

CCCCCCCCCCCC	00000000	888888888888	RRRRRRRRRR	TTTTTTTTTTTT	LLL
CCCCCCCCCCCC	00000000	888888888888	RRRRRRRRRR	TTTTTTTTTTTT	LLL
CCCCCCCCCCCC	00000000	888888888888	RRRRRRRRRR	TTTTTTTTTTTT	LLL
CCC	000	888	RRR	TTT	LLL
CCC	000	888	RRR	TTT	LLL
CCC	000	888	RRR	TTT	LLL
CCC	000	888	RRR	TTT	LLL
CCC	000	888	RRR	TTT	LLL
CCC	000	888	RRR	TTT	LLL
CCC	000	888	RRR	TTT	LLL
CCC	000	888	RRR	TTT	LLL
CCC	000	888	RRR	TTT	LLL
CCC	000	888	RRR	TTT	LLL
CCC	000	888	RRR	TTT	LLL
CCC	000	888	RRR	TTT	LLL
CCC	000	888	RRR	TTT	LLL
CCC	000	888	RRR	TTT	LLL
CCC	000	888	RRR	TTT	LLL
CCC	000	888	RRR	TTT	LLL
CCC	000	888	RRR	TTT	LLL
CCC	000	888	RRR	TTT	LLL
CCC	000	888	RRR	TTT	LLL
CCCCCCCCCCCC	00000000	888888888888	RRR	TTT	LLLLLLLLLLLLLLLL
CCCCCCCCCCCC	00000000	888888888888	RRR	TTT	LLLLLLLLLLLLLLLL
CCCCCCCCCCCC	00000000	888888888888	RRR	TTT	LLLLLLLLLLLLLLLL

```

CCCCCCCC 000000 BBBB8888 SSSSSSSS WW WW IIIIII TTTT777777 CCCCCCCC HH HH
CCCCCCCC 000000 000000 BBBB8888 SSSSSSSS WW WW IIIIII TTTT777777 CCCCCCCC HH HH
CC 00 00 BB BB SS SS WW WW II II TTTT777777 CC CCCCCCCC HH HH
CC 00 00 BB BB SS SS WW WW II II TTTT777777 CC CCCCCCCC HH HH
CC 00 00 BB BB SS SS WW WW II II TTTT777777 CC CCCCCCCC HH HH
CC 00 00 BB BB SS SS WW WW II II TTTT777777 CC CCCCCCCC HH HH
CC 00 00 BBBB8888 SSSSSS WW WW II II TTTT777777 CC CCCCCCCC HH HH
CC 00 00 BBBB8888 SSSSSS WW WW II II TTTT777777 CC CCCCCCCC HH HH
CC 00 00 BB BB SS SS WW WW II II TTTT777777 CC CCCCCCCC HH HH
CC 00 00 BB BB SS SS WW WW II II TTTT777777 CC CCCCCCCC HH HH
CC 00 00 BB BB SS SS WWW WW WWW II II TTTT777777 CC CCCCCCCC HH HH
CC 00 00 BB BB SS SS WWW WW WWW II II TTTT777777 CC CCCCCCCC HH HH
CCCCCCCC 000000 BBBB8888 SSSSSSSS WW WW IIIIII TTTT777777 CCCCCCCC HH HH
CCCCCCCC 000000 BBBB8888 SSSSSSSS WW WW IIIIII TTTT777777 CCCCCCCC HH HH

```

```

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 IIIIII SSSSSSSS
LLLLLLLLLLLL IIIIII SSSSSSSS
LLLLLLLLLLLL IIIIII SSSSSSSS

```

```

...
...
...
...

```

```

1 0001 0 MODULE COBSSWITCH(
2 0002 0 IDENT = '1-006' ! file: COBSSWITCH.B32 EDIT:LGB1006
3 0003 0 ) =
4 0004 1 BEGIN
5 0005 1
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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26 0026 1 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
27 0027 1 *
28 0028 1 *****
29 0029 1
30 0030 1 ++
31 0031 1 FACILITY: COBOL SUPPORT
32 0032 1
33 0033 1 ABSTRACT
34 0034 1
35 0035 1 Reads switches
36 0036 1
37 0037 1
38 0038 1 ENVIRONMENT: Vax-11 User Mode
39 0039 1
40 0040 1 AUTHOR: MLJ , CREATION DATE: 16-JAN-79
41 0041 1
42 0042 1 MODIFIED BY:
43 0043 1
44 0044 1 1-001 - Original. MLJ 16-JAN-79
45 0045 1 1-002 - Added boilerplate and comments. RKR 23-AUG-1979
46 0046 1 1-003 - Change symbolic name of LIBRARY file. RKR 1-OCT-79
47 0047 1 1-004 - Cosmetic changes. RKR 18-OCT-79
48 0048 1 1-005 - Fix typo from 4. RKR 20-OCT-79
49 0049 1 1-006 - Use logical LNMSC_NAMLENGTH instead of hard-coded value of 64.
50 0050 1 LGB 31-OCT-1983
51 0051 1 --
52 0052 1
53 0053 1 !<BLF/PAGE>

```

```
55 0054 1 |  
56 0055 1 | SWITCHES  
57 0056 1 |  
58 0057 1 |  
59 0058 1 SWITCHES ADDRESSING_MODE (EXTERNAL = GENERAL, NONEXTERNAL = WORD_RELATIVE);  
60 0059 1 |  
61 0060 1 |  
62 0061 1 | LINKAGES  
63 0062 1 |  
64 0063 1 LINKAGE  
65 0064 1 | L = JSB : GLOBAL(PTR=2, CNT=3, DIG=4);  
66 0065 1 |  
67 0066 1 | TABLE OF CONTENTS:  
68 0067 1 |  
69 0068 1 FORWARD ROUTINE  
70 0069 1 |  
71 0070 1 | GET_DIGIT : L ;  
72 0071 1 |  
73 0072 1 | INCLUDE FILES  
74 0073 1 |  
75 0074 1 REQUIRE 'RTLIN:RTLPSECT' ; ! Macros to declare psects  
76 0169 1 LIBRARY 'RTLSTARLE';  
77 0170 1 |  
78 0171 1 |  
79 0172 1 | MACROS  
80 0173 1 |  
81 0174 1 | NONE  
82 0175 1 |  
83 0176 1 | EQUATED SYMBOLS  
84 0177 1 |  
85 0178 1 | NONE  
86 0179 1 |  
87 0180 1 | PSECT DECLARATIONS:  
88 0181 1 |  
89 0182 1 |  
90 0183 1 DECLARE_PSECTS (COB) ; ! Declare psects for COB$ facility  
91 0184 1 |
```

```

93 0185 1 GLOBAL ROUTINE COBSSWITCH(NUMBER)=
94 0186 1
95 0187 1 ++ FUNCTIONAL DESCRIPTION
96 0188 1
97 0189 1
98 0190 1 See C79RTLREQ for specification
99 0191 1
100 0192 1
101 0193 1 FORMAL PARAMETERS:
102 0194 1
103 0195 1 NUMBER
104 0196 1
105 0197 1 IMPLICIT INPUTS:
106 0198 1
107 0199 1 Logical name table
108 0200 1
109 0201 1 IMPLICIT OUTPUTS:
110 0202 1
111 0203 1 NONE
112 0204 1
113 0205 1 ROUTINE VALUE:
114 0206 1 1 Success
115 0207 1 0 Failure
116 0208 1
117 0209 1 COMPLETION CODES:
118 0210 1
119 0211 1 NONE
120 0212 1
121 0213 1 SIDE EFFECTS:
122 0214 1
123 0215 1 NONE
124 0216 1
125 0217 1 --
126 0218 1
127 0219 1 BEGIN
128 0220 1 LOCAL
129 0221 1 BUFFER: VECTOR[LNMSC_NAMLENGTH, BYTE], ! Returned equivalence string
130 0222 1 BUFDESC: VECTOR[2], ! Descriptor for BUFFER
131 0223 1 NAMDESC: VECTOR[2], ! Descriptor for logical name
132 0224 1 LENGTH: WORD; ! Length of equivalence string
133 0225 1 GLOBAL REGISTER
134 0226 1 PTR=2, CNT=3, DIG=4;
135 0227 1
136 0228 1
137 0229 1 BUFDESC[0] = LNMSC_NAMLENGTH; ! Set up descriptors
138 0230 1 BUFDESC[1] = BUFFER; !
139 0231 1 NAMDESC[0] = 12; !
140 0232 1 NAMDESC[1] = UPLIT('COBSSWITCHES'); !
141 0233 1
142 0234 1
143 P 0235 1 IF NOT $TRNLOG( ! Translate COBSSWITCHES
144 0236 1 LOGNAM=NAMDESC, RSLLEN=LENGTH, RSLBUF=BUFDESC)
145 0237 1 THEN
146 0238 1 RETURN 0;
147 0239 1
148 0240 1
149 0241 1 PTR = BUFFER; ! Set up global registers

```

```

150 0242
151 0243
152 0244
153 0245
154 0246
155 0247
156 0248
157 0249
158 0250
159 0251
160 0252
161 0253
162 0254
163 0255
164 0256
165 0257
166 0258
167 0259
168 0260
169 0261
170 0262
171 0263
172 0264
173 0265
174 0266
175 0267

```

```

CNT = .LENGTH;
WHILE 1 DO
  BEGIN LOCAL VAL;
    Skip leading non-digits
    WHILE (IF .CNT GTR 0 THEN NOT GET_DIGIT() ELSE RETURN 0) DO 0;
    Remember first digit
    VAL = .DIG;
    Scan over digits to next non-digit, computing value in VAL
    WHILE (IF .CNT GTR 0 THEN GET_DIGIT() ELSE 0) DO VAL = .VAL * 10 + .DIG;
    Check VAL against desired switch
    IF .VAL EQL .NUMBER THEN RETURN 1;
  END;
RETURN 0;
END;

```

										.TITLE	COBSSWITCH					
										.IDENT	\1-006\					
										.PSECT	_COBSCODE, NOWRT, SHR, PIC, 2					
53	45	48	43	54	49	57	53	24	42	4F	43	0000	P.AAA:	.ASCII	\COBSSWITCHES\	:
										.EXTRN	SYS\$TRNLOG					
										.ENTRY	COBSSWITCH, Save R2,R3,R4,R5,R6,R7,R8,R9,-	0185				
											R10,R11					
														MOVAB	-276(SP), SP	
														MOVZBL	#255, BUFDESC	0229
														MOVAB	BUFFER, BUFDESC+4	0230
														MOVL	#12, NAMDESC	0231
														MOVAB	P.AAA, NAMDESC+4	0232
														CLRQ	-(SP)	0236
														CLRL	-(SP)	
														PUSHAB	BUFDESC	
														PUSHAB	LENGTH	
														PUSHAB	NAMDESC	
														CALLS	#6, SYS\$TRNLOG	
														BLBC	R0, 4\$	
														MOVAB	BUFFER, PTR	0241
														MOVZWL	LENGTH, CNT	0242
														TSTL	CNT	0250
														BLEQ	4\$	
														BSBW	GET_DIGIT	
														BLBC	R0, -1\$	

COBSSWITCH
1-006

H 5
16-Sep-1984 00:15:51
14-Sep-1984 12:10:59

VAX-11 Bliss-32 V4.0-742
[COBRTL.SRC]COBSSWITCH.B32;1

Page 5
(3)

	55		54	D0	00042		MOVL	DIG, VAL			
			53	D5	00045	2\$:	TSTL	CNT			: 0254
			10	15	00047		BLEQ	3\$: 0258
			0000V	30	00049		BSBW	GET_DIGIT			
		0A	50	E9	0004C		BLBC	RO, 3\$			
	50	55	0A	C5	0004F		MULL3	#10, VAL, RO			
	55	50	54	C1	00053		ADDL3	DIG, RO, VAL			
			EC	11	00057		BRB	2\$			
		04	55	D1	00059	3\$:	CML	VAL, NUMBER			: 0262
			D9	12	0005D		BNEQ	1\$			
			01	D0	0005F		MOVL	#1, RO			
				04	00062		RET				
			50	D4	00063	4\$:	CLRL	RO			: 0267
				04	00065		RET				

; Routine Size: 102 bytes, Routine Base: _COB\$CODE + 000C

: 176 0268 1
: 177 0269 1 !<BLF/PAGE>

```

: 179 0270 1 ROUTINE GET_DIGIT: L=
: 180 0271 1
: 181 0272 1 ++ FUNCTIONAL DESCRIPTION
: 182 0273 1
: 183 0274 1
: 184 0275 1 Get next character from string, returning:
: 185 0276 1 PTR advanced to next character
: 186 0277 1 CNT decremented
: 187 0278 1 DIG containing the character less %C'0'
: 188 0279 1 Value true if and only if the character was a digit
: 189 0280 1
: 190 0281 1
: 191 0282 1 FORMAL PARAMETERS:
: 192 0283 1
: 193 0284 1
: 194 0285 1 IMPLICIT INPUTS:
: 195 0286 1
: 196 0287 1 NONE
: 197 0288 1
: 198 0289 1 IMPLICIT OUTPUTS:
: 199 0290 1
: 200 0291 1 NONE
: 201 0292 1
: 202 0293 1 ROUTINE VALUE:
: 203 0294 1 COMPLETION CODES:
: 204 0295 1
: 205 0296 1 NONE
: 206 0297 1
: 207 0298 1 SIDE EFFECTS:
: 208 0299 1
: 209 0300 1 NONE
: 210 0301 1
: 211 0302 1 --
: 212 0303 1
: 213 0304 2 BEGIN
: 214 0305 2 EXTERNAL REGISTER
: 215 0306 2 PTR, CNT, DIG;
: 216 0307 2 LOCAL
: 217 0308 2 VAL;
: 218 0309 2
: 219 0310 2 VAL = 0;
: 220 0311 2 DIG = .(.PTR)<0,8>;
: 221 0312 2 PTR = .PTR + 1;
: 222 0313 2 CNT = .CNT - 1;
: 223 0314 2 DIG = .DIG - %C'0';
: 224 0315 2 IF .DIG LEQU 9 THEN VAL = .VAL + 1;
: 225 0316 2 .VAL
: 226 0317 1 END;

```

```

: Assume false value
: Fetch character
: Advance pointer
: Decrement count
: Bias character
: Set true value if need be
: Return the value

```

```

50 D4 0000 GET_DIGIT:
54 82 9A 0002 CLRL VAL
53 D7 0005 MOVZBL (PTR)+, DIG
DECL CNT
: 0310
: 0311
: 0313

```


COB\$SWITCH
1-006

J 5
16-Sep-1984 00:15:51
14-Sep-1984 12:10:59

VAX-11 Bliss-32 V4.0-742
[COBRTL.SRC]COB\$SWITCH.B32;1

Page 7
(4)

54	30	C2	00007	SUBL2	#48,	DIG
09	54	D1	0000A	CMPL	DIG,	#9
	02	1A	0000D	BGTRU	1\$	
	50	D6	0000F	INCL	VAL	
	05	00011	1\$:	RSB		

: 0314
: 0315
: :
: 0317

: Routine Size: 18 bytes, Routine Base: _COB\$CODE + 0072

: 227 0318 0 END ELUDOM

PSECT SUMMARY

Name	Bytes	Attributes
_COB\$CODE	132	NOVEC, NOWRT, RD, EXE, SHR, LCL, REL, CON, PIC, ALIGN(2)

Library Statistics

File	----- Total	Symbols Loaded	----- Percent	Pages Mapped	Processing Time
_\$255\$DUA28:[SYSLIB]STARLET.L32;1	9776	4	0	581	00:00.7

COMMAND QUALIFIERS

: BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACE/LIS=LIS\$:COB\$SWITCH/OBJ=OBJ\$:COB\$SWITCH MSRC\$:COB\$SWITCH/UPDATE=(ENH\$:COB\$SWITCH)

: Size: 120 code + 12 data bytes
: Run Time: 00:03.5
: Elapsed Time: 00:15.8
: Lines/CPU Min: 5451
: Lexemes/CPU-Min: 20811
: Memory Used: 62 pages
: Compilation Complete

COBRMSBLO LIS	COBSPANC LIS	COBSPANC2 LIS	COBSWITCH LIS	CONUSHR MAP	CONUDEF MDL	CONV LINK REQ	CONVUCOMIO LIS
COBRESTVA LIS	COBSETSUI LIS	COBVECTOR LIS	CONV	CONVERT MAP	CONVERT REQ	CONVCALL LIS	RECLAIM MAP
ADDKEY LIS							