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0001 0 MODULE OUTTXT (
0002 0 IDENT = 'V04-000'
P 0003 0 %BLISS32[
P 0004 0 ADDRESSING_MODE(EXTERNAL=LONG_RELATIVE, NONEXTERNAL=LONG_RELATIVE)
0005 0 ]
0006 0 ) =
0007 1 BEGIN
0008 1
0009 1 *****
0010 1 *
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0028 1 *
0029 1 *
0030 1 *****
0031 1
0032 1 ++
0033 1 FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS
0034 1
0035 1 ABSTRACT: Outputs a single line of text optionally centered.
0036 1
0037 1
0038 1 ENVIRONMENT: Transportable
0039 1
0040 1 AUTHOR: R.W.Friday CREATION DATE: April, 1979
0041 1

```

OUTTXT
V04-000

D 14
16-Sep-1984 01:23:16
14-Sep-1984 13:07:34

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

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VC

Revision History

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: 43 0042 1 %SBTTL 'Revision History'
: 44 0043 1
: 45 0044 1  MODIFIED BY:
: 46 0045 1
: 47 0046 1      007   KFA00007   Ken Alden   16-Mar-1983
: 48 0047 1      SCA is now initialized the same for both DSR and PLUS
: 49 0048 1
: 50 0049 1      006   KAD00006   Keith Dawson  07-Mar-1983
: 51 0050 1      Global edit of all modules. Updated module names, idents,
: 52 0051 1      copyright dates. Changed require files to BLISS library.
: 53 0052 1
: 54 0053 1  !--

```

Module Level Declarations

```

: 56      0054 1 %SBTTL 'Module Level Declarations'
: 57      0055 1
: 58      0056 1
: 59      0057 1 | TABLE OF CONTENTS:
: 60      0058 1 |
: 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 |
: 78      0206 1 | EQUATED SYMBOLS:
: 79      0207 1 |
: 80      0208 1 EXTERNAL LITERAL
: 81      0209 1     RINTES : UNSIGNED(8);
: 82      0210 1
: 83      0211 1 |
: 84      0212 1 | OWN STORAGE:
: 85      0213 1 |
: 86      0214 1 OWN
: 87      0215 1     PP_SCA : $H_R_SCA_BLOCK;      !Used in PUSH_SCA, POP_SCA macros (defined in SCA.REQ).
: 88      0216 1 |
: 89      0217 1 | EXTERNAL REFERENCES:
: 90      0218 1 |
: 91      0219 1 |
: 92      0220 1 EXTERNAL
: 93      0221 1     MRA : REF FIXED STRING,
: 94      0222 1     SCA : SCA_DEFINITION,
: 95      0223 1     TSF : TSF_DEFINITION;
: 96      0224 1
: 97      0225 1 EXTERNAL ROUTINE
: 98      0226 1     ENDCHR,
: 99      0227 1     OUTNJ;

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: 101 0228 1 GLOBAL ROUTINE OUTTXT (TEXT_PTR, TEXT_LENGTH, CENTERED) : NOVALUE =
: 102 0229 1
: 103 0230 1
: 104 0231 1 ++
: 105 0232 1 FUNCTIONAL DESCRIPTION:
: 106 0233 1     Outputs a generated line of t xt in the "official" way.
: 107 0234 1     This means that an MRA/TSF pair have to be allocated and set up.
: 108 0235 1     This routine is needed when there is no convenient MRA/TSF pair
: 109 0236 1     around that can be used for outputting text.
: 110 0237 1
: 111 0238 1 FORMAL PARAMETERS:
: 112 0239 1
: 113 0240 1     TEXT_PTR is a CH$PTR to the text to be centered and output.
: 114 0241 1     TEXT_LENGTH is the length of the text.
: 115 0242 1     CENTERED is the page width in which the text should be centered.
: 116 0243 1
: 117 0244 1 IMPLICIT INPUTS:      None
: 118 0245 1
: 119 0246 1 IMPLICIT OUTPUTS:     None
: 120 0247 1
: 121 0248 1 ROUTINE VALUE:
: 122 0249 1 COMPLETION CODES:     None
: 123 0250 1
: 124 0251 1 SIDE EFFECTS: None
: 125 0252 1
: 126 0253 1 --
: 127 0254 1
: 128 0255 2 BEGIN
: 129 0256 2 LOCAL
: 130 0257 2     HOLD_MRA,
: 131 0258 2     HOLD_SCA : VECTOR[SCA_SIZE],
: 132 0259 2     HOLD_TSF,
: 133 0260 2     TEMP_MRA : FIXED STRING[100],
: 134 0261 2     TEMP_TSF : VECTOR[TSF_SIZE],
: 135 0262 2     PTR;
: 136 0263 2
: 137 0264 2 !Remember location of current TSF
: 138 0265 2 HOLD_TSF = .TSF;
: 139 0266 2 !Set up substitute TSF
: 140 0267 2 INCR I FROM 0 TO TSF_SIZE - 1 DO TEMP_TSF[I] = 0;
: 141 0268 2 TSF = TEMP_TSF;
: 142 0269 2 !Set change-bar character to space.
: 143 0270 2 TSF_BAR_CHAR = %C' ';
: 144 0271 2
: 145 0272 2 !Remember location of current MRA
: 146 0273 2 HOLD_MRA = .MRA;
: 147 0274 2 !Set up substitute MRA;
: 148 0275 2 FS_MAXSIZE(TEMP_MRA) = 100;
: 149 0276 2 FS_INIT(TEMP_MRA);
: 150 0277 2 MRA = TEMP_MRA;
: 151 0278 2
: 152 0279 2 !Copy SCA before setting up a new one.
: 153 0280 2 PUSH_SCA; !Save the SAVED SCA bits.
: 154 0281 2
: 155 0282 2 INCR I FROM 0 TO SCA_SIZE -1 DO HOLD_SCA[I] = .SCA[I];
: 156 0283 2
: 157 0284 2 INCR I FROM 0 TO SCA_SAVE_START -1 DO SCA[I] = 0;

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: 158 0285 2 INCR I FROM SCA_SAVE_END +1 TO SCA_SIZE -1 DO SCA[I] = 0;
: 159 0286 2 SCA_CC_OK = 0;
: 160 0287 2 SCA_KER = 0;
: 161 0288 2 SCA_AUTOTITLE = 0;
: 162 0289 2
: 163 0290 2 !Initialize SCA.
: 164 0291 2 SCA_FC_CASE = TRUE;
: 165 0292 2 SCA_RM = 150;
: 166 0293 2 SCA_LM = 0;
: 167 0294 2 SCA_SPACING = 1;
: 168 0295 2 SCA_FC = TRUE;
: 169 0296 2 SCA_FILL = TRUE;
: 170 0297 2 SCA_JUSTIFY = TRUE;
: 171 0298 2 SCA_CROCK = TRUE;
: 172 0299 2 SCA_WRD_PNTR = .FS START (MRA);
: 173 0300 2 SCA_WRD_CPEND = RINTES;
: 174 0301 2 !Set change-bar character(s) to space.
: 175 0302 2 SCA_BAR_CHAR = %C' ';
: 176 0303 2 SCA_WRD_BAR_CHR = %C' ';
: 177 0304 2
: 178 0305 2 PTR = .TEXT_PTR;
: 179 0306 2
: 180 0307 2 INCR I FROM 1 TO .TEXT_LENGTH DO
: 181 0308 2     ENDCHR (CH$RCHAR_A (PTR));
: 182 0309 2
: 183 0310 2 !Center the text
: 184 0311 2 TSF_ADJUST = MAX ((.CENTERED - .TEXT_LENGTH)/2, 0);
: 185 0312 2 !Output the line containing the centered text.
: 186 0313 2 OUTNJ ();
: 187 0314 2
: 188 0315 2 !Restore original SCA
: 189 0316 2 INCR I FROM 0 TO SCA_SIZE - 1 DO SCA[I] = .HOLD_SCA[I];
: 190 0317 2
: 191 0318 2 POP_SCA; !Restore the SAVED SCA bits.
: 192 0319 2
: 193 0320 2 !Restore original MRA
: 194 0321 2 MRA = .HOLD_MRA;
: 195 0322 2
: 196 0323 2 !Restore original TSF
: 197 0324 2 TSF = .HOLD_TSF;
: 198 0325 2
: 199 0326 1 END;

```

!End of OUTTXT

```

.TITLE OUTTXT
.IDENT \V04-000\

.PSECT $OWNS,NOEXE,2

00000 PP_SCA: .BLKB 48

.EXTRN RINTES, MRA, SCA
.EXTRN TSF, ENDCHR, OUTNJ

.PSECT $CODE$,NOWRT,2

03FC 00000 .ENTRY OUTTXT, Save R2,R3,R4,R5,R6,R7,R8,R9 ; 0228

```

		59	00000000G	EF	9E	00002	MOVAB	MRA, R9		
		58	00000000G	EF	9E	00009	MOVAB	TSF, R8		
		57	00000000'	EF	9E	00010	MOVAB	PP_SCA, R7		
		56	00000000G	EF	9E	00017	MOVAB	SCA, R6		
		5E	FD6C	CE	9E	0001E	MOVAB	-660(SP), SP		
		54		68	D0	00023	MOVL	TSF, HOLD_TSF		0265
				50	D4	00026	CLRL	I		0267
				6E40	D4	00028	CLRL	TEMP_TSF[I]		
F9		50		27	F3	0002B	AOBLEQ	#39, I, 1\$		
		68		6E	9E	0002F	MOVAB	TEMP_TSF, TSF		0268
	1C	50		68	D0	00032	MOVL	TSF, R0		
		A0		20	D0	00035	MOVL	#32, 28(R0)		0270
		55		69	D0	00039	MOVL	MRA, HOLD_MRA		0273
	00A8	CE	64	8F	9A	0003C	MOVZBL	#100, TEMP_MRA+8		0275
			00AC	CE	D4	00042	CLRL	TEMP_MRA+12		0276
	00A0	CE	00B0	CE	9E	00046	MOVAB	TEMP_MRA+16, TEMP_MRA		
	00A4	CE	00A0	CE	D0	0004D	MOVL	TEMP_MRA, TEMP_MRA+4		
		69	00A0	CE	9E	00054	MOVAB	TEMP_MRA, MRA		0277
		67	64	B6	D0	00059	MOVL	@SCA+100, PP_SCA		
	04	A7	68	B6	D0	0005D	MOVL	@SCA+104, PP_SCA+4		
	08	A7	6C	B6	D0	00062	MOVL	@SCA+108, PP_SCA+8		
	0C	A7	70	B6	D0	00067	MOVL	@SCA+112, PP_SCA+12		
	10	A7	74	B6	D0	0006C	MOVL	@SCA+116, PP_SCA+16		
	14	A7	78	B6	D0	00071	MOVL	@SCA+120, PP_SCA+20		
	18	A7	7C	B6	D0	00076	MOVL	@SCA+124, PP_SCA+24		
	1C	A7	0080	D6	D0	0007B	MOVL	@SCA+128, PP_SCA+28		
	20	A7	0084	D6	D0	00081	MOVL	@SCA+132, PP_SCA+32		
	24	A7	0088	D6	D0	00087	MOVL	@SCA+136, PP_SCA+36		
	28	A7	008C	D6	D0	0008D	MOVL	@SCA+140, PP_SCA+40		
	2C	A7	0090	D6	D0	00093	MOVL	@SCA+144, PP_SCA+44		
				50	D4	00099	CLRL	I		0282
F1	0114	CE40		6640	D0	0009B	MOVL	SCA[I], HOLD_SCA[I]		
		50	0000005F	8F	F3	000A2	AOBLEQ	#95, I, 2\$		
				50	D4	000AA	CLRL	I		0284
				6640	D4	000AC	CLRL	SCA[I]		
F9		50		18	F3	000AF	AOBLEQ	#24, I, 3\$		
		50		25	D0	000B3	MOVL	#37, I		0285
				6640	D4	000B6	CLRL	SCA[I]		
F5		50	0000005F	8F	F3	000B9	AOBLEQ	#95, I, 4\$		
			6C	B6	D4	000C1	CLRL	@SCA+108		0286
			0084	D6	D4	000C4	CLRL	@SCA+132		0287
			008C	D6	D4	000C8	CLRL	@SCA+140		0288
	00D0	C6		01	D0	000CC	MOVL	#1, SCA+208		0291
	78	B6	96	8F	9A	000D1	MOVZBL	#150, @SCA+120		0292
			74	B6	D4	000D6	CLRL	@SCA+116		0293
	7C	B6		01	D0	000D9	MOVL	#1, @SCA+124		0294
	0094	C6		01	D0	000DD	MOVL	#1, SCA+148		0295
	68	B6		01	D0	000E2	MOVL	#1, @SCA+104		0296
	64	B6		01	D0	000E6	MOVL	#1, @SCA+100		0297
	70	B6		01	D0	000EA	MOVL	#1, @SCA+112		0298
	00F8	C6	00	B9	D0	000EE	MOVL	@MRA, SCA+248		0299
	0118	C6	00G	8F	9A	000F4	MOVZBL	#RINTES, SCA+280		0300
	0088	D6		20	D0	000FA	MOVL	#32, @SCA+136		0302
	0114	C6		20	D0	000FF	MOVL	#32, SCA+276		0303
		53	04	AC	D0	00104	MOVL	TEXT_PTR, PTR		0305
				52	D4	00108	CLRL	I		0307
				0A	11	0010A	BRB	6\$		

OUTTXT
V04-000

Module Level Declarations

J 14
16-Sep-1984 01:23:16
14-Sep-1984 13:07:34

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

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: _\$255\$DUA28:[RUNOFF.SRC]DSRLIB.L32;1 1248 53 4 86 00:00.3

:
: COMMAND QUALIFIERS

: BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LISS:OUTTXT/OBJ=OBJ\$:OUTTXT MSRCS:OUTTXT/UPDATE=(ENHS:OUTTXT)

: Size: 398 code + 48 data bytes
: Run Time: 00:11.8
: Elapsed Time: 00:26.9
: Lines/CPU Min: 1670
: Lexemes/CPU-Min: 16406
: Memory Used: 94 pages
: Compilation Complete

NEWSPAG LIS	NODOPX LIS	OUTXT LIS
OFT LIS	NDXURS LIS	NOTE LIS
OUTCH LIS	OUTLIN LIS	OUTXHR LIS
NDXHTN LIS	PACK LIS	OUTDR LIS