


```

SSSSSSSS HH HH AAAAAA RRRRRRRR EEEEEEEEEE
SSSSSSSS HH HH AAAAAA RRRRRRRR EEEEEEEEEE
SS      HH HH AA AA RR RR EE
SS      HH HH AA AA RR RR EE
SS      HH HH AA AA RR RR EE
SS      HH HH AA AA RR RR EE
SSSSSS HH HH AA AA RRRRRRRR EEEEEEEE
SSSSSS HH HH AA AA RRRRRRRR EEEEEEEE
SS      HH HH AAAAAAAAAA RR RR EE
SS      HH HH AAAAAAAAAA RR RR EE
SS      HH HH AA AA RR RR EE
SS      HH HH AA AA RR RR EE
SSSSSSSS HH HH AA AA RRRRRRRR EEEEEEEEEE
SSSSSSSS HH HH AA AA RRRRRRRR EEEEEEEEEE

```

```

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

```

```

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 OPC$SHARE_DEVNAME ( %TITLE 'SHARE_FULL_DEVNAME'
2 0002 0 , LANGUAGE (BLISS32),
3 0003 0 IDENT = 'V04-000'
4 0004 0 ) =
5 0005 0
6 0006 0 *****
7 0007 0 *
8 0008 0 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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25 0025 0 *
26 0026 0 *
27 0027 0 *****
28 0028 0
29 0029 0 **
30 0030 0 FACILITY:
31 0031 0
32 0032 0 OPCOM
33 0033 0
34 0034 0 ABSTRACT:
35 0035 0
36 0036 0 This file contains routines shared by OPCOM, REPLY and REQUEST.
37 0037 0 Each routine is compiled as a separate module so that unnecessary
38 0038 0 code is not included at link time.
39 0039 0
40 0040 0 Environment:
41 0041 0
42 0042 0 VAX/VMS operating system.
43 0043 0
44 0044 0 Author:
45 0045 0
46 0046 0 CW Hobbs
47 0047 0
48 0048 0 Creation date:
49 0049 0
50 0050 0 31 July 1983
51 0051 0
52 0052 0 Revision history:
53 0053 0
54 0054 0 V03-003 CW3169 CW Hobbs 5-May-1984
55 0055 0 Second pass for cluster-wide OPCOM:
56 0056 0 - Make DVIS_xxxNAM an input item for SHARE_FULL_DEVNAME so
57 0057 0 that calling routine can pick a name.

```

```

58      0058 0 | - Delete the entire timeout count module, it is no longer
59      0059 0 | necessary with the queued $brkthru mechanism.
60      0060 0 |
61      0061 0 | V03-002 CWH3002      CW Hobbs      16-Sep-1983
62      0062 0 | Add timeout routine and VM jacket routines.
63      0063 0 |
64      0064 0 | --
65      0065 1 | BEGIN
66      0066 1 |
67      0067 1 | LIBRARY 'SYS$LIBRARY:LIB';
68      0068 1 | LIBRARY 'LIB$:OPCOMLIB';
69      0069 1 |
70      0070 1 | GLOBAL ROUTINE SHARE_FULL_DEVNAME (DEVNAME : $ref_bblock, NAME_CODE) = %SBTTL 'share_full_devname (devname,
71      0071 1 |
72      0072 1 | ++
73      0073 1 | Functional description:
74      0074 1 |
75      0075 1 | Take the device name passed as input, and return a fully qualified device spec. This will include
76      0076 1 | the SCS nodename if that is defined. Note that the descriptor is OWN storage inside of this routine
77      0077 1 | so that this routine is non-reentrant.
78      0078 1 |
79      0079 1 | Input:
80      0080 1 |
81      0081 1 |     DEVNAME      : Address of a quadword buffer descriptor that
82      0082 1 |                   points to the buffer containing the device name
83      0083 1 |     NAME_CODE    : DVI$_xxxNAM, the device name item code
84      0084 1 |
85      0085 1 | Implicit Input:
86      0086 1 |
87      0087 1 |     None.
88      0088 1 |
89      0089 1 | Output:
90      0090 1 |
91      0091 1 |     None.
92      0092 1 |
93      0093 1 | Implicit output:
94      0094 1 |
95      0095 1 |     None.
96      0096 1 |
97      0097 1 | Side effects:
98      0098 1 |
99      0099 1 |     None.
100     0100 1 |
101     0101 1 | Routine value:
102     0102 1 |
103     0103 1 |     Descriptor pointing to fullname. If unable to modify name, input descriptor will returned.
104     0104 1 | --
105     0105 1 |
106     0106 2 | BEGIN                                ! Start of SHARE_FULL_DEVNAME
107     0107 2 |
108     0108 2 | OWN
109     0109 2 |     NAME_BUFFER  : VECTOR [MAX DEV NAM, BYTE],
110     0110 2 |     NAME_DESC    : VECTOR [2, [LONG] INITIAL (0, NAME_BUFFER),
111     0111 2 |     SEC_NAME_BUFFER : VECTOR [MAX DEV NAM, BYTE],
112     0112 2 |     SEC_NAME_DESC : VECTOR [2, [LONG] INITIAL (0, SEC_NAME_BUFFER),
113     0113 2 |     SPOOLED      : LONG,
114     0114 2 |     DVI_LIST     : VECTOR [10, LONG] INITIAL (

```

```

115      0115      2      MAX_DEV_NAM,           ! Add item code at run time
116      0116      2      NAME_BUFFER,
117      0117      2      NAME_DESC,
118      0118      2      MAX_DEV_NAM,           ! Add code at run time
119      0119      2      SEC_NAME_BUFFER,
120      0120      2      SEC_NAME_DESC,
121      0121      2      ((DVI$ SPL OR DVI$C_SECONDARY)^16 OR 4), ! Is the secondary spooled?
122      0122      2      SPOOLED,
123      0123      2      0,
124      0124      2      0);
125      0125      2
126      0126      2
127      0127      2      ! Get the name, if any problem then return the address of the input descriptor
128      0128      2      !
129      0129      2      (DVI_LIST [0])<16,16,0> = .NAME_CODE;           ! Put name item code in high word
130      0130      2      (DVI_LIST [3])<16,16,0> = (.NAME_CODE OR DVI$C_SECONDARY);
131      0131      3      IF NOT ($GETDVIW (DEVNAM=.DEVNAME, ITMLST=DVI_LIST))
132      0132      2      THEN
133      0133      2      RETURN .DEVNAME;
134      0134      2
135      0135      2      IF .NAME_DESC [0] EQL 0
136      0136      2      THEN
137      0137      2      RETURN .DEVNAME;
138      0138      2
139      0139      2      ! If the device is spooled, return secondary characteristics
140      0140      2      !
141      0141      2      IF .SPOOLED
142      0142      2      THEN
143      0143      2      IF .SEC_NAME_DESC [0] NEQ 0
144      0144      2      THEN
145      0145      2      RETURN SEC_NAME_DESC;
146      0146      2
147      0147      2      RETURN NAME_DESC;           ! If we get this far, it's ok.
148      0148      1      END;           ! End of SHARE_FULL_DEVNAME

```

```

.TITLE OPC$SHARE_DEVNAME SHARE_FULL_DEVNAME
.IDENT \V04-000\
.PSECT $OWNS,NOEXE,2

```

```

00000 NAME_BUFFER:
          .BLKB 64
0000000 00040 NAME_DESC:
          .LONG 0
0000000' 00044          .ADDRESS NAME_BUFFER
00048 SEC_NAME_BUFFER:
          .BLKB 64
0000000 00088 SEC_NAME_DESC:
          .LONG 0
0000000' 0008C          .ADDRESS SEC_NAME_BUFFER
00090 SPOOLED: .BLKB 4
00000040 00094 DVI_LIST:
          .LONG 64
0000000' 0000000' 00098          .ADDRESS NAME_BUFFER, NAME_DESC
          .LONG 64
0000000' 0000000' 000A4          .ADDRESS SEC_NAME_BUFFER, SEC_NAME_DESC

```

				00530004	000AC		.LONG	5439492		
				00000000	000B0		.ADDRESS	SPOOLED		
				00000000	000B4		.LONG	0, 0		
							.EXTRN	SYSSGETDVIW		
							.PSECT	\$CODE\$,NOWRT,2		
				0004	00000		.ENTRY	SHARE FULL DEVNAME, Save R2		0070
		52	0000	CF	9E	00002	MOVAB	DVI_LIST, R2		
		A2	08	AC	B0	00007	MOVW	NAME_CODE, DVI_LIST+2		0129
OE	A2	02		01	A9	0000C	BISW3	#1, NAME_CODE, DVI_LIST+14		0130
		08		7E	7C	00012	CLRQ	-(SP)		0131
				7E	7C	00014	CLRQ	-(SP)		
				52	DD	00016	PJSHL	R2		
				04	AC	DD	PUSHL	DEVNAME		
					7E	7C	CLRQ	-(SP)		
					08	FB	CALLS	#8, SYSSGETDVIW		
		00		50	E9	00024	BLBC	R0, 1\$		
		05		AC	A2	00027	TSTL	NAME_DESC		0135
				05	12	0002A	BNEQ	2\$		
					50	04	AC	D0	0002C	1\$:
						04		00030		
					0A	FC	A2	E9	00031	2\$:
						F4	A2	D5	00035	
						05	13	00038		
					50	F4	A2	9E	0003A	
						04		0003E		
					50	AC	A2	9E	0003F	3\$:
						04		00043		
							RET			0148

; Routine Size: 68 bytes, Routine Base: \$CODE\$ + 0000

```

: 149      0149 1 END
: 150      0150 0 ELUDOM

```

PSECT SUMMARY

Name	Bytes	Attributes
\$OWNS	188	NOVEC, WRT, RD, NOEXE, NOSHR, LCL, REL, CON, NOPIC, ALIGN(2)
\$CODE\$	68	NOVEC, NOWRT, RD, EXE, NOSHR, LCL, REL, CON, NOPIC, ALIGN(2)

Library Statistics

File	----- Total	Symbols Loaded	----- Percent	Pages Mapped	Processing Time
------	----------------	-------------------	------------------	-----------------	--------------------


```
152 0151 0 MODULE OPC$SHARE_FAOBUF (IDENT = 'V03-001') = %SBTTL 'SHARE_FAO_BUFFER' %SBTTL 'share_fao_buffer (ct
153 0152 1 BEGIN
154 0153 1
155 0154 1 LIBRARY 'SYSS$LIBRARY:LIB';
156 0155 1 LIBRARY 'LIB$:OPCOMLIB';
157 0156 1
158 0157 1 GLOBAL ROUTINE SHARE_FAO_BUFFER (ctrstr : REF VECTOR[2], args : VECTOR [4]) = %SBTTL 'SHARE_FAO_BUFFER'
159 0158 2 BEGIN
160 0159 2 '++
161 0160 2
162 0161 2 : FUNCTIONAL DESCRIPTION:
163 0162 2
164 0163 2 This routine passes an ascii string through the FAO system service with any number of specified para
165 0164 2
166 0165 2 INPUTS:
167 0166 2
168 0167 2 ctrstr Address of FAO control string descriptor
169 0168 2 args Any number of additional arguments
170 0169 2
171 0170 2 IMPLICIT INPUTS:
172 0171 2
173 0172 2 none
174 0173 2
175 0174 2 OUTPUTS:
176 0175 2
177 0176 2 none
178 0177 2
179 0178 2 IMPLICIT OUTPUTS:
180 0179 2
181 0180 2 none
182 0181 2
183 0182 2 ROUTINE VALUE:
184 0183 2
185 0184 2 Address of formatted descriptor
186 0185 2
187 0186 2 SIDE EFFECTS:
188 0187 2
189 0188 2 none
190 0189 2 --
191 0190 2 OWN
192 0191 2 DESC : VECTOR [2, LONG],
193 0192 2 FAOBUF : VECTOR [512, BYTE]
194 0193 2 ;
195 0194 2
196 0195 2 DESC [0] = 512; ! Set up result descriptor
197 0196 2 DESC [1] = FAOBUF;
198 0197 2
199 0198 2 $FAOL (CTRSTR=.CTRSTR, OUTLEN=DESC, OUTBUF=DESC, PRMLST=ARGS);
200 0199 2
201 0200 2 RETURN DESC;
202 0201 1 END;
```

```
.TITLE OPC$SHARE_FAOBUF SHARE_FAO_BUFFER
.IDENT \V03-001\
.PSECT $OWNS,NOEXE,2
```



```

00000 DESC: .BLKB 8
00008 FAOBUF: .BLKB 512

      .EXTRN  SYSS$FAOL
      .PSECT  $CODE$,NOWRT,2
      .ENTRY  SHARE_FAO_BUFFER, Save R2
MOVAB  DESC, R2
MOVZWL #512, DESC
MOVAB  FAOBUF, DESC+4
PUSHAB ARG$
PUSHL  R2
PUSHL  R2
PUSHL  CTRSTR
CALLS  #4, SYSS$FAOL
MOVAB  DESC, R0
RET

```

```

0004 00000
      52 000^' CF 9E 00002
      62 0200 8F 3C 00007
04   A2   08 A2 9E 0000C
      08 AC 9F 00011
      52 DD 00014
      52 DD 00016
      04 AC DD 00018
00000000G 00 04 FB 0001B
      50 62 9E 00022
      04 00025

```

```

: 0157
: 0195
: 0196
: 0198
:
: 0200
: 0201

```

: Routine Size: 38 bytes, Routine Base: \$CODE\$ + 0000

```

: 203 0202 1
: 204 0203 1 END
: 205 0204 0 ELUDOM

```

: End of SHARE\$FAOBUF

PSECT SUMMARY

Name	Bytes	Attributes
\$OWNS	520	NOVEC, WRT, RD, NOEXE, NOSHR, LCL, REL, CON, NOPIC, ALIGN(2)
\$CODE\$	38	NOVEC, NOWRT, RD, EXE, NOSHR, LCL, REL, CON, NOPIC, ALIGN(2)

Library Statistics

File	Symbols		Pages Mapped	Processing Time
	Total	Loaded Percent		
_\$255\$DUA28:[SYSLIB]LIB.L32;1	18619	3 0	1000	00:01.8
_\$255\$DUA28:[OPCOM.OBJ]OPCOMLIB.L32;1	633	0 0	43	00:00.7

COMMAND QUALIFIERS

OPC\$SHARE_FAOBU SHARE_FAO_BUFFER
VO3-001 SHARE_FAO_BUFFER

6 7
16-Sep-1984 01:53:46
14-Sep-1984 12:50:55

VAX-11 Bliss-32 V4.0-742
DISK\$VMSMASTER:[OPCOM.SRC]SHARE.B32;1 Page 8 (2)

OP
VO

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

```

: 207 0205 0 MODULE OPC$SHARE_VM (IDENT = 'V03-001') = %TITLE 'OPC$SHARE_VM' %SBTTL 'OPC$GET_VM (len, addr)'
: 208 0206 1 BEGIN
: 209 0207 1
: 210 0208 1 LIBRARY 'SYSS$LIBRARY:LIB';
: 211 0209 1 LIBRARY 'LIB$:OPCOMLIB';
: 212 0210 1
: 213 0211 1 GLOBAL ROUTINE OPC$GET_VM (len, addr) =
: 214 0212 2 BEGIN
: 215 0213 2 |++
: 216 0214 2 |
: 217 0215 2 | FUNCTIONAL DESCRIPTION:
: 218 0216 2 |
: 219 0217 2 | This routine calls LIB$GET_VM
: 220 0218 2 |
: 221 0219 2 | --
: 222 0220 2 LOCAL
: 223 0221 2 STATUS;
: 224 0222 2
: 225 0223 2 STATUS = LIB$GET_VM (.LEN, .ADDR);
: 226 0224 2
: 227 0225 2 RETURN .STATUS;
: 228 0226 1 END;

```

```

.TITLE OPC$SHARE_VM OPC$SHARE_VM
.IDENT \V03-001\
.EXTRN OPC$GET_VM, LIB$GET_VM
.PSECT $CODE$,NOWRT,2
.ENTRY OPC$GET_VM, Save nothing
MOVQ LEN, -(SP)
CALLS #2, LIB$GET_VM
RET

```

```

00000000G 7E 04 AC 7D 00002
02 FB 00006
04 0000D

```

: 0211
: 0223
: 0226

: Routine Size: 14 bytes, Routine Base: \$CODE\$ + 0000

```

: 229 0227 1
: 230 0228 1 GLOBAL ROUTINE OPC$FREE_VM (len, addr) = %SBTTL 'OPC$FREE_VM (len, addr)'
: 231 0229 2 BEGIN
: 232 0230 2 |++
: 233 0231 2 |
: 234 0232 2 | FUNCTIONAL DESCRIPTION:
: 235 0233 2 |
: 236 0234 2 | This routine calls LIB$FREE_VM
: 237 0235 2 |
: 238 0236 2 | --
: 239 0237 2 LOCAL
: 240 0238 2 STATUS;
: 241 0239 2
: 242 0240 2 STATUS = LIB$FREE_VM (.LEN, .ADDR);
: 243 0241 2
: 244 0242 2 RETURN .STATUS;
: 245 0243 1 END;

```

```

                                .EXTRN  OPC$FREE_VM, LIB$FREE_VM
                                .ENTRY  OPC$FREE_VM, Save nothing          ; 0228
MOVQ   LEN, -(SP)                ; 0240
CALLS  #2, LIB$FREE_VM           ;
RET                                     ; 0243
  
```

: Rout e Size: 14 bytes, Routine Base: \$CODE\$ + 000E

```

: 246      0244 1
: 247      0245 1 END
: 248      0246 0 ELUDOM
                                ! End of OPC$SHARE_VM
  
```

PSECT SUMMARY

Name	Bytes	Attributes
\$CODE\$	28	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]LIB.L32;1	18619	0	0	1000	00:01.8
\$255\$DUA28:[OPCOM.OBJ]OPCOMLIB.L32;1	633	4	0	43	00:00.7

COMMAND QUALIFIERS

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

```
250 0247 0 MODULE OPC$SHARE_LOOKOPERBIT (IDENT = 'V03-001') = %TITLE 'SHARE_LOOKOPERBIT' %SBTTL 'share_init_o
251 0248 1 BEGIN
252 0249 1
253 0250 1 LIBRARY 'SYS$LIBRARY:LIB';
254 0251 1 LIBRARY 'LIB$:OPCOMLIB';
255 0252 1
256 0253 1 EXTERNAL ROUTINE
257 0254 1 share_trnlog : NOVALUE;
258 0255 1
259 0256 1 LITERAL
260 0257 1 MAX_OPERBIT = 24;
261 0258 1
262 0259 1 OWN
263 0260 1 OPER_NAME : VECTOR [MAX_OPERBIT, LONG] PRESET (
264 0261 1 [0] = OPC$_CENTRL, [1] = OPC$_PRINT, [2] = OPC$_TAPES,
265 0262 1 [3] = OPC$_DISKS, [4] = OPC$_DEVICE, [5] = OPC$_CARDS,
266 0263 1 [6] = OPC$_NETWORK, [7] = OPC$_CLUSTER, [8] = OPC$_SECURITY,
267 0264 1 [9] = OPC$_REPLY, [10] = OPC$_SOFTWARE, [11] = OPC$_FILL 11,
268 0265 1 [12] = OPC$_OPER1, [13] = OPC$_OPER2, [14] = OPC$_OPER3,
269 0266 1 [15] = OPC$_OPER4, [16] = OPC$_OPER5, [17] = OPC$_OPER6,
270 0267 1 [18] = OPC$_OPER7, [19] = OPC$_OPER8, [20] = OPC$_OPER9,
271 0268 1 [21] = OPC$_OPER10, [22] = OPC$_OPER11, [23] = OPC$_OPER12);
272 0269 1
273 0270 1 GLOBAL
274 0271 1 OPER_KEYTBL : VECTOR [((MAX_OPERBIT*2)+1), LONG] PRESET ([0] = MAX_OPERBIT*2);
275 0272 1
276 0273 1 ROUTINE SHARE_INIT_OPER_KEYTBL : NOVALUE =
277 0274 2 BEGIN
278 0275 2 !++
279 0276 2
280 0277 2 FUNCTIONAL DESCRIPTION:
281 0278 2
282 0279 2 This routine performs run-time initializations on the operator name keyword table.
283 0280 2
284 0281 2 INPUTS:
285 0282 2
286 0283 2 None.
287 0284 2
288 0285 2 IMPLICIT INPUTS:
289 0286 2
290 0287 2 none
291 0288 2
292 0289 2 OUTPUTS:
293 0290 2
294 0291 2 none
295 0292 2
296 0293 2 IMPLICIT OUTPUTS:
297 0294 2
298 0295 2 none
299 0296 2
300 0297 2 ROUTINE VALUE:
301 0298 2
302 0299 2 none
303 0300 2
304 0301 2 SIDE EFFECTS:
305 0302 2
306 0303 2 none
```

```

307      0304 2  !--
308      0305 2
309      0306 2 LOCAL
310      0307 2     buff : VECTOR [64, BYTE],
311      0308 2     desc : VECTOR [2, LONG] PRESET ([1] = buff),
312      0309 2     msg,
313      0310 2     len,
314      0311 2     adr : REF VECTOR [, BYTE],
315      0312 2     status;
316      0313 2
317      0314 2     ! Loop through the name vector, for each non-zero entry fetch the message text and create a string
318      0315 2     ! from the message. Store a pointer to the string descriptor back in the vector.
319      0316 2
320      0317 2 INCR i FROM 0 TO MAX_OPERBIT-1
321      0318 2 DO
322      0319 2     BEGIN
323      0320 2     IF (msg = .oper_name [.i]) EQL 0           ! We assume no holes
324      0321 2     THEN
325      0322 2         $signal_stop (ss$_badparam);
326      0323 2
327      0324 2     ! Reset the buffer length, and get the message text. Any problem is fatal.
328      0325 2
329      0326 2     desc [0] = 64;
330      0327 2     IF NOT (status = $getmsg (msgid=.msg, msglen=desc, bufadr=desc, flags=1))
331      0328 2     THEN
332      0329 2         $signal_stop (.status);
333      0330 2
334      0331 2     ! Allocate and initialize a counted string, store info in the keytbl
335      0332 2
336      0333 2     len = .desc [0] + 1;                       ! String plus ASCII count byte
337      0334 2     IF NOT (status = OP($GET_VM (len, adr))   ! Get memory, store address right into keytable
338      0335 2     THEN
339      0336 2         $signal_stop (.status);
340      0337 2     adr [0] = .desc [0];                          ! Set the ascii count byte
341      0338 2     ($MOVE (.desc [0], .desc [1], adr [1]));    ! Copy the string to the new memory
342      0339 2     oper_keytbl [(2*.i)+1] = .adr;             ! Store the address in the keytbl
343      0340 2     oper_keytbl [(2*.i)+2] = .i;              ! Store the index in the keytbl
344      0341 2     END;
345      0342 2
346      0343 2 RETURN;
347      0344 1 END;

```

.TITLE OPC\$SHARE_LOOKOPERBIT SHARE_LOOKOPERBIT
.IDENT \V03-001\

.PSECT \$OWNS,NOEXE,2

00058123	0005811B	00058113	0005810B	00058103	000580FB	0000	OPER_NAME:						
							.LONG	360699,	360707,	360715,	360723,	360731,	-
00058153	0005814B	00058143	0005813B	00058133	0005812B	00018		360739,	360747,	360755,	360763,	360771,	-
00058183	0005817B	00058173	0005816B	00058163	0005815B	00030		360779,	360787,	360795,	360803,	360811,	-
000581B3	000581AB	000581A3	0005819B	00058193	0005818B	00048		360819,	360827,	360835,	360843,	360851,	-
								360859,	360867,	360875,	360883		

.PSECT \$GLOBALS,NOEXE,2

```
00000030 00000 OPER_KEYTBL:
          00004 .LONG 48
          .BLKB 192
          .EXTRN SHARE TRNLOG, LIB$STOP
          .EXTRN SYS$GETMSG, OPC$GET_VM
          .PSECT $CODE$,NOWRT,2
```

```
03FC 00000 SHARE_INIT_OPER_KEYTBL:
          .WORD Save R2,R3,R4,R5,R6,R7,R8,R9 : 0273
          MOVAB -80(SP), SP
          CLRL DESC : 0308
          MOVAB BUFF, DESC+4
          CLRL I : 0317
          MOVL OPER_NAME[I], MSG : 0320
          BNEQ 2$
          PUSHL #20 : 0322
          BRB 4$
          MOVZBL #64, DESC : 0326
          MOVQ #1, -(SP) : 0327
          PUSHAB DESC
          PUSHAB DESC
          PUSHL MSG
          CALLS #5, SYS$GETMSG
          MOVL R0, STATUS
          BLBC STATUS, 3$
          ADDL3 #1, DESC, LEN : 0333
          PUSHL SP : 0334
          PUSHAB LEN
          CALLS #2, OPC$GET_VM
          MOVL R0, STATUS
          BLBS STATUS, 5$
          PUSHL STATUS : 0336
          CALLS #1, LIB$STOP
          RET
          MOVL ADR, R7 : 0337
          MOVB DESC, (R7)
          MOV3 DESC, @DESC+4, 1(R7) : 0338
          ASHL #1, I, R0 : 0339
          MOVL R7, OPER_KEYTBL+4[R0]
          ASHL #1, I, R0 : 0340
          MOVL I, OPER_KEYTBL+8[R0]
          AOBLEQ #23, I, -1$ : 0317
          RET : 0344
```

; Routine Size: 128 bytes, Routine Base: \$CODE\$ + 0000

```
349 0345 1 GLOBAL ROUTINE SHARE_LOOKUP_OPER_BIT (TEXT : $ref_bblock) = %SBTTL 'share_lookup_oper_bit'
350 0346 2 BEGIN
351 0347 2 ++
352 0348 2
353 0349 2 FUNCTIONAL DESCRIPTION:
354 0350 2
355 0351 2 This routine converts a text string for an operator name into that operators bit index in
356 0352 2 the operator attention mask.
357 0353 2
358 0354 2 INPUTS:
359 0355 2
360 0356 2 None.
361 0357 2
362 0358 2 IMPLICIT INPUTS:
363 0359 2
364 0360 2 none
365 0361 2
366 0362 2 OUTPUTS:
367 0363 2
368 0364 2 none
369 0365 2
370 0366 2 IMPLICIT OUTPUTS:
371 0367 2
372 0368 2 none
373 0369 2
374 0370 2 ROUTINE VALUE:
375 0371 2
376 0372 2 none
377 0373 2
378 0374 2 SIDE EFFECTS:
379 0375 2
380 0376 2 none
381 0377 2 --
382 0378 2
383 0379 2 LOCAL
384 0380 2 idx,
385 0381 2 status;
386 0382 2
387 0383 2 IF .oper_keytbl [1] EQL 0
388 0384 2 THEN
389 0385 2 share_init_oper_keytbl (); ! Initialize the oper_keytbl structure
390 0386 2
391 0387 2 Translate the name if possible
392 0388 2
393 0389 2 share_trnlog (.text);
394 0390 2
395 0391 2 Convert the name to the index value stored in the keyword table
396 0392 2
397 0393 2 status = lib$lookup_key (.text, oper_keytbl, idx); ! Use the library routine
398 0394 2 IF NOT .status
399 0395 2 THEN
400 0396 2 $signal_stop (opc$_valuerr, 1, .text, .status, 1, .text);
401 0397 2
402 0398 2 RETURN .idx;
403 0399 1 END;
```


						.EXTRN LIB\$LOOKUP_KEY			
	SE		0000	04	C2	00002	.ENTRY	SHARE_LOOKUP_OPER_BIT, Save nothing	: 0345
		0000'		CF	D5	00005	SUBL2	#4, SP	
				05	12	00009	TSTL	OPER_KEYTBL+4	: 0383
FF70	CF			00	FB	0000B	BNEQ	1\$	
			04	AC	DD	00010	CALLS	#0, SHARE_INIT_OPER_KEYTBL	: 0385
0000G	CF			01	FB	00013	PUSHL	TEXT	: 0389
				5E	DD	00018	CALLS	#1, SHARE_TRNLOG	
		0000'		CF	9F	0001A	PUSHL	SP	: 0393
			04	AC	DD	0001E	PUSHAB	OPER_KEYTBL	
00000000G	00			03	FB	00021	PUSHL	TEXT	
	1A			50	E8	00028	CALLS	#3, LIB\$LOOKUP_KEY	
			04	AC	DD	0002B	BLBS	STATUS, 2\$: 0394
				01	DD	0002E	PUSHL	TEXT	: 0396
				50	DD	00030	PUSHL	#1	
			04	AC	DD	00032	PUSHL	STATUS	
				01	DD	00035	PUSHL	TEXT	
00000000G	00	0005825C		8F	DD	00037	PUSHL	#1	
				06	FB	0003D	PUSHL	#361052	
				04	00044		CALLS	#6, LIB\$STOP	
	50			6E	DC	00045	RET	IDX, R0	: 0398
				04	00048		RET		: 0399

; Routine Size: 73 bytes, Routine Base: \$CODE\$ + 0080

: 404 0400 1 END
 : 405 0401 0 ELUDOM

PSECT SUMMARY

Name	Bytes	Attributes
\$OWNS	96	NOVEC, WRT, RD, NOEXE, NOSHR, LCL, REL, CON, NOPIC, ALIGN(2)
\$GLOBALS	196	NOVEC, WRT, RD, NOEXE, NOSHR, LCL, REL, CON, NOPIC, ALIGN(2)
\$CODE\$	201	NOVEC, NOWRT, RD, EXE, NOSHR, LCL, REL, CON, NOPIC, ALIGN(2)

Library Statistics

File	Symbols		Pages Mapped	Processing Time
	Total	Loaded Percent		
\$255\$DUA28:[SYSLIB]LIB.L32;1	18619	30 0	1000	00:01.8
\$255\$DUA28:[OPCOM.OBJ]OPCOM.LB.L32;1	633	4 0	43	00:00.7

OPC\$SHARE_LOOKO SHARE_LOOKOPERBIT
V03-001 share_lookup_oper_bit

K 7
16-Sep-1984 01:53:46
14-Sep-1984 12:50:55

VAX-11 BLISS-32 V4.0-742
DISK\$VMMASTER:[OPCOM.SRC]SHARE.B32;1 Page 16
(5)

OP
VO

COMMAND QUALIFIERS

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

```
407 0402 0 MODULE OPC$SHARE_INITOPERNAM (IDENT = 'V03-001') = %TITLE 'SHARE_INIT_OPER_NAME' %SBTTL 'share_init_o
408 0403 1 BEGIN
409 0404 1
410 0405 1 LIBRARY 'SYSSLIBRARY:LIB';
411 0406 1 LIBRARY 'LIB$:OPCOMLIB';
412 0407 1
413 0408 1 GLOBAL ROUTINE SHARE_INIT_OPER_NAME : NOVALUE =
414 0409 2 BEGIN
415 0410 2 ++
416 0411 2
417 0412 2 FUNCTIONAL DESCRIPTION:
418 0413 2
419 0414 2 This routine performs run-time initializations on the operator name vector.
420 0415 2
421 0416 2 INPUTS:
422 0417 2
423 0418 2 None.
424 0419 2
425 0420 2 IMPLICIT INPUTS:
426 0421 2
427 0422 2 none
428 0423 2
429 0424 2 OUTPUTS:
430 0425 2
431 0426 2 none
432 0427 2
433 0428 2 IMPLICIT OUTPUTS:
434 0429 2
435 0430 2 none
436 0431 2
437 0432 2 ROUTINE VALUE:
438 0433 2
439 0434 2 none
440 0435 2
441 0436 2 SIDE EFFECTS:
442 0437 2
443 0438 2 none
444 0439 2 --
445 0440 2
446 0441 2
447 0442 2 Define the vector of message codes that describe the text associated with each of the known
448 0443 2 attention bits. Undefined bits have a zero message code associated with them. The order of the
449 0444 2 entries must coincide with the order of the bits that are defined, including any undefined bits.
450 0445 2 The run-time initialization of this vector is to take each non-zero entry, fetch the message text
451 0446 2 associated with that entry, and store a pointer to a string descriptor for the message text.
452 0447 2
453 0448 2 GLOBAL
454 0449 2 OPER_NAME : VECTOR [64, LONG] PRESET (
455 0450 2 [0] = OPC$_CENTRL, [1] = OPC$_PRINT, [2] = OPC$_TAPES,
456 0451 2 [3] = OPC$_DISKS, [4] = OPC$_DEVICE, [5] = OPC$_CARDS,
457 0452 2 [6] = OPC$_NETWORK, [7] = OPC$_CLUSTER, [8] = OPC$_SECURITY,
458 0453 2 [9] = OPC$_REPLY, [10] = OPC$_SOFTWARE, [11] = OPC$_FILL_11,
459 0454 2 [12] = OPC$_OPER1, [13] = OPC$_OPER2, [14] = OPC$_OPER3,
460 0455 2 [15] = OPC$_OPER4, [16] = OPC$_OPER5, [17] = OPC$_OPER6,
461 0456 2 [18] = OPC$_OPER7, [19] = OPC$_OPER8, [20] = OPC$_OPER9,
462 0457 2 [21] = OPC$_OPER10, [22] = OPC$_OPER11, [23] = OPC$_OPER12);
463 0458 2
```

```

: 464      0459 2 LOCAL
: 465      0460 2     buff : VECTOR [64, BYTE],
: 466      0461 2     desc : VECTOR [2, LONG] PRESET ([1] = buff),
: 467      0462 2     msg,
: 468      0463 2     adr : REF VECTOR [, LONG],
: 469      0464 2     status;
: 470      0465 2     ;
: 471      0466 2     ; Loop through the name vector, for each non-zero entry fetch the message text and create a string
: 472      0467 2     ; from the message. Store a pointer to the string descriptor back in the vector.
: 473      0468 2     ;
: 474      0469 2 INCR i FROM 0 TO 63
: 475      0470 2 DO
: 476      0471 2     IF (msg = .oper_name [.i]) NEQ 0
: 477      0472 2     THEN
: 478      0473 2     BEGIN
: 479      0474 2     ;
: 480      0475 2     ; Reset the buffer length, and get the message text. Any problem is fatal.
: 481      0476 2     ;
: 482      0477 2     desc [0] = 64;
: 483      0478 2     IF NOT (status = $getmsg (msgid=.msg, msglen=desc, bufadr=desc, flags=1))
: 484      0479 2     THEN
: 485      0480 2     $signal_stop (.status);
: 486      0481 2     ;
: 487      0482 2     ; Allocate and initialize a descriptor and string
: 488      0483 2     ;
: 489      0484 2     IF NOT (status = OPC$GET_VM (%REF (8), adr))
: 490      0485 2     THEN
: 491      0486 2     $signal_stop (.status);
: 492      0487 2     oper_name [.i] = .adr;           ! Replace the message code with the descriptor address
: 493      0488 2     adr [0] = .desc [0];         ! Place the string length in the descriptor
: 494      0489 2     IF NOT (status = OPC$GET_VM (adr [0], adr [1]))
: 495      0490 2     THEN
: 496      0491 2     $signal_stop (.status);
: 497      0492 2     CH$MOVE (.desc [0], .desc [1], .adr [1]);
: 498      0493 2     END;
: 499      0494 2
: 500      0495 2 RETURN;
: 501      0496 1 END;

```

							.TITLE	OPC\$SHARE_INITOPERNAME SHARE_INIT_OPER_NAME					
							.IDENT	\V03-001\					
							.PSECT	\$GLOBALS,NOEXE,2					
00058123	0005811B	00058113	0005810B	00058103	000580FB	0000	OPER_NAME::						
							.LONG	360699,	360707,	360715,	360723,	360731,	-
00058153	0005814B	00058143	0005813B	00058133	0005812B	00018		360739,	360747,	360755,	360763,	360771,	-
00058183	0005817B	00058173	0005816B	00058163	0005815B	00030		360779,	360787,	360795,	360803,	360811,	-
000581B3	000581AB	000581A3	0005819B	00058193	0005818B	00048		360819,	360827,	360835,	360843,	360851,	-
								360859,	360867,	360875,	360883		
							00060	.BLKB	160				
							.EXTRN	SYS\$GETMSG, LIB\$STOP					
							.EXTRN	OPC\$GET_VM					
							.PSECT	\$CODE\$,NOWRT,2					

Library Statistics

File	Total	Symbols Loaded	Percent	Pages Mapped	Processing Time
_\$255\$DUA28:[SYSLIB]LIB.L32;1	18619	27	0	1000	00:01.8
_\$255\$DUA28:[OPCOM.OBJ]OPCOMLIB.L32;1	633	2	0	43	00:00.8

COMMAND QUALIFIERS

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

```

: 505 0499 0 MODULE OPC$SHARE_TRNLOG (IDENT = 'V03-001') = %TITLE 'SHARE_TRNLOG' %SBTTL 'share_trnlog (name)'
: 506 0500 1 BEGIN
: 507 0501 1
: 508 0502 1 LIBRARY 'SYSS$LIBRARY:LIB';
: 509 0503 1 LIBRARY 'LIB$:OPCOMLIB';
: 510 0504 1
: 511 0505 1 GLOBAL ROUTINE SHARE_TRNLOG (NAME : $ref_bblock) : NOVALUE =
: 512 0506 1 +-
: 513 0507 1 | Functional description:
: 514 0508 1 |
: 515 0509 1 |     Recursively translate a logical name.
: 516 0510 1 |
: 517 0511 1 | Input:
: 518 0512 1 |
: 519 0513 1 |     name - Address of dynamic string descriptor for input name
: 520 0514 1 |
: 521 0515 1 | Implicit Input:
: 522 0516 1 |
: 523 0517 1 |     None.
: 524 0518 1 |
: 525 0519 1 | Output:
: 526 0520 1 |
: 527 0521 1 |     name - Receives a new dynamic string
: 528 0522 1 |
: 529 0523 1 | Implicit output:
: 530 0524 1 |
: 531 0525 1 |     None.
: 532 0526 1 |
: 533 0527 1 | Side effects:
: 534 0528 1 |
: 535 0529 1 |     None.
: 536 0530 1 |
: 537 0531 1 | Routine value:
: 538 0532 1 |
: 539 0533 1 |     None.
: 540 0534 1 | --
: 541 0535 1 |
: 542 0536 2 BEGIN                                     ! Start of share_trnlog
: 543 0537 2
: 544 0538 2 LOCAL
: 545 0539 2     lcl_buf : $bvector [256],
: 546 0540 2     in_dsc  : VECTOR [2, LONG],
: 547 0541 2     out_dsc : VECTOR [2, LONG],
: 548 0542 2     status;
: 549 0543 2 |
: 550 0544 2 | If the input string was is not dynamic, scream and shout.
: 551 0545 2 |
: 552 0546 2 | IF .name [dsc$b_class] NEQ dsc$k_class_d
: 553 0547 2 | THEN
: 554 0548 2 |     $signal_stop (ss$_badparam);
: 555 0549 2 |
: 556 0550 2 | Copy the input string to the local buffer
: 557 0551 2 |
: 558 0552 2 | CH$MOVE (.name [dsc$_length], .name [dsc$a_pointer], lcl_buf);
: 559 0553 2 |
: 560 0554 2 | Set the input and output descriptors up
: 561 0555 2 |

```

```

: 562      0556 2 in_dsc [0] = .name [dsc$w_length];
: 563      0557 2 in_dsc [1] = lcl_buf;
: 564      0558 2 out_dsc [1] = icl_buf;
: 565      0559 2
: 566      0560 2 : Try up to ten times to translate the name
: 567      0561 2
: 568      0562 2 INCR i FROM 0 TO 10
: 569      0563 2 DO
: 570      0564 2 BEGIN
: 571      0565 2 : We didn't find the end, give an error
: 572      0566 2
: 573      0567 2
: 574      0568 2 IF .i GEQ 10
: 575      0569 2 THEN
: 576      0570 2 $signal_stop (opc$valuerr, 1, .name, ss$_toomanylnam);
: 577      0571 2
: 578      0572 2 : Set up the output descriptor
: 579      0573 2
: 580      0574 2 out_dsc [0] = 256;
: 581      0575 2
: 582      0576 2 : Attempt to translate
: 583      0577 2
: 584      0578 2 status = $strnlog (lognam=in_dsc, rslten=out_dsc, rslbuf=out_dsc);
: 585      0579 2 IF .status EQL ss$_notran ! No translation, we are done
: 586      0580 2 THEN
: 587      0581 2 EXITLOOP;
: 588      0582 2 IF NOT .status
: 589      0583 2 THEN
: 590      0584 2 $signal_stop (.status);
: 591      0585 2
: 592      0586 2 : Get ready for the next loop
: 593      0587 2
: 594      0588 2 in_dsc [0] = .out_dsc [0];
: 595      0589 2 END;
: 596      0590 2
: 597      0591 2 : Copy the local string to the output
: 598      0592 2
: 599      0593 2 IF NOT (status = str$copy_dx (.name, out_dsc))
: 600      0594 2 THEN
: 601      0595 2 $signal_stop (.status);
: 602      0596 2
: 603      0597 2 RETURN;
: 604      0598 2 1 END;

```

```

.TITLE OPC$SHARE_TRNLOG SHARE_TRNLOG
.IDENT \V03-001\

```

```

.EXTRN LIB$STOP, SYS$TRNLOG
.EXTRN STR$COPY_DX

```

```

.PSECT $CODE$,NOWRT,2

```

```

00FC 0000
57 0000000G 00 9E 0002
5E FEFO CE 9E 0009
56 04 AC DO 000E

```

```

.ENTRY SHARE_TRNLOG, Save R2,R3,R4,R5,R6,R7 : 0505
MOVAB LIB$STOP, R7 :
MOVAB -272(SP), SP :
MOVL NAME, R6 : 0546

```


		02	03	A6	91	00012		CMPB	3(R6), #2		
				04	13	00016		BEQL	1\$		
				14	DD	00018		PUSHL	#20	0548	
				6B	11	0001A		BRB	6\$		
10	AE	04	B6	66	28	0001C	1\$:	MOVCS	(R6), @4(R6), LCL_BUF	0552	
		08	AE	66	3C	00022		MOVZWL	(R6), IN_DSC	0556	
		0C	AE		9E	00026		MOVAB	LCL_BUF, -IN_DSC+4	0557	
		04	AE		9E	0002B		MOVAB	LCL_BUF, OUT_DSC+4	0558	
				52	D4	00030		CLRL	1	0562	
		0A		52	D1	00032	2\$:	CPL	1, #10	0568	
				13	19	00035		BLSS	3\$		
		7E	0374	8F	3C	00037		MOVZWL	#884, -(SP)	0570	
				56	DD	0003C		PUSHL	R6		
				01	DD	0003E		PUSHL	#1		
			0005825C	8F	DD	00040		PUSHL	#361052		
		67		04	FB	00046		CALLS	#4, LIB\$STOP		
				04	00049			RET			
		6E	0100	8F	3C	0004A	3\$:	MOVZWL	#256, OUT_DSC	0574	
				7E	7C	0004F		CLRL	-(SP)	0578	
				7E	D4	00051		CLRL	-(SP)		
			0C	AE	9F	00053		PUSHAB	OUT_DSC		
			10	AE	9F	00056		PUSHAB	OUT_DSC		
			1C	AE	9F	00059		PUSHAB	IN_DSC		
	00000000G	00		06	FB	0005C		CALLS	#6, SYS\$TRNLOG		
	00000629	8F		50	D1	00063		CPL	STATUS, #1577	0579	
				0B	13	0006A		BEQL	4\$		
		16		50	E9	0006C		BLBC	STATUS, 5\$	0582	
	08	AE		6E	D0	0006F		MOVL	OUT_DSC, IN_DSC	0588	
BB		52		0A	F3	00073		AOBLEQ	#10, 1, 2\$	0562	
			4040	8F	BB	00077	4\$:	PUSHR	#^M<R6, SP>	0593	
	00000000G	00		02	FB	0007B		CALLS	#2, STR\$COPY_DX		
		05		50	E8	00082		BLBS	STATUS, 7\$		
				50	DD	00085	5\$:	PUSHL	STATUS	0595	
		67		01	FB	00087	6\$:	CALLS	#1, LIB\$STOP		
				04	0008A	7\$:		RET		0598	

: Routine Size: 139 bytes. Routine Base: \$CODE\$ + 0000

: 605 0599 1 END
 : 606 0600 0 ELUDOM

: End of SHARE_TRNLOG

PSECT SUMMARY

Name	Bytes	Attributes
\$CODE\$	139	NOVEC, NOWRT, RD, EXE, NOSHR, LCL, REL, CON, NOPIC, ALIGN(2)

Library Statistics

File	----- Symbols -----		Pages Mapped	Processing Time
	Total	Loaded Percent		
_\$255\$DUA28:[SYSLIB]LIB.L32;1	18619	12 0	1000	00:01.8
_\$255\$DUA28:[OPCOM.OBJ]OPCOMLIB.L32;1	633	4 0	43	00:00.7

COMMAND QUALIFIERS

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

: Size: 603 code + 1256 data bytes
: Run Time: 00:32.2
: Elapsed Time: 02:11.0
: Lines/CPU Min: 1116
: Lexemes/CPU-Min: 12055
: Memory Used: 101 pages
: Compilation Complete

