



```

LL          IIIIII  BBBB BBBB  SSSSSSSS  IIIIII  GGGGGGGG  RRRRRRRR  EEEEEEEEE  TTTTTTTTTT
LL          IIIIII  BBBB BBBB  SSSSSSSS  IIIIII  GGGGGGGG  RRRRRRRR  EEEEEEEEE  TTTTTTTTTT
LL          II      BB      SS      II      GG      RR      EE      TT
LL          II      BB      SS      II      GG      RR      EE      TT
LL          II      BB      SS      II      GG      RR      EE      TT
LL          II      BB      SS      II      GG      RR      EE      TT
LL          II      BB      SS      II      GG      RR      EE      TT
LL          II      BB      SS      II      GG      RR      EE      TT
LL          II      BB      SS      II      GG      RR      EE      TT
LL          II      BB      SS      II      GG      RR      EE      TT
LL          II      BB      SS      II      GG      RR      EE      TT
LLLLLLLLLL IIIIII  BBBB BBBB  SSSSSSSS  IIIIII  GGGGGG  RR      RR  EEEEEEEEE  TT
LLLLLLLLLL IIIIII  BBBB BBBB  SSSSSSSS  IIIIII  GGGGGG  RR      RR  EEEEEEEEE  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

```

```

1 0001 0 MODULE LIBSSIG_TO_RET (%TITLE'Library routine to convert a signal to a return'
2 0002 0 IDENT = 'T-011' ! File: LIBSIGRET.B32 Edit: SBL1011
3 0003 0 ) =
4 0004 1 BEGIN
5 0005 1
6 0006 1
7 0007 1 *****
8 0008 1 *
9 0009 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
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26 0026 1 *
27 0027 1 *
28 0028 1 *****
29 0029 1
30 0030 1
31 0031 1 ++
32 0032 1 FACILITY: Utility Library
33 0033 1
34 0034 1 ABSTRACT:
35 0035 1
36 0036 1 LIBSSIG_TO_RET converts any signaled condition value into
37 0037 1 an ordinary procedure return to the caller of the procedure
38 0038 1 which established the handler which called LIBSSIG_TO_RET.
39 0039 1
40 0040 1 ENVIRONMENT: User mode, re-entrant, AST level or not or mixed.
41 0041 1
42 0042 1 AUTHOR: Thomas N. Hastings CREATION DATE: 09-June-1977
43 0043 1
44 0044 1 MODIFIED BY:
45 0045 1
46 0046 1 Thomas N. Hastings, 09-June-1977: VERSION 01
47 0047 1 01 - original
48 0048 1 01-06 - Change to STARLET library. DGP 20-Apr-78
49 0049 1 01-07 - Change REQUIRE files for VAX system build. DGP 28-Apr-78
50 0050 1 01-08 - Change STARLET to RTLSTARLE to avoid conflicts. DGP 1-May-78
51 0051 1 01-09 - Change file name to LIBSIGRET.B32, and change the name of
52 0052 1 the REQUIRE file similarly.
53 0053 1 1-010 - Update the copyright notice. JBS 16-NOV-78
54 0054 1 1-011 - Use prologue file. SBL 24-June-1983
55 0055 1 --

```

LIE  
Tab

```
.. 57      0056 1  |  
.. 58      0057 1  | PROLOGUE FILE:  
.. 59      0058 1  |  
.. 60      0059 1  |  
.. 61      0060 1  | REQUIRE 'RTLIN:LIBPROLOG';           ! LIB$ definitions  
.. 62      0131 1  |  
.. 63      0132 1  |  
.. 64      0133 1  | TABLE OF CONTENTS:  
.. 65      0134 1  |  
.. 66      0135 1  |  
.. 67      0136 1  | FORWARD ROUTINE  
.. 68      0137 1  |     LIBSSIG_TO_RET;           ! Convert a signal to a return  
.. 69      0138 1  |  
.. 70      0139 1  |  
.. 71      0140 1  | MACROS:  
.. 72      0141 1  |  
.. 73      0142 1  |     NONE  
.. 74      0143 1  |  
.. 75      0144 1  | EQUATED SYMBOLS:  
.. 76      0145 1  |  
.. 77      0146 1  |     NONE  
.. 78      0147 1  |  
.. 79      0148 1  | OWN STORAGE:  
.. 80      0149 1  |  
.. 81      0150 1  |  
.. 82      0151 1  |  
.. 83      0152 1  | EXTERNAL REFERENCES:  
.. 84      0153 1  |  
.. 85      0154 1  |
```

```

: 87 0155 1 GLOBAL ROUTINE LIBSSIG_TO_RET (          ! Convert a signal to a return
: 88 0156 1     SIG_ARGS_ADR,          !-Adr. of signal args vector
: 89 0157 1     MCH_ARGS_ADR)        !-Adr. of mechanism args vector
: 90 0158 1     =                      ! Value is success, unless failure from SYSSUNWIND
: 91 0159 1
: 92 0160 1 +-+
: 93 0161 1   FUNCTIONAL DESCRIPTION:
: 94 0162 1
: 95 0163 1     LIBSSIG_TO_RET is called with the argument list passed to a condition
: 96 0164 1     handler by the condition handling facility. It converts the
: 97 0165 1     signaled condition into a return to the procedure which called the
: 98 0166 1     procedure which established the handler handling the signal. The
: 99 0167 1     stack is unwound to the caller of the establisher and the condition code
100 0168 1     is returned as the value in R0.
101 0169 1
102 0170 1     In BLISS the argument list can be passed in toto by using the
103 0171 1     BUILTIN function CALLG and AP register, thus:
104 0172 1
105 0173 1         status = CALLG (.AP, LIBSSIG_TO_RET);
106 0174 1
107 0175 1     Or more simply by: ENABLE LIBSSIG_TO_RET ();
108 0176 1     If there is no need for the handler to do any more processing
109 0177 1
110 0178 1 FORMAL PARAMETERS:
111 0179 1
112 0180 1     SIG_ARGS_ADR.rl.ra      Adr. of signal args vector
113 0181 1     MCH_ARGS_ADR.ml.ra     Adr. of mechanism args vector
114 0182 1     any other args to handler
115 0183 1
116 0184 1 IMPLICIT INPUTS:
117 0185 1
118 0186 1     NONE
119 0187 1
120 0188 1 IMPLICIT OUTPUTS:
121 0189 1
122 0190 1     NONE
123 0191 1
124 0192 1 ROUTINE VALUE:
125 0193 1 COMPLETION CODES:
126 0194 1
127 0195 1     SSS_NORMAL if SYSSUNWIND ok, else error codes form SYSSUNWIND.
128 0196 1
129 0197 1 SIDE EFFECTS:
130 0198 1
131 0199 1     Causes the stack to marked to be unwound to the caller of the
132 0200 1     establishing procedure of the handler which was called on this signal.
133 0201 1
134 0202 1 --
135 0203 1
136 0204 2 BEGIN
137 0205 2 MAP
138 0206 2     SIG_ARGS_ADR: REF BLOCK[8, BYTE],          ! Signal vector
139 0207 2     MCH_ARGS_ADR: REF BLOCK[20, BYTE];        ! mechanism vector
140 0208 2
141 0209 2 +-+
142 0210 2     ! If this is unwind condition, just let unwinding continue since
143 0211 2     ! probably it was this handler which invoked the unwind.
```



```

: 162      0229 1 END
: 163      0230 0 ELUDOM
! End of module LIBSSIG_TO_RET
  
```

```

:
: PSECT SUMMARY
:
: Name          Bytes          Attributes
:
: _LIB$CODE     39 NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)
  
```

```

:
: Library Statistics
:
: File          Total  Symbols  Percent  Pages  Processing
:               Total  Loaded   Percent  Mapped  Time
:
: _$255$DUA28:[SYSLIB]STARLET.L32;1  9776      6      0      581    00:00.7
: _$255$DUA28:[LIBRTL.OBJ]RTLLIB.L32;1  36        0      0        8    00:00.0
  
```

```

:
: COMMAND QUALIFIERS
:
: BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACE/LIS=LIS$:LIBSIGRET/OBJ=OBJ$:LIBSIGRET MSRC$:LIBSIGRET/UPDATE=(ENH$:LIBSIGRET
: )
  
```

```

: Size:          39 code + 0 data bytes
: Run Time:      00:02.2
: Elapsed Time:  00:14.6
: Lines/CPU Min: 6160
: Lexemes/CPU-Min: 10982
: Memory Used:   34 pages
: Compilation Complete
  
```

0209 AH-BT13A-SE  
VAX/VMS V4.0

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A grid of 100 small terminal windows, arranged in 10 rows and 10 columns. Each window displays a different library interface (LIB) for VAX/VMS. The libraries are:

- LIBPOLYG LIS
- LIBREMCHI LIS
- LIBSIGSTO LIS
- LIBRENAME LIS
- LIBSCANC LIS
- LIBRDOB LIS
- LIBRINPRO LIS
- LIBSIGNAL LIS
- LIBPUTOUT LIS
- LIBREMOTI LIS
- LIBSIGRET LIS
- LIBSIMTRA LIS
- LIBPOLYH LIS
- LIBREVERT LIS
- LIBSCOPY LIS

The windows contain various data, including lists of files, directory structures, and system status information. The text is small and difficult to read in detail, but the overall layout is a dense grid of these library interfaces.