```
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          DDDDDDDD     IIIIII     SSSSSSSS    CCCCCCCC
NN      NN  MM      MM  LL          DDDDDDDD     IIIIII     SSSSSSSS    CCCCCCCC
NN      NN  MMMM  MMMM  LL          DD      DD     II     SS          CC
NN      NN  MMMM  MMMM  LL          DD      DD     II     SS          CC
NNNN    NN  MM  MM  MM  LL          DD      DD     II     SS          CC
NNNN    NN  MM  MM  MM  LL          DD      DD     II     SS          CC
NN  NN  NN  MM      MM  LL          DD      DD     II       SSSSSS    CC
NN  NN  NN  MM      MM  LL          DD      DD     II       SSSSSS    CC
NN    NNNN  MM      MM  LL          DD      DD     II             SS  CC
NN    NNNN  MM      MM  LL          DD      DD     II             SS  CC
NN      NN  MM      MM  LL          DD      DD     II             SS  CC              ....
NN      NN  MM      MM  LL          DD      DD     II             SS  CC              ....
NN      NN  MM      MM  LLLLLLLLLL  DDDDDDDD     IIIIII     SSSSSSSS      CCCCCCCC  ....
NN      NN  MM      MM  LLLLLLLLLL  DDDDDDDD     IIIIII     SSSSSSSS      CCCCCCCC  ....

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
```


: R

```
;     1          0001  0 %TITLE 'NML Disconnect parameter module'
;     2          0002  0 MODULE NML$DISCONNECT (
;     3          0003  0                 LANGUAGE (BLISS32),
;     4          0004  0                 ADDRESSING_MODE (NONEXTERNAL=GENERAL),
;     5          0005  0                 ADDRESSING_MODE (EXTERNAL=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                                  *
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;    24          0024  1 !*  AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT     *
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;    26          0026  1 !*                                                                           *
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;    29          0029  1 !*                                                                           *
;    30          0030  1 !*                                                                           *
;    31          0031  1 !*****************************************************************************
;    32          0032  1 !
;    33          0033  1
;    34          0034  1 !++
;    35          0035  1 ! FACILITY:  DECnet-VAX V2.0 Network Management Listener
;    36          0036  1 !
;    37          0037  1 ! ABSTRACT:
;    38          0038  1 !
;    39          0039  1 !       These routines process all NCP DISCONNECT commands.
;    40          0040  1 !
;    41          0041  1 ! ENVIRONMENT:  VAX/VMS Operating System
;    42          0042  1 !
;    43          0043  1 ! AUTHOR:  Kathy Perko
;    44          0044  1 !
;    45          0045  1 ! CREATION DATE:  ó-Sept-1981
;    46          0046  1 !
;    47          0047  1 ! MODIFIED BY:
;    48          0048  1 !
;    49          0049  1 !       V03-002 MKP0004         Kathy Perko     1-March-1983
;    50          0050  1 !               Fix DISC LINKS so it returns an EOF message if no
;    51          0051  1 !               links were disconnected.
;    52          0052  1 !
;    53          0053  1 !       V03-001 MKP0003         Kathy Perko     7-May-1982
;    54          0054  1 !               Add double search key to DISCONNECT KNOWN LINKS WITH
;    55          0055  1 !               NODE <node name>.
;    56          0056  1 !
;    57          0057  1 !       V02-003 MKP0002         Kathy Perko     25-Oct-1981
```

```
;    58          0058  1 !                Change single link disconnect so no node name
;    59          0059  1 !                is required in the NICE command.
;    60          0060  1 !
;    61          0061  1 !        V02-002 MKP0001         Kathy Perko     18-Sept-1981
;    62          0062  1 !                Fix NML$DISCKNOWN so that if a link goes away
;    63          0063  1 !                between the read and the disconnect, no error
;    64          0064  1 !                is returned to NCP.
;    65          0065  1 !
;    66          0066  1 !--
;    67          0067  1
```

```
;    69          0068  1 %SBTTL 'Declarations'
;    70          0069  1
;    71          0070  1 !
;    72          0071  1 ! TABLE OF CONTENTS:
;    73          0072  1 !
;    74          0073  1
;    75          0074  1 FORWARD ROUTINE
;    76          0075  1     NML$DISCKNOWN       : NOVALUE,
;    77          0076  1     NML_GETLINKLIST,
;    78          0077  1     NML$DISCONNECT      : NOVALUE;
;    79          0078  1
;    80          0079  1 !
;    81          0080  1 ! INCLUDE FILES:
;    82          0081  1 !
;    83          0082  1
;    84          0083  1 LIBRARY 'LIB$:NMLLIB.L32';
;    85          0084  1 LIBRARY 'SHRLIB$:NMALIBRY.L32';
;    86          0085  1 LIBRARY 'SHRLIB$:NET.L32';
;    87          0086  1 LIBRARY 'SYS$LIBRARY:STARLET.L32';
;    88          0087  1
;    89          0088  1 !
;    90          0089  1 ! EXTERNAL REFERENCES:
;    91          0090  1 !
;    92          0091  1
;    93          0092  1 $NML_EXTDEF;
;    94          0093  1
;    95          0094  1 EXTERNAL ROUTINE
;    96          0095  1     NML$BLDP2,
;    97          0096  1     NML$BLD_REPLY,
;    98          0097  1     NML$GETEXEADR,
;    99          0098  1     NML$NETQIO,
;   100          0099  1     NML$SEND,
;   101          0100  1     NML$ERROR_1;
;   102          0101  1
```

```
;  104          0102  1
;  105          0103  1 OWN
;  106          0104  1         NML$T_P2BUFFER : VECTOR [NML$K_P2BUFLEN, BYTE],
;  107          0105  1         NML$AB_ENTITY_BUF : BBLOCK [20];
;  108          0106  1
;  109          0107  1 BIND
;  110          0108  1         NML$Q_P2BFDSC = UPLIT (NML$K_P2BUFLEN, NML$T_P2BUFFER) : DESCRIPTOR;
;  111          0109  1
;  112          0110  1
```

```
;   114          0111  1 %SBTTL 'NML$DISCKNOWN  Disconnect known links'
;   115          0112  1 GLOBAL ROUTINE NML$DISCKNOWN (ENTITY, NODE_PST, NODE_LEN, NODE_ADR) : NOVALUE =
;   116          0113  1
;   117          0114  1 !++
;   118          0115  1 ! FUNCTIONAL DESCRIPTION:
;   119          0116  1 !
;   120          0117  1 !       This routine disconnects all links with all nodes or all links
;   121          0118  1 !       with a specified node.
;   122          0119  1 !
;   123          0120  1 ! FORMAT PARAMETERS:
;   124          0121  1 !       ENTITY          Internal NML entity code (NML$C_LINKS)
;   125          0122  1 !       NODE_PST        Parameter Semantic Table (PST) entry of node
;   126          0123  1 !                       (name or address) from which to disconnect links.
;   127          0124  1 !       NODE_LEN        Length of disconnect node ID.
;   128          0125  1 !       NODE_ADR        Address of disconnect node ID.
;   129          0126  1 !--
;   130          0127  1
;   131          0128  2 BEGIN
;   132          0129  2
;   133          0130  2 LOCAL
;   134          0131  2         NFB : REF BBLOCK,
;   135          0132  2         P2DSC   : DESCRIPTOR,
;   136          0133  2         STATUS,
;   137          0134  2         PTR,
;   138          0135  2         STRTFLG,
;   139          0136  2         LINK_CNT,               ! Count of links returned by NETACP in
;   140          0137  2                                 !       P4 buffer.
;   141          0138  2         STRDSC  : DESCRIPTOR,   ! Descriptor of link for NICE response msg.
;   142          0139  2         MSGSIZE;                ! Length of response message.
;   143          0140  2
;   144          0141  2 !
;   145          0142  2 ! NFB to disconnect a link.
;   146          0143  2 !
;   147        P 0144  2 $NFBDSC (DISC_LINK_NFBDSC, DELETE, , LLI
;   148        P 0145  2                 ,LLN,         ! Search key 1 = Link number, oper1 = eql
;   149        P 0146  2                 ,NFB$C_WILDCARD,! Search key 2 = wildcard, oper2 = neq
;   150          0147  2                 );
;   151          0148  2
;   152          0149  2 OWN
;   153          0150  2         NMLPID,
;   154          0151  2         GETLIST : BBLOCK [12]           ! $GETJPI list to get NML's PID.
;   155          0152  2                 INITIAL ( WORD (4,              ! Buffer length
;   156          0153  2                                JPI$_PID),       ! Request PID
;   157          0154  2                        LONG (NMLPID,            ! Address to receive PID
;   158          0155  2                                0)),             ! Don't need length.
;   159          0156  2         IOSB : $IOSB;
;   160          0157  2
;   161          0158  2 !
;   162          0159  2 ! Get PID for NML.  If NML is not running in the local node, it is
;   163          0160  2 ! talking to NCP via a logical link.  Therefore, don't disconnect
;   164          0161  2 ! that link.  Use the PID to tell which link is NML's link to NCP.
;   165          0162  2 !
;   166        P 0163  2 STATUS = $GETJPI (ITMLST = GETLIST,
;   167          0164  2                   IOSB = IOSB);
;   168          0165  2 IF NOT .STATUS OR
;   169          0166  2    NOT .IOSB [IOS$W_STATUS] THEN
;   170          0167  2         ! Signal an error.
```

```
;  171          0168  2          NML$ERROR_1 (NMA$C_STS_MPR);
;  172          0169  2
;  173          0170  2 !
;  174          0171  2 ! Set up the link ID descriptor for the NICE response message.
;  175          0172  2 ! The link ID consists of a byte of 0 followed by a word of the
;  176          0173  2 ! link number.
;  177          0174  2 !
;  178          0175  2 STRDSC [DSC$W_LENGTH] = 3;
;  179          0176  2 STRDSC [DSC$A_POINTER] = NML$AB_ENTITY_BUF;
;  180          0177  2 NML$AB_ENTITY_BUF<0,8> = 0;
;  181          0178  2 STRTFLG = FALSE;
;  182          0179  2 !
;  183          0180  2 ! Get a list of links to disconnect from NETACP.
;  184          0181  2 !
;  185          0182  2 WHILE NML_GETLINKLIST (.STRTFLG, NML$GQ_QIOBFDSC, LINK_CNT, .NMLPID,
;  186          0183  2                       .NODE_PST, .NODE_LEN, .NODE_ADR) DO
;  187          0184  3         BEGIN
;  188          0185  3         STRTFLG = TRUE;
;  189          0186  3         PTR = .NML$GQ_QIOBFDSC [DSC$A_POINTER];
;  190          0187  3         WHILE (LINK_CNT = .LINK_CNT - 1) GEQ 0 DO
;  191          0188  4                 BEGIN
;  192          0189  4                 NML$BLDP2 (0, ..PTR, -1, 0, NML$Q_P2BFDSC, P2DSC);
;  193          0190  4                 !
;  194          0191  4                 ! Tell NETACP to disconnect the link.
;  195          0192  4                 !
;  196          0193  4                 STATUS = NML$NETQIO ( DISC_LINK_NFBDSC, P2DSC, 0, 0);
;  197          0194  4                 !
;  198          0195  4                 ! Build response message for disconnected link.
;  199          0196  4                 !
;  200          0197  4                 IF .STATUS THEN
;  201          0198  5                         BEGIN
;  202          0199  5                         NML$AB_MSGBLOCK [MSB$L_FLAGS] = 0;
;  203          0200  5                         NML$AB_MSGBLOCK [MSB$B_CODE] = NML$_STS_SUC;
;  204          0201  5                         NML$GL_PRS_FLGS [NML$V_PRS_ENTITY_FOUND] = TRUE;
;  205          0202  4                         END;
;  206          0203  4                 CH$MOVE (2, .PTR, .STRDSC [DSC$A_POINTER] + 1);
;  207          0204  4                 !
;  208          0205  4                 ! If the link went away before it could be disconnected
;  209          0206  4                 ! don't build a response message for it.
;  210          0207  4                 !
;  211          0208  4                 IF .STATUS NEQ NML$_STS_CMP THEN
;  212          0209  5                         BEGIN
;  213          0210  5                         NML$AB_MSGBLOCK [MSB$V_ENTD_FLD] = 1;
;  214          0211  5                         NML$AB_MSGBLOCK [MSB$A_ENTITY] = STRDSC;
;  215          0212  5                         NML$BLD_REPLY (NML$AB_MSGBLOCK, MSGSIZE);
;  216          0213  5                         NML$SEND (NML$AB_SNDBUFFER, .MSGSIZE);
;  217          0214  4                         END;
;  218          0215  4                 !
;  219          0216  4                 ! Advance pointer to next link in the buffer.
;  220          0217  4                 !
;  221          0218  4                 PTR = .PTR + 4;
;  222          0219  3                 END;
;  223          0220  2         END;
;  224          0221  2 !
;  225          0222  2 ! If no links were disconnected, return an error message.
;  226          0223  2 !
;  227          0224  2 IF NOT .NML$GL_PRS_FLGS [NML$V_PRS_ENTITY_FOUND] THEN
```

```
0225 3          BEGIN
0226 3          NML$AB_MSGBLOCK [MSB$L_FLAGS]  = MSB$M_DET_FLD;      ! Detail flag
0227 3          NML$AB_MSGBLOCK [MSB$B_CODE]   = NMA$C_STS_CMP;      ! Missing component status
0228 3          NML$AB_MSGBLOCK [MSB$W_DETAIL] = NMA$C_SENT_LNK;     ! Links
0229 3          NML$BLD_REPLY (NML$AB_MSGBLOCK, MSGSIZE);
0230 3          NML$SEND (NML$AB_SNDBUFFER, .MSGSIZE);
0231 2          END;
0232 1  END;                          ! of NML$DISC_KNOWN_LINKS

                                        .TITLE  NML$DISCONNECT NML Disconnect parameter module
                                        .IDENT  \V04-000\

                                        .PSECT  $PLIT$,NOWRT,NOEXE,2

          00000068  00000 P.AAA:        .LONG   104
          00000000' 00004               .ADDRESS NML$T_P2BUFFER
          00000014  00008 P.AAB:        .LONG   20
          00000000' 0000C               .ADDRESS U.1

                                        .PSECT  $OWN$,NOEXE,2

                    00000 NML$T_P2BUFFER:
                                        .BLKB   104
                    00068 NML$AB_ENTITY_BUF:
                                        .BLKB   20
                21  0007C ;_NFB
                          U.1:          .BYTE   33
                00  0007D               .BYTE   0
                08  0007E               .BYTE   8
                00  0007F               .BYTE   0
          08010012  00080               .LONG   134283282
          00000001  00084               .LONG   1
                00  00088               .BYTE   0
                00  00089               .BYTE   0
              0000  0008A               .WORD   0
          00000000  0008C               .LONG   0
                    00090 NMLPID:       .BLKB   4
         0319 0004  00094 GETLIST:      .WORD   4, 793
          00000000' 00098               .ADDRESS NMLPID
          00000000  0009C               .LONG   0
                    000A0 IOSB:         .BLKB   8

                          NML$Q_P2BFDSC=        P.AAA
                          U.2=                  P.AAB
                                        .EXTRN  NML$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  NML$BLDP2, NML$BLD_REPLY
                                                  .EXTRN  NML$GETEXEADR, NML$NETQIO
                                                  .EXTRN  NML$SEND, NML$ERROR_1
                                                  .EXTRN  SYS$GETJPI

                                                  .PSECT  $CODE$,NOWRT,2

                          0FFC 00000              .ENTRY  NML$DISCKNOWN, Save R2,R3,R4,R5,R6,R7,R8,-   ; 0112
                                                          R9,R10,R11                                   ;
       5B 00000000G    00   9E 00002              MOVAB   NML$SEND, R11                                ;
       5A 00000000G    00   9E 00009              MOVAB   NML$AB_SNDBUFFER, R10                        ;
       59 00000000G    00   9E 00010              MOVAB   NML$BLD_REPLY, R9                            ;
       58 00000000G    00   9E 00017              MOVAB   NML$GL_PRS_FLGS, R8                          ;
       57 00000000'    00   9E 0001E              MOVAB   IOSB, R7                                     ;
       56 00000000G    00   9E 00025              MOVAB   NML$AB_MSGBLOCK, R6                          ;
       5E              18   C2 0002C              SUBL2   #24, SP                                      ;
                       7E   7C 0002F              CLRQ    -(SP)                                        ; 0164
                       57   DD 00031              PUSHL   R7                                           ;
                 F4    A7   9F 00033              PUSHAB  GETLIST                                      ;
                       7E   7C 00036              CLRQ    -(SP)                                        ;
                       7E   D4 00038              CLRL    -(SP)                                        ;
 00000000G    00       07   FB 0003A              CALLS   #7, SYS$GETJPI                               ;
              55       50   D0 00041              MOVL    R0, STATUS                                   ;
              03       55   E9 00044              BLBC    STATUS, 1$                                   ; 0165
              0A       67   E8 00047              BLBS    IOSB, 2$                                     ; 0166
              7E       05   CE 0004A  1$:         MNEGL   #5, -(SP)                                    ; 0168
 00000000G    00       01   FB 0004D              CALLS   #1, NML$ERROR_1                              ;
       08     AE       03   B0 00054  2$:         MOVW    #3, STRDSC                                   ; 0175
       0C     AE   C8  A7   9E 00058              MOVAB   NML$AB_ENTITY_BUF, STRDSC+4                  ; 0176
                   C8  A7   94 0005D              CLRB    NML$AB_ENTITY_BUF                            ; 0177
                       54   D4 00060              CLRL    STRTFLG                                      ; 0178
```

```
                                52        0C   AE   D0 00062          MOVL    STRDSC+4, R2                                    ; 0203
                                7E        0C   AC   7D 00066 3$:      MOVQ    NODE_LEN, -(SP)                                 ; 0183
                                          08   AC   DD 0006A          PUSHL   NODE_PST
                                          F0   A7   DD 0006D          PUSHL   NMLPID                                          ; 0182
                                          10   AE   9F 00070          PUSHAB  LINK_CNT
                                   00000000G   00   9F 00073          PUSHAB  NML$GQ_QIOBFDSC
                                               54   DD 00079          PUSHL   STRTFLG
                          00000000V    00              07   FB 0007B          CALLS   #7, NML_GETLINKLIST
                                       72              50   E9 00082          BLBC    R0, 7$
                                       54              01   D0 00085          MOVL    #1, STRTFLG                            ; 0185
                                       53 00000000G    00   D0 00088          MOVL    NML$GQ_QIOBFDSC+4, PTR                 ; 0186
                                                       6E   D7 0008F 4$:      DECL    LINK_CNT                               ; 0187
                                                       D3   19 00091          BLSS    3$
                                             10        AE   9F 00093          PUSHAB  P2DSC                                  ; 0189
                                          00000000'    00   9F 00096          PUSHAB  NML$Q_P2BFDSC
                                                       7E   D4 0009C          CLRL    -(SP)
                                       7E              01   CE 0009E          MNEGL   #1, -(SP)
                                                       63   DD 000A1          PUSHL   (PTR)
                                                       7E   D4 000A3          CLRL    -(SP)
                          00000000G    00              06   FB 000A5          CALLS   #6, NML$BLDP2
                                                       7E   7C 000AC          CLRQ    -(SP)                                  ; 0193
                                             18        AE   9F 000AE          PUSHAB  P2DSC
                                          00000000'    00   9F 000B1          PUSHAB  U.2
                          00000000G    00              04   FB 000B7          CALLS   #4, NML$NETQIO
                                       55              50   D0 000BE          MOVL    R0, STATUS
                                       09              55   E9 000C1          BLBC    STATUS, 5$                             ; 0197
                                                       66   D4 000C4          CLRL    NML$AB_MSGBLOCK                        ; 0199
                                 04    A6              01   90 000C6          MOVB    #1, NML$AB_MSGBLOCK+4                  ; 0200
                                       68              08   88 000CA          BISB2   #8, NML$GL_PRS_FLGS                    ; 0201
                                 01    A2              63   B0 000CD 5$:      MOVW    (PTR), 1(R2)                           ; 0203
                          FFFFFFF0     8F              55   D1 000D1          CMPL    STATUS, #-16                           ; 0208
                                                       18   13 000D8          BEQL    6$
                                       66              10   88 000DA          BISB2   #16, NML$AB_MSGBLOCK                   ; 0210
                                 14    A6        08    AE   9E 000DD          MOVAB   STRDSC, NML$AB_MSGBLOCK+20             ; 0211
                                                 04    AE   9F 000E2          PUSHAB  MSGSIZE                                ; 0212
                                                       56   DD 000E5          PUSHL   R6
                                       69              02   FB 000E7          CALLS   #2, NML$BLD_REPLY
                                                 04    AE   DD 000EA          PUSHL   MSGSIZE                                ; 0213
                                                       5A   DD 000ED          PUSHL   R10
                                       6B              02   FB 000EF          CALLS   #2, NML$SEND
                                       53              04   C0 000F2 6$:      ADDL2   #4, PTR                                ; 0218
                                                       98   11 000F5          BRB     4$                                     ; 0187
                                    1B                 68   03 E0 000F7 7$:   BBS     #3, NML$GL_PRS_FLGS, 8$                ; 0224
                                       66              02   D0 000FB          MOVL    #2, NML$AB_MSGBLOCK                    ; 0226
                                 04    A6              08   8E 000FE          MNEGB   #8, NML$AB_MSGBLOCK+4                  ; 0227
                                 08    A6              07   B0 00102          MOVW    #7, NML$AB_MSGBLOCK+8                  ; 0228
                                                 04    AE   9F 00106          PUSHAB  MSGSIZE                                ; 0229
                                                       56   DD 00109          PUSHL   R6
                                       69              02   FB 0010B          CALLS   #2, NML$BLD_REPLY
                                                 04    AE   DD 0010E          PUSHL   MSGSIZE                                ; 0230
                                                       5A   DD 00111          PUSHL   R10
                                       6B              02   FB 00113          CALLS   #2, NML$SEND
                                                       04   00116 8$:         RET                                            ; 0232

; Routine Size:  279 bytes,    Routine Base:  $CODE$ + 0000
```

```
;   237          0233  1 %SBTTL 'NML_GETLINKLIST   Get a list of links to disconnect'
;   238          0234  1 ROUTINE NML_GETLINKLIST ( GET_STARTED, LISDSC, ENTRY_COUNT, NMLPID,
;   239          0235  1                         NODE_PST, NODE_LEN, NODE_ADR) =
;   240          0236  1
;   241          0237  1 !++
;   242          0238  1 ! FUNCTIONAL DESCRIPTION:
;   243          0239  1 !       This routine gets a bufferfull of currently active logical links
;   244          0240  1 !       from NETACP.  This bufferfull will be either known links or known
;   245          0241  1 !       links on a specified node.  The routine can be iteratively called
;   246          0242  1 !       to get more bufferfulls, until all links have been processed.
;   247          0243  1 !
;   248          0244  1 ! INPUTS:
;   249          0245  1 !       GET_STARTED     If false, this is the first call, so build
;   250          0246  1 !                       a new P2 buffer and start at the beginning
;   251          0247  1 !                       of the ACPs database.
;   252          0248  1 !       LISDSC          Address at which to return descriptor address
;   253          0249  1 !                       of the P4 buffer (which is full of links and
;   254          0250  1 !                       their PIDs.
;   255          0251  1 !       ENTRY_COUNT     Count of links in the P4 buffer.
;   256          0252  1 !       NMLPID          PID of NML process.  This link must be disconnected
;   257          0253  1 !                       last.
;   258          0254  1 !       NODE_PST        Parameter Semantic Table (PST) entry of node
;   259          0255  1 !                       (name or address) from which to disconnect links.
;   260          0256  1 !       NODE_LEN        Length of disconnect node ID.
;   261          0257  1 !       NODE_ADR        Address of disconnect node ID.
;   262          0258  1 !
;   263          0259  1 ! IMPLICIT INPUTS:
;   264          0260  1 !       NML$GL_PRS_FLGS [NML$V_PRS_QUALIFIER]   Set if links on a specified
;   265          0261  1 !                       node are to be returned.
;   266          0262  1 !       NML$GQ_ENTSTRDSC        Descriptor for node name or number.
;   267          0263  1 !
;   268          0264  1 !--
;   269          0265  1
;   270          0266  2 BEGIN
;   271          0267  2
;   272        P 0268  2 $NFBDSC ( GET_KNOWN_LINKS, SHOW, NFB$M_MULT OR NFB$M_ERRUPD, LLI
;   273        P 0269  2                 ,NFB$C_WILDCARD,          ! Search key 1 = wildcard, oper1 = eql
;   274        P 0270  2                 ,PID, NFB$C_OP_NEQ        ! Search key 2 = NML's PID, oper2 = neq
;   275        P 0271  2                 ,LLN                      ! Return link number
;   276          0272  2                 );
;   277          0273  2
;   278          0274  2 MAP
;   279          0275  2         NODE_PST: REF BBLOCK,
;   280          0276  2         GET_KNOWN_LINKS : DESCRIPTOR;
;   281          0277  2
;   282          0278  2 OWN
;   283          0279  2         P2_BUFFER : BBLOCK [NML$K_P2BUFLEN],
;   284          0280  2         P2DSC     : DESCRIPTOR;
;   285          0281  2
;   286          0282  2 BIND
;   287          0283  2         P2_BUF_DSC = UPLIT ( NML$K_P2BUFLEN, P2_BUFFER) : DESCRIPTOR;
;   288          0284  2
;   289          0285  2 LOCAL
;   290          0286  2         NFB     : REF BBLOCK,
;   291          0287  2         SEARCH_KEY_LEN,
;   292          0288  2         SEARCH_KEY_VAL,
;   293          0289  2         P3,
```

```
;   294     0290  2          STATUS,
;   295     0291  2          MSGSIZE;
;   296     0292  2
;   297     0293  2
;   298     0294  2      ! The first time this routine is called, GET_STARTED should be false.
;   299     0295  2      ! If so, build a P2 buffer with a search key with the node id, or
;   300     0296  2      ! a wildcard search key.  The search key tells NETACP which links
;   301     0297  2      ! to return.
;   302     0298  2      !
;   303     0299  2      IF NOT .GET_STARTED THEN
;   304     0300  3          BEGIN
;   305     0301  3          NFB = .GET_KNOWN_LINKS [DSC$A_POINTER];
;   306     0302  3          IF .NML$GL_PRS_FLGS [NML$V_PRS_QUALIFIER] THEN
;   307     0303  3              !
;   308     0304  3              ! The NICE command was DISCONNECT KNOWN LINKS WITH
;   309     0305  3              ! NODE <node id>.
;   310     0306  3              !
;   311     0307  4              BEGIN
;   312     0308  4              SEARCH_KEY_LEN = .NODE_LEN;
;   313     0309  4              NFB [NFB$L_SRCH_KEY] = .NODE_PST [PST$L_NFBID];
;   314     0310  4              IF .SEARCH_KEY_LEN EQL 0 THEN
;   315     0311  4                  !
;   316     0312  4                  ! Set the search key up to be the node address.
;   317     0313  4                  !
;   318     0314  5                  BEGIN
;   319     0315  5                  SEARCH_KEY_VAL = .(.NODE_ADR) <0,16>;
;   320     0316  5                  IF .SEARCH_KEY_VAL EQL 0 THEN
;   321     0317  5                      NML$GETEXEADR (SEARCH_KEY_VAL);
;   322     0318  5                  END
;   323     0319  4              ELSE
;   324     0320  4                  !
;   325     0321  4                  ! Set the search key up to be the node name.
;   326     0322  4                  !
;   327     0323  4                  SEARCH_KEY_VAL = .NODE_ADR;
;   328     0324  4              END
;   329     0325  3          ELSE
;   330     0326  3              !
;   331     0327  3              ! The NICE command was a DISCONNECT KNOWN LINKS.
;   332     0328  3              ! Clear search key 1 and oper 1 in case a DISCONNECT
;   333     0329  3              ! KNOWN LINKS WITH NODE <node id> was done previously.
;   334     0330  3              !
;   335     0331  4              BEGIN
;   336     0332  4              NFB [NFB$L_SRCH_KEY] = 0;
;   337     0333  4              NFB [NFB$B_OPER] = 0;
;   338     0334  4              SEARCH_KEY_LEN = -1;
;   339     0335  4              SEARCH_KEY_VAL = 0;
;   340     0336  3              END;
;   341     0337  3          NML$BLDP2 (.SEARCH_KEY_LEN, .SEARCH_KEY_VAL, 0, .NMLPID,
;   342     0338  3                                              P2_BUF_DSC, P2DSC);
;   343     0339  2          END;
;   344     0340  2
;   345     0341  2      STATUS = NML$NETQIO ( GET_KNOWN_LINKS, P2DSC, P3, .LISDSC);
;   346     0342  2
;   347     0343  2      IF NOT .STATUS AND (.STATUS NEQ NML$_STS_CMP) THEN
;   348     0344  3          BEGIN
;   349     0345  3          NML$BLD_REPLY (NML$AB_MSGBLOCK, MSGSIZE);
;   350     0346  3          $SIGNAL_MSG (NML$AB_SNDBUFFER, .MSGSIZE);
```

```
;  351          0347  2          END;
;  352          0348  2
;  353          0349  2 .ENTRY_COUNT = .(.P2DSC [DSC$A_POINTER]);
;  354          0350  2 RETURN .STATUS;
;  355          0351  2
;  356          0352  1 END;    ! of NML_GETLINKLIST


                                                .PSECT  $PLIT$,NOWRT,NOEXE,2

                                    0000001C  00010 P.AAC:  .LONG   28                                              ;
                                    00000000' 00014         .ADDRESS U.3                                            ;
                                    00000068  00018 P.AAD:  .LONG   104                                             ;
                                    00000000' 0001C         .ADDRESS P2_BUFFER                                      ;

                                                .PSECT  $OWN$,NOEXE,2

                                          22    000A8 ;_NFB
                                                U.3:    .BYTE   34                                                  ;
                                          03    000A9         .BYTE   3                                             ;
                                          08    000AA         .BYTE   8                                             ;
                                          00    000AB         .BYTE   0                                             ;
                                    00000001    000AC         .LONG   1                                             ;
                                    08010015    000B0         .LONG   134283285                                     ;
                                          03    000B4         .BYTE   3                                             ;
                                          00    000B5         .BYTE   0                                             ;
                                        0000    000B6         .WORD   0                                             ;
                                    08010012    000B8         .LONG   134283282                                     ;
                                    00000000    000BC         .LONG   0                                             ;
                                                000C0         .BLKB   4
                                                000C4 P2_BUFFER:
                                                      .BLKB   104
                                                0012C P2DSC:  .BLKB   8

                                                U.4=                    P.AAC
                                                P2_BUF_DSC=             P.AAD


                                                .PSECT  $CODE$,NOWRT,2

                                                001C 00000 NML_GETLINKLIST:
                                                      .WORD   Save R2,R3,R4                                         ; 0234
                                          54 00000000'  00  9E 00002    MOVAB   GET_KNOWN_LINKS+4, R4                 ;
                                          53 00000000'  00  9E 00009    MOVAB   P2DSC, R3                             ;
                                          5E            0C  C2 00010    SUBL2   #12, SP                               ;
                                          50      04    AC  E8 00013    BLBS    GET_STARTED, 4$                       ; 0299
                                          50            64  D0 00017    MOVL    GET_KNOWN_LINKS+4, NFB                ; 0301
                                  24 00000000G  00      02  E1 0001A    BBC     #2, NML$GL_PRS_FLGS, 2$               ; 0302
                                          51      14    AC  7D 00022    MOVQ    NODE_PST, R1                          ; 0309
                                    04    A0      0C    A1  D0 00026    MOVL    12(R1), 4(NFB)                        ;
                                                        52  D5 0002B    TSTL    SEARCH_KEY_LEN                        ; 0310
                                                        11  12 0002D    BNEQ    1$                                    ;
                                          6E      1C    BC  3C 0002F    MOVZWL  @NODE_ADR, SEARCH_KEY_VAL             ; 0315
                                                        1C  12 00033    BNEQ    3$                                    ; 0316
                                                        5E  DD 00035    PUSHL   SP                                    ; 0317
                                    00000000G   00      01  FB 00037    CALLS   #1, NML$GETEXEADR                     ;
```

```
                                   11   11 0003E          BRB      3$                                              ; 0310
                    6E        1C   AC   D0 00040 1$:      MOVL     NODE_ADR, SEARCH_KEY_VAL                        ; 0323
                                   0B   11 00044          BRB      3$                                              ; 0302
                              04   A0   D4 00046 2$:      CLRL     4(NFB)                                          ; 0332
                              03   A0   94 00049          CLRB     3(NFB)                                          ; 0333
                    52             01   CE 0004C          MNEGL    #1, SEARCH_KEY_LEN                              ; 0334
                                   6E   D4 0004F          CLRL     SEARCH_KEY_VAL                                  ; 0335
                                   53   DD 00051 3$:      PUSHL    R3                                              ; 0337
                              04   A4   9F 00053          PUSHAB   P2_BUF_DSC                                      ;
                              10   AC   DD 00056          PUSHL    NML[PID                                         ;
                                   7E   D4 00059          CLRL     -(SP)                                           ;
                              10   AE   DD 0005B          PUSHL    SEARCH_KEY_VAL                                  ;
                                   52   DD 0005E          PUSHL    SEARCH_KEY_LEN                                  ;
          00000000G   00           06   FB 00060          CALLS    #6, NML$BLDP2                                   ;
                              08   AC   DD 00067 4$:      PUSHL    LISDSC                                          ; 0341
                              08   AE   9F 0006A          PUSHAB   P3                                              ;
                                   53   DD 0006D          PUSHL    R3                                              ;
                              FC   A4   9F 0006F          PUSHAB   GET_KNOWN_LINKS                                 ;
          00000000G   00           04   FB 00072          CALLS    #4, NML$NETQIO                                  ;
                      52           50   D0 00079          MOVL     R0, STATUS                                      ;
                      2F           52   E8 0007C          BLBS     STATUS, 5$                                      ; 0343
          FFFFFFF0    8F           52   D1 0007F          CMPL     STATUS, #-16                                    ;
                                   26   13 00086          BEQL     5$                                              ;
                              08   AE   9F 00088          PUSHAB   MSGSIZE                                         ; 0345
                      00000000G    00   9F 0008B          PUSHAB   NML$AB_MSGBLOCK                                 ;
          00000000G   00           02   FB 00091          CALLS    #2, NML$BLD_REPLY                               ;
                              08   AE   DD 00098          PUSHL    MSGSIZE                                         ; 0346
                      00000000G    00   9F 0009B          PUSHAB   NML$AB_SNDBUFFER                                ;
                      01F90000     8F   DD 000A1          PUSHL    #33095680                                       ;
          00000000G   00           03   FB 000A7          CALLS    #3, LIB$SIGNAL                                  ;
                      50      04   A3   D0 000AE 5$:      MOVL     P2DSC+4, R0                                     ; 0349
               0C     BC           60   D0 000B2          MOVL     (R0), @ENTRY_COUNT                              ;
                      50           52   D0 000B6          MOVL     STATUS, R0                                      ; 0350
                                        04 000B9          RET                                                      ; 0352

; Routine Size:  186 bytes,    Routine Base:  $CODE$ + 0117
```

```
;   358          0353  1 %SBTTL 'NML$DISCONNECT  Disconnect single link'
;   359          0354  1 GLOBAL ROUTINE NML$DISCONNECT (ENTITY, LINK) : NOVALUE =
;   360          0355  1
;   361          0356  1 !++
;   362          0357  1 ! FUNCTIONAL DESCRIPTION:
;   363          0358  1 !
;   364          0359  1 !       This routine disconnects a sinlge link with the specified node.
;   365          0360  1 !
;   366          0361  1 ! FORMAL PARAMETERS:
;   367          0362  1 !
;   368          0363  1 !       ENTITY          NML$C_LINKS - Not used.
;   369          0364  1 !       LINK            Word-sized link address.
;   370          0365  1 !
;   371          0366  1 ! IMPLICIT INPUTS:
;   372          0367  1 !
;   373          0368  1 !       NML$GQ_ENTSTRDSC    Contains the node ID.
;   374          0369  1 !
;   375          0370  1 !--
;   376          0371  1
;   377          0372  2 BEGIN
;   378          0373  2
;   379          0374  2 MAP
;   380          0375  2         LINK : WORD;
;   381          0376  2
;   382        P 0377  2 $NFBDSC ( DISC_LINK_NFBDSC, DELETE, , LLI
;   383        P 0378  2                 ,LLN,             ! Search key one = link number, oper1 = eql
;   384        P 0379  2                 ,NFB$C_WILDCARD,! Search key two = wildcard, oper2 = eql
;   385          0380  2                 );
;   386          0381  2
;   387          0382  2 LOCAL
;   388          0383  2         STATUS,
;   389          0384  2         P2DSC,
;   390          0385  2         MSGSIZE;
;   391          0386  2
;   392          0387  2 !
;   393          0388  2 ! Build the P2 buffer to tell NETACP which link to disconnect.  Then,
;   394          0389  2 ! perform the disconnect.
;   395          0390  2 !
;   396          0391  2 NML$BLDP2 ( 0, .LINK, -1, 0, NML$Q_P2BFDSC, P2DSC);
;   397          0392  2 IF NML$NETQIO (DISC_LINK_NFBDSC, P2DSC, 0, 0) THEN
;   398          0393  3     BEGIN
;   399          0394  3     NML$AB_MSGBLOCK [MSB$L_FLAGS] = 0;
;   400          0395  3     NML$AB_MSGBLOCK [MSB$B_CODE] = NMA$C_STS_SUC;
;   401          0396  2     END;
;   402          0397  2 NML$BLD_REPLY (NML$AB_MSGBLOCK, MSGSIZE);
;   403          0398  2 NML$SEND (NML$AB_SNDBUFFER, .MSGSIZE);
;   404          0399  2
;   405          0400  1 END;             ! of  NML$DISCONNECT


                                                        .PSECT  $PLIT$,NOWRT,NOEXE,2

                                        00000014  00020 P.AAE:  .LONG   20                                              ;
                                        00000000' 00024         .ADDRESS U.5                                            ;

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

```
                          21  00134 ;_NFB
                                    U.5:        .BYTE   33                          ;
                          00  00135             .BYTE   0                           ;
                          08  00136             .BYTE   8                           ;
                          00  00137             .BYTE   0                           ;
                    08010012  00138             .LONG   134283282                   ;
                    00000001  0013C             .LONG   1                           ;
                          00  00140             .BYTE   0                           ;
                          00  00141             .BYTE   0                           ;
                        0000  00142             .WORD   0                           ;
                    00000000  00144             .LONG   0                           ;

                                    U.6=                P.AAE

                                                .PSECT  $CODE$,NOWRT,2

                        0004  00000             .ENTRY  NML$DISCONNECT, Save R2     ; 0354
        52 00000000G  00  9E  00002             MOVAB   NML$AB_MSGBLOCK, R2         ;
        5E            08  C2  00009             SUBL2   #8, SP                      ;
                      5E  DD  0000C             PUSHL   SP                          ; 0391
           00000000'  00  9F  0000E             PUSHAB  NML$Q_P2BFDSC               ;
                      7E  D4  00014             CLRL    -(SP)                       ;
        7E            01  CE  00016             MNEGL   #1, -(SP)                   ;
        7E       08   AC  3C  00019             MOVZWL  LINK, -(SP)                 ;
                      7E  D4  0001D             CLRL    -(SP)                       ;
  00000000G  00       06  FB  0001F             CALLS   #6, NML$BLDP2               ;
                      7E  7C  00026             CLRQ    -(SP)                       ; 0392
                 08   AE  9F  00028             PUSHAB  P2DSC                       ;
           00000000'  00  9F  0002B             PUSHAB  U.6                         ;
  00000000G  00       04  FB  00031             CALLS   #4, NML$NETQIO              ;
             06       50  E9  00038             BLBC    R0, 1$                      ;
                      62  D4  0003B             CLRL    NML$AB_MSGBLOCK             ; 0394
        04   A2       01  90  0003D             MOVB    #1, NML$AB_MSGBLOCK+4       ; 0395
                 04   AE  9F  00041 1$:         PUSHAB  MSGSIZE                     ; 0397
                      52  DD  00044             PUSHL   R2                          ;
  00000000G  00       02  FB  00046             CALLS   #2, NML$BLD_REPLY           ;
                 04   AE  DD  0004D             PUSHL   MSGSIZE                     ; 0398
           00000000G  00  9F  00050             PUSHAB  NML$AB_SNDBUFFER            ;
  00000000G  00       02  FB  00056             CALLS   #2, NML$SEND                ;
                          04  0005D             RET                                 ; 0400

; Routine Size:  94 bytes,    Routine Base:  $CODE$ + 01D1


;   406         0401   1
;   407         0402   1 END                                ! End of module
;   408         0403   1
;   409         0404   0 ELUDOM



                                                .EXTRN  LIB$SIGNAL

;                         PSECT SUMMARY
```

```
;       Name                     Bytes                         Attributes
;
;   $OWN$                          328  NOVEC,  WRT,  RD ,NOEXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)
;   $PLIT$                          40  NOVEC,NOWRT,  RD ,NOEXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)
;   $CODE$                         559  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       43        12         27        00:00.1
;   _$255$DUA28:[SHRLIB]NMALIBRY.L32;1       887        4         0         47        00:00.2
;   _$255$DUA28:[SHRLIB]NET.L32;1           1279       12         0         63        00:00.3
;   _$255$DUA28:[SYSLIB]STARLET.L32;1       9776        6         0        581        00:03.3




;                              COMMAND QUALIFIERS

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

; Size:            559 code + 368 data bytes
; Run Time:           00:15.5
; Elapsed Time:       00:42.0
; Lines/CPU Min:      1561
; Lexemes/CPU-Min: 14822
; Memory Used:  133 pages
; Compilation Complete
```

NMLFORWRD
LIS

NMLENTRY
LIS

NMLDEFINE
LIS

NMLFILEIO
LIS

NMLLIB
LIS

NMLINISTA
LIS

NMLDISC
LIS