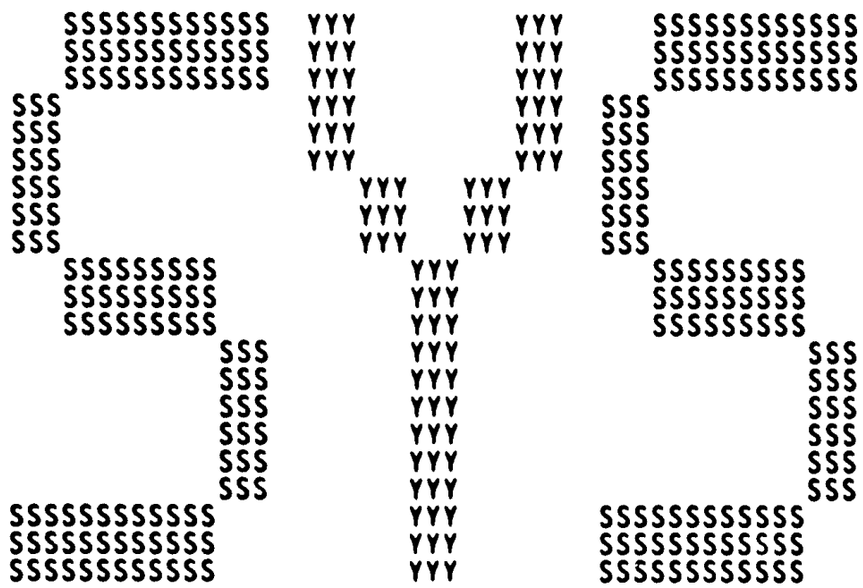

```
  SSSSSSSS  YY      YY    SSSSSSSS  EEEEEEEEEE  XX      XX    IIIIII    TTTTTTTTTT
  SSSSSSSS  YY      YY    SSSSSSSS  EEEEEEEEEE  XX      XX    IIIIII    TTTTTTTTTT
SS          YY      YY  SS          EE          XX      XX      II          TT
SS          YY      YY  SS          EE          XX      XX      II          TT
SS            YY  YY    SS          EE            XX  XX        II          TT
SS            YY  YY    SS          EE            XX  XX        II          TT
  SSSSSS        YY        SSSSSS    EEEEEEEE        XX          II          TT
  SSSSSS        YY        SSSSSS    EEEEEEEE        XX          II          TT
        SS      YY              SS  EE            XX  XX        II          TT
        SS      YY              SS  EE            XX  XX        II          TT
        SS      YY              SS  EE          XX      XX      II          TT          ....
        SS      YY              SS  EE          XX      XX      II          TT          ....
SSSSSSSS        YY      SSSSSSSS    EEEEEEEEEE  XX      XX    IIIIII      TT          ....
SSSSSSSS        YY      SSSSSSSS    EEEEEEEEEE  XX      XX    IIIIII      TT          ....

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
```

Table of contents

```
0000     1          .TITLE  SYSEXIT IMAGE EXIT SYSTEM SERVICE
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 ; FACILITY: EXECUTIVE, SYSTEM SERVICES
0000    30 ;
0000    31 ; ABSTRACT:
0000    32 ;       SYSEXIT IMPLEMENTS THE EXIT SYSTEM SERVICE AND PERFORMS THE DISPATCHING
0000    33 ;       OF EXIT HANDLERS AND DELETES THE PROCESS IF NONE EXIST.
0000    34 ;
0000    35 ; ENVIRONMENT:
0000    36 ;       MODE=KERNEL, PAGED CODE
0000    37 ;
0000    38 ; AUTHOR:       R. HUSTVEDT      CREATION DATE: 30-SEP-76
0000    39 ;
0000    40 ; MODIFIED BY:
0000    41 ;
0000    42 ;       V03-002 LJK0287         Lawrence J. Kenah       26-Jun-1984
0000    43 ;               Do not call termination handlers forever. Only call a number
0000    44 ;               equal to the number that have actually been declared.
0000    45 ;
0000    46 ;       V03-001 LJK0249         Lawrence J. Kenah       31-Aug-1983
0000    47 ;               If $DELPRC somehow returns control to this routine, lower
0000    48 ;               scheduling priority to zero before entering loop.
0000    49 ;--
```

```
                     0000     51          .SBTTL  DECLARATIONS
                     0000     52
                     0000     53 ;
                     0000     54 ; INCLUDE FILES:
                     0000     55 ;
                     0000     56
                     0000     57          $PCBDEF                         ; DEFINE PROCESS CONTROL BLOCK
                     0000     58          $PSLDEF                         ; DEFINE PSL FIELDS AND BITS
                     0000     59
                     0000     60 ;
                     0000     61 ; EQUATES:
                     0000     62 ;
00000004             0000     63 CODE=4                                  ; DISPLACEMENT TO EXIT CODE
                     0000     64 ;
                     0000     65 ; OWN STORAGE:
                     0000     66 ;
                     0000     67
                 00000000     68          .PSECT  YEXEPAGED,BYTE         ; PAGED PSECT
```

```
                     0000    70          .SBTTL  EXE$EXIT - IMAGE EXIT SYSTEM SERVICE
                     0000    71
                     0000    72 ;++
                     0000    73 ; FUNCTIONAL DESCRIPTION:
                     0000    74 ;       EXE$EXIT IMPLEMENTS THE IMAGE EXIT SYSTEM SERVICE.  THE LIST
                     0000    75 ;       OF TERMINATION CONTROL BLOCKS FOR BOTH USER AND SUPER ACCESS
                     0000    76 ;       MODES ARE PROCESSED, CALLING THE SPECIFIED TERMINATION HANDLING
                     0000    77 ;       ROUTINES.
                     0000    78 ;
                     0000    79 ; CALLING SEQUENCE:
                     0000    80 ;       CALLG   ARGLIST,EXE$EXIT
                     0000    81 ;
                     0000    82 ; INPUT PARAMETERS:
                     0000    83 ;       CODE(AP) - TERMINATION REASON CODE
                     0000    84 ;
                     0000    85 ;       R4 = CURRENT PROCESS PCB ADDRESS.
                     0000    86 ;
                     0000    87 ;
                     0000    88 ; IMPLICIT INPUTS:
                     0000    89 ;       CTL$GL_THUSER - HEAD OF THE USER MODE TERMINATION CONTROL BLOCK LIST
                     0000    90 ;       CTL$GL_THSUPR - HEAD OF THE SUPER MODE TERMINATION CONTROL BLOCK LIST
                     0000    91 ;
                     0000    92 ; OUTPUT PARAMETERS:
                     0000    93 ;       NONE
                     0000    94 ;
                     0000    95 ; COMPLETION CODES:
                     0000    96 ;       NONE
                     0000    97 ;
                     0000    98 ; SIDE EFFECTS:
                     0000    99 ;       NONE
                     0000   100 ;
                     0000   101 ;--
                     0000   102
                0010 0000   103          .ENTRY  EXE$EXIT,^M<R4>
00000000'9F    04 AC   D0   0002   104          MOVL    CODE(AP),@#CTL$GL_FINALSTS      ; SET FINAL EXIT STATUS
      00 24 A4    02   E5   000A   105          BBCC    #PCB$V_FORCPEN,PCB$L_STS(R4),5$ ; CLEAR FORCE EXIT PENDING
                  51   DC   000F   106 5$:      MOVPSL  R1                              ; GET CURRENT PSL
  51  51    02    16   EF   0011   107          EXTZV   #PSL$V_PRVMOD,#PSL$S_PRVMOD,R1,R1       ; EXTRACT PREVIOUS MODE
       00000000'9F   DF   0016   108          PUSHAL  @#CTL$GL_THCOUNT                ; GET ADDRESS OF HANDLER COUNT CELL
       FFFFFFFC'9F   DF   001C   109          PUSHAL  @#CTL$GL_THSUPR-4               ; GET ADDRESS OF TERMINATION CHAIN
              1C 51  F4   0022   110 10$.     SOBGEQ  R1,3C$                          ; TRY SUPER MODE IF NONE FOR USER
                         0025   111          $DELPRC_S                               ; DELETE SELF
                         0030   112          $SETPRI_S       PRI=#0                  ; MAKE NEXT LOOP HARMLESS
                     FE  11   003F   113 20$:    BRB     20$                         ; ****** FELL THROUGH DELPRC SOMEHOW
                         0041   114
      50   00 BE41    D0   0041   115 30$:    MOVL    @(SP)[R1],R0                    ; GET HEAD OF TERMINATION LIST
                     DA  13   0046   116          BEQL    10$                         ; NONE FOR THIS MODE, TRY ANOTHER
                9E41    D4   0048   117          CLRL    @(SP)+[R1]                  ; ZAP TERMINATION LIST POINTER
      54   00 BE41    D0   004B   118          MOVL    @(SP)[R1],R4                ; TUCK AWAY COUNT IN SAFE PLACE
                9E41    D4   0050   119          CLRL    @(SP)+[R1]                  ; CLEAR REAL COUNT CELL
                  51    D6   0053   120          INCL    R1                          ; CORRECT MODE NUMBER
           51   05    C4   0055   121          MULL    #<1+<1@<PSL$V_CURMOD-PSL$V_PRVMOD>>>,R1 ; MAKE PRV=CURRENT
        5D   0C AD    D0   0058   122          MOVL    12(FP),FP                   ; RESTORE CURRENT FRAME POINTER
           5E   08'   C0   005C   123          ADDL    S^#<8+EXE$C_CMSTKSZ>,SP     ; CLEAN KERNEL STACK
      7E   51   16    78   005F   124          ASHL    #PSL$V_PRVMOD,R1,-(SP)      ; PUSH PSL
        51   04 AC    D0   0063   125          MOVL    CODE(AP),R1                 ; SET CODE IN R1
                  2C  10   0067   126          BSBB    DOREI                       ; PUSH PC AND DO REI
```

```
                     0069   127
                     0069   128 ;
                     0069   129 ;       TERMINATION LIST PROCESSING
                     0069   130 ;
                     0069   131 ;       R0 - POINTER TO TERMINATION CONTROL BLOCK LIST
                     0069   132 ;       R1 - TERMINATION CODE/REASON
                     0069   133 ;       R4 - COUNT OF TERMINATION HANDLER CONTROL BLOCKS
                     0069   134 ;
                     0069   135
            54   DD  0069   136          PUSHL   R4                      ; SAVE COUNT ON THE STACK
       54   14 AD    DO  006B   137          MOVL    5*4(FP),R4              ; RESTORE CONTENTS OF R4
            51   DD  006F   138 40$:     PUSHL   R1                      ; SAVE CODE
            60   DD  0071   139          PUSHL   (R0)                    ; SAVE POINTER TO NEXT BLOCK
            60   D4  0073   140          CLRL    (R0)                    ; ZAP FLINK TO PREVENT CIRCULAR LIST
    0C B0   51   DO  0075   141          MOVL    R1,@12(R0)              ; SET TERMINATION CODE/REASON
04 B0   08 A0    FA  0079   142          CALLG   8(R0),@4(R0)            ; CALL TERMINATION HANDLER
            03   BA  007E   143          POPR    #^M<R0,R1>              ; RESTORE CODE AND POINTER
            50   D5  0080   144          TSTL    R0                      ; MORE TERMINATION BLOCKS?
            03   13  0082   145          BEQL    50$                     ; NO, ALL DONE
         E8 6E   F5  0084   146          SOBGTR  (SP),40$                ; KEEP GOING ONLY IF NONZERO LOOP COUNT
                     0087   147
      5E    04   C0  0087   148 50$:     ADDL    #4,SP                   ; REMOVE COUNT CELL FROM STACK
            5D   D4  008A   149          CLRL    FP                      ; TERMINATE CALL FRAME LIST
                     008C   150          $EXIT_S R1                      ; OTHERWISE EXIT AGAIN
                     0095   151
                     0095   152
                     0095   153 ;
                     0095   154 ;       PERFORM REI TO ENTER USER OR SUPER MODE AS APPROPRIATE
                     0095   155 ;
                  02 0095   156 DOREI:   REI                             ; ENTER PROPER MODE FOR TERMINATION
                     0096   157
                     0096   158
                     0096   159          .END
```

```
CODE                            = 00000004
CTL$GL_FINALSTS                   ********    X   02
CTL$GL_THCOUNT                    ********    X   02
CTL$GL_THSUPR                     ********    X   02
DOREI                             00000095 R      02
EXE$C_CMSTKSZ                     ********    X   02
EXE$EXIT                          00000000 RG     02
PCB$L_STS                       = 00000024
PCB$V_FORCPEN                   = 00000002
PSL$S_PRVMOD                    = 00000002
PSL$V_CURMOD                    = 00000018
PSL$V_PRVMOD                    = 00000016
SYS$DELPRC                        ********   GX   02
SYS$EXIT                          ********   GX   02
SYS$SETPRI                        ********   GX   02
```

Psect synopsis

```
PSECT name                      Allocation          PSECT No.  Attributes
----------                      ----------          ---------  ----------

.  ABS  .                       00000000  (    0.)  00 (  0.)  NOPIC   USR   CON   ABS   LCL NOSHR NOEXE NORD  NOWRT NOVEC BYTE
$ABS$                           00000000  (    0.)  01 (  1.)  NOPIC   USR   CON   ABS   LCL NOSHR   EXE   RD    WRT NOVEC BYTE
YEXEPAGED                       00000096  (  150.)  02 (  2.)  NOPIC   USR   CON   REL   LCL NOSHR   EXE   RD    WRT NOVEC BYTE
```

Performance indicators

Phase	Page faults	CPU Time	Elapsed Time
Initialization	29	00:00:00.07	00:00:00.88
Command processing	130	00:00:00.57	00:00:05.68
Pass 1	152	00:00:02.19	00:00:12.72
Symbol table sort	0	00:00:00.21	00:00:00.53
Pass 2	45	00:00:00.55	00:00:02.16
Symbol table output	3	00:00:00.03	00:00:00.09
Psect synopsis output	1	00:00:00.03	00:00:00.08
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	362	00:00:03.67	00:00:22.15

```
The working set limit was 1050 pages.
11193 bytes (22 pages) of virtual memory were used to buffer the intermediate code.
There were 10 pages of symbol table space allocated to hold 181 non-local and 6 local symbols.
159 source lines were read in Pass 1, producing 16 object records in Pass 2.
13 pages of virtual memory were used to define 12 macros.
```

```
                              +--------------------------+
                              ! Macro library statistics !
                              +--------------------------+

Macro library name                          Macros defined
------------------                          --------------
_$255$DUA28:[SYS.OBJ]LIB.MLB;1                       1
_$255$DUA28:[SYSLIB]STARLET.MLB;2                    8
TOTALS (all libraries)                               9

260 GETS were required to define 9 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS$:SYSEXIT/OBJ=OBJ$:SYSEXIT MSRC$:SYSEXIT/UPDATE=(ENH$:SYSEXIT)+EXECML$/LIB
```

SYSGETJPI.LIS

SYSERAPAT.LIS

SYSFAO.LIS

SYSGETDVI.LIS

SYSEXIT.LIS

SYSEVTSRV.LIS

SYSFORCEX.LIS