


```

1 0001 0 MODULE BOTPAG (
2 0002 0 IDENT = 'V04-000'
3 P 0003 0 XBLISS32[
4 0004 0 ADDRESSING_MODE(EXTERNAL=LONG_RELATIVE, NONEXTERNAL=LONG_RELATIVE)
5 0005 0 ]
6 0006 0 ) =
7 0007 1 BEGIN
8 0008 1
9 0009 1 *****
10 0010 1 *
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28 0028 1 *
29 0029 1 *
30 0030 1 *****
31 0031 1
32 0032 1 **
33 0033 1 FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS
34 0034 1
35 0035 1 ABSTRACT: Finishes that part of a page which occurs below the footnotes.
36 0036 1
37 0037 1
38 0038 1 ENVIRONMENT: Transportable
39 0039 1
40 0040 1 AUTHOR: Rich Friday CREATION DATE: 6 November, 1981
41 0041 1

```

Revision History

43	0042	1	%SBTTL 'Revision History'
44	0043	1	
45	0044	1	MODIFIED BY:
46	0045	1	
47	0046	1	003 KFA00003 Ken Alden 07-Mar-1983
48	0047	1	Global edit of all modules. Updated module names, idents,
49	0048	1	copyright dates. Changed require files to BLISS library.
50	0049	1	
51	0050	1	--

```

53 0051 1 %SBTTL 'Module Level Declarations'
54 0052 1
55 0053 1
56 0054 1 : TABLE OF CONTENTS:
57 0055 1
58 0056 1 FORWARD ROUTINE
59 0057 1     BOTPAG : NOVALUE,
60 0058 1     CPAGEB : NOVALUE;
61 0059 1
62 0060 1 : INCLUDE FILES:
63 0061 1
64 0062 1
65 0063 1 LIBRARY 'NXPORT:XPORT';           ! XPORT Library
66 0064 1 REQUIRE 'REQ:RNODEF';         ! RUNOFF variant definitions
67 0195 1
68 U 0196 1 %IF DSRPLUS %THEN
69 U 0197 1 LIBRARY 'REQ:DPLLIB';         ! DSRPLUS BLISS Library
70 0198 1 %ELSE
71 0199 1 LIBRARY 'REQ:DSRLIB';         ! DSR BLISS Library
72 0200 1 %FI
73 0201 1
74 0202 1
75 0203 1 : MACROS:
76 0204 1
77 0205 1 : This macro makes certain that when blank lines at the top or bottom of a page
78 0206 1 : are skipped change bars don't get output.
79 0207 1 MACRO
80 M 0208 1     NO_BAR SKIP (N) =
81 M 0209 1     BEGIN
82 M 0210 1     LOCAL
83 M 0211 1     HOLD_BARS;
84 M 0212 1     HOLD_BARS = .TSF_BARS;
85 M 0213 1     TSF_BARS = FALSE;
86 M 0214 1     USKIPL (N);
87 M 0215 1     TSF_BARS = .HOLD_BARS;
88 0216 1     END %;
89 0217 1
90 0218 1 : EQUATED SYMBOLS:
91 0219 1
92 0220 1
93 0221 1
94 0222 1 : OWN STORAGE:
95 0223 1
96 0224 1
97 0225 1 : EXTERNAL REFERENCES:
98 0226 1
99 0227 1
100 0228 1 EXTERNAL
101 0229 1     GCA : GCA_DEFINITION,
102 0230 1     HCT : HCT_DEFINITION,
103 0231 1     PAGEN : PAGE_DEFINITION,
104 0232 1     PHAN : PHAN_DEFINITION,
105 0233 1     TPAGER : BLOCKVECTOR [1,PAGE_SCT_SIZE], !List of terminating pages.
106 0234 1     TSF : TSF_DEFINITION;
107 0235 1
108 0236 1 EXTERNAL ROUTINE
109 0237 1     OUTTXT,

```

BOTPAG
V04-000

Module Level Declarations

~~13-Sep-1984~~ 23:49:55
14-Sep-1984 13:05:35

VAX-11 Bliss-32 V4.0-742
[RUNOFF.SRC]BOTPAG.BLI;1

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```
: 110          0238 1   PACBAS,  
: 111          0239 1   PACPAG,  
: 112          0240 1   PAGFND,  
: 113          0241 1   USKIPL;  
: 114          0242 1
```

CAP1
V04-

```

116 0243 1 GLOBAL ROUTINE BOTPAG : NOVALUE =
117 0244 1
118 0245 1 !++
119 0246 1 !FUNCTIONAL DESCRIPTION:
120 0247 1
121 0248 1 !     See ABSTRACT, above.
122 0249 1
123 0250 1 !FORMAL PARAMETERS:      None
124 0251 1
125 0252 1 !IMPLICIT INPUTS:        None
126 0253 1
127 0254 1 !IMPLICIT OUTPUTS:       None
128 0255 1
129 0256 1 !ROUTINE VALUE:
130 0257 1 !COMPLETION CODES:      None
131 0258 1
132 0259 1 !SIDE EFFECTS: None
133 0260 1
134 0261 1 !--
135 0262 1
136 0263 2 BEGIN
137 0264 2
138 0265 2 !Output and center page number at bottom of page if
139 0266 2 !the user has specified that page layout.
140 0267 2 IF
141 0268 2     (.HCT_LAYOUTN NEQ 0)
142 0269 2     AND (.PHAN_LINES_TP NEQ 0)
143 0270 2 THEN
144 0271 2     CPAGEB ();
145 0272 2
146 0273 2 !We've just finished the bottom of a page. And we know how many
147 0274 2 !lines it contains. At this point we need to remember exactly how many
148 0275 2 !physical lines were written so that /SIMULATE can get to the top of
149 0276 2 !the next page later. Note that we can't simply go there because we
150 0277 2 !may be skipping pages due to a /PAGES switch; that means that
151 0278 2 !the next physical page might not occur until several pages later,
152 0279 2 !if it occurs at all.
153 0280 2 IF
154 0281 2     NOT .GCA_SKIP_OUT
155 0282 2 THEN
156 0283 2     PHAN_BOTTOM = .PHAN_LINES_TP;
157 0284 2
158 0285 2 !If currently generating output, but there is a list of
159 0286 2 !pages to be output, see if the page just finished terminates
160 0287 2 !a particular list of pages. If so, turn off output.
161 0288 2 IF!
162 0289 2     .GCA_ORANGE_CNT NEQ 0
163 0290 2 THEN
164 0291 2     IF!
165 0292 2         NOT .GCA_SKIP_OUT
166 0293 2     THEN
167 0294 2         !See if output should be turned off right now.
168 0295 2         GCA_SKIP_OUT = (PAGFND(PAGEN,TPAGER,.GCA_ORANGE_CNT, FALSE) NEQ 0);
169 0296 2
170 0297 1 END;

```

!End of BOTPAG

					.TITLE	BOTPA		
					.IDENT	\V04-000\		
					.EXTRN	GCA, HCT, PAGEN		
					.EXTRN	PHAN, TPAGER, TSF		
					.EXTRN	OUTTXT, PACBAS, PACPAG		
					.EXTRN	PAGFND, USKIPL		
					.PSECT	\$CODE\$,NOWRT,2		
					.ENTRY	BOTPA, Save R2,R3		0243
					MOVAB	PHAN+12, R3		
					MOVAB	GCA+112, R2		
					TSTL	HCT+32		0268
					BEQL	1\$		
					TSTL	PHAN+12		0269
					BEQL	1\$		
					CALLS	#0, CPAGEB		0271
					BLBS	GCA+112, 2\$		0281
					MOVL	PHAN+12, PHAN+56		0283
					MOVL	GCA+108, R0		0289
					BEQL	4\$		
					BLBS	GCA+112, 4\$		0292
					CLRL	-(SP)		0295
					PUSHL	R0		
					PUSHAB	TPAGER		
					PUSHAB	PAGEN		
					CALLS	#4, PAGFND		
					CLRL	R1		
					TSTL	R0		
					BEQL	3\$		
					INCL	R1		
					MOVL	R1, GCA+112		
					RET			0297

; Routine Size: 86 bytes, Routine Base: \$CODE\$ + 0000


```

172 0298 1 GLOBAL ROUTINE CPAGEB :NOVALUE =      !
173 0299 1
174 0300 1  !++
175 0301 1  FUNCTIONAL DESCRIPTION:
176 0302 1
177 0303 1      This routine centers and outputs the page number at the bottom of the
178 0304 1      page.
179 0305 1
180 0306 1  FORMAL PARAMETERS:      None
181 0307 1
182 0308 1  IMPLICIT INPUTS:      None
183 0309 1
184 0310 1  IMPLICIT OUTPUTS:     None
185 0311 1
186 0312 1  ROUTINE VALUE:
187 0313 1  COMPLETION CODES:     None
188 0314 1
189 0315 1  SIDE EFFECTS: None
190 0316 1
191 0317 1  --
192 0318 1
193 0319 2  BEGIN
194 0320 2
195 0321 2  LOCAL
196 0322 2      HOLD_TOP_PAGE,
197 0323 2      HOLD_PAGING;
198 0324 2
199 0325 2  !If the user doesn't want page numbers then just return. This
200 0326 2  !means that if he says .NO NUMBER, but says to center the page number
201 0327 2  !at the bottom, he still gets the white space.
202 0328 2  IF (NOT .HCT_NUMBER_PAGE)
203 0329 3      AND (.HCT_LAYOUT_NEQ LAYOUT_RUN_BOTC) !Generate the number if user wants running page numbers
204 0330 2  THEN
205 0331 2      RETURN;
206 0332 2
207 0333 2  !Turn off paging so a new page is not accidentally started.
208 0334 2  HOLD_PAGING = .PHAN_PAGING;
209 0335 2  HOLD_TOP_PAGE = .PHAN_TOP_PAGE;
210 0336 2  PHAN_PAGING = FALSE;
211 0337 2  PHAN_TOP_PAGE = FALSE;
212 0338 2
213 0339 2  !Position down to fill all lines except line where the page number goes.
214 0340 2  NO_BAR_SKIP (.PHAN_LLLINES - (1 + .PHAN_LINES_TP));
215 0341 2
216 0342 2  !Now generate the page number in a temporary buffer.
217 0343 3  BEGIN
218 0344 3  LOCAL
219 0345 3      WORK_AREA : VECTOR[CH$ALLOCATION(100)],
220 0346 3      WORK_LENGTH,
221 0347 3      WORK_PTR;
222 0348 3
223 0349 3  WORK_PTR = CH$PTR (WORK_AREA);
224 0350 3
225 0351 3  !Generate either the running page number between a dash-space combination,
226 0352 3  !or the regular page number.
227 0353 3  IF .HCT_LAYOUT_EQL LAYOUT_RUN_BOTC
228 0354 3  THEN

```

```

229 0355 3 !User wants a running page number output.
230 0356 4 BEGIN
231 0357 4 !First generate "- " (dash space)
232 0358 4 CHSWCHAR_A (XC'-' , WORK_PTR);
233 0359 4 CHSWCHAR_A (XC' ' , WORK_PTR);
234 0360 4 WORK_LENGTH = 2;
235 0361 4 !Now insert the running page counter.
236 0362 4 WORK_LENGTH = .WORK_LENGTH + PACBAS (.PAGEN [SCT_RUN_PAGE], WORK_PTR, 10);
237 0363 4 !Now follow with " " (space dash)
238 0364 4 CHSWCHAR_A (XC' ' , WORK_PTR);
239 0365 4 CHSWCHAR_A (XC'-' , WORK_PTR);
240 0366 4 WORK_LENGTH = .WORK_LENGTH + 2;
241 0367 4 END
242 0368 3 ELSE
243 0369 3 !Center the normal page number at the bottom.
244 0370 3 WORK_LENGTH = PACPAG (PAGEN, WORK_PTR); !Convert page number and get length.
245 0371 3
246 0372 3 !Finally, output the page number, centered.
247 0373 3 OUTTXT (CHSPTR(WORK_AREA), .WORK_LENGTH, .GCA_LWIDTH);
248 0374 2 END;
249 0375 2
250 0376 2 !Now restore the paging status and return.
251 0377 2 PHAN_PAGING = .HOLD_PAGING;
252 0378 2 PHAN_TOP_PAGE = .HOLD_TOP_PAGE;
253 0379 1 END; !End of CPAGEB

```

57	00000000G	EF	9E	00002	MOVAB	TSF, R7			
56	00000000G	EF	9E	00009	MOVAB	HCT+28, R6			
55	00000000G	EF	9E	00010	MOVAB	PHAN+40, R5			
5E	98	AE	9E	00017	MOVAB	-104(SP), SP			
06	F0	B6	E8	0001B	BLBS	@HCT+12, 1\$			0328
03		66	D1	0001F	CMPL	HCT+28, #3			0329
		01	13	00022	BEQL	1\$			
		04	00	00024	RET				
53	00	B5	D0	00025	MOVL	@PHAN+40, HOLD_PAGING	1\$:		0334
54	D8	A5	D0	00029	MOVL	PHAN, HOLD_TOP_PAGE			0335
	00	B5	D4	0002D	CLRL	@PHAN+40			0336
	D8	A5	D4	00030	CLRL	PHAN			0337
50		67	D0	00033	MOVL	TSF, R0			0340
52	7C A0	00	EF	00036	EXTZV	#0, #1, 124(R0), HOLD_BARS			
		01	8A	0003C	BICB2	#1, 124(R0)			
	50 DC	B5	E4	A5 C3 00040	SUBL3	PHAN+12, @PHAN+4, R0			
		FF	A0	9F 00046	PUSHAB	-1(R0)			
	00000000G	EF	01	FB 00049	CALLS	#1, USKIPL			
7C A0	01	50	67	D0 00050	MOVL	TSF, R0			
		00	52	F0 00053	INSV	HOLD_BARS, #0, #1, 124(R0)			
		6E	04	AE 9E 00059	MOVAB	WORK_AREA, WORK_PTR			0349
		03	66	D1 0005D	CMPL	HCT+28, #3			0353
		36	12	00060	BNEQ	2\$			
	00	BE	2D	90 00062	MOVB	#45, @WORK_PTR			0358
	00	BE	6E	D6 00066	INCL	WORK_PTR			
		20	90	00068	MOVB	#32, @WORK_PTR			0359

	52		6E D6 0006C	INCL	WORK_PTR	
			02 D0 0006E	MOVL	#2, WORK_LENGTH	0360
			0A DD 00071	PUSHL	#10	0362
		04	AE 9F 00073	PUSHAB	WORK_PTR	
	7E 00000000G		EF 3C 00076	MOVZWL	PAGEN+14, -(SP)	
			03 FB 0007D	CALLS	#3, PACBAS	
	00		50 C0 00084	ADDL2	R0, WORK_LENGTH	
			20 90 00087	MOVB	#32, @WORK_PTR	0364
	00		6E D6 0008B	INCL	WORK_PTR	
			2D 90 0008D	MOVB	#45, @WORK_PTR	0365
			6E D6 00091	INCL	WORK_PTR	
	52		02 C0 00093	ADDL2	#2, WORK_LENGTH	0366
			12 11 00096	BRB	3\$	0353
			5E DD 00098	PUSHL	SP	0370
	00000000G	00000000G	EF 9F 0009A	PUSHAB	PAGEN	
			02 FB 000A0	CALLS	#2, PACPAG	
	00000000G		50 D0 000A7	MOVL	R0, WORK_LENGTH	
		00000000G	FF DD 000AA	PUSHL	@GCA+140	0373
			52 DD 000B0	PUSHL	WORK_LENGTH	
		0C	AE 9F 000B2	PUSHAB	WORK_AREA	
	00000000G		03 FB 000B5	CALLS	#3, OUTTXT	
	00		53 D0 000BC	MOVL	HOLD_PAGING, @PHAN+40	0377
	D8	A5	54 D0 000C0	MOVL	HOLD_TOP_PAGE, PHAN	0378
			04 0U0C4	RET		0379

; Routine Size: 197 bytes, Routine Base: \$CODE\$ + 0056

: 254 0380 1
: 255 0381 1 END
: 256 0382 0 ELUDOM

!End of module BOTPAG

PSECT SUMMARY

Name	Bytes	Attributes
\$CODE\$	283	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]XPORT.L32;1	590	0	0	252	00:00.1
_\$255\$DUA28:[RUNOFF.SRC]DSRLIB.L32;1	1248	26	2	86	00:00.2

BOTPAG
V04-000

Module Level Declarations

F 9
15-Sep-1984 23:49:55
14-Sep-1984 13:05:35

VAX-11 Bliss-32 V4.0-742
[RUNOFF.SRC]BOTPAG.BLI;1

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COMMAND QUALIFIERS

```
:  
:      BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS$:BOTPAG/OBJ=OBJ$:BOTPAG MSRC$:BOTPAG/UPDATE=(ENH$:BOTPAG)  
:  
: Size:      283 code + 0 data bytes  
: Run Time:  00:06.4  
: Elapsed Time: 00:18.2  
: Lines/CPU Min: 3581  
: Lexemes/CPU-Min: 16096  
: Memory Used: 67 pages  
: Compilation Complete
```

CAPT
V04-

