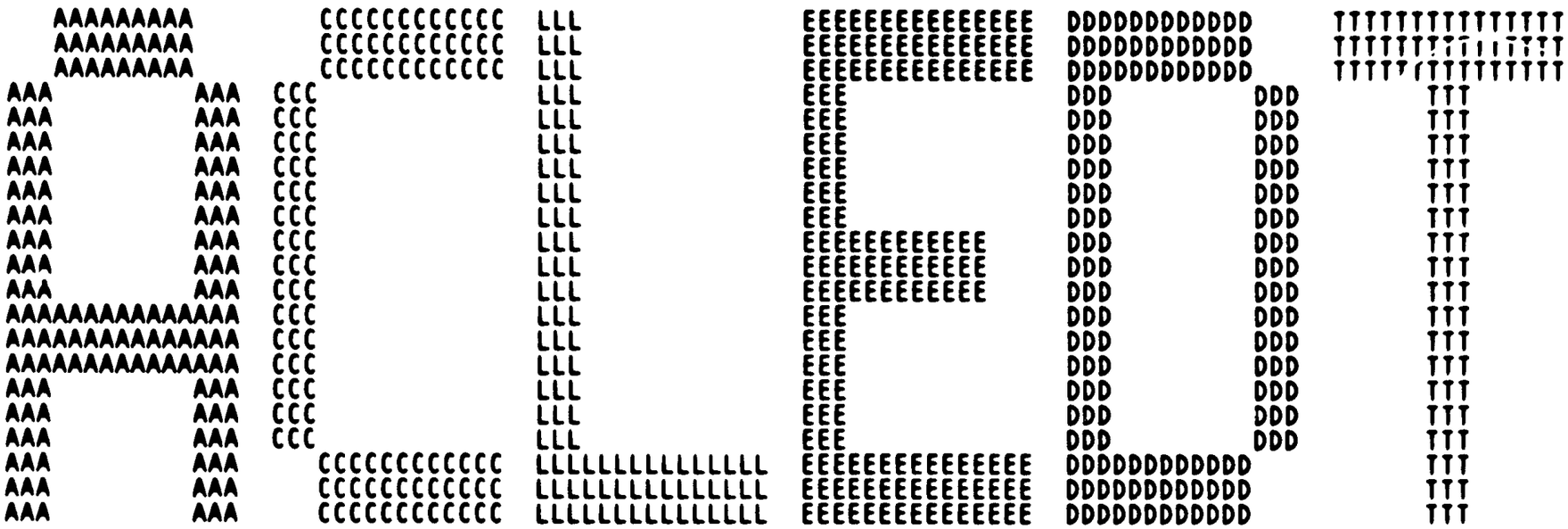
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AA      AA  EE          DD      DD  MMMM  MMMM  AA      AA      II      NN      NN
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AA      AA  EE          DD      DD  MM  MM  MM  AA      AA      II      NNNN    NN
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AA      AA  EEEEEEEE    DD      DD  MM      MM  AA      AA      II      NN  NN  NN
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```
;     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.                                                     *
;    12          0012  1 !*                                                                           *
;    13          0013  1 !*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED   *
;    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_L_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_L_LASTLINE = .AED_L_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);
```

```
;  311          0761  3          END;
;  312          0762  2      END;
;  313          0763  2  AED_L_BEGINLINE = .AED_Q_LINETABLE[LINE_L_FLINK];
;  314          0764  2
;  315          0765  2  ! Loop getting characters from the user until an End-Of-File is seen.  When
;  316          0766  2  ! an EOF is seen, it indicates the end of the session.
;  317          0767  2
;  318          0768  2  WHILE 1
;  319          0769  2  DO
;  320          0770  3      INPUT: BEGIN
;  321          0771  3      TERM_CHAR = AED_DECODEKEY ();
;  322          0772  3      IF .TERM_CHAR EQL 0 THEN RETURN;
;  323          0773  3      IF .AED_L_FLAGS[AED_V_ACERROR] AND .AED_L_FLAGS[AED_V_SCOPE]
;  324          0774  3      THEN
;  325          0775  4          BEGIN
;  326          0776  4          SCR$ERASE_PAGE (21, 1);
;  327          0777  4          AED_SET_CURSOR (.AED_B_LINE, .BUFFER_INDEX + 1);
;  328          0778  4          AED_L_FLAGS[AED_V_ACERROR] = 0;
;  329          0779  3          END;
;  330          0780  3
;  331          0781  3  ! Choose the appropriate action based upon the character typed.
;  332          0782  3
;  333          0783  3      WHILE .AED_L_FLAGS[AED_V_ACTIONKEY]
;  334          0784  3      DO
;  335          0785  4          BEGIN
;  336          0786  4          CASE .TERM_CHAR FROM 1 TO KEY_C_MAX_CODE-1 OF
;  337          0787  4          SET
;  338          0788  4
;  339          0789  4  ! Actions to delete text.
;  340          0790  4
;  341          0791  4          [KEY_C_RUB_CHR]:        ACT_RUB_CHR ();
;  342          0792  4
;  343          0793  4          [KEY_C_RUB_WRD]:
;  344          0794  5              BEGIN
;  345          0795  5              LOCAL_STATUS = ACT_RUB_WRD ();
;  346          0796  5              IF NOT .LOCAL_STATUS THEN RETURN;
;  347          0797  4              END;
;  348          0798  4
;  349          0799  4          [KEY_C_RUB_BOL]:        ACT_RUB_BOL ();
;  350          0800  4
;  351          0801  4          [KEY_C_DEL_CHR]:        ACT_DEL_CHR ();
;  352          0802  4
;  353          0803  4          [KEY_C_DEL_WRD]:
;  354          0804  5              BEGIN
;  355          0805  5              LOCAL_STATUS = ACT_DEL_WRD ();
;  356          0806  5              IF NOT .LOCAL_STATUS THEN RETURN;
;  357          0807  4              END;
;  358          0808  4
;  359          0809  4          [KEY_C_DEL_EOL]:
;  360          0810  5              BEGIN
;  361          0811  5              LOCAL_STATUS = ACT_DEL_EOL ();
;  362          0812  5              IF NOT .LOCAL_STATUS THEN RETURN;
;  363          0813  4              END;
;  364          0814  4
;  365          0815  4          [KEY_C_DEL_ACE]:
;  366          0816  5              BEGIN
;  367          0817  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]:
```

```
5                BEGIN
5                AED_L_FLAGS[AED_V_BACKWARD] = 1;
5                AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
5                TERM_CHAR = 0;
4                END;
4
4 ! Advance through the ACL based upon the direction chosen.
4
4            [KEY_C_MOVE_WRD]:        ACT_MOVE_WRD ();
4
4            [KEY_C_MOVE_BOL]·        ACT_MOVE_BOL ();
4
4            [KEY_C_MOVE_EOL]:        ACT_MOVE_EOL ();
4
4            [KEY_C_MOVE_ACE]:
5                BEGIN
5                LOCAL_STATUS = ACT_MOVE_ACE ();
5                IF NOT .LOCAL_STATUS THEN RETURN;
4                END;
4
4            [KEY_C_FIND_STR]:
5                BEGIN
5                LOCAL_STATUS = ACT_FIND_STR ();
5                IF NOT .LOCAL_STATUS THEN RETURN;
4                END;
4
4            [KEY_C_FIND_NXT]:
5                BEGIN
5                LOCAL_STATUS = ACT_FIND_NXT ();
5                IF NOT .LOCAL_STATUS THEN RETURN;
4                END;
4
4 ! Advance through an ACE using fields and items.
4
4            [KEY_C_ADV_FIELD]:
5                BEGIN
5                LOCAL_STATUS = ACT_ADV_FIELD ();
5                IF NOT .LOCAL_STATUS THEN RETURN;
4                END;
4
4            [KEY_C_SEL_FIELD]:
5                BEGIN
5                LOCAL_STATUS = ACT_SEL_FIELD ();
5                IF NOT .LOCAL_STATUS THEN RETURN;
4                END;
4
4            [KEY_C_SEL_ITEM]:
5                BEGIN
5                LOCAL_STATUS = ACT_SEL_ITEM ();
5                IF NOT .LOCAL_STATUS THEN RETURN;
4                END;
4
4 ! Miscellaneous editor actions.
4
4            [KEY_C_GOLD]:
5                BEGIN
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$A_POINTER] = BUFFER_CHAR;
;  597          1047  6                    AED_PUTOUTPUT (ECHO_DESC);
;  598          1048  6                    AED_B_COLUMN = .AED_B_COLUMN + 1;
;  599          1049  6                    BUFFER_INDEX = .BUFFER_INDEX + 1;
;  600          1050  6                    SEGMENT_SIZE = .SEGMENT_SIZE + 1;
;  601          1051  5                    END;
;  602          1052  4                END;
;  603          1053  4
;  604          1054  4 ! Split the line.
;  605          1055  4
;  606          1056  4                NEW_TEXT_LINE = AED_SEGSPLIT (BUFFER_INDEX, 1, 0, 0);
;  607          1057  4
;  608          1058  4 ! See if a new prompt string is necessary.
;  609          1059  4
;  610          1060  4                IF .AED_L_FLAGS[AED_V_PROMPT]
;  611          1061  4                AND NOT .AED_L_FLAGS[AED_V_OPENUIC]
;  612          1062  4                AND NOT .AED_L_FLAGS[AED_V_NOITEMSEL]
;  613          1063  4                AND .AED_L_LASTLINE EQLA AED_T_CURLINE[LINE_L_FLINK]
;  614          1064  4                AND .AED_L_FIRSTLINE[LINE_L_BIRACE] EQL 0
;  615          1065  4                THEN
;  616          1066  5                    BEGIN
;  617          1067  5                    AED_L_FLAGS[AED_V_NOITEMSEL] = 0;
;  618          1068  5                    AED_SELECTFIELD (BUFFER_INDEX);
;  619          1069  5                    ECHO_DESC[DSC$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);
```

```
4
4                   ECHO_DESC[DSC$W_LENGTH] = 1;
4                   ECHO_DESC[DSC$A_POINTER] = TERM_CHAR;
4                   AED_PUTOUTPUT (ECHO_DESC);
4
4 ! If the character was entered in insert mode, move all of the characters
4 ! over one position.
4
4                   IF .BUFFER_INDEX  LSS .SEGMENT_SIZE
4                   AND NOT .AED_L_FLAGS[AED_V_OVERSTRIKE]
4                   THEN
5                       BEGIN
5                       ECHO_DESC[DSC$W_LENGTH] = .SEGMENT_SIZE - .BUFFER_INDEX;
5                       ECHO_DESC[DSC$A_POINTER] = BUFFER_CHAR;
5                       AED_PUTOUTPUT (ECHO_DESC);
5                       AED_SET_CURSOR (.AED_B_LINE, .BUFFER_INDEX + 2);
5                       CH$COPY (.ECHO_DESC[DSC$W_LENGTH], BUFFER_CHAR,
5                                0,
5                                512 - .BUFFER_INDEX - 1, INPUT_BUFFER[.BUFFER_INDEX + 1]);
4                       END;
4
4                   IF .TERM_CHAR EQL '[' THEN AED_L_FLAGS[AED_V_OPENUIC] = 1;
4                   IF .TERM_CHAR EQL ']' THEN AED_L_FLAGS[AED_V_OPENUIC] = 0;
4
4 ! Now put the entered character into the line buffer.
4
4                   BUFFER_CHAR = .TERM_CHAR;
4                   BUFFER_INDEX = .BUFFER_INDEX + 1;
4                   AED_B_COLUMN = .BUFFER_INDEX + 1;
4
4 ! If in insert mode, the segment size has grown by one character.
4
4                   IF NOT .AED_L_FLAGS[AED_V_OVERSTRIKE]
4                   OR .BUFFER_INDEX GEQ .SEGMENT_SIZE
4                   THEN SEGMENT_SIZE = .SEGMENT_SIZE + 1;
4                   AED_L_FLAGS[AED_V_GOLDKEY] = 0;
3                   END;
3           TES;
2           END;
2
2 RETURN;
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$_NOCHANGE, AED_PUTOUTPUT
                .EXTRN  AED_GIVEHELP, AED_UPDATEACL
                .EXTRN  AED_SET_CURSOR, AED_SELECTFIELD
                .EXTRN  AED_SELECTITEM, AED_SETACETYPE
                .EXTRN  AED_COMPRESS, AED_POSITION
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                                                                 .EXTRN  AED_COPSEGMENT, AED_REPSEGMENT
                                                                 .EXTRN  AED_SEGSPLIT, AED_SEGCOMBINE
                                                                 .EXTRN  AED_DECODEKEY, LIB$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$SETEXV                                          ;
                                          01  DD 002FF         PUSHL   #1                                                      ; 0995
                                          15  DD 00301         PUSHL   #21                                                     ;
                               69         02  FB 00303         CALLS   #2, SCR$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_OPENUI[] = 0;
3     IF .AED_B_DEL_CHAR EQL ']' THEN AED_L_FLAGS[AED_V_OPENUI[] = 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]);
```

```
3          SEGMENT_SIZE = .SEGMENT_SIZE - .AED_Q_DEL_WORD[DSC$W_LENGTH];
3          SCR$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_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)
                            CB            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  2     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$:       PUSHL   R11
                                    00000000G             00  FB 00041          CALLS   #1, LIB$SIGNAL
                                0B            67            03  E1 00048          BBC     #3, AED_L_FLAGS, 2$
                                              7E        20  A7  9A 0004C          MOVZBL  AED_B_COLOMN, -(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  0006F 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  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     ; 1433
                                        58        A7            68  B0 00094          MOVW    BUFFER_INDEX, AED_Q_DEL_LINE  ; 1434
                                              5C        A7  9F 00098          PUSHAB  AED_Q_DEL_LINE+4              ; 1435
                                        04        AE        58  A7  3C 0009B          MOVZWL  AED_Q_DEL_LINE, 4(SP)
                                              04        AE  9F 000A0          PUSHAB  4(SP)
                                    00000000G             00  FB 000A3          CALLS   #2, LIB$GET_VM
                                                            50  D0 000AA          MOVL    R0, VM_STATUS
                                                            56  E9 000AD          BLBC    VM_STATUS, 6$
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$:       MOVL    VM_STATUS, AED_L_STATUS
                                              4F  008C  C7  E8 000BD          BLBS    AED_L_STATUS, 7$              ; 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$ERASE_LINE                           ;
                                       01  DD 0016B            PUSHL   #1                                           ; 1470
                          7E     24    A7  9A 0016D            MOVZBL  AED_B_LINE, -(SP)                            ;
                      0000G  CF        02  FB 00171            CALLS   #2, AED_SET_CURSOR                           ;
                      01  A7           10  8A 00176            BICB2   #16, AED_L_FLAGS+1                           ; 1472
                          67     80    8F  88 0017A            BISB2   #128, AED_L_FLAGS                            ; 1473
             20   A7      6E           01  81 0017E            ADDB3   #1, BUFFER_INDEX, AED_B_COLUMN               ; 1474
                      01  A7   2008    8F  AA 00183  12$:      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
```

```
; 1092          1538  2 IF .SEGMENT_SIZE GTR 0
; 1093          1539  2 AND .BUFFER_INDEX LSS .SEGMENT_SIZE
; 1094          1540  2 THEN
; 1095          1541  3     BEGIN
; 1096          1542  3     AED_B_DEL_CHAR = .BUFFER_CHAR;
; 1097          1543  3     IF .AED_B_DEL_CHAR EQL ']' THEN AED_L_FLAGS[AED_V_OPENUIC] = 1;
; 1098          1544  3     ECHO_DESC[DSC$W_LENGTH] = .SEGMENT_SIZE - .BUFFER_INDEX - 1;
; 1099          1545  3     ECHO_DESC[DSC$A_POINTER] = INPUT_BUFFER[.BUFFER_INDEX + 1];
; 1100          1546  3     IF .ECHO_DESC[DSC$W_LENGTH] GEQ 1
; 1101          1547  3     THEN AED_PUTOUTPUT (ECHO_DESC);
; 1102          1548  3     SCR$ERASE_LINE (.AED_B_LINE, .SEGMENT_SIZE);
; 1103          1549  3     AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
; 1104          1550  3     CH$COPY (.ECHO_DESC[DSC$W_LENGTH], INPUT_BUFFER[.BUFFER_INDEX + 1],
; 1105          1551  3             0,
; 1106          1552  3             512 - .BUFFER_INDEX, INPUT_BUFFER[.BUFFER_INDEX]);
; 1107          1553  3     SEGMENT_SIZE = .SEGMENT_SIZE - 1;
; 1108          1554  3     END
; 1109          1555  2 ELSE AED_SEGCOMBINE (BUFFER_INDEX, 1);
; 1110          1556  2
; 1111          1557  2 AED_L_FLAGS[AED_V_GOLDKEY] = 0;
; 1112          1558  2 AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
; 1113          1559  2 TERM_CHAR = 0;
; 1114          1560  2 RETURN 1;
; 1115          1561  2
; 1116          1562  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)                               ;
                 C000G  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$:     PUSHL   #1                                              ; 1555
                                    57  DD 000F1         PUSHL   R7                                              ;
                 0000G  CF          02  FB 000F3         CALLS   #2, AED_SEGCOMBINE                              ;
                   01  A6     2008  8F  AA 000F8 8$:     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 000EA 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)                              ;
             000000000G 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


                                               0FFC 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)                            ;
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```
                       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$:   MOVL    NEW_TEXT_LINE, R0                         ; 1922
                EC  A6     08   A0  B0 001FA        MOVW    8(R0), ECHO_DESC                          ;
                F0  A6     14   A0  9E 001FF        MOVAB   20(R0), ECHO_DESC+4                       ; 1923
                                01  DD 00204        PUSHL   #1                                        ; 1924
                                52  DD 00206        PUSHL   J                                         ;
                    67          02  FB 00208        CALLS   #2, SCR$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,
```

```
; 1645       2086  2            512 - .BUFFER_INDEX - .AED_Q_DEL_WORD[DSC$W_LENGTH],
; 1646       2087  2            INPUT_BUFFER[.BUFFER_INDEX +
; 1647       2088  2                         .AED_Q_DEL_WORD[DSC$W_LENGTH]]);
; 1648       2089  2  CH$MOVE (.AED_Q_DEL_WORD[DSC$W_LENGTH],
; 1649       2090  2            .AED_Q_DEL_WORD[DSC$A_POINTER],
; 1650       2091  2            INPUT_BUFFER[.BUFFER_INDEX]);
; 1651       2092  2  SEGMENT_SIZE = .SEGMENT_SIZE + .AED_Q_DEL_WORD[DSC$W_LENGTH];
; 1652       2093  2  ECHO_DESC[DSC$W_LENGTH] = .SEGMENT_SIZE - .BUFFER_INDEX;
; 1653       2094  2  ECHO_DESC[DSC$A_POINTER] = INPUT_BUFFER[.BUFFER_INDEX];
; 1654       2095  2  IF .AED_L_FLAGS[AED_V_RUBWORD]
; 1655       2096  2  THEN BUFFER_INDEX = .BUFFER_INDEX + .AED_Q_DEL_WORD[DSC$W_LENGTH];
; 1656       2097  2  IF .SEGMENT_SIZE GEQ .AED_L_PAGEWIDTH
; 1657       2098  2  THEN AED_SEGSPLIT (BUFFER_INDEX, 0, 1, 0)
; 1658       2099  2  ELSE AED_PUTOUTPUT (ECHO_DESC);
; 1659       2100  2  AED_B_COLUMN = .BUFFER_INDEX + 1;
; 1660       2101  2  AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
; 1661       2102  2  IF .AED_Q_DEL_WORD[DSC$W_LENGTH] NEQ 0
; 1662       2103  2  THEN
; 1663       2104  3      BEGIN
; 1664       2105  3      AED_L_FLAGS[AED_V_MODIFIED] = 1;
; 1665       2106  3      AED_L_FLAGS[AED_V_FIRSTCHAR] = 0;
; 1666       2107  2      END;
; 1667       2108  2  AED_L_FLAGS[AED_V_GOLDKEY] = 0;
; 1668       2109  2  AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
; 1669       2110  2  TERM_CHAR = 0;
; 1670       2111  2  RETURN 1;
; 1671       2112  2
; 1672       2113  1  END;                                          ! End of routine ACT_UNDEL_WRD


                                          0FFC 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$:    MOVL    BUFFER_INDEX, R6                        ; 2083
                             52     00B8    C9   3C 00070        MOVZWL  SEGMENT_SIZE, R2                        ;
                             52             56   C2 00075        SUBL2   R6, R2                                  ;
                             58     00C4  C946   9E 00078        MOVAB   INPUT_BUFFER[R6], R8                    ; 2084
                             57       60    A9   3C 0007E        MOVZWL  AED_Q_DEL_WORD, R7                      ; 2086
                             51     FE00  C746   9E 00082        MOVAB   -512(R7)[R6], R1                        ;
                             51             51   CE 00088        MNEGL   R1, R1                                  ;
               50            56             57   C1 0008B        ADDL3   R7, R6, R0                              ; 2088
    51         00            68             52   2C 0008F        MOVC5   R2, (R8), #0, R1, INPUT_BUFFER[R0]      ;
                                    00C4  C940      00094                                                        ;
               68       64   B9             57   28 00098        MOVC3   R7, @AED_Q_DEL_WORD+4, (R8)             ; 2091
                      00B8   C9             57   A0 0009D        ADDW2   R7, SEGMENT_SIZE                        ; 2092
          04   AA     00B8   C9             56   A3 000A2        SUBW3   R6, SEGMENT_SIZE, ECHO_DESC             ; 2093
                        08   AA             58   D0 000A9        MOVL    R8, ECHO_DESC+4                         ; 2094
               03       01   A9             01   E1 000AD        BBC     #1, AED_L_FLAGS+1, 5$                   ; 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,
```

```
2               512 - .BUFFER_INDEX - .AED_Q_DEL_LINE[DSC$W_LENGTH],
2               INPUT_BUFFER[.BUFFER_INDEX + .AED_Q_DEL_LINE[DSC$W_LENGTH]]);
2 CH$MOVE (.AED_Q_DEL_LINE[DSC$W_LENGTH],
2               .AED_Q_DEL_LINE[DSC$A_POINTER],
2               INPUT_BUFFER[.BUFFER_INDEX]);
2 SEGMENT_SIZE = .SEGMENT_SIZE + .AED_Q_DEL_LINE[DSC$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_DELBOL]
2 THEN BUFFER_INDEX = .BUFFER_INDEX + .AED_Q_DEL_LINE[DSC$W_LENGTH];
2 IF .SEGMENT_SIZE GEQ .AED_L_PAGEWIDTH
2 THEN AED_SEGSPLIT (BUFFER_INDEX, 0, 1, 0)
2 ELSE AED_PUTOUTPUT (ECHO_DESC);
2 AED_B_COLUMN = .BUFFER_INDEX + 1;
2 AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
2 IF .AED_Q_DEL_LINE[DSC$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_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 EQLA 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_GOLDKEY] = 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


                                         0FFC 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$:   CLRL    BUFFER_INDEX                  ; 2386
                  E0    A9            01  90 002CB        MOVB    #1, AED_B_COLUMN              ; 2387
                        7E      E0    A9  9A 002CF        MOVZBL  AED_B_COLUMN, -(SP)           ; 2388
                        7E      E4    A9  9A 002D3        MOVZBL  AED_B_LINE, -(SP)             ;
               0000G    CF            02  FB 002D7        CALLS   #2, AED_SET_CURSOR            ;
                  C1    A9    2008    8F  AA 002DC 39$:   BICW2   #8200, AED_L_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 wo.d 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;
```

```
; 2014      2452  5                 EXITLOOP;
; 2015      2453  4                 END;
; 2016      2454  3             END;
; 2017      2455  3         END
; 2018      2456  2 ELSE
; 2019      2457  3         BEGIN
; 2020      2458  3         BUFFER_INDEX = .BUFFER_INDEX - 2;
; 2021      2459  3         IF .BUFFER_INDEX GEQ 0
; 2022      2460  3         THEN
; 2023      2461  4             BEGIN
; 2024      2462  5             WHILE (.BUFFER_CHAR GEQ 'A' AND .BUFFER_CHAR LEQ 'Z')
; 2025      2463  5                 OR (.BUFFER_CHAR GEQ '0' AND .BUFFER_CHAR LEQ '9')
; 2026      2464  4             DO
; 2027      2465  5                 BEGIN
; 2028      2466  5                 BUFFER_INDEX = .BUFFER_INDEX - 1;
; 2029      2467  5                 IF .BUFFER_INDEX LSS 0 THEN EXITLOOP;
; 2030      2468  4                 END;
; 2031      2469  4             END
; 2032      2470  3         ELSE BUFFER_INDEX = -1;
; 2033      2471  2         END;
; 2034      2472  2 BUFFER_INDEX = .BUFFER_INDEX + 1;        ! First char of word
; 2035      2473  2 AED_B_COLUMN = .BUFFER_INDEX + 1;
; 2036      2474  2 AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
; 2037      2475  2 AED_L_FLAGS[AED_V_GOLDKEY] = 0;
; 2038      2476  2 AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
; 2039      2477  2 TERM_CHAR = 0;
; 2040      2478  2 RETURN 1;
; 2041      2479  2
; 2042      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$:    SUBL     #2, BUFFER_INDEX                               ; 2458
                                             28  19 00047        BLSS     8$                                             ; 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[E[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$: BICW2  #8320, AED_L_FLAGS                           ; 2560
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                  03      C1  A3  E9 000C6 8$:   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:  $CODE$ + 196
```

```
;  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_GOTOKEY] = 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];
```

```
; 2426        2860 5              AED_W_TOTALSIZE = .AED_W_TOTALSIZE + .AED_L_FIRSTLINE[LINE_W_SIZE];
; 2427        2861 4              END;
; 2428        2862 4          AED_L_CURACE = .AED_L_FIRSTLINE[LINE_L_BINACE];
; 2429        2863 3          END;
; 2430        2864 3      BUFFER_INDEX = MIN (.SEGMENT_SIZE, .AED_B_COLUMN - 1);
; 2431        2865 3      END
; 2432        2866 2  ELSE AED_B_LINE = 1;
; 2433        2867 2  AED_SET_CURSOR (.AED_B_LINE, .BUFFER_INDEX + 1);
; 2434        2868 2  AED_L_FLAGS[AED_V_ENDACL] = 0;
; 2435        2869 2  AED_L_FLAGS[AED_V_GOLDKEY] = 0;
; 2436        2870 2  AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
; 2437        2871 2  TERM_CHAR = 0;
; 2438        2872 2  RETURN 1;
; 2439        2873 2
; 2440        2874 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 0017C          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_C_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_C_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_Q_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_B_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  00021F            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$SET_CURSOR (2T, 1);
;  2986          3414  2 AED_PUTOUTPUT ($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 ($DESCRIPTOR (%CHAR (AED_C_CHAR_BS),
;  3016        P 3444  6                                              %CHAR (AED_C_CHAR_BS)));
;  3017          3445  6
;  3018          3446  5                  END;
;  3019          3447  5              END
;  3020          3448  4          ELSE EXITLOOP;
;  3021          3449  4          END
;  3022          3450  3      ELSE IF .TERM_CHAR GEQ ' '
;  3023          3451  3      THEN
;  3024          3452  4          BEGIN
;  3025          3453  4          IF .TERM_CHAR GEQ 'a' AND .TERM_CHAR LEQ 'z'
;  3026          3454  4          THEN TERM_CHAR = .TERM_CHAR - 32;       ! Convert lower to upper case
;  3027          3455  4          ECHO_DESC[DSC$W_LENGTH] = 1;
;  3028          3456  4          ECHO_DESC[DSC$A_POINTER] = TERM_CHAR;
;  3029          3457  4          AED_PUTOUTPUT (ECHO_DESC);
;  3030          3458  4          SEARCH_STRING[.STRING_INDEX] = .TERM_CHAR;
;  3031          3459  4          STRING_INDEX = .STRING_INDEX + 1;
;  3032          3460  3          END;
;  3033          3461  2      END;
;  3034          3462  2  SEARCH_SIZE = .STRING_INDEX;
;  3035          3463  2  SCR$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$FIND_SUB (.SEGMENT_SIZE - .SEARCH_BEGIN,
;  3122     3549  3                                         INPUT_BUFFER[.SEARCH_BEGIN],
;  3123     3550  3                                         .SEARCH_SIZE, SEARCH_STRING);
;  3124     3551  3     IF .STRING_LOCATION NEQ 0
;  3125     3552  3     THEN
;  3126     3553  4         BEGIN
;  3127     3554  4         BUFFER_INDEX = .STRING_LOCATION - INPUT_BUFFER[0];
;  3128     3555  4         AED_B_COLUMN = .BUFFER_INDEX + 1;
;  3129     3556  4         AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
;  3130     3557  4         AED_L_FLAGS[AED_V_GOKEY] = 0;
;  3131     3558  4         AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;  3132     3559  4         TERM_CHAR = 0;
;  3133     3560  4         RETURN 1;
;  3134     3561  3         END;
;  3135     3562  3
;  3136     3563  3 ! The specified search string is not within the current line.  Update the
;  3137     3564  3 ! text ACE with the current line segment.  Then loop through the remaining
;  3138     3565  3 ! line segments in the line table looking for the search string.  If it is
;  3139     3566  3 ! found beyond the end of the current ACE, update the ACL with the current
;  3140     3567  3 ! ACE.  Otherwise, simply set the various pointers to point to the line
;  3141     3568  3 ! segment where the search string was found.
;  3142     3569  3
;  3143     3570  3     NEW_TEXT_LINE = AED_REPSEGMENT ();
;  3144     3571  3     START_SEGMENT = .NEW_TEXT_LINE;
;  3145     3572  3     AED_L_FLAGS[AED_V_ENDACL] = 0;
;  3146     3573  3     AED_L_FLAGS[AED_V_INSERTEXT] = 0;
;  3147     3574  3     MATCH_SEGMENT = .NEW_TEXT_LINE[LINE_L_FLINK];
;  3148     3575  3     NEW_ACE = .AED_L_LASTLINE EQL .NEW_TEXT_LINE;
;  3149     3576  3     SEARCH_BEGIN = 0;
;  3150     3577  3     UNTIL .MATCH_SEGMENT EQLA AED_Q_LINETABLE[LINE_L_FLINK]
;  3151     3578  3     DO
;  3152     3579  4         BEGIN
;  3153     3580  4         STRING_LOCATION = CH$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_GOLDKEY] = 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_C_FIRSTLINE EQL .MATCH_SEGMENT
;  3230          3657  5              THEN AED_C_FIRSTLINE = AED_T_CURLINE[LINE_L_FLINK];
;  3231          3658  5              IF .AED_C_LASTLINE EQL .MATCH_SEGMENT
;  3232          3659  5              THEN AED_C_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  3          END;
;  3246          3673  3      END
;  3247          3674  2  ELSE
;  3248          3675  3      BEGIN
;  3249          3676  3      NEW_TEXT_LINE = AED_REPSEGMENT ();
;  3250          3677  3      START_SEGMENT = .NEW_TEXT_LINE;
;  3251          3678  3      MATCH_SEGMENT = NEW_TEXT_LINE[LINE_L_FLINK];
;  3252          3679  3      AED_L_FLAGS[AED_V_ENDACL] = 0;
;  3253          3680  3      AED_L_FLAGS[AED_V_INSERTEXT] = 0;
;  3254          3681  3      NEW_ACE = 0;
;  3255          3682  3      SEARCH_END = .BUFFER_INDEX;
;  3256          3683  3      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_C_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_ENDACL]
;  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;                    ; R
;  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
```

```
; 3342        3769  7                       THEN AED_L_BEGINLINE = AED_T_CURLINE[LINE_L_FLINK];
; 3343        3770  7                       IF .AED_L_FIRSTLINE EQL .MATCH_SEGMENT
; 3344        3771  7                       THEN AED_L_FIRSTLINE = AED_T_CURLINE[LINE_L_FLINK];
; 3345        3772  7                       IF .AED_L_LASTLINE EQL .MATCH_SEGMENT
; 3346        3773  7                       THEN AED_L_LASTLINE = AED_T_CURLINE[LINE_L_FLINK];
; 3347        3774  7                       AED_L_CURACE = .AED_L_FIRSTLINE[LINE_L_BINACE];
; 3348        3775  7                       BUFFER_INDEX = .STRING_LOCATION - MATCH_SEGMENT[LINE_T_TEXT];
; 3349        3776  7                       AED_B_COLUMN = .BUFFER_INDEX + 1;
; 3350        3777  7                       AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
; 3351        3778  7                       AED_L_FLAGS[AED_V_GOLDKEY] = 0;
; 3352        3779  7                       AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
; 3353        3780  7                       TERM_CHAR = 0;
; 3354        3781  7                       RETURN 1;
; 3355        3782  6                       END;
; 3356        3783  5                   END;
; 3357        3784  4               END;
; 3358        3785  4           IF .AED_L_FIRSTLINE EQL .MATCH_SEGMENT THEN NEW_ACE = 1;
; 3359        3786  4           MATCH_SEGMENT = .MATCH_SEGMENT[LINE_L_BLINK];
; 3360        3787  4           SEARCH_END = .MATCH_SEGMENT[LINE_W_SIZE];
; 3361        3788  3           END;
; 3362        3789  2       END;
; 3363        3790  2 SIGNAL (AED$_NOTFOUND);
; 3364        3791  2 AED_COPSEGMENT (.START_SEGMENT);
; 3365        3792  2 INSQUE (AED_T_CURLINE[LINE_L_FLINK], .START_SEGMENT[LINE_L_BLINK]);
; 3366        3793  2 IF .AED_L_BEGINLINE EQL .START_SEGMENT THEN AED_L_BEGINLINE = AED_T_CURLINE[LINE_L_FLINK];
; 3367        3794  2 IF .AED_L_FIRSTLINE EQL .START_SEGMENT THEN AED_L_FIRSTLINE = AED_T_CURLINE[LINE_L_FLINK];
; 3368        3795  2 IF .AED_L_LASTLINE EQL .START_SEGMENT THEN AED_L_LASTLINE = AED_T_CURLINE[LINE_L_FLINK];
; 3369        3796  2 AED_L_FLAGS[AED_V_ACERROR] = T;
; 3370        3797  2 AED_L_FLAGS[AED_V_GOLDKEY] = 0;
; 3371        3798  2 AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
; 3372        3799  2 TERM_CHAR = 0;
; 3373        3800  2 RETURN 1;
; 3374        3801  2
; 3375        3802  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$:   CLRL    STRING_LOCATION                              ; 3547
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                                          17   11 00038          BRB      6$                                          ;
                             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$:     CALLS    #0, AED_COMPRESS                            ; 3605
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                        7E      0284    CA  3C 000FA          MOVZWL  AED_W_TOTALSIZE, -(SP)                          ; 3606
                0000G   CF              01  FB 000FF          CALLS   #1, AED_UPDATEACL                               ;
                  4C    AA              50  D0 00104          MOVL    R0, AED_L_STATUS                                ;
                        4E      4C      AA  E8 00108          BLBS    AED_L_STATUS, 22$                               ; 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$:   CALLS   #0, AED_REPSEGMENT                         ; 3676
                        6B         50  D0 001F7        MOVL    R0, NEW_TEXT_LINE                          ;
                        56         6B  D0 001FA        MOVL    NEW_TEXT_LINE, START_SEGMENT               ; 3677
                        54         6B  D0 001FD        MOVL    NEW_TEXT_LINE, MATCH_SEGMENT               ; 3678
                  C0    AA   4020  8F  AA 00200        BICW2   #16416, AED_L_FLAGS                        ; 3680
                        58             D4 00206        CLRL    NEW_ACE                                    ; 3681
                        59     E8  AB  B0 00208        MOVW    BUFFER_INDEX, SEARCH_END                   ; 3682
                        50     F0  AA  9E 0020C 34$:   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 00000000G  8F  D0 00002              MOVL    #AED$_BADUIC, R6                     ;
              55 00000000G  00  9E 00009              MOVAB   SCR$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                                  ;
         00000000G  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_COLOMN, -(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          63          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
```

```
; 3609        4033  3       AED_L_FLAGS[AED_V_ACERROR] = 1;
; 3610        4034  3       SIGNAL (AED$_BADUIC);
; 3611        4035  3       RETURN 1;
; 3612        4036  2       END;
; 3613        4037  2
; 3614        4038  2  ! No error conditions have been found, select the next item.
; 3615        4039  2
; 3616        4040  2  AED_L_FLAGS[AED_V_FIRSTCHAR] = 0;
; 3617        4041  2  AED_SELECTITEM (BUFFER_INDEX);
; 3618        4042  2  ECHO_DESC[DSC$W_LENGTH] = .AED_T_CURLINE[LINE_W_SIZE];
; 3619        4043  2  ECHO_DESC[DSC$A_POINTER] = AED_T_CURLINE[LINE_T_TEXT];
; 3620        4044  2  SCR$SET_CURSOR (.AED_B_LINE, 1);
; 3621        4045  2  AED_PUTOUTPUT (ECHO_DESC);
; 3622        4046  2  SCR$ERASE_LINE (.AED_B_LINE, .SEGMENT_SIZE + 1);
; 3623        4047  2  AED_B_COLUMN = .BUFFER_INDEX + 1;
; 3624        4048  2  AED_SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
; 3625        4049  2
; 3626        4050  2  RETURN 1;
; 3627        4051  2
; 3628        4052  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)                          ;
              00000000G   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   00 FB 00006        CALLS   #2, SCR$SET_SCROLL              ;
                     0000G   CF FB 00009        CALLS   #0, AED_GIVEHELP                ; 4090
                             7E D4 00012        CLRL    -(SP)                           ; 4091
                     0000V   CF 01 FB 00014     CALLS   #1, ACT_REFRESH                 ;
                             50 01 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  3     BEGIN
;3732          4154  3     CH$FILL (0, 2*ITM$S_ITEM, ATR_ARGLIST);
;3733          4155  3
;3734          4156  3     ! Go through the line segment table and deallocate all the old segments.
;3735          4157  3     ! In addition, get rid of the copies of the binary ACEs.
;3736          4158  3
;3737          4159  3     UNTIL REMQUE (.AED_Q_LINETABLE[LINE_L_FLINK], CURRENT_LINE)
;3738          4160  3     DO
;3739          4161  4         BEGIN
;3740          4162  4         IF .CURRENT_LINE[LINE_V_BEGINACE]
;3741          4163  4         THEN IF .CURRENT_LINE[LINE_L_BINACE] NEQ 0
;3742        P 4164  4              THEN DEALLOCATE (.($BBLOCK[.CURRENT_LINE[LINE_L_BINACE], ACE$B_SIZE]),
;3743          4165  4                               CURRENT_LINE[LINE_L_BINACE]);
;3744        P 4166  4         DEALLOCATE (.CURRENT_LINE[LINE_W_SIZE] + $BYTEOFFSET (LINE_T_TEXT),
;3745          4167  4                     CURRENT_LINE);
;3746          4168  3         END;
;3747          4169  3
;3748          4170  3     ! Allocate storage for the temporary ACL segment buffer.
;3749          4171  3
;3750          4172  3     AED_L_STATUS = ALLOCATE (512, AED_A_ACLBUFFER);
;3751          4173  3     IF NOT .AED_L_STATUS
;3752          4174  3     THEN
;3753          4175  4         BEGIN
;3754          4176  4         SIGNAL (.AED_L_STATUS);
;3755          4177  4         AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;3756          4178  4         AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;3757          4179  4         TERM_CHAR = 0;
;3758          4180  4         RETURN .AED_L_WORSTERR OR STS$M_INHIB_MSG;
;3759          4181  3         END;
;3760          4182  3
;3761          4183  3     ! Re-read any ACL associated with the object.
;3762          4184  3
;3763          4185  3     ACL_CONTEXT = 0;
;3764          4186  3     ATR_ARGLIST[0, ITM$W_ITMCOD] = ACL$C_READACL;
;3765          4187  3     ATR_ARGLIST[0, ITM$W_BUFSIZ] = 512;
;3766          4188  3     ATR_ARGLIST[0, ITM$L_BUFADR] = .AED_A_ACLBUFFER;
;3767          4189  3     WHILE 1
;3768          4190  3     DO
;3769          4191  4         BEGIN
;3770        P 4192  4         AED_L_STATUS = $CHANGE_ACL (CHAN = .AED_W_OBJCHAN,
;3771        P 4193  4                                     OBJTYP = AED_L_OBJTYP,
;3772        P 4194  4                                     OBJNAM = AED_Q_OBJNAM,
;3773        P 4195  4                                     ITMLST = ATR_ARGLIST,
;3774          4196  4                                     CONTXT = ACL_CONTEXT);
;3775          4197  4         IF NOT .AED_L_STATUS
;3776          4198  4         THEN
;3777          4199  5             BEGIN
;3778          4200  5             IF .AED_L_STATUS EQL SS$_ACLEMPTY
;3779          4201  5             OR .AED_L_STATUS EQL SS$_NOMOREACE
;3780          4202  5             THEN EXITLOOP;
;3781          4203  5             SIGNAL (AED$_READERR, 1, AED_Q_OBJNAM, .AED_L_STATUS, 0);
;3782          4204  5             AED_L_FLAGS[AED_V_GOLDKEY] = 0;
;3783          4205  5             AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
;3784          4206  5             TERM_CHAR = 0;
;3785          4207  5             RETURN .AED_L_WORSTERR OR STS$M_INHIB_MSG;
;3786          4208  4             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),
```

```
6                                       NEW_TEXT_LINE);
6                   IF NOT .AED_L_STATUS
6                   THEN
7                       BEGIN
7                       SIGNAL (.AED_L_STATUS);
7                       AED_L_FLAGS[AED_V_GOLDKEY] = 0;
7                       AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
7                       TERM_CHAR = 0;
7                       RETURN .AED_L_WORSTERR OR STS$M_INHIB_MSG;
6                       END;
6                   NEW_TEXT_LINE[LINE_W_SIZE] = .ACE_TEXT_SIZE;
6                   NEW_TEXT_LINE[LINE_L_BINACE] = .ACE_NEWADDR;
6                   CH$MOVE (.ACE_TEXT_SIZE, .FIRST_CHAR, NEW_TEXT_LINE[LINE_T_TEXT]);
6                   INSQUE (.NEW_TEXT_LINE, .AED_Q_LINETABLE[LINE_L_BLINK]);
6                   IF .AED_L_FIRSTLINE EQL 0 THEN AED_L_FIRSTLINE = .NEW_TEXT_LINE;
6                   AED_L_LASTLINE = .NEW_TEXT_LINE;
5                   END;
5               AED_L_FIRSTLINE[LINE_V_BEGINACE] = 1;
5               IF .ACE_POINTER[ACE$V_HIDDEN]
6               OR (.ACE_POINTER[ACE$B_TYPE] NEQ ACE$C_KEYID
6                   AND .ACE_POINTER[ACE$B_TYPE] NEQ ACE$C_BIJNL
6                   AND .ACE_POINTER[ACE$B_TYPE] NEQ ACE$C_AIJNL
6                   AND .ACE_POINTER[ACE$B_TYPE] NEQ ACE$C_ATJNL
6                   AND .ACE_POINTER[ACE$B_TYPE] NEQ ACE$C_AUDIT
6                   AND .ACE_POINTER[ACE$B_TYPE] NEQ ACE$C_ALARM
6                   AND .ACE_POINTER[ACE$B_TYPE] NEQ ACE$C_DIRDEF)
5               THEN AED_L_FIRSTLINE[LINE_V_NOTOUCH] = 1;
5               AED_L_LASTLINE[LINE_V_ENDACE] = 1;
5               ACE_POINTER = .ACE_POINTER + .ACE_POINTER[ACE$B_SIZE];
4               END;
3           END;
3       DEALLOCATE (512, AED_A_ACLBUFFER);
3
3   ! If there is no ACL (the display is empty), set up to append the text
3   ! entered.  Otherwise, set up to modify the first segment of the display.
3
3       IF .AED_Q_LINETABLE[LINE_L_FLINK] EQLA AED_Q_LINETABLE[LINE_L_FLINK]
3       THEN
4           BEGIN
4           AED_L_FLAGS[AED_V_ENDACL] = 1;          ! At the end of the ACL
4           AED_L_FLAGS[AED_V_INSERTEXT] = 1;
4           AED_W_TOTALSIZE = SEGMENT_SIZE = 0;
4           INSQUE (AED_T_CURLINE[LINE_L_FLINK], .AED_Q_LINETABLE[LINE_L_BLINK]);
4           AED_L_FIRSTLINE = AED_L_LASTLINE = AED_T_CURLINE;
4           AED_L_FIRSTLINE[LINE_B_FLAGS] = LINE_M_BEGINACE;
4           AED_L_CURACE = 0;
4           IF .AED_L_FLAGS[AED_V_PROMPT]
4           THEN
5               BEGIN
5               AED_B_ACETYPE = 0;
5               AED_L_FLAGS[AED_V_NOITEMSEL] = 0;
5               AED_SELECTFIELD (BUFFER_INDEX);
5               AED_B_COLUMN = .BUFFER_INDEX + 1;
4               END;
4           END
3       ELSE
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                           ; 4151
                        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'  CF 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_L_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
;  401C          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_GOODKEY] = 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]
```

```
; 4070    4491  3       DO
; 4071    4492  4           BEGIN
; 4072    4493  4           IF .AED_L_LASTLINE EQLA AED_T_CURLINE
; 4073    4494  4           THEN AED_L_LASTLINE = .AED_L_LASTLINE[LINE_L_FLINK];
; 4074    4495  4           AED_L_LASTLINE = .AED_L_LASTLINE[LINE_L_FLINK];
; 4075    4496  4           AED_W_TOTALSIZE = .AED_W_TOTALSIZE + .AED_L_LASTLINE[LINE_W_SIZE];
; 4076    4497  3           END;
; 4077    4498  3       AED_L_CURACE = .AED_L_FIRSTLINE[LINE_L_BINACE];
; 4078    4499  3       IF .AED_L_FLAGS[AED_V_PROMPT]
; 4079    4500  3       THEN
; 4080    4501  4           BEGIN
; 4081    4502  4           AED_L_FLAGS[AED_V_NOITEMSEL] = 1;
; 4082    4503  4           AED_SELECTFIELD (BUFFER_INDEX);
; 4083    4504  4           AED_B_COLUMN = .BUFFER_INDEX + 1;
; 4084    4505  3           END;
; 4085    4506  2       END;
; 4086    4507  2   AED_L_FLAGS[AED_V_FIRSTCHAR] = 1;
; 4087    4508  2   IF .AED_B_COLUMN GTR .SEGMENT_SIZE + 1
; 4088    4509  2   THEN BUFFER_INDEX = .SEGMENT_SIZE
; 4089    4510  2   ELSE BUFFER_INDEX = .AED_B_COLUMN - 1;
; 4090    4511  2   AED_SET_CURSOR (.AED_B_LINE, .BUFFER_INDEX + 1);
; 4091    4512  2   AED_L_FLAGS[AED_V_GOLDKEY] = 0;
; 4092    4513  2   AED_L_FLAGS[AED_V_ACTIONKEY] = 0;
; 4093    4514  2   TERM_CHAR = 0;
; 4094    4515  2   RETURN 1;
; 4095    4516  2
; 4096    4517  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_B_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_C_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_C_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_C_FIRSTLINE
;  4340          4759  4         THEN AED_C_LASTLINE = AED_T_CURLINE;
;  4341          4760  4         IF .AED_C_BEGINLINE EQL .AED_L_FIRSTLINE
;  4342          4761  4         THEN AED_C_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_C_FLAGS[AED_V_ENDAC[]
;  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 = $CHANGE_ACL (CHAN = .AED_W_OBJCHAN,
; 4376        P 4795  2                             OBJTYP = AED_L_OBJTYP,
; 4377        P 4796  2                             OBJNAM = AED_Q_OBJNAM,
; 4378        P 4797  2                             ITMLST = ATR_ARGLIST,
; 4379          4798  2                             CONTXT = ACL_CONTEXT);
; 4380          4799  2 IF NOT .AED_L_STATUS
; 4381          4800  2 THEN
; 4382          4801  3     BEGIN
; 4383          4802  3     AED_B_OPTIONS[AED_V_KEEPJNL] = 1;           ! Keep the journal file
; 4384          4803  3     RETURN 0;
; 4385          4804  2     END;
; 4386          4805  2
; 4387          4806  2 ! Now delete any protected ACEs remaining in the ACL.
; 4388          4807  2
; 4389          4808  2 WHILE 1
; 4390          4809  2 DO
; 4391          4810  3     BEGIN
; 4392          4811  3     ATR_ARGLIST[0, ITM$W_ITMCOD] = ACL$C_READACE;
; 4393          4812  3     ATR_ARGLIST[0, ITM$W_BUFSIZ] = ACL$S_READACE;
; 4394          4813  3     ATR_ARGLIST[0, ITM$L_BUFADR] = DUMMY_ACE;
; 4395          4814  3     ACL_CONTEXT = 0;
; 4396        P 4815  3     AED_L_STATUS = $CHANGE_ACL (CHAN = .AED_W_OBJCHAN,
; 4397        P 4816  3                                 OBJTYP = AED_L_OBJTYP,
; 4398        P 4817  3                                 OBJNAM = AED_Q_OBJNAM,
; 4399        P 4818  3                                 ITMLST = ATR_ARGLIST,
; 4400          4819  3                                 CONTXT = ACL_CONTEXT);
; 4401          4820  3     IF NOT .AED_L_STATUS
; 4402          4821  3     THEN
; 4403          4822  4         BEGIN
; 4404          4823  4         IF .AED_L_STATUS EQL SS$_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
```

```
  2 ! one modified by the user.
  2
  2 CURRENT_LINE = .AED_Q_LINETABLE[LINE_L_FLINK];
  2 UNTIL .CURRENT_LINE EQL AED_Q_LINETABLE[LINE_L_FLINK]
  2 DO
  3     BEGIN
  3     IF .CURRENT_LINE[LINE_V_BEGINACE]
  3     AND .CURRENT_LINE[LINE_L_BINACE] NEQ 0
  3     THEN
  4         BEGIN
  4         ATR_ARGLIST[0, ITM$W_ITMCOD] = ACL$C_ADDACLENT;
  4         ATR_ARGLIST[0, ITM$W_BUFSIZ] = .$BBLOCK [.CURRENT_LINE[LINE_L_BINACE], ACE$B_SIZE];
  4         ATR_ARGLIST[0, ITM$L_BUFADR] = .CURRENT_LINE[LINE_L_BINACE];
  4         ACL_CONTEXT = %X'00FFFFFF';
P 4         AED_L_STATUS = $CHANGE_ACL (CHAN = .AED_W_OBJCHAN,
P 4                                     OBJTYP = AED_L_OBJTYP,
P 4                                     OBJNAM = AED_Q_OBJNAM,
P 4                                     ITMLST = ATR_ARGLIST,
  4                                     CONTXT = ACL_CONTEXT);
  4         IF NOT .AED_L_STATUS
  4         THEN
  5             BEGIN
  5             AED_B_OPTIONS[AED_V_KEEPJNL] = 1;           ! Keep the journal file
  5             SIGNAL (.AED_L_STATUS);
  5             RETURN 0;
  4             END;
  3         END;
  3     CURRENT_LINE = .CURRENT_LINE[LINE_L_FLINK];
  2     END;
  2
  2 SIGNAL (AED$_ACLUPDATED);
  2
  2 RETURN 0;
  2
  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 001A5         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];
```

```
;  4522          4940  3      IF .AED_L_LASTLINE EQL .PREV_LINE
;  4523          4941  3      THEN AED_L_LASTLINE = AED_T_CURLINE[LINE_L_FLINK];
;  4524          4942  3      IF .INPUT_BUFFER[.SEGMENT_SIZE - 1] EQL '+'
;  4525          4943  3      THEN
;  4526          4944  4          BEGIN
;  4527          4945  4          AED_SET_CURSOR (.AED_B_LINE, .SEGMENT_SIZE);
;  4528          4946  4          SEGMENT_SIZE = .SEGMENT_SIZE - 1;
;  4529          4947  3          END;
;  4530          4948  3      IF .INPUT_BUFFER[.SEGMENT_SIZE - 1] NEQ %C')'
;  4531          4949  3      THEN
;  4532          4950  4          BEGIN
;  4533          4951  4          INPUT_BUFFER[.SEGMENT_SIZE] = ')';
;  4534          4952  4          SEGMENT_SIZE = .SEGMENT_SIZE + 1;
;  4535          4953  3          END;
;  4536          4954  3      AED_L_LASTLINE[LINE_V_ENDACE] = 1;
;  4537          4955  3      NEW_TEXT_LINE = AED_REPSEGMENT ();
;  4538          4956  3      IF .TEMP_LINE GEQ 1
;  4539          4957  3      THEN
;  4540          4958  4          BEGIN
;  4541          4959  4          AED_POSITION (.NEW_TEXT_LINE);
;  4542          4960  4          AED_SET_CURSOR (.AED_B_LINE,.NEW_TEXT_LINE[LINE_W_SIZE]);
;  4543          4961  4          ECHO_DESC[DSC$W_LENGTH] = 1;
;  4544          4962  4          ECHO_DESC[DSC$A_POINTER] = VECTOR [NEW_TEXT_LINE[LINE_T_TEXT],
;  4545          4963  4                                            .NEW_TEXT_LINE[LINE_W_SIZE] - 1; ,BYTE];
;  4546          4964  4          AED_PUTOUTPUT (ECHO_DESC);
;  4547          4965  4          AED_POSITION (.AED_L_LASTLINE);
;  4548          4966  3          END;
;  4549          4967  2      END;
;  4550          4968  2
;  4551          4969  2 RETURN;
;  4552          4970  2
;  4553          4971  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