


```

BBBBBBBB      AAAAAA      SSSSSSSS      CCCCCCCC      AAAAAA      NN      NN      TTTTTTTTTT      YY      YY      PPPPPPPP
BBBBBBBB      AAAAAA      SSSSSSSS      CCCCCCCC      AAAAAA      NN      NN      TTTTTTTTTT      YY      YY      PPPPPPPP
BB      BB      AA      AA      SS      CC      AA      AA      NN      NN      TT      YY      YY      PP      PP
BB      BB      AA      AA      SS      CC      AA      AA      NN      NN      TT      YY      YY      PP      PP
BB      BB      AA      AA      SS      CC      AA      AA      NNNN      NN      TT      YY      YY      PP      PP
BB      BB      AA      AA      SS      CC      AA      AA      NNNN      NN      TT      YY      YY      PP      PP
BBBBBBBB      AA      AA      SSSSSS      CC      AA      AA      NN      NN      TT      YY      YY      PPPPPPPP
BBBBBBBB      AA      AA      SSSSSS      CC      AA      AA      NN      NN      TT      YY      YY      PPPPPPPP
BB      BB      AAAAAAAAAA      SS      CC      AAAAAAAAAA      NN      NNNN      TT      YY      YY      PP
BB      BB      AAAAAAAAAA      SS      CC      AAAAAAAAAA      NN      NNNN      TT      YY      YY      PP
BB      BB      AA      AA      SS      CC      AA      AA      NN      NN      TT      YY      YY      PP
BB      BB      AA      AA      SS      CC      AA      AA      NN      NN      TT      YY      YY      PP
BBBBBBBB      AA      AA      SSSSSSSS      CCCCCCCC      AA      AA      NN      NN      TT      YY      YY      PP
BBBBBBBB      AA      AA      SSSSSSSS      CCCCCCCC      AA      AA      NN      NN      TT      YY      YY      PP

```

```

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
LLLLLLLLLL      IIIIII      SSSSSSSS
LLLLLLLLLL      IIIIII      SSSSSSSS

```

```

1 0001 0 MODULE BASSCANTYPAHEAD (
2 0002 0 IDENT = '1-005'
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
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25 0025 1 *
26 0026 1 *
27 0027 1 *****
28 0028 1
29 0029 1
30 0030 1 **
31 0031 1 FACILITY: BASIC-PLUS-2 Miscellaneous I/O
32 0032 1
33 0033 1 ABSTRACT:
34 0034 1
35 0035 1 This module contains the BASIC CANTYPA function,
36 0036 1 which cancels type-ahead.
37 0037 1
38 0038 1 ENVIRONMENT: VAX-11 User Mode
39 0039 1
40 0040 1 AUTHOR: John Sauter, CREATION DATE: 01-MAY-1979
41 0041 1
42 0042 1 MODIFIED BY:
43 0043 1
44 0044 1 1-001 - Original.
45 0045 1 1-002 - Set up LIB$A USER FP. JBS 25-JUL-1979
46 0046 1 1-003 - Cancel typeahead immediately, instead of waiting till
47 0047 1 the next read. PLL 28-Jul-81
48 0048 1 1-004 - Use LIB$GET_EF to allocate an event flag, instead of using the
49 0049 1 default efn_zero. PLL 30-Nov-81
50 0050 1 1-005 - Declare LIB$STOP to be external. RNG 05-Jan-82
51 0051 1 --
52 0052 1
53 0053 1 !<BLF/PAGE>

```

! File: BASCANTYP.B32 EDIT:RNG1005

```

55 0054 1 |
56 0055 1 | SWITCHES:
57 0056 1 |
58 0057 1 |
59 0058 1 SWITCHES ADDRESSING_MODE (EXTERNAL = GENERAL, NONEXTERNAL = WORD_RELATIVE);
60 0059 1 |
61 0060 1 |
62 0061 1 | LINKAGES:
63 0062 1 |
64 0063 1 |
65 0064 1 REQUIRE 'RTLIN:OTSLNK'; ! Define linkages
66 0493 1 |
67 0494 1 |
68 0495 1 | TABLE OF CONTENTS:
69 0496 1 |
70 0497 1 |
71 0498 1 FORWARD ROUTINE
72 0499 1 BASSCANTYPAHEAD; ! Cancel type ahead
73 0500 1 |
74 0501 1 |
75 0502 1 | INCLUDE FILES:
76 0503 1 |
77 0504 1 |
78 0505 1 REQUIRE 'RTLML:OTSLUB'; ! Get LUB definitions
79 0645 1 |
80 0646 1 REQUIRE 'RTLML:OTSISB'; ! Get ISB definitions
81 0814 1 |
82 0815 1 REQUIRE 'RTLIN:RTLPSECT'; ! Macros for defining psects
83 0910 1 |
84 0911 1 LIBRARY 'RTLSTARLE'; ! System symbols
85 0912 1 |
86 0913 1 |
87 0914 1 | MACROS:
88 0915 1 |
89 0916 1 | NONE
90 0917 1 |
91 0918 1 | EQUATED SYMBOLS:
92 0919 1 |
93 0920 1 | NONE
94 0921 1 |
95 0922 1 | PSECTS:
96 0923 1 |
97 0924 1 DECLARE_PSECTS (BAS); ! Declare psects for BASS facility
98 0925 1 |
99 0926 1 | OWN STORAGE:
100 0927 1 |
101 0928 1 | NONE
102 0929 1 |
103 0930 1 | EXTERNAL REFERENCES:
104 0931 1 |
105 0932 1 |
106 0933 1 EXTERNAL ROUTINE
107 0934 1 LIB$GET_EF; ! allocate an event flag
108 0935 1 LIB$FREE_EF; ! deallocate an event flag
109 0936 1 LIB$STOP; ! stop process and return status
110 0937 1 BASS$OPEN_ZERO : NOVALUE; ! Open channel zero
111 0938 1 BASS$CB_PUSH : JSB_CB_PUSH NOVALUE; ! Load register CCB

```

```
: 112      0939 1      BAS$$CB_POP : JSB_CB_POP NOVALUE,      ! Done with register CCB
: 113      0940 1      BAS$$STOP_IO : NOVALUE;                ! Signal fatal I/O error
: 114      0941 1
: 115      0942 1
: 116      0943 1 ! The following are the error codes used in this module.
: 117      0944 1 .-
: 118      0945 1
: 119      0946 1 EXTERNAL LITERAL
: 120      0947 1      BAS$$K_IO_CHANOT : UNSIGNED (8);      ! Channel not open.
: 121      0948 1
```

```

123 0949 1 GLOBAL ROUTINE BASSCANTYPAHEAD (
124 0950 1     CHAN
125 0951 1     ) =
126 0952 1
127 0953 1  +-+
128 0954 1  | FUNCTIONAL DESCRIPTION:
129 0955 1  |
130 0956 1  |     Suppress type ahead on the terminal open on the specified
131 0957 1  |     channel.
132 0958 1  |
133 0959 1  | FORMAL PARAMETERS:
134 0960 1  |
135 0961 1  |     CHAN.r.l.v     The channel whose terminal to suppress type
136 0962 1  |                     ahead on.
137 0963 1  |
138 0964 1  | IMPLICIT INPUTS:
139 0965 1  |
140 0966 1  |     NONE
141 0967 1  |
142 0968 1  | IMPLICIT OUTPUTS:
143 0969 1  |
144 0970 1  |     LUB$V_PTA     Suppress type-ahead.
145 0971 1  |
146 0972 1  | ROUTINE VALUE:
147 0973 1  | COMPLETION CODES:
148 0974 1  |
149 0975 1  |     SSS_NORMAL
150 0976 1  |
151 0977 1  | SIDE EFFECTS:
152 0978 1  |
153 0979 1  |     Signals if an error is encountered.
154 0980 1  |     BASS$CB_PUSH will signal if the channel number is invalid.
155 0981 1  |     Signals BASSK_IO_CHANOT if the channel is not open.
156 0982 1  |
157 0983 1  | --
158 0984 1  |
159 0985 2  | BEGIN
160 0986 2  |
161 0987 2  | BUILTIN
162 0988 2  |     FP;
163 0989 2  |
164 0990 2  | GLOBAL REGISTER
165 0991 2  |     CCB = K_CCB_REG : REF BLOCK [, BYTE];
166 0992 2  |
167 0993 2  | LOCAL
168 0994 2  |     FMP : REF BLOCK [, BYTE],
169 0995 2  |     EVENT_FLAG,
170 0996 2  |     STATUS,
171 0997 2  |     DEVNAM_DESC : BLOCK [8, BYTE];
172 0998 2  |
173 0999 2  |     FMP = .FP;
174 1000 2  | +-+
175 1001 2  | | Get the CCB for the channel.
176 1002 2  | |
177 1003 2  | |
178 1004 3  | | IF (.CHAN EQL 0)
179 1005 2  | | THEN

```

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180      1006      BEGIN
181      1007      +
182      1008      - The user is referencing his controlling terminal.
183      1009
184      1010      BAS$$CB_PUSH (LUB$K_LUN_INPU, LUB$K_ILUN_MIN);
185      1011      +
186      1012      - If the controlling terminal is not yet open, open it.
187      1013
188      1014
189      1015      IF ( NOT .CCB [LUB$V_OPENED]) THEN BAS$$OPEN_ZERO (.FMP [SF$L_SAVE_FP]);
190      1016
191      1017      END
192      1018      ELSE
193      1019      BEGIN
194      1020      +
195      1021      - This is an ordinary channel.
196      1022
197      1023      BAS$$CB_PUSH (.CHAN, LUB$K_LUN_MIN);
198      1024      END;
199      1025
200      1026      CCB [ISB$A_USER_FP] = .FMP [SF$L_SAVE_FP];
201      1027      +
202      1028      - If the channel is not now open, give an error signal.
203      1029
204      1030
205      1031      IF ( NOT .CCB [LUB$V_OPENED]) THEN BAS$$STOP_IO (BAS$K_IO_CHANOT);
206      1032
207      1033      +
208      1034      - This code formerly set the PTA bit and then let RMS do the actual
209      1035      purge at the record level. This method, however, might purge things
210      1036      typed after the cancel typeahead was issued. So cancel typeahead now
211      1037      by doing a read virtual block of 0 characters.
212      1038
213      1039
214      1040      +
215      1041      - $ASSIGN will translate SY$$INPUT to a device name.
216      1042
217      1043
218      1044      DEVNAM_DESC [DSC$W_LENGTH] = %CHARCOUNT ('SY$$INPUT');
219      1045      DEVNAM_DESC [DSC$B_DTYPE] = DSC$K_DTYPE_Z;
220      1046      DEVNAM_DESC [DSC$B_CLASS] = DSC$K_CLASS_S;
221      1047      DEVNAM_DESC [DSC$A_POINTER] = UPLIT('SY$$INPUT');
222      1048
223      1049      STATUS = $ASSIGN (DEVNAM = DEVNAM_DESC, CHAN = CHAN);
224      1050      IF (NOT .STATUS) THEN LIB$STOP (.STATUS);
225      1051
226      1052      STATUS = LIB$GET_EF (EVENT FLAG);
227      1053      IF (NOT .STATUS) THEN LIB$STOP (.STATUS);
228      1054
229      1055      STATUS = $QIOW (EFN = .EVENT_FLAG, CHAN = .CHAN,
230      1056      P      FUNC = IOS_READVBLK+IOSM_PURGE,
231      1057      P      P1 = .CCB [LUB$A_BUF_BEG], P2 = 0);
232      1058      IF (NOT .STATUS) THEN LIB$STOP (.STATUS);
233      1059
234      1060      STATUS = LIB$FREE_EF (EVENT FLAG);
235      1061      IF (NOT .STATUS) THEN LIB$STOP (.STATUS);
236      1062

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: 237      1063 2      STATUS = $DASSGN (CHAN = .CHAN);
: 238      1064 2      IF (NOT .STATUS) THEN LIB$STOP (.STATUS);
: 239      1065 2      !+
: 240      1066 2      We are done with register CCB.
: 241      1067 2      !-
: 242      1068 2      BASS$CB_POP ();
: 243      1069 2      RETURN TSS$_NORMAL);
: 244      1070 1      END;

```

! end of BASSCANTYPAHEAD

				.TITLE	BASSCANTYPAHEAD		
				.IDENT	\1-005\		
				.PSECT	_BASSCODE,NOWRT, SHR, PIC,2		
00 00 00 54 55 50 4E 49 24 53 59 53 00000 P.AAA:					.ASCII	\SYSSINPUT\<0><0><0>	:
				.EXTRN	LIB\$GET_EF, LIB\$FREE_EF		
				.EXTRN	LIB\$STOP, BASS\$OPEN_ZERO		
				.EXTRN	BASS\$CB_PUSH, BASS\$CB_POP		
				.EXTRN	BASS\$STOP_IO, BASSK_IO_CHANOT		
				.EXTRN	SYSS\$ASSIGN, SYSS\$QIOQ		
				.EXTRN	SYSS\$DASSGN		
				.ENTRY	BASSCANTYPAHEAD, Save R2,R3,R4,R5,R11	: 0949	
55 00000000G	00	083C 00000	00 9E 00002	MOVAB	BASS\$CB_PUSH, R5	:	
54 00000000G	00	00 9E 00009	00 9E 00009	MOVAB	LIB\$STOP, R4	:	
5E		0C C2 00010	0C C2 00010	SUBL2	#12, SP	:	
53		5D D0 00013	5D D0 00013	MOVL	FP, FMP	: 0999	
	04	AC D5 00016	AC D5 00016	TSTL	CHAN	: 1004	
		18 12 00019	18 12 00019	BNEQ	1\$:	
50		08 CE 0001B	08 CE 0001B	MNEGL	#8, R0	: 1010	
52		07 CE 0001E	07 CE 0001E	MNEGL	#7, R2	:	
		65 16 00021	65 16 00021	JSB	BASS\$CB_PUSH	:	
14	FC	AB E8 00023	AB E8 00023	BLBS	-4(CCB), 2\$: 1015	
	OC	A3 DD 00027	A3 DD 00027	PUSHL	12(FMP)	:	
00000000G	00	01 FB 0002A	01 FB 0002A	CALLS	#1, BASS\$OPEN_ZERO	:	
		08 11 00031	08 11 00031	BRB	2\$: 1004	
		50 D4 00033	50 D4 00033	CLRL	R0	: 1023	
	04	AC D0 00035	AC D0 00035	MOVL	CHAN, R2	:	
		65 16 00039	65 16 00039	JSB	BASS\$CB_PUSH	:	
FF4C	CB	OC A3 D0 0003B	OC A3 D0 0003B	MOVL	12(FMP), -180(CCB)	: 1026	
	OB	FC AB E8 00041	FC AB E8 00041	BLBS	-4(CCB), 3\$: 1031	
	7E	00G 8F 9A 00045	00G 8F 9A 00045	MOVZBL	#BASSK_IO_CHANOT, -(SP)	:	
00000000G	00	01 FB 00049	01 FB 00049	CALLS	#1, BASS\$STOP_IO	:	
04	AE	01000009 8F D0 00050	01000009 8F D0 00050	MOVL	#16777225, DEVNAM_DESC	: 1044	
08	AE	99 AF 9E 00058	99 AF 9E 00058	MOVAB	P.AAA, DEVNAM_DESC+4	: 1047	
		7E 7C 0005D	7E 7C 0005D	CLRQ	-(SP)	: 1049	
		04 AC 9F 0005F	04 AC 9F 0005F	PUSHAB	CHAN	:	
	10	AE 9F 00062	AE 9F 00062	PUSHAB	DEVNAM_DESC	:	
00000000G	00	04 FB 00065	04 FB 00065	CALLS	#4, SYSS\$ASSIGN	:	
	52	50 D0 0006C	50 D0 0006C	MOVL	R0, STATUS	:	
	05	52 EB 0006F	52 EB 0006F	BLBS	STATUS, 4\$: 1050	
		52 DD 00072	52 DD 00072	PUSHL	STATUS	:	
	64	01 FB 00074	01 FB 00074	CALLS	#1, LIB\$STOP	:	
		5E DD 00077	5E DD 00077	PUSHL	SP	: 1052	
00000000G	00	01 FB 00079	01 FB 00079	CALLS	#1, LIB\$GET_EF	:	

52		50	D0	00080	MOVL	R0, STATUS	
05		52	E8	00083	BLBS	STATUS, 5\$	1053
		52	DD	00086	PUSHL	STATUS	
64		01	FB	00088	CALLS	#1, LIB\$STOP	
		7E	7C	0008B	5\$: CLRQ	-(SP)	1057
		7E	7C	0008D	CLRQ	-(SP)	
		7E	D4	0008F	CLRL	-(SP)	
	BC	AB	DD	00091	PUSHL	-68(CCB)	
		7E	7C	00094	CLRQ	-(SP)	
		7E	D4	00096	CLRL	-(SP)	
7E	0831	8F	3C	00098	MOVZWL	#2097, -(SP)	
	04	AC	DD	0009D	PUSHL	CHAN	
	2C	AE	DD	000A0	PUSHL	EVENT FLAG	
00000000G	00	0C	FB	000A3	CALLS	#12, SYSSQIOW	
	52	50	D0	000AA	MOVL	R0, STATUS	
	05	52	E8	000AD	BLBS	STATUS, 6\$	1058
		52	DD	000B0	PUSHL	STATUS	
64		01	FB	000B2	CALLS	#1, LIB\$STOP	
00000000G	00	5E	DD	000B5	6\$: PUSHL	SP	1060
	52	01	FB	000B7	CALLS	#1, LIB\$FREE_EF	
	05	50	D0	000BE	MOVL	R0, STATUS	
		52	E8	000C1	BLBS	STATUS, 7\$	1061
		52	DD	000C4	PUSHL	STATUS	
64		01	FB	000C6	CALLS	#1, LIB\$STOP	
00000000G	00	04	AC	000C9	7\$: PUSHL	CHAN	1063
	52	01	FB	000CC	CALLS	#1, SYSSDASSGN	
	05	50	D0	000D3	MOVL	R0, STATUS	
		52	E8	000D6	BLBS	STATUS, 8\$	1064
		52	DD	000D9	PUSHL	STATUS	
64		01	FB	000DB	CALLS	#1, LIB\$STOP	
00000000G	00	16	000DE	8\$: JSB	BASS\$CB_POP		1068
	50	01	D0	000E4	MOVL	#1, R0	1069
		04	000E7	RET			1070

: Routine Size: 232 bytes, Routine Base: _BAS\$CODE + 000C

: 245 1071 1
: 246 1072 1 END
: 247 1073 1
: 248 1074 0 ELUDOM

! end of module BASSCANTYPAHEAD

PSECT SUMMARY

Name	Bytes	Attributes
_BAS\$CODE	244	NOVEC, NOWRT, RD, EXE, SHR, LCL, REL, CON, PIC, ALIGN(2)

Library Statistics

BASCANTYPAHEAD
1-005

16
16-Sep-1984 00:03:23
14-Sep-1984 11:54:44

VAX-11 Bliss-32 V4.0-742
[BASRTL.SRC]BASCANTYP.B32;1

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(3)

File	----- Total	Symbols Loaded	----- Percent	Pages Mapped	Processing Time
:_\$255\$DUA28:[SYSLIB]STARLET.L32;1	9776	15	0	581	00:01.2

COMMAND QUALIFIERS

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

: Size: 232 code + 12 data bytes
: Run Time: 00:10.7
: Elapsed Time: 00:25.1
: Lines/CPU Min: 6005
: Lexemes/CPU-Min: 40277
: Memory Used: 157 pages
: Compilation Complete

