

[illegible]

```

FFFFFFFFF 000000 RRRRRRRR CCCCCCCC LL 000000 SSSSSSSS EEEEEEEEE
FFFFFFFFF 000000 RRRRRRRR CCCCCCCC LL 000000 SSSSSSSS EEEEEEEEE
FF 00 00 RR RR CC LL 00 00 SS SSSSSSSS EEEEEEEEE
FF 00 00 RR RR CC LL 00 00 SS SSSSSSSS EEEEEEEEE
FF 00 00 RR RR CC LL 00 00 SS SSSSSSSS EEEEEEEEE
FF 00 00 RR RR CC LL 00 00 SS SSSSSSSS EEEEEEEEE
FFFFFFFFF 00 00 RRRRRRRR CCCCCCCC LL 00 00 SSSSSSSS EEEEEEEEE
FFFFFFFFF 00 00 RRRRRRRR CCCCCCCC LL 00 00 SSSSSSSS EEEEEEEEE
FF 00 00 RR RR CC LL 00 00 SS SSSSSSSS EEEEEEEEE
FF 00 00 RR RR CC LL 00 00 SS SSSSSSSS EEEEEEEEE
FF 00 00 RR RR CC LL 00 00 SS SSSSSSSS EEEEEEEEE
FF 00 00 RR RR CC LL 00 00 SS SSSSSSSS EEEEEEEEE
FF 000000 RR RR CCCCCCCC LLLLLLLLLL 000000 SSSSSSSS EEEEEEEEE
FF 000000 RR RR CCCCCCCC LLLLLLLLLL 000000 SSSSSSSS EEEEEEEEE

LL I I I I I SSSSSSSS
LL I I I I I SSSSSSSS
LL I I SS
LL I I SS
LL I I SS
LL I I SS
LL I I SSSSSS
LL I I SSSSSS
LL I I SS
LL I I SS
LL I I SS
LL I I SS
LLLLLLLLLL I I I I I SSSSSSSS
LLLLLLLLLL I I I I I SSSSSSSS
```



```
1 0001 0 MODULE FOR$CLOSE (%TITLE 'FORTRAN CLOSE and default CLOSE'  
2 0002 0 IDENT = '1-021' ! File: FORCLOSE.B32 Edit: SBL1021  
3 0003 0 ) =  
4 0004 1 BEGIN  
5 0005 1  
6 0006 1 *****  
7 0007 1 *  
8 0008 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *  
9 0009 1 * DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS. *  
10 0010 1 * ALL RIGHTS RESERVED. *  
11 0011 1 *  
12 0012 1 * THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED *  
13 0013 1 * ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE *  
14 0014 1 * INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER *  
15 0015 1 * COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY *  
16 0016 1 * OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY *  
17 0017 1 * TRANSFERRED. *  
18 0018 1 *  
19 0019 1 * THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE *  
20 0020 1 * AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT *  
21 0021 1 * CORPORATION. *  
22 0022 1 *  
23 0023 1 * DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS *  
24 0024 1 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL. *  
25 0025 1 *  
26 0026 1 *  
27 0027 1 *****  
28 0028 1  
29 0029 1 ++  
30 0030 1 FACILITY: FORTRAN Support Library - user callable  
31 0031 1  
32 0032 1 ABSTRACT:  
33 0033 1  
34 0034 1 This module closes a file on a specified logical unit  
35 0035 1 (LUN) and deallocates the I/O statement block (ISB) and  
36 0036 1 RMS Record Access Block (RAB) control blocks which were  
37 0037 1 allocated by OPEN or default OPEN for this LUN.  
38 0038 1  
39 0039 1 ENVIRONMENT: User access level; re-entrant, AST level or not.  
40 0040 1  
41 0041 1 AUTHOR: Thomas N. Hastings, CREATION DATE: 28-Apr-77; Version 01  
42 0042 1  
43 0043 1 MODIFIED BY:  
44 0044 1  
45 0045 1 Thomas N. Hastings, 28-Apr-77, Version 01  
46 0046 1 [Previous edit history removed. SBL 30-Sep-1982]  
47 0047 1 1-017 - Move the BUILTIN ACTUALCOUNT into the routine.  
48 0048 1 The next BLISS compiler will require this. JBS 20-Aug-1980  
49 0049 1 1-018 - Add DEF_DSC to calling sequence for FOR$$OPECLO_ARG. JAW  
50 0050 1 02-Jul-1981  
51 0051 1 1-019 - If there is a FAB still hanging around, deallocate it. DGP 18-Dec-1981  
52 0052 1 1-020 - Reflect separation of FOR$ CCB structures from BASIC. SBL 30-Sep-1982  
53 0053 1 1-021 - Remove deallocation of FAB. SBL 20-Jan-1983  
54 0054 1 --  
55 0055 1
```



```
57 0056 1 |
58 0057 1 | PROLOGUE FILE:
59 0058 1 |
60 0059 1 |
61 0060 1 | REQUIRE 'RTLIN:FORPROLOG';          ! FORTRAN definitions
62 0126 1 |
63 0127 1 |
64 0128 1 | TABLE OF CONTENTS:
65 0129 1 |
66 0130 1 |
67 0131 1 | FORWARD ROUTINE
68 0132 1 |   FOR$CLOSE;          ! FORTRAN CLOSE statement
69 0133 1 |
70 0134 1 |
71 0135 1 | EQUATED SYMBOLS:
72 0136 1 |
73 0137 1 |   NONE
74 0138 1 |
75 0139 1 | OWN STORAGE:
76 0140 1 |
77 0141 1 |   NONE
78 0142 1 |
79 0143 1 | EXTERNAL REFERENCES:
80 0144 1 |
81 0145 1 |
82 0146 1 | EXTERNAL ROUTINE
83 0147 1 |   FOR$$OPECLO_ARG : NOVALUE,
84 0148 1 |   FOR$$SIGNAL_STO : NOVALUE,
85 0149 1 |
86 0150 1 |   FOR$$ERR_OPECLO,
87 0151 1 |
88 0152 1 |
89 0153 1 |   FOR$$CB_PUSH : JSB_CB_PUSH NOVALUE,
90 0154 1 |
91 0155 1 |   FOR$$CB_POP : JSB_CB_RET NOVALUE,
92 0156 1 |
93 0157 1 |   FOR$$FREE_VM : NOVALUE,
94 0158 1 |   FOR$$CLOSE_FILE : CALL_CCB;
95 0159 1 |
```

! Get OPEN/CLOSE arguments  
! Convert FORTRAN error#  
! to 32 condition code and SIGNAL\_STOP  
! OPEN/CLOSE error condition handler  
! resinals or unwinds depending on whether user specified E  
! (in OPEN module)  
! Push down active I/O and allocate  
! LUB/ISB/RAB if not already for unit.  
! Pop LUB/ISB/RAB  
! after popping back previous LUB/ISB/RAB, if any.  
! Deallocate FAB  
! Internal file close



```

: 97      0160 1 GLOBAL ROUTINE FOR$CLOSE (
: 98      0161 1     KEYWD,
: 99      0162 1     INFO)
: 100     0163 1     =
: 101     0164 1     ! FALSE if error and err= present.
: 102     0165 1
: 103     0166 1
: 104     0167 1 ++
: 105     0168 1 ABSTRACT:
: 106     0169 1     Interpret CLOSE statement keywords:
: 107     0170 1     attributes specified in the encoded keyword parameters.
: 108     0171 1     The keywords are UNIT=, DISPOSE=, and ERR=.
: 109     0172 1     DISPOSE= may have one of, 'SAVE', 'PRINT', or 'DELETE' values
: 110     0173 1     which overrides the DISPOSE= specification of the OPEN
: 111     0174 1     on that LUN. Call FOR$$CLOSE_FILE to RMS close the file.
: 112     0175 1     Flag the logical unit as closed.
: 113     0176 1     Deallocate LUB/ISB/RAB for this LUN
: 114     0177 1
: 115     0178 1 FORMAL PARAMETERS:
: 116     0179 1
: 117     0180 1 The following pair is repeated for each user specified keyword:
: 118     0181 1     KEYWD.rlu.v Contains KEY<7:0>, ARGTYPE<15:8>, and
: 119     0182 1     INFO.rlu.v   possibly INFO<31:16>
: 120     0183 1     Optional informaion if need more
: 121     0184 1     than 16 bits.
: 122     0185 1
: 123     0186 1 IMPLICIT INPUTS:
: 124     0187 1
: 125     0188 1     FOR$$A_CUR_LUB Current active LUB to be pushed down or 0
: 126     0189 1     if no LUB has an I/O statement in progress (usual).
: 127     0190 1     LUB$V_OPENED 1 if LUN is opened, 0 if already closed.
: 128     0191 1     LUB$W_IFI    RMS internal file id of file on this LUN.
: 129     0192 1     Needed as input to $CLOSE.
: 130     0193 1     LUB$V_SCRATCH 1 if this is a scratch file.
: 131     0194 1     LUB$V_READ_ONLY 1 if this file was specified READONLY in FORTRAN OPEN
: 132     0195 1
: 133     0196 1 IMPLICIT OUTPUTS:
: 134     0197 1
: 135     0198 1
: 136     0199 1 COMPLETION STATUS:
: 137     0200 1
: 138     0201 1     TRUE if success, FALSE if failure and ERR= keyword present
: 139     0202 1
: 140     0203 1 SIDE EFFECTS:
: 141     0204 1
: 142     0205 1     Deallocates LUB/ISB/RAB
: 143     0206 1     SIGNALs or SIGNAL_STOPs the following errors unless
: 144     0207 1     ERR= is present.
: 145     0208 1     SIGNAL_STOPs FOR$_CLOERR (28 = 'CLOSE ERROR')
: 146     0209 1     SIGNAL_STOPs FOR$_INCOPECLO (46 = 'INCONSISTENT OPEN/CLOSE
: 147     0210 1     STATEMENT SPECIFICATIONS')
: 148     0211 1 --
: 149     0212 1
: 150     0213 2 BEGIN
: 151     0214 2
: 152     0215 2 GLOBAL REGISTER
: 153     0216 2     CCB = 11 : REF $FOR$CCB_DECL;
```



```
154 0217 2
155 0218 2
156 0219 2 BUILTIN
157 0220 2 ACTUALCOUNT;
158 0221 2
159 0222 2 MAP
160 0223 2 +
161 0224 2 Use of formal argument list as a vector of blocks, each block
162 0225 2 is one longword.
163 0226 2 -
164 0227 2 KEYWD : BLOCKVECTOR [100, 1];
165 0228 2
166 0229 2 LOCAL
167 0230 2 L_UNWIND_ACTION : VOLATILE, ! Unwind action code for handler
168 0231 2 CLOS : VOLATILE VECTOR [CLOS$K_KEY_MAX + 1], ! close parameter array
169 0232 2 NAM_DSC : DSC$DESCRIPTOR, ! string desc for ASCIIZ
170 0233 2 DEF_DSC : DSC$DESCRIPTOR; ! string desc for ASCIIZ
171 0234 2
172 0235 2 ENABLE ! Establish error handler to
173 0236 2 ! RESIGNAL or UNWIND if ERR= present
174 0237 2 FOR$$ERR_OPECLO (L_UNWIND_ACTION, CLOS); ! Pass unwind action and
175 0238 2
176 0239 2 ! pass CLOS array with ERR= flag in CLOS[OPEN$K_ERR]
177 0240 2 +
178 0241 2 Set cleanup action on UNWIND to no-operation (since LUB/ISB/RAB
179 0242 2 not pushed down yet)
180 0243 2 -
181 0244 2 L_UNWIND_ACTION = FOR$K_UNWINDNOP;
182 0245 2 +
183 0246 2 Scan user parameter list and copy in sorted order to CLOS
184 0247 2 array. SIGNAL_STOP FOR$ INVARGFOR (48='INVALID ARGUMENT TO FORTRAN I/O SYSTEM')
185 0248 2 after scanning all parameters to see if ERR= is present
186 0249 2 and setting CLOS[OPEN$K_ERR] accordingly to 1 or 0
187 0250 2 -
188 0251 2 FOR$$OPECLO_ARG (KEYWD, ACTUALCOUNT (), CLOS, CLOS$K_KEY_MAX, NAM_DSC, DEF_DSC, 0);
189 0252 2 +
190 0253 2 Allocate LUB/ISB/RAB for unit 0:99 if not already setup
191 0254 2 Push down active I/O if on another unit. If unit already has
192 0255 2 active I/O, SIGNAL_STOP FOR$ RECIO_OPE (40 = 'RECURSIVE I/O OPERATION')
193 0256 2 If logical unit outside legal range, SIGNAL_STOP FOR$ INVLOGUNI (32='INVALID LOGICAL UNIT NUMBER')
194 0257 2 Stores new LUB/ISB/RAB address in OTS Common OTSS$A COR_LUB
195 0258 2 Finally indicate that UNWIND cleanup action is now to be to
196 0259 2 ret current LUB/ISB/RAB since it has now been sucessfully pushed.
197 0260 2 On return, CCB points to current control block.
198 0261 2 -
199 0262 2 FOR$$CB_PUSH (.CLOS [OPEN$K_UNIT], LUB$K_LUN_MIN);
200 0263 2 L_UNWIND_ACTION = FOR$K_UNWINDRET;
201 0264 2 +
202 0265 2 Check if file already CLOSED (or not OPEN)
203 0266 2 -
204 0267 2 IF (.CCB [LUB$V_OPENED])
205 0268 2 THEN
206 0269 2 BEGIN
207 0270 2 +
208 0271 2 DISPOSE
209 0272 2 -
210 0273 2
```

```
211 0274 3 IF .CLOS [OPEN$K_DISPOSE] NEQ 0
212 0275 3 THEN
213 0276 4 BEGIN
214 0277 4
215 0278 4 !+
216 0279 4 !- Turn off all dispose bits initially.
217 0280 4
218 0281 4
219 0282 4 CCB [LUB$V_DELETE] = 0;
220 0283 4 CCB [LUB$V_PRINT] = 0;
221 0284 4 CCB [LUB$V_SUBMIT] = 0;
222 0285 4
223 0286 4 SELECT .CLOS [OPEN$K_DISPOSE] OF
224 0287 4 SET
225 0288 4
226 0289 4 [OPEN$K_DIS_SAV] :
227 0290 4 ! DISPOSE = 'SAVE'
228 0291 5 BEGIN
229 0292 5
230 0293 5 IF .CCB [LUB$V_SCRATCH] THEN FOR$$$SIGNAL_STO (FOR$K_INCOPECLO);
231 0294 5
232 0295 4 END;
233 0296 4
234 0297 4 [OPEN$K_DIS_DEL, OPEN$K_DIS_PRDE, OPEN$K_DIS_SUDE] :
235 0298 4 ! DISPOSE = 'DELETE', 'PRINT/DELETE' or 'SUBMIT/DELETE'
236 0299 5 BEGIN
237 0300 5
238 0301 5 IF .CCB [LUB$V_READ_ONLY] THEN FOR$$$SIGNAL_STO (FOR$K_INCOPECLO);
239 0302 5
240 0303 5 CCB [LUB$V_DELETE] = 1;
241 0304 4 END;
242 0305 4
243 0306 4 [OPEN$K_DIS_PRI, OPEN$K_DIS_PRDE] :
244 0307 4 ! DISPOSE = 'PRINT', 'PRINT/DELETE'
245 0308 5 BEGIN
246 0309 5
247 0310 5 IF .CCB [LUB$V_SCRATCH] THEN FOR$$$SIGNAL_STO (FOR$K_INCOPECLO);
248 0311 5
249 0312 5 CCB [LUB$V_PRINT] = 1;
250 0313 4 END;
251 0314 4
252 0315 4 [OPEN$K_DIS_SUB, OPEN$K_DIS_SUDE] :
253 0316 4 ! DISPOSE = 'SUBMIT', 'SUBMIT/DELETE'
254 0317 4
255 0318 4 IF .CCB [LUB$V_SCRATCH]
256 0319 4 THEN
257 0320 4 FOR$$$SIGNAL_STO (FOR$K_INCOPECLO)
258 0321 4 ELSE
259 0322 4 CCB [LUB$V_SUBMIT] = 1;
260 0323 4
261 0324 4 [OTHERWISE] :
262 0325 4 FOR$$$SIGNAL_STO (FOR$K_INVARGFOR);
263 0326 4 TES;
264 0327 4
265 0328 3 END;
266 0329 3
267 0330 3 !+
```



```
268 0331 3 ! Call procedure FOR$$CLOSE_FILE to RMS close the file.
269 0332 3 !-
270 0333 3
271 0334 3 IF ( NOT FOR$$CLOSE_FILE () ) THEN FOR$$SIGNAL_STO (FOR$K_CLOERR);
272 0335 3
273 0336 3 END
274 0337 3 ELSE
275 0338 3 !+
276 0339 3 Set LUB$V_DEALLOC so FOR$$CB_POP will deallocate the rest of the LUN.
277 0340 3 !-
278 0341 3 BEGIN
279 0342 3 CCB [LUB$V_DEALLOC] = 1;
280 0343 3 END;
281 0344 3
282 0345 3 !+
283 0346 3 Pop back previous LUB or indicate that no I/O statement
284 0347 3 is currently active (OTSS$A_CUR_LUB = 0).
285 0348 3 In the latter case the deallocation will be performed right away.
286 0349 3 !-
287 0350 3 FOR$$CB_POP ();
288 0351 3
289 0352 3 !+
290 0353 3 Store success IOSTAT. If there was an error, the handler would
291 0354 3 do the store.
292 0355 3 !-
293 0356 3
294 0357 3 IF .CLOS [OPEN$K_IOSTAT] NEQ 0
295 0358 3 THEN
296 0359 3
297 0360 3 IF .CLOS [OPEN$K_IOSTAT_L]
298 0361 3 THEN
299 0362 3 .CLOS [OPEN$K_IOSTAT] = 0
300 0363 3 ELSE
301 0364 3 BEGIN
302 0365 3
303 0366 3 LOCAL
304 0367 3 IOSTAT : REF BLOCK [, BYTE];
305 0368 3
306 0369 3 IOSTAT = .CLOS [OPEN$K_IOSTAT];
307 0370 3 IOSTAT [0, 0, 16, 0] = 0;
308 0371 3 END;
309 0372 3
310 0373 3 RETURN SS$_NORMAL;
311 0374 3 END;
```

! Store one word

! RETURN success from FOR\$CLOSE  
! END of FOR\$CLOSE routine.TITLE FOR\$CLOSE FORTRAN CLOSE and default CLOSE  
.IDENT \1-021\.EXTRN FOR\$\$OPECLO\_ARG  
.EXTRN FOR\$\$SIGNAL\_STO  
.EXTRN FOR\$\$ERR\_OPECLO  
.EXTRN FOR\$\$CB\_PUSH, FOR\$\$CB\_POP  
.EXTRN FOR\$\$FREE\_VM, FOR\$\$CLOSE\_FILE

.PSECT \_FOR\$CODE,NOWRT, SHR, PIC,2



|           |           |           |      |       |        |                                  |  |      |
|-----------|-----------|-----------|------|-------|--------|----------------------------------|--|------|
|           |           |           | 083C | 00000 | .ENTRY | FOR\$CLOSE, Save R2,R3,R4,R5,R11 |  | 0160 |
| 55        | 00000000G | 00        | 9E   | 00002 | MOVAB  | FOR\$\$\$SIGNAL_STO, R5          |  |      |
| 5E        |           | AE        | 9E   | 00009 | MOVAB  | -128(SP), SP                     |  |      |
|           |           | AE        | 7C   | 0000D | CLRQ   | CLOS                             |  | 0213 |
|           |           | AE        | 7C   | 00010 | CLRQ   | CLOS                             |  |      |
|           |           | AE        | 7C   | 00013 | CLRQ   | CLOS                             |  |      |
|           |           | AE        | 7C   | 00016 | CLRQ   | CLOS                             |  |      |
|           |           | AE        | 7C   | 00019 | CLRQ   | CLOS                             |  |      |
|           |           | AE        | 7C   | 0001C | CLRQ   | CLOS                             |  |      |
|           |           | AE        | 7C   | 0001F | CLRQ   | CLOS                             |  |      |
|           |           | AE        | 7C   | 00022 | CLRQ   | CLOS                             |  |      |
|           |           | AE        | 7C   | 00025 | CLRQ   | CLOS                             |  |      |
|           |           | AE        | 7C   | 00028 | CLRQ   | CLOS                             |  |      |
|           |           | AE        | 7C   | 0002B | CLRQ   | CLOS                             |  |      |
|           |           | AE        | 7C   | 0002E | CLRQ   | CLOS                             |  |      |
|           |           | AE        | 7C   | 00031 | CLRQ   | CLOS                             |  |      |
|           |           | AE        | 7C   | 00034 | CLRQ   | CLOS                             |  |      |
|           | 6D        | 00EA      | CF   | DE    | MOVAL  | 17\$, (FP)                       |  |      |
| 7C        | AE        |           | 01   | D0    | MOVL   | #1, L_UNWIND_ACTION              |  | 0243 |
|           |           |           | 7E   | D4    | CLRL   | -(SP)                            |  | 0250 |
|           |           | 04        | AE   | 9F    | PUSHAB | DEF_DSC                          |  |      |
|           |           | 10        | AE   | 9F    | PUSHAB | NAM_DSC                          |  |      |
|           |           |           | 1A   | DD    | PUSHL  | #26                              |  |      |
|           |           | 20        | AE   | 9F    | PUSHAB | CLOS                             |  |      |
|           | 7E        |           | 6C   | 9A    | MOVZBL | (AP), -(SP)                      |  |      |
|           |           | 04        | AC   | 9F    | PUSHAB | KEYWD                            |  |      |
| 00000000G | 00        |           | 07   | FB    | CALLS  | #7, FOR\$\$OPECLO_ARG            |  |      |
|           |           |           | 50   | D4    | CLRL   | R0                               |  | 0261 |
|           | 52        | 14        | AE   | D0    | MOVL   | CLOS+4, R2                       |  |      |
|           |           | 00000000G | 00   | 16    | JSB    | FOR\$\$\$CB_PUSH                 |  |      |
| 7C        | AE        |           | 02   | D0    | MOVL   | #2, L_UNWIND_ACTION              |  | 0262 |
|           | 52        | FC        | AB   | 9E    | MOVAB  | -4(CCB), R2                      |  | 0267 |
|           | 03        |           | 62   | E8    | BLBS   | (R2), 1\$                        |  |      |
|           |           | 008F      | 31   | 00071 | BRW    | 13\$                             |  |      |
|           |           | 18        | AE   | D5    | TSTL   | CLOS+8                           |  | 0274 |
|           |           |           | 79   | 13    | BEQL   | 12\$                             |  |      |
|           | 62        | C0        | 8F   | 8A    | BICB2  | #192, (R2)                       |  | 0283 |
| FF        | AB        |           | 20   | 8A    | BICB2  | #32, -1(CCB)                     |  | 0284 |
|           | 53        | 18        | AE   | D0    | MOVL   | CLOS+8, R3                       |  | 0286 |
|           | 54        |           | 01   | D0    | MOVL   | #1, R4                           |  |      |
|           | 01        |           | 53   | D1    | CMPL   | R3, #1                           |  | 0289 |
|           |           |           | 0B   | 12    | BNEQ   | 2\$                              |  |      |
|           |           |           | 54   | D4    | CLRL   | R4                               |  |      |
| 05        | 62        |           | 05   | E1    | BBC    | #5, (R2), 2\$                    |  | 0293 |
|           |           |           | 2E   | DD    | PUSHL  | #46                              |  |      |
|           | 65        |           | 01   | FB    | CALLS  | #1, FOR\$\$\$SIGNAL_STO          |  |      |
|           | 02        |           | 53   | D1    | CMPL   | R3, #2                           |  | 0297 |
|           |           |           | 0A   | 13    | BEQL   | 3\$                              |  |      |
|           | 05        |           | 53   | D1    | CMPL   | R3, #5                           |  |      |
|           |           |           | 14   | 19    | BLSS   | 5\$                              |  |      |
|           | 06        |           | 53   | D1    | CMPL   | R3, #6                           |  |      |
|           |           |           | 0F   | 14    | BGTR   | 5\$                              |  |      |
|           |           |           | 54   | D4    | CLRL   | R4                               |  |      |
| 05        | 62        |           | 02   | E1    | BBC    | #2, (R2), 4\$                    |  | 0301 |
|           |           |           | 2E   | DD    | PUSHL  | #46                              |  |      |
|           | 65        |           | 01   | FB    | CALLS  | #1, FOR\$\$\$SIGNAL_STO          |  |      |
|           | 62        | 40        | 8F   | 88    | BISB2  | #64, (R2)                        |  | 0303 |



|           |    |           |    |       |       |       |        |                         |   |      |
|-----------|----|-----------|----|-------|-------|-------|--------|-------------------------|---|------|
|           | 03 |           | 53 | D1    | 000B6 | 5\$:  | CMPL   | R3, #3                  | : | 0306 |
|           |    |           | 05 | 13    | 000B9 |       | BEQL   | 6\$                     | : |      |
|           | 05 |           | 53 | D1    | 000BB |       | CMPL   | R3, #5                  | : |      |
|           |    |           | 0F | 12    | 000BE |       | BNEQ   | 8\$                     | : |      |
|           |    |           | 54 | D4    | 000C0 | 6\$:  | CLRL   | R4                      | : |      |
|           | 62 |           | 05 | E1    | 000C2 |       | BBC    | #5, (R2), 7\$           | : | 0310 |
|           |    |           | 2E | DD    | 000C6 |       | PUSHL  | #46                     | : |      |
|           | 65 |           | 01 | FB    | 000C8 |       | CALLS  | #1, FOR\$\$\$SIGNAL_STO | : |      |
|           | 62 | 80        | 8F | 88    | 000CB | 7\$:  | BISB2  | #128, (R2)              | : | 0312 |
|           | 04 |           | 53 | D1    | 000CF | 8\$:  | CMPL   | R3, #4                  | : | 0315 |
|           |    |           | 05 | 13    | 000D2 |       | BEQL   | 9\$                     | : |      |
|           | 06 |           | 53 | D1    | 000D4 |       | CMPL   | R3, #6                  | : |      |
|           |    |           | 11 | 12    | 000D7 |       | BNEQ   | 11\$                    | : |      |
|           |    |           | 54 | D4    | 000D9 | 9\$:  | CLRL   | R4                      | : |      |
| 07        | 62 |           | 05 | E1    | 000DB |       | BBC    | #5, (R2), 10\$          | : | 0318 |
|           |    |           | 2E | DD    | 000DF |       | PUSHL  | #46                     | : | 0320 |
|           | 65 |           | 01 | FB    | 000E1 |       | CALLS  | #1, FOR\$\$\$SIGNAL_STO | : |      |
|           |    |           | 04 | 11    | 000E4 |       | BRB    | 11\$                    | : |      |
| FF        | AB |           | 20 | 88    | 000E6 | 10\$: | BISB2  | #32, -1(CCB)            | : | 0322 |
|           | 05 |           | 54 | E9    | 000EA | 11\$: | BLBC   | R4, 12\$                | : | 0324 |
|           |    |           | 30 | DD    | 000ED |       | PUSHL  | #48                     | : | 0325 |
|           | 65 |           | 01 | FB    | 000EF |       | CALLS  | #1, FOR\$\$\$SIGNAL_STO | : |      |
| 00000000G | 00 |           | 00 | FB    | 000F2 | 12\$: | CALLS  | #0, FOR\$\$\$CLOSE_FILE | : | 0334 |
|           | 0B |           | 50 | E8    | 000F9 |       | BLBS   | R0, 14\$                | : |      |
|           |    |           | 1C | DD    | 000FC |       | PUSHL  | #28                     | : |      |
|           | 65 |           | 01 | FB    | 000FE |       | CALLS  | #1, FOR\$\$\$SIGNAL_STO | : |      |
|           |    |           | 04 | 11    | 00101 |       | BRB    | 14\$                    | : | 0267 |
| FF        | AB |           | 10 | 88    | 00103 | 13\$: | BISB2  | #16, -1(CCB)            | : | 0342 |
|           |    | 00000000G | 00 | 16    | 00107 | 14\$: | JSB    | FOR\$\$\$CB_POP         | : | 0350 |
|           |    | 68        | AE | D5    | 0010D |       | TSTL   | CLOS+88                 | : | 0357 |
|           |    |           | 0F | 13    | 00110 |       | BEQL   | 16\$                    | : |      |
|           | 05 | 74        | AE | E9    | 00112 |       | BLBC   | CLOS+100, 15\$          | : | 0360 |
|           |    | 68        | BE | D4    | 00116 |       | CLRL   | @CLOS+88                | : | 0362 |
|           |    |           | 06 | 11    | 00119 |       | BRB    | 16\$                    | : |      |
|           | 50 | 68        | AE | D0    | 0011B | 15\$: | MOVL   | CLOS+88, IOSTAT         | : | 0369 |
|           |    |           | 60 | B4    | 0011F |       | CLRW   | (IOSTAT)                | : | 0370 |
|           | 50 |           | 01 | D0    | 00121 | 16\$: | MOVL   | #1, R0                  | : | 0373 |
|           |    |           |    | 04    | 00124 |       | RET    |                         | : | 0374 |
|           |    |           |    | 0000  | 00125 | 17\$: | .WORD  | Save nothing            | : | 0213 |
|           | 50 | 08        | AC | D0    | 00127 |       | MOVL   | 8(AP), R0               | : |      |
|           | 50 | 04        | A0 | D0    | 0012B |       | MOVL   | 4(R0), R0               | : |      |
|           |    | 90        | A0 | 9F    | 0012F |       | PUSHAB | CLOS                    | : |      |
|           |    | FC        | A0 | 9F    | 00132 |       | PUSHAB | L_UNWIND_ACTION         | : |      |
|           |    |           | 02 | DD    | 00135 |       | PUSHL  | #2                      | : |      |
|           |    |           | 5E | DD    | 00137 |       | PUSHL  | SP                      | : |      |
| 00000000G | 7E | 04        | AC | 7D    | 00139 |       | MOVQ   | 4(AP), -(SP)            | : |      |
|           | 00 |           | 03 | FB    | 0013D |       | CALLS  | #3, FOR\$\$\$ERR_OPECLO | : |      |
|           |    |           | 04 | 00144 |       |       | RET    |                         | : |      |

; Routine Size: 325 bytes, Routine Base: \_FOR\$CODE + 0000

|   |     |      |   |        |
|---|-----|------|---|--------|
| : | 312 | 0375 | 1 |        |
| : | 313 | 0376 | 1 | END    |
| : | 314 | 0377 | 1 |        |
| : | 315 | 0378 | 0 | ELUDOM |

! END of FOR\$CLOSE module



## PSECT SUMMARY

```

:
:      Name                Bytes                Attributes
:
:  _FOR$CODE              325  NOVEC,NOWRT,  RD ,  EXE,  SHR,  LCL,  REL,  CON,  PIC,ALIGN(2)
:

```

## Library Statistics

```

:
:      File                Total  Symbols  Percent  Pages  Processing
:                               Loaded  Time
:
:  $255$DUA28:[SYSLIB]STARLET.L32;1    9776      1      0      581      00:01.0
:  $255$DUA28:[FORRTL.OBJ]FORLIB.L32;1   711     198     27      52      00:00.6
:  $255$DUA28:[FORRTL.OBJ]RTLLIB.L32;1   36       0      0       8      00:00.1
:

```

## COMMAND QUALIFIERS

```

:
:  BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACE/LIS=LISS$:FORCLOSE/OBJ=OBJ$:FORCLOSE MSRC$:FORCLOSE/UPDATE=(ENH$:FORCLOSE)
:
:  Size:          325 code + 0 data bytes
:  Run Time:      00:08.1
:  Elapsed Time:  00:27.7
:  Lines/CPU Min: 2793
:  Lexemes/CPU-Min: 9354
:  Memory Used:  122 pages
:  Compilation Complete

```



0179 AH-BT13A-SE  
VAX/VMS V4.0

DIGITAL EQUIPMENT CORPORATION  
CONFIDENTIAL AND PROPRIETARY

COMR50WD  
LIS

FORDATEDS  
LIS

FORDECOMO  
LIS

FORB  
LIS

COMSETST  
LIS

FORASSOC  
LIS

FORCLOSEF  
LIS

FORDATE  
LIS

FORCLOSE  
LIS

FORDECOMP  
LIS

FORDELETE  
LIS

COMRAD50  
LIS

COMUSEREX  
LIS

FORBITOPS  
LIS

FORDEFINE  
LIS

FORBACKSP  
LIS

FORDISPA  
LIS

FORCUTR  
LIS