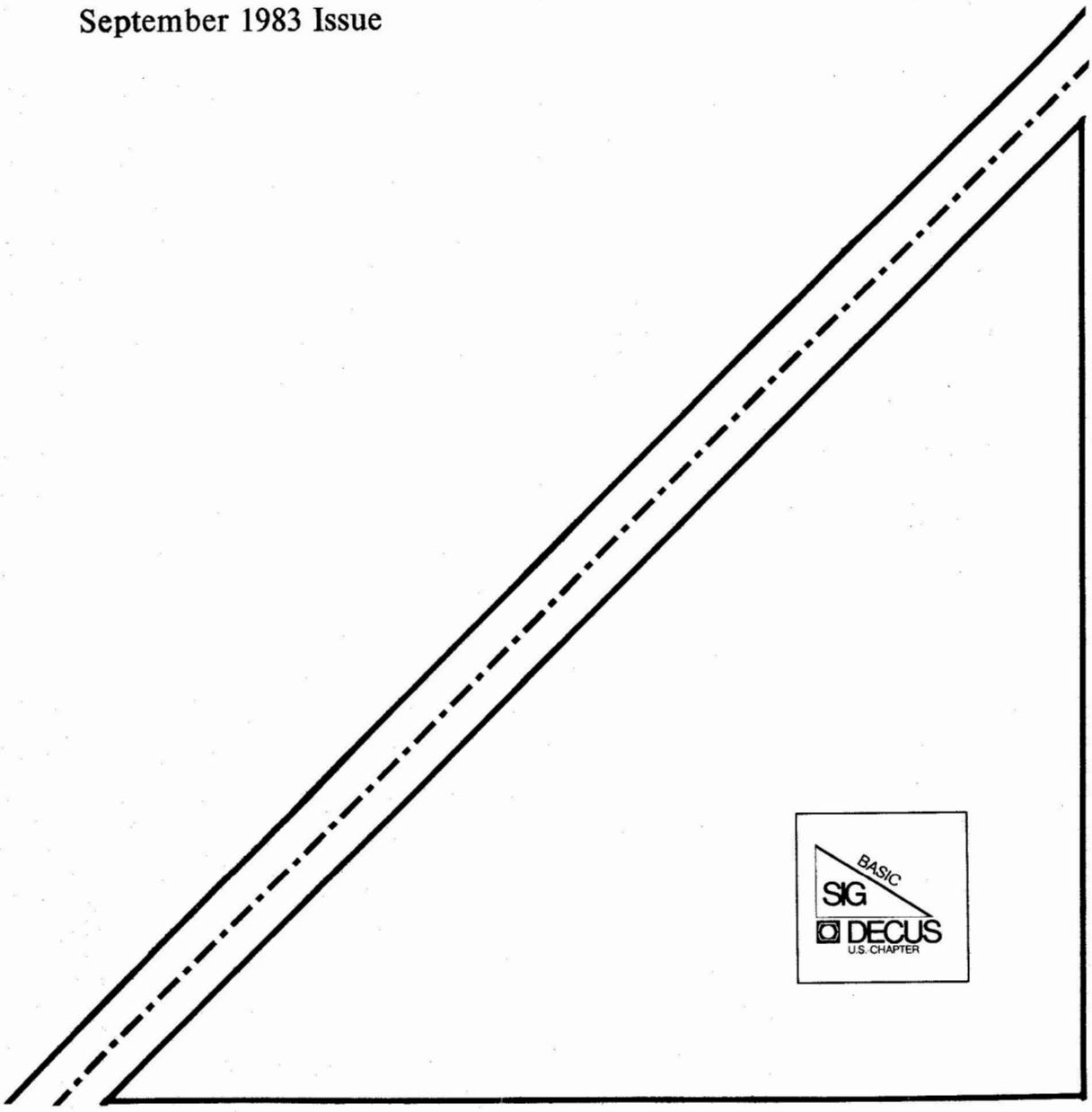
BASIC SIG

September 1983 Issue



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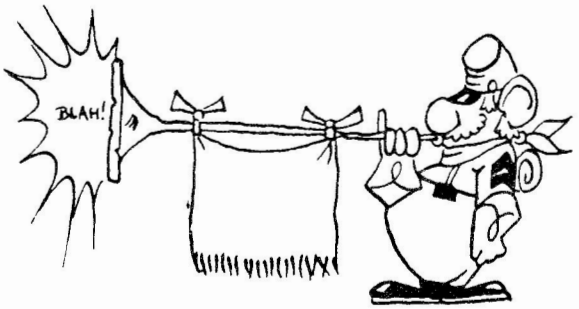

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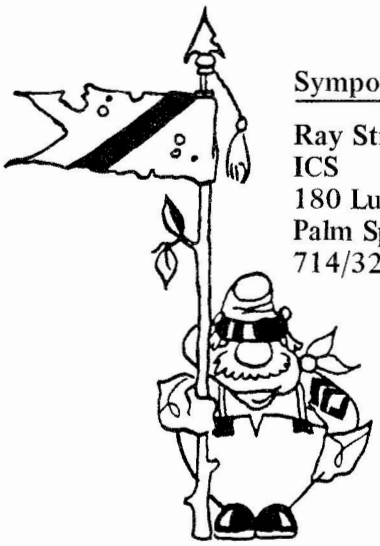

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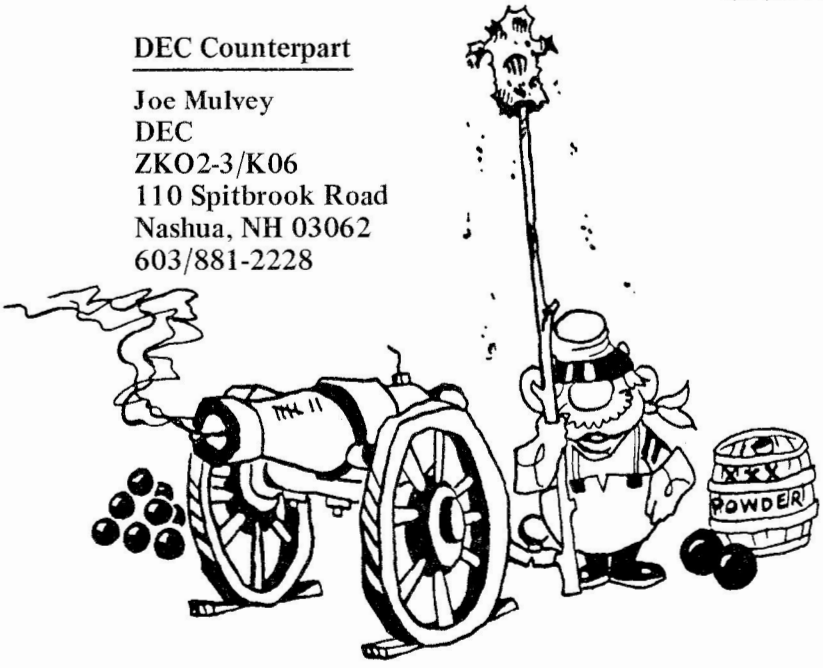

Wish List

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Computer Products, Inc.
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Real Programmers Don't Write Specs

by

Peter S. Hill
NCA Corporation

Real Programmers don't write specs -- user should consider themselves lucky to get any programs at all and like what they get.

Real Programmers don't comment their code. If it was hard to write, it should be hard to understand.

Real Programmers don't write application programs; they program right down on the bare metal. Application programming is for feebs who can't do systems programming.

Real Programmers don't eat quiche. In fact real programmers don't know how to SPELL quiche. They live on Twinkies, Doritos, Coke and Szechwan food.

Real Programmers don't writ in COBOL. COBOL is for wimpy applications programmers.

Real Programmers' programs never work right the first time. But if you throw them on the machine they can be patched into working in 'only a few' 30-hour debugging sessions.

Real Programmers don't write in FORTRAN. FORTRAN is for pipe stress freaks and crystallography weenies.

Real Programmers never work 9 to 5. If any real programmers are around at 9 AM it is because they were up all night.

Real Programmers don't write in BASIC. Actually, no programmers write in BASIC after the age of 12.

Real Programmers don't write in PL/1. PL/1 is for programmers who can't decide whether to write in COBOL or FORTRAN.

Real Programmers don't play tennis, or any other sport that requires you to change clothes. Mountain climbing is OK, and real programmers wear their climbing boots to work in case a mountain should suddenly spring up in the middle of the machine room.

Real Programmers don't document. Documentation is for simps who can't read the listings or the object code.

Real Programmers don't write in PASCAL or BLISS or ADA or any of those PINKO computer science languages. Strong typing is for people with weak memories.

BASIC+2 V2.1 for RSTS/E

Installation Notes

by

Richard W. Hill

Software Techniques, Inc.

The Basic+2 V2.1 installation on RSTS/E is easy but takes large amounts of CPU time. I encountered only one problem with the installation procedure and that was easy enough to take care of at the end of the installation. So all in all the up-grade goes very well. I will outline the problem I encountered and then give some patch locations within the compiler for some of the various defaults specified in the dialogue phase.

The problem that occured is that the BP2 RTS is not always patched with the name and location of the compiler. This occurs when you have selected the installation of the RTS and the installation work files are in an account other than the one from which the installation is being done. The installation procedure looks for patch in an ONLPAT command file in the current account and not on the work account. An easy solution for this is to copy this ONLPAT command file from the work account to the account from which the installation is being done. This file can be copied while the compiler is being built. You will have plenty of time. The file name will be 'xxxRTS.CMD' where 'xxx' is the CCL name selected for the compiler. This file will be deleted at the end of the installation if you specified that the installation files are to be deleted.

The various patch locations in BP2 V2.1 compiler for RSTS/E are listed below. The base address and offset are listed as they appear in the GBLPAT commands of the TKB command file for the compiler. The values listed in parenthesis are the octal base and offset to use with ONLPAT when accessing these values. All ASCII text values should be padded with spaces (octal 40) and not nulls.

Default switch settings - word 1:

Base: BASIC (0:0)
Offset: $ACT (10750)
Size: 1 word
Value: Bit Flags

Value	Bit	Description
1	0	MAP
2	1	CHAIN
4	2	LINE
10	3	OBJECT
20	4	DEBUG
40	5	SYNCHK
100	6	BRLRES
200	7	DSKLIB
400	8	RMSRES
1000	9	OLDRES
2000	10	CLUSTER
4000	11	CROSS
10000	12	LIST
20000	13	RUN
40000	14	MACRO OUTPUT

Default switch settings - word 2:

Base: BASIC (0:0)
Offset: $ACT2 (10752)
Size: 1 word
Value: Bit Flags

Value	Bit	Description
40	5	DECLINING
100	6	KEYWORDS
400	8	RUN/LOAD flags
1000	9	WARNING
4000	11	RSTS/E Data cache enabled

Default settings for debug flag:

Base: BASIC (0:0)
Offset: $DEBFL (10754)
Size: 1 word
Value: Bit Flags

Value	Bit	Description
1	0	DUMP

Default file organization:

Base: BASIC (0:0)
Offset: $PARST (10756)
Size: 1 word
Value: Bit Flags

Value	Bit	Description
2	1	CALLSCAN
4	2	SEQUENTIAL ORG
10	3	RELATIVE ORG
20	4	INDEX ORG
40	5	VIRTUAL ORG

Default host operating system:

Base: BASIC (0:0)
Offset: $HOSSY (4774)
Size: 1 word
Value: Integer flag

Value	Description
1	RSX-11M
4	RSTS/E
5	VMS
6	RSX-11M PLUS

Default target operating system:

Base: BASIC (0:0)
Offset: $TARSY (10760)
Size: 1 word
Value: Integer flag

Value	Description
1	RSX-11M
4	RSTS/E
5	VMS
6	RSX-11M PLUS

Default data type:

Base: BASIC (0:0)
Offset: $TYPDE (10762)
Size: 1 word
Value: Integer Flag

Value	Description
0	EXPLICIT
1	INTEGER
3	REAL

```
Default integer size:
   Base:   BASIC   (0:0)
   Offset: $SIZIN  (10764)
   Size:   1 word
   Value:  Integer Flag
           Value   Description
           -----   -----------
               1   BYTE
               2   WORD
               3   LONG

Default real size:
   Base:   BASIC   (0:0)
   Offset: $SIZRE  (10766)
   Size:   1 word
   Value:  Integer flag
           Value   Description
           -----   -----------
               5   SINGLE
               6   DOUBLE

Default scale factor:
   Base:   BASIC   (0:0)
   Offset: $SFCTR  (5006)
   Size:   1 word
   Value:  Integer

Default task extension quanity:
   Base:   BASIC   (0:0)
   Offset: $EXT    (5024)
   Size:   1 word
   Value:  Integer

Prompt message:
   Base:   BASIC   (0:0)
   Offset: $PROMT  (11014)
   Size:   6 bytes
   Value:  ASCII text - 'BASIC2'

Installed name - CCL:
   Base:   BASIC   (0:0)
   Offset: $CCNAM  (11006)
   Size:   6 bytes
   Value:  ASCII text - 'BP2'

Base version level:
   Base:   BASIC   (0:0)
   Offset: $VERS   (11026)
   Size:   6 bytes
   Value:  ASCII text - '2.1-00'
```



```
Default filetype:
   Base:   BASIC   (0:0)
   Offset: $F.TYP  (7172)
   Size:   4 bytes
   Value:  ASCII filetype - '.B2S'

Full filespec for RMS resident library:
   Base:   BASIC   (0:0)
   Offset: $RESRM  (5466)
   Size:   36 bytes
   Value:  ASCII filespec or 'NONE'

Full filespec for Basic+2 resident library:
   Base:   BASIC   (0:0)
   Offset: $RESBP  (5532)
   Size:   36 bytes
   Value:  ASCII filespec or 'NONE'

RMS cluster library name:
   Base:   BASIC   (0:0)
   Offset: $CLRMS  (5706)
   Size:   10 bytes
   Value:  ASCII filespec or 'NONE'

Basic+2 cluster library name:
   Base:   BASIC   (0:0)
   Offset: $CLBP2  (5720)
   Size:   10 bytes
   Value:  ASCII filespec or 'NONE'

Default cluster library:
   Base:   BASIC   (0:0)
   Offset: $CLXTA  (5732)
   Size:   10 bytes
   Value:  ASCII Filespec or 'NONE'

Full filespec for disk (OLB) library:
   Base:   BASIC   (0:0)
   Offset: $DSKLB  (5576)
   Size:   36 bytes
   Value:  ASCII filespec - 'LB:BP2OTS'

Full filespec for RMS ODL file:
   Base:   BASIC   (0:0)
   Offset: $RMSOD  (5642)
   Size:   36 bytes
   Value:  ASCII filespec - 'LB:RMSRLX'
```

```
Full filespec for compiler RUN code:
   Base:   BASIC   (0:0)
   Offset: $R.DEV  (5126)
   Size:   36 bytes
   Value:  ASCII filespec - 'SY:[1,2]BP2RUN.TSK'

Compiler filespec for RUN/LOAD support:
   Base:   BSPWN   (437:0)
   Offset: CMPNAM  (366)
   Size:   20 bytes
   Value:  ASCII filespec - 'SY:[1,2]BP2IC2.TSK'

Compiler workfile device and account:
 (TMP1nn.TMP and TMP2nn.TMP)
   Base:   BASIC   (0:0)
   Offset: $T.DEV  (5054)
   Size:   14 bytes        (size is limited to $T.DSZ defined
                            in the TKB command file)
   Value:  ASCII filespec

Compiler workfile device and account:
 (TEMPnn.TMP)
   Base:   BASIC   (0:0)
   Offset: $W.DEV  (6204)
   Size:   24 bytes        (size is limited to $T.DSZ defined
                            in the TKB command file)
   Value:  ASCII filespec

Device and account for primary HELP file:
   Base:   BASIC   (0:0)
   Offset: $HLP.N  (5072)
   Size:   14 bytes
   Value:  ASCII filespec - 'SY:[1,2]'

Device and account for Basic+2 ODL's:
   Base:   BASIC   (0:0)
   Offset: $ODL.DV (5110)
   Size:   14 bytes
   Value:  ASCII filespec - 'LB:'

Page width for listing:
   Base:   BASIC   (0:0)
   Offset: $LWID   (10770)
   Size:   1 word
   Value:  Integer
```



```
Page length for listing:
   Base:   BASIC   (0:0)
   Offset: $LLEN   (10772)
   Size:   1 word
   Value:  Integer
```

The compiler work file device and account specification cannot be longer than the specified with the symbol $T.DSZ which is defined in the TKB command file. Therefore, during the dialogue, specify a long name, such as 'DR1:[200,200]' and patch in the desired device and account later. If the value specified at $W.DEV contains an invalid device or logical name, the compiler will blow-up with the following error:

```
??? Internal error in work file system
    Unable to open workfile on default device
RSTS V8.0-06 ... at line  1100  in "INIT  "
```

If the value at $W.DEV contains a valid device and/or logical but $T.DEV does not, you will get the following error:

```
?Error opening compiler work files on X:
 Status is:  0  at line  1201
?Fatal error during initialization - Aborted.
?Not a valid device at line  1201  in "INIT  "
"INIT  " called at line  1010  in "BASIC "
```

If either $T.DEV or $W.DEV does not contain a device name, SY: will be used and if no account is specified, the current account will be used.

Enabling date caching for STK and TKB work file.

By

Brian Nelson

The following patch will allow STK and 7.2 SLOTKB to turn on data cacheing for the task builder's work file. For very large task builds this patch could have, depending in the system load, the effect of making STK CPU bound.

For the "File to patch?" prompt, answer with: DDn:$STK.TSK, TKB.TSK or SLOTKB.TSK.

Note that future patches for STK may require the use of larger offset address into PATCH.

Note also that the data cacheing will only work for privileged users as NO attempt is made here to drop any temporary privileges. System performance could be adversely affected by this patch due to heavy activity in the cache in XBUFF.

Usage:

```
RUN $ONLPAT
Command file name ? STKPAT
```

Following is the listing for STKPAT.CMD

```
! STKPAT.CMD
! Enable data caching for STK and TKB work file.
!
File to patch?
Base address? .OPFNB+410+1574
Offset address? 140
 Base   Offset  Old     New?
??????  000140  000020  ? <LF>
??????  000142  000043  ? <LF>
??????  000144  001402  ? <LF>
??????  000146  012704  ? 4737
??????  000150  000032  ? PATCH+10
??????  000152  132760  ? ^Z
Offset address? ^Z
Base address? PATCH
Offset address? 10
 Base   Offset  Old     New?
??????  000010  000000  ? 12704
??????  000012  000000  ? 32
??????  000014  000000  ? 12765
??????  000016  000000  ? 10040
??????  000020  000000  ? 22
??????  000022  000000  ? 207
??????  000024  000000  ? ^C
```


BASIC SIG Wishlist

By

Joe Mulvey

BASIC SIG WISHLIST - PRINTED ON 31-Aug-83 AT 10:10 AM

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00001	04/23/80	04/24/80	Y

WISH:
INTERPRETED CODE MIXED WITH COMPILED CODE IN A CHECKOUT SYSTEM. 3 LEVELS OF BASIC: INTERPRETED, FAST COMPILE, AND OPTIMIZED COMPILE ALL WORKING TOGETHER.

DEC RESPONSE:
AGREE WITH THE GOAL OF EASY CHECKOUT PLUS GOOD PERFORMANCE, THIS IS A GOAL OF DEC BASIC. (LEAVE COMPILE/INTERPRET ISSUE TO DEC).

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00002	04/23/80	04/24/80	Y

WISH:
INLINE CODE FOR BP2 FOR INTEGER OPERATIONS AT LEAST.

DEC RESPONSE:
POSSIBLE. THINKING ABOUT IT.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00003	04/23/80	04/24/80	Y

WISH:
IMPLEMENT ARCCOS/ARCSIN RADIAN FUNCTIONS.

DEC RESPONSE:
WILL CONSIDER IF ENOUGH REQUESTS ARE MADE FOR IT
(FUNCTION AVAILABLE VIA *CALL* ON VAX BASIC)

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00004	04/23/80	04/24/80	Y

WISH:
PRINT USING FORMAT THAT ALLOWS ZERO SUPPRESSION FROM THE RIGHT. I.E. 1.3600 = TO 1.36 BUT 1.3645 = 1.3645

DEC RESPONSE:
WILL CONSIDER
SET TO LOW PRIORITY

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00005	04/23/80	04/24/80	Y

WISH:
MORE DATE CONVERSION ROUTINES, I.E. SYSTEMDATE AS
MMM. DD, 19YY

DEC RESPONSE:
EASY TO DO WITH USER_DEFINED FUNCTIONS, DON'T SEE NEED IN PRESENT
BASIC. NEED ARTICLE IN NEWSLETTER CONTAINING FUNCTIONS TO DO
THIS

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00006	04/23/80	04/24/80	Y

WISH:
ALLOW MULTIBLE SUBPROGRAMS TO BE COMPILED INTO A SINGLE
OBJECT FILE FROM A SINGLE SOURCE FILE

DEC RESPONSE:
AVAILABLE IN VAX-11 BASIC. WILL CONSIDER FOR PDP-11's (LOW PRIORITY)

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00007	04/23/80	04/24/80	Y

WISH:
NEW BIT FOR CVT$$ FUNCTION 512 - CONVERTS "(" AND ")"
TO "[" AND "]". THE 64 BIT WOULD TAKE PRECEDENCE OF THE
512 BIT SO THAT CVT$$(A$,-1%) WILL WORK AS IT DID BEFORE

DEC RESPONSE:
REQUIRES MORE THOUGHT ON OUR PART TO MAKE SURE NO PROBLEMS FOLLOW.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00008	04/23/80	04/24/80	Y

WISH:
B2XREF TO ACCESS THE MCR/CCL ENTRY LINE SO
>B2X OUT/SOU/KEY/FUN
WOULD WORK

DEC RESPONSE:
WILL CONSIDER

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00009	04/23/80	04/15/83	Y

WISH:
BRANCH ON NON-EXISTENT FILE (IN OPEN) AND OTHER
ERRORS

DEC RESPONSE:
Will consider.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00010	04/23/80	04/24/80	Y

WISH:
BETTER DOCUMENTATION ON THE ACTION USED BY THE COMPILER
IN HANDLING STEP SIZES THAT ARE NOT EXACT BINARY FRACTIONS

DEC RESPONSE:
WILL CONSIDER A NEWSLETTER ARTICLE FOR THIS.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00011	04/23/80	04/15/83	Y

WISH:
MID ON LEFT SIDE OF THE = EG. MID(A$,5,3)="CAT"

DEC RESPONSE:
AGREE WITH INTENT. MAY CONSIDER.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00012	04/23/80	10/13/82	Y

WISH:
USER FUZZ FACTOR FOR APPROX = COMPARE

DEC RESPONSE:
WILL CONSIDER. VIEWED AS LOW PRIORITY.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00013	04/23/80	04/24/80	Y

WISH:
A CLOSE ALL STATEMENT TO CLOSE ALL CHANNELS

DEC RESPONSE:
WILL CONSIDER

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00014	04/23/80	04/24/80	Y

WISH:
AN END OF FILE DETECTION FUNCTION E.G. I%=EOF(CHANNEL%)

DEC RESPONSE:
WILL CONSIDER.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00015	04/23/80	04/24/80	Y

WISH:
AN END OF DATA FUNCTION EG. I%=EOD

DEC RESPONSE:
WILL CONSIDER

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00016	04/23/80	04/24/80	Y

WISH:
OPTIONAL ARGUMENT FOR THE RND FUNCTION

DEC RESPONSE:
WILL CONSIDER

BASIC SIG WISHLIST - PRINTED ON 31-Aug-83 AT 10:10 AM

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00017	04/23/80	04/24/80	Y

WISH:
STATIC PRESET (DATA INITIALIZATION) AT COMPILE TIME

DEC RESPONSE:
WILL CONSIDER. USE MACRO ROUTINES THAT DECLARE AND DEFINE
COMMON/MAP PSECT CONTENTS, THEN LINK INTO TASK.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00018	04/23/80	04/15/83	Y

WISH:
A FUNCTION TO RAISE THE ERROR FLAG

DEC RESPONSE:
CALL BAS$ERROR ON VAX FOR NOW, MAY CONSIDER THIS ENHANCEMENT
FOR THE FUTURE.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00019	04/23/80	04/15/83	Y

WISH:
RESTRICT CHANGE TO A ONE DIMENSIONAL ARRAY

DEC RESPONSE:
THIS MAY BREAK PROGRAMS.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00020	04/23/80	04/24/80	Y

WISH:
MAT OPERATIONS IN PLACE

DEC RESPONSE:
WILL CONSIDER

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00021	04/23/80	04/24/80	Y

WISH:
FUNCTION FOR DETERMINANT

DEC RESPONSE:
WILL CONSIDER

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00022	12/09/81	10/13/82	Y

WISH:
Wish:

Add support in the RSTS/E Basic-Plus-2 product for some of the n
ewer
SYSCALL's in RSTS.
Particularly the Spawn SYSCALL and especially the spool SYSCALL.

Reason:

These are particularly useful SYSCALL's and support really shoul
d be
forth coming.

DEC RESPONSE:

We agree. Supported RSTS SYS() calls should be supported by BP2 also.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00023	12/10/81	10/13/82	Y

WISH:
Matrix operations like A=A*A (where A is a matrix) should work
the same as A=B*C where A,B, and C are all identical matices.
(If this works okay for scalars, why not for mats?)

DEC RESPONSE:
BP2 implementation of some MAT functions does use the array for
intermediate storage. We will look into modifying this situation
in the future.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00024	12/10/81	10/25/82	Y

WISH:
Give VAX BASIC immediate mode full functionality. For example,
allow the call of LIB$ routines that reside in STARLET.OLB only.

DEC RESPONSE:
VAX-11 BASIC cannot "LOAD" object modules other than BASIC
object modules. This is fundamentally why most LIB$ routines
are not available. We may consider removing this limitation
in some future version.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00025	05/11/82	10/25/82	Y

WISH:
I would like to see a bit data type. This would avoid unecessary
masking and would make the code much more readable.

DEC RESPONSE:
WILL CONSIDER

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00026	05/11/82	09/02/82	Y

WISH:
Please add RESUME with a label.

Reason: Now that Basic has labels, line numbers will be used much less,
so RESUMing to a line number will have little use.

DEC RESPONSE:
Will consider.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00027	05/11/82	09/27/82	Y

WISH:
Please add the functionality to be able to chain with
line to all versions of BASIC

DEC RESPONSE:
Will consider.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00028	05/11/82	09/27/82	Y

WISH:
allow a user to invoke an error exception
or document how it can be done

DEC RESPONSE:
Will consider.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00029	05/11/82	09/27/82	Y

WISH:
allow a the ability to add an error abort

DEC RESPONSE:
If you mean an error signaling capability, will consider.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00030	05/12/82	09/27/82	Y

WISH:
Allow MACROs. This would really enhance the BASIC+2 product and
would seem to fit nicely with conditional assemblies.

DEC RESPONSE:
Will consider.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00031	05/13/82	08/27/82	Y

WISH:
Provide a cross compiler on VMS that will allow
users to develop and task build code on the VAX
for their RSX-11M system.

DEC RESPONSE:
Will consider. In VAX BASIC V2, there is a /FLAG:BP2 switch that
will direct the compiler to recognize only the BP2 language subset.
This will permit to some extent host system compilation. Generation
of PDP-11 OBJ's from the VAX BASIC code generator does not exist
(yet).

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00032	05/13/82	10/13/82	Y

WISH:
We need a reasonably fast inkey$ function or something like it
for single character input without a line terminator.

DEC RESPONSE:
Will consider.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00033	05/13/82	10/25/82	Y

WISH:
It would be helpful to have the ability to specify the output
width of the cross reference listing.

Since our standard size paper is 80 column, it is a hassle to change
paper.

Thanks so much.

We love DEC!!!

DEC RESPONSE:
WILL CONSIDER

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00034	12/07/82	04/15/83	Y

WISH:

Why not allow the lower bound of an array to be defined as in FORTRAN?

DEC RESPONSE:
May consider.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00035	12/07/82	04/14/83	Y

WISH:
Provide a method to allow chaining in RSX-11M Basic without having
to install.

DEC RESPONSE:
This is currently provided in BP2.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00036	12/07/82	04/14/83	Y

WISH:

Provide capabilility to chain to line numbers in RSX-11M Basic Plus 2

DEC RESPONSE:
May consider

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00037	12/07/82	04/15/83	Y

WISH:
Need a single charater input without CR LF.

DEC RESPONSE:
Use ONECHR or QIO. May consider an INKEY$ type function
in the future.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00038	12/08/82	04/14/83	Y

WISH:

Pointer (Pascal,PL/1 types) data types please? A compiler that does not

support immediate mode but exists only for compiling without other enhan
cements?
User control of impure areas (to support pointer types)?
Generating in-line (no threads) for very fast subprograms?
thank you!

DEC RESPONSE:

It is unlikely that we will provide a pointer data type. We don't feel
it's in the spirit of the language.

As for a compiler that doesn't support immediate mode, we may consider
a subset compiler.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00039	12/08/82	04/14/83	Y

WISH:
COMPILED NATIVE MODE BASIC
INTRINSIC BIT MANIPULATION VIA BIT ARRAY DECLARATION

DEC RESPONSE:
May consider.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00040	12/08/82	04/15/83	Y

WISH:
It would be nice if the VAX-11 BASIC compiler had the option
of multiple pass optimizations like some other languages do.
It would help the performance and the reputation of the product.

DEC RESPONSE:
We agree in principle; will consider.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00041	12/08/82	04/15/83	Y

WISH:
Ability to use $ and % variable suffix in a declared variable
Example:

```
MAP (TEST) STRING TEST1$ = 3
         , TEST2$ = 4
         , LONG TEST3%
         , TEST4%
```

DEC RESPONSE:
We have had some feedback on this and may look into doing it.
In the meantime, we recommend that you don't use these suffixes.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00042	12/08/82	04/14/83	Y

WISH:
VAX BASIC should support RMS records with variable length records
with fixed length headers.

DEC RESPONSE:
May consider.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00043	12/08/82	04/14/83	Y

WISH:
Supply a task-builder for programs too big for SLOTKB.

For instance: The BP2 compiler will soon be too big for SLOTKB.
Supply a program which is even bigger (call it: VSLTKB or GNIGHT).

I also have programs (nearly) this big, and need a bigger task-builder.

DEC RESPONSE:
Thank you for your suggestion. This item should be brought to the
attention of the RSX Development Group.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00044	12/09/82	04/14/83	Y

WISH:

Provide a non-privileged function in BP2 to return the date in internal format. We should not have to be privileged to avoid the string and code overhead of converting 31-Dec-82 to 12365

DEC RESPONSE:
This is a good candidate for a BASIC SIG Library Function.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00045	12/09/82	04/14/83	Y

WISH:

Put the BASIC-PLUS-2 compiler on the PC (the cross-development is ugly)

DEC RESPONSE:
We agree. We will work this issue with the PROFESSIONAL Group.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00046	12/09/82	04/14/83	Y

WISH:
Put that example converter program on the V2 kit. I like it, but its gonna be a pain to type it in

DEC RESPONSE:
Thank you for your input.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00047	12/09/82	04/14/83	Y

WISH:

Supply BASIC-PLUS-2 V2.0 with a /VAX switch to catch those references

(we have found two so far) which work correctly on BP2 but not on VAX basic.

DEC RESPONSE:
We agree in principle and will probably do something in the longer term to do this.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00048	12/09/82	04/14/83	Y

WISH:

Please, I know this is a repeat & it may not pertain to BASIC, but PLEASE make ERR & ERL examinable under DEBUG!!

Thank You

DEC RESPONSE:
For BP2, it's there. For VAX-BASIC, we'll discuss this with the DEBUG people.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00049	12/09/82	04/14/83	Y

WISH:
When opening a unit record device (ie TI: or LP:) if the allow clause is ALLOW NONE please attach to the device so that two basic programs do not over write each other.
example: Program A open LP: allow none and program B opens the LP: and both start printing you will get intermixed i/o.

DEC RESPONSE:

For TI:, we will consider. For LP:, the RMS group is currently looking into this issue.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00050	12/09/82	04/14/83	Y

WISH:
Allow the use of longwords as array subscripts.
I need virtual arrays with dimensions larger than 32767.
...the multi-paging capabilities of virtual arrays is great!!

DEC RESPONSE:
This is provided in VAX-BASIC. In BP2, we may consider this item, but it may increase array header size.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00051	12/09/82	04/14/83	Y

WISH:
PLEASE GIVE THE FUNCTIONALITY OF
COBOL TO A PRINT-USING REPLACEMENT!

DEC RESPONSE:
May consider.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00052	12/09/82	04/14/83	Y

WISH:
Please have the SIG help define USEFUL
benchmarks for BASIC. I'm really tired
of hearing about Whetstones

DEC RESPONSE:
We agree; we really need something like that. We believe it is underway with some volunteers at the SIG meeting. We need to have them - you are the ones to get them to us.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00053	12/09/82	04/14/83	Y

WISH:
ONECHR on VAX BASIC ... QIO is a HACK !!

DEC RESPONSE:
We agree - it should be there (As one of the developers responded: Don't be a baby, use QIO's).

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00054	12/06/82	04/14/83	Y

WISH:
Please allow the presence of line numbers in INCLUDE or some other syntax thereof to allow include to work with routines which handle errors using RESUME. ALTERNATIVE: Allow the RESUME statement to use a statement label instead of require a line number.

DEC RESPONSE:
More likely to see RESUME to a label.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00055	12/06/82	04/14/83	Y

WISH:
Allow some subset (because of what you describe as a space problem) of the RECORD declaration on the PDP-11. Possibly to allow definition of some simple datatypes (COMPLEX, non-repeating record format, etc.) this would allow user expansions without requiring the contorted code now needed.

DEC RESPONSE:
May consider.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00056	12/07/82	04/14/83	Y

WISH:
Allow substring assignment (MID on LHS).

DEC RESPONSE:
Good idea, may consider.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00057	12/08/82	04/14/83	Y

WISH:
Please consider making labels local to, for example, function definitions, and other appropriate locations. Perhaps a local/global designation for labels would be a solution.

Reason: How many variations of OOPS: can I be expected to come up with?

DEC RESPONSE:
May consider.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00058	12/08/82	04/14/83	Y

WISH:
PROBLEM: IMPLEMENTATION OF MAILBOX COMMUNICATION
DEFINED: AT THE HIGHEST LEVELS OF BASIC CONSTRUCTS THERE EXIST
FEW SYNTAX TOOLS TO FULLY UTILIZE THE FULL SCOPE OF
MBX COMMUNICATION WITHOUT RESORTING TO SYSTEM SERVICE
CALLS (i.e. QIO...)
SOLVED: ADD SYNTAX CAPABILITES TO PROVIDE FOR A MORE HIGHER LEVEL
IMPLEMENTATION OF MBX COMMUNICATION FEATURES

DEC RESPONSE:
See next wish.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00059	12/08/82	04/14/83	Y

WISH:
PREVIOUS WISH CONTINUED.....

EXAMPLE: TO PROVIDE FOR SYNC/ASYNC CAPABILITY SOMETHING SUCH AS:

```
00010       PUT #MBX.CHANNEL%, ASYNC
```

THIS WOULD ALLOW A MBX MESSAGE TO BE SENT ASYNCHRONOUSLY AND NOT REQUIRE MESSAGE RECEIPT BEFORE PROGRAM EXECUTION RESUMED.....

DEC RESPONSE:
We would like to have the SIG look at this and make some recommendations.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00060	12/08/82	04/14/83	Y

WISH:

Allow RESTORE <channel#> on native-mode sequential (ASCII stream) files on PDP-11 to avoid overhead of closing and re-opening for each scan.

DEC RESPONSE:
Will consider.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00061	12/09/82	04/14/83	Y

WISH:
PROBLEM: BASIC PERFORMANCE WITH DBMS CALLABLE INTERFACE

RSOLVED: ADDITION OF IMBEDDED DML CAPABILITY IN THE VAX 11 BASIC COMPILE

SO AS TO REAP THE 20%-30% PERFORMANCE IMPROVEMENT REALIZED BY THOSE LANGUAGES WHERE DML IS IMBEDDED.....

DEC RESPONSE:
This has been on the wishlist before. We are still looking into it.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00062	12/09/82	04/14/83	Y

WISH:
PLEASE PROVIDE SOME DOCUMENTATION TO ALLOW MACRO ROUTINES TO CREATE AND ALTER STRING LENGHTS. THE MACRO ROUTINE CAN VERIFY THE LENGHT OF A STING IN V1.6 ON THE 11'S. HOWEVER IF THE STRING IS TO SHORT, THE MACRO ROUTINE CAN ONLY RETURN AN ERROR. IF THE MACRO ROUTINE COULD MAKE A LIMITED CALL TO BASIC RTS TO PROVIDE A STRING OF PROPER LENGHT IT WOULD HELP US A LOT.

DEC RESPONSE:
Rumor has it that there will be s SIG newsletter article stating how to do it.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00063	12/09/82	04/14/83	Y

WISH:
I WISH YOU WOULD NOT (PERMANENTLY) NUMBER THE WISHES. I AM TIRED OF SUCH SETANCES AS:

"I WISH TO ADD MY SUPPORT TO #17X. THE PROBLEM WITH #34 IS THAT IT WON'T WORK IF YOU INCLUDE #99, SO #17 SHOULD BE INCLUDED WITH THE #66JL IDEA. AND THANK YOU FOR YOUR ANSWER IN #27, #33, AND #88."

SEE WHAT I MEAN?

DEC RESPONSE:
We agree.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00064	12/09/82	04/14/83	Y

WISH:

Support of MACRO from BP2. Several times I have heard people complain about problems from MACRO, and DEC's response has been "MACRO IS NOT SUPPORTED." This is news to me, and seems strange because:

- o MACRO-11 is only language universal across all PDP-11 Op. Systems.
- o Calling MACRO-11 is extensively documented
- o DEC sometimes recommends using MACRO subroutines

...continued

DEC RESPONSE:
See next wish.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00065	12/09/82	04/14/83	Y

WISH:
...continued
o Can offer both size and speed improvements
o CALL BY REF only works with MACRO subprograms

Solution is simple: SUPPORT MACRO!

P.S. Thanks for version 2 -- it looks fantastic!

DEC RESPONSE:
Thank you for your thoughts. It's unlikely we'll change our position.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00066	12/07/82	04/14/83	Y

WISH:

Would like end_of_file condition handled by INPUT/GET stmts rather than be

treated as an error condition. For example: GET/END_OF_FILE=label ... s o
that control would be transfered to that label on EOF.
Reason: Cleaner code.

DEC RESPONSE:
May consider.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00067	12/07/82	04/14/83	Y

WISH:
Provide a way at run-time to change the channel of a virtual array.

DEC RESPONSE:
May consider.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00068	12/07/82	04/14/83	Y

WISH:
LONG integer type for array subscripts.
Reason: Larger virtual arrays, e.g. DIM ARDATA%(80000)

DEC RESPONSE:
May consider.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00069	12/08/82	04/14/83	Y

WISH:

There is a problem in BASIC+ that is almost more of a bug than a new feature! LEFT, RIGHT, and MID should work as LEFT$, MID$, RIGHT$. I realize you can't make LEFT, RIGHT and MID illegal -- but please make the other version legal. It is hard to show students what a string function is and then have to explain LEFT, MID and RIGHT.
INSTR%, etc.

DEC RESPONSE:
You're right. We're not sure we can fit in it, but we will definitely look at it.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00070	12/08/82	04/14/83	Y

WISH:

I Would like to add my plea to make the Basic-plus 2 compiler generate as much in-line code as possible. V2 has done excellent things with the Basic language. Now lets do something about its speed.
Thank you

DEC RESPONSE:

We agree in principle, but we do not want to blow away any application programs. There may be some inline code we can do. There are of course definite benefits to threaded code.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00071	12/09/82	04/14/83	Y

WISH:
When opening a Virtual type file with a large Recordsize (i.e. 4096)

separate disk accesses are made every time a different block is referenc
ed,
even though the referenced block is already in the buffer previously called in. In effect this means no speed gain from accessing Virtual files with large buffers, even though buffer space is allocated.

This problem has been mentioned to the V2

DEC RESPONSE:
This is a known problem that we are looking into fixing. We suggest you submit an SPR.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00072	12/09/82	04/14/83	Y

WISH:
PLEASE DO NOT DUPLICATE CODE IN YOUR OBJECT LIBRARY.
THERE ARE MANY CASES IN WHICH BP/2 AND RMS HAVE THE
SAVE ROUTINES BUT DIFERENT ENTRY POINT NAMES
IF BP/2 COULD USE THE SAME ONES AS RMS THIS WOULD
REDUCE THE SIZE OF MANY TASKS.

DEC RESPONSE:
Point well taken; we certainly will look into this and take advantage of any savings that can be done.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00073	05/23/83	08/24/83	Y

WISH:
In regard to large buffersizes on virtual arrays--don't change it!
We use the capability as a simple virtual paging mechanism. Works great!

DEC RESPONSE:
We won't.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00074	05/23/83	07/25/83	Y

WISH:
Please fix CCPOS and TAB to subtract out backspaces.

DEC RESPONSE:
This is unlikely; it affects throughput performance.
We will talk with the various operating system groups about this.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00075	05/23/83	07/25/83	Y

WISH:
Eliminate the remaining line number.

DEC RESPONSE:
No! (That's our prevention of having PASCAL programs run through the BASIC compiler.)

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00076	05/23/83	07/25/83	Y

WISH:
Allow calling a program with parameters. Maybe:
PROGRAM XXX(A,B,C$)

DEC RESPONSE:
We really don't understand this. We think you can do this with the CALL statement. We may look at this, but CHAIN with parameters is unlikely.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00077	05/23/83	07/25/83	Y

WISH:
The increased compilation time drastically reduces the interactiveness of Basic, particularly on RSTS. Please get faster compilation, or even a B+2 that pseudo-compiles, like Basic-Plus. The lack of interaction makes debugging really difficult. ...and immediate mode and RUN don't work with

overlaid programs. The BIG programs are the ones that need the help.

DEC RESPONSE:
The goal of the "point" releases we are planning is to provide compile time performance improvements.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00078	05/23/83	07/25/83	Y

WISH:
Add integer and float data types to FIELD. Dynamic maps are useless for multiple file I/O buffers. Instead of making FIELD decline, improve it!

DEC RESPONSE:
Unlikely we'll do it. FIELD as currently implemented is compatible with other BASIC's. Doing anything to FIELD will disturb this compatibility.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00079	05/23/83	07/25/83	Y

WISH:
Allow RESUME to a label. This will make %INCLUDE more useful, too.

DEC RESPONSE:
Will consider.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00080	05/23/83	07/25/83	Y

WISH:

Add EDIT$() to Basic-Plus. Reason: upward compatibility, more readable.

DEC RESPONSE:
Not likely (Not enough room in Basic-Plus).

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00081	05/23/83	07/25/83	Y

WISH:
Add an auto-increment operator, like C, if not same syntax.
++variable_name
Reason: faster routine than LET Z = Z + 1

DEC RESPONSE:
Not likely. If done, however, we would not use this syntax, but might optimize the compiler for the function.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00082	05/23/83	07/25/83	Y

WISH:
Provide a way to do a real block I/O GET from Vax Basic.

DEC RESPONSE:
Will consider.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00083	05/24/83	07/25/83	Y

WISH:
ALLOW CHAINING TO A LINE NUMBER IN BASIC-PLUS 2.

DEC RESPONSE:
Available on RSTS/E.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00084	05/24/83	07/25/83	Y

WISH:
THE VAX-11 BASIC V2.0 IS A FANTASTIC PRODUCT. & NOW A SOLUTION IT (AS YOU KNOW) IS POSSIBLE TO DO AN INKEY$ WITH A CALL TO THE QIO SYSTEM SERVICE THERE WAS AN EXAMPLE OF THIS IN THE LAST BASIC USERS MANUAL (IM NOT SHURE IF IT EXISTS IN THIS VERSION OR NOT)

GOOD JOB!!

DEC RESPONSE:
Thanks.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00085	05/24/83	07/25/83	Y

WISH:
Please support the VFC recordtype in VAX Basic. It would make reading files created by DCL (like .LOG's) a lot easier.

DEC RESPONSE:
This is a duplicate. Our previous response, "may consider" still applies.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00086	05/24/83	07/25/83	Y

WISH:
NEED A WAY TO NOT END AN IF/THEN/ELSE AT THE NEXT LINE NUMBER IF WE USE ENDIF. SINCE LINE#'S ARE NEEDED FOR RESUME, WE CANNOT COMBINE

GOOD STRUCTURED IF'S WITH ERROR HANDLING AS THE NECESSARY LINE NUMBERS DESTROY THE 'IF' STRUCTURE

DEC RESPONSE:
If we did this, a program could then branch into the middle of an IF/THEN/ELSE structure, which is now flagged as an error.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00087	05/24/83		N

WISH:

The EXTERNAL statement, which "coerces" data types of arguments passed to subroutines at compile time, is great - can I suggest an extension?

ARGUMENT KEYWORDING

```
EXTERNAL LONG FUNCTION XYZZY(ALPHA=INTEGER, BETA=STRING)

        After which either of these is valid:
X%=XYZZY(ALPHA=A%, BETA=X$) - or - X%=XYZZY(BETA=X$, ALPHA=A%)
```

Some provision for defaulting missing args within this framework

DEC RESPONSE:

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00088	05/24/83	07/25/83	Y

WISH:
(Cont'd from previous wish) --
Argument defaulting would also be helpful.

Thanks. Viva BASIC V2!

DEC RESPONSE:
Will consider for VAX-11 BASIC.
Unlikely for BASIC-PLUS-2.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00089	05/24/83	07/25/83	Y

WISH:
How about numbering the pages on the PDP-11 listing format?

Now that you've added page numbers, how about producing a table of contents (on VAX and PDP-11) keying page numbers to %TITLE and %SBTTL (like MACRO)?

What? You haven't added page numbers?

Never mind.

DEC RESPONSE:
Will consider.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00090	05/24/83	07/25/83	Y

WISH:
NEED A WAY TO DECLARE OPTION FOR THE DEFAULT CONSTANT TYPE. I WANT TO GET RID OF PERCENT SIGNS ON CONSTANTS NOW THAT I CAN WITH VARIABLES.

DEC RESPONSE:
Not likely, but we will try to make the compiler smarter in this area.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00091	05/24/83	07/25/83	Y

WISH:
ability to 0-fill as well as space fill, on such commands as LSET/RSET, etc.

DEC RESPONSE:
We think you can do this with the STRING$ function.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00092	05/24/83	07/25/83	Y

WISH:
for the new compiler (v2.1), that if the compiler work disk is installed as a non-system disk, then if the user does not have an account on that disk, then he defaults to the system disk.

DEC RESPONSE:
We will consider some improvements in this area.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00093	05/24/83	08/23/83	Y

WISH:
Please make the interpreter less of a pig. I hear 6 users can bring a 780 to its knees. I tried a 6 line program and my working set went up to over 5000 pages to convert centegrate to F.

DEC RESPONSE:
Some improvements have been identified. A better method for freeing up unused pages will be included in the next release which will help. You can also realize some improvement by setting the file protection on the compiler .EXE's to READ and EXECUTE, and re-installing.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00094	05/25/83	08/23/83	Y

WISH:

In interactive basic the following command will bring any VAX/VMS system to its knees.

```
PRINT "X"; WHILE 1=1
```

DEC RESPONSE:
This compute bound program can consume a large amount of system resources, depending upon how it is handled by the VMS scheduler. Since I/O requires a large amount of processing, the job will use a large amount of CPU time if allowed to do so. Also, see the previous wish for some planned improvements.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00095	05/25/83	07/25/83	Y

WISH:

Allow the declaration in a MAP statement to initialize the variable area

```
for instance,  MAP (A) A$ = 'ABCD', B$ = '123456', C% = 3%
```

This would save from having to write initializing code into the program, or from doing a macro routine to define the psect.

DEC RESPONSE:
Will consider.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00096	05/25/83	07/25/83	Y

WISH:
I WISH!!! THAT THE WISH LIST COULD BE SHARED!!!! BY MORE THAN 1(ONE) PERSON MAKING WISHES!!!!

DEC RESPONSE:
Will consider.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00097	05/25/83	08/23/83	Y

WISH:
A function or method to translate a BASIC (VAX-11) I/O channel # to one that can be used by system service to do SYS$GetDev or Sys$GetChan to look at terminal characteristics and to beable to change screen width, wrap/nowrap, etc.

DEC RESPONSE:
This will probably not be part of the language. You can obtain this information by writing USEROPEN routines. In BASIC on VAX/VMS, appendix D gives an example of a USEROPEN routine that provides access to the FAB. Upon successful OPEN of the file, the STV field of the FAB contains the desired channel number.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00098	05/25/83	07/25/83	Y

WISH:
if you really plan to get rid of cvt$%, cvt%$, etc. This will make it interesting to communicate over DECnet to a RSTS Basic-plus program, unless you leave at least swap%

DEC RESPONSE:
No intent to get rid of these.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00099	05/25/83	08/24/83	Y

WISH:
Would like unsigned integers (byte, word, and long).

DEC RESPONSE:
Not likely.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00100	05/25/83	07/25/83	Y

WISH:
Please don't eliminate the last line number!
Is there no tradition in BASIC anymore?

DEC RESPONSE:
Granted!

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00101	05/26/83	07/25/83	Y

WISH:
A multi-user wish list. Also, please, an indication of which nodes support the wishlist. I typed option 3 hundreds of times on the wrong system.

DEC RESPONSE:
Will consider

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00102	05/26/83	08/31/83	Y

WISH:
Document the techniques for (unsupported) forcing of V2.x BP2 to run on RSTS V7.2 and V1.6 BP2 on V8.0 of RSTS. We need a clean migration path, and we need it badly.

DEC RESPONSE:
Please contact your local Software Specialist. They have the information needed to run BP2 V1.6 on RSTS/E V8.0. Note that although this is unsupported, it appears to work and the SWS organization is interested in any feedback on your use of it.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00103	05/26/83	07/25/83	Y

WISH:
Default variable types by alpha ranges of starting character. If we have to make Basic look more like some other language, let's not have it be COBOL.

DEC RESPONSE:
Not likely.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00104	05/26/83	08/31/83	Y

WISH:
Extend the support period for V1.6 BP2. I have do do my GENs between 1 and 7 am, and will have to compile and test about 350 programs before I can come up in production. At current BP2 compiler speeds, we will be at V9.9 before I am done.

DEC RESPONSE:
Yes, we will support V1.6 through Nov-83. This coincides with the planned support period of RSTS/E V7.2.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00105	05/26/83	07/25/83	Y

WISH:
I (and I am sure, others) would be more than glad to put up with the new size and speed of the BASIC version 2 compiler if it and RSTS would compile and run with user I/D space.
Now you have a way to sluff it off onto the RSTS group.

DEC RESPONSE:
If RSTS/E implements I/D space, we will seriously consider using it.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00106	05/26/83	07/25/83	Y

WISH:
Provide as many significant digits for single-precision real numbers as are provided in other languages running on the same hardware

DEC RESPONSE:
There are only 6.9 digits of precision. We print 6 digits because we know it's accurate; otherwise, we think we'd create problems because of the inaccuracy.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00107	05/26/83	07/25/83	Y

WISH:
Do not continue the trend of sending fewer and fewer developers to DECUS. We need MORE technical people. One for EACH flavor of BASIC, please. A VAX BASIC developer will not be able to handle detailed technical questions about BP2. Users do not come to DECUS to talk to marketing types.

DEC RESPONSE:
We agree.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00108	05/26/83	07/25/83	Y

WISH:
Support MACRO subroutines called from BP2.

DEC RESPONSE:
Not likely.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00109	05/26/83	07/25/83	Y

WISH:
Provide a non-privileged method of obtaining the system date (or, preferably any date) in internal format. I should not have to clutter up my (already large) programs with code to retrieve non-sensitive data known by the monitor. To avoid it, I have to use PEEK. So the programs or the users must be privileged. Come on, folks!

DEC RESPONSE:
Our previous response to a duplicate entry:
We think that's a good candidate for the SIG library if that becomes operational.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00110	05/26/83	07/25/83	Y

WISH:
Fix your DEMO Trip Estimator to not overwrite the menu when prompting for input. I was on node EYE on a VT-100.

DEC RESPONSE:
Will consider.

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00111	05/26/83	07/25/83	Y

WISH:
PLEASE SUPPORT GET AND PUT WITH THE COUNT AND USING MODIFIERS IN BP2 ON RSTS. THIS CAN'T BE DIFFICULT TO ADD TO THE LANGUAGE, SINCE IT CAN BE DONE IN A 5-LINE MACRO SUBROUTINE.

DEC RESPONSE:
Not likely.

BASIC SIG WISHLIST - PRINTED ON 31-Aug-83 AT 10:10 AM

WISH NUMBER	DATE OF WISH	DATE OF RESPONSE	RESOLVED
00112	05/26/83	07/25/83	Y

WISH:

RETURN RECOUNT ON PUTS IN BASIC+ AND BP2 ON RSTS, SO THAT THE NOSTALL OPTION WILL WORK ON OUTPUT TO TERMINALS AND LINEPRINTERS.

DEC RESPONSE:
We will talk to the RSTS/E people about this.

DECUS LIBRARY UPDATE

DECUS PROCEEDINGS

For your convenience and information listed below are the current DECUS Proceedings that are available and can be ordered through the DECUS office in Marlboro, Massachusetts. As availability changes this list will be updated.

			DECUS Part No.	Media Service Codes
Europe	1980	Amsterdam, Holland	PRO-81/V07.1	YA
U.S. Fall	1980	San Diego, California	PRO-81/V07.2	YA
Canada	1981	Montreal, Quebec	PRO-81/V07.3	YA
U.S. Spring	1981	Miami, Florida	PRO-81/V07.4	YA
Australia	1981	Brisbane, Australia	PRO-81/V07.5	YA
Europe	1981	Hamburg, Germany*	PRO-82/V08.1	YA
U.S. Fall	1981	Los Angeles, California	PRO-82/V08.2	YA
Canada	1982	Toronto, Canada	PRO-82/V08.3	YA
U.S. Spring	1982	Atlanta, Georgia	PRO-82/V08.4	YA
Europe	1982	Warwick, United Kingdom	PRO-EUR-82	YA
U.S. Fall	1982	Anaheim, California	PRO-ANA-82	YA
U.S. Spring	1983	St. Louis, Missouri	PRO-STLO-83	YA

* Available from Geneva only. None available until further notice.

PLEASE NOTE: The DECUS Proceedings are no longer grouped together in one volume; they are each listed separately. European, Canadian and Australian Proceedings will be listed by the year, date and place of the symposium. U.S. Proceedings will be listed by the year, season (Spring or Fall) and place of the symposium.

There will no longer be a separate publication for the Large Systems (the 10/20 Reports). Instead, they will be incorporated into the Proceedings. This will begin with the 1982 Fall Symposium Proceedings.

Additions to the Roger Williams College Collection

Version: June 1983

Author: Rolland Everitt, Roger Williams College, Bristol, RI

Operating System: RSTS/E V7.2, RT-11

Source Language: BASIC-PLUS

Other Software Required: HELP.BAC, HELP.HLP, QUEMAN, QUMRUN, RPGII, FORTRAN IV

The following is a brief description of some of the programs on the tape.

GRAPH.FOR is a RSTS/E Fortran IV subroutine which will plot up to five simultaneous functions of one independent variable. The output consists of two files. FTN1.DAT contains the plot, which is 100 columns wide. FTN2.DAT contains the tabulated data for the functions.

FORTRA.HLP, ISOMET.HLP, and XYPLOT.HLP are text files to be used with the RSTS/E HELP facility. FORTRA.HLP describes the steps for compiling, linking and running a Fortran IV program under RSTS/E. ISOMET.HLP and XYPLOT.HLP describe the capabilities of and method of access to programs ISOMET.BAS and XYPLOT.BAS.

RPGBCP.BAS is a user-friendly program which creates a batch control file for the purpose of compiling, taskbuilding, and running an RPGII program under RSTS/E. The program asks the user if he wants instructions, and prompts him step-by-step if he does.

Restrictions: Some users may wish to edit text files to remove references to Roger Williams College.

Documentation on magnetic media.

Media (Service Charge Code): Floppy Diskette (KA) Format: RT-11, 600' Magtape (MA) Format: DOS-11

Keywords: Fortran Plotting Subroutines
Category Index: XIV
Operating System Index: RSTS, RT-11

Roger Williams College Collection

new
11-629

Version: May 1983

Author: Rolland D. Everitt, Roger Williams College, Bristol, RI

Operating System: RSTS/E V7.2-04

Source Language: BASIC-PLUS

Other Software Required: MONEY, EDT or other Text Editor

Special Hardware Required: VK100 Terminal for Graphics programs

The following is a brief description of the programs included in this package:

XYPLOT.BAS is a two-dimensional cartesian plotting program capable of plotting three simultaneous functions on a GIGI (VK-100) terminal. XYPLOT is a stand-alone program and no other files are required. The user must enter one, two, or three functions in X as program lines within a subroutine. The user may introduce as many new variables as necessary, provided he does not use any of the existing program variables.

ISOMET.BAS is a cartesian plotting program capable of plotting a single function in X and Y on a GIGI (VK100) terminal. The plot appears in isometric projection. The user must enter his function as one or more program lines defining Z in terms of X and Y. The user may introduce new variables if needed, as long as he does not use any of the existing program variables.

ACOUNT.BAS is a system accounting program which uses the output of the program MONEY as its input file. ACOUNT produces a report page for each project, listing the CPU time, terminal time, percent time spent processing, disk usage, quota, and percent quota used for each PPN in the project. These values are totaled for each project.

SUMMER was designed to be used in conjunction with ACOUNT in an academic environment. The output report, which may be given any name tabulates the following data for each input report; connect time, CPU time, and disk storage total.

CIPHER.BAS is an encryption/decryption program which can operate on any file including program source code. It is menu-driven and "user friendly". No programming or system knowledge is required for use, except for the ability to enter standard file specs for input and output.

Documentation on magnetic media.
Media (Service Charge Code): Listing (BA), Floppy Diskette (KA), 600' Magtape (MA)

Format: RT-11

Keywords: Plotting, Graphics, System Management
Category Index: 7, 14, 15
Operating System Index: RSTS

TREK: A Space Game

Version: May 1983, V1.0-02

Author: Andrew J. Howard, Canberra TAFE, Act, Australia

Operating System: RSTS/E V6C

Source Language: BASIC-PLUS

Memory Required: 16KW

Special Hardware Required: VT52 or VT100 terminal

TREK is a development from SPACWR and uses the direct cursor addressing features of the VT52 and VT100 terminals. It also makes use of the Advanced Video Option of the VT100 terminal. TREK is a game of cunning and skill. You must destroy all the enemy's war fleet before they destroy you. The screen displays updates in real time.
The game will run on any terminal, but works best on a VT100 with the advanced video option.

Documentation on magnetic media.

Media (Service Charge Code): Write-Up (AA),
Floppy Diskette (KA), Format: RT-11,
600' Magtape (MA), Format: DOS-11

Keywords: Game
Category Index: 13
Operating System Index: RSTS