C_BEGINLINE = AED_T_CURLINE[LINE_L_FLINK];
;  2415          2849  3      IF .AED_C_FIRSTLINE EQL .UP_LINE_SEGMENT
;  2416          2850  3      THEN AED_C_FIRSTLINE = AED_T_CURLINE[LINE_L_FLINK];
;  2417          2851  3      IF .AED_T_CURLINE[LINE_V_ENDACE]
;  2418          2852  3      THEN
;  2419          2853  4          BEGIN
;  2420          2854  4          AED_L_FIRSTLINE = AED_L_LASTLINE = AED_T_CURLINE;
;  2421          2855  4          AED_W_TOTALSIZE = .AED_C_LASTLINE[LINE_W_SIZE];
;  2422          2856  4          UNTIL .AED_L_FIRSTLINE[LINE_V_BEGINACE]
;  2423          2857  4          DO
;  2424          2858  5              BEGIN
;  2425          2859  5              AED_L_FIRSTLINE = .AED_L_FIRSTLINE[LINE_L_BLINK];
```

```
 5                  AED_W_TOTALSIZE = .AED_W_TOTALSIZE + .AED_L_FIRSTLINE[LINE_W_SIZE];
 4                  END;
 4              AED_L_CURACE = .AED_L_FIRSTLINE[LINE_L_BINACE];
 3              END;
 3          BUFFER_INDEX = MIN (.SEGMENT_SIZE, .AED_B_COLUMN - 1);
 3          END
 2  ELSE AED_B_LINE = 1;
 2  AED_SET_CURSOR (.AED_B_LINE, .BUFFER_INDEX + 1);
 2  AED_L_FLAGS[AED_V_ENDACL] = 0;
 2  AED_L_FLAGS[AED_V_GOLDKEY] = 0;
 2  AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
 2  TERM_CHAR = 0;
 2  RETURN 1;
 2
 1  END;                                          ! End of routine ACT_UP
```

```
                                 001C 00000 ACT_UP: .WORD    Save R2,R3,R4                         ; 2747
              54        0000'  CF   9E 00002          MOVAB   NEW_TEXT_LINE, R4                     ;
              53        0000'  CF   9E 00007          MOVAB   AED_L_FIRSTLINE, R3                   ;
        C1    A3          40   8F   8A 0000C          BICB2   #64, AED_L_FLAGS+1                    ; 2789
              50          F0   A3   9E 00011          MOVAB   AED_Q_LINETABLE, R0                   ; 2791
              50          74   A3   D1 00015          CMPL    AED_T_CURLINE+4, R0                   ;
                                03   12 00019          BNEQ    1$                                    ;
                              013C   31 0001B          BRW     18$                                   ;
     0000G    CF                00   FB 0001E 1$:      CALLS   #0, AED_REPSEGMENT                    ; 2794
              64                50   D0 00023          MOVL    R0, NEW_TEXT_LINE                     ;
              03          0A   A0   E8 00026          BLBS    10(R0), 3$                            ; 2795
                              00AF   31 0002A 2$:      BRW     11$                                   ;
                          C0   A3   95 0002D 3$:      TSTB    AED_L_FLAGS                           ; 2798
                                0A   19 00030          BLSS    4$                                    ;
  05    C1    A3                05   E0 00032          BBS     #5, AED_L_FLAGS+1, 4$                 ; 2799
  EE    C1    A3                06   E1 00037          BBC     #6, AED_L_FLAGS+1, 2$                 ; 2800
     0000V    CF                00   FB 0003C 4$:      CALLS   #0, FINISH_ACE                        ; 2803
                          C1   A3   95 00041          TSTB    AED_L_FLAGS+1                         ; 2804
                                10   18 00044          BGEQ    5$                                    ;
  0B    C1    A3                04   E1 00046          BBC     #4, AED_L_FLAGS+1, 5$                 ; 2805
              50                64   D0 0004B          MOVL    NEW_TEXT_LINE, R0                     ; 2808
        0A    A0                04   88 0004E          BISB2   #4, 10(R0)                            ;
                        0284   C3   B4 00052          CLRW    AED_W_TOTALSIZE                       ; 2809
        C1    A3          40   8F   8A 00056 5$:      BICB2   #64, AED_L_FLAGS+1                    ; 2811
                        0284   C3   B5 0005B          TSTW    AED_W_TOTALSIZE                       ; 2812
                                03   12 0005F          BNEQ    6$                                    ;
              74                94   D0 00061          MOVL    @NEW_TEXT_LINE, NEW_TEXT_LINE         ; 2813
     0000G    CF                00   FB 00064 6$:      CALLS   #0, AED_COMPRESS                      ; 2814
              7E        0284   C3   3C 00069          MOVZWL  AED_W_TOTALSIZE, -(SP)                ; 2815
     0000G    CF                01   FB 0006E          CALLS   #1, AED_UPDATEACL                     ;
        4C    A3                50   D0 00073          MOVL    R0, AED_L_STATUS                      ;
              5B          4C   A3   E8 00077          BLBS    AED_L_STATUS, 10$                     ; 2816
        C0    A3          40   8F   88 0007B          BISB2   #64, AED_L_FLAGS                      ; 2819
                                63   DD 00080          PUSHL   AED_L_FIRSTLINE                       ; 2820
     0000G    CF                01   FB 00082          CALLS   #1, AED_POSITION                      ;
                                63   DD 00087          PUSHL   AED_L_FIRSTLINE                       ; 2821
     0000G    CF                01   FB 00089          CALLS   #1, AED_COPSEGMENT                    ;
```

```
              50        63  D0 0008E        MOVL    AED_L_FIRSTLINE, R0                      ; 2823
         04   B0    70  A3  0E 00091        INSQUE  AED_T_CURLINE, @4(R0)                    ;
              63    04  A3  D1 00096        CMPL    AED_L_LASTLINE, AED_L_FIRSTLINE          ; 2824
                        05  12 0009A        BNEQ    7$                                       ;
         04   A3    70  A3  9E 0009C        MOVAB   AED_T_CURLINE, AED_L_LASTLINE            ; 2825
              63    08  A3  D1 000A1  7$:   CMPL    AED_L_BEGINLINE, AED_L_FIRSTLINE         ; 2826
                        05  12 000A5        BNEQ    8$                                       ;
         08   A3    70  A3  9E 000A7        MOVAB   AED_T_CURLINE, AED_L_BEGINLINE           ; 2827
              63    70  A3  9E 000AC  8$:   MOVAB   AED_T_CURLINE, AED_L_FIRSTLINE           ; 2828
         04   A3        63  D1 000B0        CMPL    AED_L_FIRSTLINE, AED_L_LASTLINE          ; 2829
                        09  13 000B4        BEQL    9$                                       ;
 04      C0   A3        05  E1 000B6        BBC     #5, AED_L_FLAGS, 9$                      ; 2830
         C0   A3        20  8A 000BB        BICB2   #32, AED_L_FLAGS                         ; 2831
                    E8  A4  D4 000BF  9$:   CLRL    BUFFER_INDEX                             ; 2832
         E0   A3        01  90 000C2        MOVB    #1, AED_B_COLUMN                         ; 2833
              7E    E0  A3  9A 000C6        MOVZBL  AED_B_COLUMN, -(SP)                      ; 2834
              7E    E4  A3  9A 000CA        MOVZBL  AED_B_LINE, -(SP)                        ;
      0000G   CF        02  FB 000CE        CALLS   #2, AED_SET_CURSOR                       ;
                      009A  31 000D3        BRW     20$                                      ; 2835
         C0   A3  2080  8F  AA 000D6  10$:  BICW2   #8320, AED_L_FLAGS                       ; 2840
              50        64  D0 000DC  11$:  MOVL    NEW_TEXT_LINE, R0                        ; 2843
              52    04  A0  D0 000DF        MOVL    4(R0), UP_LINE_SEGMENT                   ;
                        52  DD 000E3        PUSHL   UP_LINE_SEGMENT                          ; 2844
      0000G   CF        01  FB 000E5        CALLS   #1, AED_POSITION                         ;
                        52  DD 000EA        PUSHL   UP_LINE_SEGMENT                          ; 2845
      0000G   CF        01  FB 000EC        CALLS   #1, AED_COPSEGMENT                       ;
         04   B2    70  A3  0E 000F1        INSQUE  AED_T_CURLINE, @4(UP_LINE_SEGMENT)       ; 2846
              52    08  A3  D1 000F6        CMPL    AED_L_BEGINLINE, UP_LINE_SEGMENT         ; 2847
                        05  12 000FA        BNEQ    12$                                      ;
         08   A3    70  A3  9E 000FC        MOVAB   AED_T_CURLINE, AED_L_BEGINLINE           ; 2848
              52        63  D1 00101  12$:  CMPL    AED_L_FIRSTLINE, UP_LINE_SEGMENT         ; 2849
                        04  12 00104        BNEQ    13$                                      ;
              63    70  A3  9E 00106        MOVAB   AED_T_CURLINE, AED_L_FIRSTLINE           ; 2850
 33      7A   A3        01  E1 0010A  13$:  BBC     #1, AED_T_CURLINE+10, 16$                ; 2851
              50    70  A3  9E 0010F        MOVAB   AED_T_CURLINE, R0                        ; 2854
         04   A3        50  D0 00113        MOVL    R0, AED_L_LASTLINE                       ;
              63        50  D0 00117        MOVL    R0, AED_L_FIRSTLINE                      ;
              50    04  A3  D0 0011A        MOVL    AED_L_LASTLINE, R0                       ; 2855
       0284   C3    08  A0  B0 0011E        MOVW    8(R0), AED_W_TOTALSIZE                   ;
              50        63  D0 00124        MOVL    AED_L_FIRSTLINE, R0                      ; 2856
              0F    0A  A0  E8 00127  14$:  BLBS    10(R0), 15$                              ;
              63    04  A0  D0 0012B        MOVL    4(R0), AED_L_FIRSTLINE                   ; 2859
              50        63  D0 0012F        MOVL    AED_L_FIRSTLINE, R0                      ; 2860
       0284   C3    08  A0  A0 00132        ADDW2   8(R0), AED_W_TOTALSIZE                   ;
                        ED  11 00138        BRB     14$                                      ; 2856
              50        63  D0 0013A  15$:  MOVL    AED_L_FIRSTLINE, R0                      ; 2862
         FC   A3    0C  A0  D0 0013D        MOVL    12(R0), AED_L_CURACE                     ;
              51    E0  A3  9A 00142  16$:  MOVZBL  AED_B_COLUMN, R1                         ; 2864
                        51  D7 00146        DECL    R1                                       ;
              50    78  A3  3C 00148        MOVZWL  SEGMENT_SIZE, R0                         ;
              51        50  D1 0014C        CMPL    R0, R1                                   ;
                        03  15 0014F        BLEQ    17$                                      ;
              50        51  D0 00151        MOVL    R1, R0                                   ;
         E8   A4        50  D0 00154  17$:  MOVL    R0, BUFFER_INDEX                         ;
                        04  11 00158        BRB     19$                                      ; 2791
         E4   A3        01  90 0015A  18$:  MOVB    #1, AED_B_LINE                           ; 2866
 7E      E8   A4        01  C1 0015E  19$:  ADDL3   #1, BUFFER_INDEX, -(SP)                  ; 2867
```

```
                          7E      E4   A3  9A 00163          MOVZBL  AED_B_LINE, -(SP)                       ;
                0000G     CF           02  FB 00167          CALLS   #2, AED_SET_CURSOR                      ;
                  C0      A3           20  8A 0016C          BICB2   #32, AED_L_FLAGS                        ; 2868
                  C1      A3     2008  8F  AA 00170 20$:     BICW2   #8200, AED_L_FLAGS+1                    ; 2870
                                   10  A4  94 00176          CLRB    TERM_CHAR                               ; 2871
                          50           01  D0 00179          MOVL    #1, R0                                  ; 2872
                                       04  00017C           RET                                             ; 2874

; Routine Size:  381 bytes,    Routine Base:  $CODE$ + 1994
```

```
;  2442          2875  1 %SBTTL  'ACT_DOWN - move down to next line'
;  2443          2876  1 ROUTINE ACT_DOWN =
;  2444          2877  1
;  2445          2878  1 !++
;  2446          2879  1 !
;  2447          2880  1 ! FUNCTIONAL DESCRIPTION:
;  2448          2881  1 !
;  2449          2882  1 !       This routine moves the cursor down to the next line segment.  The
;  2450          2883  1 !       cursor position in the new line segment is minimized with the
;  2451          2884  1 !       current cursor position and the end of the line segment.
;  2452          2885  1 !
;  2453          2886  1 ! CALLING SEQUENCE:
;  2454          2887  1 !       ACT_DOWN ()
;  2455          2888  1 !
;  2456          2889  1 ! INPUT PARAMETERS:
;  2457          2890  1 !       none
;  2458          2891  1 !
;  2459          2892  1 ! IMPLICIT INPUTS:
;  2460          2893  1 !       OWN storage
;  2461          2894  1 !
;  2462          2895  1 ! OUTPUT PARAMETERS:
;  2463          2896  1 !       none
;  2464          2897  1 !
;  2465          2898  1 ! IMPLICIT OUTPUTS:
;  2466          2899  1 !       none
;  2467          2900  1 !
;  2468          2901  1 ! ROUTINE VALUE:
;  2469          2902  1 !       1 if successful
;  2470          2903  1 !       error status otherwise
;  2471          2904  1 !
;  2472          2905  1 ! SIDE EFFECTS:
;  2473          2906  1 !       The line segment table is updated as necessary, ACE line pointers
;  2474          2907  1 !       are updated, and the object's ACL is updated as necessary.
;  2475          2908  1 !
;  2476          2909  1 !--
;  2477          2910  1
;  2478          2911  2 BEGIN
;  2479          2912  2
;  2480          2913  2 LOCAL
;  2481          2914  2         DOWN_LINE_SEGMENT       : REF $BBLOCK;  ! Address of next line segment
;  2482          2915  2
;  2483          2916  2 IF NOT .AED_L_FLAGS[AED_V_ENDACL]
;  2484          2917  2 OR .AED_W_TOTALSIZE GTR 0 OR .SEGMENT_SIZE GTR 0
;  2485          2918  2 THEN
;  2486          2919  3     BEGIN
;  2487          2920  3     NEW_TEXT_LINE = AED_REPSEGMENT ();
;  2488          2921  3     IF .AED_L_LASTLINE EQLA NEW_TEXT_LINE[LINE_L_FLINK]
;  2489          2922  3     THEN
;  2490          2923  4         BEGIN
;  2491          2924  4         IF .AED_L_FLAGS[AED_V_MODIFIED]
;  2492          2925  4         OR .AED_L_FLAGS[AED_V_INSERT]
;  2493          2926  4         OR .AED_L_FLAGS[AED_V_INSERTEXT]
;  2494          2927  4         THEN
;  2495          2928  5             BEGIN
;  2496          2929  5             FINISH_ACE ();
;  2497          2930  5             IF .AED_L_FLAGS[AED_V_PROMPT]
;  2498          2931  5             AND .AED_L_FLAGS[AED_V_FIRSTCHAR]
```

```
;  2499          2932  5              THEN
;  2500          2933  6                  BEGIN
;  2501          2934  6                  NEW_TEXT_LINE[LINE_V_DUMMY] = 1;
;  2502          2935  6                  AED_W_TOTALSIZE = 0;
;  2503          2936  5                  END;
;  2504          2937  5              AED_L_FLAGS[AED_V_INSERTEXT] = 0;
;  2505          2938  5              IF .AED_W_TOTALSIZE EQL 0
;  2506          2939  5              THEN NEW_TEXT_LINE = .NEW_TEXT_LINE[LINE_L_BLINK];
;  2507          2940  5              AED_COMPRESS ();
;  2508          2941  5              AED_L_STATUS = AED_UPDATEACL (.AED_W_TOTALSIZE);
;  2509          2942  5              IF NOT .AED_L_STATUS
;  2510          2943  5              THEN
;  2511          2944  6                  BEGIN
;  2512          2945  6                  AED_L_FLAGS[AED_V_ACERROR] = 1;
;  2513          2946  6                  AED_POSITION (.AED_L_FIRSTLINE);
;  2514          2947  6                  AED_COPSEGMENT (.AED_L_FIRSTLINE);
;  2515          2948  6                  INSQUE (AED_T_CURLINE[LINE_L_FLINK],
;  2516          2949  6                          .AED_L_FIRSTLINE[LINE_L_BLINK]);
;  2517          2950  6                  IF .AED_L_LASTLINE EQL .AED_L_FIRSTLINE
;  2518          2951  6                  THEN AED_L_LASTLINE = AED_T_CURLINE;
;  2519          2952  6                  IF .AED_L_BEGINLINE EQL .AED_L_FIRSTLINE
;  2520          2953  6                  THEN AED_L_BEGINLINE = AED_T_CURLINE;
;  2521          2954  6                  AED_L_FIRSTLINE = AED_T_CURLINE;
;  2522          2955  6                  IF .AED_L_FIRSTLINE NEQ .AED_L_LASTLINE
;  2523          2956  6                  AND .AED_L_FLAGS[AED_V_ENDAC[]
;  2524          2957  6                  THEN AED_L_FLAGS[AED_V_ENDACL] = 0;
;  2525          2958  6                  BUFFER_INDEX = 0;
;  2526          2959  6                  AED_B_COLUMN = 1;
;  2527          2960  6                  AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  2528          2961  6                  AED_L_FLAGS[AED_V_GOTOKEY] = 0;
;  2529          2962  6                  AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  2530          2963  6                  TERM_CHAR = 0;
;  2531          2964  6                  RETURN 1;
;  2532          2965  5                  END;
;  2533          2966  5              AED_L_FLAGS[AED_V_MODIFIED] = AED_L_FLAGS[AED_V_INSERT] = 0;
;  2534          2967  4              END;
;  2535          2968  3          END;
;  2536          2969  3      DOWN_LINE_SEGMENT = .NEW_TEXT_LINE[LINE_L_FLINK];
;  2537          2970  3      AED_POSITION (.DOWN_LINE_SEGMENT);
;  2538          2971  3      AED_COPSEGMENT (.DOWN_LINE_SEGMENT);
;  2539          2972  3      INSQUE (AED_T_CURLINE[LINE_L_FLINK], .DOWN_LINE_SEGMENT[LINE_L_BLINK]);
;  2540          2973  3      IF .AED_L_LASTLINE EQL .DOWN_LINE_SEGMENT
;  2541          2974  3      THEN AED_L_LASTLINE = AED_T_CURLINE[LINE_L_FLINK];
;  2542          2975  3      IF .AED_L_BEGINLINE EQL .DOWN_LINE_SEGMENT
;  2543          2976  3      THEN AED_L_BEGINLINE = AED_T_CURLINE[LINE_L_FLINK];
;  2544          2977  3      IF .DOWN_LINE_SEGMENT NEQA AED_Q_LINETABLE[LINE_L_FLINK]
;  2545          2978  3      THEN
;  2546          2979  4          BEGIN
;  2547          2980  4          IF .AED_T_CURLINE[LINE_V_BEGINACE]
;  2548          2981  4          THEN
;  2549          2982  5              BEGIN
;  2550          2983  5              AED_L_FIRSTLINE = AED_L_LASTLINE = AED_T_CURLINE;
;  2551          2984  5              AED_W_TOTALSIZE = .AED_L_FIRSTLINE[LINE_W_SIZE];
;  2552          2985  5              UNTIL .AED_L_LASTLINE[LINE_V_ENDACE]
;  2553          2986  5              DO
;  2554          2987  6                  BEGIN
;  2555          2988  6                  IF .AED_L_LASTLINE EQLA AED_T_CURLINE
```

```
;  2556          2989  6                 THEN AED_L_LASTLINE = .AED_L_LASTLINE[LINE_L_FLINK];
;  2557          2990  6                 AED_L_LASTLINE = .AED_L_LASTLINE[LINE_L_FLINK];
;  2558          2991  6                 AED_W_TOTALSIZE = .AED_W_TOTALSIZE + .AED_L_LASTLINE[LINE_W_SIZE];
;  2559          2992  5                 END;
;  2560          2993  5             AED_L_CURACE = .AED_L_FIRSTLINE[LINE_L_BINACE];
;  2561          2994  4             END;
;  2562          2995  4         BUFFER_INDEX = MIN (.SEGMENT_SIZE, .AED_B_COLUMN - 1);
;  2563          2996  4         AED_SET_CURSOR (.AED_B_LINE, .BUFFER_INDEX + 1);
;  2564          2997  4         END
;  2565          2998  3     ELSE
;  2566          2999  4         BEGIN
;  2567          3000  4         AED_L_FLAGS[AED_V_ENDACL] = 1;
;  2568          3001  4         AED_L_FLAGS[AED_V_INSERTEXT] = 1;
;  2569          3002  4         AED_W_TOTALSIZE = SEGMENT_SIZE = 0;
;  2570          3003  4         BUFFER_INDEX = 0;
;  2571          3004  4         AED_B_COLUMN = 1;
;  2572          3005  4         AED_L_FIRSTLINE = AED_L_LASTLINE = AED_T_CURLINE;
;  2573          3006  4         AED_L_FIRSTLINE[LINE_W_FLAGS] = LINE_M_BEGINACE;
;  2574          3007  4         AED_L_CURACE = 0;
;  2575          3008  4         IF .AED_L_FLAGS[AED_V_PROMPT]
;  2576          3009  4         THEN
;  2577          3010  5             BEGIN
;  2578          3011  5             AED_B_ACETYPE = 0;
;  2579          3012  5             AED_L_FLAGS[AED_V_NOITEMSEL] = 0;
;  2580          3013  5             AED_SELECTFIELD (BUFFER_INDEX);
;  2581          3014  5             ECHO_DESC[DSC$W_LENGTH] = .AED_T_CURLINE[LINE_W_SIZE];
;  2582          3015  5             ECHO_DESC[DSC$A_POINTER] = AED_T_CURLINE[LINE_T_TEXT];
;  2583          3016  5             SCR$SET_CURSOR (.AED_B_LINE, 1);
;  2584          3017  5             AED_PUTOUTPUT (ECHO_DESC);
;  2585          3018  5             SCR$ERASE_LINE (.AED_B_LINE, .SEGMENT_SIZE + 1);
;  2586          3019  5             AED_B_COLUMN = .BUFFER_INDEX + 1;
;  2587          3020  5             AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  2588          3021  5             AED_L_FLAGS[AED_V_FIRSTCHAR] = 1;
;  2589          3022  4             END;
;  2590          3023  3         END;
;  2591          3024  2     END;
;  2592          3025  2 AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  2593          3026  2 AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  2594          3027  2 TERM_CHAR = 0;
;  2595          3028  2 RETURN 1;
;  2596          3029  2
;  2597          3030  1 END;                                   ! End of routine ACT_DOWN


                                001C 00000 ACT_DOWN:
                                           .WORD   Save R2,R3,R4                    ; 2876
                          54    0000'  CF  9E 00002          MOVAB   NEW_TEXT_LINE, R4
                          53    0000'  CF  9E 00007          MOVAB   AED_L_FLAGS, R3
                    OF    63           05  E1 0000C          BBC     #5, AED_L_FLAGS, 1$ ; 2916
                                02C4   C3  B5 00010          TSTW    AED_W_TOTALSIZE     ; 2917
                                       09  12 00014          BNEQ    1$
                                00B8   C3  B5 00016          TSTW    SEGMENT_SIZE
                                       03  12 0001A          BNEQ    1$
                                    01F4   31 0001C          BRW     21$
```

```
           0000G  CF         00  FB 0001F 1$:    CALLS   #0, AED_REPSEGMENT                    ; 2920
                  64         50  D0 00024        MOVL    R0, NEW_TEXT_LINE                     ;
                  64     44  A3  D1 00027        CMPL    AED_L_LASTLINE, NEW_TEXT_LINE         ; 2921
                             03  13 0002B        BEQL    3$                                    ;
                           00B2  31 0002D 2$:    BRW     11$                                   ;
                             63  95 00030 3$:    TSTB    AED_L_FLAGS                           ; 2924
                             0A  19 00032        BLSS    4$                                    ;
     05    01     A3         05  E0 00034        BBS     #5, AED_L_FLAGS+1, 4$                 ; 2925
     EF    01     A3         06  E1 00039        BBC     #6, AED_L_FLAGS+1, 2$                 ; 2926
           0000V  CF         00  FB 0003E 4$:    CALLS   #0, FINISH_ACE                        ; 2929
                         01  A3  95 00043        TSTB    AED_L_FLAGS+1                         ; 2930
                             10  18 00046        BGEQ    5$                                    ;
     0B    01     A3         04  E1 00048        BBC     #4, AED_L_FLAGS+1, 5$                 ; 2931
                  50         64  D0 0004D        MOVL    NEW_TEXT_LINE, R0                     ; 2934
           0A     A0         04  88 00050        BISB2   #4, 10(R0)                            ;
                       02C4  C3  B4 00054        CLRW    AED_W_TOTALSIZE                       ; 2935
           01     A3     40  8F  8A 00058 5$:    BICB2   #64, AED_L_FLAGS+1                    ; 2937
                       02C4  C3  B5 0005D        TSTW    AED_W_TOTALSIZE                       ; 2938
                             07  12 00061        BNEQ    6$                                    ;
                  50         64  D0 00063        MOVL    NEW_TEXT_LINE, R0                     ; 2939
                  64     04  A0  D0 00066        MOVL    4(R0), NEW_TEXT_LINE                  ;
           0000G  CF         00  FB 0006A 6$:    CALLS   #0, AED_COMPRESS                      ; 2940
                  7E   02C4  C3  3C 0006F        MOVZWL  AED_W_TOTALSIZE, -(SP)                ; 2941
           0000G  CF         01  FB 00074        CALLS   #1, AED_UPDATEACL                     ;
           008C   C3         50  D0 00079        MOVL    R0, AED_L_STATUS                      ;
                  5A   008C  C3  E8 0007E        BLBS    AED_L_STATUS, 10$                     ; 2942
                  63     40  8F  88 00083        BISB2   #64, AED_L_FLAGS                      ; 2945
                         40  A3  DD 00087        PUSHL   AED_L_FIRSTLINE                       ; 2946
           0000G  CF         01  FB 0008A        CALLS   #1, AED_POSITION                      ;
                         40  A3  DD 0008F        PUSHL   AED_L_FIRSTLINE                       ; 2947
           0000G  CF         01  FB 00092        CALLS   #1, AED_COPSEGMENT                    ;
                  50     40  A3  D0 00097        MOVL    AED_L_FIRSTLINE, R0                   ; 2949
           04     B0   00B0  C3  0E 0009B        INSQUE  AED_T_CURLINE, @4(R0)                 ;
           40     A3     44  A3  D1 000A1        CMPL    AED_L_LASTLINE, AED_L_FIRSTLINE       ; 2950
                             06  12 000A6        BNEQ    7$                                    ;
           44     A3   00B0  C3  9E 000A8        MOVAB   AED_T_CURLINE, AED_L_LASTLINE         ; 2951
           40     A3     48  A3  D1 000AE 7$:    CMPL    AED_L_BEGINLINE, AED_L_FIRSTLINE      ; 2952
                             06  12 000B3        BNEQ    8$                                    ;
           48     A3   00B0  C3  9E 000B5        MOVAB   AED_T_CURLINE, AED_L_BEGINLINE        ; 2953
           40     A3   00B0  C3  9E 000BB 8$:    MOVAB   AED_T_CURLINE, AED_L_FIRSTLINE        ; 2954
           44     A3     40  A3  D1 000C1        CMPL    AED_L_FIRSTLINE, AED_L_LASTLINE       ; 2955
                             07  13 000C6        BEQL    9$                                    ;
     03           63         05  E1 000C8        BBC     #5, AED_L_FLAGS, 9$                   ; 2956
                  63         20  8A 000CC        BICB2   #32, AED_L_FLAGS                      ; 2957
                         E8  A4  D4 000CF 9$:    CLRL    BUFFER_INDEX                          ; 2958
           20     A3         01  90 000D2        MOVB    #1, AED_B_COLUMN                      ; 2959
                  7E     20  A3  9A 000D6        MOVZBL  AED_B_COLUMN, -(SP)                   ; 2960
                           00A3  31 000DA        BRW     19$                                   ;
                  63   2080  8F  AA 000DD 10$:   BICW2   #8320, AED_L_FLAGS                    ; 2966
                  52     00  B4  D0 000E2 11$:   MOVL    @NEW_TEXT_LINE, DOWN_LINE_SEGMENT     ; 2969
                             52  DD 000E6        PUSHL   DOWN_LINE_SEGMENT                     ; 2970
           0000G  CF         01  FB 000E8        CALLS   #1, AED_POSITION                      ;
                             52  DD 000ED        PUSHL   DOWN_LINE_SEGMENT                     ; 2971
           0000G  CF         01  FB 000EF        CALLS   #1, AED_COPSEGMENT                    ;
           04     B2   00B0  C3  0E 000F4        INSQUE  AED_T_CURLINE, @4(DOWN_LINE_SEGMENT)  ; 2972
                  52     44  A3  D1 000FA        CMPL    AED_L_LASTLINE, DOWN_LINE_SEGMENT     ; 2973
                             06  12 000FE        BNEQ    12$                                   ;
```

```
              44   A3    00B0   C3  9E 00100        MOVAB   AED_T_CURLINE, AED_L_LASTLINE       ; 2974
                   52      48   A3  D1 00106 12$:   CMPL    AED_L_BEGINLINE, DOWN_LINE_SEGMENT  ; 2975
                                06  12 0010A        BNEQ    13$                                 ;
              48   A3    00B0   C3  9E 0010C        MOVAB   AED_T_CURLINE, AED_L_BEGINLINE      ; 2976
                   50      30   A3  9E 00112 13$:   MOVAB   AED_Q_LINETABLE, R0                 ; 2977
                   50           52  D1 00116        CMPL    DOWN_LINE_SEGMENT, R0               ;
                                71  13 00119        BEQL    20$                                 ;
                   44    00BA   C3  E9 0011B        BLBC    AED_T_CURLINE+10, 17$               ; 2980
                   50    00B0   C3  9E 00120        MOVAB   AED_T_CURLINE, R0                   ; 2983
              44   A3           50  D0 00125        MOVL    R0, AED_L_LASTLINE                  ;
              40   A3           50  D0 00129        MOVL    R0, AED_L_FIRSTLINE                 ;
                   52      40   A3  D0 0012D        MOVL    AED_L_FIRSTLINE, R2                 ; 2984
            02C4   C3      08   A2  B0 00131        MOVW    8(R2), AED_W_TOTALSIZE              ;
                   51      44   A3  D0 00137        MOVL    AED_L_LASTLINE, R1                  ; 2985
  1F          0A   A1           01  E0 0013B 14$:   BBS     #1, 10(R1), 16$                     ;
                   50    00B0   C3  9E 00140        MOVAB   AED_T_CURLINE, R0                   ; 2988
                   50           51  D1 00145        CMPL    R1, R0                              ;
                                04  12 00148        BNEQ    15$                                 ;
              44   A3           61  D0 0014A        MOVL    (R1), AED_L_LASTLINE                ; 2989
              44   A3      44   B3  D0 0014E 15$:   MOVL    @AED_L_LASTLINE, AED_L_LASTLINE     ; 2990
                   51      44   A3  D0 00153        MOVL    AED_L_LASTLINE, R1                  ; 2991
            02C4   C3      08   A1  A0 00157        ADDW2   8(R1), AED_W_TOTALSIZE              ;
                                DC  11 0015D        BRB     14$                                 ; 2985
              3C   A3      0C   A2  D0 0015F 16$:   MOVL    12(R2), AED_L_CURACE                ; 2993
                   51      20   A3  9A 00164 17$:   MOVZBL  AED_B_COLUMN, R1                    ; 2995
                                51  D7 00168        DECL    R1                                  ;
                   50    00B8   C3  3C 0016A        MOVZWL  SEGMENT_SIZE, R0                    ;
                   51           50  D1 0016F        CMPL    R0, R1                              ;
                                03  15 00172        BLEQ    18$                                 ;
                   50           51  D0 00174        MOVL    R1, R0                              ;
              E8   A4           50  D0 00177 18$:   MOVL    R0, BUFFER_INDEX                    ;
  7E          E8   A4           01  C1 0017B        ADDL3   #1, BUFFER_INDEX, -(SP)             ; 2996
                   7E      24   A3  9A 00180 19$:   MOVZBL  AED_B_LINE, -(SP)                   ;
           0000G   CF           02  FB 00184        CALLS   #2, AED_SET_CURSOR                  ;
                              0087  31 00189        BRW     21$                                 ; 2977
                   63    4020   8F  A8 0018C 20$:   BISW2   #16416, AED_L_FLAGS                 ; 3001
                         00B8   C3  B4 00191        CLRW    SEGMENT_SIZE                        ; 3002
                         02C4   C3  B4 00195        CLRW    AED_W_TOTALSIZE                     ;
                           E8   A4  D4 00199        CLRL    BUFFER_INDEX                        ; 3003
              20   A3           01  90 0019C        MOVB    #1, AED_B_COLUMN                    ; 3004
                   50    00B0   C3  9E 001A0        MOVAB   AED_T_CURLINE, R0                   ; 3005
              44   A3           50  D0 001A5        MOVL    R0, AED_L_LASTLINE                  ;
              40   A3           50  D0 001A9        MOVL    R0, AED_L_FIRSTLINE                 ;
              0A   A0           01  B0 001AD        MOVW    #1, 10(R0)                          ; 3006
                           3C   A3  D4 001B1        CLRL    AED_L_CURACE                        ; 3007
                           01   A3  95 001B4        TSTB    AED_L_FLAGS+1                       ; 3008
                                5A  18 001B7        BGEQ    21$                                 ;
                         00A8   C3  94 001B9        CLRB    AED_B_ACETYPE                       ; 3011
              02   A3           08  8A 001BD        BICB2   #8, AED_L_FLAGS+2                   ; 3012
                           E8   A4  9F 001C1        PUSHAB  BUFFER_INDEX                        ; 3013
           0000G   CF           01  FB 001C4        CALLS   #1, AED_SELECTFIELD                 ;
              EC   A4    00B8   C3  B0 001C9        MOVW    AED_T_CURLINE+8, ECHO_DESC          ; 3014
              F0   A4    00C4   C3  9E 001CF        MOVAB   AED_T_CURLINE+20, ECHO_DESC+4       ; 3015
                                01  DD 001D5        PUSHL   #1                                  ; 3016
                   7E      24   A3  9A 001D7        MOVZBL  AED_B_LINE, -(SP)                   ;
       00000000G   00           02  FB 001DB        CALLS   #2, SCR$SET_CURSOR                  ;
                           EC   A4  9F 001E2        PUSHAB  ECHO_DESC                           ; 3017
```

```
                    0000G  CF              01 FB 001E5          CALLS   #1, AED_PUTOUTPUT                        ;
                           7E      00B8     C3 3C 001EA          MOVZWL  SEGMENT_SIZE, -(SP)                      ; 3018
                                            6E D6 001EF          INCL    (SP)                                     ;
                           7E        24     A3 9A 001F1          MOVZBL  AED_B_LINE, -(SP)                        ;
                00000000G  00              02 FB 001F5          CALLS   #2, SCR$ERASE_LINE                       ;
              20    A3       E8  A4        01 81 001FC          ADDB3   #1, BUFFER_INDEX, AED_B_COLUMN           ; 3019
                           7E        20     A3 9A 00202          MOVZBL  AED_B_COLUMN, -(SP)                      ; 3020
                           7E        24     A3 9A 00206          MOVZBL  AED_B_LINE, -(SP)                        ;
                    0000G  CF              02 FB 0020A          CALLS   #2, AED_SET_CURSOR                       ;
                      01   A3              10 88 0020F          BISB2   #16, AED_L_FLAGS+1                       ; 3021
                      01   A3      2008    8F AA 00213 21$:     BICW2   #8200, AED_L_FLAGS+1                     ; 3026
                                     10     A4 94 00219          CLRB    TERM_CHAR                                ; 3027
                           50                01 D0 0021C          MOVL    #1, R0                                   ; 3028
                                             04 0021F          RET                                              ; 3030

; Routine Size:  544 bytes,    Routine Base:  $CODE$ + 1B11
```

```
;  2599     3031  1 %SBTTL  'ACT_RIGHT - move right one character'
;  2600     3032  1 ROUTINE ACT_RIGHT =
;  2601     3033  1
;  2602     3034  1 !++
;  2603     3035  1 !
;  2604     3036  1 ! FUNCTIONAL DESCRIPTION:
;  2605     3037  1 !
;  2606     3038  1 !       This routine advances the cursor one character to the right.  If
;  2607     3039  1 !       the end of the line segment is reached, the cursor is set to the
;  2608     3040  1 !       first character of the next line.
;  2609     3041  1 !
;  2610     3042  1 ! CALLING SEQUENCE:
;  2611     3043  1 !       ACT_RIGHT ()
;  2612     3044  1 !
;  2613     3045  1 ! INPUT PARAMETERS:
;  2614     3046  1 !       none
;  2615     3047  1 !
;  2616     3048  1 ! IMPLICIT INPUTS:
;  2617     3049  1 !       OWN storage
;  2618     3050  1 !
;  2619     3051  1 ! OUTPUT PARAMETERS:
;  2620     3052  1 !       none
;  2621     3053  1 !
;  2622     3054  1 ! IMPLICIT OUTPUTS:
;  2623     3055  1 !       none
;  2624     3056  1 !
;  2625     3057  1 ! ROUTINE VALUE:
;  2626     3058  1 !       1 if successful
;  2627     3059  1 !       error status otherwise
;  2628     3060  1 !
;  2629     3061  1 ! SIDE EFFECTS:
;  2630     3062  1 !       The line segment table is updated as necessary, ACE line pointers
;  2631     3063  1 !       are updated, and the object's ACL is updated as necessary.
;  2632     3064  1 !
;  2633     3065  1 !--
;  2634     3066  1
;  2635     3067  2 BEGIN
;  2636     3068  2
;  2637     3069  2 IF .BUFFER_INDEX LSS .SEGMENT_SIZE
;  2638     3070  2 THEN
;  2639     3071  3     BEGIN
;  2640     3072  3     BUFFER_INDEX = .BUFFER_INDEX + 1;
;  2641     3073  3     AED_B_COLUMN = .BUFFER_INDEX + 1;
;  2642     3074  3     AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  2643     3075  3     AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  2644     3076  3     AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  2645     3077  3     TERM_CHAR = 0;
;  2646     3078  3     RETURN 1;
;  2647     3079  2     END;
;  2648     3080  2
;  2649     3081  2 BUFFER_INDEX = 0;
;  2650     3082  2 AED_B_COLUMN = 1;
;  2651     3083  2 AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  2652     3084  2 TERM_CHAR = KEY_C_DOWN;
;  2653     3085  2 RETURN 1;
;  2654     3086  2
;  2655     3087  1 END;                                   ! End of routine ACT_RIGHT
```

```
                                              000C 00000 ACT_RIGHT:
                                                                   .WORD   Save R2,R3                                  ; 3032
                              53     0000'  CF   9E 00002           MOVAB   BUFFER_INDEX, R3                            ;
                              52     0000'  CF   9E 00007           MOVAB   AED_B_COLUMN, R2                            ;
          63      0098    C2         10     00   ED 0000C           CMPZV   #0, #16, SEGMENT_SIZE, BUFFER_INDEX         ; 3069
                                            1D   15 00013           BLEQ    1$                                          ;
                                            63   D6 00015           INCL    BUFFER_INDEX                                ; 3072
                          62         63     01   81 00017           ADDB3   #1, BUFFER_INDEX, AED_B_COLUMN              ; 3073
                                     7E     62   9A 0001B           MOVZBL  AED_B_COLUMN, -(SP)                         ; 3074
                                     7E  04 A2   9A 0001E           MOVZBL  AED_B_LINE, -(SP)                           ;
                              0000G  CF     02   FB 00022           CALLS   #2, AED_SET_CURSOR                          ;
                              E1  A2   2008 8F   AA 00027           BICW2   #8200, AED_L_FLAGS+1                        ; 3076
                                         28 A3   94 0002D           CLRB    TERM_CHAR                                   ; 3077
                                            0D   11 00030           BRB     2$                                          ; 3078
                                            63   D4 00032 1$:       CLRL    BUFFER_INDEX                                ; 3081
                                     62     01   90 00034           MOVB    #1, AED_B_COLUMN                            ; 3082
                              E1     A2     08   8A 00037           BICB2   #8, AED_L_FLAGS+1                           ; 3083
                              28     A3     1C   90 0003B           MOVB    #28, TERM_CHAR                              ; 3084
                                     50     01   D0 0003F 2$:       MOVL    #1, R0                                      ; 3085
                                                 04 00042           RET                                                 ; 3087

; Routine Size:  67 bytes,    Routine Base:  $CODE$ + 1D31
```

```
;  2657          3088  1 %SBTTL  'ACT_LEFT - move left one character'
;  2658          3089  1 ROUTINE ACT_LEFT =
;  2659          3090  1
;  2660          3091  1 !++
;  2661          3092  1 !
;  2662          3093  1 ! FUNCTIONAL DESCRIPTION:
;  2663          3094  1 !
;  2664          3095  1 !       This routine advances the cursor one character to the left.  If
;  2665          3096  1 !       the beginning of the line segment is reached, the cursor is set
;  2666          3097  1 !       to the last character of the previous line.
;  2667          3098  1 !
;  2668          3099  1 ! CALLING SEQUENCE:
;  2669          3100  1 !       ACT_LEFT ()
;  2670          3101  1 !
;  2671          3102  1 ! INPUT PARAMETERS:
;  2672          3103  1 !       none
;  2673          3104  1 !
;  2674          3105  1 ! IMPLICIT INPUTS:
;  2675          3106  1 !       OWN storage
;  2676          3107  1 !
;  2677          3108  1 ! OUTPUT PARAMETERS:
;  2678          3109  1 !       none
;  2679          3110  1 !
;  2680          3111  1 ! IMPLICIT OUTPUTS:
;  2681          3112  1 !       none
;  2682          3113  1 !
;  2683          3114  1 ! ROUTINE VALUE:
;  2684          3115  1 !       1 if successful
;  2685          3116  1 !       error status otherwise
;  2686          3117  1 !
;  2687          3118  1 ! SIDE EFFECTS:
;  2688          3119  1 !       The line segment table is updated as necessary, ACE line pointers
;  2689          3120  1 !       are updated, and the object's ACL is updated as necessary.
;  2690          3121  1 !
;  2691          3122  1 !--
;  2692          3123  1
;  2693          3124  2 BEGIN
;  2694          3125  2
;  2695          3126  2 IF .BUFFER_INDEX GTR 0
;  2696          3127  2 THEN
;  2697          3128  3     BEGIN
;  2698          3129  3     BUFFER_INDEX = .BUFFER_INDEX - 1;
;  2699          3130  3     AED_B_COLUMN = .BUFFER_INDEX + 1;
;  2700          3131  3     AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  2701          3132  3     AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  2702          3133  3     AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  2703          3134  3     TERM_CHAR = 0;
;  2704          3135  3     RETURN 1;
;  2705          3136  2     END;
;  2706          3137  2
;  2707          3138  2 AED_B_COLUMN = .$BBLOCK [.AED_T_CURLINE[LINE_L_BLINK], LINE_W_SIZE] + 1;
;  2708          3139  2 AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  2709          3140  2 TERM_CHAR = KEY_C_UP;
;  2710          3141  2 RETURN 1;
;  2711          3142  2
;  2712          3143  1 END;                                        ! End of routine ACT_LEFT
```

```
                                                000C 00000 ACT_LEFT:
                                                                .WORD   Save R2,R3                                      ; 3089
                        53      0000'   CF  9E  00002           MOVAB   BUFFER_INDEX, R3                                ;
                        52      0000'   CF  9E  00007           MOVAB   AED_B_COLUMN, R2                                ;
                                        63  D5  0000C           TSTL    BUFFER_INDEX                                    ; 3126
                                        1D  15  0000E           BLEQ    1$                                              ;
                                        63  D7  00010           DECL    BUFFER_INDEX                                    ; 3129
                62      63              01  81  00012           ADDB3   #1, BUFFER_INDEX, AED_B_COLUMN                  ; 3130
                        7E              62  9A  00016           MOVZBL  AED_B_COLUMN, -(SP)                             ; 3131
                        7E      04      A2  9A  00019           MOVZBL  AED_B_LINE, -(SP)                               ;
              0000G     CF              02  FB  0001D           CALLS   #2, AED_SET_CURSOR                              ;
                E1      A2      2008    8F  AA  00022           BICW2   #8200, AED_L_FLAGS+1                            ; 3133
                        28      A3      94  00028             CLRB    TERM_CHAR                                       ; 3134
                                        12  11  0002B           BRB     2$                                              ; 3135
                        50      0094    C2  D0  0002D 1$:       MOVL    AED_T_CURLINE+4, R0                             ; 3138
                62      08      A0      01  81  00032           ADDB3   #1, 8(R0), AED_B_COLUMN                         ;
                        E1      A2      08  8A  00037           BICB2   #8, AED_L_FLAGS+1                               ; 3139
                        28      A3      1B  90  0003B           MOVB    #27, TERM_CHAR                                  ; 3140
                        50              01  D0  0003F 2$:       MOVL    #1, R0                                          ; 3141
                                            04  00042           RET                                                     ; 3143

; Routine Size:  67 bytes,    Routine Base:  $CODE$ + 1D74
```

```
;  2714          3144  1 %SBTTL  'ACT_TOP - move to beginning of ACL'
;  2715          3145  1 ROUTINE ACT_TOP =
;  2716          3146  1
;  2717          3147  1 !++
;  2718          3148  1 !
;  2719          3149  1 ! FUNCTIONAL DESCRIPTION:
;  2720          3150  1 !
;  2721          3151  1 !       This routine moves the cursor to the first character in the first
;  2722          3152  1 !       line segment of the first ACE in the ACL.  The display is scrolled
;  2723          3153  1 !       as necessary.
;  2724          3154  1 !
;  2725          3155  1 ! CALLING SEQUENCE:
;  2726          3156  1 !       ACT_TOP ()
;  2727          3157  1 !
;  2728          3158  1 ! INPUT PARAMETERS:
;  2729          3159  1 !       none
;  2730          3160  1 !
;  2731          3161  1 ! IMPLICIT INPUTS:
;  2732          3162  1 !       OWN storage
;  2733          3163  1 !
;  2734          3164  1 ! OUTPUT PARAMETERS:
;  2735          3165  1 !       none
;  2736          3166  1 !
;  2737          3167  1 ! IMPLICIT OUTPUTS:
;  2738          3168  1 !       none
;  2739          3169  1 !
;  2740          3170  1 ! ROUTINE VALUE:
;  2741          3171  1 !       1 if successful
;  2742          3172  1 !       error status otherwise
;  2743          3173  1 !
;  2744          3174  1 ! SIDE EFFECTS:
;  2745          3175  1 !       The line segment table is updated as necessary, ACE line pointers
;  2746          3176  1 !       are updated, and the object's ACL is updated as necessary.
;  2747          3177  1 !
;  2748          3178  1 !--
;  2749          3179  1
;  2750          3180  2 BEGIN
;  2751          3181  2
;  2752          3182  2 AED_L_FLAGS[AED_V_INSERTEXT] = 0;                          ! No item selection
;  2753          3183  2
;  2754          3184  2 NEW_TEXT_LINE = AED_REPSEGMENT ();
;  2755          3185  2 IF .AED_L_FLAGS[AED_V_MODIFIED]
;  2756          3186  2 OR .AED_L_FLAGS[AED_V_INSERT]
;  2757          3187  2 OR .AED_L_FLAGS[AED_V_INSERTEXT]
;  2758          3188  2 THEN
;  2759          3189  3     BEGIN
;  2760          3190  3     FINISH_ACE ();
;  2761          3191  3     IF .AED_L_FLAGS[AED_V_PROMPT]
;  2762          3192  3     AND .AED_L_FLAGS[AED_V_FIRSTCHAR]
;  2763          3193  3     THEN
;  2764          3194  4         BEGIN
;  2765          3195  4         NEW_TEXT_LINE[LINE_V_DUMMY] = 1;
;  2766          3196  4         AED_W_TOTALSIZE = 0;
;  2767          3197  3         END;
;  2768          3198  3     AED_L_FLAGS[AED_V_INSERTEXT] = 0;
;  2769          3199  3     IF .AED_W_TOTALSIZE EQL 0
;  2770          3200  3     THEN NEW_TEXT_LINE = .NEW_TEXT_LINE[LINE_L_FLINK];
```

```
;  2771          3201  3      AED_COMPRESS ();
;  2772          3202  3      AED_L_STATUS = AED_UPDATEACL (.AED_W_TOTALSIZE);
;  2773          3203  3      IF NOT .AED_L_STATUS
;  2774          3204  3      THEN
;  2775          3205  4          BEGIN
;  2776          3206  4          AED_L_FLAGS[AED_V_ACERROR] = 1;
;  2777          3207  4          AED_POSITION (.AED_L_FIRSTLINE);
;  2778          3208  4          AED_COPSEGMENT (.AED_L_FIRSTLINE);
;  2779          3209  4          INSQUE (AED_T_CURLINE[LINE_L_FLINK],
;  2780          3210  4                  .AED_L_FIRSTLINE[LINE_L_BLINK]);
;  2781          3211  4          IF .AED_L_LASTLINE EQL .AED_L_FIRSTLINE
;  2782          3212  4          THEN AED_L_LASTLINE = AED_T_CURLINE;
;  2783          3213  4          IF .AED_L_BEGINLINE EQL .AED_L_FIRSTLINE
;  2784          3214  4          THEN AED_L_BEGINLINE = AED_T_CURLINE;
;  2785          3215  4          AED_L_FIRSTLINE = AED_T_CURLINE;
;  2786          3216  4          IF .AED_L_FIRSTLINE NEQ .AED_L_LASTLINE
;  2787          3217  4          AND .AED_L_FLAGS[AED_V_ENDACL]
;  2788          3218  4          THEN AED_L_FLAGS[AED_V_ENDACL] = 0;
;  2789          3219  4          BUFFER_INDEX = 0;
;  2790          3220  4          AED_B_COLUMN = 1;
;  2791          3221  4          AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  2792          3222  4          AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  2793          3223  4          AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  2794          3224  4          TERM_CHAR = 0;
;  2795          3225  4          RETURN 1;
;  2796          3226  3          END;
;  2797          3227  3      AED_L_FLAGS[AED_V_MODIFIED] = AED_L_FLAGS[AED_V_INSERT] = 0;
;  2798          3228  2      END;
;  2799          3229  2 AED_COMPRESS ();
;  2800          3230  2 AED_L_FIRSTLINE = .AED_Q_LINETABLE[LINE_L_FLINK];
;  2801          3231  2 AED_POSITION (.AED_L_FIRSTLINE);
;  2802          3232  2 AED_COPSEGMENT (.AED_L_FIRSTLINE);
;  2803          3233  2 INSQUE (AED_T_CURLINE[LINE_L_FLINK], .AED_L_FIRSTLINE[LINE_L_BLINK]);
;  2804          3234  2 AED_L_BEGINLINE = AED_L_FIRSTLINE = AED_L_LASTLINE = AED_T_CURLINE[LINE_L_FLINK];
;  2805          3235  2 AED_W_TOTALSIZE = .AED_L_LASTLINE[LINE_W_SIZE];
;  2806          3236  2 UNTIL .AED_L_LASTLINE[LINE_V_ENDACE]
;  2807          3237  2 DO
;  2808          3238  3     BEGIN
;  2809          3239  3     AED_L_LASTLINE = .AED_L_LASTLINE[LINE_L_FLINK];
;  2810          3240  3     AED_W_TOTALSIZE = .AED_W_TOTALSIZE + .AED_L_LASTLINE[LINE_W_SIZE];
;  2811          3241  2     END;
;  2812          3242  2 AED_L_CURACE = .AED_L_FIRSTLINE[LINE_L_BINACE];
;  2813          3243  2 BUFFER_INDEX = 0;
;  2814          3244  2 AED_B_LINE = AED_B_COLUMN = 1;
;  2815          3245  2 AED_SET_CURSOR (1, 1);
;  2816          3246  2 AED_L_FLAGS[AED_V_ENDACL] = 0;
;  2817          3247  2 AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  2818          3248  2 AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  2819          3249  2 TERM_CHAR = 0;
;  2820          3250  2 RETURN 1;
;  2821          3251  2
;  2822          3252  1 END;                                    ! End of routine ACT_TOP
```

```
                                      000C 00000 ACT_TOP:.WORD     Save R2,R3                                    ; 3145
              53        0000'    CF   9E 00002         MOVAB       NEW_TEXT_LINE, R3                           ;
              52        0000'    CF   9E 00007         MOVAB       AED_L_FLAGS, R2                             ;
         01   A2          40     8F   8A 0000C         BICB2       #64, AED_L_FLAGS+1                          ; 3182
      0000G   CF                 00   FB 00011         CALLS       #0, AED_REPSEGMENT                          ; 3184
              63                 50   D0 00016         MOVL        R0, NEW_TEXT_LINE                           ;
                                 62   95 00019         TSTB        AED_L_FLAGS                                 ; 3185
                                 0D   19 0001B         BLSS        1$                                          ;
   08    01   A2                 05   E0 0001D         BBS         #5, AED_L_FLAGS+1, 1$                       ; 3186
   03    01   A2                 06   E0 00022         BBS         #6, AED_L_FLAGS+1, 1$                       ; 3187
                               00A8   31 00027         BRW         8$                                          ;
      0000V   CF                 00   FB 0002A 1$:     CALLS       #0, FINISH_ACE                              ; 3190
                          01     A2   95 0002F         TSTB        AED_L_FLAGS+1                               ; 3191
                                 10   18 00032         BGEQ        2$                                          ;
   0B    01   A2                 04   E1 00034         BBC         #4, AED_L_FLAGS+1, 2$                       ; 3192
              50                 63   D0 00039         MOVL        NEW_TEXT_LINE, R0                           ; 3195
         0A   A0                 04   88 0003C         BISB2       #4, 10(R0)                                  ;
                        02C4     C2   B4 00040         CLRW        AED_W_TOTALSIZE                             ; 3196
         01   A2          40     8F   8A 00044 2$:     BICB2       #64, AED_L_FLAGS+1                          ; 3198
                        02C4     C2   B5 00049         TSTW        AED_W_TOTALSIZE                             ; 3199
                                 03   12 0004D         BNEQ        3$                                          ;
              73                 93   D0 0004F         MOVL        @NEW_TEXT_LINE, NEW_TEXT_LINE               ; 3200
      0000G   CF                 00   FB 00052 3$:     CALLS       #0, AED_COMPRESS                            ; 3201
              7E        02C4     C2   3C 00057         MOVZWL      AED_W_TOTALSIZE, -(SP)                      ; 3202
      0000G   CF                 01   FB 0005C         CALLS       #1, AED_UPDATEACL                           ;
      008C    C2                 50   D0 00061         MOVL        R0, AED_L_STATUS                            ;
              62        008C     C2   E8 00066         BLBS        AED_L_STATUS, 7$                            ; 3203
              62          40     8F   88 0006B         BISB2       #64, AED_L_FLAGS                            ; 3206
                          40     A2   DD 0006F         PUSHL       AED_L_FIRSTLINE                             ; 3207
      0000G   CF                 01   FB 00072         CALLS       #1, AED_POSITION                            ;
                          40     A2   DD 00077         PUSHL       AED_L_FIRSTLINE                             ; 3208
      0000G   CF                 01   FB 0007A         CALLS       #1, AED_COPSEGMENT                          ;
              50          40     A2   D0 0007F         MOVL        AED_L_FIRSTLINE, R0                         ; 3210
         04   B0        00B0     C2   0E 00083         INSQUE      AED_T_CURLINE, @4(R0)                       ;
         40   A2          44     A2   D1 00089         CMPL        AED_L_LASTLINE, AED_L_FIRSTLINE             ; 3211
                                 06   12 0008E         BNEQ        4$                                          ;
         44   A2        00B0     C2   9E 00090         MOVAB       AED_T_CURLINE, AED_L_LASTLINE               ; 3212
         40   A2          48     A2   D1 00096 4$:     CMPL        AED_L_BEGINLINE, AED_L_FIRSTLINE            ; 3213
                                 06   12 0009B         BNEQ        5$                                          ;
         48   A2        00B0     C2   9E 0009D         MOVAB       AED_T_CURLINE, AED_L_BEGINLINE              ; 3214
         40   A2        00B0     C2   9E 000A3 5$:     MOVAB       AED_T_CURLINE, AED_L_FIRSTLINE              ; 3215
         44   A2          40     A2   D1 000A9         CMPL        AED_L_FIRSTLINE, AED_L_LASTLINE             ; 3216
                                 07   13 000AE         BEQL        6$                                          ;
   03         62                 05   E1 000B0         BBC         #5, AED_L_FLAGS, 6$                         ; 3217
              62                 20   8A 000B4         BICB2       #32, AED_L_FLAGS                            ; 3218
                          E8     A3   D4 000B7 6$:     CLRL        BUFFER_INDEX                                ; 3219
         20   A2                 01   90 000BA         MOVB        #1, AED_B_COLUMN                            ; 3220
              7E          20     A2   9A 000BE         MOVZBL      AED_B_COLUMN, -(SP)                         ; 3221
              7E          24     A2   9A 000C2         MOVZBL      AED_B_LINE, -(SP)                           ;
      0000G   CF                 02   FB 000C6         CALLS       #2, AED_SET_CURSOR                          ;
                                 7D   11 000CB         BRB         11$                                         ; 3222
              62        2080     8F   AA 000CD 7$:     BICW2       #8320, AED_L_FLAGS                          ; 3227
      0000G   CF                 00   FB 000D2 8$:     CALLS       #0, AED_COMPRESS                            ; 3229
         40   A2          30     A2   D0 000D7         MOVL        AED_Q_LINETABLE, AED_L_FIRSTLINE            ; 3230
                          40     A2   DD 000DC         PUSHL       AED_L_FIRSTLINE                             ; 3231
      0000G   CF                 01   FB 000DF         CALLS       #1, AED_POSITION                            ;
                          40     A2   DD 000E4         PUSHL       AED_L_FIRSTLINE                             ; 3232
```

```
                 0000G  CF              01 FB 000E7          CALLS   #1, AED_COPSEGMENT
                        50        40    A2 D0 000EC          MOVL    AED_L_FIRSTLINE, R0                 ;3233
                   04   B0      00B0    C2 0E 000F0          INSQUE  AED_T_CURLINE, @4(R0)
                        50      00B0    C2 9E 000F6          MOVAB   AED_T_CURLINE, R0                   ;3234
                   44   A2              50 D0 000FB          MOVL    R0, AED_L_LASTLINE
                   40   A2              50 D0 000FF          MOVL    R0, AED_L_FIRSTLINE
                   48   A2              50 D0 00103          MOVL    R0, AED_L_BEGINLINE
                        50        44    A2 D0 00107          MOVL    AED_L_LASTLINE, R0                  ;3235
                 02C4   C2        08    A0 B0 0010B          MOVW    8(R0), AED_W_TOTALSIZE
                        50        44    A2 D0 00111          MOVL    AED_L_LASTLINE, R0                  ;3236
           10     0A   A0              01 E0 00115 9$:      BBS     #1, 10(R0), 10$
                   44   A2              60 D0 0011A          MOVL    (R0), AED_L_LASTLINE                ;3239
                        50        44    A2 D0 0011E          MOVL    AED_L_LASTLINE, R0                  ;3240
                 02C4   C2        08    A0 A0 00122          ADDW2   8(R0), AED_W_TOTALSIZE
                                        EB 11 00128          BRB     9$                                  ;3236
                        50        40    A2 D0 0012A 10$:     MOVL    AED_L_FIRSTLINE, R0                 ;3242
                   3C   A2        0C    A0 D0 0012E          MOVL    12(R0), AED_L_CURACE
                                  E8    A3 D4 00133          CLRL    BUFFER_INDEX                        ;3243
                   20   A2              01 90 00136          MOVB    #1, AED_B_COLUMN                    ;3244
                   24   A2              01 90 0013A          MOVB    #1, AED_B_LINE
                                        01 DD 0013E          PUSHL   #1                                  ;3245
                                        01 DD 00140          PUSHL   #1
                 0000G  CF              02 FB 00142          CALLS   #2, AED_SET_CURSOR
                        62              20 8A 00147          BICB2   #32, AED_L_FLAGS                    ;3246
                   01   A2      2008    8F AA 0014A 11$:     BICW2   #8200, AED_L_FLAGS+1                ;3248
                                    10  A3 94 00150          CLRB    TERM_CHAR                           ;3249
                        50              01 D0 00153          MOVL    #1, R0                              ;3250
                                        04 00156             RET                                         ;3252

; Routine Size:  343 bytes,    Routine Base:  $CODE$ + 1DB7
```

```
;  2824     3253  1 %SBTTL  'ACT_BOTTOM - move to end of ACL'
;  2825     3254  1 ROUTINE ACT_BOTTOM =
;  2826     3255  1
;  2827     3256  1 !++
;  2828     3257  1 !
;  2829     3258  1 ! FUNCTIONAL DESCRIPTION:
;  2830     3259  1 !
;  2831     3260  1 !       This routine positions the cursor to the first character position
;  2832     3261  1 !       in a new ACE at the end of the ACL.  The screen is scrolled as
;  2833     3262  1 !       necessary.
;  2834     3263  1 !
;  2835     3264  1 ! CALLING SEQUENCE:
;  2836     3265  1 !       ACT_BOTTOM ()
;  2837     3266  1 !
;  2838     3267  1 ! INPUT PARAMETERS:
;  2839     3268  1 !       none
;  2840     3269  1 !
;  2841     3270  1 ! IMPLICIT INPUTS:
;  2842     3271  1 !       OWN storage
;  2843     3272  1 !
;  2844     3273  1 ! OUTPUT PARAMETERS:
;  2845     3274  1 !       none
;  2846     3275  1 !
;  2847     3276  1 ! IMPLICIT OUTPUTS:
;  2848     3277  1 !       none
;  2849     3278  1 !
;  2850     3279  1 ! ROUTINE VALUE:
;  2851     3280  1 !       1 if successful
;  2852     3281  1 !       error status otherwise
;  2853     3282  1 !
;  2854     3283  1 ! SIDE EFFECTS:
;  2855     3284  1 !       The line segment table is updated as necessary, ACE line pointers
;  2856     3285  1 !       are updated, and the object's ACL is updated as necessary.
;  2857     3286  1 !
;  2858     3287  1 !--
;  2859     3288  1
;  2860     3289  2 BEGIN
;  2861     3290  2
;  2862     3291  2 NEW_TEXT_LINE = AED_REPSEGMENT ();
;  2863     3292  2 IF .AED_L_FLAGS[AED_V_MODIFIED]
;  2864     3293  2 OR .AED_L_FLAGS[AED_V_INSERT]
;  2865     3294  2 OR .AED_L_FLAGS[AED_V_INSERTEXT]
;  2866     3295  2 THEN
;  2867     3296  3     BEGIN
;  2868     3297  3     FINISH_ACE ();
;  2869     3298  3     IF .AED_L_FLAGS[AED_V_PROMPT]
;  2870     3299  3     AND .AED_L_FLAGS[AED_V_FIRSTCHAR]
;  2871     3300  3     THEN
;  2872     3301  4         BEGIN
;  2873     3302  4         NEW_TEXT_LINE[LINE_V_DUMMY] = 1;
;  2874     3303  4         AED_W_TOTALSIZE = 0;
;  2875     3304  3         END;
;  2876     3305  3     AED_L_FLAGS[AED_V_INSERTEXT] = 0;
;  2877     3306  3     IF .AED_W_TOTALSIZE EQL 0
;  2878     3307  3     THEN NEW_TEXT_LINE = .NEW_TEXT_LINE[LINE_L_BLINK];
;  2879     3308  3     AED_COMPRESS ();
;  2880     3309  3     AED_L_STATUS = AED_UPDATEACL (.AED_W_TOTALSIZE);
```

```
;  2881          3310  3     IF NOT .AED_L_STATUS
;  2882          3311  3     THEN
;  2883          3312  4         BEGIN
;  2884          3313  4         AED_L_FLAGS[AED_V_ACERROR] = 1;
;  2885          3314  4         AED_POSITION (.AED_L_FIRSTLINE);
;  2886          3315  4         AED_COPSEGMENT (.AED_L_FIRSTLINE);
;  2887          3316  4         INSQUE (AED_T_CURLINE[LINE_L_FLINK],
;  2888          3317  4                 .AED_L_FIRSTLINE[LINE_L_BLINK]);
;  2889          3318  4         IF .AED_L_LASTLINE EQL .AED_L_FIRSTLINE
;  2890          3319  4         THEN AED_L_LASTLINE = AED_T_CURLINE;
;  2891          3320  4         IF .AED_L_BEGINLINE EQL .AED_L_FIRSTLINE
;  2892          3321  4         THEN AED_L_BEGINLINE = AED_T_CURLINE;
;  2893          3322  4         AED_L_FIRSTLINE = AED_T_CURLINE;
;  2894          3323  4         IF .AED_L_FIRSTLINE NEQ .AED_L_LASTLINE
;  2895          3324  4         AND .AED_L_FLAGS[AED_V_ENDACL]
;  2896          3325  4         THEN AED_L_FLAGS[AED_V_ENDACL] = 0;
;  2897          3326  4         BUFFER_INDEX = 0;
;  2898          3327  4         AED_B_COLUMN = 1;
;  2899          3328  4         AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  2900          3329  4         AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  2901          3330  4         AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  2902          3331  4         TERM_CHAR = 0;
;  2903          3332  4         RETURN 1;
;  2904          3333  3         END;
;  2905          3334  3     AED_L_FLAGS[AED_V_MODIFIED] = AED_L_FLAGS[AED_V_INSERT] = 0;
;  2906          3335  2     END;
;  2907          3336  2 AED_COMPRESS ();
;  2908          3337  2 AED_POSITION (AED_Q_LINETABLE[LINE_L_FLINK]);
;  2909          3338  2 INSQUE (AED_T_CURLINE[LINE_L_FLINK], .AED_Q_LINETABLE[LINE_L_BLINK]);
;  2910          3339  2 AED_L_FLAGS[AED_V_ENDACL] = 1;
;  2911          3340  2 AED_L_FLAGS[AED_V_INSERTEXT] = 1;
;  2912          3341  2 AED_W_TOTALSIZE = SEGMENT_SIZE = 0;
;  2913          3342  2 BUFFER_INDEX = 0;
;  2914          3343  2 AED_B_COLUMN = 1;
;  2915          3344  2 AED_L_FIRSTLINE = AED_L_LASTLINE = AED_T_CURLINE;
;  2916          3345  2 AED_L_FIRSTLINE[LINE_W_FLAGS] = LINE_M_BEGINACE;
;  2917          3346  2 AED_L_CURACE = 0;
;  2918          3347  2 IF .AED_L_FLAGS[AED_V_PROMPT]
;  2919          3348  2 THEN
;  2920          3349  3     BEGIN
;  2921          3350  3     AED_B_ACETYPE = 0;
;  2922          3351  3     AED_L_FLAGS[AED_V_NOITEMSEL] = 0;
;  2923          3352  3     AED_SELECTFIELD (BUFFER_INDEX);
;  2924          3353  3     ECHO_DESC[DSC$W_LENGTH] = .AED_T_CURLINE[LINE_W_SIZE];
;  2925          3354  3     ECHO_DESC[DSC$A_POINTER] = AED_T_CURLINE[LINE_T_TEXT];
;  2926          3355  3     SCR$SET_CURSOR (.AED_B_LINE, 1);
;  2927          3356  3     AED_PUTOUTPUT (ECHO_DESC);
;  2928          3357  3     SCR$ERASE_LINE (.AED_B_LINE, .SEGMENT_SIZE + 1);
;  2929          3358  3     AED_B_COLUMN = .BUFFER_INDEX + 1;
;  2930          3359  3     AED_L_FLAGS[AED_V_FIRSTCHAR] = 1;
;  2931          3360  2     END;
;  2932          3361  2 AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  2933          3362  2 AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  2934          3363  2 AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  2935          3364  2 TERM_CHAR = 0;
;  2936          3365  2 RETURN 1;
;  2937          3366  2
```

```
; 2938         3367  1 END;                                          ! End of routine ACT_BOTTOM


                                   000C 00000 ACT_BOTTOM:
                                                   .WORD   Save R2,R3                                   ; 3254
              53     0000'   CF     9E 00002       MOVAB   NEW_TEXT_LINE, R3                            ;
              52     0000'   CF     9E 00007       MOVAB   AED_L_FLAGS, R2                              ;
        0000G CF             00     FB 0000C       CALLS   #0, AED_REPSEGMENT                           ; 3291
              63             50     D0 00011       MOVL    R0, NEW_TEXT_LINE                            ;
                             62     95 00014       TSTB    AED_L_FLAGS                                  ; 3292
                             0D     19 00016       BLSS    1$                                           ;
   08     01  A2             05     E0 00018       BBS     #5, AED_L_FLAGS+1, 1$                        ; 3293
   03     01  A2             06     E0 0001D       BBS     #6, AED_L_FLAGS+1, 1$                        ; 3294
                           00A0     31 00022       BRW     8$                                           ;
        0000V CF             00     FB 00025 1$:   CALLS   #0, FINISH_ACE                               ; 3297
                     01      A2     95 0002A       TSTB    AED_L_FLAGS+1                                ; 3298
                             10     18 0002D       BGEQ    2$                                           ;
   0B     01  A2             04     E1 0002F       BBC     #4, AED_L_FLAGS+1, 2$                        ; 3299
              50             63     D0 00034       MOVL    NEW_TEXT_LINE, R0                            ; 3302
          0A  A0             04     88 00037       BISB2   #4, 10(R0)                                   ;
                   02C4      C2     B4 0003B       CLRW    AED_W_TOTALSIZE                              ; 3303
          01  A2     40      8F     8A 0003F 2$:   BICB2   #64, AED_L_FLAGS+1                           ; 3305
                   02C4      C2     B5 00044       TSTW    AED_W_TOTALSIZE                              ; 3306
                             07     12 00048       BNEQ    3$                                           ;
              50             63     D0 0004A       MOVL    NEW_TEXT_LINE, R0                            ; 3307
              63     04      A0     D0 0004D       MOVL    4(R0), NEW_TEXT_LINE                         ;
        0000G CF             00     FB 00051 3$:   CALLS   #0, AED_COMPRESS                             ; 3308
              7E   02C4      C2     3C 00056       MOVZWL  AED_W_TOTALSIZE, -(SP)                       ; 3309
        0000G CF             01     FB 0005B       CALLS   #1, AED_UPDATEACL                            ;
        008C  C2             50     D0 00060       MOVL    R0, AED_L_STATUS                             ;
              56   008C      C2     E8 00065       BLBS    AED_L_STATUS, 7$                             ; 3310
              62     40      8F     88 0006A       BISB2   #64, AED_L_FLAGS                             ; 3313
                     40      A2     DD 0006E       PUSHL   AED_L_FIRSTLINE                              ; 3314
        0000G CF             01     FB 00071       CALLS   #1, AED_POSITION                             ;
                     40      A2     DD 00076       PUSHL   AED_L_FIRSTLINE                              ; 3315
        0000G CF             01     FB 00079       CALLS   #1, AED_COPSEGMENT                           ;
              50     40      A2     D0 0007E       MOVL    AED_L_FIRSTLINE, R0                          ; 3317
          04  B0   00B0      C2     0E 00082       INSQUE  AED_T_CURLINE, @4(R0)                        ;
          40  A2     44      A2     D1 00088       CMPL    AED_L_LASTLINE, AED_L_FIRSTLINE              ; 3318
                             06     12 0008D       BNEQ    4$                                           ;
          44  A2   00B0      C2     9E 0008F       MOVAB   AED_T_CURLINE, AED_L_LASTLINE                ; 3319
          40  A2     48      A2     D1 00095 4$:   CMPL    AED_L_BEGINLINE, AED_L_FIRSTLINE             ; 3320
                             06     12 0009A       BNEQ    5$                                           ;
          48  A2   00B0      C2     9E 0009C       MOVAB   AED_T_CURLINE, AED_L_BEGINLINE               ; 3321
          40  A2   00B0      C2     9E 000A2 5$:   MOVAB   AED_T_CURLINE, AED_L_FIRSTLINE               ; 3322
          44  A2     40      A2     D1 000A8       CMPL    AED_L_FIRSTLINE, AED_L_LASTLINE              ; 3323
                             07     13 000AD       BEQL    6$                                           ;
   03         62             05     E1 000AF       BBC     #5, AED_L_FLAGS, 6$                          ; 3324
              62             20     8A 000B3       BICB2   #32, AED_L_FLAGS                             ; 3325
                     E8      A3     D4 000B6 6$:   CLRL    BUFFER_INDEX                                 ; 3326
          20  A2             01     90 000B9       MOVB    #1, AED_B_COLUMN                             ; 3327
                           0092     31 000BD       BRW     9$                                           ; 3328
              62   2080      8F     AA 000C0 7$:   BICW2   #8320, AED_L_FLAGS                           ; 3334
        0000G CF             00     FB 000C5 8$:   CALLS   #0, AED_COMPRESS                             ; 3336
```

```
                                        30  A2  9F 000CA          PUSHAB  AED_Q_LINETABLE                          ; 3337
                   0000G  CF                01  FB 000CD          CALLS   #1, AED_POSITION                         ;
                      34  B2          00B0  C2  0E 000D2          INSQUE  AED_T_CURLINE, @AED_Q_LINETABLE+4        ; 3338
                          62          4020  8F  A8 000D8          BISW2   #16416, AED_L_FLAGS                      ; 3340
                                      00B8  C2  B4 000DD          CLRW    SEGMENT_SIZE                             ; 3341
                                      02C4  C2  B4 000E1          CLRW    AED_W_TOTALSIZE                          ;
                                        E8  A3  D4 000E5          CLRL    BUFFER_INDEX                             ; 3342
                      20  A2                01  90 000E8          MOVB    #1, AED_B_COLUMN                         ; 3343
                          50          00B0  C2  9E 000EC          MOVAB   AED_T_CURLINE, R0                        ; 3344
                      44  A2                50  D0 000F1          MOVL    R0, AED_L_LASTLINE                       ;
                      40  A2                50  D0 000F5          MOVL    R0, AED_L_FIRSTLINE                      ;
                      0A  A0                01  B0 000F9          MOVW    #1, 10(R0)                               ; 3345
                                        3C  A2  D4 000FD          CLRL    AED_L_CURACE                             ; 3346
                                        01  A2  95 00100          TSTB    AED_L_FLAGS+1                            ; 3347
                                            4D  18 00103          BGEQ    9$                                       ;
                                      00A8  C2  94 00105          CLRB    AED_B_ACETYPE                            ; 3350
                      02  A2                08  8A 00109          BICB2   #8, AED_L_FLAGS+2                        ; 3351
                                        E8  A3  9F 0010D          PUSHAB  BUFFER_INDEX                             ; 3352
                   0000G  CF                01  FB 00110          CALLS   #1, AED_SELECTFIELD                      ;
                      EC  A3          00B8  C2  B0 00115          MOVW    AED_T_CURLINE+8, ECHO_DESC               ; 3353
                      F0  A3          00C4  C2  9E 0011B          MOVAB   AED_T_CURLINE+20, ECHO_DESC+4            ; 3354
                                            01  DD 00121          PUSHL   #1                                       ; 3355
                          7E            24  A2  9A 00123          MOVZBL  AED_B_LINE, -(SP)                        ;
               00000000G  00                02  FB 00127          CALLS   #2, SCR$SET_CURSOR                       ;
                                        EC  A3  9F 0012E          PUSHAB  ECHO_DESC                                ; 3356
                   0000G  CF                01  FB 00131          CALLS   #1, AED_PUTOUTPUT                        ;
                          7E          00B8  C2  3C 00136          MOVZWL  SEGMENT_SIZE, -(SP)                      ; 3357
                                            6E  D6 0013B          INCL    (SP)                                     ;
                          7E            24  A2  9A 0013D          MOVZBL  AED_B_LINE, -(SP)                        ;
               00000000G  00                02  FB 00141          CALLS   #2, SCR$ERASE_LINE                       ;
        20    A2      E8  A3                01  81 00148          ADDB3   #1, BUFFER_INDEX, AED_B_COLUMN           ; 3358
                      01  A2                10  88 0014E          BISB2   #16, AED_L_FLAGS+1                       ; 3359
                          7E            20  A2  9A 00152 9$:      MOVZBL  AED_B_COLUMN, -(SP)                      ; 3361
                          7E            24  A2  9A 00156          MOVZBL  AED_B_LINE, -(SP)                        ;
                   0000G  CF                02  FB 0015A          CALLS   #2, AED_SET_CURSOR                       ;
                      01  A2          2008  8F  AA 0015F          BICW2   #8200, AED_L_FLAGS+1                     ; 3363
                                        10  A3  94 00165          CLRB    TERM_CHAR                                ; 3364
                          50                01  D0 00168          MOVL    #1, R0                                   ; 3365
                                                04 0016B          RET                                              ; 3367

; Routine Size:  364 bytes,     Routine Base:  $CODE$ + 1F0E
```

```
;  2940          3368  1 %SBTTL  'ACT_FIND_STR - locate specific string'
;  2941          3369  1 ROUTINE ACT_FIND_STR =
;  2942          3370  1
;  2943          3371  1 !++
;  2944          3372  1 !
;  2945          3373  1 ! FUNCTIONAL DESCRIPTION:
;  2946          3374  1 !
;  2947          3375  1 !       This routine obtains the string to be searched for.  If the search
;  2948          3376  1 !       string is terminated by the ADVANCE action key, the search is in
;  2949          3377  1 !       the forward direction.  If the search string is terminated by the
;  2950          3378  1 !       BACKUP action key, the search is in the backward direction.  The
;  2951          3379  1 !       screen is scrolled as necessary to accomodate the next occurrance
;  2952          3380  1 !       of the search string.
;  2953          3381  1 !
;  2954          3382  1 ! CALLING SEQUENCE:
;  2955          3383  1 !       ACT_FIND_STR ()
;  2956          3384  1 !
;  2957          3385  1 ! INPUT PARAMETERS:
;  2958          3386  1 !       none
;  2959          3387  1 !
;  2960          3388  1 ! IMPLICIT INPUTS:
;  2961          3389  1 !       OWN storage
;  2962          3390  1 !
;  2963          3391  1 ! OUTPUT PARAMETERS:
;  2964          3392  1 !       none
;  2965          3393  1 !
;  2966          3394  1 ! IMPLICIT OUTPUTS:
;  2967          3395  1 !       none
;  2968          3396  1 !
;  2969          3397  1 ! ROUTINE VALUE:
;  2970          3398  1 !       1 if successful
;  2971          3399  1 !       error status otherwise
;  2972          3400  1 !
;  2973          3401  1 ! SIDE EFFECTS:
;  2974          3402  1 !       The line segment table is updated as necessary, ACE line pointers
;  2975          3403  1 !       are updated, and the object's ACL is updated as necessary.
;  2976          3404  1 !
;  2977          3405  1 !--
;  2978          3406  1
;  2979          3407  2 BEGIN
;  2980          3408  2
;  2981          3409  2 LOCAL
;  2982          3410  2         STRING_INDEX    : VECTOR [1,WORD];      ! Index into search string buffer
;  2983          3411  2
;  2984          3412  2 AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  2985          3413  2 SCR$SET_CURSOR (2^T, 1);
;  2986          3414  2 AED_PUTOUTPUT ($DESCRIPTOR ('Search string: '));
;  2987          3415  2 STRING_INDEX = 0;
;  2988          3416  2 WHILE T
;  2989          3417  2 DO
;  2990          3418  3     BEGIN
;  2991          3419  3     TERM_CHAR = AED_DECODEKEY ();
;  2992          3420  3     AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  2993          3421  3     IF .TERM_CHAR EQL 0 THEN RETURN 1;
;  2994          3422  3     IF .AED_L_FLAGS[AED_V_ACTIONKEY]
;  2995          3423  3     OR .TERM_CHAR EQL AED_C_CHAR_ESC
;  2996          3424  3     THEN
```

```
;  2997     3425  4          BEGIN
;  2998     3426  4          IF .TERM_CHAR EQL KEY_C_RUB_BOL
;  2999     3427  4          THEN
;  3000     3428  5              BEGIN
;  3001     3429  5              SCR$ERASE_PAGE (21, 1);
;  3002     3430  5              SCR$SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  3003     3431  5              AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  3004     3432  5              AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  3005     3433  5              TERM_CHAR = 0;
;  3006     3434  5              RETURN 1;
;  3007     3435  5              END
;  3008     3436  4          ELSE IF .TERM_CHAR EQL KEY_C_RUB_CHR
;  3009     3437  4          THEN
;  3010     3438  5              BEGIN
;  3011     3439  5              IF .STRING_INDEX GTR 0
;  3012     3440  5              THEN
;  3013     3441  6                  BEGIN
;  3014     3442  6                  STRING_INDEX = .STRING_INDEX - 1;
;  3015   P 3443  6                  AED_PUTOUTPUT ($DESCRIPTOR (%CHAR (AED_C_CHAR_BS),
;  3016   P 3444  6                                              %CHAR (AED_C_CHAR_BS)));
;  3017     3445  6                  END;
;  3018     3446  5              END
;  3019     3447  5          ELSE EXITLOOP;
;  3020     3448  4          END
;  3021     3449  4      ELSE IF .TERM_CHAR GEQ ' '
;  3022     3450  3      THEN
;  3023     3451  3          BEGIN
;  3024     3452  4          IF .TERM_CHAR GEQ 'a' AND .TERM_CHAR LEQ 'z'
;  3025     3453  4          THEN TERM_CHAR = .TERM_CHAR - 32;       ! Convert lower to upper case
;  3026     3454  4          ECHO_DESC[DSC$W_LENGTH] = 1;
;  3027     3455  4          ECHO_DESC[DSC$A_POINTER] = TERM_CHAR;
;  3028     3456  4          AED_PUTOUTPUT (ECHO_DESC);
;  3029     3457  4          SEARCH_STRING[.STRING_INDEX] = .TERM_CHAR;
;  3030     3458  4          STRING_INDEX = .STRING_INDEX + 1;
;  3031     3459  4          END;
;  3032     3460  3          END;
;  3033     3461  2      END;
;  3034     3462  2  SEARCH_SIZE = .STRING_INDEX;
;  3035     3463  2  SCR$ERASE_PAGE (21, 1);
;  3036     3464  2  IF .SEARCH_SIZE EQL 0
;  3037     3465  2  THEN
;  3038     3466  3      BEGIN
;  3039     3467  3      SCR$SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  3040     3468  3      AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  3041     3469  3      AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  3042     3470  3      TERM_CHAR = 0;
;  3043     3471  3      RETURN 1;
;  3044     3472  2      END;
;  3045     3473  2  IF .AED_L_FLAGS[AED_V_ACTIONKEY]
;  3046     3474  2  THEN
;  3047     3475  3      BEGIN
;  3048     3476  3      IF .TERM_CHAR EQL KEY_C_ADVANCE THEN AED_L_FLAGS[AED_V_BACKWARD] = 0;
;  3049     3477  3      IF .TERM_CHAR EQL KEY_C_BACKUP THEN AED_L_FLAGS[AED_V_BACKWARD] = 1;
;  3050     3478  2      END;
;  3051     3479  2  AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  3052     3480  2  TERM_CHAR = KEY_C_FIND_NXT;
;  3053     3481  2  RETURN 1;
```

```
;  3054          3482  2
;  3055          3483  1 END;                                    ! End of routine ACT_FIND_STR


                                                                  .PSECT  $PLIT$,NOWRT,NOEXE,2

20 3A 67 6E 69 72 74 73 20 68 63 72 61 65 53  00000 P.AAB:  .ASCII  \Search string: \                ;
                                              0000F          .BLKB   1
                                     0000000F 00010 P.AAA:   .LONG   15                              ;
                                     00000000' 00014         .ADDRESS P.AAB                          ;
                                           08 00018 P.AAD:   .ASCII  <8>                             ;
                                           20 00019          .ASCII  \ \                             ;
                                           08 0001A          .ASCII  <8>                             ;
                                              0001B          .BLKB   1
                                     00000003 0001C P.AAC:   .LONG   3                               ;
                                     00000000' 00020         .ADDRESS P.AAD                          ;


                                                                  .PSECT  $CODE$,NOWRT,2

                                           01FC 00000 ACT_FIND_STR:
                                                                  .WORD   Save R2,R3,R4,R5,R6,R7,R8       ; 3369
                                        58     0000G  CF  9E 00002        MOVAB   AED_PUTOUTPUT, R8       ;
                                        57 00000000G  00  9E 00007        MOVAB   SCR$ERASE_PAGE, R7      ;
                                        56 00000000G  00  9E 0000E        MOVAB   SCR$SET_CURSOR, R6      ;
                                        55     0000'  CF  9E 00015        MOVAB   AED_L_FLAGS, R5         ;
                                        54     0000'  CF  9E 0001A        MOVAB   TERM_CHAR, R4           ;
                                  01    A5            08  8A 0001F        BICB2   #8, AED_L_FLAGS+1       ; 3412
                                                      01  DD 00023        PUSHL   #1                      ; 3413
                                                      15  DD 00025        PUSHL   #21                     ;
                                        66            02  FB 00027        CALLS   #2, SCR$SET_CURSOR      ;
                                           0000'      CF  9F 0002A        PUSHAB  P.AAA                   ; 3414
                                        68            01  FB 0002E        CALLS   #1, AED_PUTOUTPUT       ;
                                                      53  B4 00031        CLRW    STRING_INDEX            ; 3415
                                  0000G CF            00  FB 00033 1$:     CALLS   #0, AED_DECODEKEY       ; 3419
                                        64            50  90 00038        MOVB    R0, TERM_CHAR           ;
                                  01    A5            08  8A 0003B        BICB2   #8, AED_L_FLAGS+1       ; 3420
                                        52            64  9A 0003F        MOVZBL  TERM_CHAR, R2           ; 3421
                                                      7D  13 00042        BEQL    8$                      ;
                               05 02    A5            05  E0 00044        BBS     #5, AED_L_FLAGS+2, 2$   ; 3422
                                        1B            52  91 00049        CMPB    R2, #27                 ; 3423
                                                      22  12 0004C        BNEQ    4$                      ;
                                        23            52  91 0004E 2$:     CMPB    R2, #35                 ; 3426
                                                      09  12 00051        BNEQ    3$                      ;
                                                      01  DD 00053        PUSHL   #1                      ; 3429
                                                      15  DD 00055        PUSHL   #21                     ;
                                        67            02  FB 00057        CALLS   #2, SCR$ERASE_PAGE      ;
                                                      52  11 0005A        BRB     7$                      ; 3430
                                        29            52  91 0005C 3$:     CMPB    R2, #41                 ; 3436
                                                      3D  12 0005F        BNEQ    6$                      ;
                                                      53  B5 00061        TSTW    STRING_INDEX            ; 3439
                                                      CE  13 00063        BEQL    1$                      ;
                                                      53  B7 00065        DECW    STRING_INDEX            ; 3442
                                           0000'      CF  9F 00067        PUSHAB  P.AAC                   ; 3445
                                        68            01  FB 0006B        CALLS   #1, AED_PUTOUTPUT       ;
```

```
                                C3  11 0006E          BRB     1$                                     ; 3436
              20                52  91 00070  4$:     CMPB    R2, #32                                ; 3450
                                BE  1F 00073          BLSSU   1$
         61   8F                52  91 00075          CMPB    R2, #97                                ; 3453
                                09  1F 00079          BLSSU   5$
         7A   8F                52  91 0007B          CMPB    R2, #122
                                03  1A 0007F          BGTRU   5$
              64                20  82 00081          SUBB2   #32, TERM_CHAR                         ; 3454
         DC   A4                01  B0 00084  5$:     MOVW    #1, ECHO_DESC                          ; 3455
         E0   A4                64  9E 00088          MOVAB   TERM_CHAR, ECHO_DESC+4                 ; 3456
                        DC      A4  9F 0008C          PUSHAB  ECHO_DESC                              ; 3457
              68                01  FB 0008F          CALLS   #1, AED_PUTOUTPUT
              50                53  3C 00092          MOVZWL  STRING_INDEX, R0                       ; 3458
         08 A440                64  90 00095          MOVB    TERM_CHAR, SEARCH_STRING[R0]
                                53  B6 0009A          INCW    STRING_INDEX                           ; 3459
                                95  11 0009C          BRB     1$                                     ; 3416
         04   A4                53  B0 0009E  6$:     MOVW    STRING_INDEX, SEARCH_SIZE              ; 3462
                                01  DD 000A2          PUSHL   #1                                     ; 3463
                                15  DD 000A4          PUSHL   #21
              67                02  FB 000A6          CALLS   #2, SCR$ERASE_PAGE
                        04      A4  B5 000A9          TSTW    SEARCH_SIZE                            ; 3464
                                15  12 000AC          BNEQ    9$
              7E        20      A5  9A 000AE  7$:     MOVZBL  AED_B_COLUMN, -(SP)                    ; 3467
              7E        24      A5  9A 000B2          MOVZBL  AED_B_LINE, -(SP)
              66                02  FB 000B6          CALLS   #2, SCR$SET_CURSOR
         01   A5      2008      8F  AA 000B9          BICW2   #8200, AED_L_FLAGS+1                   ; 3469
                                64  94 000BF          CLRB    TERM_CHAR                              ; 3470
                                1E  11 000C1  8$:     BRB     12$                                    ; 3471
   12    02   A5                05  E1 000C3  9$:     BBC     #5, AED_L_FLAGS+2, 11$                 ; 3473
              0C                64  91 000C8          CMPB    TERM_CHAR, #12                         ; 3476
                                04  12 000CB          BNEQ    10$
         01   A5                01  8A 000CD          BICB2   #1, AED_L_FLAGS+1
              0E                64  91 000D1  10$:    CMPB    TERM_CHAR, #14                         ; 3477
                                04  12 000D4          BNEQ    11$
         01   A5                01  88 000D6          BISB2   #1, AED_L_FLAGS+1
         01   A5                08  8A 000DA  11$:    BICB2   #8, AED_L_FLAGS+1                      ; 3479
              64                05  90 000DE          MOVB    #5, TERM_CHAR                          ; 3480
              50                01  D0 000E1  12$:    MOVL    #1, R0                                 ; 3481
                                    04 000E4          RET                                            ; 3483

; Routine Size:  229 bytes,    Routine Base:  $CODE$ + 207A
```

```
;  3057          3484  1 %SBTTL  'ACT_FIND_NXT - locate next occurrance of string'
;  3058          3485  1 ROUTINE ACT_FIND_NXT =
;  3059          3486  1
;  3060          3487  1 !++
;  3061          3488  1 !
;  3062          3489  1 ! FUNCTIONAL DESCRIPTION:
;  3063          3490  1 !
;  3064          3491  1 !       This routine searches for the next occurrence of the selected search
;  3065          3492  1 !       string.  The direction of the search depends of the state of the
;  3066          3493  1 !       BACKWARD flag.
;  3067          3494  1 !
;  3068          3495  1 ! CALLING SEQUENCE:
;  3069          3496  1 !       ACT_FIND_NXT ()
;  3070          3497  1 !
;  3071          3498  1 ! INPUT PARAMETERS:
;  3072          3499  1 !       none
;  3073          3500  1 !
;  3074          3501  1 ! IMPLICIT INPUTS:
;  3075          3502  1 !       OWN storage
;  3076          3503  1 !
;  3077          3504  1 ! OUTPUT PARAMETERS:
;  3078          3505  1 !       none
;  3079          3506  1 !
;  3080          3507  1 ! IMPLICIT OUTPUTS:
;  3081          3508  1 !       none
;  3082          3509  1 !
;  3083          3510  1 ! ROUTINE VALUE:
;  3084          3511  1 !       1 if successful
;  3085          3512  1 !       error status otherwise
;  3086          3513  1 !
;  3087          3514  1 ! SIDE EFFECTS:
;  3088          3515  1 !       The line segment table is updated as necessary, ACE line pointers
;  3089          3516  1 !       are updated, and the object's ACL is updated as necessary.
;  3090          3517  1 !
;  3091          3518  1 !--
;  3092          3519  1
;  3093          3520  2 BEGIN
;  3094          3521  2
;  3095          3522  2 LOCAL
;  3096          3523  2         START_SEGMENT   : REF $BBLOCK,          ! Line where search started
;  3097          3524  2         SEARCH_BEGIN    : VECTOR [1,WORD],      ! Where to start the search
;  3098          3525  2         SEARCH_END      : VECTOR [1,WORD],      ! Where the search ends
;  3099          3526  2         STRING_LOCATION,                        ! Location of the found string or 0
;  3100          3527  2         NEW_ACE,                                ! String found in new ACE flag
;  3101          3528  2         MATCH_SEGMENT   : REF $BBLOCK;          ! Address of line that matched
;  3102          3529  2
;  3103          3530  2 IF .SEARCH_SIZE EQL 0
;  3104          3531  2 THEN
;  3105          3532  3     BEGIN
;  3106          3533  3     AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  3107          3534  3     AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  3108          3535  3     TERM_CHAR = 0;
;  3109          3536  3     RETURN 1;
;  3110          3537  2     END;
;  3111          3538  2 IF NOT .AED_L_FLAGS[AED_V_BACKWARD]
;  3112          3539  2 THEN
;  3113          3540  3     BEGIN
```

```
;  3114     3541  3
;  3115     3542  3  ! See if the specified string is within the current line.
;  3116     3543  3
;  3117     3544  3      SEARCH_BEGIN = .BUFFER_INDEX + .SEARCH_SIZE;
;  3118     3545  3      IF .SEARCH_BEGIN GEQ .SEGMENT_SIZE
;  3119     3546  3      OR .SEARCH_BEGIN + .SEARCH_SIZE GTR .SEGMENT_SIZE
;  3120     3547  3      THEN STRING_LOCATION = 0
;  3121     3548  3      ELSE STRING_LOCATION = CH$FIND_SUB (.SEGMENT_SIZE - .SEARCH_BEGIN,
;  3122     3549  3                                         INPUT_BUFFER[.SEARCH_BEGIN],
;  3123     3550  3                                         .SEARCH_SIZE, SEARCH_STRING);
;  3124     3551  3      IF .STRING_LOCATION NEQ 0
;  3125     3552  3      THEN
;  3126     3553  4          BEGIN
;  3127     3554  4          BUFFER_INDEX = .STRING_LOCATION - INPUT_BUFFER[0];
;  3128     3555  4          AED_B_COLUMN = .BUFFER_INDEX + 1;
;  3129     3556  4          AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  3130     3557  4          AED_L_FLAGS[AED_V_GOKEY] = 0;
;  3131     3558  4          AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  3132     3559  4          TERM_CHAR = 0;
;  3133     3560  4          RETURN 1;
;  3134     3561  4          END;
;  3135     3562  3
;  3136     3563  3  ! The specified search string is not within the current line.  Update the
;  3137     3564  3  ! text ACE with the current line segment.  Then loop through the remaining
;  3138     3565  3  ! line segments in the line table looking for the search string.  If it is
;  3139     3566  3  ! found beyond the end of the current ACE, update the ACL with the current
;  3140     3567  3  ! ACE.  Otherwise, simply set the various pointers to point to the line
;  3141     3568  3  ! segment where the search string was found.
;  3142     3569  3
;  3143     3570  3      NEW_TEXT_LINE = AED_REPSEGMENT ();
;  3144     3571  3      START_SEGMENT = .NEW_TEXT_LINE;
;  3145     3572  3      AED_L_FLAGS[AED_V_ENDACL] = 0;
;  3146     3573  3      AED_L_FLAGS[AED_V_INSERTEXT] = 0;
;  3147     3574  3      MATCH_SEGMENT = .NEW_TEXT_LINE[LINE_L_FLINK];
;  3148     3575  3      NEW_ACE = .AED_L_LASTLINE EQL .NEW_TEXT_LINE;
;  3149     3576  3      SEARCH_BEGIN = 0;
;  3150     3577  3      UNTIL .MATCH_SEGMENT EQLA AED_Q_LINETABLE[LINE_L_FLINK]
;  3151     3578  3      DO
;  3152     3579  4          BEGIN
;  3153     3580  4          STRING_LOCATION = CH$FIND_SUB (.MATCH_SEGMENT[LINE_W_SIZE] -
;  3154     3581  4                                         .SEARCH_BEGIN,
;  3155     3582  4                                         VECTOR [MATCH_SEGMENT[LINE_T_TEXT],
;  3156     3583  4                                                 .SEARCH_BEGIN; ,BYTE],
;  3157     3584  4                                         .SEARCH_SIZE, SEARCH_STRING);
;  3158     3585  4          IF .STRING_LOCATION NEQ 0
;  3159     3586  4          THEN
;  3160     3587  5              BEGIN
;  3161     3588  5              IF .NEW_ACE
;  3162     3589  6              AND (.AED_L_FLAGS[AED_V_MODIFIED]
;  3163     3590  6                   OR .AED_L_FLAGS[AED_V_INSERT]
;  3164     3591  6                   OR .AED_L_FLAGS[AED_V_INSERTEXT])
;  3165     3592  5              THEN
;  3166     3593  6                  BEGIN
;  3167     3594  6                  FINISH_ACE ();
;  3168     3595  6                  IF .AED_L_FLAGS[AED_V_PROMPT]
;  3169     3596  6                  AND .AED_L_FLAGS[AED_V_FIRSTCHAR]
;  3170     3597  6                  THEN
```

```
;  3171        3598  7                    BEGIN
;  3172        3599  7                    NEW_TEXT_LINE[LINE_V_DUMMY] = 1;
;  3173        3600  7                    AED_W_TOTALSIZE = 0;
;  3174        3601  6                    END;
;  3175        3602  6                AED_L_FLAGS[AED_V_INSERTEXT] = 0;
;  3176        3603  6                IF .AED_W_TOTALSIZE EQL 0
;  3177        3604  6                THEN NEW_TEXT_LINE = .NEW_TEXT_LINE[LINE_L_FLINK];
;  3178        3605  6                AED_COMPRESS ();
;  3179        3606  6                AED_L_STATUS = AED_UPDATEACL (.AED_W_TOTALSIZE);
;  3180        3607  6                IF NOT .AED_L_STATUS
;  3181        3608  6                THEN
;  3182        3609  7                    BEGIN
;  3183        3610  7                    AED_L_FLAGS[AED_V_ACERROR] = 1;
;  3184        3611  7                    AED_POSITION (.AED_L_FIRSTLINE);
;  3185        3612  7                    AED_COPSEGMENT (.AED_L_FIRSTLINE);
;  3186        3613  7                    INSQUE (AED_T_CURLINE[LINE_L_FLINK],
;  3187        3614  7                            .AED_L_FIRSTLINE[LINE_L_BLINK]);
;  3188        3615  7                    IF .AED_L_LASTLINE EQL .AED_L_FIRSTLINE
;  3189        3616  7                    THEN AED_L_LASTLINE = AED_T_CURLINE;
;  3190        3617  7                    IF .AED_L_BEGINLINE EQL .AED_L_FIRSTLINE
;  3191        3618  7                    THEN AED_L_BEGINLINE = AED_T_CURLINE;
;  3192        3619  7                    AED_L_FIRSTLINE = AED_T_CURLINE;
;  3193        3620  7                    IF .AED_L_FIRSTLINE NEQ .AED_L_LASTLINE
;  3194        3621  7                    AND .AED_L_FLAGS[AED_V_ENDACL]
;  3195        3622  7                    THEN AED_L_FLAGS[AED_V_ENDACL] = 0;
;  3196        3623  7                    BUFFER_INDEX = 0;
;  3197        3624  7                    AED_B_COLUMN = 1;
;  3198        3625  7                    AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  3199        3626  7                    AED_L_FLAGS[AED_V_GOTOKEY] = 0;
;  3200        3627  7                    AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  3201        3628  7                    TERM_CHAR = 0;
;  3202        3629  7                    RETURN 1;
;  3203        3630  6                    END;
;  3204        3631  6                AED_L_FLAGS[AED_V_MODIFIED] = AED_L_FLAGS[AED_V_INSERT] = 0;
;  3205        3632  5                END;
;  3206        3633  5            AED_L_FIRSTLINE = AED_L_LASTLINE = .MATCH_SEGMENT;
;  3207        3634  5            AED_W_TOTALSIZE = .AED_L_FIRSTLINE[LINE_W_SIZE];
;  3208        3635  5            UNTIL .AED_L_FIRSTLINE[LINE_V_BEGINACE]
;  3209        3636  5            DO
;  3210        3637  6                BEGIN
;  3211        3638  6                AED_L_FIRSTLINE = .AED_L_FIRSTLINE[LINE_L_BLINK];
;  3212        3639  6                AED_W_TOTALSIZE = .AED_W_TOTALSIZE + .AED_L_FIRSTLINE[LINE_W_SIZE];
;  3213        3640  5                END;
;  3214        3641  5            DO
;  3215        3642  6                BEGIN
;  3216        3643  6                AED_L_LASTLINE = .AED_L_LASTLINE[LINE_L_FLINK];
;  3217        3644  6                AED_W_TOTALSIZE = .AED_W_TOTALSIZE + .AED_L_LASTLINE[LINE_W_SIZE];
;  3218        3645  6                END
;  3219        3646  5            UNTIL .AED_L_LASTLINE[LINE_V_BEGINACE]
;  3220        3647  5               OR .AED_L_LASTLINE EQLA AED_Q_LINETABLE[LINE_L_FLINK];
;  3221        3648  5            AED_W_TOTALSIZE = .AED_W_TOTALSIZE - .AED_L_LASTLINE[LINE_W_SIZE];
;  3222        3649  5            AED_L_LASTLINE = .AED_L_LASTLINE[LINE_L_BLINK];
;  3223        3650  5            AED_POSITION (.MATCH_SEGMENT);
;  3224        3651  5            AED_COPSEGMENT (.MATCH_SEGMENT);
;  3225        3652  5            INSQUE (AED_T_CURLINE[LINE_L_FLINK],
;  3226        3653  5                    .MATCH_SEGMENT[LINE_L_BLINK]);
;  3227        3654  5            IF .AED_L_BEGINLINE EQL .MATCH_SEGMENT
```

```
;  3228          3655  5              THEN AED_L_BEGINLINE = AED_T_CURLINE[LINE_L_FLINK];
;  3229          3656  5              IF .AED_L_FIRSTLINE EQL .MATCH_SEGMENT
;  3230          3657  5              THEN AED_L_FIRSTLINE = AED_T_CURLINE[LINE_L_FLINK];
;  3231          3658  5              IF .AED_L_LASTLINE EQL .MATCH_SEGMENT
;  3232          3659  5              THEN AED_L_LASTLINE = AED_T_CURLINE[LINE_L_FLINK];
;  3233          3660  5              AED_L_CURACE = .AED_L_FIRSTLINE[LINE_L_BINACE];
;  3234          3661  5              BUFFER_INDEX = .STRING_LOCATION - MATCH_SEGMENT[LINE_T_TEXT];
;  3235          3662  5              AED_B_COLUMN = .BUFFER_INDEX + 1;
;  3236          3663  5              AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  3237          3664  5              AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  3238          3665  5              AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  3239          3666  5              TERM_CHAR = 0;
;  3240          3667  5              RETURN 1;
;  3241          3668  4              END;
;  3242          3669  4          IF .AED_L_LASTLINE EQL .MATCH_SEGMENT THEN NEW_ACE = 1;
;  3243          3670  4          MATCH_SEGMENT = .MATCH_SEGMENT[LINE_L_FLINK];
;  3244          3671  4          SEARCH_BEGIN = 0;
;  3245          3672  4          END;
;  3246          3673  3      END
;  3247          3674  2  ELSE
;  3248          3675  2      BEGIN
;  3249          3676  2      NEW_TEXT_LINE = AED_REPSEGMENT ();
;  3250          3677  2      START_SEGMENT = .NEW_TEXT_LINE;
;  3251          3678  2      MATCH_SEGMENT = NEW_TEXT_LINE[LINE_L_FLINK];
;  3252          3679  2      AED_L_FLAGS[AED_V_ENDACL] = 0;
;  3253          3680  2      AED_L_FLAGS[AED_V_INSERTEXT] = 0;
;  3254          3681  2      NEW_ACE = 0;
;  3255          3682  2      SEARCH_END = .BUFFER_INDEX;
;  3256          3683  2      UNTIL .MATCH_SEGMENT EQLA AED_Q_LINETABLE[LINE_L_FLINK]
;  3257          3684  3      DO
;  3258          3685  4          BEGIN
;  3259          3686  4          STRING_LOCATION = CH$FIND_SUB (.SEARCH_END, MATCH_SEGMENT[LINE_T_TEXT],
;  3260          3687  4                                         .SEARCH_SIZE, SEARCH_STRING);
;  3261          3688  4          IF .STRING_LOCATION NEQ 0
;  3262          3689  4          THEN
;  3263          3690  5              BEGIN
;  3264          3691  5              IF .NEW_ACE
;  3265          3692  6              AND (.AED_L_FLAGS[AED_V_MODIFIED]
;  3266          3693  6                   OR .AED_L_FLAGS[AED_V_INSERT]
;  3267          3694  6                   OR .AED_L_FLAGS[AED_V_INSERTEXT])
;  3268          3695  5              THEN
;  3269          3696  6                  BEGIN
;  3270          3697  6                  FINISH_ACE ();
;  3271          3698  6                  IF .AED_L_FLAGS[AED_V_PROMPT]
;  3272          3699  6                  AND .AED_L_FLAGS[AED_V_FIRSTCHAR]
;  3273          3700  6                  THEN
;  3274          3701  7                      BEGIN
;  3275          3702  7                      NEW_TEXT_LINE[LINE_V_DUMMY] = 1;
;  3276          3703  7                      AED_W_TOTALSIZE = 0;
;  3277          3704  6                      END;
;  3278          3705  6                  IF .AED_W_TOTALSIZE EQL 0
;  3279          3706  6                  THEN NEW_TEXT_LINE = .NEW_TEXT_LINE[LINE_L_FLINK];
;  3280          3707  6                  AED_COMPRESS ();
;  3281          3708  6                  AED_L_STATUS = AED_UPDATEACL (.AED_W_TOTALSIZE);
;  3282          3709  6                  IF NOT .AED_L_STATUS
;  3283          3710  6                  THEN
;  3284          3711  7                      BEGIN
```

```
;  3285     3712  7                    AED_L_FLAGS[AED_V_ACERROR] = 1;
;  3286     3713  7                    AED_POSITION (.AED_L_FIRSTLINE);
;  3287     3714  7                    AED_COPSEGMENT (.AED_L_FIRSTLINE);
;  3288     3715  7                    INSQUE (AED_T_CURLINE[LINE_L_FLINK],
;  3289     3716  7                            .AED_L_FIRSTLINE[LINE_L_BLINK]);
;  3290     3717  7                    IF .AED_L_LASTLINE EQL .AED_L_FIRSTLINE
;  3291     3718  7                    THEN AED_L_LASTLINE = AED_T_CURLINE;
;  3292     3719  7                    IF .AED_L_BEGINLINE EQL .AED_L_FIRSTLINE
;  3293     3720  7                    THEN AED_L_BEGINLINE = AED_T_CURLINE;
;  3294     3721  7                    AED_L_FIRSTLINE = AED_T_CURLINE;
;  3295     3722  7                    IF .AED_L_FIRSTLINE NEQ .AED_L_LASTLINE
;  3296     3723  7                    AND .AED_L_FLAGS[AED_V_ENDAC[]
;  3297     3724  7                    THEN AED_L_FLAGS[AED_V_ENDACL] = 0;
;  3298     3725  7                    BUFFER_INDEX = 0;
;  3299     3726  7                    AED_B_COLUMN = 1;
;  3300     3727  7                    AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  3301     3728  7                    AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  3302     3729  7                    AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  3303     3730  7                    TERM_CHAR = 0;
;  3304     3731  7                    RETURN 1;
;  3305     3732  6                    END;
;  3306     3733  6                AED_L_FLAGS[AED_V_MODIFIED] = AED_L_FLAGS[AED_V_INSERT] = 0;
;  3307     3734  5                END;
;  3308     3735  5            SEARCH_BEGIN = .SEARCH_END;
;  3309     3736  5            WHILE 1
;  3310     3737  5            DO
;  3311     3738  6                BEGIN
;  3312     3739  6                SEARCH_BEGIN = .SEARCH_BEGIN - .SEARCH_SIZE;
;  3313     3740  6                STRING_LOCATION = CH$FIND_SUB (.SEARCH_END - .SEARCH_BEGIN,
;  3314     3741  6                                               VECTOR [MATCH_SEGMENT[LINE_T_TEXT],
;  3315     3742  6                                                       .SEARCH_BEGIN; ,BYTE],
;  3316     3743  6                                               .SEARCH_SIZE, SEARCH_STRING);
;  3317     3744  6                IF .STRING_LOCATION NEQ 0
;  3318     3745  6                THEN
;  3319     3746  7                    BEGIN
;  3320     3747  7                    AED_L_FIRSTLINE = AED_L_LASTLINE = .MATCH_SEGMENT;
;  3321     3748  7                    AED_W_TOTALSIZE = .AED_L_FIRSTLINE[LINE_W_SIZE];
;  3322     3749  7                    UNTIL .AED_L_FIRSTLINE[LINE_V_BEGINACE]
;  3323     3750  7                    DO
;  3324     3751  8                        BEGIN
;  3325     3752  8                        AED_L_FIRSTLINE = .AED_L_FIRSTLINE[LINE_L_BLINK];
;  3326     3753  8                        AED_W_TOTALSIZE = .AED_W_TOTALSIZE + .AED_L_FIRSTLINE[LINE_W_SIZE];
;  3327     3754  7                        END;
;  3328     3755  7                    DO
;  3329     3756  8                        BEGIN
;  3330     3757  8                        AED_L_LASTLINE = .AED_L_LASTLINE[LINE_L_FLINK];
;  3331     3758  8                        AED_W_TOTALSIZE = .AED_W_TOTALSIZE + .AED_L_LASTLINE[LINE_W_SIZE];
;  3332     3759  8                        END
;  3333     3760  7                    UNTIL .AED_L_LASTLINE[LINE_V_BEGINACE]
;  3334     3761  7                       OR .AED_L_LASTLINE EQLA AED_Q_LINETABLE[LINE_L_FLINK];
;  3335     3762  7                    AED_W_TOTALSIZE = .AED_W_TOTALSIZE - .AED_L_LASTLINE[LINE_W_SIZE];
;  3336     3763  7                    AED_L_LASTLINE = .AED_L_LASTLINE[LINE_L_BLINK];
;  3337     3764  7                    AED_POSITION (.MATCH_SEGMENT);
;  3338     3765  7                    AED_COPSEGMENT (.MATCH_SEGMENT);
;  3339     3766  7                    INSQUE (AED_T_CURLINE[LINE_L_FLINK],
;  3340     3767  7                            .MATCH_SEGMENT[LINE_L_BLINK]);
;  3341     3768  7                    IF .AED_L_BEGINLINE EQL .MATCH_SEGMENT
```

```
7                              THEN AED_L_BEGINLINE = AED_T_CURLINE[LINE_L_FLINK];
7                              IF .AED_L_FIRSTLINE EQL .MATCH_SEGMENT
7                              THEN AED_L_FIRSTLINE = AED_T_CURLINE[LINE_L_FLINK];
7                              IF .AED_L_LASTLINE EQL .MATCH_SEGMENT
7                              THEN AED_L_LASTLINE = AED_T_CURLINE[LINE_L_FLINK];
7                              AED_L_CURACE = .AED_L_FIRSTLINE[LINE_L_BINACE];
7                              BUFFER_INDEX = .STRING_LOCATION - MATCH_SEGMENT[LINE_T_TEXT];
7                              AED_B_COLUMN = .BUFFER_INDEX + 1;
7                              AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
7                              AED_L_FLAGS[AED_V_GOLDKEY] = 0;
7                              AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
7                              TERM_CHAR = 0;
7                              RETURN 1;
6                              END;
5                          END;
4                      END;
4                  IF .AED_L_FIRSTLINE EQL .MATCH_SEGMENT THEN NEW_ACE = 1;
4                  MATCH_SEGMENT = .MATCH_SEGMENT[LINE_L_BLINK];
4                  SEARCH_END = .MATCH_SEGMENT[LINE_W_SIZE];
3                  END;
2          END;
2  SIGNAL (AED$_NOTFOUND);
2  AED_COPSEGMENT (.START_SEGMENT);
2  INSQUE (AED_T_CURLINE[LINE_L_FLINK], .START_SEGMENT[LINE_L_BLINK]);
2  IF .AED_L_BEGINLINE EQL .START_SEGMENT THEN AED_L_BEGINLINE = AED_T_CURLINE[LINE_L_FLINK];
2  IF .AED_L_FIRSTLINE EQL .START_SEGMENT THEN AED_L_FIRSTLINE = AED_T_CURLINE[LINE_L_FLINK];
2  IF .AED_L_LASTLINE EQL .START_SEGMENT THEN AED_L_LASTLINE = AED_T_CURLINE[LINE_L_FLINK];
2  AED_L_FLAGS[AED_V_ACERROR] = 1;
2  AED_L_FLAGS[AED_V_GOLDKEY] = 0;
2  AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
2  TERM_CHAR = 0;
2  RETURN 1;
2
1  END;                                                   ! End of routine ACT_FIND_NXT
```

```
                                  0FFC 00000 ACT_FIND_NXT:
                                                   .WORD   Save R2,R3,R4,R5,R6,R7,R8,R9,R10,R11          ; 3485
            5B      0000'   CF    9E 00002         MOVAB   NEW_TEXT_LINE, R11                            ;
            5A      0000'   CF    9E 00007         MOVAB   AED_L_FIRSTLINE, R10                          ;
            54        14    AB    3C 0000C         MOVZWL  SEARCH_SIZE, R4                               ; 3530
                            03    12 00010         BNEQ    1$                                            ;
                          0426    31 00012         BRW     70$                                           ;
            03        C1    AA    E9 00015 1$:     BLBC    AED_L_FLAGS+1, 2$                             ; 3538
                          01D6    31 00019         BRW     33$                                           ;
    57      E8      AB      54    A1 0001C 2$:     ADDW3   R4, BUFFER_INDEX, SEARCH_BEGIN                ; 3544
            50      57            3C 00021         MOVZWL  SEARCH_BEGIN, R0                              ; 3545
            51        78    AA    3C 00024         MOVZWL  SEGMENT_SIZE, R1                              ;
            51      50            D1 00028         CMPL    R0, R1                                        ;
                            09    18 0002B         BGEQ    3$                                            ;
    52      50      54            C1 0002D         ADDL3   R4, R0, R2                                    ; 3546
            51      52            D1 00031         CMPL    R2, R1                                        ;
                            04    15 00034         BLEQ    4$                                            ;
                            52    D4 00036 3$:     CLRL    STRING_LOCATION                               ; 3547
```

```
                                   17  11 00038           BRB     6$                                          ;
                    51             50  C2 0003A 4$:       SUBL2   R0, R1                                      ; 3548
 0084 CA40     51      18    AB    54  39 0003D           MATCHC  R4, SEARCH_STRING, R1, INPUT_BUFFER[R0]     ; 3549
                                   03  13 00046           BEQL    5$                                          ;
                             53    54  D0 00048           MOVL    R4, R3                                      ;
                             53    54  C2 0004B 5$:       SUBL2   R4, R3                                      ;
                             52    53  D0 0004E           MOVL    R3, STRING_LOCATION                         ;
                                   0D  13 00051 6$:       BEQL    7$                                          ; 3551
                    50     0084    CA  9E 00053           MOVAB   INPUT_BUFFER, R0                            ; 3554
           E8   AB           52    50  C3 00058           SUBL3   R0, STRING_LOCATION, BUFFER_INDEX           ;
                                 032A  31 0005D           BRW     59$                                         ; 3555
              0000G          CF    00  FB 00060 7$:       CALLS   #0, AED_REPSEGMENT                          ; 3570
                             6B    50  D0 00065           MOVL    R0, NEW_TEXT_LINE                           ;
                             51    6B  D0 00068           MOVL    NEW_TEXT_LINE, R1                           ; 3571
                             56    51  D0 0006B           MOVL    R1, START_SEGMENT                           ;
                 C0    AA  4020    8F  AA 0006E           BICW2   #16416, AED_L_FLAGS                         ; 3573
                             54    61  D0 00074           MOVL    (R1), MATCH_SEGMENT                         ; 3574
                                   50  D4 00077           CLRL    R0                                          ; 3575
                    51       04    AA  D1 00079           CMPL    AED_L_LASTLINE, R1                          ;
                                   02  12 0007D           BNEQ    8$                                          ;
                                   50  D6 0007F           INCL    R0                                          ;
                             58    50  D0 00081 8$:       MOVL    R0, NEW_ACE                                 ;
                                   57  B4 00084 9$:       CLRW    SEARCH_BEGIN                                ; 3576
                    50       F0    AA  9E 00086           MOVAB   AED_Q_LINETABLE, R0                         ; 3577
                             50    54  D1 0008A           CMPL    MATCH_SEGMENT, R0                           ;
                                   03  12 0008D           BNEQ    10$                                         ;
                                 0321  31 0008F           BRW     63$                                         ;
                             50    57  3C 00092 10$:      MOVZWL  SEARCH_BEGIN, R0                            ; 3581
                    51       08    A4  3C 00095           MOVZWL  8(MATCH_SEGMENT), R1                        ;
                             51    50  C2 00099           SUBL2   R0, R1                                      ;
                    55       14    AB  3C 0009C           MOVZWL  SEARCH_SIZE, R5                             ; 3584
   14 A044     51      18    AB    55  39 000A0           MATCHC  R5, SEARCH_STRING, R1, 20(R0)-              ; 3583
                                                                  [MATCH_SEGMENT]                             ;
                                   03  13 000A8           BEQL    11$                                         ;
                             53    55  D0 000AA           MOVL    R5, R3                                      ;
                             53    55  C2 000AD 11$:      SUBL2   R5, R3                                      ;
                             52    53  D0 000B0           MOVL    R3, STRING_LOCATION                         ;
                                   03  12 000B3           BNEQ    12$                                         ; 3585
                                 012B  31 000B5           BRW     31$                                         ;
                             03    58  E8 000B8 12$:      BLBS    NEW_ACE, 14$                                ; 3588
                                 00A2  31 000BB 13$:      BRW     23$                                         ;
                          C0       AA  95 000BE 14$:      TSTB    AED_L_FLAGS                                 ; 3589
                                   0A  19 000C1           BLSS    15$                                         ;
                    05     C1    AA    05  E0 000C3           BBS     #5, AED_L_FLAGS+1, 15$                  ; 3590
                    EE     C1    AA    06  E1 000C8           BBC     #6, AED_L_FLAGS+1, 13$                  ; 3591
              0000V          CF    00  FB 000CD 15$:      CALLS   #0, FINISH_ACE                              ; 3594
                          C1       AA  95 000D2           TSTB    AED_L_FLAGS+1                               ; 3595
                                   10  18 000D5           BGEQ    16$                                         ;
                    0B     C1    AA    04  E1 000D7           BBC     #4, AED_L_FLAGS+1, 16$                  ; 3596
                             50    6B  D0 000DC           MOVL    NEW_TEXT_LINE, R0                           ; 3599
                    0A       A0    04  88 000DF           BISB2   #4, 10(R0)                                  ;
                         0284      CA  B4 000E3           CLRW    AED_W_TOTALSIZE                             ; 3600
                 C1    AA    40    8F  8A 000E7 16$:      BICB2   #64, AED_L_FLAGS+1                          ; 3602
                         0284      CA  B5 000EC           TSTW    AED_W_TOTALSIZE                             ; 3603
                                   03  12 000F0           BNEQ    17$                                         ;
                             7B    9B  D0 000F2           MOVL    @NEW_TEXT_LINE, NEW_TEXT_LINE               ; 3604
              0000G          CF    00  FB 000F5 17$:      CALLS   #0, AED_COMPRESS                            ; 3605
```

```
                 7E      0284   CA  3C 000FA          MOVZWL  AED_W_TOTALSIZE, -(SP)                        ; 3606
          0000G  CF             01  FB 000FF          CALLS   #1, AED_UPDATEACL                             ;
             4C  AA             50  D0 00104          MOVL    R0, AED_L_STATUS                              ;
                 4E        4C   AA  E8 00108          BLBS    AED_L_STATUS, 22$                             ; 3607
             C0  AA        40   8F  88 0010C          BISB2   #64, AED_L_FLAGS                              ; 3610
                                6A  DD 00111          PUSHL   AED_L_FIRSTLINE                               ; 3611
          0000G  CF             01  FB 00113          CALLS   #1, AED_POSITION                              ;
                                6A  DD 00118          PUSHL   AED_L_FIRSTLINE                               ; 3612
          0000G  CF             01  FB 0011A          CALLS   #1, AED_COPSEGMENT                            ;
                 50             6A  D0 0011F          MOVL    AED_L_FIRSTLINE, R0                           ; 3614
             04  B0        70   AA  0E 00122          INSQUE  AED_T_CURLINE, @4(R0)                         ;
                 6A        04   AA  D1 00127          CMPL    AED_L_LASTLINE, AED_L_FIRSTLINE               ; 3615
                                05  12 0012B          BNEQ    18$                                           ;
             04  AA        70   AA  9E 0012D          MOVAB   AED_T_CURLINE, AED_L_LASTLINE                 ; 3616
                 6A        08   AA  D1 00132  18$:    CMPL    AED_L_BEGINLINE, AED_L_FIRSTLINE              ; 3617
                                05  12 00136          BNEQ    19$                                           ;
             08  AA        70   AA  9E 00138          MOVAB   AED_T_CURLINE, AED_L_BEGINLINE                ; 3618
                 6A        70   AA  9E 0013D  19$:    MOVAB   AED_T_CURLINE, AED_L_FIRSTLINE                ; 3619
             04  AA             6A  D1 00141          CMPL    AED_L_FIRSTLINE, AED_L_LASTLINE               ; 3620
                                09  13 00145          BEQL    21$                                           ;
     04      C0  AA             05  E1 00147          BBC     #5, AED_L_FLAGS, 21$                          ; 3621
             C0  AA             20  8A 0014C  20$:    BICB2   #32, AED_L_FLAGS                              ; 3622
                           E8   AB  D4 00150  21$:    CLRL    BUFFER_INDEX                                  ; 3623
             E0  AA             01  90 00153          MOVB    #1, AED_B_COLUMN                              ; 3624
                              0236  31 00157          BRW     60$                                           ; 3625
             C0  AA      2080   8F  AA 0015A  22$:    BICW2   #8320, AED_L_FLAGS                            ; 3631
             04  AA             54  D0 00160  23$:    MOVL    MATCH_SEGMENT, AED_L_LASTLINE                 ; 3633
                 6A             54  D0 00164          MOVL    MATCH_SEGMENT, AED_L_FIRSTLINE                ;
                 50             6A  D0 00167          MOVL    AED_L_FIRSTLINE, R0                           ; 3634
           0284  CA        08   A0  B0 0016A          MOVW    8(R0), AED_W_TOTALSIZE                        ;
                 50             6A  D0 00170          MOVL    AED_L_FIRSTLINE, R0                           ; 3635
                 0F        0A   A0  E8 00173  24$:    BLBS    10(R0), 25$                                   ;
                 6A        04   A0  D0 00177          MOVL    4(R0), AED_L_FIRSTLINE                        ; 3638
                 50             6A  D0 0017B          MOVL    AED_L_FIRSTLINE, R0                           ; 3639
           0284  CA        08   A0  A0 0017E          ADDW2   8(R0), AED_W_TOTALSIZE                        ;
                                ED  11 00184          BRB     24$                                           ; 3635
                 50        04   AA  D0 00186  25$:    MOVL    AED_L_LASTLINE, R0                            ; 3643
             04  AA             60  D0 0018A  26$:    MOVL    (R0), AED_L_LASTLINE                          ;
                 50        04   AA  D0 0018E          MOVL    AED_L_LASTLINE, R0                            ; 3644
           0284  CA        08   A0  A0 00192          ADDW2   8(R0), AED_W_TOTALSIZE                        ;
                 09        0A   A0  E8 00198          BLBS    10(R0), 27$                                   ; 3646
                 51        F0   AA  9E 0019C          MOVAB   AED_Q_LINETABLE, R1                           ; 3647
                 51             50  D1 001A0          CMPL    R0, R1                                        ;
                                E5  12 001A3          BNEQ    26$                                           ;
           0284  CA        08   A0  A2 001A5  27$:    SUBW2   8(R0), AED_W_TOTALSIZE                        ; 3648
             04  AA        04   A0  D0 001AB          MOVL    4(R0), AED_L_LASTLINE                         ; 3649
                                54  DD 001B0          PUSHL   MATCH_SEGMENT                                 ; 3650
          0000G  CF             01  FB 001B2          CALLS   #1, AED_POSITION                              ;
                                54  DD 001B7          PUSHL   MATCH_SEGMENT                                 ; 3651
          0000G  CF             01  FB 001B9          CALLS   #1, AED_COPSEGMENT                            ;
             04  B4        70   AA  0E 001BE          INSQUE  AED_T_CURLINE, @4(MATCH_SEGMENT)              ; 3653
                 54        08   AA  D1 001C3          CMPL    AED_L_BEGINLINE, MATCH_SEGMENT                ; 3654
                                05  12 001C7          BNEQ    28$                                           ;
             08  AA        70   AA  9E 001C9          MOVAB   AED_T_CURLINE, AED_L_BEGINLINE                ; 3655
                 54             6A  D1 001CE  28$:    CMPL    AED_L_FIRSTLINE, MATCH_SEGMENT                ; 3656
                                04  12 001D1          BNEQ    29$                                           ;
                 6A        70   AA  9E 001D3          MOVAB   AED_T_CURLINE, AED_L_FIRSTLINE                ; 3657
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                                54        04    AA   D1 001D7 29$:    CMPL    AED_L_LASTLINE, MATCH_SEGMENT                ; 3658
                                                03   13 001DB         BEQL    30$                                          ;
                                             0199   31 001DD         BRW     58$                                          ;
                                             0191   31 001E0 30$:     BRW     57$                                          ;
                                54        04    AA   D1 001E3 31$:     CMPL    AED_L_LASTLINE, MATCH_SEGMENT            ; 3669
                                                03   12 001E7         BNEQ    32$                                          ;
                                58              01   D0 001E9         MOVL    #1, NEW_ACE                                  ;
                                54              64   D0 001EC 32$:     MOVL    (MATCH_SEGMENT), MATCH_SEGMENT               ; 3670
                                             FE92   31 001EF         BRW     9$                                           ; 3671
                          0000G CF              00   FB 001F2 33$:     CALLS   #0, AED_REPSEGMENT                           ; 3676
                                6B              50   D0 001F7         MOVL    R0, NEW_TEXT_LINE                            ;
                                56              6B   D0 001FA         MOVL    NEW_TEXT_LINE, START_SEGMENT                 ; 3677
                                54              6B   D0 001FD         MOVL    NEW_TEXT_LINE, MATCH_SEGMENT                 ; 3678
                             C0 AA        4020   8F   AA 00200         BICW2   #16416, AED_L_FLAGS                          ; 3680
                                59              58   D4 00206         CLRL    NEW_ACE                                      ; 3681
                                59        E8    AB   B0 00208         MOVW    BUFFER_INDEX, SEARCH_END                     ; 3682
                                50        F0    AA   9E 0020C 34$:     MOVAB   AED_Q_LINETABLE, R0                          ; 3683
                                50              54   D1 00210         CMPL    MATCH_SEGMENT, R0                            ;
                                                03   12 00213         BNEQ    35$                                          ;
                                             019B   31 00215         BRW     63$                                          ;
                                55        14    AB   3C 00218 35$:     MOVZWL  SEARCH_SIZE, R5                              ; 3687
14 A4                   59        18    AB        55   39 0021C         MATCHC  R5, SEARCH_STRING, SEARCH_END, -             ; 3686
                                                                                20(MATCH_SEGMENT)                            ;
                                                03   13 00223         BEQL    36$                                          ;
                                53              55   D0 00225         MOVL    R5, R3                                       ;
                                53              55   C2 00228 36$:     SUBL2   R5, R3                                       ;
                                52              53   D0 0022B         MOVL    R3, STRING_LOCATION                          ;
                                                03   12 0022E         BNEQ    37$                                          ; 3688
                                             016D   31 00230         BRW     61$                                          ;
                                03              58   E8 00233 37$:     BLBS    NEW_ACE, 39$                                 ; 3691
                                             0095   31 00236 38$:     BRW     48$                                          ;
                             C0 AA              95   00239 39$:     TSTB    AED_L_FLAGS                                  ; 3692
                                                0A   19 0023C         BLSS    40$                                          ;
05                      C1 AA                   05   E0 0023E         BBS     #5, AED_L_FLAGS+1, 40$                       ; 3693
EE                      C1 AA                   06   E1 00243         BBC     #6, AED_L_FLAGS+1, 38$                       ; 3694
                     0000V CF                   00   FB 00248 40$:     CALLS   #0, FINISH_ACE                               ; 3697
                             C1 AA              95   0024D         TSTB    AED_L_FLAGS+1                                ; 3698
                                                10   18 00250         BGEQ    41$                                          ;
0B                      C1 AA                   04   E1 00252         BBC     #4, AED_L_FLAGS+1, 41$                       ; 3699
                           50                   6B   D0 00257         MOVL    NEW_TEXT_LINE, R0                            ; 3702
                        0A A0                   04   88 0025A         BISB2   #4, 10(R0)                                   ;
                                          0284  CA   B4 0025E         CLRW    AED_W_TOTALSIZE                              ; 3703
                                          0284  CA   B5 00262 41$:     TSTW    AED_W_TOTALSIZE                              ; 3705
                                                03   12 00266         BNEQ    42$                                          ;
                                7B              9B   D0 00268         MOVL    @NEW_TEXT_LINE, NEW_TEXT_LINE                ; 3706
                          0000G CF              00   FB 0026B 42$:     CALLS   #0, AED_COMPRESS                             ; 3707
                                7E        0284  CA   3C 00270         MOVZWL  AED_W_TOTALSIZE, -(SP)                       ; 3708
                          0000G CF              01   FB 00275         CALLS   #1, AED_UPDATEACL                            ;
                             4C AA              50   D0 0027A         MOVL    R0, AED_L_STATUS                             ;
                                46        4C    AA   E8 0027E         BLBS    AED_L_STATUS, 47$                            ; 3709
                             C0 AA        40    8F   88 00282         BISB2   #64, AED_L_FLAGS                             ; 3712
                                                6A   DD 00287         PUSHL   AED_L_FIRSTLINE                              ; 3713
                          0000G CF              01   FB 00289         CALLS   #1, AED_POSITION                             ;
                                                6A   DD 0028E         PUSHL   AED_L_FIRSTLINE                              ; 3714
                          0000G CF              01   FB 00290         CALLS   #1, AED_COPSEGMENT                           ;
                                50              6A   D0 00295         MOVL    AED_L_FIRSTLINE, R0                          ; 3716
                          04 B0        70    AA   0E 00298         INSQUE  AED_T_CURLINE, @4(R0)                        ;
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                          6A      04  AA  D1 0029D         CMPL    AED_L_LASTLINE, AED_L_FIRSTLINE              ; 3717
                                      05  12 002A1         BNEQ    43$                                          ;
                   04     AA      70  AA  9E 002A3         MOVAB   AED_T_CURLINE, AED_L_LASTLINE                ; 3718
                          6A      08  AA  D1 002A8  43$:   CMPL    AED_L_BEGINLINE, AED_L_FIRSTLINE             ; 3719
                                      05  12 002AC         BNEQ    44$                                          ;
                   08     AA      70  AA  9E 002AE         MOVAB   AED_T_CURLINE, AED_L_BEGINLINE               ; 3720
                          6A      70  AA  9E 002B3  44$:   MOVAB   AED_T_CURLINE, AED_L_FIRSTLINE               ; 3721
                   04     AA          6A  D1 002B7         CMPL    AED_L_FIRSTLINE, AED_L_LASTLINE              ; 3722
                                      03  12 002BB         BNEQ    46$                                          ;
                                    FE90  31 002BD  45$:   BRW     21$                                          ;
           F8      C0     AA          05  E1 002C0  46$:   BBC     #5, AED_L_FLAGS, 45$                         ; 3723
                                    FE84  31 002C5         BRW     20$                                          ;
                   C0     AA    2080  8F  AA 002C8  47$:   BICW2   #8320, AED_L_FLAGS                           ; 3733
                          57          59  B0 002CE  48$:   MOVW    SEARCH_END, SEARCH_BEGIN                     ; 3735
                          57      14  AB  A2 002D1  49$:   SUBW2   SEARCH_SIZE, SEARCH_BEGIN                    ; 3739
                          50          57  3C 002D5         MOVZWL  SEARCH_BEGIN, R0                             ; 3740
                          51          59  3C 002D8         MOVZWL  SEARCH_END, R1                               ;
                          51          50  C2 002DB         SUBL2   R0, R1                                       ;
                          55      14  AB  3C 002DE         MOVZWL  SEARCH_SIZE, R5                              ; 3743
  14 A044  51      18     AB          55  39 002E2         MATCHC  R5, SEARCH_STRING, R1, 20(R0)-               ; 3742
                                                                   [MATCH_SEGMENT]                              ;
                                      03  13 002EA         BEQL    50$                                          ;
                          53          55  D0 002EC         MOVL    R5, R3                                       ;
                          53          55  C2 002EF  50$:   SUBL2   R5, R3                                       ;
                          52          53  D0 002F2         MOVL    R3, STRING_LOCATION                          ;
                                      DA  13 002F5         BEQL    49$                                          ; 3744
                   04     AA          54  D0 002F7         MOVL    MATCH_SEGMENT, AED_L_LASTLINE                ; 3747
                          6A          54  D0 002FB         MOVL    MATCH_SEGMENT, AED_L_FIRSTLINE               ;
                          50          6A  D0 002FE         MOVL    AED_L_FIRSTLINE, R0                          ; 3748
                 0284     CA      08  A0  B0 00301         MOVW    8(R0), AED_W_TOTALSIZE                       ;
                          50          6A  D0 00307         MOVL    AED_L_FIRSTLINE, R0                          ; 3749
                          0F      0A  A0  E8 0030A  51$:   BLBS    10(R0), 52$                                  ;
                          6A      04  A0  D0 0030E         MOVL    4(R0), AED_L_FIRSTLINE                       ; 3752
                          50          6A  D0 00312         MOVL    AED_L_FIRSTLINE, R0                          ; 3753
                 0284     CA      08  A0  A0 00315         ADDW2   8(R0), AED_W_TOTALSIZE                       ;
                                      ED  11 0031B         BRB     51$                                          ; 3749
                          50      04  AA  D0 0031D  52$:   MOVL    AED_L_LASTLINE, R0                           ; 3757
                   04     AA          60  D0 00321  53$:   MOVL    (R0), AED_L_LASTLINE                         ;
                          50      04  AA  D0 00325         MOVL    AED_L_LASTLINE, R0                           ; 3758
                 0284     CA      08  A0  A0 00329         ADDW2   8(R0), AED_W_TOTALSIZE                       ;
                          09      0A  A0  E8 0032F         BLBS    10(R0), 54$                                  ; 3760
                          51      F0  AA  9E 00333         MOVAB   AED_Q_LINETABLE, R1                          ; 3761
                          51          50  D1 00337         CMPL    R0, R1                                       ;
                                      E5  12 0033A         BNEQ    53$                                          ;
                 0284     CA      08  A0  A2 0033C  54$:   SUBW2   8(R0), AED_W_TOTALSIZE                       ; 3762
                   04     AA      04  A0  D0 00342         MOVL    4(R0), AED_L_LASTLINE                        ; 3763
                                      54  DD 00347         PUSHL   MATCH_SEGMENT                                ; 3764
                0000G     CF          01  FB 00349         CALLS   #1, AED_POSITION                             ;
                                      54  DD 0034E         PUSHL   MATCH_SEGMENT                                ; 3765
                0000G     CF          01  FB 00350         CALLS   #1, AED_COPSEGMENT                           ;
                   04     B4      70  AA  0E 00355         INSQUE  AED_T_CURLINE, @4(MATCH_SEGMENT)             ; 3767
                          54      08  AA  D1 0035A         CMPL    AED_L_BEGINLINE, MATCH_SEGMENT               ; 3768
                                      05  12 0035E         BNEQ    55$                                          ;
                   08     AA      70  AA  9E 00360         MOVAB   AED_T_CURLINE, AED_L_BEGINLINE               ; 3769
                          54          6A  D1 00365  55$:   CMPL    AED_L_FIRSTLINE, MATCH_SEGMENT               ; 3770
                                      04  12 00368         BNEQ    56$                                          ;
                          6A      70  AA  9E 0036A         MOVAB   AED_T_CURLINE, AED_L_FIRSTLINE               ; 3771
```

```
                 54         04    AA  D1 0036E  56$:    CMPL    AED_L_LASTLINE, MATCH_SEGMENT                         ; 3772
                                  05  12 00372          BNEQ    58$
              04 AA         70    AA  9E 00374  57$:    MOVAB   AED_T_CURLINE, AED_L_LASTLINE                         ; 3773
                 50               6A  D0 00379  58$:    MOVL    AED_L_FIRSTLINE, R0                                   ; 3774
              FC AA         0C    A0  D0 0037C          MOVL    12(R0), AED_L_CURACE
          53     52               54  C3 00381          SUBL3   MATCH_SEGMENT, STRING_LOCATION, R3                    ; 3775
              E8 AB         EC    A3  9E 00385          MOVAB   -20(R3), BUFFER_INDEX
    E0 AA     E8 AB               01  81 0038A  59$:    ADDB3   #1, BUFFER_INDEX, AED_B_COLUMN                        ; 3776
                 7E         E0    AA  9A 00390  60$:    MOVZBL  AED_B_COLUMN, -(SP)                                   ; 3777
                 7E         E4    AA  9A 00394          MOVZBL  AED_B_LINE, -(SP)
         0000G   CF               02  FB 00398          CALLS   #2, AED_SET_CURSOR
                          009B    31  0039D             BRW     70$                                                   ; 3778
                 54               6A  D1 003A0  61$:    CMPL    AED_L_FIRSTLINE, MATCH_SEGMENT                        ; 3785
                                  03  12 003A3          BNEQ    62$
                 58               01  D0 003A5          MOVL    #1, NEW_ACE
                 54         04    A4  D0 003A8  62$:    MOVL    4(MATCH_SEGMENT), MATCH_SEGMENT                       ; 3786
                 59         08    A4  B0 003AC          MOVW    8(MATCH_SEGMENT), SEARCH_END                          ; 3787
                               FE59   31 003B0          BRW     34$                                                   ; 3683
          16     C0 AA            03  E1 003B3  63$:    BBC     #3, AED_L_FLAGS, 64$                                  ; 3790
                                  01  DD 003B8          PUSHL   #1
                                  15  DD 003BA          PUSHL   #21
     00000000G   00               02  FB 003BC          CALLS   #2, SCR$ERASE_PAGE
                                  01  DD 003C3          PUSHL   #1
                                  15  DD 003C5          PUSHL   #21
     00000000G   00               02  FB 003C7          CALLS   #2, SCR$SET_CURSOR
                     00000000G    8F  DD 003CE  64$:    PUSHL   #AED$_NOTFOUND
     00000000G   00               01  FB 003D4          CALLS   #1, LIB$SIGNAL
          0F     C0 AA            03  E1 003DB          BBC     #3, AED_L_FLAGS, 65$
                 7E         E0    AA  9A 003E0          MOVZBL  AED_B_COLUMN, -(SP)
                 7E         E4    AA  9A 003E4          MOVZBL  AED_B_LINE, -(SP)
     00000000G   00               02  FB 003E8          CALLS   #2, SCR$SET_CURSOR
                     00000000*    8F  D5 003EF  65$:    TSTL    #<AED$_NOTFOUND&7>
                                  14  13 003F5          BEQL    66$
00000000*  8F    D4 AA        03  00  ED 003F7          CMPZV   #0, #3, AED_L_WORSTERR, #<AED$_NOTFOUND&7>
                                  08  18 00401          BGEQ    66$
              D4 AA  00000000G    8F  D0 00403          MOVL    #AED$_NOTFOUND, AED_L_WORSTERR
                                  56  DD 0040B  66$:    PUSHL   START_SEGMENT                                         ; 3791
         0000G   CF               01  FB 0040D          CALLS   #1, AED_COPSEGMENT
              04 B6         70    AA  0E 00412          INSQUE  AED_T_CURLINE, @4(START_SEGMENT)                      ; 3792
                 56         08    AA  D1 00417          CMPL    AED_L_BEGINLINE, START_SEGMENT                        ; 3793
                                  05  12 0041B          BNEQ    67$
              08 AA         70    AA  9E 0041D          MOVAB   AED_T_CURLINE, AED_L_BEGINLINE
                 56               6A  D1 00422  67$:    CMPL    AED_L_FIRSTLINE, START_SEGMENT                        ; 3794
                                  04  12 00425          BNEQ    68$
                 6A         70    AA  9E 00427          MOVAB   AED_T_CURLINE, AED_L_FIRSTLINE
                 56         04    AA  D1 0042B  68$:    CMPL    AED_L_LASTLINE, START_SEGMENT                         ; 3795
                                  05  12 0042F          BNEQ    69$
              04 AA         70    AA  9E 00431          MOVAB   AED_T_CURLINE, AED_L_LASTLINE
              C0 AA         40    8F  88 00436  69$:    BISB2   #64, AED_L_FLAGS                                      ; 3796
              C1 AA       2008    8F  AA 0043B  70$:    BICW2   #8200, AED_L_FLAGS+1                                  ; 3798
                            10    AB  94 00441          CLRB    TERM_CHAR                                             ; 3799
                 50               01  D0 00444          MOVL    #1, R0                                                ; 3800
                                      04 00447          RET                                                           ; 3802

; Routine Size:  1096 bytes,    Routine Base:  $CODE$ + 215F
```

```
;  3377          3803  1 %SBTTL  'ACT_ADV_FIELD - advance to the next field'
;  3378          3804  1 ROUTINE ACT_ADV_FIELD =
;  3379          3805  1
;  3380          3806  1 !++
;  3381          3807  1 !
;  3382          3808  1 ! FUNCTIONAL DESCRIPTION:
;  3383          3809  1 !
;  3384          3810  1 !       This routine moves the cursor to the beginning of the next major
;  3385          3811  1 !       field or inserts the text for the first item in the next major
;  3386          3812  1 !       field depending on the state of the PROMPT flag.  The cursor is
;  3387          3813  1 !       left positioned to the end of the selected field.
;  3388          3814  1 !
;  3389          3815  1 ! CALLING SEQUENCE:
;  3390          3816  1 !       ACT_ADV_FIELD ()
;  3391          3817  1 !
;  3392          3818  1 ! INPUT PARAMETERS:
;  3393          3819  1 !       none
;  3394          3820  1 !
;  3395          3821  1 ! IMPLICIT INPUTS:
;  3396          3822  1 !       OWN storage
;  3397          3823  1 !
;  3398          3824  1 ! OUTPUT PARAMETERS:
;  3399          3825  1 !       none
;  3400          3826  1 !
;  3401          3827  1 ! IMPLICIT OUTPUTS:
;  3402          3828  1 !       none
;  3403          3829  1 !
;  3404          3830  1 ! ROUTINE VALUE:
;  3405          3831  1 !       1 if successful
;  3406          3832  1 !       error status otherwise
;  3407          3833  1 !
;  3408          3834  1 ! SIDE EFFECTS:
;  3409          3835  1 !       The line segment table is updated as necessary, ACE line pointers
;  3410          3836  1 !       are updated, and the object's ACL is updated as necessary.
;  3411          3837  1 !
;  3412          3838  1 !--
;  3413          3839  1
;  3414          3840  2 BEGIN
;  3415          3841  2
;  3416          3842  2 IF .AED_L_FLAGS[AED_V_OPENUIC]
;  3417          3843  2 THEN
;  3418          3844  3     BEGIN
;  3419          3845  3     AED_L_FLAGS[AED_V_ACERROR] = 1;
;  3420          3846  3     SIGNAL (AED$_BADUIC);
;  3421          3847  3     AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  3422          3848  3     AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  3423          3849  3     TERM_CHAR = 0;
;  3424          3850  3     RETURN 1;
;  3425          3851  3     END
;  3426          3852  2 ELSE
;  3427          3853  3     BEGIN
;  3428          3854  3     IF NOT .AED_L_FLAGS[AED_V_NOITEMSEL]
;  3429          3855  3     THEN
;  3430          3856  4         BEGIN
;  3431          3857  4         IF .BUFFER_INDEX GTR 0
;  3432          3858  5         AND (IF .AED_B_ACETYPE EQL ACE$C_DIRDEF
;  3433          3859  5              THEN .AED_B_FIELD LSS 5
```

```
5                 ELSE .AED_B_FIELD LSS 6)
4            THEN
5                BEGIN
5                IF .INPUT_BUFFER[.BUFFER_INDEX - 1] EQL '+'
5                THEN INPUT_BUFFER[.BUFFER_INDEX - 1] = ','
5                ELSE
6                    BEGIN
6                    IF .BUFFER_INDEX GEQ .AED_L_PAGEWIDTH
6                    THEN AED_SEGSPLIT (BUFFER_INDEX, 0, 0, 0);
6                    INPUT_BUFFER[.BUFFER_INDEX] = ',';
6                    ECHO_DESC[DSC$W_LENGTH] = 1;
6                    ECHO_DESC[DSC$A_POINTER] = INPUT_BUFFER[.BUFFER_INDEX];
6                    AED_PUTOUTPUT (ECHO_DESC);
6                    SEGMENT_SIZE = .SEGMENT_SIZE + 1;
6                    BUFFER_INDEX = .BUFFER_INDEX + 1;
6                    AED_B_COLUMN = .AED_B_COLUMN + 1;
5                    END;
5                AED_L_FLAGS[AED_V_GOLDKEY] = 0;
5                TERM_CHAR = KEY_C_SEL_FIELD;
5                RETURN 1;
4                END;
4            END
3        ELSE
4            BEGIN
4            WHILE .BUFFER_INDEX LSS .SEGMENT_SIZE
4            DO
5                BEGIN
5                AED_SELECTFIELD (BUFFER_INDEX);
5                IF .INPUT_BUFFER[.BUFFER_INDEX] EQL ',' THEN EXITLOOP;
4                END;
4            AED_B_COLUMN = .BUFFER_INDEX + 1;
4            AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
3            END;
2        END;
2    AED_L_FLAGS[AED_V_GOLDKEY] = 0;
2    AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
2    TERM_CHAR = 0;
2    RETURN 1;
2
1    END;                                          ! End of routine ACT_ADV_FIELD



                                      007C 00000 ACT_ADV_FIELD:
                                                      .WORD    Save R2,R3,R4,R5,R6                  ; 3804
              56 0000000G   8F   D0 00002             MOVL     #AED$_BADUIC, R6                     ;
              55 0000000G   00   9E 00009             MOVAB    SCR$SET_CURSOR, R5                   ;
              54     0000'  CF   9E 00010             MOVAB    BUFFER_INDEX, R4                     ;
              53     0000'  CF   9E 00015             MOVAB    AED_L_FLAGS, R3                      ;
              4D        02  A3   E9 0001A             BLBC     AED_L_FLAGS+2, 4$                    ; 3842
              63        40  8F   88 0001E             BISB2    #64, AED_L_FLAGS                     ; 3845
         12   63            03   E1 00022             BBC      #3, AED_L_FLAGS, 1$                  ; 3846
                            01   DD 00026             PUSHL    #1                                   ;
                            15   DD 00028             PUSHL    #21                                  ;
     0000000G 00            02   FB 0002A             CALLS    #2, SCR$ERASE_PAGE                   ;
```

```
                                          01  DD 00031       PUSHL   #1
                                          15  DD 00033       PUSHL   #21
                         65               02  FB 00035       CALLS   #2, SCR$SET_CURSOR
                                          56  DD 00038 1$:   PUSHL   R6
                  00000000G  00           01  FB 0003A       CALLS   #1, LIB$SIGNAL
              0B             63           03  E1 00041       BBC     #3, AED_L_FLAGS, 2$
                             7E     20    A3  9A 00045       MOVZBL  AED_B_COLUMN, -(SP)
                             7E     24    A3  9A 00049       MOVZBL  AED_B_LINE, -(SP)
                             65           02  FB 0004D       CALLS   #2, SCR$SET_CURSOR
                                00000000* 8F  D5 00050 2$:   TSTL    #<AED$_BADUIC&7>
                                          10  13 00056       BEQL    3$
00000000*  8F      14   A3                03  00  ED 00058   CMPZV   #0, #3, AED_L_WORSTERR, #<AED$_BADUIC&7>
                                          04  18 00062       BGEQ    3$
                         14  A3           56  D0 00064       MOVL    R6, AED_L_WORSTERR
                                        009F  31 00068 3$:   BRW     13$                                          ; 3847
              6A         02  A3           03  E0 0006B 4$:   BBS     #3, AED_L_FLAGS+2, 10$                       ; 3854
                             50           64  D0 00070       MOVL    BUFFER_INDEX, R0                             ; 3857
                                          F3  15 00073       BLEQ    3$
                             09     00A8  C3  91 00075       CMPB    AED_B_ACETYPE, #9                            ; 3858
                                          07  12 0007A       BNEQ    5$
                             05     0090  C3  91 0007C       CMPB    AED_B_FIELD, #5                              ; 3859
                                          05  11 00081       BRB     6$
                             06     0090  C3  91 00083 5$:   CMPB    AED_B_FIELD, #6                              ; 3860
                                          DE  1E 00088 6$:   BGEQU   3$
                             2B     00C3 C340 91 0008A       CMPB    INPUT_BUFFER-1[R0], #43                      ; 3863
                                          08  12 00090       BNEQ    7$
                    00C3 C340             2C  90 00092       MOVB    #44, INPUT_BUFFER-1[R0]                      ; 3864
                                          36  11 00098       BRB     9$
                         18  A3           50  D1 0009A 7$:   CMPL    R0, AED_L_PAGEWIDTH                          ; 3867
                                          0B  19 0009E       BLSS    8$
                                          7E  7C 000A0       CLRQ    -(SP)                                        ; 3868
                                          7E  D4 000A2       CLRL    -(SP)
                                          54  DD 000A4       PUSHL   R4
                    0000G  CF             04  FB 000A6       CALLS   #4, AED_SEGSPLIT
                             50     00C4  C3  9E 000AB 8$:   MOVAB   INPUT_BUFFER, R0                             ; 3869
                       00 B440            2C  90 000B0       MOVB    #44, @BUFFER_INDEX[R0]
                       04  A4             01  B0 000B5       MOVW    #1, ECHO_DESC                                ; 3870
                       08  A4        00 B440  9E 000B9       MOVAB   @BUFFER_INDEX[R0], ECHO_DESC+4               ; 3871
                                     04   A4  9F 000BF       PUSHAB  ECHO_DESC                                    ; 3872
                    0000G  CF             01  FB 000C2       CALLS   #1, AED_PUTOUTPUT
                                    00B8  C3  B6 000C7       INCW    SEGMENT_SIZE                                 ; 3873
                                          64  D6 000CB       INCL    BUFFER_INDEX                                 ; 3874
                                    20    A3  96 000CD       INCB    AED_B_COLUMN                                 ; 3875
                         01  A3           08  8A 000D0 9$:   BICB2   #8, AED_L_FLAGS+1                            ; 3877
                         28  A4           08  90 000D4       MOVB    #8, TERM_CHAR                                ; 3878
                                          39  11 000D8       BRB     14$                                          ; 3879
                             52           64  D0 000DA 10$:  MOVL    BUFFER_INDEX, R2                             ; 3884
       52     00B8   C3      10           00  ED 000DD 11$:  CMPZV   #0, #16, SEGMENT_SIZE, R2
                                          12  15 000E4       BLEQ    12$
                                          54  DD 000E6       PUSHL   R4                                           ; 3887
                    0000G  CF             01  FB 000E8       CALLS   #1, AED_SELECTFIELD
                             52           64  D0 000ED       MOVL    BUFFER_INDEX, R2                             ; 3888
                             2C     00C4 C342 91 000F0       CMPB    INPUT_BUFFER[R2], #44
                                          E5  12 000F6       BNEQ    11$
             20   A3         64           01  81 000F8 12$:  ADDB3   #1, BUFFER_INDEX, AED_B_COLUMN               ; 3890
                             7E     20    A3  9A 000FD       MOVZBL  AED_B_COLUMN, -(SP)                          ; 3891
                             7E     24    A3  9A 00101       MOVZBL  AED_B_LINE, -(SP)
```

```
0000G  CF          02  FB 00105        CALLS   #2, AED_SET_CURSOR          ;
   01  A3    2008  8F  AA 0010A 13$:   BICW2   #8200, AED_C_FLAGS+1        ; 3895
             28        A4  94 00110        CLRB    TERM_CHAR                   ; 3896
   50              01  D0 00113 14$:   MOVL    #1, R0                      ; 3897
                       04 00116        RET                                 ; 3899

; Routine Size:  279 bytes,    Routine Base:  $CODE$ + 25A7
```

```
;  3475     3900  1 %SBTTL  'ACT_SEL_FIELD - select the next field'
;  3476     3901  1 ROUTINE ACT_SEL_FIELD =
;  3477     3902  1
;  3478     3903  1 !++
;  3479     3904  1 !
;  3480     3905  1 ! FUNCTIONAL DESCRIPTION:
;  3481     3906  1 !
;  3482     3907  1 !       This routine moves the cursor to the beginning of the next field or
;  3483     3908  1 !       inserts the text for the first item in the next field depending on
;  3484     3909  1 !       the state of the PROMPT flag.  The cursor is left positioned to the
;  3485     3910  1 !       end of the selected field.
;  3486     3911  1 !
;  3487     3912  1 ! CALLING SEQUENCE:
;  3488     3913  1 !       ACT_SEL_FIELD ()
;  3489     3914  1 !
;  3490     3915  1 ! INPUT PARAMETERS:
;  3491     3916  1 !       none
;  3492     3917  1 !
;  3493     3918  1 ! IMPLICIT INPUTS:
;  3494     3919  1 !       OWN storage
;  3495     3920  1 !
;  3496     3921  1 ! OUTPUT PARAMETERS:
;  3497     3922  1 !       none
;  3498     3923  1 !
;  3499     3924  1 ! IMPLICIT OUTPUTS:
;  3500     3925  1 !       none
;  3501     3926  1 !
;  3502     3927  1 ! ROUTINE VALUE:
;  3503     3928  1 !       1 if successful
;  3504     3929  1 !       error status otherwise
;  3505     3930  1 !
;  3506     3931  1 ! SIDE EFFECTS:
;  3507     3932  1 !       The line segment table is updated as necessary, ACE line pointers
;  3508     3933  1 !       are updated, and the object's ACL is updated as necessary.
;  3509     3934  1 !
;  3510     3935  1 !--
;  3511     3936  1
;  3512     3937  2 BEGIN
;  3513     3938  2
;  3514     3939  2 IF .AED_L_FLAGS[AED_V_OPENUIC]
;  3515     3940  2 THEN
;  3516     3941  3     BEGIN
;  3517     3942  3     AED_L_FLAGS[AED_V_ACERROR] = 1;
;  3518     3943  3     SIGNAL (AED$_BADUIC);
;  3519     3944  3     AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  3520     3945  3     AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  3521     3946  3     TERM_CHAR = 0;
;  3522     3947  3     RETURN 1;
;  3523     3948  3     END
;  3524     3949  2 ELSE
;  3525     3950  3     BEGIN
;  3526     3951  3     IF .BUFFER_INDEX LSS .SEGMENT_SIZE
;  3527     3952  3     OR NOT .AED_L_FLAGS[AED_V_NOITEMSEL]
;  3528     3953  3     THEN
;  3529     3954  4         BEGIN
;  3530     3955  4         AED_L_FLAGS[AED_V_FIRSTCHAR] = 0;
;  3531     3956  4         AED_SELECTFIELD (BUFFER_INDEX);
```

```
;  3532        3957  4          IF NOT .AED_L_FLAGS[AED_V_NOITEMSEL]
;  3533        3958  4          THEN
;  3534        3959  5              BEGIN
;  3535        3960  5              ECHO_DESC[DSC$W_LENGTH] = .AED_T_CURLINE[LINE_W_SIZE];
;  3536        3961  5              ECHO_DESC[DSC$A_POINTER] = AED_T_CURLINE[LINE_T_TEXT];
;  3537        3962  5              SCR$SET_CURSOR (.AED_B_LINE, 1);
;  3538        3963  5              AED_PUTOUTPUT (ECHO_DESC);
;  3539        3964  5              SCR$ERASE_LINE (.AED_B_LINE, .SEGMENT_SIZE + 1);
;  3540        3965  4              END;
;  3541        3966  4          AED_B_COLUMN = .BUFFER_INDEX + 1;
;  3542        3967  4          AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  3543        3968  3          END;
;  3544        3969  2      END;
;  3545        3970  2  AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  3546        3971  2  AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  3547        3972  2  TERM_CHAR = 0;
;  3548        3973  2  RETURN 1;
;  3549        3974  2
;  3550        3975  1  END;                                   ! End of routine ACT_SEL_FIELD


                                    003C 00000 ACT_SEL_FIELD:
                                                .WORD   Save R2,R3,R4,R5                        ; 3901
                          55 00000000G   8F  D0 00002       MOVL    #AED$_BADUIC, R5              ;
                          54 00000000G   00  9E 00009       MOVAB   SCR$SET_CURSOR, R4            ;
                          53      0000'  CF  9E 00010       MOVAB   BUFFER_INDEX, R3              ;
                          52      0000'  CF  9E 00015       MOVAB   AED_L_FLAGS, R2               ;
                          4C        02   A2  E9 0001A       BLBC    AED_L_FLAGS+2, 3$             ; 3939
                          62        40   8F  88 0001E       BISB2   #64, AED_L_FLAGS              ; 3942
                    12    62             03  E1 00022       BBC     #3, AED_L_FLAGS, 1$           ; 3943
                                         01  DD 00026       PUSHL   #1                            ;
                                         15  DD 00028       PUSHL   #21                           ;
                              00000000G  00  02  FB 0002A    CALLS   #2, SCR$ERASE_PAGE            ;
                                         01  DD 00031       PUSHL   #1                            ;
                                         15  DD 00033       PUSHL   #21                           ;
                                    64   02  FB 00035       CALLS   #2, SCR$SET_CURSOR            ;
                                         55  DD 00038 1$:    PUSHL   R5                            ;
                              00000000G  00  01  FB 0003A    CALLS   #1, LIB$SIGNAL                ;
                          0B            62  03  E1 00041    BBC     #3, AED_L_FLAGS, 2$           ;
                                    7E    20  A2  9A 00045    MOVZBL  AED_B_COLUMN, -(SP)           ;
                                    7E    24  A2  9A 00049    MOVZBL  AED_B_LINE, -(SP)             ;
                                    64   02  FB 0004D       CALLS   #2, SCR$SET_CURSOR            ;
                                         00000000* 8F  D5 00050 2$:    TSTL    #<AED$_BADUIC&7>      ;
                                         71  13 00056       BEQL    6$                            ;
00000000*  8F        14   A2             03  00  ED 00058    CMPZV   #0, #3, AED_L_WORSTERR, #<AED$_BADUIC&7>;
                                         65  18 00062       BGEQ    6$                            ;
                                   14   A2  55  D0 00064       MOVL    R5, AED_L_WORSTERR            ;
                                         5F  11 00068       BRB     6$                            ; 3944
           63     00B8   C2             10  00  ED 0006A 3$:    CMPZV   #0, #16, SEGMENT_SIZE, BUFFER_INDEX ; 3951
                                         05  14 00071       BGTR    4$                            ;
                    51       02   A2     03  E0 00073       BBS     #3, AED_L_FLAGS+2, 6$         ; 3952
                             01   A2     10  8A 00078 4$:    BICB2   #16, AED_L_FLAGS+1            ; 3955
                                         53  DD 0007C       PUSHL   R3                            ; 3956
                           0000G  CF     01  FB 0007E       CALLS   #1, AED_SELECTFIELD           ;
```

```
                2F      02  A2                  03  E0  00083          BBS     #3, AED_L_FLAGS+2, 5$                       ; 3957
                        04  A3      00B8        C2  B0  00088          MOVW    AED_T_CURLINE+8, ECHO_DESC                  ; 3960
                        08  A3      00C4        C2  9E  0008E          MOVAB   AED_T_CURLINE+20, ECHO_DESC+4               ; 3961
                                                01  DD  00094          PUSHL   #1                                          ; 3962
                            7E        24        A2  9A  00096          MOVZBL  AED_B_LINE, -(SP)                           ;
                            64                  02  FB  0009A          CALLS   #2, SCR$SET_CURSOR                          ;
                                      04        A3  9F  0009D          PUSHAB  ECHO_DESC                                   ; 3963
                    0000G   CF                  01  FB  000A0          CALLS   #1, AED_PUTOUTPUT                           ;
                            7E        00B8      C2  3C  000A5          MOVZWL  SEGMENT_SIZE, -(SP)                         ; 3964
                                                6E  D6  000AA          INCL    (SP)                                        ;
                            7E        24        A2  9A  000AC          MOVZBL  AED_B_LINE, -(SP)                           ;
                00000000G   00                  02  FB  000B0          CALLS   #2, SCR$ERASE_LINE                          ;
            20  A2                              01  81  000B7  5$:      ADDB3   #1, BUFFER_INDEX, AED_B_COLUMN              ; 3966
                            7E        20        A2  9A  000BC          MOVZBL  AED_B_COLUMN, -(SP)                         ; 3967
                            7E        24        A2  9A  000C0          MOVZBL  AED_B_LINE, -(SP)                           ;
                    0000G   CF                  02  FB  000C4          CALLS   #2, AED_SET_CURSOR                          ;
                      01    A2      2008        8F  AA  000C9  6$:      BICW2   #8200, AED_L_FLAGS+1                        ; 3971
                                        28      A3  94  000CF          CLRB    TERM_CHAR                                   ; 3972
                            50                  01  D0  000D2          MOVL    #1, R0                                      ; 3973
                                                04  000D5              RET                                                 ; 3975

; Routine Size:  214 bytes,    Routine Base:  $CODE$ + 26BE
```

```
;  3552     3976  1 %SBTTL  'ACT_SEL_ITEM - select the next item'
;  3553     3977  1 ROUTINE ACT_SEL_ITEM =
;  3554     3978  1
;  3555     3979  1 !++
;  3556     3980  1 !
;  3557     3981  1 ! FUNCTIONAL DESCRIPTION:
;  3558     3982  1 !
;  3559     3983  1 !       This routine selects the next item based upon the selected field.
;  3560     3984  1 !       The cursor is left positioned at the end of the selected item.  This
;  3561     3985  1 !       is only valid for an ACE being entered in PROMPT mode.
;  3562     3986  1 !
;  3563     3987  1 ! CALLING SEQUENCE:
;  3564     3988  1 !       ACT_SEL_ITEM ()
;  3565     3989  1 !
;  3566     3990  1 ! INPUT PARAMETERS:
;  3567     3991  1 !       none
;  3568     3992  1 !
;  3569     3993  1 ! IMPLICIT INPUTS:
;  3570     3994  1 !       OWN storage
;  3571     3995  1 !
;  3572     3996  1 ! OUTPUT PARAMETERS:
;  3573     3997  1 !       none
;  3574     3998  1 !
;  3575     3999  1 ! IMPLICIT OUTPUTS:
;  3576     4000  1 !       none
;  3577     4001  1 !
;  3578     4002  1 ! ROUTINE VALUE:
;  3579     4003  1 !       1 if successful
;  3580     4004  1 !       error status otherwise
;  3581     4005  1 !
;  3582     4006  1 ! SIDE EFFECTS:
;  3583     4007  1 !       The line segment table is updated as necessary, ACE line pointers
;  3584     4008  1 !       are updated, and the object's ACL is updated as necessary.
;  3585     4009  1 !
;  3586     4010  1 !--
;  3587     4011  1
;  3588     4012  2 BEGIN
;  3589     4013  2
;  3590     4014  2 ! Clear all key indicators in case an error is seen.
;  3591     4015  2
;  3592     4016  2 AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  3593     4017  2 AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  3594     4018  2 TERM_CHAR = 0;
;  3595     4019  2
;  3596     4020  2 ! Check to see if item selection is allowed.
;  3597     4021  2
;  3598     4022  2 IF NOT .AED_L_FLAGS[AED_V_PROMPT] OR NOT .AED_L_FLAGS[AED_V_INSERTEXT]
;  3599     4023  2 THEN
;  3600     4024  3     BEGIN
;  3601     4025  3     AED_L_FLAGS[AED_V_ACERROR] = 1;
;  3602     4026  3     SIGNAL (AED$_NOITEMSEL);
;  3603     4027  3     RETURN 1;
;  3604     4028  2     END;
;  3605     4029  2
;  3606     4030  2 IF .AED_L_FLAGS[AED_V_OPENUIC]
;  3607     4031  2 THEN
;  3608     4032  3     BEGIN
```

```
 3      AED_L_FLAGS[AED_V_ACERROR] = 1;
 3      SIGNAL (AED$_BADUIC);
 3      RETURN 1;
 2      END;
 2
 2  ! No error conditions have been found, select the next item.
 2
 2  AED_L_FLAGS[AED_V_FIRSTCHAR] = 0;
 2  AED_SELECTITEM (BUFFER_INDEX);
 2  ECHO_DESC[DSC$W_LENGTH] = .AED_T_CURLINE[LINE_W_SIZE];
 2  ECHO_DESC[DSC$A_POINTER] = AED_T_CURLINE[LINE_T_TEXT];
 2  SCR$SET_CURSOR (.AED_B_LINE, 1);
 2  AED_PUTOUTPUT (ECHO_DESC);
 2  SCR$ERASE_LINE (.AED_B_LINE, .SEGMENT_SIZE + 1);
 2  AED_B_COLUMN = .BUFFER_INDEX + 1;
 2  AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
 2
 2  RETURN 1;
 2
 1  END;                                                  ! End of routine ACT_SEL_ITEM



                                              01FC 00000 ACT_SEL_ITEM:
                                                                .WORD   Save R2,R3,R4,R5,R6,R7,R8                   ; 3977
                       58 00000000G  8F   D0 00002              MOVL    #AED$_BADUIC, R8                            ;
                       57 00000000G  00   9E 00009              MOVAB   LIB$SIGNAL, R7                              ;
                       56 00000000G  8F   D0 00010              MOVL    #AED$_NOITEMSEL, R6                         ;
                       55 00000000G  00   9E 00017              MOVAB   SCR$ERASE_PAGE, R5                          ;
                       54     0000'  CF   9E 0001E              MOVAB   BUFFER_INDEX, R4                            ;
                       53 00000000G  00   9E 00023              MOVAB   SCR$SET_CURSOR, R3                          ;
                       52     0000'  CF   9E 0002A              MOVAB   AED_L_FLAGS, R2                             ;
                 01    A2      2008  8F   AA 0002F              BICW2   #8200, AED_L_FLAGS+1                        ; 4017
                                 28  A4   94 00035              CLRB    TERM_CHAR                                   ; 4018
                                 01  A2   95 00038              TSTB    AED_L_FLAGS+1                               ; 4022
                                     05   18 0003B              BGEQ    1$                                          ;
           44    01    A2            06   E0 0003D              BBS     #6, AED_L_FLAGS+1, 4$                       ;
                       62        40  8F   88 00042 1$:          BISB2   #64, AED_L_FLAGS                            ; 4025
           0E          62            03   E1 00046              BBC     #3, AED_L_FLAGS, 2$                         ; 4026
                                     01   DD 0004A              PUSHL   #1                                          ;
                                     15   DD 0004C              PUSHL   #21                                         ;
                       65            02   FB 0004E              CALLS   #2, SCR$ERASE_PAGE                          ;
                                     01   DD 00051              PUSHL   #1                                          ;
                                     15   DD 00053              PUSHL   #21                                         ;
                       63            02   FB 00055              CALLS   #2, SCR$SET_CURSOR                          ;
                                     56   DD 00058 2$:          PUSHL   R6                                          ;
                       67            01   FB 0005A              CALLS   #1, LIB$SIGNAL                              ;
           0B          62            03   E1 0005D              BBC     #3, AED_L_FLAGS, 3$                         ;
                       7E        20  A2   9A 00061              MOVZBL  AED_B_COLUMN, -(SP)                         ;
                       7E        24  A2   9A 00065              MOVZBL  AED_B_LINE, -(SP)                           ;
                       63            02   FB 00069              CALLS   #2, SCR$SET_CURSOR                          ;
                          00000000*  8F   D5 0006C 3$:          TSTL    #<AED$_NOITEMSEL&7>                         ;
                                     58   13 00072              BEQL    7$                                          ;
00000000*  8F    14    A2            03   00   ED 00074         CMPZV   #0, #3, AED_L_WORSTERR, #<AED$_NOITEMSEL&7> ;
                                     4C   18 0007E              BGEQ    7$                                          ;
```

```
                                14  A2                56  D0 00080          MOVL    R6, AED_L_WORSTERR                        ;
                                                      46  11 00084          BRB     7$                                        ; 4027
                                    44            02  A2  E9 00086 4$:      BLBC    AED_L_FLAGS+2, 8$                         ; 4030
                                    62            40  8F  88 0008A          BISB2   #64, AED_L_FLAGS                          ; 4033
                       0E           62                03  E1 0008E          BBC     #3, AED_L_FLAGS, 5$                       ; 4034
                                                      01  DD 00092          PUSHL   #1                                        ;
                                                      15  DD 00094          PUSHL   #21                                       ;
                                    65                02  FB 00096          CALLS   #2, SCR$ERASE_PAGE                        ;
                                                      01  DD 00099          PUSHL   #1                                        ;
                                                      15  DD 0009B          PUSHL   #21                                       ;
                                    63                02  FB 0009D          CALLS   #2, SCR$SET_CURSOR                        ;
                                                      58  DD 000A0 5$:      PUSHL   R8                                        ;
                                    67                01  FB 000A2          CALLS   #1, LIB$SIGNAL                            ;
                       0B           62                03  E1 000A5          BBC     #3, AED_L_FLAGS, 6$                       ;
                                    7E            20  A2  9A 000A9          MOVZBL  AED_B_COLUMN, -(SP)                       ;
                                    7E            24  A2  9A 000AD          MOVZBL  AED_B_LINE, -(SP)                         ;
                                    63                02  FB 000B1          CALLS   #2, SCR$SET_CURSOR                        ;
                                           00000000*  8F  D5 000B4 6$:      TSTL    #<AED$_BADUIC&7>                          ;
                                                      5E  13 000BA          BEQL    9$                                        ;
00000000*  8F     14   A2           03                00  ED 000BC          CMPZV   #0, #3, AED_L_WORSTERR, #<AED$_BADUIC&7>  ;
                                                      52  18 000C6          BGEQ    9$                                        ;
                                14  A2                58  D0 000C8          MOVL    R8, AED_L_WORSTERR                        ;
                                                      4C  11 000CC 7$:      BRB     9$                                        ; 4035
                                01  A2                10  8A 000CE 8$:      BICB2   #16, AED_L_FLAGS+1                        ; 4040
                                                      54  DD 000D2          PUSHL   R4                                        ; 4041
                             0000G  CF                01  FB 000D4          CALLS   #1, AED_SELECTITEM                        ;
                                04  A4          00B8  C2  B0 000D9          MOVW    AED_T_CURLINE+8, ECHO_DESC                ; 4042
                                08  A4          00C4  C2  9E 000DF          MOVAB   AED_T_CURLINE+20, ECHO_DESC+4             ; 4043
                                                      01  DD 000E5          PUSHL   #1                                        ; 4044
                                    7E            24  A2  9A 000E7          MOVZBL  AED_B_LINE, -(SP)                         ;
                                    63                02  FB 000EB          CALLS   #2, SCR$SET_CURSOR                        ;
                                                  04  A4  9F 000EE          PUSHAB  ECHO_DESC                                 ; 4045
                             0000G  CF                01  FB 000F1          CALLS   #1, AED_PUTOUTPUT                         ;
                                    7E          00B8  C2  3C 000F6          MOVZWL  SEGMENT_SIZE, -(SP)                       ; 4046
                                                      6E  D6 000FB          INCL    (SP)                                      ;
                                    7E            24  A2  9A 000FD          MOVZBL  AED_B_LINE, -(SP)                         ;
                        000000000G  00                02  FB 00101          CALLS   #2, SCR$ERASE_LINE                        ;
                  20   A2           64                01  81 00108          ADDB3   #1, BUFFER_INDEX, AED_B_COLUMN            ; 4047
                                    7E            20  A2  9A 0010D          MOVZBL  AED_B_COLUMN, -(SP)                       ; 4048
                                    7E            24  A2  9A 00111          MOVZBL  AED_B_LINE, -(SP)                         ;
                             0000G  CF                02  FB 00115          CALLS   #2, AED_SET_CURSOR                        ;
                                    50                01  D0 0011A 9$:      MOVL    #1, R0                                    ; 4050
                                                          04 0011D          RET                                               ; 4052

; Routine Size:  286 bytes,    Routine Base:  $CODE$ + 2794
```

```
;  3630          4053  1 %SBTTL  'ACT_HELP - provide interactive help'
;  3631          4054  1 ROUTINE ACT_HELP =
;  3632          4055  1
;  3633          4056  1 !++
;  3634          4057  1 !
;  3635          4058  1 ! FUNCTIONAL DESCRIPTION:
;  3636          4059  1 !
;  3637          4060  1 !       This routine supplies the interactive help to the user.
;  3638          4061  1 !
;  3639          4062  1 ! CALLING SEQUENCE:
;  3640          4063  1 !       ACT_HELP ()
;  3641          4064  1 !
;  3642          4065  1 ! INPUT PARAMETERS:
;  3643          4066  1 !       none
;  3644          4067  1 !
;  3645          4068  1 ! IMPLICIT INPUTS:
;  3646          4069  1 !       OWN storage
;  3647          4070  1 !
;  3648          4071  1 ! OUTPUT PARAMETERS:
;  3649          4072  1 !       none
;  3650          4073  1 !
;  3651          4074  1 ! IMPLICIT OUTPUTS:
;  3652          4075  1 !       none
;  3653          4076  1 !
;  3654          4077  1 ! ROUTINE VALUE:
;  3655          4078  1 !       1 if successful
;  3656          4079  1 !       error status otherwise
;  3657          4080  1 !
;  3658          4081  1 ! SIDE EFFECTS:
;  3659          4082  1 !       The line segment table is updated as necessary, ACE line pointers
;  3660          4083  1 !       are updated, and the object's ACL is updated as necessary.
;  3661          4084  1 !
;  3662          4085  1 !--
;  3663          4086  1
;  3664          4087  2 BEGIN
;  3665          4088  2
;  3666          4089  2 SCR$SET_SCROLL (1, 24);
;  3667          4090  2 AED_GIVEHELP ();
;  3668          4091  2 ACT_REFRESH (0);                                    ! Refersh the screen
;  3669          4092  2 RETURN 1;
;  3670          4093  2
;  3671          4094  1 END;                                               ! End of routine ACT_HELP


                                0000 00000 ACT_HELP:
                                           .WORD   Save nothing                         ; 4054
                                18  DD 00002        PUSHL   #24                         ; 4089
                                01  DD 00004        PUSHL   #1                          ;
                    00000000G   02  FB 00006        CALLS   #2, SCR$SET_SCROLL          ;
                        0000G   00  FB 00009        CALLS   #0, AED_GIVEHELP            ; 4090
                                7E  D4 00012        CLRL    -(SP)                       ; 4091
                        0000V   01  FB 00014        CALLS   #1, ACT_REFRESH             ;
                                50  D0 00019        MOVL    #1, R0                      ; 4092
                                    04 0001C        RET                                 ; 4094
```

; Routine Size: 29 bytes,   Routine Base: $CODE$ + 28B2

```
;  3673          4095  1 %SBTTL  'ACT_REFRESH - refresh the display'
;  3674          4096  1 ROUTINE ACT_REFRESH (RESET) =
;  3675          4097  1
;  3676          4098  1 !++
;  3677          4099  1 !
;  3678          4100  1 ! FUNCTIONAL DESCRIPTION:
;  3679          4101  1 !
;  3680          4102  1 !       This routine clears the screen and repaints the display to eliminate
;  3681          4103  1 !       any extraneous garbage that may have appeared on the screen.
;  3682          4104  1 !
;  3683          4105  1 ! CALLING SEQUENCE:
;  3684          4106  1 !       ACT_REFRESH (ARG1)
;  3685          4107  1 !
;  3686          4108  1 ! INPUT PARAMETERS:
;  3687          4109  1 !       ARG1: 1 = reinitialize display from object's original ACL
;  3688          4110  1 !             0 = reinitialize display from in core copy of object's ACL
;  3689          4111  1 !
;  3690          4112  1 ! IMPLICIT INPUTS:
;  3691          4113  1 !       OWN storage
;  3692          4114  1 !
;  3693          4115  1 ! OUTPUT PARAMETERS:
;  3694          4116  1 !       none
;  3695          4117  1 !
;  3696          4118  1 ! IMPLICIT OUTPUTS:
;  3697          4119  1 !       none
;  3698          4120  1 !
;  3699          4121  1 ! ROUTINE VALUE:
;  3700          4122  1 !       1 if successful
;  3701          4123  1 !       error status otherwise
;  3702          4124  1 !
;  3703          4125  1 ! SIDE EFFECTS:
;  3704          4126  1 !       The line segment table is updated as necessary, ACE line pointers
;  3705          4127  1 !       are updated, and the object's ACL is updated as necessary.
;  3706          4128  1 !
;  3707          4129  1 !--
;  3708          4130  1
;  3709          4131  2 BEGIN
;  3710          4132  2
;  3711          4133  2 LOCAL
;  3712          4134  2         CURRENT_LINE    : REF $BBLOCK,                  ! Address of current line segment
;  3713          4135  2         ATR_ARGLIST     : BLOCKVECTOR [2, ITM$S_ITEM, BYTE],    ! ACL attribute descriptor
;  3714          4136  2         ACL_CONTEXT,                                    ! ACL context for $CHANGE_ACL
;  3715          4137  2         ACE_POINTER     : REF $BBLOCK,                  ! Address of current ACE
;  3716          4138  2         ACE_NEWADDR     : REF $BBLOCK,                  ! Copy of current ACE
;  3717          4139  2         ACE_DESC        : $BBLOCK [DSC$C_S_BLN],            ! Binary ACE descr
;  3718          4140  2         ACE_TEXT_DESC   : $BBLOCK [DSC$C_S_BLN],            ! Text ACE descriptor
;  3719          4141  2         ACE_TEXT        : $BBLOCK [3072],               ! ACE text storage
;  3720          4142  2         ACE_TEXT_SIZE,                                  ! ACE text size
;  3721          4143  2         FIRST_CHAR,                                     ! Addr of first char in segment
;  3722          4144  2         LAST_CHAR,                                      ! Addr of last char in segment
;  3723          4145  2         NEW_TEXT_LINE   : REF $BBLOCK,                  ! Converted line storage addr
;  3724          4146  2         LINE_SEG_SIZE;                                  ! Size of line segment
;  3725          4147  2
;  3726          4148  2 ! If this is a reset operation, deallocate all the in core ACL information
;  3727          4149  2 ! and rebuild it from the object's actual ACL.
;  3728          4150  2
;  3729          4151  2 IF .RESET
```

```
;3730        4152  2 THEN
;3731        4153  2     BEGIN
;3732        4154  2     CH$FILL (0, 2*ITM$S_ITEM, ATR_ARGLIST);
;3733        4155  2
;3734        4156  2 ! Go through the line segment table and deallocate all the old segments.
;3735        4157  2 ! In addition, get rid of the copies of the binary ACEs.
;3736        4158  2
;3737        4159  2     UNTIL REMQUE (.AED_Q_LINETABLE[LINE_L_FLINK], CURRENT_LINE)
;3738        4160  2     DO
;3739        4161  3         BEGIN
;3740        4162  3         IF .CURRENT_LINE[LINE_V_BEGINACE]
;3741        4163  3         THEN IF .CURRENT_LINE[LINE_L_BINACE] NEQ 0
;3742      P 4164  3              THEN DEALLOCATE (.($BBLOCK[.CURRENT_LINE[LINE_L_BINACE], ACE$B_SIZE]),
;3743      P 4165  3                               CURRENT_LINE[LINE_L_BINACE]);
;3744      P 4166  3         DEALLOCATE (.CURRENT_LINE[LINE_W_SIZE] + $BYTEOFFSET (LINE_T_TEXT),
;3745      P 4167  3                     CURRENT_LINE);
;3746        4168  3         END;
;3747        4169  2
;3748        4170  2 ! Allocate storage for the temporary ACL segment buffer.
;3749        4171  2
;3750        4172  2     AED_L_STATUS = ALLOCATE (512, AED_A_ACLBUFFER);
;3751        4173  2     IF NOT .AED_L_STATUS
;3752        4174  2     THEN
;3753        4175  3         BEGIN
;3754        4176  3         SIGNAL (.AED_L_STATUS);
;3755        4177  3         AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;3756        4178  3         AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;3757        4179  3         TERM_CHAR = 0;
;3758        4180  3         RETURN .AED_L_WORSTERR OR STS$M_INHIB_MSG;
;3759        4181  3         END;
;3760        4182  2
;3761        4183  2 ! Re-read any ACL associated with the object.
;3762        4184  2
;3763        4185  2     ACL_CONTEXT = 0;
;3764        4186  2     ATR_ARGLIST[0, ITM$W_ITMCOD] = ACL$C_READACL;
;3765        4187  2     ATR_ARGLIST[0, ITM$W_BUFSIZ] = 512;
;3766        4188  2     ATR_ARGLIST[0, ITM$L_BUFADR] = .AED_A_ACLBUFFER;
;3767        4189  2     WHILE 1
;3768        4190  2     DO
;3769        4191  3         BEGIN
;3770      P 4192  3         AED_L_STATUS = $CHANGE_ACL (CHAN = .AED_W_OBJCHAN,
;3771      P 4193  3                                     OBJTYP = AED_L_OBJTYP,
;3772      P 4194  3                                     OBJNAM = AED_Q_OBJNAM,
;3773      P 4195  3                                     ITMLST = ATR_ARGLIST,
;3774        4196  3                                     CONTXT = ACL_CONTEXT);
;3775        4197  3         IF NOT .AED_L_STATUS
;3776        4198  3         THEN
;3777        4199  4             BEGIN
;3778        4200  4             IF .AED_L_STATUS EQL SS$_ACLEMPTY
;3779        4201  4             OR .AED_L_STATUS EQL SS$_NOMOREACE
;3780        4202  4             THEN EXITLOOP;
;3781        4203  4             SIGNAL (AED$_READERR, 1, AED_Q_OBJNAM, .AED_L_STATUS, 0);
;3782        4204  4             AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;3783        4205  4             AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;3784        4206  4             TERM_CHAR = 0;
;3785        4207  4             RETURN .AED_L_WORSTERR OR STS$M_INHIB_MSG;
;3786        4208  3             END;
```

```
;  3787          4209  4          ACE_POINTER = .AED_A_ACLBUFFER;
;  3788          4210  4          UNTIL .ACE_POINTER GEQA .AED_A_ACLBUFFER + 512
;  3789          4211  4          DO
;  3790          4212  5              BEGIN
;  3791          4213  5              IF .ACE_POINTER[ACE$B_SIZE] EQL 0 THEN EXITLOOP;
;  3792          4214  5              AED_L_STATUS = ALLOCATE (.ACE_POINTER[ACE$B_SIZE], ACE_NEWADDR);
;  3793          4215  5              IF NOT .AED_L_STATUS
;  3794          4216  5              THEN
;  3795          4217  6                  BEGIN
;  3796          4218  6                  SIGNAL (.AED_L_STATUS);
;  3797          4219  6                  AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  3798          4220  6                  AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  3799          4221  6                  TERM_CHAR = 0;
;  3800          4222  6                  RETURN .AED_L_WORSTERR OR STS$M_INHIB_MSG;
;  3801          4223  5                  END;
;  3802          4224  5              CH$MOVE (.ACE_POINTER[ACE$B_SIZE], .ACE_POINTER, .ACE_NEWADDR);
;  3803          4225  5              ACE_DESC[DSC$A_POINTER] = .ACE_POINTER;
;  3804          4226  5              ACE_DESC[DSC$W_LENGTH] = .ACE_POINTER[ACE$B_SIZE];
;  3805          4227  5              ACE_TEXT_DESC[DSC$A_POINTER] = ACE_TEXT;
;  3806          4228  5              ACE_TEXT_DESC[DSC$W_LENGTH] = 3072;
;  3807        P 4229  5              AED_L_STATUS = $FORMAT_ACL (ACLENT = ACE_DESC,
;  3808        P 4230  5                                          ACLLEN = ACE_TEXT_DESC,
;  3809        P 4231  5                                          ACLSTR = ACE_TEXT_DESC,
;  3810        P 4232  5                                          WIDTH = AED_L_PAGEWIDTH,
;  3811        P 4233  5                                          TRMDSC = $DESCRIPTOR (0),
;  3812          4234  5                                          INDENT = 0);
;  3813          4235  5              ACE_TEXT_SIZE = .ACE_TEXT_DESC[DSC$W_LENGTH];
;  3814          4236  5              FIRST_CHAR = ACE_TEXT;
;  3815          4237  5              AED_L_FIRSTLINE = AED_L_LASTLINE = 0;
;  3816          4238  5              WHILE (LAST_CHAR = CH$FIND_CH (.ACE_TEXT_SIZE, .FIRST_CHAR, 0)) GTR 0
;  3817          4239  5              DO
;  3818          4240  6                  BEGIN
;  3819          4241  6                  LINE_SEG_SIZE = .LAST_CHAR - .FIRST_CHAR;
;  3820        P 4242  6                  AED_L_STATUS = ALLOCATE (.LINE_SEG_SIZE + $BYTEOFFSET (LINE_T_TEXT),
;  3821          4243  6                                           NEW_TEXT_LINE);
;  3822          4244  6                  IF NOT .AED_L_STATUS
;  3823          4245  6                  THEN
;  3824          4246  7                      BEGIN
;  3825          4247  7                      SIGNAL (.AED_L_STATUS);
;  3826          4248  7                      AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  3827          4249  7                      AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  3828          4250  7                      TERM_CHAR = 0;
;  3829          4251  7                      RETURN .AED_L_WORSTERR OR STS$M_INHIB_MSG;
;  3830          4252  6                      END;
;  3831          4253  6                  NEW_TEXT_LINE[LINE_W_SIZE] = .LINE_SEG_SIZE;
;  3832          4254  6                  NEW_TEXT_LINE[LINE_L_BINACE] = .ACE_NEWADDR;
;  3833          4255  6                  CH$MOVE (.ACE_TEXT_SIZE, .FIRST_CHAR, NEW_TEXT_LINE[LINE_T_TEXT]);
;  3834          4256  6                  INSQUE (.NEW_TEXT_LINE, .AED_Q_LINETABLE[LINE_L_BLINK]);
;  3835          4257  6                  IF .AED_L_FIRSTLINE EQL 0 THEN AED_L_FIRSTLINE = .NEW_TEXT_LINE;
;  3836          4258  6                  AED_L_LASTLINE = .NEW_TEXT_LINE;
;  3837          4259  6                  FIRST_CHAR = .LAST_CHAR + 1;
;  3838          4260  6                  ACE_TEXT_SIZE = .ACE_TEXT_SIZE - .LINE_SEG_SIZE - 1;
;  3839          4261  5                  END;
;  3840          4262  5              IF .ACE_TEXT_SIZE GTR 0
;  3841          4263  5              THEN
;  3842          4264  6                  BEGIN
;  3843        P 4265  6                  AED_L_STATUS = ALLOCATE (.ACE_TEXT_SIZE + $BYTEOFFSET (LINE_T_TEXT),
```

```
;  3844     4266  6                                   NEW_TEXT_LINE);
;  3845     4267  6                 IF NOT .AED_L_STATUS
;  3846     4268  6                 THEN
;  3847     4269  7                     BEGIN
;  3848     4270  7                     SIGNAL (.AED_L_STATUS);
;  3849     4271  7                     AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  3850     4272  7                     AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  3851     4273  7                     TERM_CHAR = 0;
;  3852     4274  7                     RETURN .AED_L_WORSTERR OR STS$M_INHIB_MSG;
;  3853     4275  6                     END;
;  3854     4276  6                 NEW_TEXT_LINE[LINE_W_SIZE] = .ACE_TEXT_SIZE;
;  3855     4277  6                 NEW_TEXT_LINE[LINE_L_BINACE] = .ACE_NEWADDR;
;  3856     4278  6                 CH$MOVE (.ACE_TEXT_SIZE, .FIRST_CHAR, NEW_TEXT_LINE[LINE_T_TEXT]);
;  3857     4279  6                 INSQUE (.NEW_TEXT_LINE, .AED_Q_LINETABLE[LINE_L_BLINK]);
;  3858     4280  6                 IF .AED_L_FIRSTLINE EQL 0 THEN AED_L_FIRSTLINE = .NEW_TEXT_LINE;
;  3859     4281  6                 AED_L_LASTLINE = .NEW_TEXT_LINE;
;  3860     4282  5                 END;
;  3861     4283  5             AED_L_FIRSTLINE[LINE_V_BEGINACE] = 1;
;  3862     4284  5             IF .ACE_POINTER[ACE$V_HIDDEN]
;  3863     4285  6             OR (.ACE_POINTER[ACE$B_TYPE] NEQ ACE$C_KEYID
;  3864     4286  6                 AND .ACE_POINTER[ACE$B_TYPE] NEQ ACE$C_BIJNL
;  3865     4287  6                 AND .ACE_POINTER[ACE$B_TYPE] NEQ ACE$C_AIJNL
;  3866     4288  6                 AND .ACE_POINTER[ACE$B_TYPE] NEQ ACE$C_ATJNL
;  3867     4289  6                 AND .ACE_POINTER[ACE$B_TYPE] NEQ ACE$C_AUDIT
;  3868     4290  6                 AND .ACE_POINTER[ACE$B_TYPE] NEQ ACE$C_ALARM
;  3869     4291  6                 AND .ACE_POINTER[ACE$B_TYPE] NEQ ACE$C_DIRDEF)
;  3870     4292  5             THEN AED_L_FIRSTLINE[LINE_V_NOTOUCH] = 1;
;  3871     4293  5             AED_L_LASTLINE[LINE_V_ENDACE] = 1;
;  3872     4294  5             ACE_POINTER = .ACE_POINTER + .ACE_POINTER[ACE$B_SIZE];
;  3873     4295  4             END;
;  3874     4296  3         END;
;  3875     4297  3     DEALLOCATE (512, AED_A_ACLBUFFER);
;  3876     4298  3
;  3877     4299  3 ! If there is no ACL (the display is empty), set up to append the text
;  3878     4300  3 ! entered.  Otherwise, set up to modify the first segment of the display.
;  3879     4301  3
;  3880     4302  3     IF .AED_Q_LINETABLE[LINE_L_FLINK] EQLA AED_Q_LINETABLE[LINE_L_FLINK]
;  3881     4303  3     THEN
;  3882     4304  4         BEGIN
;  3883     4305  4         AED_L_FLAGS[AED_V_ENDACL] = 1;          ! At the end of the ACL
;  3884     4306  4         AED_L_FLAGS[AED_V_INSERTEXT] = 1;
;  3885     4307  4         AED_W_TOTALSIZE = SEGMENT_SIZE = 0;
;  3886     4308  4         INSQUE (AED_T_CURLINE[LINE_L_FLINK], .AED_Q_LINETABLE[LINE_L_BLINK]);
;  3887     4309  4         AED_L_FIRSTLINE = AED_L_LASTLINE = AED_T_CURLINE;
;  3888     4310  4         AED_L_FIRSTLINE[LINE_Q_FLAGS] = LINE_M_BEGINACE;
;  3889     4311  4         AED_L_CURACE = 0;
;  3890     4312  4         IF .AED_L_FLAGS[AED_V_PROMPT]
;  3891     4313  4         THEN
;  3892     4314  5             BEGIN
;  3893     4315  5             AED_B_ACETYPE = 0;
;  3894     4316  5             AED_L_FLAGS[AED_V_NOITEMSEL] = 0;
;  3895     4317  5             AED_SELECTFIELD (BUFFER_INDEX);
;  3896     4318  5             AED_B_COLUMN = .BUFFER_INDEX + 1;
;  3897     4319  4             END;
;  3898     4320  4         END
;  3899     4321  3     ELSE
;  3900     4322  4         BEGIN
```

```
;  3901          4323  4          AED_COPSEGMENT (.AED_Q_LINETABLE[LINE_L_FLINK]);
;  3902          4324  4          INSQUE (AED_T_CURLINE[LINE_L_FLINK], AED_Q_LINETABLE[LINE_L_FLINK]);
;  3903          4325  4          AED_L_FIRSTLINE = AED_L_LASTLINE = AED_T_CURLINE;
;  3904          4326  4          AED_W_TOTALSIZE = .AED_L_FIRSTLINE[LINE_W_SIZE];
;  3905          4327  4          UNTIL .AED_L_LASTLINE[LINE_V_ENDACE]
;  3906          4328  4          DO
;  3907          4329  5              BEGIN
;  3908          4330  5              IF .AED_L_LASTLINE EQLA AED_T_CURLINE
;  3909          4331  5              THEN AED_L_LASTLINE = .AED_L_LASTLINE[LINE_L_FLINK];
;  3910          4332  5              AED_L_LASTLINE = .AED_L_LASTLINE[LINE_L_FLINK];
;  3911          4333  5              AED_W_TOTALSIZE = .AED_W_TOTALSIZE + .AED_L_LASTLINE[LINE_W_SIZE];
;  3912          4334  4              END;
;  3913          4335  4          AED_L_CURACE = .AED_L_FIRSTLINE[LINE_L_BINACE];
;  3914          4336  4          IF .AED_L_FLAGS[AED_V_PROMPT]
;  3915          4337  4          THEN
;  3916          4338  5              BEGIN
;  3917          4339  5              AED_L_FLAGS[AED_V_NOITEMSEL] = 1;
;  3918          4340  5              AED_SELECTFIELD (BUFFER_INDEX);
;  3919          4341  5              AED_B_COLUMN = .BUFFER_INDEX + 1;
;  3920          4342  4              END;
;  3921          4343  3          END;
;  3922          4344  3      AED_L_BEGINLINE = .AED_Q_LINETABLE[LINE_L_FLINK];
;  3923          4345  3      AED_B_SAVE_LIN = 1;
;  3924          4346  3      AED_B_SAVE_COL = .AED_B_COLUMN;
;  3925          4347  2      END;
;  3926          4348  2
;  3927          4349  2  ! Now repaint the display.
;  3928          4350  2
;  3929          4351  2  SCR$ERASE_PAGE (1, 1);
;  3930          4352  2  SCR$SET_SCROLL (1, 20);                    ! Set up the scrolling region
;  3931          4353  2  IF .AED_L_FLAGS[AED_V_VT5X] OR .AED_L_FLAGS[AED_V_VT1XX]
;  3932          4354  2  THEN AED_PUTOUTPUT (%$DESCRIPTOR (%CHAR(AED_C_CHAR_ESC),'='));
;  3933          4355  2  TEMP_LINE = 1;
;  3934          4356  2  NEW_TEXT_LINE = .AED_L_BEGINLINE;
;  3935          4357  2  DO
;  3936          4358  3      BEGIN
;  3937          4359  3      SCR$SET_CURSOR (.TEMP_LINE, 1);
;  3938          4360  3      ECHO_DESC[DSC$W_LENGTH] = .NEW_TEXT_LINE[LINE_W_SIZE];
;  3939          4361  3      ECHO_DESC[DSC$A_POINTER] = NEW_TEXT_LINE[LINE_T_TEXT];
;  3940          4362  3      AED_PUTOUTPUT (ECHO_DESC);
;  3941          4363  3      TEMP_LINE = .TEMP_LINE + 1;
;  3942          4364  3      IF .NEW_TEXT_LINE[LINE_V_REPLACE]
;  3943          4365  3      THEN NEW_TEXT_LINE = .NEW_TEXT_LINE[LINE_L_FLINK];
;  3944          4366  3      NEW_TEXT_LINE = .NEW_TEXT_LINE[LINE_L_FLINK];
;  3945          4367  3      END
;  3946          4368  3  UNTIL (.TEMP_LINE GTR 20)
;  3947          4369  2     OR (.NEW_TEXT_LINE EQLA AED_Q_LINETABLE[LINE_L_FLINK]);
;  3948          4370  2  SCR$SET_CURSOR (.AED_B_SAVE_LIN, .AED_B_SAVE_COL);
;  3949          4371  2  AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  3950          4372  2  AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  3951          4373  2  TERM_CHAR = 0;
;  3952          4374  2  RETURN 1;
;  3953          4375  2
;  3954          4376  1  END;                                        ! End of routine ACT_REFRESH
```

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

                                   00  00024 P.AAF:   .BYTE   0                                          ;
                                       00025          .BLKB   3
                             00000001  00028 P.AAE:   .LONG   1                                          ;
                             00000000' 0002C          .ADDRESS P.AAF                                     ;
                                   1B  00030 P.AAH:   .ASCII  <27>                                       ;
                                   3D  00031          .ASCII  \=\                                        ;
                                       00032          .BLKB   2
                             00000002  00034 P.AAG:   .LONG   2                                          ;
                             00000000' 00038          .ADDRESS P.AAH                                     ;

                                                      .EXTRN  SYS$CHANGE_ACL, SYS$FORMAT_ACL

                                                      .PSECT  $CODE$,NOWRT,2

                                 0FFC 00000 ACT_REFRESH:
                                                      .WORD   Save R2,R3,R4,R5,R6,R7,R8,R9,R10,R11   ; 4096
                    5E     F3C4  CE 9E 00002          MOVAB   -3132(SP), SP
                    03       04  AC E8 00007          BLBS    RESET, 1$                              ; 4151
                           04E7  31    0000B          BRW     55$
      18        00          6E   00 2C 0000E 1$:      MOVC5   #0, (SP), #0, #24, ATR_ARGLIST         ; 4154
                             E8  AD    00013
                04  AE    0000'  DF 0F 00015 2$:      REMQUE  @AED_Q_LINETABLE, CURRENT_LINE         ; 4159
                             37  1D    0001B          BVS     4$
                    52       04  AE D0 0001D          MOVL    CURRENT_LINE, R2                       ; 4162
                    17       0A  A2 E9 00021          BLBC    10(R2), 3$
                             0C  A2 D5 00025          TSTL    12(R2)                                 ; 4163
                             12  13    00028          BEQL    3$
                             0C  A2 9F 0002A          PUSHAB  12(R2)                                 ; 4165
                04  AE       0C  B2 D0 0002D          MOVL    @12(R2), 4(SP)
                             04  AE 9F 00032          PUSHAB  4(SP)
          00000000G  00      02  FB    00035          CALLS   #2, LIB$FREE_VM
                             04  AE 9F 0003C 3$:      PUSHAB  CURRENT_LINE                           ; 4167
                04  AE       08  A2 3C 0003F          MOVZWL  8(R2), 4(SP)
                04  AE       14  C0    00044          ADDL2   #20, 4(SP)
                             04  AE 9F 00048          PUSHAB  4(SP)
          00000000G  00      02  FB    0004B          CALLS   #2, LIB$FREE_VM
                             C1  11    00052          BRB     2$                                     ; 4159
                          0000'  CF 9F 00054 4$:      PUSHAB  AED_A_ACLBUFFER                        ; 4172
                04  AE    0200   8F 3C 00058          MOVZWL  #512, 4(SP)
                             04  AE 9F 0005E          PUSHAB  4(SP)
          00000000G  00      02  FB    00061          CALLS   #2, LIB$GET_VM
                    56       50  D0    00068          MOVL    R0, VM_STATUS
                    0A       56  E9    0006B          BLBC    VM_STATUS, 5$
 0200   8F      00  6E       00  2C    0006E          MOVC5   #0, (SP), #0, #512, @AED_A_ACLBUFFER
                          0000'  DF    00075
             0000'  CF       56  D0    00078 5$:      MOVL    VM_STATUS, AED_L_STATUS
                    33    0000'  CF E8 0007D          BLBS    AED_L_STATUS, 8$                       ; 4173
          16 0000'  CF       03  E1    00082          BBC     #3, AED_L_FLAGS, 6$                    ; 4176
                             01  DD    00088          PUSHL   #1
                             15  DD    0008A          PUSHL   #21
          00000000G  00      02  FB    0008C          CALLS   #2, SCR$ERASE_PAGE
                             01  DD    00093          PUSHL   #1
                             15  DD    00095          PUSHL   #21
          00000000G  00      02  FB    00097          CALLS   #2, SCR$SET_CURSOR
                          0000'  CF DD 0009E 6$:      PUSHL   AED_L_STATUS                           ;
```

```
                    00000000G  00              01  FB 000A2          CALLS   #1, LIB$SIGNAL                              ;
              03        0000'  CF              03  E0 000A9          BBS     #3, AED_L_FLAGS, 7$                          ;
                                             02B2  31 000AF          BRW     39$                                          ;
                                             029E  31 000B2 7$:      BRW     38$                                          ;
                                       08      AE  D4 000B5 8$:      CLRL    ACL_CONTEXT                                  ; 4185
                   E8      AD 00070200      8F  D0 000B8          MOVL    #459264, ATR_ARGLIST                         ; 4187
                   EC      AD    0000'      CF  D0 000C0          MOVL    AED_A_ACLBUFFER, ATR_ARGLIST+4               ; 4188
                                       08      AE  9F 000C6 9$:      PUSHAB  ACL_CONTEXT                                  ; 4196
                                               7E  7C 000C9          CLRQ    -(SP)                                        ;
                                       E8      AD  9F 000CB          PUSHAB  ATR_ARGLIST                                  ;
                                    0000'      CF  9F 000CE          PUSHAB  AED_Q_OBJNAM                                 ;
                                    0000'      CF  9F 000D2          PUSHAB  AED_L_OBJTYP                                 ;
                            7E      0000'      CF  3C 000D6          MOVZWL  AED_W_OBJCHAN, -(SP)                         ;
                    00000000G       00         07  FB 000DB          CALLS   #7, SYS$CHANGE_ACL                           ;
                        0000'       CF         50  D0 000E2          MOVL    R0, AED_L_STATUS                             ;
                                    76         50  E8 000E7          BLBS    R0, 15$                                      ; 4197
                    000009D0        8F         50  D1 000EA          CMPL    R0, #2512                                    ; 4200
                                               07  13 000F1          BEQL    10$                                          ;
                    000009E0        8F         50  D1 000F3          CMPL    R0, #2528                                    ; 4201
                                               03  12 000FA 10$:     BNEQ    11$                                          ;
                                             030C  31 000FC          BRW     47$                                          ;
              16        0000'  CF              03  E1 000FF 11$:     BBC     #3, AED_L_FLAGS, 12$                         ; 4203
                                               01  DD 00105          PUSHL   #1                                           ;
                                               15  DD 00107          PUSHL   #21                                          ;
                    00000000G  00              02  FB 00109          CALLS   #2, SCR$ERASE_PAGE                           ;
                                               01  DD 00110          PUSHL   #1                                           ;
                                               15  DD 00112          PUSHL   #21                                          ;
                    00000000G  00              02  FB 00114          CALLS   #2, SCR$SET_CURSOR                           ;
                                               7E  D4 0011B 12$:     CLRL    -(SP)                                        ;
                                    0000'      CF  DD 0011D          PUSHL   AED_L_STATUS                                 ;
                                    0000'      CF  9F 00121          PUSHAB  AED_Q_OBJNAM                                 ;
                                               01  DD 00125          PUSHL   #1                                           ;
                                 011510B2      8F  DD 00127          PUSHL   #18157746                                    ;
                    00000000G  00              05  FB 0012D          CALLS   #5, LIB$SIGNAL                               ;
              11        0000'  CF              03  E1 00134          BBC     #3, AED_L_FLAGS, 13$                         ;
                               7E    0000'     CF  9A 0013A          MOVZBL  AED_B_COLUMN, -(SP)                          ;
                               7E    0000'     CF  9A 0013F          MOVZBL  AED_B_LINE, -(SP)                            ;
                    00000000G  00              02  FB 00144          CALLS   #2, SCR$SET_CURSOR                           ;
    02     0000'  CF           03              00  ED 0014B 13$:     CMPZV   #0, #3, AED_L_WORSTERR, #2                   ;
                                               09  18 00152          BGEQ    14$                                          ;
                        0000'  CF 011510B2     8F  D0 00154          MOVL    #18157746, AED_L_WORSTERR                    ;
                                             0221  31 0015D 14$:     BRW     41$                                          ; 4204
                        59          0000'      CF  D0 00160 15$:     MOVL    AED_A_ACLBUFFER, ACE_POINTER                 ; 4209
              50        0000'  CF 00000200     8F  C1 00165 16$:     ADDL3   #512, AED_A_ACLBUFFER, R0                    ; 4210
                               50              59  D1 0016F          CMPL    ACE_POINTER, R0                              ;
                                               03  1F 00172          BLSSU   18$                                          ;
                                             FF4F  31 00174 17$:     BRW     9$                                           ;
                                               69  95 00177 18$:     TSTB    (ACE_POINTER)                                ; 4213
                                               F9  13 00179          BEQL    17$                                          ;
                                       0C      AE  9F 0017B          PUSHAB  ACE_NEWADDR                                  ; 4214
                        04     AE              69  9A 0017E          MOVZBL  (ACE_POINTER), 4(SP)                         ;
                                       04      AE  9F 00182          PUSHAB  4(SP)                                        ;
                    00000000G  00              02  FB 00185          CALLS   #2, LIB$GET_VM                               ;
                               58              50  D0 0018C          MOVL    R0, VM_STATUS                                ;
                               0A              58  E9 0018F          BLBC    VM_STATUS, 19$                               ;
                               50              69  9A 00192          MOVZBL  (ACE_POINTER), R0                            ;
    50             00          6E              00  2C 00195          MOVC5   #0, (SP), #0, R0, @ACE_NEWADDR               ;
```

```
                                0C    BE    0019A
             0000'   CF               58 D0 0019C 19$:    MOVL    VM_STATUS, AED_L_STATUS
                     5C     0000'     CF E8 001A1         BLBS    AED_L_STATUS, 25$                              4215
         16  0000'   CF               03 E1 001A6         BBC     #3, AED_L_FLAGS, 20$                           4218
                                      01 DD 001AC         PUSHL   #1
                                      15 DD 001AE         PUSHL   #21
         00000000G   00               02 FB 001B0         CALLS   #2, SCR$ERASE_PAGE
                                      01 DD 001B7         PUSHL   #1
                                      15 DD 001B9         PUSHL   #21
         00000000G   00               02 FB 001BB         CALLS   #2, SCR$SET_CURSOR
                            0000'     CF DD 001C2 20$:    PUSHL   AED_L_STATUS
         00000000G   00               01 FB 001C6         CALLS   #1, LIB$SIGNAL
         11  0000'   CF               03 E1 001CD         BBC     #3, AED_L_FLAGS, 22$
                     7E     0000'     CF 9A 001D3 21$:    MOVZBL  AED_B_COLUMN, -(SP)
                     7E     0000'     CF 9A 001D8         MOVZBL  AED_B_LINE, -(SP)
         00000000G   00               02 FB 001DD         CALLS   #2, SCR$SET_CURSOR
                     50     0000'     CF D0 001E4 22$:    MOVL    AED_L_STATUS, R0
                     07               50 93 001E9         BITB    R0, #7
                                      03 12 001EC         BNEQ    24$
                            0190      31    001EE 23$:    BRW     41$
51       50          03               00 EF 001F1 24$:    EXTZV   #0, #3, R0, R1
51   0000'   CF      03               00 ED 001F6         CMPZV   #0, #3, AED_L_WORSTERR, R1
                                      EF 18 001FD         BGEQ    23$
                            017A      31    001FF         BRW     40$
                     50               69 9A 00202 25$:    MOVZBL  (ACE_POINTER), R0                              4224
     0C      BE      69               50 28 00205         MOVC3   R0, (ACE_POINTER), @ACE_NEWADDR
             E4      AD               59 D0 0020A         MOVL    ACE_POINTER, ACE_DESC+4                        4225
             E0      AD               69 9B 0020E         MOVZBW  (ACE_POINTER), ACE_DESC                        4226
             DC      AD     14        AE 9E 00212         MOVAB   ACE_TEXT, ACE_TEXT_DESC+4                      4227
             D8      AD     0C00      8F B0 00217         MOVW    #3072, ACE_TEXT_DESC                           4228
                                      7E 7C 0021D         CLRQ    -(SP)                                          4234
                            0000'     CF 9F 0021F         PUSHAB  P.AAE
                            0000'     CF 9F 00223         PUSHAB  AED_L_PAGEWIDTH
                            D8        AD 9F 00227         PUSHAB  ACE_TEXT_DESC
                            D8        AD 9F 0022A         PUSHAB  ACE_TEXT_DESC
                            E0        AD 9F 0022D         PUSHAB  ACE_DESC
         00000000G   00               07 FB 00230         CALLS   #7, SYS$FORMAT_ACL
             0000'   CF               50 D0 00237         MOVL    R0, AED_L_STATUS
                     56     D8        AD 3C 0023C         MOVZWL  ACE_TEXT_DESC, ACE_TEXT_SIZE                   4235
                     5A     14        AE 9E 00240         MOVAB   ACE_TEXT, FIRST_CHAR                           4236
                            0000'     CF 7C 00244         CLRQ    AED_L_FIRSTLINE                                4237
         6A          56               00 3A 00248 26$:    LOCC    #0, ACE_TEXT_SIZE, (FIRST_CHAR)                4238
                                      02 12 0024C         BNEQ    27$
                                      51 D4 0024E         CLRL    R1
                     5B               51 D0 00250 27$:    MOVL    R1, LAST_CHAR
                                      03 14 00253         BGTR    28$
                            009B      31    00255         BRW     34$
         57          5B               5A C3 00258 28$:    SUBL3   FIRST_CHAR, LAST_CHAR, LINE_SEG_SIZE           4241
                            10        AE 9F 0025C         PUSHAB  NEW_TEXT_LINE                                  4243
                     52     14        A7 9E 0025F         MOVAB   20(R7), R2
             04      AE               52 D0 00263         MOVL    R2, 4(SP)
                            04        AE 9F 00267         PUSHAB  4(SP)
         00000000G   00               02 FB 0026A         CALLS   #2, LIB$GET_VM
                     58               50 D0 00271         MOVL    R0, VM_STATUS
                     07               58 E9 00274         BLBC    VM_STATUS, 29$
52       00          6E               00 2C 00277         MOVC5   #0, (SP), #0, R2, @NEW_TEXT_LINE
                            10        BE    0027C
```

```
              0000'  CF            58  D0 0027E 29$:   MOVL    VM_STATUS, AED_L_STATUS                         ;
                     33     0000'  CF  E8 00283        BLBS    AED_L_STATUS, 32$                               ; 4244
        16    0000'  CF            03  E1 00288        BBC     #3, AED_L_FLAGS, 30$                            ; 4247
                                   01  DD 0028E        PUSHL   #1                                              ;
                                   15  DD 00290        PUSHL   #21                                             ;
          00000000G  00            02  FB 00292        CALLS   #2, SCR$ERASE_PAGE                              ;
                                   01  DD 00299        PUSHL   #1                                              ;
                                   15  DD 0029B        PUSHL   #21                                             ;
          00000000G  00            02  FB 0029D        CALLS   #2, SCR$SET_CURSOR                              ;
                            0000'  CF  DD 002A4 30$:   PUSHL   AED_L_STATUS                                    ;
          00000000G  00            01  FB 002A8        CALLS   #1, LIB$SIGNAL                                  ;
        03    0000'  CF            03  E0 002AF        BBS     #3, AED_L_FLAGS, 31$                            ;
                                 FF2C  31 002B5        BRW     22$                                             ;
                                 FF18  31 002B8 31$:   BRW     21$                                             ;
                     58     10     AE  D0 002BB 32$:   MOVL    NEW_TEXT_LINE, R8                               ; 4253
                08   A8            57  B0 002BF        MOVW    LINE_SEG_SIZE, 8(R8)                            ;
                0C   A8     0C     AE  D0 002C3        MOVL    ACE_NEWADDR, 12(R8)                             ; 4254
    14  A8           6A            56  28 002C8        MOVC3   ACE_TEXT_SIZE, (FIRST_CHAR), 20(R8)             ; 4255
              0000'  DF            68  0E 002CD        INSQUE  (R8), @AED_Q_LINETABLE+4                        ; 4256
                            0000'  CF  D5 002D2        TSTL    AED_L_FIRSTLINE                                 ; 4257
                                   06  12 002D6        BNEQ    33$                                             ;
              0000'  CF     10     AE  D0 002D8        MOVL    NEW_TEXT_LINE, AED_L_FIRSTLINE                  ;
              0000'  CF     10     AE  D0 002DE 33$:   MOVL    NEW_TEXT_LINE, AED_L_LASTLINE                   ; 4258
                     5A     01     AB  9E 002E4        MOVAB   1(R11), FIRST_CHAR                              ; 4259
        52           56            57  C3 002E8        SUBL3   LINE_SEG_SIZE, ACE_TEXT_SIZE, R2                ; 4260
                     56     FF     A2  9E 002EC        MOVAB   -1(R2), ACE_TEXT_SIZE                           ;
                                 FF55  31 002F0        BRW     26$                                             ; 4238
                                   56  D5 002F3 34$:   TSTL    ACE_TEXT_SIZE                                   ; 4262
                                   03  14 002F5        BGTR    35$                                             ;
                                 00C6  31 002F7        BRW     44$                                             ;
                            10     AE  9F 002FA 35$:   PUSHAB  NEW_TEXT_LINE                                   ; 4266
                     52     14     A6  9E 002FD        MOVAB   20(R6), R2                                      ;
                04   AE            52  D0 00301        MOVL    R2, 4(SP)                                       ;
                            04     AE  9F 00305        PUSHAB  4(SP)                                           ;
          00000000G  00            02  FB 00308        CALLS   #2, LIB$GET_VM                                  ;
                     58            50  D0 0030F        MOVL    R0, VM_STATUS                                   ;
                     07            58  E9 00312        BLBC    VM_STATUS, 36$                                  ;
 52     00           6E            00  2C 00315        MOVC5   #0, (SP), #0, R2, @NEW_TEXT_LINE                ;
                            10     BE     0031A                                                                ;
              0000'  CF            58  D0 0031C 36$:   MOVL    VM_STATUS, AED_L_STATUS                         ;
                     71     0000'  CF  E8 00321        BLBS    AED_L_STATUS, 42$                               ; 4267
        16    0000'  CF            03  E1 00326        BBC     #3, AED_L_FLAGS, 37$                            ; 4270
                                   01  DD 0032C        PUSHL   #1                                              ;
                                   15  DD 0032E        PUSHL   #21                                             ;
          00000000G  00            02  FB 00330        CALLS   #2, SCR$ERASE_PAGE                              ;
                                   01  DD 00337        PUSHL   #1                                              ;
                                   15  DD 00339        PUSHL   #21                                             ;
          00000000G  00            02  FB 0033B        CALLS   #2, SCR$SET_CURSOR                              ;
                            0000'  CF  DD 00342 37$:   PUSHL   AED_L_STATUS                                    ;
          00000000G  00            01  FB 00346        CALLS   #1, LIB$SIGNAL                                  ;
        11    0000'  CF            03  E1 0034D        BBC     #3, AED_L_FLAGS, 39$                            ;
                     7E     0000'  CF  9A 00353 38$:   MOVZBL  AED_B_COLUMN, -(SP)                             ;
                     7E     0000'  CF  9A 00358        MOVZBL  AED_B_LINE, -(SP)                               ;
          00000000G  00            02  FB 0035D        CALLS   #2, SCR$SET_CURSOR                              ;
                     50     0000'  CF  D0 00364 39$:   MOVL    AED_L_STATUS, R0                                ;
                     07            50  93 00369        BITB    R0, #7                                          ;
                                   13  13 0036C        BEQL    41$                                             ;
```

```
 51         50       03           00  EF 0036E       EXTZV   #0, #3, R0, R1                          :
 51   0000' CF       03           00  ED 00373       CMPZV   #0, #3, AED_L_WORSTERR, R1              :
                                  05  18 0037A       BGEQ    41$                                     :
           0000'  CF              50  D0 0037C 40$:  MOVL    R0, AED_L_WORSTERR                      :
           0000'  CF        2008  8F  AA 00381 41$:  BICW2   #8200, AED_L_FLAGS+1                    : 4272
                           0000'  CF  94 00388       CLRB    TERM_CHAR                               : 4273
      50   0000'  CF    10000000  8F  C9 0038C       BISL3   #268435456, AED_L_WORSTERR, R0          : 4274
                                  04     00396       RET                                             :
                  58          10  AE  D0 00397 42$:  MOVL    NEW_TEXT_LINE, R8                       : 4276
             08   A8              56  B0 0039B       MOVW    ACE_TEXT_SIZE, 8(R8)                    :
             0C   A8          0C  AE  D0 0039F       MOVL    ACE_NEWADDR, 12(R8)                     : 4277
   14   A8        6A              56  28 003A4       MOVC3   ACE_TEXT_SIZE, (FIRST_CHAR), 20(R8)     : 4278
           0000'  DF              68  0E 003A9       INSQUE  (R8), @AED_Q_LINETABLE+4                : 4279
                           0000'  CF  D5 003AE       TSTL    AED_L_FIRSTLINE                         : 4280
                                  06  12 003B2       BNEQ    43$                                     :
           0000'  CF          10  AE  D0 003B4       MOVL    NEW_TEXT_LINE, AED_L_FIRSTLINE          :
           0000'  CF          10  AE  D0 003BA 43$:  MOVL    NEW_TEXT_LINE, AED_L_LASTLINE           : 4281
                  51       0000'  CF  D0 003C0 44$:  MOVL    AED_L_FIRSTLINE, R1                     : 4283
             0A   A1              01  88 003C5       BISB2   #1, 10(R1)                              :
      27     03   A9              02  E0 003C9       BBS     #2, 3(ACE_POINTER), 45$                 : 4284
                  50          01  A9  9A 003CE       MOVZBL  1(ACE_POINTER), R0                      : 4285
                  01              50  91 003D2       CMPB    R0, #1                                  :
                                  22  13 003D5       BEQL    46$                                     :
                  02              50  91 003D7       CMPB    R0, #2                                  : 4286
                                  1D  13 003DA       BEQL    46$                                     :
                  03              50  91 003DC       CMPB    R0, #3                                  : 4287
                                  18  13 003DF       BEQL    46$                                     :
                  04              50  91 003E1       CMPB    R0, #4                                  : 4288
                                  13  13 003E4       BEQL    46$                                     :
                  05              50  91 003E6       CMPB    R0, #5                                  : 4289
                                  0E  13 003E9       BEQL    46$                                     :
                  06              50  91 003EB       CMPB    R0, #6                                  : 4290
                                  09  13 003EE       BEQL    46$                                     :
                  09              50  91 003F0       CMPB    R0, #9                                  : 4291
                                  04  13 003F3       BEQL    46$                                     :
             0A   A1              10  88 003F5 45$:  BISB2   #16, 10(R1)                             : 4292
                  50       0000'  CF  D0 003F9 46$:  MOVL    AED_L_LASTLINE, R0                      : 4293
             0A   A0              02  88 003FE       BISB2   #2, 10(R0)                              :
                  50              69  9A 00402       MOVZBL  (ACE_POINTER), R0                       : 4294
                  59              50  C0 00405       ADDL2   R0, ACE_POINTER                         :
                                FD5A  31 00408       BRW     16$                                     : 4210
                           0000'  CF  9F 0040B 47$:  PUSHAB  AED_A_ACLBUFFER                         : 4297
             04   AE        0200  8F  3C 0040F       MOVZWL  #512, 4(SP)                             :
                              04  AE  9F 00415       PUSHAB  4(SP)                                   :
      00000000G   00              02  FB 00418       CALLS   #2, LIB$FREE_VM                         :
                  50       0000'  CF  9E 0041F       MOVAB   AED_Q_LINETABLE, R0                     : 4302
                  50       0000'  CF  D1 00424       CMPL    AED_Q_LINETABLE, R0                     :
                                  3E  12 00429       BNEQ    48$                                     :
           0000'  CF        4020  8F  A8 0042B       BISW2   #16416, AED_L_FLAGS                     : 4306
                           0000'  CF  B4 00432       CLRW    SEGMENT_SIZE                            : 4307
                           0000'  CF  B4 00436       CLRW    AED_W_TOTALSIZE                         :
           0000'  DF       0000'  CF  0E 0043A       INSQUE  AED_T_CURLINE, @AED_Q_LINETABLE+4       : 4308
                  50       0000'  CF  9E 00441       MOVAB   AED_T_CURLINE, R0                       : 4309
           0000'  CF              50  D0 00446       MOVL    R0, AED_L_LASTLINE                      :
           0000'  CF              50  D0 0044B       MOVL    R0, AED_L_FIRSTLINE                     :
             0A   A0              01  B0 00450       MOVW    #1, 10(R0)                              : 4310
                           0000'  CF  D4 00454       CLRL    AED_L_CURACE                            : 4311
```

```
                          0000'  CF  95 00458        TSTB    AED_L_FLAGS+1                          ; 4312
                                 6C  18 0045C        BGEQ    52$
                          0000'  CF  94 0045E        CLRB    AED_B_ACETYPE                          ; 4315
             0000'  CF           08  8A 00462        BICB2   #8, AED_L_FLAGS+2                      ; 4316
                                 68  11 00467        BRB     53$                                    ; 4317
                          0000'  CF  DD 00469 48$:   PUSHL   AED_Q_LINETABLE                        ; 4323
             0000G  CF           01  FB 0046D        CALLS   #1, AED_COPSEGMENT
             0000'  CF    0000'  CF  0E 00472        INSQUE  AED_T_CURLINE, AED_Q_LINETABLE         ; 4324
                    50    0000'  CF  9E 00479        MOVAB   AED_T_CURLINE, R0                      ; 4325
             0000'  CF           50  D0 0047E        MOVL    R0, AED_L_LASTLINE
             0000'  CF           50  D0 00483        MOVL    R0, AED_L_FIRSTLINE
                    51    0000'  CF  D0 00488        MOVL    AED_L_FIRSTLINE, R1                    ; 4326
             0000'  CF       08  A1  B0 0048D        MOVW    8(R1), AED_W_TOTALSIZE
                    50    0000'  CF  D0 00493        MOVL    AED_L_LASTLINE, R0                     ; 4327
        23      0A  A0           01  E0 00498 49$:   BBS     #1, 10(R0), 51$
                    52    0000'  CF  9E 0049D        MOVAB   AED_T_CURLINE, R2                      ; 4330
                    52           50  D1 004A2        CMPL    R0, R2
                                 05  12 004A5        BNEQ    50$
             0000'  CF           60  D0 004A7        MOVL    (R0), AED_L_LASTLINE                   ; 4331
             0000'  CF    0000'  DF  D0 004AC 50$:   MOVL    @AED_L_LASTLINE, AED_L_LASTLINE        ; 4332
                    50    0000'  CF  D0 004B3        MOVL    AED_L_LASTLINE, R0                     ; 4333
             0000'  CF       08  A0  A0 004B8        ADDW2   8(R0), AED_W_TOTALSIZE
                                 D8  11 004BE        BRB     49$                                    ; 4327
             0000'  CF       0C  A1  D0 004C0 51$:   MOVL    12(R1), AED_L_CURACE                   ; 4335
                          0000'  CF  95 004C6        TSTB    AED_L_FLAGS+1                          ; 4336
                                 16  18 004CA 52$:   BGEQ    54$
             0000'  CF           08  88 004CC        BISB2   #8, AED_L_FLAGS+2                      ; 4339
                          0000'  CF  9F 004D1 53$:   PUSHAB  BUFFER_INDEX                           ; 4340
             0000G  CF           01  FB 004D5        CALLS   #1, AED_SELECTFIELD
 0000'  CF   0000'  CF           01  81 004DA        ADDB3   #1, BUFFER_INDEX, AED_B_COLUMN         ; 4341
             0000'  CF    0000'  CF  D0 004E2 54$:   MOVL    AED_Q_LINETABLE, AED_L_BEGINLINE       ; 4344
             0000'  CF           01  90 004E9        MOVB    #1, AED_B_SAVE_LIN                     ; 4345
             0000'  CF    0000'  CF  90 004EE        MOVB    AED_B_COLUMN, AED_B_SAVE_COL           ; 4346
                                 01  DD 004F5 55$:   PUSHL   #1                                     ; 4351
                                 01  DD 004F7        PUSHL   #1
         00000000G  00           02  FB 004F9        CALLS   #2, SCR$ERASE_PAGE
                                 14  DD 00500        PUSHL   #20                                    ; 4352
                                 01  DD 00502        PUSHL   #1
         00000000G  00           02  FB 00504        CALLS   #2, SCR$SET_SCROLL
                    06    0000'  CF  E8 0050B        BLBS    AED_L_FLAGS, 56$                       ; 4353
        09   0000'  CF           01  E1 00510        BBC     #1, AED_L_FLAGS, 57$
                          0000'  CF  9F 00516 56$:   PUSHAB  P.AAG                                  ; 4354
             0000G  CF           01  FB 0051A        CALLS   #1, AED_PUTOUTPUT
             0000'  CF           01  D0 0051F 57$:   MOVL    #1, TEMP_LINE                          ; 4355
                10  AE    0000'  CF  D0 00524        MOVL    AED_L_BEGINLINE, NEW_TEXT_LINE         ; 4356
                    53    0000'  CF  D0 0052A        MOVL    TEMP_LINE, R3                          ; 4359
                                 01  DD 0052F 58$:   PUSHL   #1
                                 53  DD 00531        PUSHL   R3
         00000000G  00           02  FB 00533        CALLS   #2, SCR$SET_CURSOR
                    52       10  AE  D0 0053A        MOVL    NEW_TEXT_LINE, R2                      ; 4360
             0000'  CF       08  A2  B0 0053E        MOVW    8(R2), ECHO_DESC
             0000'  CF       14  A2  9E 00544        MOVAB   20(R2), ECHO_DESC+4                    ; 4361
                          0000'  CF  9F 0054A        PUSHAB  ECHO_DESC                              ; 4362
             0000G  CF           01  FB 0054E        CALLS   #1, AED_PUTOUTPUT
                          0000'  CF  D6 00553        INCL    TEMP_LINE                              ; 4363
        04      0A  A2           03  E1 00557        BBC     #3, 10(R2), 59$                        ; 4364
                10  AE           62  D0 0055C        MOVL    (R2), NEW_TEXT_LINE                    ; 4365
```

```
            10   AE        10   BE   D0 00560 59$:    MOVL    @NEW_TEXT_LINE, NEW_TEXT_LINE          ; 4366
                 53     0000'   CF   D0 00565         MOVL    TEMP_LINE, R3                          ; 4368
                 14             53   D1 0056A         CMPL    R3, #20                                ;
                                0B   14 0056D         BGTR    60$                                    ;
                 50     0000'   CF   9E 0056F         MOVAB   AED_Q_LINETABLE, R0                    ; 4369
                 50        10   AE   D1 00574         CMPL    NEW_TEXT_LINE, R0                      ;
                                B5   12 00578         BNEQ    58$                                    ;
                 7E     0000'   CF   9A 0057A 60$:    MOVZBL  AED_B_SAVE_COL, -(SP)                  ; 4370
                 7E     0000'   CF   9A 0057F         MOVZBL  AED_B_SAVE_LIN, -(SP)                  ;
     00000000G   00             02   FB 00584         CALLS   #2, SCR$SET_CURSOR                     ;
         0000'   CF      2008   8F   AA 0058B         BICW2   #8200, AED_[_FLAGS+1                   ; 4372
                        0000'   CF   94 00592         CLRB    TERM_CHAR                              ; 4373
                 50             01   D0 00596         MOVL    #1, R0                                 ; 4374
                                     04 00599         RET                                            ; 4376
```

; Routine Size: 1434 bytes,   Routine Base: $CODE$ + 28CF

```
;  3956          4377  1 %SBTTL  'ACT_ENTER - enter the current ACE'
;  3957          4378  1 ROUTINE ACT_ENTER =
;  3958          4379  1
;  3959          4380  1 !++
;  3960          4381  1 !
;  3961          4382  1 ! FUNCTIONAL DESCRIPTION:
;  3962          4383  1 !
;  3963          4384  1 !       This routine updates the object's ACL with the newly modified ACE.
;  3964          4385  1 !       The cursor is left positioned at the first character of the next
;  3965          4386  1 !       ACE.
;  3966          4387  1 !
;  3967          4388  1 ! CALLING SEQUENCE:
;  3968          4389  1 !       ACT_ENTER ()
;  3969          4390  1 !
;  3970          4391  1 ! INPUT PARAMETERS:
;  3971          4392  1 !       none
;  3972          4393  1 !
;  3973          4394  1 ! IMPLICIT INPUTS:
;  3974          4395  1 !       OWN storage
;  3975          4396  1 !
;  3976          4397  1 ! OUTPUT PARAMETERS:
;  3977          4398  1 !       none
;  3978          4399  1 !
;  3979          4400  1 ! IMPLICIT OUTPUTS:
;  3980          4401  1 !       none
;  3981          4402  1 !
;  3982          4403  1 ! ROUTINE VALUE:
;  3983          4404  1 !       1 if successful
;  3984          4405  1 !       error status otherwise
;  3985          4406  1 !
;  3986          4407  1 ! SIDE EFFECTS:
;  3987          4408  1 !       The line segment table is updated as necessary, ACE line pointers
;  3988          4409  1 !       are updated, and the object's ACL is updated as necessary.
;  3989          4410  1 !
;  3990          4411  1 !--
;  3991          4412  1
;  3992          4413  2 BEGIN
;  3993          4414  2
;  3994          4415  2 BUFFER_INDEX = 0;
;  3995          4416  2 AED_B_COLUMN = 1;
;  3996          4417  2 AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  3997          4418  2 NEW_TEXT_LINE = AED_REPSEGMENT ();
;  3998          4419  2 IF .AED_L_FLAGS[AED_V_MODIFIED]
;  3999          4420  2 OR .AED_L_FLAGS[AED_V_INSERT]
;  4000          4421  2 OR .AED_L_FLAGS[AED_V_INSERTEXT]
;  4001          4422  2 THEN
;  4002          4423  3     BEGIN
;  4003          4424  3     FINISH_ACE ();
;  4004          4425  3     AED_L_FLAGS[AED_V_INSERTEXT] = 0;
;  4005          4426  3     AED_COMPRESS ();
;  4006          4427  3     AED_L_STATUS = AED_UPDATEACL (.AED_W_TOTALSIZE);
;  4007          4428  3     IF NOT .AED_L_STATUS
;  4008          4429  3     THEN
;  4009          4430  4         BEGIN
;  4010          4431  4         AED_L_FLAGS[AED_V_ACERROR] = 1;
;  4011          4432  4         AED_POSITION (.AED_L_FIRSTLINE);
;  4012          4433  4         AED_COPSEGMENT (.AED_L_FIRSTLINE);
```

```
;  4013          4434  4          INSQUE (AED_T_CURLINE[LINE_L_FLINK],
;  4014          4435  4                 .AED_C_FIRSTLINE[LINE_L_BLINK]);
;  4015          4436  4          IF .AED_L_LASTLINE EQL .AED_L_FIRSTLINE
;  4016          4437  4          THEN AED_C_LASTLINE = AED_T_CURLINE;
;  4017          4438  4          IF .AED_C_BEGINLINE EQL .AED_L_FIRSTLINE
;  4018          4439  4          THEN AED_C_BEGINLINE = AED_T_CURLINE;
;  4019          4440  4          AED_L_FIRSTLINE = AED_T_CURLINE;
;  4020          4441  4          IF .AED_L_FIRSTLINE NEQ .AED_L_LASTLINE
;  4021          4442  4          AND .AED_C_FLAGS[AED_V_ENDAC[]
;  4022          4443  4          THEN AED_L_FLAGS[AED_V_ENDACL] = 0;
;  4023          4444  4          BUFFER_INDEX = 0;
;  4024          4445  4          AED_B_COLUMN = 1;
;  4025          4446  4          AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  4026          4447  4          AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  4027          4448  4          AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  4028          4449  4          TERM_CHAR = 0;
;  4029          4450  4          RETURN 1;
;  4030          4451  3          END;
;  4031          4452  3      AED_L_FLAGS[AED_V_MODIFIED] = AED_L_FLAGS[AED_V_INSERT] = 0;
;  4032          4453  2      END;
;  4033          4454  2
;  4034          4455  2  ! Set up the display for the next line.
;  4035          4456  2
;  4036          4457  2  AED_POSITION (.AED_L_LASTLINE[LINE_L_FLINK]);
;  4037          4458  2  IF .AED_L_LASTLINE[LINE_L_FLINK] EQLA AED_Q_LINETABLE[LINE_L_FLINK]
;  4038          4459  2  THEN
;  4039          4460  3      BEGIN
;  4040          4461  3      AED_L_FLAGS[AED_V_ENDACL] = 1;
;  4041          4462  3      AED_L_FLAGS[AED_V_INSERTEXT] = 1;
;  4042          4463  3      AED_W_TOTALSIZE = SEGMENT_SIZE = 0;
;  4043          4464  3      INSQUE (AED_T_CURLINE[LINE_L_FLINK],
;  4044          4465  3             .AED_Q_LINETABLE[LINE_L_BLINK]);
;  4045          4466  3      AED_L_FIRSTLINE = AED_L_LASTLINE = AED_T_CURLINE;
;  4046          4467  3      AED_L_FIRSTLINE[LINE_Q_FLAGS] = LINE_M_BEGINACE;
;  4047          4468  3      AED_L_CURACE = 0;
;  4048          4469  3      IF .AED_L_FLAGS[AED_V_PROMPT]
;  4049          4470  3      THEN
;  4050          4471  4          BEGIN
;  4051          4472  4          AED_B_ACETYPE = 0;
;  4052          4473  4          AED_L_FLAGS[AED_V_NOITEMSEL] = 0;
;  4053          4474  4          AED_SELECTFIELD (BUFFER_INDEX);
;  4054          4475  4          ECHO_DESC[DSC$W_LENGTH] = .AED_T_CURLINE[LINE_W_SIZE];
;  4055          4476  4          ECHO_DESC[DSC$A_POINTER] = AED_T_CURLINE[LINE_T_TEXT];
;  4056          4477  4          SCR$SET_CURSOR (.AED_B_LINE, 1);
;  4057          4478  4          AED_PUTOUTPUT (ECHO_DESC);
;  4058          4479  4          SCR$ERASE_LINE (.AED_B_LINE, .SEGMENT_SIZE + 1);
;  4059          4480  4          AED_B_COLUMN = .BUFFER_INDEX + 1;
;  4060          4481  4          AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  4061          4482  4          END;
;  4062          4483  3      END
;  4063          4484  2  ELSE
;  4064          4485  3      BEGIN
;  4065          4486  3      AED_COPSEGMENT (.AED_L_LASTLINE[LINE_L_FLINK]);
;  4066          4487  3      INSQUE (AED_T_CURLINE[LINE_L_FLINK], AED_L_LASTLINE[LINE_L_FLINK]);
;  4067          4488  3      AED_L_FIRSTLINE = AED_L_LASTLINE = AED_T_CURLINE;
;  4068          4489  3      AED_W_TOTALSIZE = .AED_C_FIRSTLINE[LINE_Q_SIZE];
;  4069          4490  3      UNTIL .AED_L_LASTLINE[LINE_V_ENDACE]
```

```
3       DO
4           BEGIN
4           IF .AED_L_LASTLINE EQLA AED_T_CURLINE
4           THEN AED_L_LASTLINE = .AED_L_LASTLINE[LINE_L_FLINK];
4           AED_L_LASTLINE = .AED_L_LASTLINE[LINE_L_FLINK];
4           AED_W_TOTALSIZE = .AED_W_TOTALSIZE + .AED_L_LASTLINE[LINE_W_SIZE];
3           END;
3       AED_L_CURACE = .AED_L_FIRSTLINE[LINE_L_BINACE];
3       IF .AED_L_FLAGS[AED_V_PROMPT]
3       THEN
4           BEGIN
4           AED_L_FLAGS[AED_V_NOITEMSEL] = 1;
4           AED_SELECTFIELD (BUFFER_INDEX);
4           AED_B_COLUMN = .BUFFER_INDEX + 1;
3           END;
2       END;
2   AED_L_FLAGS[AED_V_FIRSTCHAR] = 1;
2   IF .AED_B_COLUMN GTR .SEGMENT_SIZE + 1
2   THEN BUFFER_INDEX = .SEGMENT_SIZE
2   ELSE BUFFER_INDEX = .AED_B_COLUMN - 1;
2   AED_SET_CURSOR (.AED_B_LINE, .BUFFER_INDEX + 1);
2   AED_L_FLAGS[AED_V_GOLDKEY] = 0;
2   AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
2   TERM_CHAR = 0;
2   RETURN 1;
2
1   END;                                              ! End of routine ACT_ENTER
```

```
                                   001C 00000 ACT_ENTER:
                                                   .WORD    Save R2,R3,R4                        ; 4378
             54       0000'   CF  9E 00002         MOVAB    BUFFER_INDEX, R4                     ;
             53       0000'   CF  9E 00007         MOVAB    AED_L_FLAGS, R3                      ;
                              64  D4 0000C         CLRL     BUFFER_INDEX                         ; 4415
          20    A3            01  90 0000E         MOVB     #1, AED_B_COLUMN                     ; 4416
          01    A3            08  8A 00012         BICB2    #8, AED_L_FLAGS+1                    ; 4417
       0000G    CF            00  FB 00016         CALLS    #0, AED_REPSEGMENT                   ; 4418
          18    A4            50  D0 0001B         MOVL     R0, NEW_TEXT_LINE                    ;
                              63  95 0001F         TSTB     AED_L_FLAGS                          ; 4419
                              0D  19 00021         BLSS     1$                                   ;
   08     01    A3            05  E0 00023         BBS      #5, AED_L_FLAGS+1, 1$                ; 4420
   03     01    A3            06  E0 00028         BBS      #6, AED_L_FLAGS+1, 1$                ; 4421
                            0081  31 0002D         BRW      6$                                   ;
       0000V    CF            00  FB 00030 1$:     CALLS    #0, FINISH_ACE                       ; 4424
          01    A3      40    8F  8A 00035         BICB2    #64, AED_L_FLAGS+1                   ; 4425
       0000G    CF            00  FB 0003A         CALLS    #0, AED_COMPRESS                     ; 4426
          7E          02C4    C3  3C 0003F         MOVZWL   AED_W_TOTALSIZE, -(SP)               ; 4427
       0000G    CF            01  FB 00044         CALLS    #1, AED_UPDATEACL                    ;
        008C    C3            50  D0 00049         MOVL     R0, AED_L_STATUS                     ;
                59    008C    C3  E8 0004E         BLBS     AED_L_STATUS, 5$                     ; 4428
                63      40    8F  88 00053         BISB2    #64, AED_L_FLAGS                     ; 4431
                        40    A3  DD 00057         PUSHL    AED_L_FIRSTLINE                      ; 4432
       0000G    CF            01  FB 0005A         CALLS    #1, AED_POSITION                     ;
                        40    A3  DD 0005F         PUSHL    AED_L_FIRSTLINE                      ; 4433
```

```
          0000G  CF              01  FB 00062        CALLS   #1, AED_COPSEGMENT                              ;
             50  40              A3  D0 00067        MOVL    AED_L_FIRSTLINE, R0                             ; 4435
       04    B0  00B0            C3  0E 0006B        INSQUE  AED_T_CURLINE, @4(R0)                           ;
       40    A3  44              A3  D1 00071        CMPL    AED_L_LASTLINE, AED_L_FIRSTLINE                 ; 4436
                                 06  12 00076        BNEQ    2$                                              ;
       44    A3  00B0            C3  9E 00078        MOVAB   AED_T_CURLINE, AED_L_LASTLINE                   ; 4437
       40    A3  48              A3  D1 0007E  2$:   CMPL    AED_L_BEGINLINE, AED_L_FIRSTLINE                ; 4438
                                 06  12 00083        BNEQ    3$                                              ;
       48    A3  00B0            C3  9E 00085        MOVAB   AED_T_CURLINE, AED_L_BEGINLINE                  ; 4439
       40    A3  00B0            C3  9E 0008B  3$:   MOVAB   AED_T_CURLINE, AED_L_FIRSTLINE                  ; 4440
       44    A3  40              A3  D1 00091        CMPL    AED_L_FIRSTLINE, AED_L_LASTLINE                 ; 4441
                                 07  13 00096        BEQL    4$                                              ;
  03         63                  05  E1 00098        BBC     #5, AED_L_FLAGS, 4$                             ; 4442
             63                  20  8A 0009C        BICB2   #32, AED_L_FLAGS                                ; 4443
                                 64  D4 0009F  4$:   CLRL    BUFFER_INDEX                                    ; 4444
       20    A3                  01  90 000A1        MOVB    #1, AED_B_COLUMN                                ; 4445
             7E  20              A3  9A 000A5        MOVZBL  AED_B_COLUMN, -(SP)                             ; 4446
                               0127  31 000A9        BRW     16$                                             ;
             63  2080            8F  AA 000AC  5$:   BICW2   #8320, AED_L_FLAGS                              ; 4452
                 44              B3  DD 000B1  6$:   PUSHL   @AED_L_LASTLINE                                 ; 4457
          0000G  CF              01  FB 000B4        CALLS   #1, AED_POSITION                                ;
             50  30              A3  9E 000B9        MOVAB   AED_Q_LINETABLE, R0                             ; 4458
             50  44              B3  D1 000BD        CMPL    @AED_L_LASTLINE, R0                             ;
                                 03  13 000C1        BEQL    7$                                              ;
                               0082  31 000C3        BRW     9$                                              ;
             63  4020            8F  A8 000C6  7$:   BISW2   #16416, AED_L_FLAGS                             ; 4462
                 00B8            C3  B4 000CB        CLRW    SEGMENT_SIZE                                    ; 4463
                 02C4            C3  B4 000CF        CLRW    AED_W_TOTALSIZE                                 ;
       34    B3  00B0            C3  0E 000D3        INSQUE  AED_T_CURLINE, @AED_Q_LINETABLE+4               ; 4465
             50  00B0            C3  9E 000D9        MOVAB   AED_T_CURLINE, R0                               ; 4466
       44    A3                  50  D0 000DE        MOVL    R0, AED_L_LASTLINE                              ;
       40    A3                  50  D0 000E2        MOVL    R0, AED_L_FIRSTLINE                             ;
       0A    A0                  01  B0 000E6        MOVW    #1, 10(R0)                                      ; 4467
                 3C              A3  D4 000EA        CLRL    AED_L_CURACE                                    ; 4468
                 01              A3  95 000ED        TSTB    AED_L_FLAGS+1                                   ; 4469
                                 54  18 000F0        BGEQ    8$                                              ;
                 00A8            C3  94 000F2        CLRB    AED_B_ACETYPE                                   ; 4472
       02    A3                  08  8A 000F6        BICB2   #8, AED_L_FLAGS+2                               ; 4473
                                 54  DD 000FA        PUSHL   R4                                              ; 4474
          0000G  CF              01  FB 000FC        CALLS   #1, AED_SELECTFIELD                             ;
       04    A4  00B8            C3  B0 00101        MOVW    AED_T_CURLINE+8, ECHO_DESC                      ; 4475
       08    A4  00C4            C3  9E 00107        MOVAB   AED_T_CURLINE+20, ECHO_DESC+4                   ; 4476
                                 01  DD 0010D        PUSHL   #1                                              ; 4477
             7E  24              A3  9A 0010F        MOVZBL  AED_B_LINE, -(SP)                               ;
      00000000G  00              02  FB 00113        CALLS   #2, SCR$SET_CURSOR                              ;
                 04              A4  9F 0011A        PUSHAB  ECHO_DESC                                       ; 4478
          0000G  CF              01  FB 0011D        CALLS   #1, AED_PUTOUTPUT                               ;
             7E  00B8            C3  3C 00122        MOVZWL  SEGMENT_SIZE, -(SP)                             ; 4479
                                 6E  D6 00127        INCL    (SP)                                            ;
             7E  24              A3  9A 00129        MOVZBL  AED_B_LINE, -(SP)                               ;
      00000000G  00              02  FB 0012D        CALLS   #2, SCR$ERASE_LINE                              ;
  20    A3       64              01  81 00134        ADDB3   #1, BUFFER_INDEX, AED_B_COLUMN                  ; 4480
             7E  20              A3  9A 00139        MOVZBL  AED_B_COLUMN, -(SP)                             ; 4481
             7E  24              A3  9A 0013D        MOVZBL  AED_B_LINE, -(SP)                               ;
          0000G  CF              02  FB 00141        CALLS   #2, AED_SET_CURSOR                              ;
                                 67  11 00146  8$:   BRB     13$                                             ; 4458
                 44              B3  DD 00148  9$:   PUSHL   @AED_L_LASTLINE                                 ; 4486
```

```
                    0000G  CF          01  FB 0014B        CALLS   #1, AED_COPSEGMENT                          ;
                       44  B3    00B0  C3  0E 00150        INSQUE  AED_T_CURLINE, @AED_L_LASTLINE              ; 4487
                           50    00B0  C3  9E 00156        MOVAB   AED_T_CURLINE, R0                           ; 4488
                       44  A3          50  D0 0015B        MOVL    R0, AED_L_LASTLINE                          ;
                       40  A3          50  D0 0015F        MOVL    R0, AED_L_FIRSTLINE                         ;
                           52      40  A3  D0 00163        MOVL    AED_L_FIRSTLINE, R2                         ; 4489
                    02C4   C3      08  A2  B0 00167        MOVW    8(R2), AED_W_TOTALSIZE                      ;
                           51      44  A3  D0 0016D        MOVL    AED_L_LASTLINE, R1                          ; 4490
              1F       0A  A1          01  E0 00171  10$:  BBS     #1, 10(R1), 12$                             ;
                           50    00B0  C3  9E 00176        MOVAB   AED_T_CURLINE, R0                           ; 4493
                           50          51  D1 0017B        CMPL    R1, R0                                      ;
                                       04  12 0017E        BNEQ    11$                                         ;
                       44  A3          61  D0 00180        MOVL    (R1), AED_L_LASTLINE                        ; 4494
                       44  A3      44  B3  D0 00184  11$:  MOVL    @AED_L_LASTLINE, AED_L_LASTLINE             ; 4495
                           51      44  A3  D0 00189        MOVL    AED_L_LASTLINE, R1                          ; 4496
                    02C4   C3      08  A1  A0 0018D        ADDW2   8(R1), AED_W_TOTALSIZE                      ;
                                       DC  11 00193        BRB     10$                                         ; 4490
                       3C  A3      0C  A2  D0 00195  12$:  MOVL    12(R2), AED_L_CURACE                        ; 4498
                                   01  A3  95 0019A        TSTB    AED_L_FLAGS+1                               ; 4499
                                       10  18 0019D        BGEQ    13$                                         ;
                       02  A3          08  88 0019F        BISB2   #8, AED_L_FLAGS+2                           ; 4502
                                       54  DD 001A3        PUSHL   R4                                          ; 4503
                    0000G  CF          01  FB 001A5        CALLS   #1, AED_SELECTFIELD                         ;
          20  A3           64          01  81 001AA        ADDB3   #1, BUFFER_INDEX, AED_B_COLUMN              ; 4504
                       01  A3          10  88 001AF  13$:  BISB2   #16, AED_L_FLAGS+1                          ; 4507
                           50    00B8  C3  3C 001B3        MOVZWL  SEGMENT_SIZE, R0                            ; 4508
                                       50  D6 001B8        INCL    R0                                          ;
    50    20  A3               08      00  ED 001BA        CMPZV   #0, #8, AED_B_COLUMN, R0                    ;
                                       07  15 001C0        BLEQ    14$                                         ;
                           64    00B8  C3  3C 001C2        MOVZWL  SEGMENT_SIZE, BUFFER_INDEX                  ; 4509
                                       06  11 001C7        BRB     15$                                         ;
                           64      20  A3  9A 001C9  14$:  MOVZBL  AED_B_COLUMN, BUFFER_INDEX                  ; 4510
                                       64  D7 001CD        DECL    BUFFER_INDEX                                ;
              7E           64          01  C1 001CF  15$:  ADDL3   #1, BUFFER_INDEX, -(SP)                     ; 4511
                           7E      24  A3  9A 001D3  16$:  MOVZBL  AED_B_LINE, -(SP)                           ;
                    0000G  CF          02  FB 001D7        CALLS   #2, AED_SET_CURSOR                          ;
                       01  A3    2008  8F  AA 001DC        BICW2   #8200, AED_L_FLAGS+1                        ; 4513
                                   28  A4  94 001E2        CLRB    TERM_CHAR                                   ; 4514
                           50          01  D0 001E5        MOVL    #1, R0                                      ; 4515
                                           04 001E8        RET                                                 ; 4517

; Routine Size:  489 bytes,    Routine Base:  $CODE$ + 2E69
```

```
;  4098          4518  1 %SBTTL  'ACT_INSERT - insert an ACE'
;  4099          4519  1 ROUTINE ACT_INSERT =
;  4100          4520  1
;  4101          4521  1 !++
;  4102          4522  1 !
;  4103          4523  1 ! FUNCTIONAL DESCRIPTION:
;  4104          4524  1 !
;  4105          4525  1 !       This routine is called when it is desired to insert a new ACE at
;  4106          4526  1 !       a random position in the ACL.
;  4107          4527  1 !
;  4108          4528  1 ! CALLING SEQUENCE:
;  4109          4529  1 !       ACT_INSERT ()
;  4110          4530  1 !
;  4111          4531  1 ! INPUT PARAMETERS:
;  4112          4532  1 !       none
;  4113          4533  1 !
;  4114          4534  1 ! IMPLICIT INPUTS:
;  4115          4535  1 !       OWN storage
;  4116          4536  1 !
;  4117          4537  1 ! OUTPUT PARAMETERS:
;  4118          4538  1 !       none
;  4119          4539  1 !
;  4120          4540  1 ! IMPLICIT OUTPUTS:
;  4121          4541  1 !       none
;  4122          4542  1 !
;  4123          4543  1 ! ROUTINE VALUE:
;  4124          4544  1 !       1 if successful
;  4125          4545  1 !       error status otherwise
;  4126          4546  1 !
;  4127          4547  1 ! SIDE EFFECTS:
;  4128          4548  1 !       The line segment table is updated as necessary, ACE line pointers
;  4129          4549  1 !       are updated, and the object's ACL is updated as necessary.
;  4130          4550  1 !
;  4131          4551  1 !--
;  4132          4552  1
;  4133          4553  2 BEGIN
;  4134          4554  2
;  4135          4555  2 IF NOT .AED_L_FLAGS[AED_V_ENDACL]
;  4136          4556  2 AND NOT .AED_L_FLAGS[AED_V_INSERTEXT]
;  4137          4557  2 AND NOT .AED_L_FLAGS[AED_V_INSERT]
;  4138          4558  2 THEN
;  4139          4559  3     BEGIN
;  4140          4560  3     NEW_TEXT_LINE = AED_REPSEGMENT ();
;  4141          4561  3     IF .AED_L_FLAGS[AED_V_MODIFIED]
;  4142          4562  3     THEN
;  4143          4563  4         BEGIN
;  4144          4564  4         FINISH_ACE ();
;  4145          4565  4         IF .AED_L_FLAGS[AED_V_PROMPT]
;  4146          4566  4         AND .AED_L_FLAGS[AED_V_FIRSTCHAR]
;  4147          4567  4         THEN
;  4148          4568  5             BEGIN
;  4149          4569  5             NEW_TEXT_LINE[LINE_V_DUMMY] = 1;
;  4150          4570  5             AED_W_TOTALSIZE = 0;
;  4151          4571  4             END;
;  4152          4572  4         AED_L_FLAGS[AED_V_INSERTEXT] = 0;
;  4153          4573  4         IF .AED_W_TOTALSIZE EQL 0
;  4154          4574  4         THEN NEW_TEXT_LINE = .NEW_TEXT_LINE[LINE_L_BLINK];
```

```
;  4155          4575  4          AED_COMPRESS ();
;  4156          4576  4          AED_L_STATUS = AED_UPDATEACL (.AED_W_TOTALSIZE);
;  4157          4577  4          IF NOT .AED_L_STATUS
;  4158          4578  4          THEN
;  4159          4579  5              BEGIN
;  4160          4580  5              AED_L_FLAGS[AED_V_ACERROR] = 1;
;  4161          4581  5              AED_POSITION (.AED_L_FIRSTLINE);
;  4162          4582  5              AED_COPSEGMENT (.AED_L_FIRSTLINE);
;  4163          4583  5              INSQUE (AED_T_CURLINE[LINE_L_FLINK],
;  4164          4584  5                      .AED_L_FIRSTLINE[LINE_L_BLINK]);
;  4165          4585  5              IF .AED_L_LASTLINE EQL .AED_L_FIRSTLINE
;  4166          4586  5              THEN AED_L_LASTLINE = AED_T_CURLINE;
;  4167          4587  5              IF .AED_L_BEGINLINE EQL .AED_L_FIRSTLINE
;  4168          4588  5              THEN AED_L_BEGINLINE = AED_T_CURLINE;
;  4169          4589  5              AED_L_FIRSTLINE = AED_T_CURLINE;
;  4170          4590  5              IF .AED_L_FIRSTLINE NEQ .AED_L_LASTLINE
;  4171          4591  5              AND .AED_L_FLAGS[AED_V_ENDACL]
;  4172          4592  5              THEN AED_L_FLAGS[AED_V_ENDACL] = 0;
;  4173          4593  5              BUFFER_INDEX = 0;
;  4174          4594  5              AED_B_COLUMN = 1;
;  4175          4595  5              AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  4176          4596  5              AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  4177          4597  5              AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  4178          4598  5              TERM_CHAR = 0;
;  4179          4599  5              RETURN 1;
;  4180          4600  4              END;
;  4181          4601  4          AED_L_FLAGS[AED_V_MODIFIED] = AED_L_FLAGS[AED_V_INSERT] = 0;
;  4182          4602  3          END;
;  4183          4603  3      AED_COMPRESS ();
;  4184          4604  3      AED_POSITION (.AED_L_FIRSTLINE);
;  4185          4605  3      AED_L_CURACE = .AED_L_FIRSTLINE[LINE_L_BINACE];
;  4186          4606  3      AED_W_TOTALSIZE = SEGMENT_SIZE = 0;
;  4187          4607  3      INSQUE (AED_T_CURLINE[LINE_L_FLINK], .AED_L_FIRSTLINE[LINE_L_BLINK]);
;  4188          4608  3      IF .AED_L_BEGINLINE EQL .AED_L_FIRSTLINE
;  4189          4609  3      THEN AED_L_BEGINLINE = AED_T_CURLINE[LINE_L_FLINK];
;  4190          4610  3      AED_L_FIRSTLINE = AED_L_LASTLINE = AED_T_CURLINE;
;  4191          4611  3      AED_L_FIRSTLINE[LINE_W_FLAGS] = LINE_M_BEGINACE;
;  4192          4612  3      AED_POSITION (AED_T_CURLINE);
;  4193          4613  3
;  4194          4614  3  ! Now repaint the display.  This is done by either scrolling down and repainting
;  4195          4615  3  ! the first part of the display or repainting from the current position to the
;  4196          4616  3  ! end of the display (or the end of the ACL).  This is necessary to echo the
;  4197          4617  3  ! text from the split portion of the line.
;  4198          4618  3
;  4199          4619  3      IF .AED_B_LINE LEQ 10
;  4200          4620  3      THEN
;  4201          4621  4          BEGIN
;  4202          4622  4          SCR$SET_CURSOR (1,1);           ! **** TEMP ****
;  4203          4623  4          SCR$DOWN_SCROLL ();
;  4204          4624  4          NEW_TEXT_LINE = .AED_L_BEGINLINE;
;  4205          4625  4          INCR J FROM 1 TO .AED_B_LINE
;  4206          4626  4          DO
;  4207          4627  5              BEGIN
;  4208          4628  5              ECHO_DESC[DSC$W_LENGTH] = .NEW_TEXT_LINE[LINE_W_SIZE];
;  4209          4629  5              ECHO_DESC[DSC$A_POINTER] = NEW_TEXT_LINE[LINE_T_TEXT];
;  4210          4630  5              SCR$SET_CURSOR (.J, 1);
;  4211          4631  5              AED_PUTOUTPUT (ECHO_DESC);
```

```
5                 SCR$ERASE_LINE (.J, .ECHO_DESC[DSC$W_LENGTH] + 1);
5                 NEW_TEXT_LINE = .NEW_TEXT_LINE[LINE_L_FLINK];
4                 END;
4             END
3         ELSE
4             BEGIN
4             NEW_TEXT_LINE = AED_T_CURLINE;
4             INCR J FROM .AED_B_LINE TO 20
4             DO
5                 BEGIN
5                 ECHO_DESC[DSC$W_LENGTH] = .NEW_TEXT_LINE[LINE_W_SIZE];
5                 ECHO_DESC[DSC$A_POINTER] = NEW_TEXT_LINE[LINE_T_TEXT];
5                 SCR$SET_CURSOR (.J, 1);
5                 AED_PUTOUTPUT (ECHO_DESC);
5                 SCR$ERASE_LINE (.J, .ECHO_DESC[DSC$W_LENGTH] + 1);
5                 NEW_TEXT_LINE = .NEW_TEXT_LINE[LINE_L_FLINK];
5                 IF .NEW_TEXT_LINE EQLA AED_Q_LINETABLE[LINE_L_FLINK] THEN EXITLOOP;
4                 END;
3             END;
3         BUFFER_INDEX = 0;
3         AED_B_COLUMN = 1;
3         IF .AED_L_FLAGS[AED_V_PROMPT]
3         THEN
4             BEGIN
4             AED_B_ACETYPE = 0;
4             AED_L_FLAGS[AED_V_NOITEMSEL] = 0;
4             AED_SELECTFIELD (BUFFER_INDEX);
4             ECHO_DESC[DSC$W_LENGTH] = .AED_T_CURLINE[LINE_W_SIZE];
4             ECHO_DESC[DSC$A_POINTER] = AED_T_CURLINE[LINE_T_TEXT];
4             SCR$SET_CURSOR (.AED_B_LINE, 1);
4             AED_PUTOUTPUT (ECHO_DESC);
4             SCR$ERASE_LINE (.AED_B_LINE, .SEGMENT_SIZE + 1);
4             AED_B_COLUMN = .BUFFER_INDEX + 1;
3             END;
3         AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
3         AED_L_FLAGS[AED_V_FIRSTCHAR] = 1;
3         AED_L_FLAGS[AED_V_INSERTEXT] = 1;
3         AED_L_FLAGS[AED_V_INSERT] = 1;
2         END;
2     AED_L_FLAGS[AED_V_GOLDKEY] = 0;
2     AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
2     TERM_CHAR = 0;
2     RETURN 1;
2
1     END;                                            ! End of routine ACT_INSERT
```

```
                             03FC 00000 ACT_INSERT:
                                                 .WORD   Save R2,R3,R4,R5,R6,R7,R8,R9     ; 4519
59        0000G   CF   9E 00002                  MOVAB   AED_PUTOUTPUT, R9                ;
58        0000G   CF   9E 00007                  MOVAB   AED_POSITION, R8                 ;
57 00000000G      00   9E 0000C                  MOVAB   SCR$ERASE_LINE, R7               ;
56 00000000G      00   9E 00013                  MOVAB   SCR$SET_CURSOR, R6               ;
55        0000'   CF   9E 0001A                  MOVAB   NEW_TEXT_LINE, R5                ;
```

```
                    54    0000'  CF  9E 0001F        MOVAB   AED_L_FLAGS, R4                          ;
      03            64           05  E1 00024        BBC     #5, AED_L_FLAGS, 2$                      ;  4555
                               01FB  31 00028 1$:    BRW     19$                                      ;
      F8      01    A4           06  E0 0002B 2$:    BBS     #6, AED_L_FLAGS+1, 1$                    ;  4556
      F3      01    A4           05  E0 00030        BBS     #5, AED_L_FLAGS+1, 1$                    ;  4557
           0000G    CF           00  FB 00035        CALLS   #0, AED_REPSEGMENT                       ;  4560
                    65           50  D0 0003A        MOVL    R0, NEW_TEXT_LINE                        ;
                                 64  95 0003D        TSTB    AED_L_FLAGS                              ;  4561
                                 03  19 0003F        BLSS    3$                                       ;
                               00AB  31 00041        BRW     10$                                      ;
           0000V    CF           00  FB 00044 3$:    CALLS   #0, FINISH_ACE                           ;  4564
                            01   A4  95 00049        TSTB    AED_L_FLAGS+1                            ;  4565
                                 10  18 0004C        BGEQ    4$                                       ;
      0B      01    A4           04  E1 0004E        BBC     #4, AED_L_FLAGS+1, 4$                    ;  4566
                    50           65  D0 00053        MOVL    NEW_TEXT_LINE, R0                        ;  4569
              0A    A0           04  88 00056        BISB2   #4, 10(R0)                               ;
                          02C4   C4  B4 0005A        CLRW    AED_W_TOTALSIZE                          ;  4570
              01    A4      40   8F  8A 0005E 4$:    BICB2   #64, AED_L_FLAGS+1                       ;  4572
                          02C4   C4  B5 00063        TSTW    AED_W_TOTALSIZE                          ;  4573
                                 07  12 00067        BNEQ    5$                                       ;
                    50           65  D0 00069        MOVL    NEW_TEXT_LINE, R0                        ;  4574
                    65      04   A0  D0 0006C        MOVL    4(R0), NEW_TEXT_LINE                     ;
           0000G    CF           00  FB 00070 5$:    CALLS   #0, AED_COMPRESS                         ;  4575
                    7E    02C4   C4  3C 00075        MOVZWL  AED_W_TOTALSIZE, -(SP)                   ;  4576
           0000G    CF           01  FB 0007A        CALLS   #1, AED_UPDATEACL                        ;
           008C     C4           50  D0 0007F        MOVL    R0, AED_L_STATUS                         ;
                    61    008C   C4  E8 00084        BLBS    AED_L_STATUS, 9$                         ;  4577
                    64      40   8F  88 00089        BISB2   #64, AED_L_FLAGS                         ;  4580
                            40   A4  DD 0008D        PUSHL   AED_L_FIRSTLINE                          ;  4581
                    68           01  FB 00090        CALLS   #1, AED_POSITION                         ;
                            40   A4  DD 00093        PUSHL   AED_L_FIRSTLINE                          ;  4582
           0000G    CF           01  FB 00096        CALLS   #1, AED_COPSEGMENT                       ;
                    50      40   A4  D0 0009B        MOVL    AED_L_FIRSTLINE, R0                      ;  4584
              04    B0    00B0   C4  0E 0009F        INSQUE  AED_T_CURLINE, @4(R0)                    ;
              40    A4      44   A4  D1 000A5        CMPL    AED_L_LASTLINE, AED_L_FIRSTLINE          ;  4585
                                 06  12 000AA        BNEQ    6$                                       ;
              44    A4    00B0   C4  9E 000AC        MOVAB   AED_T_CURLINE, AED_L_LASTLINE            ;  4586
              40    A4      48   A4  D1 000B2 6$:    CMPL    AED_L_BEGINLINE, AED_L_FIRSTLINE         ;  4587
                                 06  12 000B7        BNEQ    7$                                       ;
              48    A4    00B0   C4  9E 000B9        MOVAB   AED_T_CURLINE, AED_L_BEGINLINE           ;  4588
              40    A4    00B0   C4  9E 000BF 7$:    MOVAB   AED_T_CURLINE, AED_L_FIRSTLINE           ;  4589
              44    A4      40   A4  D1 000C5        CMPL    AED_L_FIRSTLINE, AED_L_LASTLINE          ;  4590
                                 07  13 000CA        BEQL    8$                                       ;
      03            64           05  E1 000CC        BBC     #5, AED_L_FLAGS, 8$                      ;  4591
                    64           20  8A 000D0        BICB2   #32, AED_L_FLAGS                         ;  4592
                            E8   A5  D4 000D3 8$:    CLRL    BUFFER_INDEX                             ;  4593
              20    A4           01  90 000D6        MOVB    #1, AED_B_COLUMN                         ;  4594
                    7E      20   A4  9A 000DA        MOVZBL  AED_B_COLUMN, -(SP)                      ;  4595
                    7E      24   A4  9A 000DE        MOVZBL  AED_B_LINE, -(SP)                        ;
           0000G    CF           02  FB 000E2        CALLS   #2, AED_SET_CURSOR                       ;
                               013C  31 000E7        BRW     19$                                      ;  4596
                    64    2080   8F  AA 000EA 9$:    BICW2   #8320, AED_L_FLAGS                       ;  4601
           0000G    CF           00  FB 000EF 10$:   CALLS   #0, AED_COMPRESS                         ;  4603
                            40   A4  DD 000F4        PUSHL   AED_L_FIRSTLINE                          ;  4604
                    68           01  FB 000F7        CALLS   #1, AED_POSITION                         ;
                    50      40   A4  D0 000FA        MOVL    AED_L_FIRSTLINE, R0                      ;  4605
              3C    A4      0C   A0  D0 000FE        MOVL    12(R0), AED_L_CURACE                     ;
```

```
                                 00B8  C4  B4  00103          CLRW    SEGMENT_SIZE                          ; 4606
                                 02C4  C4  B4  00107          CLRW    AED_W_TOTALSIZE                       ;
                     04   B0     00B0  C4  0E  0010B          INSQUE  AED_T_CURLINE, @4(R0)                 ; 4607
                     40   A4       48  A4  D1  00111          CMPL    AED_L_BEGINLINE, AED_L_FIRSTLINE      ; 4608
                                       06  12  00116          BNEQ    11$                                   ;
                     48   A4     00B0  C4  9E  00118          MOVAB   AED_T_CURLINE, AED_L_BEGINLINE        ; 4609
                          50     00B0  C4  9E  0011E  11$:    MOVAB   AED_T_CURLINE, R0                     ; 4610
                     44   A4           50  D0  00123          MOVL    R0, AED_L_LASTLINE                    ;
                     40   A4           50  D0  00127          MOVL    R0, AED_L_FIRSTLINE                   ;
                     0A   A0           01  B0  0012B          MOVW    #1, 10(R0)                            ; 4611
                                 00B0  C4  9F  0012F          PUSHAB  AED_T_CURLINE                         ; 4612
                          68           01  FB  00133          CALLS   #1, AED_POSITION                      ;
                          0A       24  A4  91  00136          CMPB    AED_B_LINE, #10                       ; 4619
                                       48  1A  0013A          BGTRU   14$                                   ;
                                       01  DD  0013C          PUSHL   #1                                    ; 4622
                                       01  DD  0013E          PUSHL   #1                                    ;
                          66           02  FB  00140          CALLS   #2, SCR$SET_CURSOR                    ;
           00000000G      00           00  FB  00143          CALLS   #0, SCR$DOWN_SCROLL                   ; 4623
                          65       48  A4  D0  0014A          MOVL    AED_L_BEGINLINE, NEW_TEXT_LINE        ; 4624
                          53       24  A4  9A  0014E          MOVZBL  AED_B_LINE, R3                        ; 4625
                                       52  D4  00152          CLRL    J                                     ;
                                       28  11  00154          BRB     13$                                   ;
                          50           65  D0  00156  12$:    MOVL    NEW_TEXT_LINE, R0                     ; 4628
                     EC   A5       08  A0  B0  00159          MOVW    8(R0), ECHO_DESC                      ;
                     F0   A5       14  A0  9E  0015E          MOVAB   20(R0), ECHO_DESC+4                   ; 4629
                                       01  DD  00163          PUSHL   #1                                    ; 4630
                                       52  DD  00165          PUSHL   J                                     ;
                          66           02  FB  00167          CALLS   #2, SCR$SET_CURSOR                    ;
                                   EC  A5  9F  0016A          PUSHAB  ECHO_DESC                             ; 4631
                          69           01  FB  0016D          CALLS   #1, AED_PUTOUTPUT                     ;
                          7E       EC  A5  3C  00170          MOVZWL  ECHO_DESC, -(SP)                      ; 4632
                                       6E  D6  00174          INCL    (SP)                                  ;
                                       52  DD  00176          PUSHL   J                                     ;
                          67           02  FB  00178          CALLS   #2, SCR$ERASE_LINE                    ;
                          75           95  D0  0017B          MOVL    @NEW_TEXT_LINE, NEW_TEXT_LINE         ; 4633
              D4          52           53  F3  0017E  13$:    AOBLEQ  R3, J, 12$                            ; 4625
                                       45  11  00182          BRB     17$                                   ; 4619
                          65     00B0  C4  9E  00184  14$:    MOVAB   AED_T_CURLINE, NEW_TEXT_LINE          ; 4638
                          52           65  D0  00189          MOVL    NEW_TEXT_LINE, R2                     ; 4642
                          53       24  A4  9A  0018C          MOVZBL  AED_B_LINE, J                         ;
                                       53  D7  00190          DECL    J                                     ;
                                       31  11  00192          BRB     16$                                   ;
                     EC   A5       08  A2  B0  00194  15$:    MOVW    8(R2), ECHO_DESC                      ;
                     F0   A5       14  A2  9E  00199          MOVAB   20(R2), ECHO_DESC+4                   ; 4643
                                       01  DD  0019E          PUSHL   #1                                    ; 4644
                                       53  DD  001A0          PUSHL   J                                     ;
                          66           02  FB  001A2          CALLS   #2, SCR$SET_CURSOR                    ;
                                   EC  A5  9F  001A5          PUSHAB  ECHO_DESC                             ; 4645
                          69           01  FB  001A8          CALLS   #1, AED_PUTOUTPUT                     ;
                          7E       EC  A5  3C  001AB          MOVZWL  ECHO_DESC, -(SP)                      ; 4646
                                       6E  D6  001AF          INCL    (SP)                                  ;
                                       53  DD  001B1          PUSHL   J                                     ;
                          67           02  FB  001B3          CALLS   #2, SCR$ERASE_LINE                    ;
                          75           95  D0  001B6          MOVL    @NEW_TEXT_LINE, NEW_TEXT_LINE         ; 4647
                          52           65  D0  001B9          MOVL    NEW_TEXT_LINE, R2                     ; 4648
                          50       30  A4  9E  001BC          MOVAB   AED_Q_LINETABLE, R0                   ;
                          50           52  D1  001C0          CMPL    R2, R0                                ;
```

```
                              04  13 001C3          BEQL    17$                                      ;
           CB          53     14  F3 001C5  16$:    AOBLEQ  #20, J, 15$                              ; 4639
                           E8 A5  D4 001C9  17$:    CLRL    BUFFER_INDEX                             ; 4651
               20  A4         01  90 001CC          MOVB    #1, AED_B_COLUMN                         ; 4652
                           01 A4  95 001D0          TSTB    AED_L_FLAGS+1                            ; 4653
                              3F  18 001D3          BGEQ    18$                                      ;
                         00A8 C4  94 001D5          CLRB    AED_B_ACETYPE                            ; 4656
               02  A4         08  8A 001D9          BICB2   #8, AED_L_FLAGS+2                        ; 4657
                           E8 A5  9F 001DD          PUSHAB  BUFFER_INDEX                             ; 4658
            0000G  CF         01  FB 001E0          CALLS   #1, AED_SELECTFIELD                      ;
               EC  A5    00B8 C4  B0 001E5          MOVW    AED_T_CURLINE+8, ECHO_DESC               ; 4659
               F0  A5    00C4 C4  9E 001EB          MOVAB   AED_T_CURLINE+20, ECHO_DESC+4            ; 4660
                              01  DD 001F1          PUSHL   #1                                       ; 4661
                   7E      24 A4  9A 001F3          MOVZBL  AED_B_LINE, -(SP)                        ;
                   66         02  FB 001F7          CALLS   #2, SCR$SET_CURSOR                       ;
                           EC A5  9F 001FA          PUSHAB  ECHO_DESC                                ; 4662
                   69         01  FB 001FD          CALLS   #1, AED_PUTOUTPUT                        ;
                   7E    00B8 C4  3C 00200          MOVZWL  SEGMENT_SIZE, -(SP)                      ; 4663
                              6E  D6 00205          INCL    (SP)                                     ;
                   7E      24 A4  9A 00207          MOVZBL  AED_B_LINE, -(SP)                        ;
                   67         02  FB 0020B          CALLS   #2, SCR$ERASE_LINE                       ;
     20   A4       E8  A5     01  81 0020E          ADDB3   #1, BUFFER_INDEX, AED_B_COLUMN           ; 4664
                   7E      20 A4  9A 00214  18$:    MOVZBL  AED_B_COLUMN, -(SP)                      ; 4666
                   7E      24 A4  9A 00218          MOVZBL  AED_B_LINE, -(SP)                        ;
            0000G  CF         02  FB 0021C          CALLS   #2, AED_SET_CURSOR                       ;
               01  A4      70 8F  88 00221          BISB2   #112, AED_L_FLAGS+1                      ; 4669
               01  A4    2008 8F  AA 00226  19$:    BICW2   #8200, AED_L_FLAGS+1                     ; 4672
                           10 A5  94 0022C          CLRB    TERM_CHAR                                ; 4673
                   50         01  D0 0022F          MOVL    #1, R0                                   ; 4674
                                  04 00232          RET                                              ; 4676

; Routine Size:  563 bytes,    Routine Base:  $CODE$ + 3052
```

```
;  4258          4677  1 %SBTTL  'ACT_EXIT - leave the ACL editor'
;  4259          4678  1 ROUTINE ACT_EXIT (QUIT) =
;  4260          4679  1
;  4261          4680  1 !++
;  4262          4681  1 !
;  4263          4682  1 ! FUNCTIONAL DESCRIPTION:
;  4264          4683  1 !
;  4265          4684  1 !       This routine handles two ACL editor actions.  If the action is a
;  4266          4685  1 !       QUIT, then any existing journal file is closed (but not deleted),
;  4267          4686  1 !       any unentered ACE is left untouched, and the session is terminated.
;  4268          4687  1 !
;  4269          4688  1 !       If the action is an EXIT, the object's ACL is updated to reflect the
;  4270          4689  1 !       current state.  This done by first deleting any existing ACL, and
;  4271          4690  1 !       adding the current in core one.
;  4272          4691  1 !
;  4273          4692  1 ! CALLING SEQUENCE:
;  4274          4693  1 !       ACT_EXIT (ARG1)
;  4275          4694  1 !
;  4276          4695  1 ! INPUT PARAMETERS:
;  4277          4696  1 !       ARG1: 1 = terminate the session with the object's ACL untouched
;  4278          4697  1 !             0 = terminate the session and update the object's ACL
;  4279          4698  1 !
;  4280          4699  1 ! IMPLICIT INPUTS:
;  4281          4700  1 !       OWN storage
;  4282          4701  1 !
;  4283          4702  1 ! OUTPUT PARAMETERS:
;  4284          4703  1 !       none
;  4285          4704  1 !
;  4286          4705  1 ! IMPLICIT OUTPUTS:
;  4287          4706  1 !       none
;  4288          4707  1 !
;  4289          4708  1 ! ROUTINE VALUE:
;  4290          4709  1 !       1 if successful
;  4291          4710  1 !       error status otherwise
;  4292          4711  1 !
;  4293          4712  1 ! SIDE EFFECTS:
;  4294          4713  1 !       The line segment table is updated as necessary, ACE line pointers
;  4295          4714  1 !       are updated, and the object's ACL is updated as necessary.
;  4296          4715  1 !
;  4297          4716  1 !--
;  4298          4717  1
;  4299          4718  2 BEGIN
;  4300          4719  2
;  4301          4720  2 LOCAL
;  4302          4721  2         ATR_ARGLIST     : BLOCKVECTOR [2, ITM$S_ITEM, BYTE],    ! ACL attributes
;  4303          4722  2         ACL_CONTEXT,                                            ! ACL context for $CHANGE_ACL
;  4304          4723  2         DUMMY_ACE       : $BBLOCK [ACL$S_DELACLENT],    ! Dummy ACE for delete
;  4305          4724  2         CURRENT_LINE    : REF $BBLOCK;          ! Current line segment address
;  4306          4725  2
;  4307          4726  2 ! Determine if this is a QUIT or EXIT.
;  4308          4727  2
;  4309          4728  2 IF .QUIT
;  4310          4729  2 THEN
;  4311          4730  3     BEGIN
;  4312          4731  3     SIGNAL (AED$_NOCHANGE);
;  4313          4732  3     RETURN 0;
;  4314          4733  2     END;
```

```
;  4315          4734  2
;  4316          4735  2 NEW_TEXT_LINE = AED_REPSEGMENT ();
;  4317          4736  2 IF .AED_L_FLAGS[AED_V_MODIFIED]
;  4318          4737  2 OR .AED_L_FLAGS[AED_V_INSERT]
;  4319          4738  2 OR .AED_L_FLAGS[AED_V_INSERTEXT]
;  4320          4739  2 THEN
;  4321          4740  3     BEGIN
;  4322          4741  3     FINISH_ACE ();
;  4323          4742  3     IF .AED_L_FLAGS[AED_V_PROMPT]
;  4324          4743  3     AND .AED_L_FLAGS[AED_V_FIRSTCHAR]
;  4325          4744  3     THEN
;  4326          4745  4         BEGIN
;  4327          4746  4         NEW_TEXT_LINE[LINE_V_DUMMY] = 1;
;  4328          4747  4         AED_W_TOTALSIZE = 0;
;  4329          4748  3         END;
;  4330          4749  3     AED_COMPRESS ();
;  4331          4750  3     AED_L_STATUS = AED_UPDATEACL (.AED_W_TOTALSIZE);
;  4332          4751  3     IF NOT .AED_L_STATUS
;  4333          4752  3     THEN
;  4334          4753  4         BEGIN
;  4335          4754  4         AED_L_FLAGS[AED_V_ACERROR] = 1;
;  4336          4755  4         AED_POSITION (.AED_L_FIRSTLINE);
;  4337          4756  4         AED_COPSEGMENT (.AED_L_FIRSTLINE);
;  4338          4757  4         INSQUE (AED_T_CURLINE[LINE_L_FLINK], .AED_L_FIRSTLINE[LINE_L_BLINK]);
;  4339          4758  4         IF .AED_L_LASTLINE EQL .AED_L_FIRSTLINE
;  4340          4759  4         THEN AED_L_LASTLINE = AED_T_CURLINE;
;  4341          4760  4         IF .AED_L_BEGINLINE EQL .AED_L_FIRSTLINE
;  4342          4761  4         THEN AED_L_BEGINLINE = AED_T_CURLINE;
;  4343          4762  4         AED_L_FIRSTLINE = AED_T_CURLINE;
;  4344          4763  4         IF .AED_L_FIRSTLINE NEQ .AED_L_LASTLINE
;  4345          4764  4         AND .AED_L_FLAGS[AED_V_ENDACL]
;  4346          4765  4         THEN
;  4347          4766  5             BEGIN
;  4348          4767  5             AED_L_FLAGS[AED_V_ENDACL] = 0;
;  4349          4768  5             AED_L_FLAGS[AED_V_INSERTEXT] = 0;
;  4350          4769  4             END;
;  4351          4770  4         BUFFER_INDEX = 0;
;  4352          4771  4         AED_B_COLUMN = 1;
;  4353          4772  4         AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  4354          4773  4         AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  4355          4774  4         AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  4356          4775  4         TERM_CHAR = 0;
;  4357          4776  4         RETURN 1;
;  4358          4777  3         END;
;  4359          4778  2     END;
;  4360          4779  2 AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;  4361          4780  2
;  4362          4781  2 ! Now for the fun part.  Because the real ACL on the object hasn't been
;  4363          4782  2 ! touched, it is necessary to update it at this time.  This is done by
;  4364          4783  2 ! first deleting the object's ACL, and then applying the ACL as modified
;  4365          4784  2 ! by the user.
;  4366          4785  2
;  4367          4786  2 CH$FILL (0, 2*ITM$S_ITEM, ATR_ARGLIST);
;  4368          4787  2 ACL_CONTEXT = 0;
;  4369          4788  2
;  4370          4789  2 ! Now delete the entire ACL.  This will catch all but the protected ACEs.
;  4371          4790  2
```

```
;  4372          4791  2 ATR_ARGLIST[0, ITM$W_ITMCOD] = ACL$C_DELETEACL;
;  4373          4792  2 ATR_ARGLIST[0, ITM$W_BUFSIZ] = 12;
;  4374          4793  2 ATR_ARGLIST[0, ITM$L_BUFADR] = DUMMY_ACE;
;  4375        P 4794  2 AED_L_STATUS = $CHANGE_ACL (CHAN = .AED_W_OBJCHAN,
;  4376        P 4795  2                             OBJTYP = AED_L_OBJTYP,
;  4377        P 4796  2                             OBJNAM = AED_Q_OBJNAM,
;  4378        P 4797  2                             ITMLST = ATR_ARGLIST,
;  4379          4798  2                             CONTXT = ACL_CONTEXT);
;  4380          4799  2 IF NOT .AED_L_STATUS
;  4381          4800  2 THEN
;  4382          4801  2     BEGIN
;  4383          4802  2     AED_B_OPTIONS[AED_V_KEEPJNL] = 1;           ! Keep the journal file
;  4384          4803  2     RETURN 0;
;  4385          4804  2     END;
;  4386          4805  2
;  4387          4806  2 ! Now delete any protected ACEs remaining in the ACL.
;  4388          4807  2
;  4389          4808  2 WHILE 1
;  4390          4809  2 DO
;  4391          4810  2     BEGIN
;  4392          4811  2     ATR_ARGLIST[0, ITM$W_ITMCOD] = ACL$C_READACE;
;  4393          4812  2     ATR_ARGLIST[0, ITM$W_BUFSIZ] = ACL$S_READACE;
;  4394          4813  2     ATR_ARGLIST[0, ITM$L_BUFADR] = DUMMY_ACE;
;  4395          4814  2     ACL_CONTEXT = 0;
;  4396        P 4815  2     AED_L_STATUS = $CHANGE_ACL (CHAN = .AED_W_OBJCHAN,
;  4397        P 4816  2                                 OBJTYP = AED_L_OBJTYP,
;  4398        P 4817  2                                 OBJNAM = AED_Q_OBJNAM,
;  4399        P 4818  2                                 ITMLST = ATR_ARGLIST,
;  4400          4819  2                                 CONTXT = ACL_CONTEXT);
;  4401          4820  2     IF NOT .AED_L_STATUS
;  4402          4821  3     THEN
;  4403          4822  4         BEGIN
;  4404          4823  4         IF .AED_L_STATUS EQL SS$_ACLEMPTY
;  4405          4824  4         OR .AED_L_STATUS EQL SS$_NOMOREACE
;  4406          4825  4         THEN EXITLOOP;
;  4407          4826  4         AED_B_OPTIONS[AED_V_KEEPJNL] = 1;           ! Keep the journal file
;  4408          4827  4         SIGNAL (.AED_L_STATUS);
;  4409          4828  4         RETURN 0;
;  4410          4829  3         END;
;  4411          4830  3     ATR_ARGLIST[0, ITM$W_ITMCOD] = ACL$C_DELACLENT;
;  4412          4831  3     ATR_ARGLIST[0, ITM$W_BUFSIZ] = .DUMMY_ACE[ACE$B_SIZE];
;  4413          4832  3     ATR_ARGLIST[0, ITM$L_BUFADR] = DUMMY_ACE;
;  4414        P 4833  3     AED_L_STATUS = $CHANGE_ACL (CHAN = .AED_W_OBJCHAN,
;  4415        P 4834  3                                 OBJTYP = AED_L_OBJTYP,
;  4416        P 4835  3                                 OBJNAM = AED_Q_OBJNAM,
;  4417        P 4836  3                                 ITMLST = ATR_ARGLIST,
;  4418          4837  3                                 CONTXT = ACL_CONTEXT);
;  4419          4838  3     IF NOT .AED_L_STATUS
;  4420          4839  3     THEN
;  4421          4840  4         BEGIN
;  4422          4841  4         AED_B_OPTIONS[AED_V_KEEPJNL] = 1;           ! Keep the journal file
;  4423          4842  4         SIGNAL (.AED_L_STATUS);
;  4424          4843  4         RETURN 0;
;  4425          4844  3         END;
;  4426          4845  2     END;
;  4427          4846  2
;  4428          4847  2 ! Now that the object's original ACL has been removed, update the ACL with the
```

```
;  4429          4848  2 ! one modified by the user.
;  4430          4849  2
;  4431          4850  2 CURRENT_LINE = .AED_Q_LINETABLE[LINE_L_FLINK];
;  4432          4851  2 UNTIL .CURRENT_LINE EQL AED_Q_LINETABLE[LINE_L_FLINK]
;  4433          4852  2 DO
;  4434          4853  3     BEGIN
;  4435          4854  3     IF .CURRENT_LINE[LINE_V_BEGINACE]
;  4436          4855  3     AND .CURRENT_LINE[LINE_L_BINACE] NEQ 0
;  4437          4856  3     THEN
;  4438          4857  4         BEGIN
;  4439          4858  4         ATR_ARGLIST[0, ITM$W_ITMCOD] = ACL$C_ADDACLENT;
;  4440          4859  4         ATR_ARGLIST[0, ITM$W_BUFSIZ] = .$BBLOCK [.CURRENT_LINE[LINE_L_BINACE], ACE$B_SIZE];
;  4441          4860  4         ATR_ARGLIST[0, ITM$L_BUFADR] = .CURRENT_LINE[LINE_L_BINACE];
;  4442          4861  4         ACL_CONTEXT = %X'00FFFFFF';
;  4443        P 4862  4         AED_L_STATUS = $CHANGE_ACL (CHAN = .AED_W_OBJCHAN,
;  4444        P 4863  4                                     OBJTYP = AED_L_OBJTYP,
;  4445        P 4864  4                                     OBJNAM = AED_Q_OBJNAM,
;  4446        P 4865  4                                     ITMLST = ATR_ARGLIST,
;  4447          4866  4                                     CONTXT = ACL_CONTEXT);
;  4448          4867  4         IF NOT .AED_L_STATUS
;  4449          4868  4         THEN
;  4450          4869  5             BEGIN
;  4451          4870  5             AED_B_OPTIONS[AED_V_KEEPJNL] = 1;          ! Keep the journal file
;  4452          4871  5             SIGNAL (.AED_L_STATUS);
;  4453          4872  5             RETURN 0;
;  4454          4873  4             END;
;  4455          4874  3         END;
;  4456          4875  3     CURRENT_LINE = .CURRENT_LINE[LINE_L_FLINK];
;  4457          4876  2     END;
;  4458          4877  2
;  4459          4878  2 SIGNAL (AED$_ACLUPDATED);
;  4460          4879  2
;  4461          4880  2 RETURN 0;
;  4462          4881  2
;  4463          4882  1 END;                                    ! End of routine ACT_EXIT


                                        0FFC 00000 ACT_EXIT:
                                                            .WORD   Save R2,R3,R4,R5,R6,R7,R8,R9,R10,R11        ; 4678
                                5B 00000000G    8F  D0 00002        MOVL    #AED$_NOCHANGE, R11             ;
                                5A 00000000G    00  9E 00009        MOVAB   SYS$CHANGE_ACL, R10             ;
                                59 00000000G    00  9E 00010        MOVAB   LIB$SIGNAL, R9                  ;
                                58 00000000G    00  9E 00017        MOVAB   SCR$ERASE_PAGE, R8              ;
                                57 00000000G    00  9E 0001E        MOVAB   SCR$SET_CURSOR, R7              ;
                                56       0000'  CF  9E 00025        MOVAB   AED_L_FLAGS, R6                 ;
                                5E       FEE4   CE  9E 0002A        MOVAB   -284(SP), SP                    ;
                                41         04   AC  E9 0002F        BLBC    QUIT, 4$                        ; 4728
                          0E    66              03  E1 00033        BBC     #3, AED_L_FLAGS, 1$             ; 4731
                                                01  DD 00037        PUSHL   #1                              ;
                                                15  DD 00039        PUSHL   #21                             ;
                                68              02  FB 0003B        CALLS   #2, SCR$ERASE_PAGE              ;
                                                01  DD 0003E        PUSHL   #1                              ;
                                                15  DD 00040        PUSHL   #21                             ;
                                67              02  FB 00042        CALLS   #2, SCR$SET_CURSOR              ;
```

```
                                        5B  DD 00045 1$:   PUSHL   R11                                          ;
                         69             01  FB 00047       CALLS   #1, LIB$SIGNAL                               ;
                 0B      66             03  E1 0004A       BBC     #3, AED_L_FLAGS, 2$                          ;
                         7E       20    A6  9A 0004E       MOVZBL  AED_B_COLUMN, -(SP)                          ;
                         7E       24    A6  9A 00052       MOVZBL  AED_B_LINE, -(SP)                            ;
                         67             02  FB 00056       CALLS   #2, SCR$SET_CURSOR                           ;
                            00000000*   8F  D5 00059 2$:   TSTL    #<AED$_NOCHANGE&7>                           ;
                                        10  13 0005F       BEQL    3$                                           ;
00000000*  8F    14  A6      03         00  ED 00061       CMPZV   #0, #3, AED_L_WORSTERR, #<AED$_NOCHANGE&7>   ;
                                        04  18 0006B       BGEQ    3$                                           ;
                    14   A6             5B  D0 0006D       MOVL    R11, AED_L_WORSTERR                          ;
                                      027E  31 00071 3$:   BRW     27$                                          ; 4732
                  0000G  CF             00  FB 00074 4$:   CALLS   #0, AED_REPSEGMENT                           ; 4735
                  0000'  CF             50  D0 00079       MOVL    R0, NEW_TEXT_LINE                            ;
                         66             95     0007E       TSTB    AED_L_FLAGS                                  ; 4736
                                        0D  19 00080       BLSS    5$                                           ;
                 08  01  A6             05  E0 00082       BBS     #5, AED_L_FLAGS+1, 5$                        ; 4737
                 03  01  A6             06  E0 00087       BBS     #6, AED_L_FLAGS+1, 5$                        ; 4738
                                      00A6  31 0008C       BRW     10$                                          ;
                  0000V  CF             00  FB 0008F 5$:   CALLS   #0, FINISH_ACE                               ; 4741
                                  01    A6  95 00094       TSTB    AED_L_FLAGS+1                                ; 4742
                                        12  18 00097       BGEQ    6$                                           ;
                 0D  01  A6             04  E1 00099       BBC     #4, AED_L_FLAGS+1, 6$                        ; 4743
                         50    0000'    CF  D0 0009E       MOVL    NEW_TEXT_LINE, R0                            ; 4746
                     0A  A0             04  88 000A3       BISB2   #4, 10(R0)                                   ;
                               02C4     C6  B4 000A7       CLRW    AED_W_TOTALSIZE                              ; 4747
                  0000G  CF             00  FB 000AB 6$:   CALLS   #0, AED_COMPRESS                             ; 4749
                         7E    02C4     C6  3C 000B0       MOVZWL  AED_W_TOTALSIZE, -(SP)                       ; 4750
                  0000G  CF             01  FB 000B5       CALLS   #1, AED_UPDATEACL                            ;
                  008C   C6             50  D0 000BA       MOVL    R0, AED_L_STATUS                             ;
                         71    008C     C6  E8 000BF       BLBS    AED_L_STATUS, 10$                            ; 4751
                         66       40    8F  88 000C4       BISB2   #64, AED_L_FLAGS                             ; 4754
                                  40    A6  DD 000C8       PUSHL   AED_L_FIRSTLINE                              ; 4755
                  0000G  CF             01  FB 000CB       CALLS   #1, AED_POSITION                             ;
                                  40    A6  DD 000D0       PUSHL   AED_L_FIRSTLINE                              ; 4756
                  0000G  CF             01  FB 000D3       CALLS   #1, AED_COPSEGMENT                           ;
                         50       40    A6  D0 000D8       MOVL    AED_L_FIRSTLINE, R0                          ; 4757
                     04  B0    00B0     C6  0E 000DC       INSQUE  AED_T_CURLINE, @4(R0)                        ;
                     40  A6       44    A6  D1 000E2       CMPL    AED_L_LASTLINE, AED_L_FIRSTLINE              ; 4758
                                        06  12 000E7       BNEQ    7$                                           ;
                     44  A6    00B0     C6  9E 000E9       MOVAB   AED_T_CURLINE, AED_L_LASTLINE                ; 4759
                     40  A6       48    A6  D1 000EF 7$:   CMPL    AED_L_BEGINLINE, AED_L_FIRSTLINE             ; 4760
                                        06  12 000F4       BNEQ    8$                                           ;
                     48  A6    00B0     C6  9E 000F6       MOVAB   AED_T_CURLINE, AED_L_BEGINLINE               ; 4761
                     40  A6    00B0     C6  9E 000FC 8$:   MOVAB   AED_T_CURLINE, AED_L_FIRSTLINE               ; 4762
                     44  A6       40    A6  D1 00102       CMPL    AED_L_FIRSTLINE, AED_L_LASTLINE              ; 4763
                                        09  13 00107       BEQL    9$                                           ;
                 05      66             05  E1 00109       BBC     #5, AED_L_FLAGS, 9$                          ; 4764
                         66    4020     8F  AA 0010D       BICW2   #16416, AED_L_FLAGS                          ; 4768
                               0000'    CF  D4 00112 9$:   CLRL    BUFFER_INDEX                                 ; 4770
                     20  A6             01  90 00116       MOVB    #1, AED_B_COLUMN                             ; 4771
                         7E       20    A6  9A 0011A       MOVZBL  AED_B_COLUMN, -(SP)                          ; 4772
                         7E       24    A6  9A 0011E       MOVZBL  AED_B_LINE, -(SP)                            ;
                  0000G  CF             02  FB 00122       CALLS   #2, AED_SET_CURSOR                           ;
                     01  A6    2008     8F  AA 00127       BICW2   #8200, AED_L_FLAGS+1                         ; 4774
                               0000'    CF  94 0012D       CLRB    TERM_CHAR                                    ; 4775
                         50             01  D0 00131       MOVL    #1, R0                                       ; 4776
```

```
                                          04 00134          RET                                                    ;
                  01     A6           08  8A 00135  10$:    BICB2   #8, AED_L_FLAGS+1                             ; 4779
    18      00           6E           00  2C 00139          MOVC5   #0, (SP), #0, #24, ATR_ARGLIST                ; 4786
                                 E8   AD     0013E                                                                ;
                                      6E  D4 00140          CLRL    ACL_CONTEXT                                   ; 4787
                  E8     AD 0006000C  8F  D0 00142          MOVL    #393228, ATR_ARGLIST                          ; 4792
                  EC     AD       04  AE  9E 0014A          MOVAB   DUMMY_ACE, ATR_ARGLIST+4                      ; 4793
                                      5E  DD 0014F          PUSHL   SP                                            ; 4798
                                      7E  7C 00151          CLRQ    -(SP)                                         ;
                                 E8   AD  9F 00153          PUSHAB  ATR_ARGLIST                                   ;
                                 0C   A6  9F 00156          PUSHAB  AED_Q_OBJNAM                                  ;
                                 08   A6  9F 00159          PUSHAB  AED_L_OBJTYP                                  ;
                         7E      78   A6  3C 0015C          MOVZWL  AED_W_OBJCHAN, -(SP)                          ;
                         6A           07  FB 00160          CALLS   #7, SYS$CHANGE_ACL                            ;
                008C     C6           50  D0 00163          MOVL    R0, AED_L_STATUS                              ;
                         07     008C  C6  E8 00168          BLBS    AED_L_STATUS, 11$                             ; 4799
                  04     A6           08  88 0016D          BISB2   #8, AED_B_OPTIONS                             ; 4802
                                    017E  31 00171          BRW     27$                                           ; 4803
                  E8     AD 000900FF  8F  D0 00174  11$:    MOVL    #590079, ATR_ARGLIST                          ; 4812
                  EC     AD       04  AE  9E 0017C          MOVAB   DUMMY_ACE, ATR_ARGLIST+4                      ; 4813
                                      6E  D4 00181          CLRL    ACL_CONTEXT                                   ; 4814
                                      5E  DD 00183          PUSHL   SP                                            ; 4819
                                      7E  7C 00185          CLRQ    -(SP)                                         ;
                                 E8   AD  9F 00187          PUSHAB  ATR_ARGLIST                                   ;
                                 0C   A6  9F 0018A          PUSHAB  AED_Q_OBJNAM                                  ;
                                 08   A6  9F 0018D          PUSHAB  AED_L_OBJTYP                                  ;
                         7E      78   A6  3C 00190          MOVZWL  AED_W_OBJCHAN, -(SP)                          ;
                         6A           07  FB 00194          CALLS   #7, SYS$CHANGE_ACL                            ;
                008C     C6           50  D0 00197          MOVL    R0, AED_L_STATUS                              ;
                         20           50  E8 0019C          BLBS    R0, 13$                                       ; 4820
            000009D0     8F           50  D1 0019F          CMPL    R0, #2512                                     ; 4823
                                      66  13 001A6          BEQL    15$                                           ;
            000009E0     8F           50  D1 001A8          CMPL    R0, #2528                                     ; 4824
                                      5D  13 001AF          BEQL    15$                                           ;
                  04     A6           08  88 001B1          BISB2   #8, AED_B_OPTIONS                             ; 4826
            03           66           03  E0 001B5          BBS     #3, AED_L_FLAGS, 12$                          ; 4827
                                    00B7  31 001B9          BRW     20$                                           ;
                                    00A6  31 001BC  12$:    BRW     19$                                           ;
                  EA     AD           02  B0 001BF  13$:    MOVW    #2, ATR_ARGLIST+2                             ; 4830
                  E8     AD       04  AE  9B 001C3          MOVZBW  DUMMY_ACE, ATR_ARGLIST                        ; 4831
                  EC     AD       04  AE  9E 001C8          MOVAB   DUMMY_ACE, ATR_ARGLIST+4                      ; 4832
                                      5E  DD 001CD          PUSHL   SP                                            ; 4837
                                      7E  7C 001CF          CLRQ    -(SP)                                         ;
                                 E8   AD  9F 001D1          PUSHAB  ATR_ARGLIST                                   ;
                                 0C   A6  9F 001D4          PUSHAB  AED_Q_OBJNAM                                  ;
                                 08   A6  9F 001D7          PUSHAB  AED_L_OBJTYP                                  ;
                         7E      78   A6  3C 001DA          MOVZWL  AED_W_OBJCHAN, -(SP)                          ;
                         6A           07  FB 001DE          CALLS   #7, SYS$CHANGE_ACL                            ;
                008C     C6           50  D0 001E1          MOVL    R0, AED_L_STATUS                              ;
                         89     008C  C6  E8 001E6          BLBS    AED_L_STATUS, 11$                             ; 4838
                  04     A6           08  88 001EB          BISB2   #8, AED_B_OPTIONS                             ; 4841
            0E           66           03  E1 001EF          BBC     #3, AED_L_FLAGS, 14$                          ; 4842
                                      01  DD 001F3          PUSHL   #1                                            ;
                                      15  DD 001F5          PUSHL   #21                                           ;
                         68           02  FB 001F7          CALLS   #2, SCR$ERASE_PAGE                            ;
                                      01  DD 001FA          PUSHL   #1                                            ;
                                      15  DD 001FC          PUSHL   #21                                           ;
```

```
                          67            02 FB 001FE        CALLS   #2, SCR$SET_CURSOR                       ;
                                 008C   C6 DD 00201  14$:  PUSHL   AED_L_STATUS                             ;
                          69            01 FB 00205        CALLS   #1, LIB$SIGNAL                           ;
                 72       66            03 E0 00208        BBS     #3, AED_L_FLAGS, 21$                     ;
                                        7B 11 0020C        BRB     22$                                      ;
                          52       30   A6 D0 0020E  15$:  MOVL    AED_Q_LINETABLE, CURRENT_LINE            ; 4850
                          50       30   A6 9E 00212  16$:  MOVAB   AED_Q_LINETABLE, R0                      ; 4851
                          50            52 D1 00216        CMPL    CURRENT_LINE, R0                         ;
                                        03 12 00219        BNEQ    17$                                      ;
                                      008E 31 0021B        BRW     24$                                      ;
                          03       0A   A2 E8 0021E  17$:  BLBS    10(CURRENT_LINE), 18$                    ; 4854
                                      0081 31 00222        BRW     23$                                      ;
                                   0C   A2 D5 00225  18$:  TSTL    12(CURRENT_LINE)                         ; 4855
                                        7C 13 00228        BEQL    23$                                      ;
                     EA   AD            01 B0 0022A        MOVW    #1, ATR_ARGLIST+2                        ; 4858
                     E8   AD       0C   B2 9B 0022E        MOVZBW  @12(CURRENT_LINE), ATR_ARGLIST           ; 4859
                     EC   AD       0C   A2 D0 00233        MOVL    12(CURRENT_LINE), ATR_ARGLIST+4          ; 4860
                          6E 00FFFFFF   8F D0 00238        MOVL    #16777215, ACL_CONTEXT                   ; 4861
                                        5E DD 0023F        PUSHL   SP                                       ; 4866
                                        7E 7C 00241        CLRQ    -(SP)                                    ;
                                   E8   AD 9F 00243        PUSHAB  ATR_ARGLIST                              ;
                                   0C   A6 9F 00246        PUSHAB  AED_Q_OBJNAM                             ;
                                   08   A6 9F 00249        PUSHAB  AED_L_OBJTYP                             ;
                          7E       78   A6 3C 0024C        MOVZWL  AED_W_OBJCHAN, -(SP)                     ;
                          6A            07 FB 00250        CALLS   #7, SYS$CHANGE_ACL                       ;
                   008C   C6            50 D0 00253        MOVL    R0, AED_L_STATUS                         ;
                          49     008C   C6 E8 00258        BLBS    AED_L_STATUS, 23$                        ; 4867
                     04   A6            08 88 0025D        BISB2   #8, AED_B_OPTIONS                        ; 4870
                 0E       66            03 E1 00261        BBC     #3, AED_L_FLAGS, 20$                     ; 4871
                                        01 DD 00265  19$:  PUSHL   #1                                       ;
                                        15 DD 00267        PUSHL   #21                                      ;
                          68            02 FB 00269        CALLS   #2, SCR$ERASE_PAGE                       ;
                                        01 DD 0026C        PUSHL   #1                                       ;
                                        15 DD 0026E        PUSHL   #21                                      ;
                          67            02 FB 00270        CALLS   #2, SCR$SET_CURSOR                       ;
                                 008C   C6 DD 00273  20$:  PUSHL   AED_L_STATUS                             ;
                          69            01 FB 00277        CALLS   #1, LIB$SIGNAL                           ;
                 0B       66            03 E1 0027A        BBC     #3, AED_L_FLAGS, 22$                     ;
                          7E       20   A6 9A 0027E  21$:  MOVZBL  AED_B_COLUMN, -(SP)                      ;
                          7E       24   A6 9A 00282        MOVZBL  AED_B_LINE, -(SP)                        ;
                          67            02 FB 00286        CALLS   #2, SCR$SET_CURSOR                       ;
                          50     008C   C6 D0 00289  22$:  MOVL    AED_L_STATUS, R0                         ;
                          07            50 93 0028E        BITB    R0, #7                                   ;
                                        5F 13 00291        BEQL    27$                                      ;
      51         50       03            00 EF 00293        EXTZV   #0, #3, R0, R1                           ;
      51     14  A6       03            00 ED 00298        CMPZV   #0, #3, AED_L_WORSTERR, R1               ;
                                        52 18 0029E        BGEQ    27$                                      ;
                     14   A6            50 D0 002A0        MOVL    R0, AED_L_WORSTERR                       ;
                                        4C 11 002A4        BRB     27$                                      ; 4872
                          52            62 D0 002A6  23$:  MOVL    (CURRENT_LINE), CURRENT_LINE             ; 4875
                                      FF66 31 002A9        BRW     16$                                      ; 4851
                 0E       66            03 E1 002AC  24$:  BBC     #3, AED_L_FLAGS, 25$                     ; 4878
                                        01 DD 002B0        PUSHL   #1                                       ;
                                        15 DD 002B2        PUSHL   #21                                      ;
                          68            02 FB 002B4        CALLS   #2, SCR$ERASE_PAGE                       ;
                                        01 DD 002B7        PUSHL   #1                                       ;
                                        15 DD 002B9        PUSHL   #21                                      ;
```

```
                                      67           02  FB 002BB          CALLS   #2, SCR$SET_CURSOR                          ;
                                        00000000G  8F  DD 002BE 25$:     PUSHL   #AED$_ACLUPDATED                            ;
                                      69           01  FB 002C4          CALLS   #1, LIB$SIGNAL                              ;
                         0B           66           03  E1 002C7          BBC     #3, AED_L_FLAGS, 26$                        ;
                                      7E       20  A6  9A 002CB          MOVZBL  AED_B_COLUMN, -(SP)                         ;
                                      7E       24  A6  9A 002CF          MOVZBL  AED_B_LINE, -(SP)                           ;
                                      67           02  FB 002D3          CALLS   #2, SCR$SET_CURSOR                          ;
                                        00000000*  8F  D5 002D6 26$:     TSTL    #<AED$_ACLUPDATED&7>                        ;
                                                   14  13 002DC          BEQL    27$                                         ;
00000000*  8F       14   A6           03           00  ED 002DE          CMPZV   #0, #3, AED_L_WORSTERR, #<AED$_ACLUPDATED&- ;
                                                                                 7>                                          ;
                                                   08  18 002E8          BGEQ    27$                                         ;
                              14   A6 00000000G    8F  D0 002EA          MOVL    #AED$_ACLUPDATED, AED_L_WORSTERR            ;
                                                   50  D4 002F2 27$:     CLRL    R0                                          ; 4882
                                                       04 002F4          RET                                                 ;

; Routine Size:  757 bytes,    Routine Base:  $CODE$ + 3285
```

```
;  4465     4883  1 %SBTTL  'FINISH_ACE - Tie off the current ACE'
;  4466     4884  1 ROUTINE FINISH_ACE : NOVALUE =
;  4467     4885  1
;  4468     4886  1 !++
;  4469     4887  1 !
;  4470     4888  1 ! FUNCTIONAL DESCRIPTION:
;  4471     4889  1 !
;  4472     4890  1 !       This routine ties off the current ACE.  I.e., it adds a final right
;  4473     4891  1 !       paren if necessary.
;  4474     4892  1 !
;  4475     4893  1 ! CALLING SEQUENCE:
;  4476     4894  1 !       FINISH_ACE ()
;  4477     4895  1 !
;  4478     4896  1 ! INPUT PARAMETERS:
;  4479     4897  1 !       none
;  4480     4898  1 !
;  4481     4899  1 ! IMPLICIT IMPUTS:
;  4482     4900  1 !       OWN storage
;  4483     4901  1 !
;  4484     4902  1 ! OUTPUT PARAMETERS:
;  4485     4903  1 !       none
;  4486     4904  1 !
;  4487     4905  1 ! IMPLICIT OUTPUTS:
;  4488     4906  1 !       none
;  4489     4907  1 !
;  4490     4908  1 ! ROUTINE VALUE:
;  4491     4909  1 !       none
;  4492     4910  1 !
;  4493     4911  1 ! SIDE EFFECTS:
;  4494     4912  1 !       none
;  4495     4913  1 !
;  4496     4914  1 !--
;  4497     4915  1
;  4498     4916  2 BEGIN
;  4499     4917  2
;  4500     4918  2 LOCAL
;  4501     4919  2         PREV_LINE       : REF $BBLOCK;          ! Address of the previous line
;  4502     4920  2
;  4503     4921  2 IF .AED_W_TOTALSIZE GTR 0 OR .SEGMENT_SIZE GTR 0
;  4504     4922  2 THEN
;  4505     4923  3     BEGIN
;  4506     4924  3     PREV_LINE = .AED_L_LASTLINE;
;  4507     4925  3     TEMP_LINE = .AED_B_LINE;
;  4508     4926  3     UNTIL .PREV_LINE[LINE_V_BEGINACE]
;  4509     4927  3        OR .PREV_LINE[LINE_W_SIZE] GTR 0
;  4510     4928  3     DO
;  4511     4929  4         BEGIN
;  4512     4930  4         PREV_LINE = .PREV_LINE[LINE_L_BLINK];
;  4513     4931  4         TEMP_LINE = .TEMP_LINE - 1;
;  4514     4932  3         END;
;  4515     4933  3     IF .PREV_LINE[LINE_W_SIZE] EQL 0 THEN RETURN;
;  4516     4934  3     AED_COPSEGMENT (.PREV_LINE);
;  4517     4935  3     INSQUE (AED_T_CURLINE[LINE_L_FLINK], .PREV_LINE[LINE_L_BLINK]);
;  4518     4936  3     IF .AED_L_BEGINLINE EQL .PREV_LINE
;  4519     4937  3     THEN AED_L_BEGINLINE = AED_T_CURLINE[LINE_L_FLINK];
;  4520     4938  3     IF .AED_L_FIRSTLINE EQL .PREV_LINE
;  4521     4939  3     THEN AED_L_FIRSTLINE = AED_T_CURLINE[LINE_L_FLINK];
```

```
3        IF .AED_L_LASTLINE EQL .PREV_LINE
3        THEN AED_C_LASTLINE = AED_T_CURLINE[LINE_L_FLINK];
3        IF .INPUT_BUFFER[.SEGMENT_SIZE - 1] EQL '+'
3        THEN
4            BEGIN
4            AED_SET_CURSOR (.AED_B_LINE, .SEGMENT_SIZE);
4            SEGMENT_SIZE = .SEGMENT_SIZE - 1;
3            END;
3        IF .INPUT_BUFFER[.SEGMENT_SIZE - 1] NEQ %C')'
3        THEN
4            BEGIN
4            INPUT_BUFFER[.SEGMENT_SIZE] = ')';
4            SEGMENT_SIZE = .SEGMENT_SIZE + 1;
3            END;
3        AED_L_LASTLINE[LINE_V_ENDACE] = 1;
3        NEW_TEXT_LINE = AED_REPSEGMENT ();
3        IF .TEMP_LINE GEQ 1
3        THEN
4            BEGIN
4            AED_POSITION (.NEW_TEXT_LINE);
4            AED_SET_CURSOR (.AED_B_LINE,.NEW_TEXT_LINE[LINE_W_SIZE]);
4            ECHO_DESC[DSC$W_LENGTH] = 1;
4            ECHO_DESC[DSC$A_POINTER] = VECTOR [NEW_TEXT_LINE[LINE_T_TEXT],
4                                               .NEW_TEXT_LINE[LINE_W_SIZE] - 1; ,BYTE];
4            AED_PUTOUTPUT (ECHO_DESC);
4            AED_POSITION (.AED_C_LASTLINE);
3            END;
2        END;
2
2    RETURN;
2
1    END;                                          ! End of routine FINISH_ACE



                              001C 00000 FINISH_ACE:
                                                .WORD   Save R2,R3,R4                        ; 4884
          54   0000'  CF  9E 00002              MOVAB   NEW_TEXT_LINE, R4                    ;
          53   0000'  CF  9E 00007              MOVAB   SEGMENT_SIZE, R3                     ;
               020C   C3  B5 0000C              TSTW    AED_W_TOTALSIZE                      ; 4921
                      04  12 00010              BNEQ    1$                                   ;
                      63  B5 00012              TSTW    SEGMENT_SIZE                         ;
                      1F  13 00014              BEQL    4$                                   ;
          52     8C   A3  D0 00016 1$:          MOVL    AED_L_LASTLINE, PREV_LINE            ; 4924
     F4   A4   FF6C   C3  9A 0001A              MOVZBL  AED_B_LINE, TEMP_LINE                ; 4925
          0E     0A   A2  E8 00020 2$:          BLBS    10(PREV_LINE), 3$                    ; 4926
                 08   A2  B5 00024              TSTW    8(PREV_LINE)                         ; 4927
                      09  12 00027              BNEQ    3$                                   ;
          52     04   A2  D0 00029              MOVL    4(PREV_LINE), PREV_LINE              ; 4930
                 F4   A4  D7 0002D              DECL    TEMP_LINE                            ; 4931
                      EE  11 00030              BRB     2$                                   ; 4926
                 08   A2  B5 00032 3$:          TSTW    8(PREV_LINE)                         ; 4933
                      6A  13 00035 4$:          BEQL    10$                                  ;
                      52  DD 00037              PUSHL   PREV_LINE                            ; 4934
     0000G  CF        01  FB 00039              CALLS   #1, AED_COPSEGMENT                   ;
```

```
        04   B2      F8   A3  0E 0003E        INSQUE  AED_T_CURLINE, @4(PREV_LINE)              ; 4935
             52      90   A3  D1 00043        CMPL    AED_L_BEGINLINE, PREV_LINE                ; 4936
                          05  12 00047        BNEQ    5$
        90   A3      F8   A3  9E 00049        MOVAB   AED_T_CURLINE, AED_L_BEGINLINE            ; 4937
             52      88   A3  D1 0004E 5$:    CMPL    AED_L_FIRSTLINE, PREV_LINE                ; 4938
                          05  12 00052        BNEQ    6$
        88   A3      F8   A3  9E 00054        MOVAB   AED_T_CURLINE, AED_L_FIRSTLINE            ; 4939
             52      8C   A3  D1 00059 6$:    CMPL    AED_L_LASTLINE, PREV_LINE                 ; 4940
                          05  12 0005D        BNEQ    7$
        8C   A3      F8   A3  9E 0005F        MOVAB   AED_T_CURLINE, AED_L_LASTLINE             ; 4941
             50           63  3C 00064 7$:    MOVZWL  SEGMENT_SIZE, R0                          ; 4942
             2B   0B A340 91 00067            CMPB    INPUT_BUFFER-1[R0], #43
                          0F  12 0006C        BNEQ    8$
             7E           63  3C 0006E        MOVZWL  SEGMENT_SIZE, -(SP)                       ; 4945
             7E    FF6C   C3  9A 00071        MOVZBL  AED_B_LINE, -(SP)
     0000G   CF           02  FB 00076        CALLS   #2, AED_SET_CURSOR
                          63  B7 0007B        DECW    SEGMENT_SIZE                              ; 4946
             50           63  3C 0007D 8$:    MOVZWL  SEGMENT_SIZE, R0                          ; 4948
             29   0B A340 91 00080            CMPB    INPUT_BUFFER-1[R0], #41
                          07  13 00085        BEQL    9$
     0C A340              29  90 00087        MOVB    #41, INPUT_BUFFER[R0]                     ; 4951
                          63  B6 0008C        INCW    SEGMENT_SIZE                              ; 4952
             50      8C   A3  D0 0008E 9$:    MOVL    AED_L_LASTLINE, R0                        ; 4954
        0A   A0           02  88 00092        BISB2   #2, 10(R0)
     0000G   CF           00  FB 00096        CALLS   #0, AED_REPSEGMENT                        ; 4955
             64           50  D0 0009B        MOVL    R0, NEW_TEXT_LINE
                     F4   A4  D5 0009E        TSTL    TEMP_LINE                                 ; 4956
                          39  15 000A1 10$:   BLEQ    11$
                          64  DD 000A3        PUSHL   NEW_TEXT_LINE                             ; 4959
     0000G   CF           01  FB 000A5        CALLS   #1, AED_POSITION
             50           64  D0 000AA        MOVL    NEW_TEXT_LINE, R0                         ; 4960
             7E      08   A0  3C 000AD        MOVZWL  8(R0), -(SP)
             7E    FF6C   C3  9A 000B1        MOVZBL  AED_B_LINE, -(SP)
     0000G   CF           02  FB 000B6        CALLS   #2, AED_SET_CURSOR
        EC   A4           01  B0 000BB        MOVW    #1, ECHO_DESC                             ; 4961
             51           64  D0 000BF        MOVL    NEW_TEXT_LINE, R1                         ; 4962
             50      08   A1  3C 000C2        MOVZWL  8(R1), R0                                 ; 4963
        F0   A4      13 A140  9E 000C6        MOVAB   19(R1)[R0], ECHO_DESC+4
                     EC   A4  9F 000CC        PUSHAB  ECHO_DESC                                 ; 4964
     0000G   CF           01  FB 000CF        CALLS   #1, AED_PUTOUTPUT
                     8C   A3  DD 000D4        PUSHL   AED_L_LASTLINE                            ; 4965
     0000G   CF           01  FB 000D7        CALLS   #1, AED_POSITION
                          04  000DC 11$:      RET                                               ; 4971

; Routine Size:  221 bytes,    Routine Base:  $CODE$ + 357A


; 4554          4972  1
; 4555          4973  1 END
; 4556          4974  0 ELUDOM



;                          PSECT SUMMARY
```

```
;       Name                     Bytes                        Attributes
;
;   AED_COMMON                    1320  NOVEC,  WRT,  RD ,NOEXE,NOSHR,  LCL,  REL,  OVR,NOPIC,ALIGN(0)
;   $OWN$                          560  NOVEC,  WRT,  RD ,NOEXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)
;   $CODE$                       13911  NOVEC,NOWRT,  RD ,  EXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)
;   $PLIT$                          60  NOVEC,NOWRT,  RD ,NOEXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)




;                           Library Statistics
;
;                                          -------- Symbols --------      Pages       Processing
;       File                               Total    Loaded   Percent      Mapped      Time
;
;   _$255$DUA28:[SYSLIB]LIB.L32;1          18619        54         0      1000         00:01.8
;   _$255$DUA28:[SYSLIB]TPAMAC.L32;1          42         0         0        14         00:00.1





;                                    COMMAND QUALIFIERS

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

; Size:           13911 code + 1940 data bytes
; Run Time:          03:15.4
; Elapsed Time:      09:51.0
; Lines/CPU Min:      1527
; Lexemes/CPU-Min: 18458
; Memory Used:  485 pages
; Compilation Complete
```

AEDHELP
LIS

AEDINIT
LIS

AEDMAIN
LIS

AEDKEYTAB
LIS

AEDMESSAG
LIS

AEDPROMPT
LIS

SETACL
LIS

AEDSUBR
LIS