


```
LL      000000      CCCCCCCC      KK      KK      DDDDDDDD      NN      NN
LL      000000      CCCCCCCC      KK      KK      DDDDDDDD      NN      NN
LL      00      00      CC      KK      KK      DD      DD      NN      NN
LL      00      00      CC      KK      KK      DD      DD      NN      NN
LL      00      00      CC      KK      KK      DD      DD      NNNN      NN
LL      00      00      CC      KK      KK      DD      DD      NNNN      NN
LL      00      00      CC      KKKKKK      DD      DD      NN      NN      NN
LL      00      00      CC      KKKKKK      DD      DD      NN      NN      NN
LL      00      00      CC      KK      KK      DD      DD      NN      NN      NNNN
LL      00      00      CC      KK      KK      DD      DD      NN      NN      NNNN
LL      00      00      CC      KK      KK      DD      DD      NN      NN      NN
LL      00      00      CC      KK      KK      DD      DD      NN      NN      NN
LL      00      00      CC      KK      KK      DD      DD      NN      NN      NN
LLLLLLLLLLLL      000000      CCCCCCCC      KK      KK      DDDDDDDD      NN      NN
LLLLLLLLLLLL      000000      CCCCCCCC      KK      KK      DDDDDDDD      NN      NN
                                           .....
                                           .....
                                           .....
                                           .....
```

```
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
LLLLLLLLLLLL      IIIIII      SSSSSSSS
LLLLLLLLLLLL      IIIIII      SSSSSSSS
```

```

0000 1 .TITLE LOCKDN - LOCK FCP INTO REAL MEMORY
0000 2 .IDENT 'V04-000'
0000 3
0000 4
0000 5 :*****
0000 6 :*
0000 7 :* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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0000 23 :* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
0000 24 :*
0000 25 :*
0000 26 :*****
0000 27
0000 28 :++
0000 29
0000 30 : FACILITY: F11ACP STRUCTURE LEVEL 1
0000 31
0000 32 : ABSTRACT:
0000 33
0000 34 : THIS ROUTINE TOUCHES ALL OF THE PAGES IN FCP TO BRING THEM
0000 35 : INTO REAL MEMORY.
0000 36
0000 37 : ENVIRONMENT:
0000 38
0000 39 : STARLET OPERATING SYSTEM, INCLUDING PRIVILEGED SYSTEM SERVICES
0000 40 : AND INTERNAL EXEC ROUTINE.
0000 41
0000 42 :--
0000 43
0000 44 : AUTHOR: ANDREW C. GOLDSTEIN 30-MAY-78 21:51
0000 45
0000 46 : MODIFIED BY:
0000 47
0000 48 :**
0000 49
0000 50
0000 51 : DEFINE LABELS FOR THE START AND END OF THE LOCKED DOWN AREAS
0000 52
0000 53 : .PSECT $LOCKEDC0$,NOWRT,PAGE
0000 54 LCODE_START:
0000 55
0000 56 : .PSECT $LOCKEDC9$,NOWRT,LONG
0000 57 LCODE_END:

```

```
0000 58
00000000 59 .PSECT $LOCKEDD0$,NOEXE,LONG
0000 60 LDATA_START:
0000 61
00000000 62 .PSECT $LOCKEDD9$,NOEXE,LONG
0000 63 LDATA_END:
0000 64
00000000 65 .PSECT $LOCKEDD1$,NOEXE,LONG
0000 66 :
0000 67 : DESCRIPTORS TO LOCK DOWN THE CODE AND DATA AREAS THAT ARE TO BE LOCKED INTO
0000 68 : THE WORKING SET
0000 69 :
00000000 70 .PSECT $CODE$,NOWRT,LONG
0000 71
FFFFFFFF'00000000' 0000 72 LOCKED_CODE: .LONG LCODE_START,LCODE_END-1
FFFFFFFF'00000000' 0008 73 LOCKED_DATA: .LONG LDATA_START,LDATA_END-1
```

```
0010 75 :++
0010 76 :
0010 77 : FUNCTIONAL DESCRIPTION:
0010 78 :
0010 79 :     THIS ROUTINE TOUCHES ALL OF THE PAGES IN FCP TO BRING THEM
0010 80 :     INTO REAL MEMORY.
0010 81 :
0010 82 : CALLING SEQUENCE:
0010 83 :     CALL LOCKDOWN ( )
0010 84 :     NONE
0010 85 :
0010 86 : INPUT PARAMETERS:
0010 87 :     NONE
0010 88 :
0010 89 : IMPLICIT INPUTS:
0010 90 :     NONE
0010 91 :
0010 92 : OUTPUT PARAMETERS:
0010 93 :     NONE
0010 94 :
0010 95 : IMPLICIT OUTPUTS:
0010 96 :     NONE
0010 97 :
0010 98 : ROUTINE VALUE:
0010 99 :     NONE
0010 100 :
0010 101 : SIDE EFFECTS:
0010 102 :     CRITICAL CODE LOCKED INTO THE WORKING SET
0010 103 :
0010 104 :--
0010 105 :
0000 0010 106 LOCKDOWN::
0010 107 :     .WORD  ^M<>
0012 108 :
0012 109 : LOCK INTO THE WORKING SET THE CODE AND DATA AREAS THAT SHOULD BE.
0012 110 :
0012 111 :     $LKWSET_S  LOCKED_CODE
0020 112 :     $LKWSET_S  LOCKED_DATA
04 002E 113 :     RET
002F 114 :
002F 115 :
002F 116 :
002F 117 :     .END
```

LOCKDN
Symbol table

- LOCK FCP INTO REAL MEMORY

H 16

16-SEP-1984 00:43:43 VAX/VMS Macro V04-00
5-SEP-1984 01:08:06 [F11A.SRC]LOCKDN.MAR;1

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```

AQB_TYPE      = 00000005
BITMAP_TYPE   = 00000001
DIRECTORY_TYPE = 00000002
FCB_TYPE      = 00000000
HEADER_TYPE   = 00000000
INDEX_TYPE    = 00000003
LCODE_END     00000000 R    02
LCODE_START   00000000 R    01
LDATA_END     00000000 R    04
LDATA_START   00000000 R    03
LOCKDOWN      00000010 RG   06
LOCKED_CODE   00000000 R    06
LOCKED_DATA   00000008 R    06
MVL_TYPE      = 00000004
RVT_TYPE      = 00000003
SYS$LKWSET    ***** GX  06
VCB_TYPE      = 00000002
WCB_TYPE      = 00000001

```

```

+-----+
! Psect synopsis !
+-----+

```

PSECT name	Allocation	PSECT No.	Attributes
ABS	00000000 (0.)	00 (0.)	NOPIC USR CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE
\$LOCKEDC0\$	00000000 (0.)	01 (1.)	NOPIC USR CON REL LCL NOSHR EXE RD NOWRT NOVEC PAGE
\$LOCKEDC9\$	00000000 (0.)	02 (2.)	NOPIC USR CON REL LCL NOSHR EXE RD NOWRT NOVEC LONG
\$LOCKEDD0\$	00000000 (0.)	03 (3.)	NOPIC USR CON REL LCL NOSHR NOEXE RD WRT NOVEC LONG
\$LOCKEDD9\$	00000000 (0.)	04 (4.)	NOPIC USR CON REL LCL NOSHR NOEXE RD WRT NOVEC LONG
\$LOCKEDD1\$	00000000 (0.)	05 (5.)	NOPIC USR CON REL LCL NOSHR NOEXE RD WRT NOVEC LONG
\$CODE\$	0000002F (47.)	06 (6.)	NOPIC USR CON REL LCL NOSHR EXE RD NOWRT NOVEC LONG

```

+-----+
! Performance indicators !
+-----+

```

Phase	Page faults	CPU Time	Elapsed Time
Initialization	29	00:00:00.10	00:00:00.53
Command processing	108	00:00:00.74	00:00:03.60
Pass 1	113	00:00:00.80	00:00:03.87
Symbol table sort	0	00:00:00.01	00:00:00.01
Pass 2	36	00:00:00.45	00:00:01.77
Symbol table output	3	00:00:00.01	00:00:00.29
Psect synopsis output	2	00:00:00.03	00:00:00.03
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	294	00:00:02.16	00:00:10.28

The working set limit was 1050 pages.
2534 bytes (5 pages) of virtual memory were used to buffer the intermediate code.
There were 10 pages of symbol table space allocated to hold 18 non-local and 0 local symbols.
220 source lines were read in Pass 1, producing 21 object records in Pass 2.
6 pages of virtual memory were used to define 6 macros.

! Macro library statistics !

Macro library name	Macros defined
-----	-----
-\$255\$DUA28:[SYS.OBJ]LIB.MLB;1	0
-\$255\$DUA28:[SYSLIB]STARLET.MLB;2	2
TOTALS (all libraries)	2

14 GETS were required to define 2 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS\$:LOCKDN/OBJ=OBJ\$:LOCKDN MSRC\$:FCPPRE/UPDATE=(ENH\$:FCPPRE)+MSRC\$:LOCKDN/UPDATE=(ENH\$:LOCKDN)+EXECMLS/LIB

