


```

PPPPPPPP      AAAAAA      TTTTTTTTTT      SSSSSSSS      IIIIII      000000
PPPPPPPP      AAAAAA      TTTTTTTTTT      SSSSSSSS      IIIIII      000000
PP      PP      AA      AA      TT      SS      II      00      00
PP      PP      AA      AA      TT      SS      II      00      00
PP      PP      AA      AA      TT      SS      II      00      00
PP      PP      AA      AA      TT      SS      II      00      00
PPPPPPPP      AA      AA      TT      SSSSSS      II      00      00
PPPPPPPP      AA      AA      TT      SSSSSS      II      00      00
PP      AAAAAAAAAA      TT      SS      II      00      00
PP      AAAAAAAAAA      TT      SS      II      00      00
PP      AA      AA      TT      SS      II      00      00
PP      AA      AA      TT      SS      II      00      00
PP      AA      AA      TT      SSSSSSSS      IIIIII      000000
PP      AA      AA      TT      SSSSSSSS      IIIIII      000000

```

```

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 PATSIO (
2 L 0002 0 %IF %VARIANT EQL 1
3 0003 0 %THEN
4 0004 0 ADDRESSING_MODE (EXTERNAL = LONG_RELATIVE, NONEXTERNAL = LONG_RELATIVE),
5 0005 0 %FI
6 0006 0 IDENT = 'V04-000') =
7 0007 1 BEGIN
8 0008 1
9 0009 1 *****
10 0010 1 *
11 0011 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
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27 0027 1 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL. *
28 0028 1 *
29 0029 1 *
30 0030 1 *****
31 0031 1
32 0032 1 FACILITY: PATCH
33 0033 1
34 0034 1 **
35 0035 1 FUNCTIONAL DESCRIPTION:
36 0036 1 FAO FORMATTING ROUTINE
37 0037 1
38 0038 1 Version: X01.05
39 0039 1
40 0040 1 History:
41 0041 1 Author:
42 0042 1 Carol Peters, 01 Oct 1976: Version 01
43 0043 1
44 0044 1 Modified by:
45 0045 1 Kathleen Morse, 13 Oct 1977: Version 16
46 0046 1
47 0047 1 Revision history:
48 0048 1 NO DATE PROGRAMMER PURPOSE
49 0049 1 -- ---- -
50 0050 1 00 13-OCT-77 K.D. MORSE ADAPT VERSION 14 TO PATCH.
51 0051 1 01 15-DEC-77 K.D. MORSE ADD JOURNAL OUTPUT
52 0052 1 02 25-APR-78 K.D. MORSE CONVERT TO NATIVE COMPILER.
53 0053 1 03 18-MAY-78 K.D. MORSE NO CHANGES FOR VERS 15.
54 0054 1 04 13-JUN-78 K.D. MORSE ADD FAO COUNTS TO SIGNALS.
55 0055 1 05 29-JUN-78 K.D. MORSE NO CHANGES FOR VERS 16.
56 0056 1
57 0057 1 --

```

```

: 59      0058 1 FORWARD ROUTINE
: 60      0059 1          PAT$FAO_OUT: NOVALUE;
: 61      0060 1
: 62      0061 1 LIBRARY 'SYSS$LIBRARY:STARLET.L32';
: 63      0062 1 REQUIRE 'SRCS$SYSLIT.REQ';
: 64      0112 1 REQUIRE 'SRCS$VXSMAC.REQ';
: 65      0177 1 REQUIRE 'SRCS$PATPCT.REQ';
: 66      0217 1 REQUIRE 'SRCS$PATGEN.REQ';
: 67      0439 1
: 68      0440 1 EXTERNAL ROUTINE
: 69      0441 1          PAT$WRITEFILE: NOVALUE,
: 70      0442 1          SYSS$FAOL: ADDRESSING_MODE (ABSOLUTE);
: 71      0443 1
: 72      0444 1 EXTERNAL
: 73      0445 1          PAT$GL_ERRCODE,
: 74      0446 1          PAT$GL_JNL_RAB: BLOCK [, BYTE],
: 75      0447 1          PAT$GL_OUT_RAB: BLOCK [, BYTE];

```

! ROUTINE TO FORMAT AND OUTPUT A STRING

! WRITES TO A FILE
! ROUTINE TO FORMAT AN ASCII STRING

! ERROR CODE
! RAB FOR JOURNAL FILE
! RAB for SYSS\$OUTPUT

```

77 0448 1 GLOBAL ROUTINE PAT$FAO_OUT (STRING, ARGUMENTS) : NOVALUE =
78 0449 1
79 0450 1  !++
80 0451 1  FUNCTIONAL DESCRIPTION:
81 0452 1
82 0453 1      SETS UP INPUT AND OUTPUT STRING DESCRIPTORS, AND THEN CALLS
83 0454 1      FAO TO FORMAT THE STRING. THEN SENDS THE FORMATTED STRING TO
84 0455 1      THE TERMINAL
85 0456 1
86 0457 1      IF THE OUTPUT FAILS, A FATAL ERROR IS REPORTED.
87 0458 1
88 0459 1  CALLING SEQUENCE:
89 0460 1
90 0461 1      PAT$FAO_OUT ( )
91 0462 1
92 0463 1  INPUTS:
93 0464 1
94 0465 1      STRING          - THE ADDRESS OF A COUNTED CONTROL STRING TO FAO
95 0466 1      ARGUMENTS        - MAY BE ABSENT. ARGUMENTS TO BE APPLIED TO THE
96 0467 1                        FAO CONTROL STRING.
97 0468 1
98 0469 1  IMPLICIT INPUTS:
99 0470 1
100 0471 1      NONE
101 0472 1
102 0473 1  OUTPUTS:
103 0474 1
104 0475 1      NONE
105 0476 1
106 0477 1  IMPLICIT OUTPUTS:
107 0478 1
108 0479 1      NONE
109 0480 1
110 0481 1  ROUTINE VALUE:
111 0482 1
112 0483 1      NOVALUE
113 0484 1
114 0485 1  SIDE EFFECTS:
115 0486 1
116 0487 1      THE FORMATTED STRING IS OUTPUT ON THE TERMINAL.  ON ERROR, EXITS.
117 0488 1  --
118 0489 1
119 0490 2 BEGIN
120 0491 2
121 0492 2 MAP
122 0493 2      STRING: REF VECTOR [, BYTE];                ! FAO CONTROL STRING
123 0494 2
124 0495 2 LOCAL
125 0496 2      OUT_BUF: VECTOR [TTY_OUT_WIDTH, BYTE],      ! FORMATTED MESSAGE BUFFER
126 0497 2      INP_DESC: VECTOR [2];                          ! FAO CONTROL STRING DESCRIPTOR
127 0498 2      OUT_DESC: VECTOR [2];                          ! FORMATTED MESSAGE DESCRIPTOR
128 0499 2
129 0500 2  !++
130 0501 2  SET UP FAO CONTROL STRING DESCRIPTOR AND FORMATTED
131 0502 2  MESSAGE STRING DESCRIPTOR.
132 0503 2  --
133 0504 2  INP_DESC [0] = .STRING [0];                        ! SET SIZE OF STRING

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: 134 0505 2 INP_DESC [1] = STRING [1];           ! SET ADDRESS OF STRING
: 135 0506 2 OUT_DESC [0] = TTY_OUT_WIDTH;      ! SET MAX MESSAGE WIDTH
: 136 0507 2 OUT_DESC [1] = OUT_BUF;          ! SET MESSAGE ADDRESS
: 137 0508
: 138 0509 2 !++
: 139 0510 2 ! FORMAT THE MESSAGE.
: 140 0511 2 !--
: 141 0512 2 SYSS$FAOL (INP_DESC, PAT$GL_OUTRAB [RAB$W_RSZ], OUT_DESC, ARGUMENTS);
: 142 0513
: 143 0514 2 !++
: 144 0515 2 ! Output the formatted message. If this fails, then exit as there
: 145 0516 2 ! is no way to communicate with the patcher.
: 146 0517 2 !--
: 147 0518 2 PAT$GL_OUTRAB [RAB$L_RBF] = OUT_BUF;
: 148 0519 2 PAT$GL_ERRCODE = $PUT (RAB = PAT$GL_OUTRAB);
: 149 0520 2 IF NOT .PAT$GL_ERRCODE
: 150 0521 2 THEN
: 151 0522 2     SIGNAL (.PAT$GL_ERRCODE);
: 152 0523 2 PAT$WRITEFILE(.PAT$GL_OUTRAB[RAB$W_RSZ], OUT_BUF, PAT$GL_JNL_RAB);
: 153 0524 1 END;
```

```

.TITLE PATSIO
.IDENT  \V04-000\

.EXTRN PAT$WRITEFILE, SYSS$FAOL
.EXTRN PAT$GL_ERRCODE, PAT$GL_JNL_RAB
.EXTRN PAT$GL_OUTRAB, SYSS$PUT
```

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

```

      000C 00000
      53 00000000G EF 9E 00002
      52 00000000G EF 9E 00009
      5E      FF70 CE 9E 00010
08 AE      04  BC 9A 00015
      04  AC  01 C1 0001A
      7E      84 8F 9A 00020
      04  AE  10 AE 9E 00024
      08  AC  9F 00029
      04  AE  9F 0002C
      52  DD  0002F
      14  AE  9F 00031
00000000G 9F 04  FB 00034
      06  A2  10 AE 9E 0003B
      DE  A2  9F 00040
00000000G 00 01  FB 00043
      63 50  D0 0004A
      09 63  E8 0004D
00000000G 00 63  DD 00050
      01  FB 00052
00000000G 00 00000000G EF 9F 00059 1$:
      14  AE  9F 0005F
      7E 62  3C 00062
00000000G EF 03  FB 00065
      04 0006C

.ENTRY PAT$FAO OUT, Save R2,R3      : 0448
MOVAB PAT$GL_ERRCODE, R3
MOVAB PAT$GL_OUTRAB+34, R2
MOVAB -144(SP), SP
MOVZBL @STRING, INP_DESC           : 0504
ADDL3 #1, STRING, INP_DESC+4      : 0505
MOVZBL #132, OUT_DESC             : 0506
MOVAB OUT_BUF, OUT_DESC+4         : 0507
PUSHAB ARGUMENTS                  : 0512
PUSHAB OUT_DESC
PUSHL R2
PUSHAB INP_DESC
CALLS #4, @SYSS$FAOL
MOVAB OUT_BUF, PAT$GL_OUTRAB+40   : 0518
PUSHAB PAT$GL_OUTRAB              : 0519
CALLS #1, SYSS$PUT
MOVL R0, PAT$GL_ERRCODE
BLBS PAT$GL_ERRCODE, 1$           : 0520
PUSHL PAT$GL_ERRCODE              : 0522
CALLS #1, LIB$SIGNAL
PUSHAB PAT$GL_JNL_RAB             : 0523
PUSHAB OUT_BUF
MOVZWL PAT$GL_OUTRAB+34, -(SP)
CALLS #3, PAT$WRITEFILE
RET                                 : 0524
```

PATSIO
V04-000

I 13
16-Sep-1984 00:15:54
14-Sep-1984 12:52:47

VAX-11 Bliss-32 V4.0-742
DISK\$VMMASTER:[PATCH.SRC]PATSIO.B32;1 Page 5 (3)

PAT
V04

; Routine Size: 109 bytes, Routine Base: _PAT\$CODE + 0000

; f

: 155
: 156
0525 1 END
0526 0 ELUDOM

.EXTRN LIB\$SIGNAL

PSECT SUMMARY

Name	Bytes	Attributes
_PAT\$CODE	109	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

COMMAND QUALIFIERS

BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/VARIANT:1/LIS=LISS:PATSIO/OBJ=OBJ\$:PATSIO MSRC\$:PATSIO/UPDATE=(ENH\$:PATSIO)

Size: 109 code + 0 data bytes
Run Time: 00:05.0
Elapsed Time: 00:22.5
Lines/CPU Min: 6324
Lexemes/CPU-Min: 16881
Memory Used: 60 pages
Compilation Complete

The image displays a grid of 100 small terminal window screenshots, arranged in 10 rows and 10 columns. Each screenshot shows a different screen from the VAX/VMS operating system. The screens contain various text-based data, including system status, user prompts, and error messages. Some screens are clearly labeled with titles like PATREB LIS, PATSCA LIS, PATST LIS, PATSPA LIS, and PATSSV LIS. The text is generally small and difficult to read, but the overall layout is a dense grid of these individual window captures.