J 4

```
   AAAAAAAAA     NNN         NNN     AAAAAAAAA     LLL              YYY         YYY  ZZZZZZZZZZZZZZZ
   AAAAAAAAA     NNN         NNN     AAAAAAAAA     LLL              YYY         YYY  ZZZZZZZZZZZZZZZ
   AAAAAAAAA     NNN         NNN     AAAAAAAAA     LLL              YYY         YYY  ZZZZZZZZZZZZZZZ
AAA         AAA  NNN         NNN  AAA         AAA  LLL              YYY         YYY              ZZZ
AAA         AAA  NNN         NNN  AAA         AAA  LLL              YYY         YYY              ZZZ
AAA         AAA  NNN         NNN  AAA         AAA  LLL              YYY         YYY              ZZZ
AAA         AAA  NNNNNN      NNN  AAA         AAA  LLL                 YYY   YYY              ZZZ
AAA         AAA  NNNNNN      NNN  AAA         AAA  LLL                 YYY   YYY              ZZZ
AAA         AAA  NNNNNN      NNN  AAA         AAA  LLL                 YYY   YYY              ZZZ
AAA         AAA  NNN   NNN   NNN  AAA         AAA  LLL                    YYY              ZZZ
AAA         AAA  NNN   NNN   NNN  AAA         AAA  LLL                    YYY              ZZZ
AAA         AAA  NNN   NNN   NNN  AAA         AAA  LLL                    YYY              ZZZ
AAAAAAAAAAAAAAA  NNN      NNNNNN  AAAAAAAAAAAAAAA  LLL                    YYY           ZZZ
AAAAAAAAAAAAAAA  NNN      NNNNNN  AAAAAAAAAAAAAAA  LLL                    YYY           ZZZ
AAAAAAAAAAAAAAA  NNN      NNNNNN  AAAAAAAAAAAAAAA  LLL                    YYY           ZZZ
AAA         AAA  NNN         NNN  AAA         AAA  LLL                    YYY        ZZZ
AAA         AAA  NNN         NNN  AAA         AAA  LLL                    YYY        ZZZ
AAA         AAA  NNN         NNN  AAA         AAA  LLL                    YYY        ZZZ
AAA         AAA  NNN         NNN  AAA         AAA  LLLLLLLLLLLLLLL        YYY        ZZZZZZZZZZZZZZZ
AAA         AAA  NNN         NNN  AAA         AAA  LLLLLLLLLLLLLLL        YYY        ZZZZZZZZZZZZZZZ
AAA         AAA  NNN         NNN  AAA         AAA  LLLLLLLLLLLLLLL        YYY        ZZZZZZZZZZZZZZZ
```

```
**FILE**ID**OBJMISC                                   C 1



   000000    BBBBBBBB           JJ  MM       MM   IIIIII      SSSSSSSS    CCCCCCCC
   000000    BBBBBBBB           JJ  MM       MM   IIIIII      SSSSSSSS    CCCCCCCC
 00      00  BB      BB         JJ  MMMM   MMMM     II      SS          CC
 00      00  BB      BB         JJ  MMMM   MMMM     II      SS          CC
 00      00  BB      BB         JJ  MM  MM  MM      II      SS          CC
 00      00  BB      BB         JJ  MM  MM  MM      II      SS          CC
 00      00  BBBBBBBB           JJ  MM       MM     II        SSSSSS    CC
 00      00  BBBBBBBB           JJ  MM       MM     II        SSSSSS    CC
 00      00  BB      BB  JJ     JJ  MM       MM     II              SS  CC
 00      00  BB      BB  JJ     JJ  MM       MM     II              SS  CC
 00      00  BB      BB  JJ     JJ  MM       MM     II              SS  CC
 00      00  BB      BB  JJ     JJ  MM       MM     II              SS  CC              ....
   000000    BBBBBBBB      JJJJJJ   MM       MM   IIIIII    SSSSSSSS      CCCCCCCC      ....
   000000    BBBBBBBB      JJJJJJ   MM       MM   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
```

```
%title 'OBJMISC - Analyze Miscellaneous Object Records'
        module objmisc  (
                        ident='V04-000') = begin

!
!****************************************************************************
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!*                                                                          *
!****************************************************************************
!


!++
! Facility:     VAX/VMS Analyze Facility, Analyze Miscellaneous Object Records
!
! Abstract:     This module is responsible for analyzing the following object
!               record types:
!                       EOM     End-of-Module Records
!                       HDR     Header Records
!                       LNK     Link Option Records
!                               and also reserved record types
!
!
! Environment:
!
! Author: Paul C. Anagnostopoulos, Creation Date: 13 January 1981, my birthday!
!
! Modified By:
!
!       V03-004 ROP0020         Robert Posniak          11-JUL-1984
!               Ensure we don't point beyond header record after
!               we print creation date/time.
!
!       V03-003 MCN0158         Maria del C. Nasr       22-Mar-1984
!               Add size parameter to call to ANL$CHECK_SYMBOL, since now
!               it can be up to 39 characters (maximum size of shareable image
!               name).
!
!       V03-002 JWT0122         Jim Teague              26-May-1983
!               Remove requirement for a patch date/time field.  Such
```

```
;    58         0058  1 !                a field is meaningless, and the Linker ignores it.
;    59         0059  1 !
;    60         0060  1 !        V03-001 PCA1011         Paul C. Anagnostopoulos  1-Apr-1983
;    61         0061  1 !                Change the message prefix to ANLOBJ$_ to ensure that
;    62         0062  1 !                message symbols are unique across all ANALYZEs.  This
;    63         0063  1 !                is necessitated by the new merged message files.
;    64         0064  1 !--
```

```
1 %sbttl 'Module Declarations'
1 !
1 ! Libraries and Requires:
1 !
1
1 library 'lib';
1 require 'objexereq';
1
1 !
1 ! Table of Contents:
1 !
1
1 forward routine
1         anl$object_eom: novalue,
1         anl$object_hdr: novalue,
1         anl$object_hdr_mhd: novalue,
1         anl$object_record_size: novalue,
1         anl$object_hdr_text: novalue,
1         anl$object_hdr_mtc: novalue,
1         anl$object_lnk: novalue;
1
1 !
1 ! External References:
1 !
1
1 external routine
1         anl$check_flags,
1         anl$check_symbol,
1         anl$check_when,
1         anl$format_error,
1         anl$format_flags,
1         anl$format_hex,
1         anl$format_line,
1         anl$object_env_check,
1         anl$object_psect_check,
1         anl$object_psect_ref,
1         anl$object_record_line,
1         anl$object_tir_clean,
1         anl$report_line;
1
1 !
1 ! Own Variables:
1 !
1 ! The following variable is used to remember the record size from
1 ! the module header.
1
1 own
1         mhd_record_size: long initial(obj$c_maxrecsiz);
```

```
1 %sbttl 'ANL$OBJECT_EOM - Analyze EOM and EOMW Records'
1 !++
1 ! Functional Description:
1 !       This routine analyzes end of module records, of which there are
1 !       two flavors.
1 !
1 ! Formal Parameters:
1 !       record_number   Number of this object record.
1 !       the_record      Address of descriptor of the record.
1 !
1 ! Implicit Inputs:
1 !       global data
1 !
1 ! Implicit Outputs:
1 !       global data
1 !
1 ! Returned Value:
1 !       none
1 !
1 ! Side Effects:
1 !
1 !--
1
1
2 global routine anl$object_eom(record_number,the_record): novalue = begin
2
2 bind
2       record_dsc = .the_record: descriptor;
2
2 own
2       transfer_flags_def: vector[2,long] initial(
2                               0,
2                               uplit byte (%ascic 'EOM$V_WKTFR')
2                               );
2
2 local
2       status: long,
2       scanp: ref block[,byte],
2       fit_ok: byte;
2
2 builtin
2       nullparameter;
2
2
2 ! If we are called with no arguments, it means that we reached the end of
2 ! an object file and were missing an end-of-module record.  In this case,
2 ! we are to "force" and end-of-module.  Skip all the record analysis stuff.
2
3 if not nullparameter(1) then (
3
3 ! First we print a major line for the record.  We won't indent this code
3 ! because it is so long.
3
3 scanp = .record_dsc[ptr];
4 anl$object_record_line((if .scanp[obj$b_rectyp] eqlu obj$c_eom then anlobj$_objeomrec
3                                                                   else anlobj$_objeomwrec),
3                       .record_number,record_dsc);
```

```
3 anl$report_line(0);
3
3 ! Now we make sure the severity is present and print it.
3
3 fit_ok = true;
3
3 ensure_field_fit(eom$b_comcod,record_dsc);
4 if .fit_ok then (
5         anl$format_line(0,1,    (selectoneu .scanp[eom$b_comcod] of set
5                                 [eom$c_success]:        anlobj$_objeomsevsuc;
5                                 [eom$c_warning]:        anlobj$_objeomsevwrn;
5                                 [eom$c_error]:          anlobj$_objeomseverr;
5                                 [eom$c_abort]:          anlobj$_objeomsevabt;
5                                 [4 to 10]:              anlobj$_objeomsevres;
5                                 [otherwise]:            anlobj$_objeomsevign;
4                                 tes),
4                                 .scanp[eom$b_comcod]);
4         if .scanp[eom$b_comcod] gequ 4 and .scanp[eom$b_comcod] lequ 10 then
4                 anl$format_error(anlobj$_objeombadsev);
3 );
3
3 ! Now we are done if that is the end of the record.
3
4 if .record_dsc[len] gtru 2 then (
4
4         ! I guess we have a transfer address.  First there is a psect number,
4         ! which is either a byte or word depending on the record type.  Be sure
4         ! to record the reference.
4
5         if .scanp[obj$b_rectyp] eqlu obj$c_eom then (
5                 ensure_field_fit(eom$b_psindx,record_dsc);
6                 if .fit_ok then (
6                         anl$format_line(0,1,anlobj$_objpsect,.scanp[eom$b_psindx]);
6                         anl$object_psect_ref(.scanp[eom$b_psindx]);
6                         scanp = scanp[eom$l_tfradr];
5                 );
5
5         ) else (
5
5                 ensure_field_fit(eomw$w_psindx,record_dsc);
6                 if .fit_ok then (
6                         anl$format_line(0,1,anlobj$_objpsect,.scanp[eomw$w_psindx]);
6                         anl$object_psect_ref(.scanp[eomw$w_psindx]);
6                         scanp = scanp[eomw$l_tfradr];
5                 );
4         );
4
4         ! Now we have the transfer offset itself.  Print it.
4
4         ensure_field_fit(0,0,32,0,record_dsc);
5         if .fit_ok then (
5                 anl$format_line(0,1,anlobj$_objvalue,.scanp[0,0,32,0]);
5                 if .scanp[0,0,32,0] gtru %x'3fffffff' then
5                         anl$format_error(anlobj$_objp0space);
5                 scanp = .scanp + 4;
4         );
4
4          ! Again, the record may end at this point.  If so, we are done.
4
5          if .record_dsc[ptr]+.record_dsc[len] gtru .scanp then (
5
5                 ! OK, so there must be the transfer flags byte.
5                 ! Print it and check it.
5
5                 anl$format_flags(1,anlobj$_objeomflags,.scanp[0,0,8,0],transfer_flags_def);
5                 anl$check_flags(.scanp[0,0,8,0],transfer_flags_def);
5                 increment (scanp);
5
5                 ! We must ensure that there are no spurious bytes at the end.
5
5                 if .record_dsc[ptr]+.record_dsc[len] gtru .scanp then
5                        anl$format_error(anlobj$_extrabytes);
4          );
3 );
2 );
```

```
2 ! The following code is necessary to check for module-wide errors and to
2 ! clean up after the module.
2
2 ! We have to check for various TIR errors and let it clean up.
2
2 anl$object_tir_clean();
2
2 ! We have to check to see that no psect reference errors occurred.
2 ! We also have to do the same for environments.
2
2 anl$object_psect_check();
2 anl$object_env_check();
2
2 ! Finally, we reset the maximum record size for the next module.
2
2 mhd_record_size = obj$c_maxrecsiz;
2
2 return;
2
1 end;
```

```
                                                                  .TITLE  OBJMISC OBJMISC - Analyze Miscellaneous Object
;                                                                                 Records
                                                                  .IDENT  \V04-000\

                                                                  .PSECT  $PLIT$,NOWRT,NOEXE,2

       52  46  54  4B  57  5F  56  24  4D  4F  45  0B  00000 P.AAA:  .ASCII  <11>\EOM$V_WKTFR\                              ;

                                                                  .PSECT  $OWN$,NOEXE,2

                                         00000800  00000 MHD_RECORD_SIZE:
                                                                  .LONG   2048                                          ;
                                         00000000  00004 TRANSFER_FLAGS_DEF:
                                                                  .LONG   0                                             ;
                                         00000000' 00008          .ADDRESS P.AAA                                        ;

                                                                  .EXTRN  ANLOBJ$_OK, ANLOBJ$_ANYTHING
                                                                  .EXTRN  ANLOBJ$_DATATYPE
                                                                  .EXTRN  ANLOBJ$_ERRORCOUNT
                                                                  .EXTRN  ANLOBJ$_ERRORNONE
                                                                  .EXTRN  ANLOBJ$_ERRORS, ANLOBJ$_EXEFIXA
                                                                  .EXTRN  ANLOBJ$_EXEFIXAIMAGE
                                                                  .EXTRN  ANLOBJ$_EXEFIXALINE
                                                                  .EXTRN  ANLOBJ$_EXEFIXCOUNT
                                                                  .EXTRN  ANLOBJ$_EXEFIXEXTRA
                                                                  .EXTRN  ANLOBJ$_EXEFIXFIXED
                                                                  .EXTRN  ANLOBJ$_EXEFIXFLAGS
                                                                  .EXTRN  ANLOBJ$_EXEFIXG
                                                                  .EXTRN  ANLOBJ$_EXEFIXGIMAGE
                                                                  .EXTRN  ANLOBJ$_EXEFIXGLINE
                                                                  .EXTRN  ANLOBJ$_EXEFIXLIST
                                                                  .EXTRN  ANLOBJ$_EXEFIXNAME
                                                                  .EXTRN  ANLOBJ$_EXEFIXNAMEO
                                                                  .EXTRN  ANLOBJ$_EXEFIXP
                                                                  .EXTRN  ANLOBJ$_EXEFIXPSECT
```

```
        .EXTRN  ANLOBJ$_EXEFIXUP
        .EXTRN  ANLOBJ$_EXEFIXUPNONE
        .EXTRN  ANLOBJ$_EXEGST, ANLOBJ$_EXEHDR
        .EXTRN  ANLOBJ$_EXEHDRACTIVE
        .EXTRN  ANLOBJ$_EXEHDRBLKCOUNT
        .EXTRN  ANLOBJ$_EXEHDRCHANCOUNT
        .EXTRN  ANLOBJ$_EXEHDRCHANDEF
        .EXTRN  ANLOBJ$_EXEHDRDECECO
        .EXTRN  ANLOBJ$_EXEHDRDMT
        .EXTRN  ANLOBJ$_EXEHDRDST
        .EXTRN  ANLOBJ$_EXEHDRFILEID
        .EXTRN  ANLOBJ$_EXEHDRFIXED
        .EXTRN  ANLOBJ$_EXEHDRFLAGS
        .EXTRN  ANLOBJ$_EXEHDRGBLIDENT
        .EXTRN  ANLOBJ$_EXEHDRGST
        .EXTRN  ANLOBJ$_EXEHDRIDENT
        .EXTRN  ANLOBJ$_EXEHDRIMAGEID
        .EXTRN  ANLOBJ$_EXEHDRISD
        .EXTRN  ANLOBJ$_EXEHDRISDBASE
        .EXTRN  ANLOBJ$_EXEHDRISDCOUNT
        .EXTRN  ANLOBJ$_EXEHDRISDFLAGS
        .EXTRN  ANLOBJ$_EXEHDRISDGBLNAM
        .EXTRN  ANLOBJ$_EXEHDRISDNUM
        .EXTRN  ANLOBJ$_EXEHDRISDPFCDEF
        .EXTRN  ANLOBJ$_EXEHDRISDPFCSIZ
        .EXTRN  ANLOBJ$_EXEHDRISDTYPE
        .EXTRN  ANLOBJ$_EXEHDRISDVBN
        .EXTRN  ANLOBJ$_EXEHDRLINKID
        .EXTRN  ANLOBJ$_EXEHDRMATCH
        .EXTRN  ANLOBJ$_EXEHDRNAME
        .EXTRN  ANLOBJ$_EXEHDRNOPATCH
        .EXTRN  ANLOBJ$_EXEHDRPAGECOUNT
        .EXTRN  ANLOBJ$_EXEHDRPAGEDEF
        .EXTRN  ANLOBJ$_EXEHDRPATCH
        .EXTRN  ANLOBJ$_EXEHDRPATCHDATE
        .EXTRN  ANLOBJ$_EXEHDRPRIV
        .EXTRN  ANLOBJ$_EXEHDRROPATCH
        .EXTRN  ANLOBJ$_EXEHDRRWPATCH
        .EXTRN  ANLOBJ$_EXEHDRSYMDBG
        .EXTRN  ANLOBJ$_EXEHDRSYSVER
        .EXTRN  ANLOBJ$_EXEHDRTEXTVBN
        .EXTRN  ANLOBJ$_EXEHDRTIME
        .EXTRN  ANLOBJ$_EXEHDRTYPEEXE
        .EXTRN  ANLOBJ$_EXEHDRTYPELIM
        .EXTRN  ANLOBJ$_EXEHDRUSERECO
        .EXTRN  ANLOBJ$_EXEHDRXFER1
        .EXTRN  ANLOBJ$_EXEHDRXFER2
        .EXTRN  ANLOBJ$_EXEHDRXFER3
        .EXTRN  ANLOBJ$_EXEHEADING
        .EXTRN  ANLOBJ$_EXEPATCH
        .EXTRN  ANLOBJ$_FLAG, ANLOBJ$_HEXDATA
        .EXTRN  ANLOBJ$_HEXHEADING1
        .EXTRN  ANLOBJ$_HEXHEADING2
        .EXTRN  ANLOBJ$_INDMSGSEC
        .EXTRN  ANLOBJ$_INTERACT
        .EXTRN  ANLOBJ$_MASK, ANLOBJ$_OBJCPRREC
        .EXTRN  ANLOBJ$_OBJDBGREC
        .EXTRN  ANLOBJ$_OBJENV, ANLOBJ$_OBJEOMFLAGS
        .EXTRN  ANLOBJ$_OBJEOMREC
        .EXTRN  ANLOBJ$_OBJEOMSEVABT
        .EXTRN  ANLOBJ$_OBJEOMSEVERR
        .EXTRN  ANLOBJ$_OBJEOMSEVIGN
        .EXTRN  ANLOBJ$_OBJEOMSEVRES
        .EXTRN  ANLOBJ$_OBJEOMSEVSUC
        .EXTRN  ANLOBJ$_OBJEOMSEVWRN
        .EXTRN  ANLOBJ$_OBJEOMWREC
        .EXTRN  ANLOBJ$_OBJFADPASSMECH
        .EXTRN  ANLOBJ$_OBJGSDENV
        .EXTRN  ANLOBJ$_OBJGSDENVFLAGS
        .EXTRN  ANLOBJ$_OBJGSDENVPAR
        .EXTRN  ANLOBJ$_OBJGSDEPM
        .EXTRN  ANLOBJ$_OBJGSDEPMW
        .EXTRN  ANLOBJ$_OBJGSDIDC
        .EXTRN  ANLOBJ$_OBJGSDIDCENT
        .EXTRN  ANLOBJ$_OBJGSDIDCFLAGS
        .EXTRN  ANLOBJ$_OBJGSDIDCMATCH
        .EXTRN  ANLOBJ$_OBJGSDIDCOBJ
        .EXTRN  ANLOBJ$_OBJGSDIDCVALA
        .EXTRN  ANLOBJ$_OBJGSDIDCVALB
        .EXTRN  ANLOBJ$_OBJGSDLEPM
        .EXTRN  ANLOBJ$_OBJGSDLPRO
        .EXTRN  ANLOBJ$_OBJGSDLSY
        .EXTRN  ANLOBJ$_OBJGSDPRO
        .EXTRN  ANLOBJ$_OBJGSDPROW
        .EXTRN  ANLOBJ$_OBJGSDPSC
        .EXTRN  ANLOBJ$_OBJGSDPSCALIGN
        .EXTRN  ANLOBJ$_OBJGSDPSCALLOC
        .EXTRN  ANLOBJ$_OBJGSDPSCBASE
        .EXTRN  ANLOBJ$_OBJGSDPSCFLAGS
        .EXTRN  ANLOBJ$_OBJGSDREC
        .EXTRN  ANLOBJ$_OBJGSDSPSC
        .EXTRN  ANLOBJ$_OBJGSDSYM
        .EXTRN  ANLOBJ$_OBJGSDSYMW
        .EXTRN  ANLOBJ$_OBJGTXREC
        .EXTRN  ANLOBJ$_OBJHDRIGNREC
        .EXTRN  ANLOBJ$_OBJHEADING
        .EXTRN  ANLOBJ$_OBJLITINDEX
        .EXTRN  ANLOBJ$_OBJLNKREC
        .EXTRN  ANLOBJ$_OBJLNMREC
        .EXTRN  ANLOBJ$_OBJMHDCREATE
        .EXTRN  ANLOBJ$_OBJMHDNAME
        .EXTRN  ANLOBJ$_OBJMHDPATCH
        .EXTRN  ANLOBJ$_OBJMHDREC
        .EXTRN  ANLOBJ$_OBJMHDRECSIZ
        .EXTRN  ANLOBJ$_OBJMHDSTRLVL
        .EXTRN  ANLOBJ$_OBJMHDVERSION
        .EXTRN  ANLOBJ$_OBJMTCCORRECT
        .EXTRN  ANLOBJ$_OBJMTCINPUT
        .EXTRN  ANLOBJ$_OBJMTCNAME
        .EXTRN  ANLOBJ$_OBJMTCREC
        .EXTRN  ANLOBJ$_OBJMTCSEQNUM
        .EXTRN  ANLOBJ$_OBJMTCUIC
        .EXTRN  ANLOBJ$_OBJMTCVERSION
        .EXTRN  ANLOBJ$_OBJMTCWHEN
```

```
.EXTRN  ANLOBJ$_OBJPROARGCOUNT
.EXTRN  ANLOBJ$_OBJPROARGNUM
.EXTRN  ANLOBJ$_OBJPSECT
.EXTRN  ANLOBJ$_OBJSRCREC
.EXTRN  ANLOBJ$_OBJSTATHEADING1
.EXTRN  ANLOBJ$_OBJSTATHEADING2
.EXTRN  ANLOBJ$_OBJSTATLINE
.EXTRN  ANLOBJ$_OBJSTATTOTAL
.EXTRN  ANLOBJ$_OBJSYMBOL
.EXTRN  ANLOBJ$_OBJSYMFLAGS
.EXTRN  ANLOBJ$_OBJTIRARGINDEX
.EXTRN  ANLOBJ$_OBJTIRCMD
.EXTRN  ANLOBJ$_OBJTIRCMDSTK
.EXTRN  ANLOBJ$_OBJTBTREC
.EXTRN  ANLOBJ$_OBJTIRREC
.EXTRN  ANLOBJ$_OBJTIRSTOIM
.EXTRN  ANLOBJ$_OBJTIRVIELD
.EXTRN  ANLOBJ$_OBJTTLREC
.EXTRN  ANLOBJ$_OBJVALUE
.EXTRN  ANLOBJ$_OBJUVALUE
.EXTRN  ANLOBJ$_PROTECTION
.EXTRN  ANLOBJ$_SEVERITY
.EXTRN  ANLOBJ$_TEXT, ANLOBJ$_TEXTHDR
.EXTRN  ANLOBJ$_NOSUCHMOD
.EXTRN  ANLOBJ$_BADDATE
.EXTRN  ANLOBJ$_BADHDRBLKCOUNT
.EXTRN  ANLOBJ$_BADSEVERITY
.EXTRN  ANLOBJ$_BADSYM1ST
.EXTRN  ANLOBJ$_BADSYMCHAR
.EXTRN  ANLOBJ$_BADSYMLEN
.EXTRN  ANLOBJ$_EXEBADFIXUPEND
.EXTRN  ANLOBJ$_EXEBADFIXUPISD
.EXTRN  ANLOBJ$_EXEBADFIXUPVBN
.EXTRN  ANLOBJ$_EXEBADISDS1
.EXTRN  ANLOBJ$_EXEBADISDTYPE
.EXTRN  ANLOBJ$_EXEBADMATCH
.EXTRN  ANLOBJ$_EXEBADPATCHLEN
.EXTRN  ANLOBJ$_EXEBADOBJ
.EXTRN  ANLOBJ$_EXEBADTYPE
.EXTRN  ANLOBJ$_EXEBADXFERO
.EXTRN  ANLOBJ$_EXEHDRISDLONG
.EXTRN  ANLOBJ$_EXEHDRLONG
.EXTRN  ANLOBJ$_EXEISDLENDZRO
.EXTRN  ANLOBJ$_EXEISDLENGBL
.EXTRN  ANLOBJ$_EXEISDLENPRIV
.EXTRN  ANLOBJ$_EXENOTNATIVE
.EXTRN  ANLOBJ$_EXTRABYTES
.EXTRN  ANLOBJ$_FIELDFIT
.EXTRN  ANLOBJ$_FLAGERROR
.EXTRN  ANLOBJ$_NOTOK, ANLOBJ$_OBJBADIDCMATCH
.EXTRN  ANLOBJ$_OBJBADNUM
.EXTRN  ANLOBJ$_OBJBADPOP
.EXTRN  ANLOBJ$_OBJBADPUSH
.EXTRN  ANLOBJ$_OBJBADTYPE
.EXTRN  ANLOBJ$_OBJBADVIELD
.EXTRN  ANLOBJ$_OBJEOMBADSEV
.EXTRN  ANLOBJ$_OBJEOMMISSING
```

```
                                                        .EXTRN  ANLOBJ$_OBJFADBADAVC
                                                        .EXTRN  ANLOBJ$_OBJFADBADRBC
                                                        .EXTRN  ANLOBJ$_OBJGSDBADALIGN
                                                        .EXTRN  ANLOBJ$_OBJGSDBADSUBTYP
                                                        .EXTRN  ANLOBJ$_OBJHDRRES
                                                        .EXTRN  ANLOBJ$_OBJMHDBADRECSIZ
                                                        .EXTRN  ANLOBJ$_OBJMHDBADSTRLVL
                                                        .EXTRN  ANLOBJ$_OBJMHDMISSING
                                                        .EXTRN  ANLOBJ$_OBJNONTIRCMD
                                                        .EXTRN  ANLOBJ$_OBJNOPSC
                                                        .EXTRN  ANLOBJ$_OBJNULLREC
                                                        .EXTRN  ANLOBJ$_OBJPOSPACE
                                                        .EXTRN  ANLOBJ$_OBJPROMINMAX
                                                        .EXTRN  ANLOBJ$_OBJPSCABSLEN
                                                        .EXTRN  ANLOBJ$_OBJRECTOOBIG
                                                        .EXTRN  ANLOBJ$_OBJTIRRES
                                                        .EXTRN  ANLOBJ$_OBJUNDEFENV
                                                        .EXTRN  ANLOBJ$_OBJUNDEFLIT
                                                        .EXTRN  ANLOBJ$_OBJUNDEFPSC
                                                        .EXTRN  ANALYZE$_FACILITY
                                                        .EXTRN  ANL$CHECK_FLAGS
                                                        .EXTRN  ANL$CHECK_SYMBOL
                                                        .EXTRN  ANL$CHECK_WHEN, ANL$FORMAT_ERROR
                                                        .EXTRN  ANL$FORMAT_FLAGS
                                                        .EXTRN  ANL$FORMAT_HEX, ANL$FORMAT_LINE
                                                        .EXTRN  ANL$OBJECT_ENV_CHECK
                                                        .EXTRN  ANL$OBJECT_PSECT_CHECK
                                                        .EXTRN  ANL$OBJECT_PSECT_REF
                                                        .EXTRN  ANL$OBJECT_RECORD_LINE
                                                        .EXTRN  ANL$OBJECT_TIR_CLEAN
                                                        .EXTRN  ANL$REPORT_LINE

                                                        .PSECT  $CODE$,NOWRT,2

                           0FFC 00000                   .ENTRY  ANL$OBJECT_EOM, Save R2,R3,R4,R5,R6,R7,R8,-  ; 0572
                                                                R9,R10,R11                                   ;
     5B 00000000G   8F   D0 00002                       MOVL    #ANLOBJ$_OBJPSECT, R11                       ;
     5A     0000G   CF   9E 00009                       MOVAB   ANL$FORMAT_LINE, R10                         ;
     59     0000G   CF   9E 0000E                       MOVAB   ANL$FORMAT_ERROR, R9                         ;
     58 00000000G   8F   D0 00013                       MOVL    #ANLOBJ$_FIELDFIT, R8                        ;
     55        08   AC   D0 0001A                       MOVL    THE_RECORD, R5                               ; 0575
                    6C   95 0001E                       TSTB    (AP)                                         ; 0596
                    03   13 00020                       BEQL    1$                                           ;
               04   AC   D5 00022                       TSTL    4(AP)                                        ;
                    03   12 00025 1$:                   BNEQ    2$                                           ;
                  01AA   31 00027                       BRW     21$                                          ;
     53        04   A5   9E 0002A 2$:                   MOVAB   4(R5), R3                                    ; 0601
     52             63   D0 0002E                       MOVL    (R3), SCANP                                  ;
                    55   DD 00031                       PUSHL   R5                                           ; 0602
               04   AC   DD 00033                       PUSHL   RECORD_NUMBER                                ; 0604
                    57   D4 00036                       CLRL    R7                                           ; 0602
     03             62   91 00038                       CMPB    (SCANP), #3                                  ;
                    0A   12 0003B                       BNEQ    3$                                           ;
                    57   D6 0003D                       INCL    R7                                           ;
        00000000G   8F   DD 0003F                       PUSHL   #ANLOBJ$_OBJEOMREC                           ;
                    06   11 00045                       BRB     4$                                           ;
        00000000G   8F   DD 00047 3$:                   PUSHL   #ANLOBJ$_OBJEOMWREC                          ;
```

```
                 0000G  CF           03  FB 0004D 4$:     CALLS   #3, ANL$OBJECT_RECORD_LINE                          :
                                     7E  D4 00052         CLRL    -(SP)                                               : 0605
                 0000G  CF           01  FB 00054         CALLS   #1, ANL$REPORT_LINE                                 :
                        54           01  90 00059         MOVB    #1, FIT_OK                                          : 0609
                        16           54  E9 0005C         BLBC    FIT_OK, 5$                                          : 0611
                        51       02  A2  9E 0005F         MOVAB   2(R2), R1                                           :
                        50           65  3C 00063         MOVZWL  (R5), R0                                            :
                        50           63  C0 00066         ADDL2   (R3), R0                                            :
                        50           51  D1 00069         CMPL    R1, R0                                              :
                                     07  1B 0006C         BLEQU   5$                                                  :
                                     58  DD 0006E         PUSHL   R8                                                  :
                        69           01  FB 00070         CALLS   #1, ANL$FORMAT_ERROR                                :
                                     54  94 00073         CLRB    FIT_OK                                              :
                        69           54  E9 00075 5$:     BLBC    FIT_OK, 12$                                         : 0612
                        56       01  A2  9A 00078         MOVZBL  1(SCANP), R6                                        : 0621
                                     56  DD 0007C         PUSHL   R6                                                  :
                                     08  12 0007E         BNEQ    6$                                                  : 0614
                           00000000G 8F  DD 00080         PUSHL   #ANLOBJ$_OBJEOMSEVSUC                               :
                                     3F  11 00086         BRB     11$                                                 :
                        01           56  91 00088 6$:     CMPB    R6, #1                                              : 0615
                                     08  12 0008B         BNEQ    7$                                                  :
                           00000000G 8F  DD 0008D         PUSHL   #ANLOBJ$_OBJEOMSEVWRN                               :
                                     32  11 00093         BRB     11$                                                 :
                        02           56  91 00095 7$:     CMPB    R6, #2                                              : 0616
                                     08  12 00098         BNEQ    8$                                                  :
                           00000000G 8F  DD 0009A         PUSHL   #ANLOBJ$_OBJEOMSEVERR                               :
                                     25  11 000A0         BRB     11$                                                 :
                        03           56  91 000A2 8$:     CMPB    R6, #3                                              : 0617
                                     08  12 000A5         BNEQ    9$                                                  :
                           00000000G 8F  DD 000A7         PUSHL   #ANLOBJ$_OBJEOMSEVABT                               :
                                     18  11 000AD         BRB     11$                                                 :
                        04           56  91 000AF 9$:     CMPB    R6, #4                                              : 0618
                                     0D  1F 000B2         BLSSU   10$                                                 :
                        0A           56  91 000B4         CMPB    R6, #10                                             :
                                     08  1A 000B7         BGTRU   10$                                                 :
                           00000000G 8F  DD 000B9         PUSHL   #ANLOBJ$_OBJEOMSEVRES                               :
                                     06  11 000BF         BRB     11$                                                 :
                           00000000G 8F  DD 000C1 10$:    PUSHL   #ANLOBJ$_OBJEOMSEVIGN                               : 0619
                                     01  DD 000C7 11$:    PUSHL   #1                                                  : 0613
                                     7E  D4 000C9         CLRL    -(SP)                                               :
                        6A           04  FB 000CB         CALLS   #4, ANL$FORMAT_LINE                                 :
                        04           56  91 000CE         CMPB    R6, #4                                              : 0622
                                     0E  1F 000D1         BLSSU   12$                                                 :
                        0A           56  91 000D3         CMPB    R6, #10                                             :
                                     09  1A 000D6         BGTRU   12$                                                 :
                           00000000G 8F  DD 000D8         PUSHL   #ANLOBJ$_OBJEOMBADSEV                               : 0623
                        69           01  FB 000DE         CALLS   #1, ANL$FORMAT_ERROR                                :
                        02           65  B1 000E1 12$:    CMPW    (R5), #2                                            : 0628
                                     03  1A 000E4         BGTRU   13$                                                 :
                                 00EB    31 000E6         BRW     21$                                                 :
                        37           57  E9 000E9 13$:    BLBC    R7, 15$                                             : 0634
                        16           54  E9 000EC         BLBC    FIT_OK, 14$                                         : 0635
                        51       03  A2  9E 000EF         MOVAB   3(R2), R1                                           :
                        50           65  3C 000F3         MOVZWL  (R5), R0                                            :
                        50           63  C0 000F6         ADDL2   (R3), R0                                            :
                        50           51  D1 000F9         CMPL    R1, R0                                              :
                                     07  1B 000FC         BLEQU   14$                                                 :
```

```
                                 58  DD 000FE          PUSHL   R8                                      ;
                   69            01  FB 00100          CALLS   #1, ANL$FORMAT_ERROR                    ;
                                 54  94 00103          CLRB    FIT_OK                                  ;
                   69            54  E9 00105 14$:     BLBC    FIT_OK, 18$                             ; 0636
                   7E      02    A2  9A 00108          MOVZBL  2(SCANP), -(SP)                         ; 0637
                                 5B  DD 0010C          PUSHL   R11                                     ;
                                 01  DD 0010E          PUSHL   #1                                      ;
                                 7E  D4 00110          CLRL    -(SP)                                   ;
                   6A            04  FB 00112          CALLS   #4, ANL$FORMAT_LINE                     ;
                   7E      02    A2  9A 00115          MOVZBL  2(SCANP), -(SP)                         ; 0638
            0000G  CF            01  FB 00119          CALLS   #1, ANL$OBJECT_PSECT_REF                ;
                   52            03  C0 0011E          ADDL2   #3, SCANP                               ; 0639
                                 35  11 00121          BRB     17$                                     ; 0634
                   72            54  E9 00123 15$:     BLBC    FIT_OK, 20$                             ; 0644
                   51      04    A2  9E 00126          MOVAB   4(R2), R1                               ;
                   50            65  3C 0012A          MOVZWL  (R5), R0                                ;
                   50            63  C0 0012D          ADDL2   (R3), R0                                ;
                   50            51  D1 00130          CMPL    R1, R0                                  ;
                                 07  1B 00133          BLEQU   16$                                     ;
                                 58  DD 00135          PUSHL   R8                                      ;
                   69            01  FB 00137          CALLS   #1, ANL$FORMAT_ERROR                    ;
                                 54  94 0013A          CLRB    FIT_OK                                  ;
                   59            54  E9 0013C 16$:     BLBC    FIT_OK, 20$                             ; 0645
                   7E      02    A2  3C 0013F          MOVZWL  2(SCANP), -(SP)                         ; 0646
                                 5B  DD 00143          PUSHL   R11                                     ;
                                 01  DD 00145          PUSHL   #1                                      ;
                                 7E  D4 00147          CLRL    -(SP)                                   ;
                   6A            04  FB 00149          CALLS   #4, ANL$FORMAT_LINE                     ;
                   7E      02    A2  3C 0014C          MOVZWL  2(SCANP), -(SP)                         ; 0647
            0000G  CF            01  FB 00150          CALLS   #1, ANL$OBJECT_PSECT_REF                ;
                   52            04  C0 00155          ADDL2   #4, SCANP                               ; 0648
                   3D            54  E9 00158 17$:     BLBC    FIT_OK, 20$                             ; 0654
                   51      04    A2  9E 0015B          MOVAB   4(R2), R1                               ;
                   50            65  3C 0015F          MOVZWL  (R5), R0                                ;
                   50            63  C0 00162          ADDL2   (R3), R0                                ;
                   50            51  D1 00165          CMPL    R1, R0                                  ;
                                 07  1B 00168          BLEQU   18$                                     ;
                                 58  DD 0016A          PUSHL   R8                                      ;
                   69            01  FB 0016C          CALLS   #1, ANL$FORMAT_ERROR                    ;
                                 54  94 0016F          CLRB    FIT_OK                                  ;
                   24            54  E9 00171 18$:     BLBC    FIT_OK, 20$                             ; 0655
                                 62  DD 00174          PUSHL   (SCANP)                                 ; 0656
                        00000000G 8F  DD 00176          PUSHL   #ANLOBJ$_OBJVALUE                       ;
                                 01  DD 0017C          PUSHL   #1                                      ;
                                 7E  D4 0017E          CLRL    -(SP)                                   ;
                   6A            04  FB 00180          CALLS   #4, ANL$FORMAT_LINE                     ;
         3FFFFFFF  8F            62  D1 00183          CMPL    (SCANP), #1073741823                    ; 0657
                                 09  1B 0018A          BLEQU   19$                                     ;
                        00000000G 8F  DD 0018C          PUSHL   #ANLOBJ$_OBJPOSPACE                     ; 0658
                   69            01  FB 00192          CALLS   #1, ANL$FORMAT_ERROR                    ;
                   52            04  C0 00195 19$:     ADDL2   #4, SCANP                               ; 0659
                   50            65  3C 00198 20$:     MOVZWL  (R5), R0                                ; 0664
         53        63            50  C1 0019B          ADDL3   R0, (R3), R3                            ;
                   52            53  D1 0019F          CMPL    R3, SCANP                               ;
                                 30  1B 001A2          BLEQU   21$                                     ;
                            0000' CF  9F 001A4          PUSHAB  TRANSFER_FLAGS_DEF                      ; 0669
                   7E            62  9A 001A8          MOVZBL  (SCANP), -(SP)                          ;
```

```
                     00000000G  8F   DD 001AB          PUSHL   #ANLOBJ$_OBJEOMFLAGS                   ;
                                01   DD 001B1          PUSHL   #1                                     ;
             0000G  CF          04   FB 001B3          CALLS   #4, ANL$FORMAT_FLAGS                   ;
                        0000'   CF   9F 001B8          PUSHAB  TRANSFER_FLAGS_DEF                     ; 0670
                7E              62   9A 001BC          MOVZBL  (SCANP), -(SP)                         ;
             0000G  CF          02   FB 001BF          CALLS   #2, ANL$CHECK_FLAGS                    ;
                                52   D6 001C4          INCL    SCANP                                  ; 0671
                52              53   D1 001C6          CMPL    R3, SCANP                              ; 0675
                                09   1B 001C9          BLEQU   21$                                    ;
                     00000000G  8F   DD 001CB          PUSHL   #ANLOBJ$_EXTRABYTES                    ; 0676
                69              01   FB 001D1          CALLS   #1, ANL$FORMAT_ERROR                   ;
             0000G  CF          00   FB 001D4 21$:     CALLS   #0, ANL$OBJECT_TIR_CLEAN               ; 0685
             0000G  CF          00   FB 001D9          CALLS   #0, ANL$OBJECT_PSECT_CHECK             ; 0690
             0000G  CF          00   FB 001DE          CALLS   #0, ANL$OBJECT_ENV_CHECK               ; 0691
             0000'  CF    0800  8F   3C 001E3          MOVZWL  #2048, MHD_RECORD_SIZE                 ; 0695
                                04      001EA          RET                                            ; 0699

; Routine Size:  491 bytes,    Routine Base:  $CODE$ + 0000


;  268          0700  1
```

```
1 %sbttl 'ANL$OBJECT_HDR - Analyze Object Header Records'
1 !++
1 ! Functional Description:
1 !       This routine is called to analyze header records from object files.
1 !
1 ! Formal Parameters:
1 !       record_number   The record number of this header record.
1 !       the_record      The address of the descriptor of this record.
1 !
1 ! Implicit Inputs:
1 !       global data
1 !
1 ! Implicit Outputs:
1 !       global data
1 !
1 ! Returned Value:
1 !       none
1 !
1 ! Side Effects:
1 !
1 !--
1
1
2 global routine anl$object_hdr(record_number,the_record): novalue = begin
2
2 bind
2       record_dsc = .the_record: descriptor;
2
2 local
2       status: long,
2       scanp: ref block[,byte],
2       fit_ok: byte;
2
2
2 ! Decide what to do based on the header type.  If there isn't one, forget it.
2
2 scanp = .record_dsc[ptr];
2 fit_ok = true;
2 ensure_field_fit(obj$b_subtyp,record_dsc);
2 if not .fit_ok then
2       return;
2
2 selectoneu .scanp[obj$b_subtyp] of set
2 [obj$c_hdr_mhd]:          anl$object_hdr_mhd(.record_number,record_dsc);
2
2 [obj$c_hdr_lnm,
2  obj$c_hdr_src,
2  obj$c_hdr_ttl,
2  obj$c_hdr_cpr,
2  obj$c_hdr_gtx]:          anl$object_hdr_text(.record_number,record_dsc);
2
2 [obj$c_hdr_mtc]:          anl$object_hdr_mtc(.record_number,record_dsc);
2
2 [mhd$c_maxhdrtyp+1
3  to 100]:                 (anl$format_error(anlobj$_objhdrres,.record_number,.scanp[obj$b_subtyp]);
3                           anl$report_line(0);
2                           anl$format_hex(1,record_dsc););
```

```
      ;  327         0758  2
      ;  328         0759  3 [101 to 255]:            (anl$format_line(0,0,anlobj$_objhdrignrec,.record_number,
      ;  329         0760  3                                          .scanp[obj$b_subtyp],.record_dsc[len]);
      ;  330         0761  3                          anl$report_line(0);
      ;  331         0762  2                          anl$format_hex(1,record_dsc););
      ;  332         0763  2 tes;
      ;  333         0764  2
      ;  334         0765  2 return;
      ;  335         0766  2
      ;  336         0767  1 end;



                                        001C 00000          .ENTRY  ANL$OBJECT_HDR, Save R2,R3,R4                   ; 0724
                    53        08    AC    D0 00002          MOVL    THE_RECORD, R3                                  ; 0727
                    52        04    A3    D0 00006          MOVL    4(R3), SCANP                                    ; 0737
                    54              01    90 0000A          MOVB    #1, FIT_OK                                      ; 0738
                    1D              54    E9 0000D          BLBC    FIT_OK, 1$                                      ; 0739
                    51        02    A2    9E 00010          MOVAB   2(R2), R1                                       ;
                    50              63    3C 00014          MOVZWL  (R3), R0                                        ;
                    50        04    A3    C0 00017          ADDL2   4(R3), R0                                       ;
                    50              51    D1 0001B          CMPL    R1, R0                                          ;
                                    0D    1B 0001E          BLEQU   1$                                              ;
                          00000000G 8F    DD 00020          PUSHL   #ANLOBJ$_FIELDFIT                               ;
             0000G  CF              01    FB 00026          CALLS   #1, ANL$FORMAT_ERROR                            ;
                                    54    94 0002B          CLRB    FIT_OK                                          ;
                    7E              54    E9 0002D 1$:      BLBC    FIT_OK, 8$                                      ; 0740
                    52        01    A2    9A 00030          MOVZBL  1(SCANP), R2                                    ; 0743
                                    0B    12 00034          BNEQ    2$                                              ; 0744
                                    53    DD 00036          PUSHL   R3                                              ;
                              04    AC    DD 00038          PUSHL   RECORD_NUMBER                                   ;
             0000V  CF              02    FB 0003B          CALLS   #2, ANL$OBJECT_HDR_MHD                          ;
                                          04 00040          RET                                                     ;
                    04              52    91 00041 2$:      CMPB    R2, #4                                          ; 0746
                                    05    1B 00044          BLEQU   3$                                              ;
                    06              52    91 00046          CMPB    R2, #6                                          ;
                                    0B    12 00049          BNEQ    4$                                              ;
                                    53    DD 0004B 3$:      PUSHL   R3                                              ; 0750
                              04    AC    DD 0004D          PUSHL   RECORD_NUMBER                                   ;
             0000V  CF              02    FB 00050          CALLS   #2, ANL$OBJECT_HDR_TEXT                         ;
                                          04 00055          RET                                                     ;
                    05              52    91 00056 4$:      CMPB    R2, #5                                          ; 0752
                                    0B    12 00059          BNEQ    5$                                              ;
                                    53    DD 0005B          PUSHL   R3                                              ;
                              04    AC    DD 0005D          PUSHL   RECORD_NUMBER                                   ;
             0000V  CF              02    FB 00060          CALLS   #2, ANL$OBJECT_HDR_MTC                          ;
                                          04 00065          RET                                                     ;
                    07              52    91 00066 5$:      CMPB    R2, #7                                          ; 0754
                                    18    1F 00069          BLSSU   6$                                              ;
               64   8F              52    91 0006B          CMPB    R2, #100                                        ;
                                    12    1A 0006F          BGTRU   6$                                              ;
                                    52    DD 00071          PUSHL   R2                                              ; 0755
                              04    AC    DD 00073          PUSHL   RECORD_NUMBER                                   ;
                          00000000G 8F    DD 00076          PUSHL   #ANLOBJ$_OBJHDRRES                              ;
             0000G  CF              03    FB 0007C          CALLS   #3, ANL$FORMAT_ERROR                            ;
```

```
                                              1B  11 00081         BRB     7$                                                        ; 0756
                            65   8F           52  91 00083 6$:     CMPB    R2, #101                                                  ; 0759
                                              25  1F 00087         BLSSU   8$                                                        ;
                                 7E           63  3C 00089         MOVZWL  (R3), -(SP)                                               ; 0760
                                              52  DD 0008C         PUSHL   R2                                                        ;
                                        04    AC  DD 0008E         PUSHL   RECORD_NUMBER                                             ; 0759
                                   00000000G  8F  DD 00091         PUSHL   #ANLOBJ$_OBJHDRIGNREC                                     ;
                                              7E  7C 00097         CLRQ    -(SP)                                                     ;
                         0000G   CF           06  FB 00099         CALLS   #6, ANL$FORMAT_LINE                                       ;
                                              7E  D4 0009E 7$:     CLRL    -(SP)                                                     ; 0761
                         0000G   CF           01  FB 000A0         CALLS   #1, ANL$REPORT_LINE                                       ;
                                              53  DD 000A5         PUSHL   R3                                                        ; 0762
                                              01  DD 000A7         PUSHL   #1                                                        ;
                         0000G   CF           02  FB 000A9         CALLS   #2, ANL$FORMAT_HEX                                        ;
                                                  04 000AE 8$:     RET                                                               ; 0767

; Routine Size:  175 bytes,    Routine Base:  $CODE$ + 01EB
```

```
1 %sbttl 'ANL$OBJECT_HDR_MHD - Analyze Module Header Record'
1 !++
1 ! Functional Description:
1 !       This routine is called to analyze the module header record.
1 !
1 ! Formal Parameters:
1 !       record_number   The number of this record in the object file.
1 !       the_record      The address of the descriptor of the record.
1 !
1 ! Implicit Inputs:
1 !       global data
1 !
1 ! Implicit Outputs:
1 !       global data
1 !
1 ! Returned Value:
1 !       none
1 !
1 ! Side Effects:
1 !
1 !--
1
1
2 global routine anl$object_hdr_mhd(record_number,the_record): novalue = begin
2
2 bind
2       record_dsc = .the_record: descriptor;
2
2 local
2       status: long,
2       scanp: ref block[,byte],
2       fit_ok: byte,
2       work_dsc: descriptor;
2
2
2 ! We begin by printing a record line for this module header.
2
2 anl$object_record_line(anlobj$_objmhdrec,.record_number,record_dsc);
2 anl$report_line(0);
2
2 ! Now we print the structure level and make sure it is valid.
2
2 scanp = .record_dsc[ptr];
2 fit_ok = true;
2 ensure_field_fit(mhd$b_strlvl,record_dsc);
3 if .fit_ok then (
3       anl$format_line(0,1,anlobj$_objmhdstrlvl,.scanp[mhd$b_strlvl]);
3       if .scanp[mhd$b_strlvl] gtru obj$c_strlvl then
3               anl$format_error(anlobj$_objmhdbadstrlvl,obj$c_strlvl);
2 );
2
2 ! Now we print the maximum record size and make sure it's valid.  We also
2 ! save it for future use.
2
2 ensure_field_fit(mhd$w_recsiz,record_dsc);
3 if .fit_ok then (
3       anl$format_line(0,1,anlobj$_objmhdrecsiz,.scanp[mhd$w_recsiz]);
3               if .scanp[mhd$w_recsiz] gtru obj$c_maxrecsiz then
3                       anl$format_error(anlobj$_objmhdbadrecsiz,obj$c_maxrecsiz);
3               mhd_record_size = .scanp[mhd$w_recsiz];
2 );
2
2 ! Now we print the module name and make sure it's valid.
2
2 ensure_ascic_fit(mhd$b_namlng,record_dsc,work_dsc);
3 if .fit_ok then (
3               anl$format_line(0,1,anlobj$_objmhdname,.work_dsc[len],.work_dsc[ptr]);
3               anl$check_symbol(work_dsc, shl$c_maxnamlng);
3               scanp = .work_dsc[ptr] + .work_dsc[len];
2 );
2
2 ! Now we print the module version and make sure it's valid.
2
2 ensure_ascic_fit(0,0,8,0,record_dsc,work_dsc);
3 if .fit_ok then (
3               anl$format_line(0,1,anlobj$_objmhdversion,.work_dsc[len],.work_dsc[ptr]);
3               if (.work_dsc[len] lssu 1) or (.work_dsc[len] gtru obj$c_symsiz) then
3                       anl$format_error(anlobj$_badsymlen,obj$c_symsiz);
3               scanp = .work_dsc[ptr] + .work_dsc[len];
2 );
2
2 ! Now we print the creation date/time and make sure it's valid.
2
2 ensure_field_fit(0,0,17*8,0,record_dsc);
3 if .fit_ok then (
3               build_descriptor(work_dsc,17,.scanp);
3               anl$format_line(0,1,anlobj$_objmhdcreate,work_dsc);
3               anl$check_when(work_dsc);
3               scanp = .scanp + 17;
2 );
2
2 ! If we're at the end of the record, no problem, just return
2
2 if .record_dsc[ptr] + .record_dsc[len] gequ .scanp then
2               return;
2
2 ! If there is a last patch date/time field, print it and make sure
2 ! it's valid.  It can be blank, full of nulls or contain a date.
2
2 ensure_field_fit(0,0,17*8,0,record_dsc);
3 if .fit_ok then (
3               build_descriptor(work_dsc,17,.scanp);
3               if not (ch$neq(17,.scanp,0,0,0)) then   ! if nothing but 0's, fill with blanks
3                       ch$copy(0,0,17,.work_dsc[ptr],' ');
3               anl$format_line(0,1,anlobj$_objmhdpatch,work_dsc);
3               if ch$neq(17,.work_dsc[ptr], 0,0,' ') then
3                       anl$check_when(work_dsc);
3               scanp = .scanp + 17;
2 );
2
2 ! Finally, we ensure that there are no spurious bytes at the end.
2
2 if .record_dsc[ptr]+.record_dsc[len] gtru .scanp then
2               anl$format_error(anlobj$_extrabytes);
```

```
        : 452           0882  2
        : 453           0883  2 return;
        : 454           0884  2
        : 455           0885  1 end;



                                                 07FC 00000          .ENTRY   ANL$OBJECT_HDR_MHD, Save R2,R3,R4,R5,R6,R7,-; 0791
                                                                              R8,R9,R10                                   :
                            5A       0000G  CF    9E 00002           MOVAB    ANL$FORMAT_LINE, R10                        :
                            59       0000G  CF    9E 00007           MOVAB    ANL$FORMAT_ERROR, R9                        :
                            58   00000000G  8F    D0 0000C           MOVL     #ANLOBJ$_FIELDFIT, R8                       :
                            5E              08    C2 00013           SUBL2    #8, SP                                      :
                            54          08  AC    D0 00016           MOVL     THE_RECORD, R4                              ; 0794
                                            54    DD 0001A           PUSHL    R4                                          ; 0805
                                        04  AC    DD 0001C           PUSHL    RECORD_NUMBER                               :
                                 00000000G  8F    DD 0001F           PUSHL    #ANLOBJ$_OBJMHDREC                          :
                     0000G  CF              03    FB 00025           CALLS    #3, ANL$OBJECT_RECORD_LINE                  :
                                            7E    D4 0002A           CLRL     -(SP)                                       ; 0806
                     0000G  CF              01    FB 0002C           CALLS    #1, ANL$REPORT_LINE                         :
                            52          04  A4    D0 00031           MOVL     4(R4), R2                                   ; 0810
                            56              52    D0 00035           MOVL     R2, SCANP                                   :
                            53              01    90 00038           MOVB     #1, FIT_OK                                  ; 0811
                            53              53    E9 0003B           BLBC     FIT_OK, 3$                                  ; 0812
                            51          03  A6    9E 0003E           MOVAB    3(R6), R1                                   :
                            50              64    3C 00042           MOVZWL   (R4), R0                                    :
                            50              52    C0 00045           ADDL2    R2, R0                                      :
                            50              51    D1 00048           CMPL     R1, R0                                      :
                                            07    1B 0004B           BLEQU    1$                                          :
                                            58    DD 0004D           PUSHL    R8                                          :
                            69              01    FB 0004F           CALLS    #1, ANL$FORMAT_ERROR                        :
                                            53    94 00052           CLRB     FIT_OK                                      :
                            6A              53    E9 00054 1$:       BLBC     FIT_OK, 5$                                  ; 0813
                            7E          02  A6    9A 00057           MOVZBL   2(SCANP), -(SP)                             ; 0814
                                 00000000G  8F    DD 0005B           PUSHL    #ANLOBJ$_OBJMHDSTRLVL                       :
                                            01    DD 00061           PUSHL    #1                                          :
                                            7E    D4 00063           CLRL     -(SP)                                       :
                            6A              04    FB 00065           CALLS    #4, ANL$FORMAT_LINE                         :
                                        02  A6    95 00068           TSTB     2(SCANP)                                    ; 0815
                                            0B    13 0006B           BEQL     2$                                          :
                                            7E    D4 0006D           CLRL     -(SP)                                       ; 0816
                                 00000000G  8F    DD 0006F           PUSHL    #ANLOBJ$_OBJMHDBADSTRLVL                    :
                            69              02    FB 00075           CALLS    #2, ANL$FORMAT_ERROR                        :
                            6B              53    E9 00078 2$:       BLBC     FIT_OK, 7$                                  ; 0822
                            51          05  A6    9E 0007B           MOVAB    5(R6), R1                                   :
                            50              64    3C 0007F           MOVZWL   (R4), R0                                    :
                            50              52    C0 00082           ADDL2    R2, R0                                      :
                            50              51    D1 00085           CMPL     R1, R0                                      :
                                            07    1B 00088           BLEQU    3$                                          :
                                            58    DD 0008A           PUSHL    R8                                          :
                            69              01    FB 0008C           CALLS    #1, ANL$FORMAT_ERROR                        :
                                            53    94 0008F           CLRB     FIT_OK                                      :
                            72              53    E9 00091 3$:       BLBC     FIT_OK, 8$                                  ; 0823
                            7E          03  A6    3C 00094           MOVZWL   3(SCANP), -(SP)                             ; 0824
                                 00000000G  8F    DD 00098           PUSHL    #ANLOBJ$_OBJMHDRECSIZ                       :
```

```
                                                                          K  2
8         OBJMISC          OBJMISC - Analyze Miscellaneous Object Records  15-Sep-1984 23:42:42    VAX-11 Bliss-32 V4.0-742              Page  21
)         V04-000          ANL$OBJECT_HDR_MHD - Analyze Module Header Reco 14-Sep-1984 11:52:57    [ANALYZ.SRC]OBJMISC.B32;1               (6)

                                      01  DD 0009E           PUSHL    #1                                                     ;
                                      7E  D4 000A0           CLRL     -(SP)                                                  ;
                    6A                04  FB 000A2           CALLS    #4, ANL$FORMAT_LINE                                    ;
              0800  8F          03    A6  B1 000A5           CMPW     3(SCANP), #2048                                        ; 0825
                                      0E  1B 000AB           BLEQU    4$                                                     ;
                    7E        0800    8F  3C 000AD           MOVZWL   #2048, -(SP)                                           ; 0826
                         00000000G    8F  DD 000B2           PUSHL    #ANLOBJ$_OBJMHDBADRECSIZ                               ;
                    69                02  FB 000B8           CALLS    #2, ANL$FORMAT_ERROR                                   ;
              0000' CF          03    A6  3C 000BB 4$:       MOVZWL   3(SCANP), MHD_RECORD_SIZE                              ; 0827
                    6A                53  E9 000C1 5$:       BLBC     FIT_OK, 9$                                             ; 0832
                    51          06    A6  9E 000C4           MOVAB    6(R6), R1                                              ;
                    50                64  3C 000C8           MOVZWL   (R4), R0                                               ;
                    50                52  C0 000CB           ADDL2    R2, R0                                                 ;
                    50                51  D1 000CE           CMPL     R1, R0                                                 ;
                                      07  1B 000D1           BLEQU    6$                                                     ;
                                      58  DD 000D3           PUSHL    R8                                                     ;
                    69                01  FB 000D5           CALLS    #1, ANL$FORMAT_ERROR                                   ;
                                      53  94 000D8           CLRB     FIT_OK                                                 ;
                    75                53  E9 000DA 6$:       BLBC     FIT_OK, 11$                                            ;
                    6E          05    A6  9A 000DD           MOVZBL   5(SCANP), WORK_DSC                                     ;
                04  AE          06    A6  9E 000E1           MOVAB    6(R6), WORK_DSC+4                                      ;
                    69                53  E9 000E6 7$:       BLBC     FIT_OK, 11$                                            ;
                    50                6E  3C 000E9           MOVZWL   WORK_DSC, R0                                           ;
                    50                08  C6 000EC           DIVL2    #8, R0                                                 ;
                    51          01  A046  9E 000EF           MOVAB    1(R0)[SCANP], R1                                       ;
                    50                64  3C 000F4           MOVZWL   (R4), R0                                               ;
                    50                52  C0 000F7           ADDL2    R2, R0                                                 ;
                    50                51  D1 000FA           CMPL     R1, R0                                                 ;
                                      07  1B 000FD           BLEQU    8$                                                     ;
                                      58  DD 000FF           PUSHL    R8                                                     ;
                    69                01  FB 00101           CALLS    #1, ANL$FORMAT_ERROR                                   ;
                                      53  94 00104           CLRB     FIT_OK                                                 ;
                    69                53  E9 00106 8$:       BLBC     FIT_OK, 12$                                            ; 0833
                                04    AE  DD 00109           PUSHL    WORK_DSC+4                                             ; 0834
                    7E          04    AE  3C 0010C           MOVZWL   WORK_DSC, -(SP)                                        ;
                         00000000G    8F  DD 00110           PUSHL    #ANLOBJ$_OBJMHDNAME                                    ;
                                      01  DD 00116           PUSHL    #1                                                     ;
                                      7E  D4 00118           CLRL     -(SP)                                                  ;
                    6A                05  FB 0011A           CALLS    #5, ANL$FORMAT_LINE                                    ;
                                      27  DD 0011D           PUSHL    #39                                                    ; 0835
                                04    AE  9F 0011F           PUSHAB   WORK_DSC                                               ;
              0000G CF                02  FB 00122           CALLS    #2, ANL$CHECK_SYMBOL                                   ;
                    56                6E  3C 00127           MOVZWL   WORK_DSC, SCANP                                        ; 0836
                    56          04    AE  C0 0012A           ADDL2    WORK_DSC+4, SCANP                                      ;
                    73                53  E9 0012E 9$:       BLBC     FIT_OK, 15$                                            ; 0841
                    51          01    A6  9E 00131           MOVAB    1(R6), R1                                              ;
                    50                64  3C 00135           MOVZWL   (R4), R0                                               ;
                    50                52  C0 00138           ADDL2    R2, R0                                                 ;
                    50                51  D1 0013B           CMPL     R1, R0                                                 ;
                                      07  1B 0013E           BLEQU    10$                                                    ;
                                      58  DD 00140           PUSHL    R8                                                     ;
                    69                01  FB 00142           CALLS    #1, ANL$FORMAT_ERROR                                   ;
                                      53  94 00145           CLRB     FIT_OK                                                 ;
                    73                53  E9 00147 10$:      BLBC     FIT_OK, 16$                                            ;
                    6E                66  9A 0014A           MOVZBL   (SCANP), WORK_DSC                                      ;
                04  AE          01    A6  9E 0014D           MOVAB    1(R6), WORK_DSC+4                                      ;
                    68                53  E9 00152 11$:      BLBC     FIT_OK, 16$                                            ;
              50             6E  3C 00155           MOVZWL  WORK_DSC, R0                                 :
              50             08  C6 00158           DIVL2   #8, R0                                       :
              51      01 A046    9E 0015B           MOVAB   1(R0)[SCANP], R1                             :
              50             64  3C 00160           MOVZWL  (R4), R0                                     :
              50             52  C0 00163           ADDL2   R2, R0                                       :
              50             51  D1 00166           CMPL    R1, R0                                       :
                             07  1B 00169           BLEQU   12$                                          :
                             58  DD 0016B           PUSHL   R8                                           :
              69             01  FB 0016D           CALLS   #1, ANL$FORMAT_ERROR                         :
                             53  94 00170           CLRB    FIT_OK                                       :
              6B             53  E9 00172  12$:     BLBC    FIT_OK, 17$                                  : 0842
                      04     AE  DD 00175           PUSHL   WORK_DSC+4                                   : 0843
              7E      04     AE  3C 00178           MOVZWL  WORK_DSC, -(SP)                              :
                 00000000G   8F  DD 0017C           PUSHL   #ANLOBJ$_OBJMHDVERSION                       :
                             01  DD 00182           PUSHL   #1                                           :
                             7E  D4 00184           CLRL    -(SP)                                        :
              6A             05  FB 00186           CALLS   #5, ANL$FORMAT_LINE                          :
                             6E  B5 00189           TSTW    WORK_DSC                                     : 0844
                             05  13 0018B           BEQL    13$                                          :
              1F             6E  B1 0018D           CMPW    WORK_DSC, #31                                :
                             08  1B 00190           BLEQU   14$                                          :
                             1F  DD 00192  13$:     PUSHL   #31                                          : 0845
                 00000000G   8F  DD 00194           PUSHL   #ANLOBJ$_BADSYMLEN                           :
              69             02  FB 0019A           CALLS   #2, ANL$FORMAT_ERROR                         :
              56             6E  3C 0019D  14$:     MOVZWL  WORK_DSC, SCANP                              : 0846
              56      04     AE  C0 001A0           ADDL2   WORK_DSC+4, SCANP                            :
              39             53  E9 001A4  15$:     BLBC    FIT_OK, 17$                                  : 0851
              51      11     A6  9E 001A7           MOVAB   17(R6), R1                                   :
              50             64  3C 001AB           MOVZWL  (R4), R0                                     :
              50             52  C0 001AE           ADDL2   R2, R0                                       :
              50             51  D1 001B1           CMPL    R1, R0                                       :
                             07  1B 001B4           BLEQU   16$                                          :
                             58  DD 001B6           PUSHL   R8                                           :
              69             01  FB 001B8           CALLS   #1, ANL$FORMAT_ERROR                         :
                             53  94 001BB           CLRB    FIT_OK                                       :
              20             53  E9 001BD  16$:     BLBC    FIT_OK, 17$                                  : 0852
              6E             11  D0 001C0           MOVL    #17, WORK_DSC                                : 0853
       04     AE             56  D0 001C3           MOVL    SCANP, WORK_DSC+4                            :
                             5E  DD 001C7           PUSHL   SP                                           : 0854
                 00000000G   8F  DD 001C9           PUSHL   #ANLOBJ$_OBJMHDCREATE                        :
                             01  DD 001CF           PUSHL   #1                                           :
                             7E  D4 001D1           CLRL    -(SP)                                        :
              6A             04  FB 001D3           CALLS   #4, ANL$FORMAT_LINE                          :
                             5E  DD 001D6           PUSHL   SP                                           : 0855
     0000G    CF             01  FB 001D8           CALLS   #1, ANL$CHECK_WHEN                           :
              56             11  C0 001DD           ADDL2   #17, SCANP                                   : 0856
              57             64  3C 001E0  17$:     MOVZWL  (R4), R7                                     : 0861
              57             52  C0 001E3           ADDL2   R2, R7                                       :
              56             57  D1 001E6           CMPL    R7, SCANP                                    :
                             6C  1E 001E9           BGEQU   22$                                          :
              5B             53  E9 001EB           BLBC    FIT_OK, 21$                                  : 0867
              50      11     A6  9E 001EE           MOVAB   17(R6), R0                                   :
              57             50  D1 001F2           CMPL    R0, R7                                       :
                             07  1B 001F5           BLEQU   18$                                          :
                             58  DD 001F7           PUSHL   R8                                           :
              69             01  FB 001F9           CALLS   #1, ANL$FORMAT_ERROR                         :
                             53  94 001FC           CLRB    FIT_OK                                       :
                                48            53  E9 001FE 18$:     BLBC    FIT_OK, 21$                                        ; 0868
                                6E            11  D0 00201          MOVL    #17, WORK_DSC                                      ; 0869
                           04   AE            56  D0 00204          MOVL    SCANP, WORK_DSC+4                                  ;
        00            00        66            11  2D 00208          CMPC5   #17, (SCANP), #0, #0, @#^X00000000                 ; 0870
                                    00000000  9F     0020D                                                                     ;
                                              0F  12 00212          BNEQ    19$                                                ;
   04   AE            11 00000000   9F        00  2C 00214          MOVC5   #0, @#^X00000000, #17, WORK_DSC+4, -               ; 0871
                                    00000020  9F     0021E                  @#^X00000020                                       ;
                                              5E  DD 00223 19$:     PUSHL   SP                                                 ; 0872
                                   00000000G  8F  DD 00225          PUSHL   #ANLOBJ$_OBJMHDPATCH                               ;
                                              01  DD 0022B          PUSHL   #1                                                 ;
                                              7E  D4 0022D          CLRL    -(SP)                                              ;
                                6A            04  FB 0022F          CALLS   #4, ANL$FORMAT_LINE                                ;
        00            20   04   BE            11  2D 00232          CMPC5   #17, @WORK_DSC+4, #32, #0, @#^X00000000            ; 0873
                                    00000000  9F     00238                                                                     ;
                                              07  13 0023D          BEQL    20$                                                ;
                                              5E  DD 0023F          PUSHL   SP                                                 ; 0874
                         0000G  CF            01  FB 00241          CALLS   #1, ANL$CHECK_WHEN                                 ;
                                56            11  C0 00246 20$:     ADDL2   #17, SCANP                                         ; 0875
                                56            57  D1 00249 21$:     CMPL    R7, SCANP                                          ; 0880
                                              09  1B 0024C          BLEQU   22$                                                ;
                                   00000000G  8F  DD 0024E          PUSHL   #ANLOBJ$_EXTRABYTES                                ; 0881
                                69            01  FB 00254          CALLS   #1, ANL$FORMAT_ERROR                               ;
                                                  04 00257 22$:     RET                                                        ; 0885

; Routine Size:  600 bytes,    Routine Base:  $CODE$ + 029A
```

```
          ;   457           0886  1 %sbttl 'ANL$OBJECT_RECORD_SIZE - Check Object Record Size'
          ;   458           0887  1 !++
          ;   459           0888  1 ! Functional Description:
          ;   460           0889  1 !       This little routine is called to check the size of an object record
          ;   461           0890  1 !       against the maximum size specified in the module header.  We assume
          ;   462           0891  1 !       the maximum size has been retrieved by now.
          ;   463           0892  1 !
          ;   464           0893  1 ! Formal Parameters:
          ;   465           0894  1 !       size            Size of the object record to check.
          ;   466           0895  1 !
          ;   467           0896  1 ! Implicit Inputs:
          ;   468           0897  1 !       global data
          ;   469           0898  1 !
          ;   470           0899  1 ! Implicit Outputs:
          ;   471           0900  1 !       global data
          ;   472           0901  1 !
          ;   473           0902  1 ! Returned Value:
          ;   474           0903  1 !       none
          ;   475           0904  1 !
          ;   476           0905  1 ! Side Effects:
          ;   477           0906  1 !
          ;   478           0907  1 !--
          ;   479           0908  1
          ;   480           0909  1
          ;   481           0910  2 global routine anl$object_record_size(size): novalue = begin
          ;   482           0911  2
          ;   483           0912  2
          ;   484           0913  2 ! Just check the size and print an error message if too large.
          ;   485           0914  2
          ;   486           0915  2 if .size gtru .mhd_record_size then
          ;   487           0916  2         anl$format_error(anlobj$_objrectoobig,.mhd_record_size);
          ;   488           0917  2
          ;   489           0918  2 return;
          ;   490           0919  2
72        ;   491           0920  1 end;



75                                                      0000 00000          .ENTRY  ANL$OBJECT_RECORD_SIZE, Save nothing          ; 0910
96                              0000'  CF         04  AC  D1 00002          CMPL    SIZE, MHD_RECORD_SIZE                         ; 0915
                                                      0F  1B 00008          BLEQU   1$                                            ;
                                             0000'  CF  DD 0000A          PUSHL   MHD_RECORD_SIZE                               ; 0916
                                         00000000G  8F  DD 0000E          PUSHL   #ANLOBJ$_OBJRECTOOBIG                         ;
                                0000G  CF         02  FB 00014          CALLS   #2, ANL$FORMAT_ERROR                          ;
01                                                     04 00019 1$:       RET                                                   ; 0920

02        ; Routine Size:  26 bytes,    Routine Base:  $CODE$ + 04F2
04
02
```

```
1 %sbttl 'ANL$OBJECT_HDR_TEXT - Analyze Text Header Records'
1 !++
1 ! Functional Description:
1 !       This routine is called to analye the header records that just
1 !       contain text.
1 !
1 ! Formal Parameters:
1 !       record_number   Number of this object record.
1 !       the_record      Address of a descriptor of the record.
1 !
1 ! Implicit Inputs:
1 !       global data
1 !
1 ! Implicit Outputs:
1 !       global data
1 !
1 ! Returned Value:
1 !       none
1 !
1 ! Side Effects:
1 !
1 !--
1
1
2 global routine anl$object_hdr_text(record_number,the_record): novalue = begin
2
2 bind
2       record_dsc = .the_record: descriptor;
2
2 own
2       record_msg: vector[7,long] initial(
2                                       0,
2                                       anlobj$_objlnmrec,
2                                       anlobj$_objsrcrec,
2                                       anlobj$_objttlrec,
2                                       anlobj$_objcprrec,
2                                       0,
2                                       anlobj$_objgtxrec);
2 local
2       scanp: ref block[,byte],
2       work_dsc: descriptor;
2
2
2 ! First we print the main record line for this text record.
2
2 scanp = .record_dsc[ptr];
2 anl$object_record_line(.record_msg[.scanp[obj$b_subtyp]],.record_number,record_dsc);
2 anl$report_line(0);
2
2 ! Now we format the textual information into lines, with as many characters
2 ! per line as possible.  SCANP will act as the text pointer.
2
2 anl$format_line(0,1,anlobj$_texthdr);
2 scanp = .scanp + 2;
3 while .scanp lssa (.record_dsc[ptr]+.record_dsc[len]) do (
3
3       ! Build a descriptor for this line of text.
;  550      0978  3
;  551      0979  3          build_descriptor(work_dsc,minu(.record_dsc[ptr]+.record_dsc[len]-.scanp,65),.scanp);
;  552      0980  3
;  553      0981  3          ! Print the text.
;  554      0982  3
;  555      0983  3          anl$format_line(0,1,anlobj$_text,.work_dsc[len],.work_dsc[ptr]);
;  556      0984  3
;  557      0985  3          ! Update the text pointer.
;  558      0986  3
;  559      0987  3          scanp = .scanp + .work_dsc[len];
;  560      0988  2 );
;  561      0989  2
;  562      0990  2 return;
;  563      0991  2
;  564      0992  1 end;


                                                                      .PSECT  $OWN$,NOEXE,2

                                          00000000  0000C RECORD_MSG:
                                                                      .LONG   0                                              ;
              0000000G 0000000G 0000000G 0000000G  00010               .LONG   ANLOBJ$_OBJLNMREC, ANLOBJ$_OBJSRCREC, -      ;
                                                                              ANLOBJ$_OBJTTLREC, ANLOBJ$_OBJCPRREC          ;
                                          00000000  00020               .LONG   0                                              ;
                                          0000000G  00024               .LONG   ANLOBJ$_OBJGTXREC                              ;


                                                                      .PSECT  $CODE$,NOWRT,2

                                             000C 00000               .ENTRY  ANL$OBJECT_HDR_TEXT, Save R2,R3              ; 0945
                       5E             08  C2 00002               SUBL2   #8, SP
                       52       08    AC  D0 00005               MOVL    THE_RECORD, R2                                 ; 0948
                       53       04    A2  D0 00009               MOVL    4(R2), SCANP                                   ; 0966
                                      52  DD 0000D               PUSHL   R2                                             ; 0967
                                04    AC  DD 0000F               PUSHL   RECORD_NUMBER                                  ;
                       50       01    A3  9A 00012               MOVZBL  1(SCANP), R0                                   ;
                             0000'CF40    DD 00016               PUSHL   RECORD_MSG[R0]                                 ;
                 0000G  CF            03  FB 0001B               CALLS   #3, ANL$OBJECT_RECORD_LINE                     ;
                                      7E  D4 00020               CLRL    -(SP)                                          ; 0968
                 0000G  CF            01  FB 00022               CALLS   #1, ANL$REPORT_LINE                            ;
                          00000000G   8F  DD 00027               PUSHL   #ANLOBJ$_TEXTHDR                               ; 0973
                                      01  DD 0002D               PUSHL   #1                                             ;
                                      7E  D4 0002F               CLRL    -(SP)                                          ;
                 0000G  CF            03  FB 00031               CALLS   #3, ANL$FORMAT_LINE                            ;
                        53            02  C0 00036               ADDL2   #2, SCANP                                      ; 0974
                        50            62  3C 00039 1$:           MOVZWL  (R2), R0                                       ; 0975
                        50      04    A2  C0 0003C               ADDL2   4(R2), R0                                      ;
                        50            53  D1 00040               CMPL    SCANP, R0                                      ;
                                      35  1E 00043               BGEQU   3$                                             ;
                        50            53  C2 00045               SUBL2   SCANP, R0                                      ; 0979
              00000041  8F            50  D1 00048               CMPL    R0, #65                                        ;
                                      04  1B 0004F               BLEQU   2$                                             ;
                        50      41    8F  9A 00051               MOVZBL  #65, R0                                        ;
                        6E            50  D0 00055 2$:           MOVL    R0, WORK_DSC                                   ;
                  04    AE            53  D0 00058               MOVL    SCANP, WORK_DSC+4                              ;
```

```
                                 04   AE  DD 0005C          PUSHL    WORK_DSC+4                              ; 0983
                       7E        04   AE  3C 0005F          MOVZWL   WORK_DSC, -(SP)                         ;
                          00000000G   8F  DD 00063          PUSHL    #ANLOBJ$_TEX,                           ;
                                      01  DD 00069          PUSHL    #1                                      ;
                                      7E  D4 0006B          CLRL     -(SP)                                   ;
                 0000G  CF            05  FB 0006D          CALLS    #5, ANL$FORMAT_LINE                     ;
                        50            6E  3C 00072          MOVZWL   WORK_DSC, R0                            ; 0987
                        53            50  C0 00075          ADDL2    R0, SCANP                               ;
                                      BF  11 00078          BRB      1$                                      ; 0975
                                          04 0007A 3$:      RET                                              ; 0992

; Routine Size:  123 bytes,    Routine Base:  $CODE$ + 050C
```

```
1 %sbttl 'ANL$OBJECT_HDR_MTC - Analyze Maintenance Header Records'
1 !++
1 ! Functional Description:
1 !       This routine is called to analyze maintenance header records.
1 !
1 ! Formal Parameters:
1 !       record_number   The number of this record in the object file.
1 !       the_record      The address of the descriptor of the record.
1 !
1 ! Implicit Inputs:
1 !       global data
1 !
1 ! Implicit Outputs:
1 !       global data
1 !
1 ! Returned Value:
1 !       none
1 !
1 ! Side Effects:
1 !
1 !--
1
1
2 global routine anl$object_hdr_mtc(record_number,the_record): novalue = begin
2
2 bind
2       record_dsc = .the_record: descriptor;
2
2 local
2       status: long,
2       scanp: ref block[,byte],
2       fit_ok: byte,
2       work_dsc: descriptor;
2
2 ! We begin by printing a record line for this maintenance record.
2
2 anl$object_record_line(anlobj$_objmtcrec,.record_number,record_dsc);
2 anl$report_line(0);
2
2 ! Now we print the patch utility name.
2
2 scanp = .record_dsc[ptr];
2 fit_ok = true;
2 ensure_ascic_fit(0,0,8,0,record_dsc,work_dsc);
3 if .fit_ok then (
3       anl$format_line(0,1,anlobj$_objmtcname,.work_dsc[len],.work_dsc[ptr]);
3       scanp = .work_dsc[ptr] + .work_dsc[len];
2 );
2
2 ! Next we print the patch utility version.
2
2 ensure_ascic_fit(0,0,8,0,record_dsc,work_dsc);
3 if .fit_ok then (
3       anl$format_line(0,1,anlobj$_objmtcversion,.work_dsc[len],.work_dsc[ptr]);
3       scanp = .work_dsc[ptr] + .work_dsc[len];
2 );
```

```
;  623     1050  2
;  624     1051  2  . Now the UIC of the stupid patch person (WHY NOT JUST RECOMPILE?).
;  625     1052  2
;  626     1053  2  ensure_field_fit(0,0,16,0,record_dsc);
;  627     1054  3  if .fit_ok then (
;  628     1055  3          anl$format_line(0,1,anlobj$_objmtcuic,.scanp[0,0,8,0],.scanp[1,0,8,0]);
;  629     1056  3          scanp = .scanp + 2;
;  630     1057  2  );
;  631     1058  2
;  632     1059  2  ! Now the input file specification.
;  633     1060  2
;  634     1061  2  ensure_ascic_fit(0,0,8,0,record_dsc,work_dsc);
;  635     1062  3  if .fit_ok then (
;  636     1063  3          anl$format_line(0,1,anlobj$_objmtcinput,.work_dsc[len],.work_dsc[ptr]);
;  637     1064  3          scanp = .work_dsc[ptr] + .work_dsc[len];
;  638     1065  2  );
;  639     1066  2
;  640     1067  2  ! Now the correction file specification.
;  641     1068  2
;  642     1069  2  ensure_ascic_fit(0,0,8,0,record_dsc,work_dsc);
;  643     1070  3  if .fit_ok then (
;  644     1071  3          anl$format_line(0,1,anlobj$_objmtccorrect,.work_dsc[len],.work_dsc[ptr]);
;  645     1072  3          scanp = .work_dsc[ptr] + .work_dsc[len];
;  646     1073  2  );
;  647     1074  2
;  648     1075  2  ! Now the date and time of patching.
;  649     1076  2
;  650     1077  2  ensure_field_fit(0,0,17*8,0,record_dsc);
;  651     1078  3  if .fit_ok then (
;  652     1079  3          build_descriptor(work_dsc,17,.scanp);
;  653     1080  3          anl$format_line(0,1,anlobj$_objmtcwhen,work_dsc);
;  654     1081  3          anl$check_when(work_dsc);
;  655     1082  3          scanp = .scanp + 17;
;  656     1083  2  );
;  657     1084  2
;  658     1085  2  ! Last, and hopefully least, the sequence number.
;  659     1086  2
;  660     1087  2  ensure_field_fit(0,0,8,0,record_dsc);
;  661     1088  3  if .fit_ok then (
;  662     1089  3          anl$format_line(0,1,anlobj$_objmtcseqnum,.scanp[0,0,8,0]);
;  663     1090  3          increment (scanp);
;  664     1091  2  );
;  665     1092  2
;  666     1093  2  ! Finally, we ensure that there are no spurious bytes at the end.
;  667     1094  2
;  668     1095  2  if .record_dsc[ptr]+.record_dsc[len] gtru .scanp then
;  669     1096  2          anl$format_error(anlobj$_extrabytes);
;  670     1097  2
;  671     1098  2  return;
;  672     1099  2
;  673     1100  1  end;



                                                  01FC 00000         .ENTRY  ANL$OBJECT_HDR_MTC, Save R2,R3,R4,R5,R6,R7,-; 1016
```

```
                                                                    G 3
OBJMISC         OBJMISC - Analyze Miscellaneous Object Records  15-Sep-1984 23:42:42    VAX-11 Bliss-32 V4.0-742               Page  30
V04-000         ANL$OBJECT_HDR_MTC - Analyze Maintenance Header 14-Sep-1984 11:52:57    [ANALYZ.SRC]OBJMISC.B32;1                   (9)

                                                       R8                                 :
                58     0000G  CF  9E 00002     MOVAB   ANL$FORMAT_LINE, R8                :
                57     0000G  CF  9E 00007     MOVAB   ANL$FORMAT_ERROR, R7               :
                56 00000000G  8F  D0 0000C     MOVL    #ANLOBJ$_FIELDFIT, R6              :
                5E            08  C2 00013     SUBL2   #8, SP                             :
                54       08   AC  D0 00016     MOVL    THE_RECORD, R4                     : 1019
                              54  DD 0001A     PUSHL   R4                                 : 1030
                         04   AC  DD 0001C     PUSHL   RECORD_NUMBER                      :
                   00000000G  8F  DD 0001F     PUSHL   #ANLOBJ$_OBJMTCREC                 :
         0000G  CF            03  FB 00025     CALLS   #3, ANL$OBJECT_RECORD_LINE         :
                              7E  D4 0002A     CLRL    -(SP)                              : 1031
         0000G  CF            01  FB 0002C     CALLS   #1, ANL$REPORT_LINE                :
                55       04   A4  D0 00031     MOVL    4(R4), R5                          : 1035
                52            55  D0 00035     MOVL    R5, SCANP                          :
                53            01  90 00038     MOVB    #1, FIT_OK                         : 1036
                78            53  E9 0003B     BLBC    FIT_OK, 3$                         : 1037
                51       01   A2  9E 0003E     MOVAB   1(R2), R1                          :
                50            64  3C 00042     MOVZWL  (R4), R0                           :
                50            55  C0 00045     ADDL2   R5, R0                             :
                50            51  D1 00048     CMPL    R1, R0                             :
                              07  1B 0004B     BLEQU   1$                                 :
                              56  DD 0004D     PUSHL   R6                                 :
                67            01  FB 0004F     CALLS   #1, ANL$FORMAT_ERROR               :
                              53  94 00052     CLRB    FIT_OK                             :
                6A            53  E9 00054 1$: BLBC    FIT_OK, 4$                         :
                6E            62  9A 00057     MOVZBL  (SCANP), WORK_DSC                  :
         04     AE       01   A2  9E 0005A     MOVAB   1(R2), WORK_DSC+4                  :
                7F            53  E9 0005F     BLBC    FIT_OK, 5$                         :
                50            6E  3C 00062     MOVZWL  WORK_DSC, R0                       :
                50            08  C6 00065     DIVL2   #8, R0                             :
                51       01 A042  9E 00068     MOVAB   1(R0)[SCANP], R1                   :
                50            64  3C 0006D     MOVZWL  (R4), R0                           :
                50            55  C0 00070     ADDL2   R5, R0                             :
                50            51  D1 00073     CMPL    R1, R0                             :
                              07  1B 00076     BLEQU   2$                                 :
                              56  DD 00078     PUSHL   R6                                 :
                67            01  FB 0007A     CALLS   #1, ANL$FORMAT_ERROR               :
                              53  94 0007D     CLRB    FIT_OK                             :
                7E            53  E9 0007F 2$: BLBC    FIT_OK, 6$                         : 1038
                         04   AE  DD 00082     PUSHL   WORK_DSC+4                         : 1039
                7E       04   AE  3C 00085     MOVZWL  WORK_DSC, -(SP)                    :
                   00000000G  8F  DD 00089     PUSHL   #ANLOBJ$_OBJMTCNAME                :
                              01  DD 0008F     PUSHL   #1                                 :
                              7E  D4 00091     CLRL    -(SP)                              :
                68            05  FB 00093     CALLS   #5, ANL$FORMAT_LINE                :
                52            6E  3C 00096     MOVZWL  WORK_DSC, SCANP                    : 1040
                52       04   AE  C0 00099     ADDL2   WORK_DSC+4, SCANP                  :
                79            53  E9 0009D     BLBC    FIT_OK, 7$                         : 1045
                51       01   A2  9E 000A0     MOVAB   1(R2), R1                          :
                50            64  3C 000A4     MOVZWL  (R4), R0                           :
                50            55  C0 000A7     ADDL2   R5, R0                             :
                50            51  D1 000AA     CMPL    R1, R0                             :
                              07  1B 000AD     BLEQU   3$                                 :
                              56  DD 000AF     PUSHL   R6                                 :
                67            01  FB 000B1     CALLS   #1, ANL$FORMAT_ERROR               :
                              53  94 000B4     CLRB    FIT_OK                             :
                7A            53  E9 000B6 3$: BLBC    FIT_OK, 8$                         :
                     6E              62  9A 000B9          MOVZBL  (SCANP), WORK_DSC                     :
              04     AE       01     A2  9E 000BC          MOVAB   1(R2), WORK_DSC+4                     :
                     6F              53  E9 000C1 4$:      BLBC    FIT_OK, 8$                            :
                     50              6E  3C 000C4          MOVZWL  WORK_DSC, R0                          :
                     50              08  C6 000C7          DIVL2   #8, R0                                :
                     51       01 A042    9E 000CA          MOVAB   1(R0)[SCANP], R1                      :
                     50              64  3C 000CF          MOVZWL  (R4), R0                              :
                     50              55  C0 000D2          ADDL2   R5, R0                                :
                     50              51  D1 000D5          CMPL    R1, R0                                :
                                     07  1B 000D8          BLEQU   5$                                    :
                                     56  DD 000DA          PUSHL   R6                                    :
                     67              01  FB 000DC          CALLS   #1, ANL$FORMAT_ERROR                  :
                                     53  94 000DF          CLRB    FIT_OK                                :
                     73              53  E9 000E1 5$:      BLBC    FIT_OK, 10$                           : 1046
                              04     AE  DD 000E4          PUSHL   WORK_DSC+4                            : 1047
                     7E       04     AE  3C 000E7          MOVZWL  WORK_DSC, -(SP)                       :
                        00000000G    8F  DD 000EB          PUSHL   #ANLOBJ$_OBJMTCVERSION                :
                                     01  DD 000F1          PUSHL   #1                                    :
                                     7E  D4 000F3          CLRL    -(SP)                                 :
                     68              05  FB 000F5          CALLS   #5, ANL$FORMAT_LINE                   :
                     52              6E  3C 000F8          MOVZWL  WORK_DSC, SCANP                       : 1048
        52    04     AE              52  C3 000FB          SUBL3   SCANP, WORK_DSC+4, SCANP              :
                     74              53  E9 00100 6$:      BLBC    FIT_OK, 11$                           : 1053
                     51       02     A2  9E 00103          MOVAB   2(R2), R1                             :
                     50              64  3C 00107          MOVZWL  (R4), R0                              :
                     50              55  C0 0010A          ADDL2   R5, R0                                :
                     50              51  D1 0010D          CMPL    R1, R0                                :
                                     07  1B 00110          BLEQU   7$                                    :
                                     56  DD 00112          PUSHL   R6                                    :
                     67              01  FB 00114          CALLS   #1, ANL$FORMAT_ERROR                  :
                                     53  94 00117          CLRB    FIT_OK                                :
                     79              53  E9 00119 7$:      BLBC    FIT_OK, 12$                           : 1054
                     7E       01     A2  9A 0011C          MOVZBL  1(SCANP), -(SP)                       : 1055
                     7E              62  9A 00120          MOVZBL  (SCANP), -(SP)                        :
                        00000000G    8F  DD 00123          PUSHL   #ANLOBJ$_OBJMTCUIC                    :
                                     01  DD 00129          PUSHL   #1                                    :
                                     7E  D4 0012B          CLRL    -(SP)                                 :
                     68              05  FB 0012D          CALLS   #5, ANL$FORMAT_LINE                   :
                     52              02  C0 00130          ADDL2   #2, SCANP                             : 1056
                     78              53  E9 00133 8$:      BLBC    FIT_OK, 13$                           : 1061
                     51       01     A2  9E 00136          MOVAB   1(R2), R1                             :
                     50              64  3C 0013A          MOVZWL  (R4), R0                              :
                     50              55  C0 0013D          ADDL2   R5, R0                                :
                     50              51  D1 00140          CMPL    R1, R0                                :
                                     07  1B 00143          BLEQU   9$                                    :
                                     56  DD 00145          PUSHL   R6                                    :
                     67              01  FB 00147          CALLS   #1, ANL$FORMAT_ERROR                  :
                                     53  94 0014A          CLRB    FIT_OK                                :
                     6A              53  E9 0014C 9$:      BLBC    FIT_OK, 14$                           :
                     6E              62  9A 0014F          MOVZBL  (SCANP), WORK_DSC                     :
              04     AE       01     A2  9E 00152          MOVAB   1(R2), WORK_DSC+4                     :
                     7F              53  E9 00157 10$:     BLBC    FIT_OK, 15$                           :
                     50              6E  3C 0015A          MOVZWL  WORK_DSC, R0                          :
                     50              08  C6 0015D          DIVL2   #8, R0                                :
                     51       01 A042    9E 00160          MOVAB   1(R0)[SCANP], R1                      :
                     50              64  3C 00165          MOVZWL  (R4), R0                              :
                     50              55  C0 00168          ADDL2   R5, R0                                :
```

```
            50            51  D1 0016B          CMPL    R1, R0                          :
                          07  1B 0016E          BLEQU   11$                             :
                          56  DD 00170          PUSHL   R6                              :
            67            01  FB 00172          CALLS   #1, ANL$FORMAT_ERROR            :
                          53  94 00175          CLRB    FIT_OK                          :
            7D            53  E9 00177 11$:     BLBC    FIT_OK, 16$                     : 1062
                     04   AE  DD 0017A          PUSHL   WORK_DSC+4                      : 1063
            7E       04   AE  3C 0017D          MOVZWL  WORK_DSC, -(SP)                 :
               00000000G  8F  DD 00181          PUSHL   #ANLOBJ$_OBJMTCINPUT            :
                          01  DD 00187          PUSHL   #1                              :
                          7E  D4 00189          CLRL    -(SP)                           :
            68            05  FB 0018B          CALLS   #5, ANL$FORMAT_LINE             :
            52            6E  3C 0018E          MOVZWL  WORK_DSC, SCANP                 : 1064
            52       04   AE  C0 00191          ADDL2   WORK_DSC+4, SCANP               :
            78            53  E9 00195 12$:     BLBC    FIT_OK, 17$                     : 1069
            51       01   A2  9E 00198          MOVAB   1(R2), R1                       :
            50            64  3C 0019C          MOVZWL  (R4), R0                        :
            50            55  C0 0019F          ADDL2   R5, R0                          :
            50            51  D1 001A2          CMPL    R1, R0                          :
                          07  1B 001A5          BLEQU   13$                             :
                          56  DD 001A7          PUSHL   R6                              :
            67            01  FB 001A9          CALLS   #1, ANL$FORMAT_ERROR            :
                          53  94 001AC          CLRB    FIT_OK                          :
            5F            53  E9 001AE 13$:     BLBC    FIT_OK, 17$                     :
            6E            62  9A 001B1          MOVZBL  (SCANP), WORK_DSC               :
      04    AE       01   A2  9E 001B4          MOVAB   1(R2), WORK_DSC+4               :
            77            53  E9 001B9 14$:     BLBC    FIT_OK, 18$                     :
            50            6E  3C 001BC          MOVZWL  WORK_DSC, R0                    :
            50            08  C6 001BF          DIVL2   #8, R0                          :
            51       01 A042  9E 001C2          MOVAB   1(R0)[SCANP], R1                :
            50            64  3C 001C7          MOVZWL  (R4), R0                        :
            50            55  C0 001CA          ADDL2   R5, R0                          :
            50            51  D1 001CD          CMPL    R1, R0                          :
                          07  1B 001D0          BLEQU   15$                             :
                          56  DD 001D2          PUSHL   R6                              :
            67            01  FB 001D4          CALLS   #1, ANL$FORMAT_ERROR            :
                          53  94 001D7          CLRB    FIT_OK                          :
            70            53  E9 001D9 15$:     BLBC    FIT_OK, 19$                     : 1070
                     04   AE  DD 001DC          PUSHL   WORK_DSC+4                      : 1071
            7E       04   AE  3C 001DF          MOVZWL  WORK_DSC, -(SP)                 :
               00000000G  8F  DD 001E3          PUSHL   #ANLOBJ$_OBJMTCCORRECT          :
                          01  DD 001E9          PUSHL   #1                              :
                          7E  D4 001EB          CLRL    -(SP)                           :
            68            05  FB 001ED          CALLS   #5, ANL$FORMAT_LINE             :
            52            6E  3C 001F0          MOVZWL  WORK_DSC, SCANP                 : 1072
            52       04   AE  C0 001F3          ADDL2   WORK_DSC+4, SCANP               :
            67            53  E9 001F7 16$:     BLBC    FIT_OK, 20$                     : 1077
            51       11   A2  9E 001FA          MOVAB   17(R2), R1                      :
            50            64  3C 001FE          MOVZWL  (R4), R0                        :
            50            55  C0 00201          ADDL2   R5, R0                          :
            50            51  D1 00204          CMPL    R1, R0                          :
                          07  1B 00207          BLEQU   17$                             :
                          56  DD 00209          PUSHL   R6                              :
            67            01  FB 0020B          CALLS   #1, ANL$FORMAT_ERROR            :
                          53  94 0020E          CLRB    FIT_OK                          :
            4E            53  E9 00210 17$:     BLBC    FIT_OK, 20$                     : 1078
            6E            11  D0 00213          MOVL    #17, WORK_DSC                   : 1079
```

```
                        04   AE           52  D0 00216          MOVL    SCANP, WORK_DSC+4                     ;
                                          5E  DD 0021A          PUSHL   SP                                    ; 1080
                              00000000G   8F  DD 0021C          PUSHL   #ANLOBJ$_OBJMTCWHEN                   ;
                                          01  DD 00222          PUSHL   #1                                    ;
                                          7E  D4 00224          CLRL    -(SP)                                 ;
                             68           04  FB 00226          CALLS   #4, ANL$FORMAT_LINE                   ;
                                          5E  DD 00229          PUSHL   SP                                    ; 1081
                    0000G    CF           01  FB 0022B          CALLS   #1, ANL$CHECK_WHEN                    ;
                             52           11  C0 00230          ADDL2   #17, SCANP                            ; 1082
                             2B           53  E9 00233 18$:     BLBC    FIT_OK, 20$                           ; 1087
                             51      01   A2  9E 00236          MOVAB   1(R2), R1                             ;
                             50           64  3C 0023A          MOVZWL  (R4), R0                              ;
                             50           55  C0 0023D          ADDL2   R5, R0                                ;
                             50           51  D1 00240          CMPL    R1, R0                                ;
                                          07  1B 00243          BLEQU   19$                                   ;
                                          56  DD 00245          PUSHL   R6                                    ;
                             67           01  FB 00247          CALLS   #1, ANL$FORMAT_ERROR                  ;
                                          53  94 0024A          CLRB    FIT_OK                                ;
                             12           53  E9 0024C 19$:     BLBC    FIT_OK, 20$                           ; 1088
                             7E           62  9A 0024F          MOVZBL  (SCANP), -(SP)                        ; 1089
                              00000000G   8F  DD 00252          PUSHL   #ANLOBJ$_OBJMTCSEQNUM                 ;
                                          01  DD 00258          PUSHL   #1                                    ;
                                          7E  D4 0025A          CLRL    -(SP)                                 ;
                             68           04  FB 0025C          CALLS   #4, ANL$FORMAT_LINE                   ;
                                          52  D6 0025F          INCL    SCANP                                 ; 1090
                             50           64  3C 00261 20$:     MOVZWL  (R4), R0                              ; 1095
                             50           55  C0 00264          ADDL2   R5, R0                                ;
                             52           50  D1 00267          CMPL    R0, SCANP                             ;
                                          09  1B 0026A          BLEQU   21$                                   ;
                              00000000G   8F  DD 0026C          PUSHL   #ANLOBJ$_EXTRABYTES                   ; 1096
                             67           01  FB 00272          CALLS   #1, ANL$FORMAT_ERROR                  ;
                                          04  00275 21$:        RET                                           ; 1100

; Routine Size:  630 bytes,    Routine Base:  $CODE$ + 0587


|;  674          1101   1
```

```
;  676         1102   1 %sbttl 'ANL$OBJECT_LNK - Analyze LNK Record'
;  677         1103   1 !++
;  678         1104   1 ! Functional Description:
;  679         1105   1 !       This routine analyzes the LNK record, with link optior specifications.
;  680         1106   1 !       Currently this is ignored by the linker, so we will just dump it in
;  681         1107   1 !       hex for the guy.
;  682         1108   1 !
;  683         1109   1 ! Formal Parameters:
;  684         1110   1 !       record_number   The number of this object record.
;  685         1111   1 !       the_record      Address of descriptor of record.
;  686         1112   1 !
;  687         1113   1 ! Implicit Inputs:
;  688         1114   1 !       global data
;  689         1115   1 !
;  690         1116   1 ! Implicit Outputs:
;  691         1117   1 !       global data
;  692         1118   1 !
;  693         1119   1 ! Returned Value:
;  694         1120   1 !       none
;  695         1121   1 !
;  696         1122   1 ! Side Effects:
;  697         1123   1 !
;  698         1124   1 !--
;  699         1125   1
;  700         1126   1
;  701         1127   2 global routine anl$object_lnk(record_number,the_record): novalue = begin
;  702         1128   2
;  703         1129   2 bind
;  704         1130   2       record_dsc = .the_record: descriptor;
;  705         1131   2
;  706         1132   2
;  707         1133   2 ! First we print a major line for the record.
;  708         1134   2
;  709         1135   2 anl$object_record_line(anlobj$_objlnkrec,.record_number,record_dsc);
;  710         1136   2 anl$report_line(0);
;  711         1137   2
;  712         1138   2 ! Now we just dump the contents in hex.
;  713         1139   2
;  714         1140   2 anl$format_hex(1,record_dsc);
;  715         1141   2
;  716         1142   2 return;
;  717         1143   2
;  718         1144   1 end;



                                            0000 00000          .ENTRY  ANL$OBJECT_LNK, Save nothing                  ; 1127
                 7E          04     AC   7D 00002          MOVQ    RECORD_NUMBER, -(SP)                          ; 1135
                      00000000G     8F   DD 00006          PUSHL   #ANLOBJ$_OBJLNKREC                             ;
         0000G   CF                 03   FB 0000C          CALLS   #3, ANL$OBJECT_RECORD_LINE                     ;
                                    7E   D4 00011          CLRL    -(SP)                                          ; 1136
         0000G   CF                 01   FB 00013          CALLS   #1, ANL$REPORT_LINE                            ;
                             08     AC   DD 00018          PUSHL   THE_RECORD                                     ; 1140
                                    01   DD 0001B          PUSHL   #1                                             ;
         0000G   CF                 02   FB 0001D          CALLS   #2, ANL$FORMAT_HEX                             ;
```

```
                                                        04 00022        RET                                                   ; 1144

; Routine Size:  35 bytes,    Routine Base:  $CODE$ + 07FD


;  719          1145  1
;  720          1146  0 end eludom




;                                         PSECT SUMMARY
;
;       Name                            Bytes                        Attributes
;
;  $OWN$                                    40  NOVEC,  WRT,  RD ,NOEXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)
;  $PLIT$                                   12  NOVEC,NOWRT,  RD ,NOEXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)
;  $CODE$                                 2080  NOVEC,NOWRT,  RD ,  EXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)


;                                 Library Statistics
;
;                                                  -------- Symbols --------      Pages       Processing
;       File                                       Total    Loaded   Percent      Mapped      Time
;
;  _$255$DUA28:[SYSLIB]LIB.L32;1                   18619        37         0      1000          00:01.9




;                                         COMMAND QUALIFIERS

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

; Size:          2080 code + 52 data bytes
; Run Time:         00:36.0
; Elapsed Time:     01:49.3
; Lines/CPU Min:     1912
; Lexemes/CPU-Min: 17522
; Memory Used:  290 pages
; Compilation Complete
```

0007 AH-BT13A-SE
VAX/VMS V4.0

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DB MISC
LIS

RMS2IDX
LIS

RMS3IDX
LIS

RMS
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DBUTIR
LIS