```
LLL              BBBBBBBBBBBB     RRRRRRRRRRRR
LLL              BBBBBBBBBBBB     RRRRRRRRRRRR
LLL              BBBBBBBBBBBB     RRRRRRRRRRRR
LLL              BBB         BBB  RR          RRR
LLL              BBB         BBB  RRR         RRR
LLL              BBB         BBB  RRR         RRR
LLL              BBB         BBB  RRR         RRR
LLL              BBB         BBB  RRR         RRR
LLL              BBB         BBB  RRR         RRR
LLL              BBBBBBBBBBBB     RRRRRRRRRRRR
LLL              BBBBBBBBBBBB     RRRRRRRRRRRR
LLL              BBBBBBBBBBBB     RRRRRRRRRRRR
LLL              BBB         BBB  RRR   RRR
LLL              BBB         BBB  RRR   RRR
LLL              BBB         BBB  RRR   RRR
LLL              BBB         BBB  RRR      RRR
LLL              BBB         BBB  RRR      RRR
LLL              BBB         BBB  RRR      RRR
LLLLLLLLLLLLLLL  BBBBBBBBBBBB     RRR         RRR
LLLLLLLLLLLLLLL  BBBBBBBBBBBB     RRR         RRR
LLLLLLLLLLLLLLL  BBBBBBBBBBBB     RRR         RRR
```

FILEID**DATA

```
DDDDDDDD      AAAAAA    TTTTTTTTTT    AAAAAA
DDDDDDDD      AAAAAA    TTTTTTTTTT    AAAAAA
DD      DD   AA    AA       TT      AA    AA
DD      DD   AA    AA       TT      AA    AA
DD      DD   AA    AA       TT      AA    AA
DD      DD   AA    AA       TT      AA    AA
DD      DD   AA    AA       TT      AA    AA
DD      DD   AAAAAAAAAA     TT      AAAAAAAAAA
DD      DD   AAAAAAAAAA     TT      AAAAAAAAAA
DD      DD   AA    AA       TT      AA    AA      ....
DD      DD   AA    AA       TT      AA    AA      ....
DDDDDDDD     AA    AA       TT      AA    AA      ....
DDDDDDDD     AA    AA       TT      AA    AA      ....

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

```
;     1          0001  0 MODULE LBR_DATA (                       ! Library access procedure data base
;     2          0002  0                 LANGUAGE (BLISS32),
;     3          0003  0                 IDENT = 'V04-000'
;     4          0004  0                 ) =
;     5          0005  1 BEGIN
;     6          0006  1
;     7          0007  1 !
;     8          0008  1 !**************************************************************************
;     9          0009  1 !*                                                                        *
;    10          0010  1 !*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                               *
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;    27          0027  1 !*                                                                        *
;    28          0028  1 !*                                                                        *
;    29          0029  1 !**************************************************************************
;    30          0030  1
;    31          0031  1 !++
;    32          0032  1 !
;    33          0033  1 ! FACILITY:  Library access procedures
;    34          0034  1 !
;    35          0035  1 ! ABSTRACT:
;    36          0036  1 !
;    37          0037  1 !       The VAX/VMS librarian procedures implement a standard access method
;    38          0038  1 !       to libraries through a shared, common procedure set.
;    39          0039  1 !
;    40          0040  1 ! ENVIRONMENT:
;    41          0041  1 !
;    42          0042  1 !       VAX native, user mode.
;    43          0043  1 !
;    44          0044  1 !--
;    45          0045  1 !
;    46          0046  1 !
;    47          0047  1 ! AUTHOR:  Benn Schreiber,       CREATION DATE:  11-June-1979
;    48          0048  1 !
;    49          0049  1 ! MODIFIED BY:
;    50          0050  1 !
;    51          0051  1 !       V03-002 GJA0090         Greg Awdziewicz         24-Jul-1984
;    52          0052  1 !               - Change librarian version id to V04-00.
;    53          0053  1 !
;    54          0054  1 !       V03-001 JWT0114         Jim Teague              18-Apr-1983
;    55          0055  1 !               Add globals for dcx address tables.  Needed in order
;    56          0056  1 !               to dynamically activate DCXSHR.
;    57          0057  1 !
```

```
;    58          0058  1 !--
;    59          0059  1
;    60          0060  1
```

```
;    62          0061  1 LIBRARY
;    63          0062  1         'SYS$LIBRARY:STARLET.L32';
;    64          0063  1 REQUIRE
;    65          0064  1         'PREFIX';
;    66          0203  1 REQUIRE
;    67          0204  1         'LBRDEF';
;    68          0795  1 !
;    69          0796  1 ! Librarian global data
;    70          0797  1 !
;    71          0798  1 GLOBAL
;    72          0799  1 !
;    73          0800  1 ! Do not change the order of the following data.  Any new data must be
;    74          0801  1 ! inserted at the end.
;    75          0802  1 !
;    76          0803  1     lbr$gl_control : REF BBLOCK,                !Pointer to current user control table
;    77          0804  1     lbr$gl_rmsstv,                              !STV from last RMS error
;    78          0805  1     lbr$al_ctltab : VECTOR [lbr$c_maxctl],      !Table of pointers to control tables
;    79          0806  1     lbr$gl_hictl : INITIAL(0),                  !Highest control index in use
;    80          0807  1     lbr$gt_eotdesc : VECTOR [4, BYTE] INITIAL
;    81          0808  1                         (%X '77007703'),        !End of text record
;    82          0809  1     lbr$gt_lbrver : countedstring ('VAX-11 Librarian V04-00'),
;    83          0810  1     lbr$gl_maxread,                             !Maximum blocks in one RMS read
;    84          0811  1     lbr$gl_maxidxrd : INITIAL (20),             !Maximum blocks in one index read
;    85          0812  1     dcxshr_address : initial (0);               !base address of dcxshr
;    86          0813  1
;    87          0814  1 !
;    88          0815  1 ! The following macro generates a table of offsets into the DCXSHR
;    89          0816  1 !       transfer vector.  Linking LBRSHR with the DCXSHR symbol table,
;    90          0817  1 !       one can then call lib$adr_image to dynamically load DCXSHR.
;    91          0818  1 !       The base address of DCXSHR is then added to each of these
;    92          0819  1 !       DCX transfer vector entries.
;    93          0820  1 !
;    94        M 0821  1 macro dcxsym(a) []=
;    95        M 0822  1         external literal %name('dcx$',a);
;    96        M 0823  1         global %name('dcx_',a): initial (%name('dcx$',a) - dcx$analyze_init);
;    97          0824  1         dcxsym(%remaining)%;
;    98          0825  1
;    99        P 0826  1 dcxsym (analyze_init,analyze_data,analyze_done,
;   100        P 0827  1         compress_init,compress_data,compress_done,
;   101          0828  1         expand_init,expand_data,expand_done,make_map);
;   102          0829  1
;   103          0830  1
;   104          0831  1 END                                     ! Of module
;   105          0832  0 ELUDOM


                                        .TITLE  LBR_DATA
                                        .IDENT  \V04-000\

                                        .PSECT  $GLOBAL$,NOEXE,2

                                00000 LBR$GL_CONTROL::
                                        .BLKB   4
                                00004 LBR$GL_RMSSTV::
                                        .BLKB   4
                                00008 LBR$AL_CTLTAB::
                                        .BLKB   64
```

```
                                00000000  00048 LBR$GL_HICTL::
                                                      .LONG   0                                                       ;
                                77007703  0004C LBR$GT_EOTDESC::
                                                      .LONG   1996519171                                              ;
                                      17  00050 LBR$GT_LBRVER::
                                                      .BYTE   23                                                      ;
61  69  72  61  72  62  69  4C  20  31  31  2D  58  41  56  00051           .ASCII  \VAX-11 Librarian V04-00\                                ;
                          30  30  2D  34  30  56  20  6E  00060                                                                           ;
                                                  00068 LBR$GL_MAXREAD::
                                                      .BLKB   4
                                00000014  0006C LBR$GL_MAXIDXRD::
                                                      .LONG   20                                                      ;
                                00000000  00070 DCXSHR_ADDRESS::
                                                      .LONG   0                                                       ;
                                00000000* 00074 DCX_ANALYZE_INIT::
                                                      .LONG   <DCX$ANALYZE_INIT-DCX$ANALYZE_INIT>                     ;
                                00000000* 00078 DCX_ANALYZE_DATA::
                                                      .LONG   <DCX$ANALYZE_DATA-DCX$ANALYZE_INIT>                     ;
                                00000000* 0007C DCX_ANALYZE_DONE::
                                                      .LONG   <DCX$ANALYZE_DONE-DCX$ANALYZE_INIT>                     ;
                                00000000* 00080 DCX_COMPRESS_INIT::
                                                      .LONG   <DCX$COMPRESS_INIT-DCX$ANALYZE_INIT>                    ;
                                00000000* 00084 DCX_COMPRESS_DATA::
                                                      .LONG   <DCX$COMPRESS_DATA-DCX$ANALYZE_INIT>                    ;
                                00000000* 00088 DCX_COMPRESS_DONE::
                                                      .LONG   <DCX$COMPRESS_DONE-DCX$ANALYZE_INIT>                    ;
                                00000000* 0008C DCX_EXPAND_INIT::
                                                      .LONG   <DCX$EXPAND_INIT-DCX$ANALYZE_INIT>                      ;
                                00000000* 00090 DCX_EXPAND_DATA::
                                                      .LONG   <DCX$EXPAND_DATA-DCX$ANALYZE_INIT>                      ;
                                00000000* 00094 DCX_EXPAND_DONE::
                                                      .LONG   <DCX$EXPAND_DONE-DCX$ANALYZE_INIT>                      ;
                                00000000* 00098 DCX_MAKE_MAP::
                                                      .LONG   <DCX$MAKE_MAP-DCX$ANALYZE_INIT>                         ;

                                                      .EXTRN  DCX$ANALYZE_INIT
                                                      .EXTRN  DCX$ANALYZE_DATA
                                                      .EXTRN  DCX$ANALYZE_DONE
                                                      .EXTRN  DCX$COMPRESS_INIT
                                                      .EXTRN  DCX$COMPRESS_DATA
                                                      .EXTRN  DCX$COMPRESS_DONE
                                                      .EXTRN  DCX$EXPAND_INIT
                                                      .EXTRN  DCX$EXPAND_DATA
                                                      .EXTRN  DCX$EXPAND_DONE
                                                      .EXTRN  DCX$MAKE_MAP

;                                   PSECT SUMMARY
;
;       Name                    Bytes                           Attributes
;
;  $GLOBAL$                         156  NOVEC,  WRT,  RD ,NOEXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)


;                                Library Statistics
```

```
;
;                                        -------- Symbols --------      Pages       Processing
;       File                             Total    Loaded   Percent      Mapped      Time
;
;  _$255$DUA28:[SYSLIB]STARLET.L32;1      9776        6         0        581        00:01.0
```

```
;                                   COMMAND QUALIFIERS

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

; Size:         0 code + 156 data bytes
; Run Time:         00:08.4
; Elapsed Time:     00:19.4
; Lines/CPU Min:     5921
; Lexemes/CPU-Min: 49508
; Memory Used:  91 pages
; Compilation Complete
```

CACHE
LIS

DATA
LIS

LBR

LBRSHR
MAP

OLDLIBFMT
MDL

DUMP
LIS

LBR
MDL

PREFIX
REQ

LBRUSR
SDL