


```

LL      NN      NN  KK      KK  NN      NN  XX      XX  TTTTTTTTTT  000000  88888888  JJ
LL      NN      NN  KK      KK  NN      NN  XX      XX  TTTTTTTTTT  000000  88888888  JJ
LL      NN      NN  KK      KK  NN      NN  XX      XX  TT          00      00  88      88  JJ
LL      NN      NN  KK      KK  NN      NN  XX      XX  TT          00      00  88      88  JJ
LL      NNNN     NN  KK      KK  NNNN     NN  XX      XX  TT          00      00  88      88  JJ
LL      NNNN     NN  KK      KK  NNNN     NN  XX      XX  TT          00      00  88      88  JJ
LL      NN  NN  NN  KKKKKK  NN  NN  NN  XX      XX  TT          00      00  88888888  JJ
LL      NN  NN  NN  KKKKKK  NN  NN  NN  XX      XX  TT          00      00  88888888  JJ
LL      NN      NNNN  KK      KK  NN      NNNN  XX      XX  TT          00      00  88      88  JJ
LL      NN      NNNN  KK      KK  NN      NNNN  XX      XX  TT          00      00  88      88  JJ
LL      NN      NN  KK      KK  NN      NN  XX      XX  TT          00      00  88      88  JJ
LL      NN      NN  KK      KK  NN      NN  XX      XX  TT          00      00  88      88  JJ
LLLLLLLLLLLL  NN      NN  KK      KK  NN      NN  XX      XX  TT          000000  88888888  JJJJJJ  ....
LLLLLLLLLLLL  NN      NN  KK      KK  NN      NN  XX      XX  TT          000000  88888888  JJJJJJ  ....

```

```

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
LLLLLLLLLLLL  IIIIII  SSSSSSSS
LLLLLLLLLLLL  IIIIII  SSSSSSSS

```

```
1 0001 0 MODULE LNK_NXTOBJ
2 0002 0 (IDENT = 'V04-000'
3 0003 0 ADDRESSING_MODE(EXTERNAL=GENERAL,
4 0004 0 NONEXTERNAL=LONG_RELATIVE)
5 0005 0 ) =
6 0006 0
7 0007 1 BEGIN
8 0008 1
9 0009 1
10 0010 1 *****
11 0011 1 *
12 0012 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
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29 0029 1 *
30 0030 1 *
31 0031 1 *****
32 0032 1
33 0033 1
34 0034 1
35 0035 1
36 0036 1
37 0037 1 ++
38 0038 1
39 0039 1 MODULE: LNK_NXTOBJ
40 0040 1
41 0041 1 FACILITY: LINKER
42 0042 1
43 0043 1 ABSTRACT: FIND NEXT OBJECT MODULE (AND OPEN FILE) FOR PASS 2.
44 0044 1
45 0045 1 HISTORY:
46 0046 1
47 0047 1 VERSION: X01.00
48 0048 1
49 0049 1 AUTHOR: T.J. PORTER 11-APR-77
50 0050 1
51 0051 1 MODIFIED BY:
52 0052 1
53 0053 1 V03-003 BLS0074 Benn Schreiber 29-Aug-1981
54 0054 1 Remove argument for call to lnk$nextobjmod
55 0055 1
56 0056 1 V03-002 BLS0017 Benn Schreiber 1-Sep-1980
57 0057 1 Set lnk$gl_curomd when going to new object module.
```



```
63 0062 1 |
64 0063 1 | ++
65 0064 1 |
66 0065 1 | FUNCTIONAL DESCRIPTION:
67 0066 1 |
68 0067 1 |
69 0068 1 | THIS MODULE CONTAINS THE ROUTINE TO ACQUIRE THE NEXT
70 0069 1 | OBJECT MODULE DESCRIPTOR AND ENSURE THAT THE FILE IS OPEN
71 0070 1 | (AT CORRECT PLACE) READY FOR PASS 2 TO READ RECORDS
72 0071 1 | SEQUENTIALLY FROM IT.
73 0072 1 | THIS IS DONE BY FOLLOWING DOWN THE SINGLY LINKED
74 0073 1 | LIST OF OBJECT MODULE DESCRIPTORS TO THE END, THEN PROCEEDING
75 0074 1 | TO THE NEXT FILE IN SEQUENCE, OPENING IT AND FOLLOWING
76 0075 1 | DOWN THE LIST.
77 0076 1 | CALLING SEQUENCE:-
78 0077 1 | LNK$NXTOBJMOD ()
79 0078 1 |
80 0079 1 | THE ADDRESS OF THE DESCRIPTOR OF THE NEXT OBJECT MODULE
81 0080 1 | IS STORED IN LNK$GL_CUROMD
82 0081 1 | ROUTINE HAS VALUE FALSE WHEN NO MORE
83 0082 1 | MODULES ARE AVAILABLE IN THE LAST FILE.
84 0083 1 |
85 0084 1 | --
86 0085 1 |
87 0086 1 | LIBRARY
88 0087 1 | 'STARLETL32'; ! SYSTEM USER DATA STRUCTURES
89 0088 1 | REQUIRE
90 0089 1 | 'PREFIX'; ! MACROS ETC.
91 0204 1 | LIBRARY
92 0205 1 | 'DATBAS'; ! INTERNAL DATA BASE DEFINITION
93 0206 1 |
94 0207 1 | EXTERNAL LITERAL
95 0208 1 | LINS_EMPTYFILE; ! FILE CONTAINS NO MODULES
96 0209 1 |
97 0210 1 | EXTERNAL ROUTINE
98 0211 1 | LNK$NXTFIL, ! OPEN NEXT FILE
99 0212 1 | LNK$POINTOBJ; ! POINT TO A MODULE IN LIBRARY
100 0213 1 |
101 0214 1 | EXTERNAL
102 0215 1 | LNK$GL_CUROMD : REF BLOCK[,BYTE], ! POINTER TO CURRENT OBJECT MODULE DESCRIPTOR
103 0216 1 | LNK$GL_CURFIL : REF BLOCK[,BYTE]; ! POINTER TO CURRENT FILE.
104 0217 1 |
105 0218 1 | GLOBAL ROUTINE LNK$NXTOBJMOD =
106 0219 2 | BEGIN
107 0220 2 |
108 0221 2 | IF THE END OF A LIST OF OBJECT MODULE DESCRIPTORS (OR
109 0222 2 | FIRST CALL) OPEN NEXT FILE. ON SUBSEQUENT CALLS FOLLOW DOWN
110 0223 2 | CURRENT LIST. FINALLY RETURN VALUE FALSE
111 0224 2 |
112 0225 2 | LOCAL
113 0226 2 | LSTOBMODESC : REF BLOCK[,BYTE]; ! POINTER TO PREVIOUS OBJ MOD. DESCRIPTOR
114 0227 2 |
115 0228 2 | IF (LSTOBMODESC = .LNK$GL_CUROMD) NEQ 0 ! IF THERE WAS ONE
116 0229 2 | THEN LNK$GL_CUROMD = .LNK$GL_CUROMD[OMD$LNXTOMD]; ! BEFORE, GET THE ONE
117 0230 2 | WHILE (.LNK$GL_CUROMD EQL 0) DO ! IT POINTS TO IF THERE
118 0231 3 | BEGIN ! IS NO LONGER A DESCRIPTOR
119 0232 3 | LSTOBMODESC = 0; ! RESET THE LAST OBJECT DESCRIPTOR
```

```

: 120      0233      3      IF NOT LNK$NXTFIL()      ! OPEN NEXT FILE
: 121      0234      4      THEN BEGIN      ! AND ALL DONE IF NO MORE
: 122      0235      4      LNK$GL_CURFIL = 0;
: 123      0236      4      RETURN FALSE
: 124      0237      4      END;
: 125      0238      4      IF (LNK$GL_CUROMD = .LNK$GL_CURFIL[FDB$L_OMDLST]) EQL 0 ! OTHERWISE GET THE FIRST MODULE
: 126      0239      4      THEN      ! BUT IF THERE IS NONE
: 127      0240      4      SIGNAL(LIN$_EMPTYFILE,1,LNK$GL_CURFIL[FDB$Q_FILENAME]); ! REPORT THE ERROR
: 128      0241      2      END;
: 129      0242      2      IF .LNK$GL_CURFIL[FDB$V_LIBR]      ! IF A LIBRARY FILE
: 130      0243      2      OR .LNK$GL_CUROMD[OMD$V_SHRIMG]      ! AND/OR A SHAREABLE IMAGE
: 131      0244      4      OR ((.LSTOBMODESC NEQ 0)      ! OR THIS IS NOT THE FIRST IN A CONCATENATED
: 132      0245      3      AND .LSTOBMODESC[OMD$V_NOBIN])      ! OBJ BUT IS PRECEDED BY A MODULE WITH NO BI
: 133      0246      2      THEN LNK$POINTOBJ(LNK$GL_CUROMD[OMD$L_MODVBN]);      ! POINT TO THE MODULE
: 134      0247      2
: 135      0248      2      RETURN TRUE      ! AND SUCCESS
: 136      0249      1      END;

```

```

.TITLE LNK_NXTOBJ
.IDENT \V04-000\

.EXTRN LIN$_EMPTYFILE, LNK$NXTFIL
.EXTRN LNK$POINTOBJ, LNK$GL_CUROMD
.EXTRN LNK$GL_CURFIL

```

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

```

: 0218      54 00000000G 00 001C 00000      .ENTRY LNK$NXTOBJMOD, Save R2,R3,R4
: 0219      53 00000000G 00 09E 00002      MOVAB LNK$GL_CURFIL, R4
: 0220      50      63 D0 00010      MOVAB LNK$GL_CUROMD, R3
: 0221      52      50 D0 00013      MOVL LNK$GL_CUROMD, R0
: 0222      03 13 00016      BEQL 1$
: 0223      63      60 D0 00018      MOVL (R0), LNK$GL_CUROMD
: 0224      63 D5 0001B 1$:      TSTL LNK$GL_CUROMD
: 0225      2D 12 0001D      BNEQ 3$
: 0226      52 D4 0001F      CLRL LSTOBMODESC
: 0227      00000000G 00 00 FB 00021      CALLS #0, LNK$NXTFIL
: 0228      04      50 E8 00028      BLBS R0, 2$
: 0229      64 D4 0002B      CLRL LNK$GL_CURFIL
: 0230      45 11 0002D      BRB 6$
: 0231      50      64 D0 0002F 2$:      MOVL LNK$GL_CURFIL, R0
: 0232      63      04 A0 D0 00032      MOVL 4(R0), LNK$GL_CUROMD
: 0233      E3 12 00036      BNEQ 1$
: 0234      14 A0 9F 00038      PUSHAB 20(R0)
: 0235      01 DD 0003B      PUSHL #1
: 0236      00000000G 00 8F DD 0003D      PUSHL #LIN$_EMPTYFILE
: 0237      03 FB 00043      CALLS #3, LIB$SIGNAL
: 0238      CF 11 0004A      BRB 1$
: 0239      50      64 D0 0004C 3$:      MOVL LNK$GL_CURFIL, R0
: 0240      11 0A A0 01 E0 0004F      BBS #1, 10(R0), 4$
: 0241      09      50 63 D0 00054      MOVL LNK$GL_CUROMD, R0
: 0242      02 E0 00057      BBS #2, 20(R0), 4$
: 0243      52 D5 0005C      TSTL LSTOBMODESC
: 0244      10 13 0005E      BEQL 5$
: 0245      0B 14 A2 01 E1 00060      BBC #1, 20(LSTOBMODESC), 5$

```

LNK_NXTOBJ
V04=000

M 8
16-Sep-1984 00:10:25
14-Sep-1984 12:40:31

VAX-11 Bliss-32 V4.0-742
[LINKER.SRC]LNKNXTOBJ.B32;1

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(2)

7E	00000000G	63 00 50	0C	C1	00065	4\$:	ADDL3	#12,	LNK\$GL	CUROMD,	-(SP)
			01	FB	00069		CALLS	#1,	LNK\$POINTOBJ		
			01	D0	00070	5\$:	MOVL	#1,	R0		
				04	00073		RET				
			50	D4	00074	6\$:	CLRL		R0		
				04	00076		RET				

: 0246
: 0248
: 0249
:

: Routine Size: 119 bytes, Routine Base: \$CODE\$ + 0000

: 137 0250 0 END ELUDOM

.EXTRN LIB\$SIGNAL

PSECT SUMMARY

Name	Bytes	Attributes
\$CODE\$	119	NOVEC,NOWRT, RD , EXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)

Library Statistics

File	Total	Symbols Loaded	Percent	Pages Mapped	Processing Time
\$255\$DUA28:[SYSLIB]STARLET.L32;1	9776	6	0	581	00:01.0
\$255\$DUA28:[LINKER.OBJ]DATBAS.L32;1	538	7	1	28	00:00.5

COMMAND QUALIFIERS

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

: Size: 119 code + 0 data bytes
: Run Time: 00:04.8
: Elapsed Time: 00:18.7
: Lines/CPU Min: 3112
: Lexemes/CPU-Min: 9970
: Memory Used: 57 pages
: Compilation Complete

[Screenshot 1]	[Screenshot 2]	[Screenshot 3]	[Screenshot 4]	[Screenshot 5]	[Screenshot 6]	[Screenshot 7]	[Screenshot 8]	[Screenshot 9]	[Screenshot 10]	[Screenshot 11]	[Screenshot 12]
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