



HEA  
VOA

.....

[illegible]

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LL               IIIIII               SSSSSSSS
LL               IIIIII               SSSSSSSS
LL               II                   SS
LL               II                   SS
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LL               II                   SS
LL               II                   SSSSSS
LL               II                   SSSSSS
LL               II                   SS
LL               II                   SS
LL               II                   SS
LL               II                   SS
LLLLLLLLLLLLLL  IIIIII               SSSSSSSS
LLLLLLLLLLLLLL  IIIIII               SSSSSSSS

```

```
1 0001 0 MODULE gtabs ( IDENT = 'V04-000'
2 P 0002 0 %BLISS32[, ADDRESSING_MODE (EXTERNAL = LONG_RELATIVE,
3 0003 0 NONEXTERNAL = LONG_RELATIVE)]
4 0004 0 ) =
5 0005 1 BEGIN
6 0006 1
7 0007 1 *****
8 0008 1 *
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26 0026 1 *
27 0027 1 *
28 0028 1 *****
29 0029 1
30 0030 1 ++
31 0031 1 FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS
32 0032 1
33 0033 1 ABSTRACT:
34 0034 1
35 0035 1 Collects and validates tabs when activated via a .TABS command.
36 0036 1
37 0037 1 ENVIRONMENT: Transportable
38 0038 1
39 0039 1 AUTHOR: R.W.Friday CREATION DATE: July, 1978
40 0040 1
41 0041 1
```

GTABS  
V04-000

Revision History

H 9  
16-Sep-1984 00:43:33  
14-Sep-1984 13:06:40

VAX-11 Bliss-32 V4.0-742  
DISK\$VMSMASTER:[RUNOFF.SRC]GTABS.BLI;1 Page 2 (2)

: 43  
: 44  
: 45  
: 46  
: 47  
: 48  
: 49  
: 50  
: 51  
: 52

0042 1 %SBTTL 'Revision History'  
0043 1  
0044 1  
0045 1  
0046 1  
0047 1  
0048 1  
0049 1  
0050 1  
0051 1

MODIFIED BY:

003

RER00003

Ron Randall

07-Mar-1983

Global edit of all modules. Updated module names, idents,  
copyright dates. Changed require files to BLISS library.

## Module Level Declarations

I 9  
16-Sep-1984 00:43:33  
14-Sep-1984 13:06:40VAX-11 Bliss-32 V4.0-742  
DISK\$VMSMASTER:[RUNOFF.SRC]GTABS.BLI;1 Page 3  
(3)

```

: 54      0052 1 %SBTTL 'Module Level Declarations'
: 55      0053 1
: 56      0054 1
: 57      0055 1 | TABLE OF CONTENTS:
: 58      0056 1 |
: 59      0057 1 | INCLUDE FILES:
: 60      0058 1 |
: 61      0059 1 | LIBRARY 'NXPORT:XPORT';      ! XPORT Library
: 62      0060 1 | REQUIRE 'REQ:RNODEF';      ! RUNOFF variant definitions
: 63      0191 1 |
: 64      U 0192 1 | %IF DSRPLUS %THEN
: 65      U 0193 1 | LIBRARY 'REQ:DPLLIB';      ! DSRPLUS BLISS Library
: 66      0194 1 | %ELSE
: 67      0195 1 | LIBRARY 'REQ:DSRLIB';      ! DSR BLISS Library
: 68      0196 1 | %FI
: 69      0197 1 |
: 70      0198 1 |
: 71      0199 1 | | EXTERNAL REFERENCES:
: 72      0200 1 |
: 73      0201 1 | EXTERNAL
: 74      0202 1 |     NMLST : NUMBER_LIST,      !GLNM returns command parameters here
: 75      0203 1 |     TTABLE : COUNTED_LIST;      !Table of tab settings
: 76      0204 1 |
: 77      0205 1 | EXTERNAL LITERAL
: 78      0206 1 |     RNFTMT;      !Error messages
: 79      0207 1 |
: 80      0208 1 | EXTERNAL ROUTINE
: 81      0209 1 |     ERMA,
: 82      0210 1 |     GLNM;
: 83      0211 1 |

```

```
85 0212 1 GLOBAL ROUTINE GTABS (HANDLER_CODE) : NOVALUE =
86 0213 1
87 0214 1 ++
88 0215 1 FUNCTIONAL DESCRIPTION:
89 0216 1
90 0217 1 GTABS calls GLNM to pick up a list of tab settings, and
91 0218 1 then validates them and sets up the new tab settings in
92 0219 1 TTABLE. In the normal case, the numbers are simply picked
93 0220 1 up, and become the new tab settings. However, there are
94 0221 1 the following special cases.
95 0222 1
96 0223 1 1) If no tab settings are given, the tab settings
97 0224 1 count (TTABLE[CL_INDEX]) is set to zero to indicate
98 0225 1 that no tabs are to be expanded. However,
99 0226 1 the settings are left undisturbed, and can be
100 0227 1 recovered later.
101 0228 1 2) If the user just specified a ',' instead of giving
102 0229 1 a value (i.e., NM_NULL), the "old" tab stop setting
103 0230 1 is used as a parameter value instead.
104 0231 1 It undergoes the same validation that a normal setting
105 0232 1 would. In this way, tab settings "turned off", as
106 0233 1 described in 1) are recovered.
107 0234 1
108 0235 1 FORMAL PARAMETERS:
109 0236 1
110 0237 1 HANDLER_CODE is not examined. It is passed to this routine
111 0238 1 for reasons of conformity only. It will always have the
112 0239 1 value H_TAB_STOPS.
113 0240 1
114 0241 1 IMPLICIT INPUTS:
115 0242 1
116 0243 1 The current setting of TTABLE is used as input.
117 0244 1
118 0245 1 IMPLICIT OUTPUTS: None
119 0246 1
120 0247 1 ROUTINE VALUE:
121 0248 1 COMPLETION CODES: None
122 0249 1
123 0250 1 SIDE EFFECTS: None
124 0251 1 --
125 0252 1
126 0253 2 BEGIN
127 0254 2 LOCAL
128 0255 2 PREVIOUS_TAB,
129 0256 2 TEMP;
130 0257 2
131 0258 2 GLNM (0); !Request maximum number of tabs
132 0259 2
133 0260 2 IF .NMLST_COUNT EQL 0
134 0261 2 THEN
135 0262 2 BEGIN
136 0263 2 TTABLE [CL_INDEX] = 0; !Turn off all tabs
137 0264 2 RETURN;
138 0265 2 END;
139 0266 2
140 0267 2 IF .NMLST_COUNT GTR .TTABLE [CL_MAX_INDEX]
141 0268 2 THEN
```

```

: 142      0269      3      BEGIN
: 143      0270      3      ERMA (RNFTMT, FALSE);      !Too many tab settings
: 144      0271      3      NMLST_COUNT = .TTABLE [CL_MAX_INDEX];      !Fix it up
: 145      0272      3      END;
: 146      0273      3
: 147      0274      3      PREVIOUS_TAB = 0;
: 148      0275      3
: 149      0276      3      INCR I FROM 1 TO .NMLST_COUNT DO
: 150      0277      3      BEGIN
: 151      0278      3
: 152      0279      3      IF .NMLST_DESCR (.I) EQL NM_BAD
: 153      0280      3      THEN
: 154      0281      3      TEMP = .TTABLE [.I]      !Use old value instead
: 155      0282      3      ELSE
: 156      0283      3
: 157      0284      3      IF .NMLST_DESCR (.I) EQL NM_NULL
: 158      0285      3      THEN
: 159      0286      3      TEMP = .TTABLE [.I]
: 160      0287      3      ELSE
: 161      0288      3
: 162      0289      3      IF .NMLST_DESCR (.I) EQL NM_UNSIGNED
: 163      0290      3      THEN
: 164      0291      3      TEMP = .NMLST_VALUE (.I)
: 165      0292      3      ELSE
: 166      0293      3      !A signed value to adjust this tab setting.
: 167      0294      3      TEMP = .TTABLE [.I] + .NMLST_VALUE (.I);
: 168      0295      3
: 169      0296      3      !At this point, TEMP contains the number that might become
: 170      0297      3      !the new tab setting.
: 171      0298      3      !The null case has been resolved by applying the "old" setting.
: 172      0299      3      TTABLE [.I] = .TEMP;      !Tab setting is ok
: 173      0300      3      PREVIOUS_TAB = .TEMP;
: 174      0301      3      TTABLE [CL_INDEX] = .I;
: 175      0302      3      END;
: 176      0303      3
: 177      0304      1      END;      !End of GTABS
```

```

                                .TITLE  GTABS
                                .IDENT  \V04-000\

                                .EXTRN  NMLST, TTABLE, RNFTMT
                                .EXTRN  ERMA, GLNM

                                .PSECT  $CODE$,NOWRT,2

                                .ENTRY   GTABS, Save R2,R3,R4,R5      : 0212
                                MOVAB    NMLST, R5
                                MOVAB    TTABLE+4, R4
                                CLRL     -(SP)      : 0258
                                CALLS    #1, GLNM
                                MOVL     NMLST, R0      : 0260
                                BNEQ     1$
                                CLRL     TTABLE+4
                                RET
                                CMPL     R0, TTABLE      : 0263
                                BLEQ     2$      : 0262
                                : 0267

                                003C 00000
                                55 00000000G EF 9E 00002
                                54 00000000G EF 9E 00009
                                7E D4 00010
                                00000000G EF 01 FB 00012
                                50          65 D0 00019
                                03          03 12 0001C
                                64          64 D4 0001E
                                04 00020
                                FC A4      50 D1 00021 1$:
                                13 15 00025
```

|           |      |           |      |       |       |        |                             |   |      |
|-----------|------|-----------|------|-------|-------|--------|-----------------------------|---|------|
| 00000000G | EF   | 00000000G | 7E   | D4    | 00027 | CLRL   | -(SP)                       | : | 0270 |
|           | 65   | FC        | 8F   | DD    | 00029 | PUSHL  | #RNFTMT                     | : |      |
|           |      |           | 02   | FB    | 0002F | CALLS  | #2, ERMA                    | : |      |
|           |      |           | A4   | D0    | 00036 | MOVL   | TTABLE, NMLST               | : | 0271 |
|           |      |           | 53   | D4    | 0003A | CLRL   | PREVIOUS_TAB                | : | 0274 |
|           |      |           | 50   | D4    | 0003C | CLRL   | I                           | : | 0276 |
|           |      |           | 30   | 11    | 0003E | BRB    | 8\$                         | : |      |
| 51        |      | 00A0      | C540 | D0    | 00040 | MOVL   | NMLST+160[I], R1            | : | 0279 |
| 04        |      |           | 51   | D1    | 00046 | CMPL   | R1, #4                      | : |      |
|           |      |           | 04   | 13    | 00049 | BEQL   | 4\$                         | : |      |
|           |      |           | 51   | D5    | 0004B | TSTL   | R1                          | : | 0284 |
|           |      |           | 06   | 12    | 0004D | BNEQ   | 5\$                         | : |      |
| 52        |      |           | 6440 | D0    | 0004F | MOVL   | TTABLE+4[I], TEMP           | : | 0286 |
|           |      |           | 11   | 11    | 00053 | BRB    | 7\$                         | : |      |
| 01        |      |           | 51   | D1    | 00055 | CMPL   | R1, #1                      | : | 0289 |
|           |      |           | 06   | 12    | 00058 | BNEQ   | 6\$                         | : |      |
| 52        |      |           | 6540 | D0    | 0005A | MOVL   | NMLST[I], TEMP              | : | 0291 |
|           |      |           | 06   | 11    | 0005E | BRB    | 7\$                         | : |      |
| 52        | 6440 |           | 6540 | C1    | 00060 | ADDL3  | NMLST[I], TTABLE+4[I], TEMP | : | 0294 |
|           | 6440 |           | 52   | D0    | 00066 | MOVL   | TEMP, TTABLE+4[I]           | : | 0299 |
|           | 53   |           | 52   | D0    | 0006A | MOVL   | TEMP, PREVIOUS_TAB          | : | 0300 |
|           | 64   |           | 50   | D0    | 0006D | MOVL   | I, TTABLE+4                 | : | 0301 |
| CC        | 50   |           | 65   | F3    | 00070 | AOBLEQ | NMLST, I, 3\$               | : | 0276 |
|           |      |           | 04   | 00074 | RET   |        |                             | : | 0304 |

; Routine Size: 117 bytes, Routine Base: \$CODE\$ + 0000

: 178 0305 1  
: 179 0306 1 END  
: 180 0307 0 ELUDOM

!End of module

## PSECT SUMMARY

| Name     | Bytes | Attributes                                                   |
|----------|-------|--------------------------------------------------------------|
| \$CODE\$ | 117   | NOVEC, NOWRT, RD, EXE, NOSHR, LCL, REL, CON, NOPIC, ALIGN(2) |

## Library Statistics

| File                                   | -----<br>Total | Symbols<br>Loaded | -----<br>Percent | Pages<br>Mapped | Processing<br>Time |
|----------------------------------------|----------------|-------------------|------------------|-----------------|--------------------|
| _\$255\$DUA28:[SYSLIB]XPORT.L32;1      | 590            | 0                 | 0                | 252             | 00:00.1            |
| _\$255\$DUA28:[RUNOFF.SRC]DSRLIB.L32;1 | 1248           | 14                | 1                | 86              | 00:00.3            |

```
;          COMMAND QUALIFIERS
;          BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LISS$:GTABS/OBJ=OBJ$:GTABS MSRC$:GTABS/UPDATE=(ENH$:GTABS)
; Size:      117 code + 0 data bytes
; Run Time:   00:04.3
; Elapsed Time: 00:15.8
; Lines/CPU Min: 4244
; Lexemes/CPU-Min: 17350
; Memory Used: 51 pages
; Compilation Complete
```

0342

AH-BT13A-SE  
 VAX/VMS V4.0

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