```
NNN           NNN   MMM           MMM   LLL
NNN           NNN   MMM           MMM   LLL
NNN           NNN   MMM           MMM   LLL
NNN           NNN   MMMMMM    MMMMMM   LLL
NNN           NNN   MMMMMM    MMMMMM   LLL
NNN           NNN   MMMMMM    MMMMMM   LLL
NNNNNN        NNN   MMM   MMM   MMM   LLL
NNNNNN        NNN   MMM   MMM   MMM   LLL
NNNNNN        NNN   MMM   MMM   MMM   LLL
NNN   NNN     NNN   MMM         MMM   LLL
NNN   NNN     NNN   MMM         MMM   LLL
NNN   NNN     NNN   MMM         MMM   LLL
NNN       NNNNNN   MMM         MMM   LLL
NNN       NNNNNN   MMM         MMM   LLL
NNN       NNNNNN   MMM         MMM   LLL
NNN           NNN   MMM         MMM   LLL
NNN           NNN   MMM         MMM   LLL
NNN           NNN   MMM         MMM   LLL
NNN           NNN   MMM         MMM   LLLLLLLLLLLLLLL
NNN           NNN   MMM         MMM   LLLLLLLLLLLLLLL
NNN           NNN   MMM         MMM   LLLLLLLLLLLLLLL
```

```
NN       NN  MM       MM  LL          ZZZZZZZZZZ  EEEEEEEEEE  RRRRRRRR      000000
NN       NN  MM       MM  LL          ZZZZZZZZZZ  EEEEEEEEEE  RRRRRRRR      000000
NN       NN  MMMM   MMMM  LL                ZZ    EE          RR      RR  00      00
NN       NN  MMMM   MMMM  LL               ZZ     EE          RR      RR  00      00
NNNN     NN  MM  MM  MM  MM  LL            ZZ      EE          RR      RR  00      00
NNNN     NN  MM  MM  MM  MM  LL           ZZ       EE          RR      RR  00      00
NN  NN   NN  MM      MM  MM  LL          ZZ        EEEEEEEE    RRRRRRRR    00      00
NN  NN   NN  MM      MM  MM  LL          ZZ        EEEEEEEE    RRRRRRRR    00      00
NN    NNNN  MM      MM  MM  LL        ZZ          EE          RR  RR      00      00
NN    NNNN  MM      MM  MM  LL        ZZ          EE          RR  RR      00      00
NN      NN  MM      MM  MM  LL      ZZ            EE          RR    RR    00      00      ....
NN      NN  MM      MM  MM  LL      ZZ            EE          RR    RR    00      00      ....
NN      NN  MM      MM  MM  LLLLLLLLLL  ZZZZZZZZZZ  EEEEEEEEEE  RR      RR    000000      ....
NN      NN  MM      MM  MM  LLLLLLLLLL  ZZZZZZZZZZ  EEEEEEEEEE  RR      RR    000000      ....

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

```
;  1     0001  0 %TITLE 'NML ZERO counters module'
;  2     0002  0 MODULE NML$ZERO (
;  3     0003  0                 LANGUAGE (BLISS32),
;  4     0004  0                 ADDRESSING_MODE (EXTERNAL=GENERAL),
;  5     0005  0                   RESSING_MODE (NONEXTERNAL=GENERAL),
;  6     0006  0                 IDENT = 'V04-000'
;  7     0007  0                 ) =
;  8     0008  1 BEGIN
;  9     0009  1 !
; 10     0010  1 !**************************************************************************
; 11     0011  1 !*                                                                        *
; 12     0012  1 !*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                               *
; 13     0013  1 !*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.                 *
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; 22     0022  1 !*                                                                        *
; 23     0023  1 !*  THE INFORMATION IN THIS SOFTWARE IS  SUBJECT TO CHANGE WITHOUT NOTICE  *
; 24     0024  1 !*  AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT  *
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; 26     0026  1 !*                                                                        *
; 27     0027  1 !*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE  OR  RELIABILITY OF ITS  *
; 28     0028  1 !*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.                *
; 29     0029  1 !*                                                                        *
; 30     0030  1 !*                                                                        *
; 31     0031  1 !**************************************************************************
; 32     0032  1 !
; 33     0033  1
; 34     0034  1 !++
; 35     0035  1 ! FACILITY:  DECnet-VAX Network Management Listener
; 36     0036  1 !
; 37     0037  1 ! ABSTRACT:
; 38     0038  1 !
; 39     0039  1 !    These routines return volatile data base information in response to
; 40     0040  1 !    an NCP ZERO command message.
; 41     0041  1 !
; 42     0042  1 ! ENVIRONMENT:  VAX/VMS Operating System
; 43     0043  1 !
; 44     0044  1 ! AUTHOR:  Kathy Perko
; 45     0045  1 !
; 46     0046  1 ! CREATION DATE:  30-Aug-1982
; 47     0047  1 !
; 48     0048  1 ! MODIFIED BY:
; 49     0049  1 !       V03-003 MKP0003         Kathy Perko             6-Jan-1983
; 50     0050  1 !               Add dummy table entry for X25 Access Module entity.
; 51     0051  1 !
; 52     0052  1 !       V03-002 MKP0002         Kathy Perko             24-June-1983
; 53     0053  1 !               Add dummy table entries for Service Adjacency entity and
; 54     0054  1 !               NI Configurator entity.
; 55     0055  1 !
; 56     0056  1 !       V03-001 MKP0001         Kathy Perko             9-Oct-1982
; 57     0057  1 !               Add Area entity, and null entries for adjacent node
```

```
;   58          0058  1 !                   entities (which are read only) to tables.
;   59          0059  1 !
;   60          0060  1 !--
```

```
;    62          0061  1 %SBTTL 'Declarations'
;    63          0062  1
;    64          0063  1 !
;    65          0064  1 ! TABLE OF CONTENTS:
;    66          0065  1 !
;    67          0066  1
;    68          0067  1 FORWARD ROUTINE
;    69          0068  1     NML$ZERO              : NOVALUE,
;    70          0069  1     NML_CALL_ZERO         : NOVALUE,
;    71          0070  1     NML_CALL_ZERO_NODE    : NOVALUE,
;    72          0071  1     NML_ZEROPLURAL        : NOVALUE,
;    73          0072  1     NML_ZERO_KNOWN        : NOVALUE,
;    74          0073  1     NML_ZERONONODES       : NOVALUE,
;    75          0074  1     NML_ZERO_ENTITY       : NOVALUE,
;    76          0075  1     NML_ZERO_NODE         : NOVALUE,
;    77          0076  1     NML_ZEROREMOTES       : NOVALUE;
;    78          0077  1
;    79          0078  1 !
;    80          0079  1 ! INCLUDE FILES:
;    81          0080  1 !
;    82          0081  1
;    83          0082  1 LIBRARY 'LIB$:NMLLIB.L32';
;    84          0083  1 LIBRARY 'SHRLIB$:NMALIBRY.L32';
;    85          0084  1 LIBRARY 'SYS$LIBRARY:STARLET.L32';
;    86          0085  1
;    87          0086  1 !
;    88          0087  1 ! OWN STORAGE:
;    89          0088  1 !
;    90          0089  1
;    91          0090  1 OWN
;    92          0091  1     NML$T_P2BUFFER : VECTOR [NML$K_P2BUFLEN];
;    93          0092  1 BIND
;    94          0093  1     NML$Q_P2BFDSC = UPLIT (NML$K_P2BUFLEN, NML$T_P2BUFFER) : DESCRIPTOR;
;    95          0094  1
;    96          0095  1 OWN
;    97          0096  1     NML$T_ENTBUFFER : VECTOR [32],
;    98          0097  1     NML$Q_ENTBFDSC  : DESCRIPTOR
;    99          0098  1                       INITIAL (0, NML$T_ENTBUFFER);
;   100          0099  1
;   101          0100  1 !
;   102          0101  1 ! EXTERNAL REFERENCES:
;   103          0102  1 !
;   104          0103  1
;   105          0104  1 $NML_EXTDEF;
;   106          0105  1
;   107          0106  1 EXTERNAL ROUTINE
;   108          0107  1     LIB$ESTABLISH : ADDRESSING_MODE (GENERAL),
;   109          0108  1     LIB$REVERT    : ADDRESSING_MODE (GENERAL),
;   110          0109  1     NML$BLD_REPLY,
;   111          0110  1     NML$BLDP2,
;   112          0111  1     NML$ERROR_1,
;   113          0112  1     NML$ERROR_2,
;   114          0113  1     NML$GETEXEID,
;   115          0114  1     NML$GETINFTABS,
;   116          0115  1     NML$GET_ENTITY_IDS,
;   117          0116  1     NML$MAINHANDLER,
;   118          0117  1     NML$NETQIO,
```

```
;  119          0118  1     NML$SEND;
;  120          0119  1
```

```
;  122          0120  1 !
;  123          0121  1 ! Macro to build dispatch table for an entity.
;  124          0122  1 !
;  125          0123  1 MACRO $TAB (TAB,
;  126          0124  1     DISPATCH_RTN,
;  127        M 0125  1     ZERO_RTN,       ZERO_KNO_RTN) =
;  128        M 0126  1
;  129        M 0127  1         OWN TAB : BBLOCK [%LENGTH * 4] INITIAL (
;  130        M 0128  1         $PIC (DISPATCH_RTN, TAB),
;  131        M 0129  1         $PIC (ZERO_RTN, TAB),
;  132        M 0130  1         $PIC (ZERO_KNO_RTN,TAB))
;  133        M 0131  1                 %,
;  134        M 0132  1
;  135        M 0133  1     $PIC (ADDR,TAB) =
;  136        M 0134  1                 %IF %IDENTICAL (ADDR, 0)
;  137        M 0135  1                 %THEN   LONG (0)
;  138        M 0136  1                 %ELSE LONG (%NAME (ADDR) - %NAME (TAB))
;  139        M 0137  1                 %FI
;  140        M 0138  1                 %;
;  141          0139  1
;  142          0140  1
;  143          0141  1 !
;  144          0142  1 ! Dispatch tables.  There is one table for each internal NML entity (NML
;  145          0143  1 ! internal entities are broken down more that NICE entities).  The table
;  146          0144  1 ! specifies the following information about the entity:
;  147          0145  1 !       The address of the dispatch routine in this module for the entity.
;  148          0146  1 !               The dispatch routines vary depending on the different
;  149          0147  1 !               formats the entities can have.
;  150          0148  1 !       The addresses of the routines which perform the requested change:
;  151          0149  1 !               - Zero single entity
;  152          0150  1 !               - Zero known entities
;  153          0151  1 !
;  154        P 0152  1 $TAB (LINE_TAB,                           ! NML$C_LINE
;  155        P 0153  1     NML_CALL_ZERO,
;  156          0154  1     NML_ZERO_ENTITY,    NML_ZERO_KNOWN);
;  157          0155  1
;  158          0156  1 BIND LOGGING_TAB = UPLIT (0);
;  159          0157  1
;  160          0158  1 BIND SINK_TAB = UPLIT (0);
;  161          0159  1
;  162        P 0160  1 $TAB (NODE_TAB,                           ! NML$C_NODE
;  163        P 0161  1     NML_CALL_ZERO_NODE,
;  164          0162  1     NML_ZERO_NODE,      NML_ZEROKNONODES);
;  165          0163  1
;  166        P 0164  1 $TAB (NODEBYNAME_TAB,             ! NML$C_NODEBYNAME
;  167        P 0165  1     NML_CALL_ZERO_NODE,
;  168          0166  1     NML_ZERO_NODE,      NML_ZEROKNONODES);
;  169          0167  1
;  170          0168  1 BIND LOOPNODE_TAB = UPLIT (0);
;  171          0169  1
;  172          0170  1 BIND ADJACENT_NODE_TAB = UPLIT (0);
;  173          0171  1
;  174        P 0172  1 $TAB (EXECUTOR_TAB,                       ! NML$C_EXECUTOR
;  175        P 0173  1     NML_CALL_ZERO_NODE,
;  176          0174  1     NML_ZERO_NODE,      NML_ZEROKNONODES);
;  177          0175  1
;  178          0176  1 BIND OBJECT_TAB = UPLIT (0);
```

```
;  179          0177  1
;  180        P 0178  1 $TAB (CIRCUIT_TAB,                          ! NML$C_CIRCUIT
;  181        P 0179  1     NML_CALL_ZERO,
;  182          0180  1     NML_ZERO_ENTITY,    NML_ZERO_KNOWN);
;  183          0181  1
;  184          0182  1 BIND CIRCUIT_ADJACENT_TAB = UPLIT (0);
;  185          0183  1
;  186          0184  1 BIND CIRCUIT_ADJ_SRV_TAB = UPLIT (0);
;  187          0185  1
;  188          0186  1 BIND AREA_TAB = UPLIT (0);
;  189          0187  1
;  190          0188  1 BIND X25_ACCESS_TAB = UPLIT (0);
;  191          0189  1
;  192          0190  1 BIND PROT_NET_TAB = UPLIT (0);
;  193          0191  1
;  194        P 0192  1 $TAB (PROT_DTE_TAB,                         ! NML$C_PROT_DTE
;  195        P 0193  1     NML_CALL_ZERO,
;  196          0194  1     NML_ZERO_ENTITY,    NML_ZERO_KNOWN);
;  197          0195  1
;  198          0196  1 BIND PROT_GRP_TAB = UPLIT (0);
;  199          0197  1
;  200        P 0198  1 $TAB (X25_SERV_TAB,                         ! NML$C_X25_SERV
;  201        P 0199  1     NML_CALL_ZERO,
;  202          0200  1     NML_ZERO_ENTITY,    0);
;  203          0201  1
;  204          0202  1 BIND X25_SERV_DEST_TAB = UPLIT (0);
;  205          0203  1
;  206          0204  1 BIND TRACE_TAB = UPLIT (0);
;  207          0205  1
;  208          0206  1 BIND TRACEPNT_TAB = UPLIT (0);
;  209          0207  1
;  210        P 0208  1 $TAB (X29_SERV_TAB,                         ! NML$C_X29_SERV
;  211        P 0209  1     NML_CALL_ZERO,
;  212          0210  1     NML_ZERO_ENTITY,    0);
;  213          0211  1
;  214          0212  1 BIND X29_SERV_DEST_TAB = UPLIT (0);
;  215          0213  1
;  216          0214  1 BIND NI_CONFIG_TAB = UPLIT (0);
;  217          0215  1
;  218          0216  1 BIND LINK_TAB = UPLIT (0);
;  219          0217  1
;  220          0218  1
;  221          0219  1 !
;  222          0220  1 ! Table table.  Contains pointers to Dispatch tables for NML entities.
;  223          0221  1 ! Indexed by NML$C_entity definitions.
;  224          0222  1 !
;  225          0223  1 OWN TABLE_TAB : VECTOR [NML$C_MAXENTITY] INITIAL (
;  226          0224  1         $PIC (LINE_TAB, TABLE_TAB),
;  227          0225  1         $PIC (LOGGING_TAB,TABLE_TAB),
;  228          0226  1         $PIC (SINK_TAB,TABLE_TAB),
;  229          0227  1         $PIC (NODE_TAB,TABLE_TAB),
;  230          0228  1         $PIC (NODEBYNAME_TAB,TABLE_TAB),
;  231          0229  1         $PIC (LOOPNODE_TAB,TABLE_TAB),
;  232          0230  1         $PIC (ADJACENT_NODE_TAB,TABLE_TAB),
;  233          0231  1         $PIC (EXECUTOR_TAB,TABLE_TAB),
;  234          0232  1         $PIC (OBJECT_TAB,TABLE_TAB),
;  235          0233  1         $PIC (CIRCUIT_TAB,TABLE_TAB),
```

```
;  236     0234  1          $PIC (CIRCUIT_ADJACENT_TAB,TABLE_TAB),
;  237     0235  1          $PIC (CIRCUIT_ADJ_SRV_TAB,TABLE_TAB),
;  238     0236  1          $PIC (AREA_TAB,TABLE_TAB),
;  239     0237  1          $PIC (X25_ACCESS_TAB,TABLE_TAB),
;  240     0238  1          $PIC (PROT_NET_TAB,TABLE_TAB),
;  241     0239  1          $PIC (PROT_DTE_TAB,TABLE_TAB),
;  242     0240  1          $PIC (PROT_GRP_TAB,TABLE_TAB),
;  243     0241  1          $PIC (X25_SERV_TAB,TABLE_TAB),
;  244     0242  1          $PIC (X25_SERV_DEST_TAB,TABLE_TAB),
;  245     0243  1          $PIC (TRACE_TAB,TABLE_TAB),
;  246     0244  1          $PIC (TRACEPNT_TAB,TABLE_TAB),
;  247     0245  1          $PIC (X29_SERV_TAB,TABLE_TAB),
;  248     0246  1          $PIC (X29_SERV_DEST_TAB,TABLE_TAB),
;  249     0247  1          $PIC (NI_CONFIG_TAB,TABLE_TAB),
;  250     0248  1          $PIC (LINK_TAB,TABLE_TAB));
```

```
;  252     0249  1 %SBTTL 'NML$ZERO  Zero counters main routine'
;  253     0250  1 GLOBAL ROUTINE NML$ZERO : NOVALUE =
;  254     0251  1
;  255     0252  1 !++
;  256     0253  1 ! FUNCTIONAL DESCRIPTION:
;  257     0254  1 !
;  258     0255  1 !       This routine dispatches the zero function to the proper routine
;  259     0256  1 !       according to the entity type.
;  260     0257  1 !
;  261     0258  1 ! IMPLICIT INPUTS·
;  262     0259  1 !
;  263     0260  1 !       NML$GB_OPTIONS contains the option byte parsed from the NICE message.
;  264     0261  1 !       NML$GB_ENTITY_CODE contains the entity code.
;  265     0262  1 !
;  266     0263  1 !--
;  267     0264  1
;  268     0265  2 BEGIN
;  269     0266  2
;  270     0267  2 MAP
;  271     0268  2     NML$GB_ENTITY_FORMAT : BYTE SIGNED,
;  272     0269  2     NML$GB_OPTIONS : BBLOCK [1];
;  273     0270  2
;  274     0271  2 LOCAL
;  275     0272  2     ZERO_TABLE : REF BBLOCK,     ! Dispatch table reference
;  276     0273  2     RTN_ADDR,                    ! Temporary routine address
;  277     0274  2     PARSE_TAB,                   ! Address of NICE message parsing
;  278     0275  2                                  !       table.
;  279     0276  2     ZERO_RTN;                    ! Address of routine to perform
;  280     0277  2                                  !       zero requested by NICE
;  281     0278  2                                  !       message.
;  282     0279  2
;  283     0280  2
;  284     0281  2 !
;  285     0282  2 ! Get address of entity's dispatch table.  The addresses are stored as offsets
;  286     0283  2 ! to make NMLSHR PIC.  Change the offset into a useable address.
;  287     0284  2 !
;  288     0285  2 ZERO_TABLE = .TABLE_TAB [.NML$GL_NML_ENTITY] + TABLE_TAB;
;  289     0286  2 IF .ZERO_TABLE NEQA 0 THEN
;  290     0287  3     BEGIN
;  291     0288  3     RTN_ADDR = .ZERO_TABLE [ZER$L_DISPATCH] + .ZERO_TABLE;
;  292     0289  3     !
;  293     0290  3     !  Go to dispatch table for the entity specified in the NICE message.
;  294     0291  3     !  Get the address of the routine which performs the type of change
;  295     0292  3     !  requested.
;  296     0293  3     !
;  297     0294  3     IF .RTN_ADDR NEQA .ZERO_TABLE THEN
;  298     0295  4         BEGIN
;  299     0296  4         !
;  300     0297  4         ! Each function's portion of the entity's dispatch table contains
;  301     0298  4         ! the addresses of two zero routines.  These routines do the
;  302     0299  4         ! following:
;  303     0300  4         !       - Zero a single entity
;  304     0301  4         !       - Zero known entities
;  305     0302  4         !
;  306     0303  4         IF .NML$GB_ENTITY_FORMAT EQL NMA$C_ENT_KNO THEN
;  307     0304  4             ZERO_RTN = .ZERO_TABLE [ZER$L_KNOWN]
;  308     0305  4         ELSE
```

```
;  309     0306  4            ZERO_RTN = .ZERO_TABLE [ZER$L_ENTITY];
;  310     0307  4
;  311     0308  4            ! The routine addresses are stored as offsets (to make NMLSHR PIC).
;  312     0309  4            ! Make the offset into a callable routine address.
;  313     0310  4            !
;  314     0311  4            IF .ZERO_RTN NEQ 0 THEN
;  315     0312  5                BEGIN
;  316     0313  5                ZERO_RTN = .ZERO_RTN + .ZERO_TABLE;
;  317     0314  5                !
;  318     0315  5                ! Call change routine.
;  319     0316  5                !
;  320     0317  5                (.RTN_ADDR) (.NML$GL_NML_ENTITY,
;  321     0318  5                             .ZERO_RTN);
;  322     0319  5                END
;  323     0320  4            ELSE
;  324     0321  4                NML$ERROR_1 (NMA$C_STS_FUN);
;  325     0322  4            END
;  326     0323  3        ELSE
;  327     0324  3            NML$ERROR_1 (NMA$C_STS_FUN);
;  328     0325  3        END
;  329     0326  2 ELSE
;  330     0327  2        NML$ERROR_1 (NMA$C_STS_FUN);
;  331     0328  1 END;                                ! End of NML$ZERO


                                                    .TITLE  NML$ZERO NML ZERO counters module
                                                    .IDENT  \V04-000\

                                                    .PSECT  $PLIT$,NOWRT,NOEXE,2

00000068  00000 P.AAA:  .LONG   104                                                    ;
00000000' 00004         .ADDRESS NML$T_P2BUFFER                                        ;
00000000  00008 P.AAB:  .LONG   0                                                      ;
00000000  0000C P.AAC:  .LONG   0                                                      ;
00000000  00010 P.AAD:  .LONG   0                                                      ;
00000000  00014 P.AAE:  .LONG   0                                                      ;
00000000  00018 P.AAF:  .LONG   0                                                      ;
00000000  0001C P.AAG:  .LONG   0                                                      ;
00000000  00020 P.AAH:  .LONG   0                                                      ;
00000000  0C024 P.AAI:  .LONG   0                                                      ;
00000000  00028 P.AAJ:  .LONG   0                                                      ;
00000000  0002C P.AAK:  .LONG   0                                                      ;
00000000  00030 P.AAL:  .LONG   0                                                      ;
00000000  00034 P.AAM:  .LONG   0                                                      ;
00000000  00038 P.AAN:  .LONG   0                                                      ;
00000000  0003C P.AAO:  .LONG   0                                                      ;
00000000  00040 P.AAP:  .LONG   0                                                      ;
00000000  00044 P.AAQ:  .LONG   0                                                      ;
00000000  00048 P.AAR:  .LONG   0                                                      ;

                                                    .PSECT  $OWN$,NOEXE,2

                    00000 NML$T_P2BUFFER:
                                                    .BLKB   416
                    001A0 NML$T_ENTBUFFER:
                                                    .BLKB   128
00000000            00220 NML$Q_ENTBFDSC:
```

```
                                        .LONG   0                                       ;
00000000' 00224                         .ADDRESS NML$T_ENTBUFFER                        ;
00000000V 00228 LINE_TAB:
                                        .LONG   <NML_CALL_ZERO-LINE_TAB>                ;
00000000V 0022C                         .LONG   <NML_ZERO_ENTITY-LINE_TAB>              ;
00000000V 00230                         .LONG   <NML_ZERO_KNOWN-LINE_TAB>               ;
          00234                         .BLKB   4
00000000V 00238 NODE_TAB:
                                        .LONG   <NML_CALL_ZERO_NODE-NODE_TAB>           ;
00000000V 0023C                         .LONG   <NML_ZERO_NODE-NODE_TAB>                ;
00000000V 00240                         .LONG   <NML_ZERORNONODES-NODE_TAB>             ;
          00244                         .BLKB   4
00000000V 00248 NODEBYNAME_TAB:
                                        .LONG   <NML_CALL_ZERO_NODE-NODEBYNAME_TAB>     ;
00000000V 0024C                         .LONG   <NML_ZERO_NODE-NODEBYNAME_TAB>          ;
00000000V 00250                         .LONG   <NML_ZERORNONODES-NODEBYNAME_TAB>       ;
          00254                         .BLKB   4
00000000V 00258 EXECUTOR_TAB:
                                        .LONG   <NML_CALL_ZERO_NODE-EXECUTOR_TAB>       ;
00000000V 0025C                         .LONG   <NML_ZERO_NODE-EXECUTOR_TAB>            ;
00000000V 00260                         .LONG   <NML_ZERORNONODES-EXECUTOR_TAB>         ;
          00264                         .BLKB   4
00000000V 00268 CIRCUIT_TAB:
                                        .LONG   <NML_CALL_ZERO-CIRCUIT_TAB>             ;
00000000V 0026C                         .LONG   <NML_ZERO_ENTITY-CIRCUIT_TAB>           ;
00000000V 00270                         .LONG   <NML_ZERO_KNOWN-CIRCUIT_TAB>            ;
          00274                         .BLKB   4
00000000V 00278 PROT_DTE_TAB:
                                        .LONG   <NML_CALL_ZERO-PROT_DTE_TAB>            ;
00000000V 0027C                         .LONG   <NML_ZERO_ENTITY-PROT_DTE_TAB>          ;
00000000V 00280                         .LONG   <NML_ZERO_KNOWN-PROT_DTE_TAB>           ;
          00284                         .BLKB   4
00000000V 00288 X25_SERV_TAB:
                                        .LONG   <NML_CALL_ZERO-X25_SERV_TAB>            ;
00000000V 0028C                         .LONG   <NML_ZERO_ENTITY-X25_SERV_TAB>          ;
00000000  00290                         .LONG   0                                       ;
          00294                         .BLKB   4
00000000V 00298 X29_SERV_TAB:
                                        .LONG   <NML_CALL_ZERO-X29_SERV_TAB>            ;
00000000V 0029C                         .LONG   <NML_ZERO_ENTITY-X29_SERV_TAB>          ;
00000000  002A0                         .LONG   0                                       ;
          002A4                         .BLKB   4
00000000* 002A8 TABLE_TAB:
                                        .LONG   <LINE_TAB-TABLE_TAB>                    ;
00000000* 002AC                         .LONG   <LOGGING_TAB-TABLE_TAB>                 ;
00000000* 002B0                         .LONG   <SINK_TAB-TABLE_TAB>                    ;
00000000* 002B4                         .LONG   <NODE_TAB-TABLE_TAB>                    ;
00000000* 002B8                         .LONG   <NODEBYNAME_TAB-TABLE_TAB>              ;
00000000* 002BC                         .LONG   <LOOPNODE_TAB-TABLE_TAB>                ;
00000000* 002C0                         .LONG   <ADJACENT_NODE_TAB-TABLE_TAB>           ;
00000000* 002C4                         .LONG   <EXECUTOR_TAB-TABLE_TAB>                ;
00000000* 002C8                         .LONG   <OBJECT_TAB-TABLE_TAB>                  ;
00000000* 002CC                         .LONG   <CIRCUIT_TAB-TABLE_TAB>                 ;
00000000* 002D0                         .LONG   <CIRCUIT_ADJACENT_TAB-TABLE_TAB>        ;
00000000* 002D4                         .LONG   <CIRCUIT_ADJ_SRV_TAB-TABLE_TAB>         ;
00000000* 002D8                         .LONG   <AREA_TAB-TABLE_TAB>                    ;
00000000* 002DC                         .LONG   <X25_ACCESS_TAB-TABLE_TAB>              ;
```

```
00000000* 002E0          .LONG   <PROT_NET_TAB-TABLE_TAB>
00000000* 002E4          .LONG   <PROT_DTE_TAB-TABLE_TAB>
00000000* 002E8          .LONG   <PROT_GRP_TAB-TABLE_TAB>
00000000* 002EC          .LONG   <X25_SERV_TAB-TABLE_TAB>
00000000* 002F0          .LONG   <X25_SERV_DEST_TAB-TABLE_TAB>
00000000* 002F4          .LONG   <TRACE_TAB-TABLE_TAB>
00000000* 002F8          .LONG   <TRACEPNT_TAB-TABLE_TAB>
00000000* 002FC          .LONG   <X29_SERV_TAB-TABLE_TAB>
00000000* 00300          .LONG   <X29_SERV_DEST_TAB-TABLE_TAB>
00000000* 00304          .LONG   <NI_CONFIG_TAB-TABLE_TAB>
00000000* 00308          .LONG   <LINK_TAB-TABLE_TAB>
                0030C    .BLKB   4

NML$Q_P2BFDSC=      P.AAA
LOGGING_TAB=        P.AAB
SINK_TAB=           P.AAC
LOOPNODE_TAB=       P.AAD
ADJACENT_NODE_TAB=  P.AAE
OBJECT_TAB=         P.AAF
CIRCUIT_ADJACENT_TAB=
                    P.AAG
CIRCUIT_ADJ_SRV_TAB=P.AAH
AREA_TAB=           P.AAI
X25_ACCESS_TAB=     P.AAJ
PROT_NET_TAB=       P.AAK
PROT_GRP_TAB=       P.AAL
X25_SERV_DEST_TAB=  P.AAM
TRACE_TAB=          P.AAN
TRACEPNT_TAB=       P.AAO
X29_SERV_DEST_TAB=  P.AAP
NI_CONFIG_TAB=      P.AAQ
LINK_TAB=           P.AAR
        .EXTRN  NML$GB_EVTSRCTYP
        .EXTRN  NML$GQ_EVTSRCDSC
        .EXTRN  NML$GW_EVTCLASS
        .EXTRN  NML$GB_EVTMSKTYP
        .EXTRN  NML$GQ_EVTMSKDSC
        .EXTRN  NML$GW_EVTSNKADR
        .EXTRN  NML$GW_ACP_CHAN
        .EXTRN  NML$GL_LOGMASK, NML$GQ_ENTSTRDSC
        .EXTRN  NML$AB_QIOBUFFER
        .EXTRN  NML$GQ_QIOBFDSC
        .EXTRN  NML$AB_EXEBUFFER
        .EXTRN  NML$GL_EXEDATPTR
        .EXTRN  NML$GQ_EXEDATDSC
        .EXTRN  NML$GQ_EXEBFDSC
        .EXTRN  NML$AB_RCVBUFFER
        .EXTRN  NML$GQ_RCVBFDSC
        .EXTRN  NML$AB_SNDBUFFER
        .EXTRN  NML$GQ_SNDBFDSC
        .EXTRN  NML$GL_RCVDATLEN
        .EXTRN  NML$AB_CPTABLE, NML$AB_MSGBLOCK
        .EXTRN  NML$AB_ENTITY_ID
        .EXTRN  NML$AB_QUALIFIER_ID
        .EXTRN  NML$AB_ENTITYDATA
        .EXTRN  NML$AB_NML_NMV, NML$AB_PRMSEM
        .EXTRN  NML$AB_RECBUF, NML$AL_ENTINFTAB
```

```
                                        .EXTRN  NML$AL_PERMINFTAB
                                        .EXTRN  NML$AW_PRM_DES, NML$GB_CMD_VER
                                        .EXTRN  NML$GB_ENTITY_CODE
                                        .EXTRN  NML$GB_ENTITY_FORMAT
                                        .EXTRN  NML$GL_QUALIFIER_PST
                                        .EXTRN  NML$GB_QUALIFIER_FORMAT
                                        .EXTRN  NML$GB_FUNCTION
                                        .EXTRN  NML$GB_INFO, NML$GB_OPTIONS
                                        .EXTRN  NML$GL_PRMCODE, NML$GL_PRS_FLGS
                                        .EXTRN  NML$GL_NML_ENTITY
                                        .EXTRN  NML$GQ_NETNAMDSC
                                        .EXTRN  NML$GQ_RECBFDSC
                                        .EXTRN  NML$GW_PRMDESCNT
                                        .EXTRN  LIB$ESTABLISH, LIB$REVERT
                                        .EXTRN  NML$BLD_REPLY, NML$BLDP2
                                        .EXTRN  NML$ERROR_1, NML$ERROR_2
                                        .EXTRN  NML$GETEXEID, NML$GETINFTABS
                                        .EXTRN  NML$GET_ENTITY_IDS
                                        .EXTRN  NML$MAINHANDLER
                                        .EXTRN  NML$NETQIO, NML$SEND

                                        .PSECT  $CODE$,NOWRT,2

                          001C 00000    .ENTRY  NML$ZERO, Save R2,R3,R4                 ; 0250
                54 00000000'  00  9E 00002  MOVAB   TABLE_TAB, R4                       ;
                52 00000000G  00  D0 00009  MOVL    NML$GL_NML_ENTITY, R2               ; 0285
                50            64  9E 00010  MOVAB   TABLE_TAB, R0                     ;
          51    50          6442  C1 00013  ADDL3   TABLE_TAB[R2], R0, ZERO_TABLE     ;
                              2A  13 00018  BEQL    3$                                ; 0286
          53    61            51  C1 0001A  ADDL3   ZERO_TABLE, (ZERO_TABLE), RTN_ADDR ; 0288
                51            53  D1 0001E  CMPL    RTN_ADDR, ZERO_TABLE              ; 0294
                              21  13 00021  BEQL    3$                                ;
          FF    8F 00000000G  00  91 00023  CMPB    NML$GB_ENTITY_FORMAT, #-1         ; 0303
                              06  12 0002B  BNEQ    1$                                ;
                50        08  A1  D0 0002D  MOVL    8(ZERO_TABLE), ZERO_RTN           ; 0304
                              04  11 00031  BRB     2$                                ;
                50        04  A1  D0 00033  1$:     MOVL    4(ZERO_TABLE), ZERO_RTN   ; 0306
                              0B  13 00037  2$:     BEQL    3$                        ; 0311
                50            51  C0 00039  ADDL2   ZERO_TABLE, ZERO_RTN            ; 0313
                              50  DD 0003C  PUSHL   ZERO_RTN                          ; 0318
                              52  DD 0003E  PUSHL   R2                                ; 0317
                63            02  FB 00040  CALLS   #2, (RTN_ADDR)                   ;
                              04  00043  RET                                         ; 0311
                7E            01  CE 00044  3$:     MNEGL   #1, -(SP)                 ; 0327
  00000000G     00            01  FB 00047  CALLS   #1, NML$ERROR_1                  ;
                              04  0004E  RET                                         ; 0328

; Routine Size:  79 bytes,    Routine Base:  $CODE$ + 0000
```

```
;  333          0329  1 %SBTTL 'NML_CALL_ZERO   Zero volatile entity parameters'
;  334          0330  1 ROUTINE NML_CALL_ZERO (ENTITY, ZERO_RTN): NOVALUE =
;  335          0331  1
;  336          0332  1 !++
;  337          0333  1 ! FUNCTIONAL DESCRIPTION:
;  338          0334  1 !
;  339          0335  1 !       This routine dispatches to a routine to zero the specified
;  340          0336  1 !       set of circuit counters based on the entity id format.
;  341          0337  1 !
;  342          0338  1 ! FORMAL INPUTS:
;  343          0339  1 !       ENTITY          Internal NML entity code of entity to zero.
;  344          0340  1 !       ZERO_RTN        Address of routine to perform zero requested
;  345          0341  1 !                       by NICE message.
;  346          0342  1 !
;  347          0343  1 ! IMPLICIT INPUTS:
;  348          0344  1 !
;  349          0345  1 !       NML$GB_ENTITY_FORMAT contains the entity format code.
;  350          0346  1 !
;  351          0347  1 !--
;  352          0348  1
;  353          0349  2 BEGIN
;  354          0350  2
;  355          0351  2 MAP
;  356          0352  2     NML$GB_ENTITY_FORMAT : BYTE SIGNED;
;  357          0353  2
;  358          0354  2 SELECTONEU .NML$GB_ENTITY_FORMAT OF
;  359          0355  2     SET
;  360          0356  2     [NMA$C_ENT_KNO]:                ! Known
;  361          0357  2         NML_ZEROPLURAL (.ENTITY,            ! Entity code
;  362          0358  2                         .ZERO_RTN,          ! Zero routine
;  363          0359  2                         0,                  ! Not used
;  364          0360  2                         0);                 ! Not used
;  365          0361  2
;  366          0362  2     [1 TO 16]:                      ! Entity name
;  367          0363  2         NML_ZEROPLURAL (.ENTITY,            ! Entity code
;  368          0364  2                         .ZERO_RTN,          ! Zero routine
;  369          0365  2                         .NML$GB_ENTITY_FORMAT,! Id string length
;  370          0366  2                         NML$AB_ENTITY_ID);  ! Id string address
;  371          0367  2
;  372          0368  2     [OTHERWISE]:
;  373          0369  2         NML$ERROR_2 (NMA$C_STS_IDE, .NML$GB_ENTITY_CODE);       ! Option error
;  374          0370  2     TES;
;  375          0371  2
;  376          0372  1 END;                                ! End of NML_CALL_ZERO


                                        0000 00000 NML_CALL_ZERO:
                                                           .WORD   Save nothing                                    ; 0330
                    50 00000000G    00  98 00002           CVTBL   NML$GB_ENTITY_FORMAT, R0                        ; 0354
                FF  8F              50  91 00009           CMPB    R0, #-1                                         ; 0356
                                    04  12 0000D           BNEQ    1$                                              ;
                                    7E  7C 0000F           CLRQ    -(SP)                                           ; 0357
                                    11  11 00011           BRB     2$                                              ; 0358
                                    50  D5 00013 1$:       TSTL    R0                                              ; 0362
```

```
                                        19  13 00015          BEQL    3$                                                      ;
                                    10  50  91 00017          CMPB    R0, #16                                                 ;
                                        14  1A 0001A          BGTRU   3$                                                      ;
                                00000000G   00  9F 0001C      PUSHAB  NML$AB_ENTITY_ID                                        ; 0363
                                        50  DD 00022          PUSHL   R0                                                      ; 0365
                                    7E      04  AC  7D 00024 2$:      MOVQ    ENTITY, -(SP)                                   ; 0363
                        00000000V   00      04  FB 00028      CALLS   #4, NML_ZEROPLURAL                                      ;
                                            04  0002F          RET                                                             ;
                                    7E 00000000G    00  9A 00030 3$:      MOVZBL  NML$GB_ENTITY_CODE, -(SP)                   ; 0369
                                    7E              09  CE 00037          MNEGL   #9, -(SP)                                   ;
                        00000000G   00              02  FB 0003A      CALLS   #2, NML$ERROR_2                                 ;
                                                    04  00041          RET                                                     ; 0372

; Routine Size:  66 bytes,    Routine Base:  $CODE$ + 004F
```

```
;  378          0373  1 %SBTTL 'NML_CALL_ZERO_NODE  Zero node counters'
;  379          0374  1 ROUTINE NML_CALL_ZERO_NODE (ENTITY, ZERO_RTN) : NOVALUE =
;  380          0375  1
;  381          0376  1 !++
;  382          0377  1 ! FUNCTIONAL DESCRIPTION:
;  383          0378  1 !
;  384          0379  1 !       This routine dispatches to a routine to zero the specified set
;  385          0380  1 !       of node counters based on the entity id format.
;  386          0381  1 !
;  387          0382  1 ! FORMAL INPUTS:
;  388          0383  1 !       ENTITY          Internal NML entity code of entity to zero.
;  389          0384  1 !       ZERO_RTN        Address of routine to perform zero requested
;  390          0385  1 !                       by NICE message.
;  391          0386  1 !
;  392          0387  1 ! IMPLICIT INPUTS:
;  393          0388  1 !
;  394          0389  1 !       NML$GB_ENTITY_FORMAT contains the entity format code.
;  395          0390  1 !
;  396          0391  1 !--
;  397          0392  1
;  398          0393  2 BEGIN
;  399          0394  2
;  400          0395  2 MAP
;  401          0396  2     NML$GB_ENTITY_FORMAT : BYTE SIGNED;
;  402          0397  2
;  403          0398  2 LOCAL
;  404          0399  2     EXEC_ADR;
;  405          0400  2
;  406          0401  2 EXEC_ADR = 0;           ! Set exec address in case entity is NML$C_EXECUTOR.
;  407          0402  2 SELECTONEU .NML$GB_ENTITY_FORMAT OF
;  408          0403  2     SET
;  409          0404  2     [NMA$C_ENT_KNO]:            ! Known
;  410          0405  2         NML_ZEROPLURAL (.ENTITY,                ! No entity
;  411          0406  2                         NML_ZEROKNONODES,       ! Routine name
;  412          0407  2                         0,                      ! Not used
;  413          0408  2                         0);                     ! Not used
;  414          0409  2
;  415          0410  2     [NMA$C_ENT_ADD]:            ! Node address
;  416          0411  3         BEGIN
;  417          0412  3         IF .ENTITY EQL NML$C_EXECUTOR THEN
;  418          0413  3             NML_ZEROPLURAL (NML$C_EXECUTOR,     ! entity = executor node
;  419          0414  3                             NML_ZERO_NODE,      ! Routine name
;  420          0415  3                             2,                  ! Id string length
;  421          0416  3                             EXEC_ADR)           ! Executor node address
;  422          0417  3         ELSE
;  423          0418  3             NML_ZEROPLURAL (NML$C_NODE,         ! Entity code
;  424          0419  3                             NML_ZERO_NODE,      ! Routine address
;  425          0420  3                             2,                  ! Id string length
;  426          0421  3                             NML$AB_ENTITY_ID);  ! Id (node address) address
;  427          0422  2         END;
;  428          0423  2
;  429          0424  2     [1 TO 6]:                   ! Node name
;  430          0425  2         IF .NML$GL_NML_ENTITY EQL NML$C_EXECUTOR THEN
;  431          0426  2             NML_ZEROPLURAL (NML$C_EXECUTOR,     ! No entity
;  432          0427  2                             NML_ZERO_NODE,      ! Routine address
;  433          0428  2                             2,                  ! Id string length
;  434          0429  2                             EXEC_ADR)           ! Executor node address
```

```
;  435          0430  2          ELSE
;  436          0431  2              NML_ZEROPLURAL (NML$C_NODEBYNAME,    ! Entity code
;  437          0432  2                             NML_ZERO_NODE,       ! Routine address
;  438          0433  2                             .NML$GB_ENTITY_FORMAT, ! Id (node name) length
;  439          0434  2                             NML$AB_ENTITY_ID);   ! Id address
;  440          0435  2
;  441          0436  2      [OTHERWISE]:
;  442          0437  2          NML$ERROR_2 (NMA$C_STS_IDE, NMA$C_ENT_NOD); ! Option error
;  443          0438  2      TES;
;  444          0439  2
;  445          0440  1 END;                              ! End of NML_CALL_ZERO_NODE


                                001C 00000 NML_CALL_ZERO_NODE:
                                           .WORD   Save R2,R3,R4                                    ; 0374
                     54 00000000G   00  9E 00002           MOVAB   NML$AB_ENTITY_ID, R4
                     53 00000000V   00  9E 00009           MOVAB   NML_ZERO_NODE, R3
                                    7E  D4 00010           CLRL    EXET_ADR                         ; 0401
                     52 00000000G   00  98 00012           CVTBL   NML$GB_ENTITY_FORMAT, R2         ; 0402
                  FF 8F                 52  91 00019       CMPB    R2, #-1                          ; 0404
                                        0D  12 0001D       BNEQ    1$
                                        7E  7C 0001F       CLRQ    -(SP)                            ; 0405
                        00000000V       00  9F 00021       PUSHAB  NML_ZEROKNONODES
                                04      AC  DD 00027       PUSHL   ENTITY
                                        32  11 0002A       BRB     5$
                                        52  D5 0002C 1$:   TSTL    R2                               ; 0410
                                        1A  12 0002E       BNEQ    4$
                     07         04      AC  D1 00030       CMPL    ENTITY, #7                       ; 0412
                                        0A  12 00034       BNEQ    3$
                                        5E  DD 00036 2$:   PUSHL   SP                               ; 0413
                                        02  DD 00038       PUSHL   #2
                                        53  DD 0003A       PUSHL   R3
                                        07  DD 0003C       PUSHL   #7
                                        1E  11 0003E       BRB     5$
                                        54  DD 00040 3$:   PUSHL   R4                               ; 0418
                                        02  DD 00042       PUSHL   #2
                                        53  DD 00044       PUSHL   R3
                                        03  DD 00046       PUSHL   #3
                                        14  11 00048       BRB     5$
                     06                 52  91 0004A 4$:   CMPB    R2, #6                           ; 0424
                                        17  1A 0004D       BGTRU   6$
                     07 00000000G   00  D1 0004F           CMPL    NML$GL_NML_ENTITY, #7            ; 0425
                                        DE  13 00056       BEQL    2$
                                        14  BB 00058       PUSHR   #^M<R2,R4>                       ; 0433
                                        53  DD 0005A       PUSHL   R3                               ; 0431
                                        04  DD 0005C       PUSHL   #4
                  00000000V     00      04  FB 0005E 5$:   CALLS   #4, NML_ZEROPLURAL
                                        04  00065         RET                                      ; 0425
                                        7E  D4 00066 6$:   CLRL    -(SP)                            ; 0437
                     7E                 09  CE 00068       MNEGL   #9, -(SP)
                  00000000G     00      02  FB 0006B       CALLS   #2, NML$ERROR_2
                                        04  00072         RET                                      ; 0440

; Routine Size:  115 bytes,    Routine Base:  $CODE$ + 0091
```

```
;  447          0441  1 %SBTTL 'NML_ZEROPLURAL  Zero plural entity counters'
;  448          0442  1 ROUTINE NML_ZEROPLURAL (ENTITY, RTN, PRM1, PRM2) : NOVALUE =
;  449          0443  1
;  450          0444  1 !++
;  451          0445  1 ! FUNCTIONAL DESCRIPTION:
;  452          0446  1 !
;  453          0447  1 !       This routine frames the response messages with 'more' and
;  454          0448  1 !       'done' messages and calls the specified routine.
;  455          0449  1 !
;  456          0450  1 ! FORMAL PARAMETERS:
;  457          0451  1 !
;  458          0452  1 !       ENTITY          Entity Table index for the entity (NML$C_...)
;  459          0453  1 !       RTN             Address of entity routine to be called.
;  460          0454  1 !       PRM1            Routine parameter value.
;  461          0455  1 !       PRM2            Routine parameter value.
;  462          0456  1 !
;  463          0457  1 ! SIDE EFFECTS:
;  464          0458  1 !
;  465          0459  1 !       A 'more' message is sent and then a 'done' message is signalled
;  466          0460  1 !       following a return or signal from the specified routine.
;  467          0461  1 !
;  468          0462  1 !--
;  469          0463  1
;  470          0464  2 BEGIN
;  471          0465  2
;  472          0466  2 LOCAL
;  473          0467  2     MSG_SIZE;
;  474          0468  2
;  475          0469  2 !
;  476          0470  2 ! Send success with multiple responses message.
;  477          0471  2 !
;  478          0472  2 NML$BLD_REPLY (UPLIT(0, NMA$C_STS_MOR), MSG_SIZE); ! Build message
;  479          0473  2 NML$SEND (NML$AB_SNDBUFFER, .MSG_SIZE); ! Send it                                    ; R
;  480          0474  2 !
;  481          0475  2 ! Enable condition handler to allow done message to be sent.
;  482          0476  2 !
;  483          0477  2 LIB$ESTABLISH (NML$MAINHANDLER);
;  484          0478  2 !
;  485          0479  2 ! Call entity-specific routine.
;  486          0480  2 !
;  487          0481  2 (.RTN) (.ENTITY, .PRM1, .PRM2);
;  488          0482  2 !
;  489          0483  2 ! Signal done message.
;  490          0484  2 !
;  491          0485  2 LIB$REVERT ();                  ! Disable condition handler
;  492          0486  2 NML$ERROR_1 (NMA$C_STS_DON);    ! Signal no more responses
;  493          0487  2
;  494          0488  1 END;                            ! End of NML_ZEROPLURAL


                                                        .PSECT  $PLIT$,NOWRT,NOEXE,2

                                00000002  00000000  0004C P.AAS:  .LONG   0, 2                                ;
```

```
                                                   .PSECT  $CODE$,NOWRT,2

                                  0000 00000 NML_ZEROPLURAL:
                                                   .WORD   Save nothing                        ; 0442
                  5E          04  C2 00002         SUBL2   #4, SP                              ;
                              5E  DD 00005         PUSHL   SP                                  ; 0472
                     00000000' 00 9F 00007         PUSHAB  P.AAS                               ;
        00000000G  00         02  FB 0000D         CALLS   #2, NML$BLD_REPLY                   ;
                              6E  DD 00014         PUSHL   MSG_SIZE                            ; 0473
                     00000000G 00 9F 00016         PUSHAB  NML$AB_SNDBUFFER                    ;
        00000000G  00         02  FB 0001C         CALLS   #2, NML$SEND                        ;
                     00000000G 00 9F 00023         PUSHAB  NML$MAINHANDLER                     ; 0477
        00000000G  00         01  FB 00029         CALLS   #1, LIB$ESTABLISH                   ;
                  7E      0C  AC  7D 00030         MOVQ    PRM1, -(SP)                         ; 0481
                          04  AC  DD 00034         PUSHL   ENTITY                              ;
               08  BC         03  FB 00037         CALLS   #3, @RTN                            ;
        00000000G  00         00  FB 0003B         CALLS   #0, LIB$REVERT                      ; 0485
                  7E      80  8F  98 00042         CVTBL   #-128, -(SP)                        ; 0486
        00000000G  00         01  FB 00046         CALLS   #1, NML$ERROR_1                     ;
                                  04 0004D         RET                                         ; 0488

; Routine Size:  78 bytes,    Routine Base:  $CODE$ + 0104


;  495         0489  1
```

```
;  497          0490  1 %SBTTL 'NML_ZERO_KNOWN   Zero known entity counters'
;  498          0491  1 ROUTINE NML_ZERO_KNOWN (ENTITY, DUM1, DUM2) : NOVALUE =
;  499          0492  1
;  500          0493  1 !++
;  501          0494  1 ! FUNCTIONAL DESCRIPTION:
;  502          0495  1 !
;  503          0496  1 !       This routine clears the counters in the volatile data base entries
;  504          0497  1 !       for known entities of the type specified.
;  505          0498  1 !
;  506          0499  1 ! FORMAL PARAMETERS:
;  507          0500  1 !
;  508          0501  1 !       ENTITY          Index into Entity Table for entity (NML$C_...)
;  509          0502  1 !       DUM1            Not used.
;  510          0503  1 !       DUM2            Not used.
;  511          0504  1 !
;  512          0505  1 ! SIDE EFFECTS:
;  513          0506  1 !
;  514          0507  1 !       Zero or more response messages will be sent.
;  515          0508  1 !
;  516          0509  1 !--
;  517          0510  1
;  518          0511  2 BEGIN
;  519          0512  2
;  520          0513  2 LOCAL
;  521          0514  2     BUFEND,
;  522          0515  2     DUMDSC : REF DESCRIPTOR,    ! Dummy table descriptor
;  523          0516  2     ENTLEN,                     ! DNA line name length
;  524          0517  2     LENGTH,
;  525          0518  2     LISDSC : DESCRIPTOR,        ! List buffer descriptor
;  526          0519  2     ENTPTR,                     ! Pointer to entity id for response
;  527          0520  2     MSGSIZE,                    ! Response message size
;  528          0521  2     NFBDSC : REF DESCRIPTOR,    ! Descriptor for NFB
;  529          0522  2     P2DSC  : DESCRIPTOR,        ! P2 buffer descriptor
;  530          0523  2     PTR,
;  531          0524  2     STATUS,
;  532          0525  2     STRTFLG;
;  533          0526  2 !
;  534          0527  2 ! Get a list of all entities in the volatile data base.
;  535          0528  2 !
;  536          0529  2 STRTFLG = FALSE;
;  537          0530  2
;  538          0531  2 WHILE NML$GET_ENTITY_IDS (.ENTITY, NMA$C_ENT_KNO, 0, .STRTFLG, LISDSC) DO
;  539          0532  3     BEGIN
;  540          0533  3     STRTFLG = TRUE;
;  541          0534  3     !
;  542          0535  3     ! Zero counters for every entity in the list.
;  543          0536  3     !
;  544          0537  3     BUFEND = .LISDSC [DSC$A_POINTER] + .LISDSC [DSC$W_LENGTH];
;  545          0538  3     PTR = .LISDSC [DSC$A_POINTER];
;  546          0539  3
;  547          0540  3     WHILE .PTR LSSA .BUFEND DO
;  548          0541  4         BEGIN
;  549          0542  4         LENGTH = .(.PTR)<0,16>;
;  550          0543  4         PTR = .PTR + 2;
;  551          0544  4         !
;  552          0545  4         ! Get NFB and P2 buffer.
;  553          0546  4         !
```

```
;  554          0547  4          NML$GETINFTABS (.ENTITY, NML$C_ZERO, NFBDSC, DUMDSC, 0);
;  555          0548  4          NML$BLDP2 (.LENGTH, .PTR, -1, 0, NML$Q_P2BFDSC, P2DSC);
;  556          0549  4
;  557          0550  4          ! Initialize message flags and status.
;  558          0551  4          !
;  559          0552  4          NML$AB_MSGBLOCK [MSB$L_FLAGS] = 0;
;  560          0553  4          NML$AB_MSGBLOCK [MSB$B_CODE] = NMA$C_STS_SUC;
;  561          0554  4          !
;  562          0555  4          ! Zero the counters for the specified entity.
;  563          0556  4          !
;  564          0557  4          NML$NETQIO (.NFBDSC, P2DSC, 0, 0);
;  565          0558  4          !
;  566          0559  4          ! Move the entity ID into the entity buffer.
;  567          0560  4          !
;  568          0561  4          ENTPTR = .NML$Q_ENTBFDSC [DSC$A_POINTER];
;  569          0562  4          CH$WCHAR_A (.LENGTH, ENTPTR);
;  570          0563  4          CH$MOVE (.LENGTH, .PTR, .ENTPTR);
;  571          0564  4          NML$Q_ENTBFDSC [DSC$W_LENGTH] = .LENGTH + 1;
;  572          0565  4          !
;  573          0566  4          ! Add line id to response message.
;  574          0567  4          !
;  575          0568  4          NML$AB_MSGBLOCK [MSB$V_ENTD_FLD] = 1;
;  576          0569  4          NML$AB_MSGBLOCK [MSB$A_ENTITY] = NML$Q_ENTBFDSC;
;  577          0570  4          !
;  578          0571  4          ! Build and send the response message.
;  579          0572  4          !
;  580          0573  4          NML$BLD_REPLY (NML$AB_MSGBLOCK, MSGSIZE);
;  581          0574  4          NML$SEND (NML$AB_SNDBUFFER, .MSGSIZE);
;  582          0575  4
;  583          0576  4          PTR = .PTR + .LENGTH;    ! Advance pointer
;  584          0577  3          END;
;  585          0578  2      END;
;  586          0579  2
;  587          0580  1 END;                              ! End of NML_ZERO_KNOWN


                                 0FFC 00000 NML_ZERO_KNOWN:
                                                .WORD   Save R2,R3,R4,R5,R6,R7,R8,R9,R10,R11          ; 0491
                      5B 00000000G   00  9E 00002       MOVAB   NML$AB_MSGBLOCK, R11                  ;
                      5E             1C  C2 00009       SUBL2   #28, SP                               ;
                                     59  D4 0000C       CLRL    STRTFLG                               ; 0529
                               14    AE  9F 0000E 1$:   PUSHAB  LISDSC                                ; 0531
                                     59  DD 00011       PUSHL   STRTFLG                               ;
                                     7E  D4 00013       CLRL    -(SP)                                 ;
                      7E             01  CE 00015       MNEGL   #1, -(SP)                             ;
                               04    AC  DD 00018       PUSHL   ENTITY                                ;
                00000000G      00        05  FB 0001B       CALLS   #5, NML$GET_ENTITY_IDS            ;
                               01        50  E8 00022       BLBS    R0, 2$                            ;
                                         04  00025       RET                                       ;
                      59             01  D0 00026 2$:   MOVL    #1, STRTFLG                           ; 0533
                      5A       14    AE  3C 00029       MOVZWL  LISDSC, BUFEND                        ; 0537
                      5A       18    AE  C0 0002D       ADDL2   LISDSC+4, BUFEND                      ;
                      56       18    AE  D0 00031       MOVL    LISDSC+4, PTR                         ; 0538
                      5A             56  D1 00035 3$:   CMPL    PTR, BUFEND                           ; 0540
```

```
                                          D4  1E 00038          BGEQU   1$                                      ;
                        57                86  3C 0003A          MOVZWL  (PTR)+, LENGTH                          ; 0542
                                          7E  D4 0003D          CLRL    -(SP)                                   ; 0547
                                   04     AE  9F 0003F          PUSHAB  DUMDSC                                  ;
                                   0C     AE  9F 00042          PUSHAB  NFBDSC                                  ;
                                          05  DD 00045          PUSHL   #5                                      ;
                                   04     AC  DD 00047          PUSHL   ENTITY                                  ;
              00000000G  00               05  FB 0004A          CALLS   #5, NML$GETINFTABS                      ;
                                   0C     AE  9F 00051          PUSHAB  P2DSC                                   ; 0548
                         00000000'        00  9F 00054          PUSHAB  NML$Q_P2BFDSC                           ;
                                          7E  D4 0005A          CLRL    -(SP)                                   ;
                        7E                01  CE 0005C          MNEGL   #1, -(SP)                               ;
                                          56  DD 0005F          PUSHL   PTR                                     ;
                                          57  DD 00061          PUSHL   LENGTH                                  ;
              00000000G  00               06  FB 00063          CALLS   #6, NML$BLDP2                           ;
                                          6B  D4 0006A          CLRL    NML$AB_MSGBLOCK                         ; 0552
                    04   AB               01  90 0006C          MOVB    #1, NML$AB_MSGBLOCK+4                   ; 0553
                                          7E  7C 00070          CLRQ    -(SP)                                   ; 0557
                                   14     AE  9F 00072          PUSHAB  P2DSC                                   ;
                                   10     AE  DD 00075          PUSHL   NFBDSC                                  ;
              00000000G  00               04  FB 00078          CALLS   #4, NML$NETQIO                          ;
                         58 00000000'     00  D0 0007F          MOVL    NML$Q_ENTBFDSC+4, ENTPTR                ; 0561
                         88               57  90 00086          MOVB    LENGTH, (ENTPTR)+                       ; 0562
                 68      66               57  28 00089          MOVC3   LENGTH, (PTR), (ENTPTR)                 ; 0563
       00000000'  00     57               01  A1 0008D          ADDW3   #1, LENGTH, NML$Q_ENTBFDSC              ; 0564
                         6B               10  88 00095          BISB2   #16, NML$AB_MSGBLOCK                    ; 0568
                    14   AB 00000000'     00  9E 00098          MOVAB   NML$Q_ENTBFDSC, NML$AB_MSGBLOCK+20      ; 0569
                                   08     AE  9F 000A0          PUSHAB  MSGSIZE                                 ; 0573
                                          5B  DD 000A3          PUSHL   R11                                     ;
              00000000G  00               02  FB 000A5          CALLS   #2, NML$BLD_REPLY                       ;
                                   08     AE  DD 000AC          PUSHL   MSGSIZE                                 ; 0574
                         00000000G        00  9F 000AF          PUSHAB  NML$AB_SNDBUFFER                        ;
              00000000G  00               02  FB 000B5          CALLS   #2, NML$SEND                            ;
                         56               57  C0 000BC          ADDL2   LENGTH, PTR                             ; 0576
                                        FF73  31 000BF          BRW     3$                                      ; 0540
                                              04 000C2          RET                                             ; 0580

; Routine Size:  195 bytes,    Routine Base:  $CODE$ + 0152
```

```
;  589          0581  1 %SBTTL 'NML_ZEROKNONODES  Zero known node counters'
;  590          0582  1 ROUTINE NML_ZEROKNONODES (DUM0, DUM1, DUM2) : NOVALUE =
;  591          0583  1
;  592          0584  1 !++
;  593          0585  1 ! FUNCTIONAL DESCRIPTION:
;  594          0586  1 !
;  595          0587  1 !       This routine zeros counters for all nodes in the volatile data base.
;  596          0588  1 !
;  597          0589  1 ! FORMAL PARAMETERS:
;  598          0590  1 !
;  599          0591  1 !       DUM0            Not used.
;  600          0592  1 !       DUM1            Not used.
;  601          0593  1 !       DUM2            Not used.
;  602          0594  1 !
;  603          0595  1 ! SIDE EFFECTS:
;  604          0596  1 !
;  605          0597  1 !       Zero or more response messages will be sent as a result of
;  606          0598  1 !       the routines that are called.
;  607          0599  1 !
;  608          0600  1 !--
;  609          0601  1
;  610          0602  2 BEGIN
;  611          0603  2
;  612          0604  2 LOCAL
;  613          0605  2     EXEC_ADR: WORD;
;  614          0606  2 !
;  615          0607  2 ! Return executor node.
;  616          0608  2 !
;  617          0609  2 EXEC_ADR = 0;
;  618          0610  2 NML_ZERO_NODE (NML$C_EXECUTOR,
;  619          0611  2                 2,                  ! Id string length
;  620          0612  2                 EXEC_ADR);          ! Executor node address
;  621          0613  2 !
;  622          0614  2 ! Return remote nodes.
;  623          0615  2 !
;  624          0616  2 NML_ZEROREMOTES ();
;  625          0617  2
;  626          0618  1 END;                                 ! End of NML_ZEROKNONODES


                                        0000 00000 NML_ZEROKNONODES:
                                                           .WORD   Save nothing                    ; 0582
                                5E              04  C2 00002       SUBL2   #4, SP                  ;
                                                6E  B4 00005       CLRW    EXEC_ADR                ; 0609
                                                5E  DD 00007       PUSHL   SP                      ; 0610
                                                02  DD 00009       PUSHL   #2                      ;
                                                07  DD 0000B       PUSHL   #7                      ;
                        00000000V   00          03  FB 0000D       CALLS   #3, NML_ZERO_NODE       ;
                        00000000V   00          00  FB 00014       CALLS   #0, NML_ZEROREMOTES     ; 0616
                                                    04 0001B       RET                             ; 0618

; Routine Size:  28 bytes,    Routine Base:  $CODE$ + 0215
```

```
;  628     0619  1 %SBTTL 'NML_ZERO_ENTITY  Zero entity counters'
;  629     0620  1 ROUTINE NML_ZERO_ENTITY (ENTITY, LEN, ADR) : NOVALUE =
;  630     0621  1
;  631     0622  1 !++
;  632     0623  1 ! FUNCTIONAL DESCRIPTION:
;  633     0624  1 !
;  634     0625  1 !
;  635     0626  1 ! FORMAL PARAMETERS:
;  636     0627  1 !
;  637     0628  1 !       ENTITY          Entity Table index (NML$C_...)
;  638     0629  1 !       LEN             Length of entity id string.
;  639     0630  1 !       ADR             Address of entity id string.
;  640     0631  1 !
;  641     0632  1 ! SIDE EFFECTS:
;  642     0633  1 !
;  643     0634  1 !       A response message will be sent.
;  644     0635  1 !
;  645     0636  1 !--
;  646     0637  1
;  647     0638  2 BEGIN
;  648     0639  2
;  649     0640  2 LOCAL
;  650     0641  2     DUMDSC : REF DESCRIPTOR,    ! Dummy table descriptor
;  651     0642  2     MSGSIZE,                    ! Length of response message
;  652     0643  2     NEWLEN,                             ! Mapped (VMS) line name length
;  653     0644  2     NFBDSC : REF DESCRIPTOR,    ! NFB descriptor
;  654     0645  2     P2DSC  : DESCRIPTOR;                ! Descriptor for P2 buffer
;  655     0646  2 !
;  656     0647  2 ! Get NFB and P2 buffer.
;  657     0648  2 !
;  658     0649  2 NML$GETINFTABS (.ENTITY, NML$C_ZERO, NFBDSC, DUMDSC, 0);
;  659     0650  2 !
;  660     0651  2 ! X25 and X29 Server databases have only one entry.  So always do a
;  661     0652  2 ! wildcard zero of these databases.
;  662     0653  2 !
;  663     0654  2 IF .ENTITY EQL NML$C_X25_SERV OR
;  664     0655  2    .ENTITY EQL NML$C_X29_SERV THEN
;  665     0656  2     LEN = -1;
;  666     0657  2
;  667     0658  2 NML$BLDP2 (.LEN, .ADR, -1, 0, NML$Q_P2BFDSC, P2DSC);
;  668     0659  2 !
;  669     0660  2 ! Initialize message flags and status.
;  670     0661  2 !
;  671     0662  2 NML$AB_MSGBLOCK [MSB$L_FLAGS] = 0;
;  672     0663  2 NML$AB_MSGBLOCK [MSB$B_CODE] = NMA$C_STS_SUC;
;  673     0664  2 !
;  674     0665  2 ! Zero the counters for the specified line.
;  675     0666  2 !
;  676     0667  2 NML$NETQIO (.NFBDSC, P2DSC, 0, 0);
;  677     0668  2 !
;  678     0669  2 ! Build and send the response message.
;  679     0670  2 !
;  680     0671  2 NML$BLD_REPLY (NML$AB_MSGBLOCK, MSGSIZE);
;  681     0672  2 NML$SEND (NML$AB_SNDBUFFER, .MSGSIZE);
;  682     0673  2
;  683     0674  1 END;                                ! End of NML_ZERO_ENTITY
```

```
                                0004 00000 NML_ZERO_ENTITY:
                                           .WORD   Save R2                                          ; 0620
                 52 00000000G   00  9E 00002        MOVAB   NML$AB_MSGBLOCK, R2
                 5E             14  C2 00009        SUBL2   #20, SP
                                7E  D4 0000C        CLRL    -(SP)                                    ; 0649
                          04    AE  9F 0000E        PUSHAB  DUMDSC
                          0C    AE  9F 00011        PUSHAB  NFBDSC
                                05  DD 00014        PUSHL   #5
                          04    AC  DD 00016        PUSHL   ENTITY
    00000000G   00              05  FB 00019        CALLS   #5, NML$GETINFTABS
                 11       04    AC  D1 00020        CMPL    ENTITY, #17                              ; 0654
                                06  13 00024        BEQL    1$
                 15       04    AC  D1 00026        CMPL    ENTITY, #21                              ; 0655
                                04  12 0002A        BNEQ    2$
              08 AC             01  CE 0002C 1$:    MNEGL   #1, LEN                                  ; 0656
                          0C    AE  9F 00030 2$:    PUSHAB  P2DSC                                    ; 0658
                    00000000'   00  9F 00033        PUSHAB  NML$Q_P2BFDSC
                                7E  D4 00039        CLRL    -(SP)
                 7E             01  CE 0003B        MNEGL   #1, -(SP)
                 7E       08    AC  7D 0003E        MOVQ    LEN, -(SP)
    00000000G   00              06  FB 00042        CALLS   #6, NML$BLDP2
                                62  D4 00049        CLRL    NML$AB_MSGBLOCK                          ; 0662
              04 A2             01  90 0004B        MOVB    #1, NML$AB_MSGBLOCK+4                    ; 0663
                                7E  7C 0004F        CLRQ    -(SP)                                    ; 0667
                          14    AE  9F 00051        PUSHAB  P2DSC
                          10    AE  DD 00054        PUSHL   NFBDSC
    00000000G   00              04  FB 00057        CALLS   #4, NML$NETQIO
                          08    AE  9F 0005E        PUSHAB  MSGSIZE                                  ; 0671
                                52  DD 00061        PUSHL   R2
    00000000G   00              02  FB 00063        CALLS   #2, NML$BLD_REPLY
                          08    AE  DD 0006A        PUSHL   MSGSIZE                                  ; 0672
                    000000000G  00  9F 0006D        PUSHAB  NML$AB_SNDBUFFER
    00000000G   00              02  FB 00073        CALLS   #2, NML$SEND
                                    04 0007A        RET                                              ; 0674

; Routine Size:  123 bytes,    Routine Base:  $CODE$ + 0231
```

```
;  685     0675  1 %SBTTL 'NML_ZERO_NODE  Zero node counters'
;  686     0676  1 ROUTINE NML_ZERO_NODE (ENTITY, LEN, ADR) : NOVALUE =
;  687     0677  1
;  688     0678  1 !++
;  689     0679  1 ! FUNCTIONAL DESCRIPTION:
;  690     0680  1 !
;  691     0681  1 !
;  692     0682  1 ! FORMAL PARAMETERS:
;  693     0683  1 !
;  694     0684  1 !       ENTITY          Entity Table index (NML$C...)
;  695     0685  1 !       LEN             Length of entity id string.
;  696     0686  1 !       ADR             Address of entity id string.
;  697     0687  1 !
;  698     0688  1 ! SIDE EFFECTS:
;  699     0689  1 !
;  700     0690  1 !       A response message will be sent.
;  701     0691  1 !
;  702     0692  1 !--
;  703     0693  1
;  704     0694  2 BEGIN
;  705     0695  2
;  706     0696  2 LOCAL
;  707     0697  2     MSGSIZE,                        ! Response message size
;  708     0698  2     NFBDSC : REF DESCRIPTOR,        ! NFB descriptor
;  709     0699  2     P2DSC  : DESCRIPTOR,                    ! P2 parameter descriptor
;  710     0700  2     DUMDSC : REF DESCRIPTOR;        ! Dummy table descriptor
;  711     0701  2
;  712     0702  2 !
;  713     0703  2 ! Get the NFB and P2 buffer.
;  714     0704  2 !
;  715     0705  2 NML$GETINFTABS (.ENTITY, NML$C_ZERO, NFBDSC, DUMDSC, 0);
;  716     0706  2 IF .ENTITY NEQ NML$C_NODEBYNAME THEN
;  717     0707  2     !
;  718     0708  2     ! Zero executor node or node specified by address in the NICE command.
;  719     0709  2     !
;  720     0710  2     NML$BLDP2 (0, .(.ADR)<0,16>, -1, 0, NML$Q_P2BFDSC, P2DSC)
;  721     0711  2 ELSE
;  722     0712  2     !
;  723     0713  2     ! Zero node specified by name in the NICE command.
;  724     0714  2     !
;  725     0715  2     NML$BLDP2 (.LEN, .ADR, -1, 0, NML$Q_P2BFDSC, P2DSC);
;  726     0716  2
;  727     0717  2 !
;  728     0718  2 ! Initialize message flags and status.
;  729     0719  2 !
;  730     0720  2 NML$AB_MSGBLOCK [MSB$L_FLAGS] = 0;
;  731     0721  2 NML$AB_MSGBLOCK [MSB$B_CODE] = NMA$C_STS_SUC;
;  732     0722  2 !
;  733     0723  2 ! Zero the counters for the specified node.
;  734     0724  2 !
;  735     0725  2 NML$NETQIO (.NFBDSC, P2DSC, 0, 0);
;  736     0726  2 !
;  737     0727  2 ! If zeroing the executor node's counters, then the excutor's entity ID
;  738     0728  2 ! must be returned in the NICE response message.  Add it to the message.
;  739     0729  2 !
;  740     0730  2 IF .ENTITY EQL NML$C_EXECUTOR THEN
;  741     0731  3     BEGIN
```

```
;  742     0732  3      !
;  743     0733  3      ! Add the executor id to the entity buffer.
;  744     0734  3      !
;  745     0735  3      NML$GETEXEID (NML$Q_ENTBFDSC, NML$Q_ENTBFDSC [DSC$W_LENGTH]);
;  746     0736  3      !
;  747     0737  3      ! Add the entity id to the message.
;  748     0738  3      !
;  749     0739  3      NML$AB_MSGBLOCK [MSB$V_ENTD_FLD] = 1;
;  750     0740  3      NML$AB_MSGBLOCK [MSB$A_ENTITY] = NML$Q_ENTBFDSC;
;  751     0741  2      END;
;  752     0742  2  !
;  753     0743  2  ! Build and send the response message.
;  754     0744  2  !
;  755     0745  2  NML$BLD_REPLY (NML$AB_MSGBLOCK, MSGSIZE);
;  756     0746  2  NML$SEND (NML$AB_SNDBUFFER, .MSGSIZE);
;  757     0747  2
;  758     0748  1  END;                                ! End of NML_ZERO_NODE


                                 001C C0000 NML_ZERO_NODE:
                                                    .WORD   Save R2,R3,R4                                   ; 0676
                         54 00000000'   00   9E 00002       MOVAB   NML$Q_P2BFDSC, R4                       ;
                         53 00000000'   00   9E 00009       MOVAB   NML$Q_ENTBFDSC, R3                      ;
                         52 00000000G   00   9E 00010       MOVAB   NML$AB_MSGBLOCK, R2                     ;
                         5E                  14   C2 00017       SUBL2   #20, SP                         ;
                                             7E   D4 0001A       CLRL    -(SP)                           ; 0705
                                    04       AE   9F 0001C       PUSHAB  DUMDSC                          ;
                                    0C       AE   9F 0001F       PUSHAB  NFBDSC                          ;
                                             05   DD 00022       PUSHL   #5                              ;
                                    04       AC   DD 00024       PUSHL   ENTITY                          ;
                         00000000G  00            05   FB 00027       CALLS   #5, NML$GETINFTABS          ;
                                    04       04   AC   D1 0002E       CMPL    ENTITY, #4                  ; 0706
                                             12   13 00032       BEQL    1$                              ;
                                    0C       AE   9F 00034       PUSHAB  P2DSC                           ; 0710
                                             54   DD 00037       PUSHL   R4                              ;
                                             7E   D4 00039       CLRL    -(SP)                           ;
                                    7E            01   CE 0003B       MNEGL   #1, -(SP)                   ;
                                    7E       0C   BC   3C 0003E       MOVZWL  @ADR, -(SP)                 ;
                                             7E   D4 00042       CLRL    -(SP)                           ;
                                             0E   11 00044       BRB     2$                              ;
                                    0C       AE   9F 00046  1$:  PUSHAB  P2DSC                           ; 0715
                                             54   DD 00049       PUSHL   R4                              ;
                                             7E   D4 0004B       CLRL    -(SP)                           ;
                                    7E            01   CE 0004D       MNEGL   #1, -(SP)                   ;
                                    7E       08   AC   7D 00050       MOVQ    LEN, -(SP)                  ;
                         00000000G  00            06   FB 00054  2$:  CALLS   #6, NML$BLDP2               ;
                                                 62   D4 0005B       CLRL    NML$AB_MSGBLOCK             ; 0720
                               04    A2           01   90 0005D       MOVB    #1, NML$AB_MSGBLOCK+4       ; 0721
                                                 7E   7C 00061       CLRQ    -(SP)                       ; 0725
                                    14       AE   9F 00063       PUSHAB  P2DSC                           ;
                                    10       AE   DD 00066       PUSHL   NFBDSC                          ;
                         00000000G  00            04   FB 00069       CALLS   #4, NML$NETQIO              ;
                                    07       04   AC   D1 00070       CMPL    ENTITY, #7                  ; 0730
                                                 12   12 00074       BNEQ    3$                          ;
```

```
                                        53  DD 00076          PUSHL   R3                                                      ; 0735
                                        53  DD 00078          PUSHL   R3                                                      ;
                    00000000G  00       02  FB 0007A          CALLS   #2, NML$GETEXEID                                        ;
                               62       10  88 00081          BISB2   #16, NML$AB_MSGBLOCK                                    ; 0739
                          14   A2       63  9E 00084          MOVAB   NML$Q_ENTBFDSC, NML$AB_MSGBLOCK+20                      ; 0740
                                    08  AE  9F 00088 3$:       PUSHAB  MSGSIZE                                                 ; 0745
                                        52  DD 0008B          PUSHL   R2                                                      ;
                    00000000G  00       02  FB 0008D          CALLS   #2, NML$BLD_REPLY                                       ;
                                    08  AE  DD 00094          PUSHL   MSGSIZE                                                 ; 0746
                               00000000G  00  9F 00097          PUSHAB  NML$AB_SNDBUFFER                                        ;
                    00000000G  00       02  FB 0009D          CALLS   #2, NML$SEND                                            ;
                                        04  000A4          RET                                                             ; 0748

; Routine Size:  165 bytes,    Routine Base:  $CODE$ + 02AC
```

```
;  760          0749  1 %SBTTL 'NML_ZEROREMOTES  Zero known node counters'
;  761          0750  1 ROUTINE NML_ZEROREMOTES: NOVALUE =
;  762          0751  1
;  763          0752  1 !++
;  764          0753  1 ! FUNCTIONAL DESCRIPTION:
;  765          0754  1 !
;  766          0755  1 !       This routine zeros the counters for all remote nodes.
;  767          0756  1 !
;  768          0757  1 ! SIDE EFFECTS:
;  769          0758  1 !
;  770          0759  1 !       Zero or more response messages will be sent.
;  771          0760  1 !
;  772          0761  1 !--
;  773          0762  1
;  774          0763  2 BEGIN
;  775          0764  2
;  776          0765  2 LOCAL
;  777          0766  2     BUFEND,
;  778          0767  2     DUMDSC : REF DESCRIPTOR,    ! Dummy table descriptor
;  779          0768  2     ENTPTR,                     ! Pointer to node id in response
;  780          0769  2     LENGTH,
;  781          0770  2     LISDSC : DESCRIPTOR,
;  782          0771  2     MSGSIZE,
;  783          0772  2     NFBDSC : REF DESCRIPTOR,    ! NFB descriptor
;  784          0773  2     P2DSC  : DESCRIPTOR,        ! Descriptor for P2 buffer
;  785          0774  2     PTR,
;  786          0775  2     STATUS,
;  787          0776  2     STRTFLG;
;  788          0777  2 !
;  789          0778  2 ! Get the list of known remote nodes.
;  790          0779  2 !
;  791          0780  2 STRTFLG = FALSE;
;  792          0781  2
;  793          0782  2 WHILE NML$GET_ENTITY_IDS (NML$C_NODE, NMA$C_ENT_KNO, 0, .STRTFLG, LISDSC) DO
;  794          0783  3     BEGIN
;  795          0784  3
;  796          0785  3     STRTFLG = TRUE;
;  797          0786  3     !
;  798          0787  3     ! Zero counters for all nodes in the list.
;  799          0788  3     !
;  800          0789  3     PTR = .LISDSC [DSC$A_POINTER];
;  801          0790  3     BUFEND = .LISDSC [DSC$A_POINTER] + .LISDSC [DSC$W_LENGTH];
;  802          0791  3     LENGTH = 2;
;  803          0792  3     NML$GETINFTABS (NML$C_NODE, NML$C_ZERO, NFBDSC, DUMDSC, 0);
;  804          0793  3
;  805          0794  3     WHILE .PTR LSSA .BUFEND DO
;  806          0795  4         BEGIN
;  807          0796  4         PTR = .PTR +4;          ! Skip loopnode flag.
;  808          0797  4         NML$BLDP2 (0, .(.PTR)<0,16>, -1, 0, NML$Q_P2BFDSC, P2DSC);
;  809          0798  4
;  810          0799  4         NML$AB_MSGBLOCK [MSB$L_FLAGS] = 0;
;  811          0800  4         NML$AB_MSGBLOCK [MSB$B_CODE] = NMA$C_STS_SUC;
;  812          0801  4
;  813          0802  4         NML$NETQIO (.NFBDSC, P2DSC, 0, 0);
;  814          0803  4         !
;  815          0804  4         ! Move node address and name into entity id buffer and
;  816          0805  4         ! advance pointer.
```

```
;  817          0806  4          !
;  818          0807  4          ENTPTR = CH$MOVE (2,
;  819          0808  4                           .PTR,
;  820          0809  4                           .NML$Q_ENTBFDSC [DSC$A_POINTER]);
;  821          0810  4          PTR = .PTR + 4;
;  822          0811  4          LENGTH = .(.PTR)<0,16>;
;  823          0812  4          CH$WCHAR_A (.LENGTH, ENTPTR);
;  824          0813  4          PTR = .PTR + 2;
;  825          0814  4          ENTPTR = CH$MOVE (.LENGTH, .PTR, .ENTPTR);
;  826          0815  4          PTR = .PTR + .LENGTH;
;  827          0816  4          !
;  828          0817  4          ! Add node id to message.
;  829          0818  4          !
;  830          0819  4          NML$Q_ENTBFDSC [DSC$W_LENGTH] =
;  831          0820  4                  .ENTPTR - .NML$Q_ENTBFDSC [DSC$A_POINTER];
;  832          0821  4          NML$AB_MSGBLOCK [MSB$V_ENTD_FLD] = 1;
;  833          0822  4          !
;  834          0823  4          ! Build and send the response message.
;  835          0824  4          !
;  836          0825  4          NML$BLD_REPLY (NML$AB_MSGBLOCK, MSGSIZE);
;  837          0826  4          NML$SEND (NML$AB_SNDBUFFER, .MSGSIZE);
;  838          0827  4          END
;  839          0828  2      END;
;  840          0829  2
;  841          0830  1 END;                              ! End of NML_ZEROREMOTES


                                 0FFC 00000 NML_ZEROREMOTES:
                                            .WORD   Save R2,R3,R4,R5,R6,R7,R8,R9,R10,R11          ; 0750
                    5B 00000000G   00   9E 00002        MOVAB   NML$AB_MSGBLOCK, R11              ;
                    5E             1C   C2 00009        SUBL2   #28, SP                           ;
                                   59   D4 0000C        CLRL    STRTFLG                           ; 0780
                           14      AE   9F 0000E 1$:    PUSHAB  LISDSC                            ; 0782
                                   59   DD 00011        PUSHL   STRTFLG                           ;
                                   7E   D4 00013        CLRL    -(SP)                             ;
                    7E             01   CE 00015        MNEGL   #1, -(SP)                         ;
                                   03   DD 00018        PUSHL   #3                                ;
00000000G           00             05   FB 0001A        CALLS   #5, NML$GET_ENTITY_IDS            ;
                    01             50   E8 00021        BLBS    R0, 2$                            ;
                                   04   00024          RET                                       ;
                    59             01   D0 00025 2$:    MOVL    #1, STRTFLG                       ; 0785
                    56       18    AE   D0 00028        MOVL    LISDSC+4, PTR                     ; 0789
                    5A       14    AE   3C 0002C        MOVZWL  LISDSC, BUFEND                    ; 0790
                    5A       18    AE   C0 00030        ADDL2   LISDSC+4, BUFEND                  ;
                    58             02   D0 00034        MOVL    #2, LENGTH                        ; 0791
                                   7E   D4 00037        CLRL    -(SP)                             ; 0792
                           04      AE   9F 00039        PUSHAB  DUMDSC                            ;
                           0C      AE   9F 0003C        PUSHAB  NFBDSC                            ;
                                   05   DD 0003F        PUSHL   #5                                ;
                                   03   DD 00041        PUSHL   #3                                ;
00000000G           00             05   FB 00043        CALLS   #5, NML$GETINFTABS                ;
                    5A             56   D1 0004A 3$:    CMPL    PTR, BUFEND                       ; 0794
                                   BF   1E 0004D        BGEQU   1$                                ;
                    56             04   C0 0004F        ADDL2   #4, PTR                           ; 0796
```

```
                                    0C   AE  9F 00052         PUSHAB  P2DSC                                    ; 0797
                          00000000'     00  9F 00055         PUSHAB  NML$Q_P2BFDSC                           ;
                                        7E  D4 0005B         CLRL    -(SP)                                   ;
                                    7E      01  CE 0005D         MNEGL   #1, -(SP)                           ;
                                    7E      66  3C 00060         MOVZWL  (PTR), -(SP)                        ;
                                        7E  D4 00063         CLRL    -(SP)                                   ;
                          00000000G     00  06  FB 00065         CALLS   #6, NML$BLDP2                       ;
                                        6B  D4 00068         CLRL    NML$AB_MSGBLOCK                         ; 0799
                                04      AB  01  90 0006E         MOVB    #1, NML$AB_MSGBLOCK+4               ; 0800
                                        7E  7C 00072         CLRQ    -(SP)                                   ; 0802
                                    14      AE  9F 00074         PUSHAB  P2DSC                               ;
                                    10      AE  DD 00077         PUSHL   NFBDSC                              ;
                          00000000G     00  04  FB 0007A         CALLS   #4, NML$NETQIO                      ;
                                    57  00000000'  00  D0 00081         MOVL    NML$Q_ENTBFDSC+4, R7        ; 0809
                                    67      86  B0 00088         MOVW    (PTR)+, (R7)                        ;
                                    53  02      A7  9E 0008B         MOVAB   2(R7), ENTPTR                   ;
                                    56      02  C0 0008F         ADDL2   #2, PTR                             ; 0810
                                    58      86  3C 00092         MOVZWL  (PTR)+, LENGTH                      ; 0811
                                    83      58  90 00095         MOVB    LENGTH, (ENTPTR)+                   ; 0812
                          63        66      58  28 00098         MOVC3   LENGTH, (PTR), (ENTPTR)             ; 0814
                                    56      58  C0 0009C         ADDL2   LENGTH, PTR                         ; 0815
                00000000'   00      53      57  A3 0009F         SUBW3   R7, ENTPTR, NML$Q_ENTBFDSC          ; 0820
                                    6B      10  88 000A7         BISB2   #16, NML$AB_MSGBLOCK                ; 0821
                                    08      AE  9F 000AA         PUSHAB  MSGSIZE                             ; 0825
                                        5B  DD 000AD         PUSHL   R11                                     ;
                          00000000G     00  02  FB 000AF         CALLS   #2, NML$BLD_REPLY                   ;
                                    08      AE  DD 000B6         PUSHL   MSGSIZE                             ; 0826
                          00000000G     00  9F 000B9         PUSHAB  NML$AB_SNDBUFFER                        ;
                          00000000G     00  02  FB 000BF         CALLS   #2, NML$SEND                        ;
                                        82  11 000C6         BRB     3$                                      ; 0794
                                        04  000C8         RET                                             ; 0830

; Routine Size:  201 bytes,    Routine Base:  $CODE$ + 0351
```

```
;  843          0831  1 END                                   ! End of module
;  844          0832  1
;  845          0833  0 ELUDOM
```

```
;                                  PSECT SUMMARY
;
;       Name                    Bytes                           Attributes
;
;  $OWN$                          784  NOVEC,  WRT,  RD ,NOEXE,NOSHR,  LCL,  REL,  CON NOPIC,ALIGN(2)
;  $PLIT$                          84  NOVEC,NOWRT,  RD ,NOEXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)
;  $CODE$                        1050  NOVEC,NOWRT,  RD ,  EXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)
```

```
;                                Library Statistics
;
;                                        -------- Symbols --------      Pages       Processing
;       File                             Total    Loaded   Percent      Mapped      Time
;
;  _$255$DUA28:[NML.OBJ]NMLLIB.L32;1       341        33         9          27        00:00.1
;  _$255$DUA28:[SHRLIB]NMALIBRY.L32;1      887         8         0          47        00:00.2
;  _$255$DUA28:[SYSLIB]STARLET.L32;1      9776         2         0         581        00:02.2
```

```
;                                    COMMAND QUALIFIERS

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

; Size:          1050 code + 868 data bytes
; Run Time:         00:23.1
; Elapsed Time:     00:42.8
; Lines/CPU Min:     2162
; Lexemes/CPU-Min: 15715
; Memory Used:  147 pages
; Compilation Complete
```

NPARSE
LIS

REQUEST
MAP

OPCOM

REPLY
MAP

NMLXFER
LIS

OPCCRASH
MAP

NMLV2STA
LIS

OPCOMLIB
B32

ALLOCATE
LIS

NMLZERO
LIS

OPCOMDEF
SDL

OPCOM
MAP

OPCDEFTMP
SDL

CANCEL
LIS