

SUPER 99 MONTHLY

EDITORIAL.....	1
EXTENDED BASIC.....	2
DATABASES.....	3
TI-WRITER.....	5
MULTIPLAN™.....	5
SPEECH.....	7
CORCOMP CONTROLLER.....	7
COMMUNICATIONS.....	8
FORTH.....	10
99 POTPOURRI.....	11

spreadsheets and databases.

We anticipate announcing more staff writers in upcoming issues.

EDITORIAL

How to Sell Gold Cheap and Fail

While we seldom dabble in editorial comment, recent events deserve attention.

Texas Instruments, in another surprise move, has scrapped plans to produce their long-awaited 64K VDP chip and has suspended production of several processors.

Once again, the engineers of TI have sought to distribute their superior products and have had those plans foiled by individuals who have again failed to recognize the potential for the firm's products. While TI's engineers have consistently produced innovative and useful products, the firm continues on its self-destructive path in vain pursuit of competing on other manufacturers' turf, regardless of the consequences.

99/4A owners continue to ignore the actions of TI and follow the paths of the manufacturers who support the 99/4A. Many manufacturers have now spotted that trend and are reacting to the wishes of the users.

One example of the direction of manufacturers is Myarc, Inc., a New

-->

In an effort to continue to offer the best possible information to you, our readers, we have asked several writers to lend their expertise to our publication on an ongoing basis. It is with great pleasure that we announce two Corresponding Staff Writers:

Mr. Barry A. Traver is very well-known throughout the 99/4A world, having written articles and programs that have been in print in several publications, including programs in our May issue. Barry is a college English instructor. Barry's articles will focus primarily on Extended BASIC links to Assembly Language and may occasionally include some CorComp Toolshed routines.

Mr. Charles M. Robertson joins us after having written an article on TI-Writer for our February issue. Chuck is a psychotherapist and will soon be leaving our vicinity to pursue a doctorate in Psychology in Florida. Chuck will direct his attention toward articles on word processing,

Jersey based firm who has long been rumored to be working on the 99/4A "compatible" "99/128" computer. Myarc apparently has no intention of tossing in the towel in a market with a base of 2 to 3 million owners and is now rumored to be working on offering 99/4A owners "compatibility" with a non-TI processor by offering a new BASIC language (and, perhaps, related products), as well as other 99/4A items. The Myarc 32K/128K RAMDISK/Print Spooler Card, which users report is compatible with most 99/4A hardware, including the CorComp Disk Controller, has now reached users and the early reaction to the card has been very enthusiastic, though the documentation is reported to be below par. Producing RS-232 Cards, Disk Controller Cards, hard disks and Mini-Expansion systems, Myarc is a winner.

The 99/4A is a valued item which can be likened to gold. TI chose to sell their gold cheap and failed. As TI fades from the consumer and small business picture and strays from what could have been, the epitaph that is being etched reads, "It wasn't the computer that died".

EXTENDED BASIC

Converting Console BASIC PRINT Statements to TEII Speech Statements

STANDARD: 1A 2XB TE 4B 5A 6B 7A 9A

Have you ever spent hours adding speech to a program? Well, Paul Yorke of Stuart, Florida sent us a great solution to the problem. The program is listed below.

Instructions:

1. Load your console BASIC program into Extended BASIC (using OLD). RESequence the program.
2. SAVE the program in MERGE format. The filename cannot be more than 8 characters long as the new program will carry the name of this MERGE

program plus the characters "SP".

3. RUN the program below, which Paul calls "PRO-RIT".

4. The new program is in MERGE format. You must SAVE it in normal format so it can be used in TEII.

5. RUN the program from TEII. Your PRINT statements will then print to both the screen and the speech synthesizer!

```

100 REM PROGRAM REWRITER (T
EII SPEECH)
110 REM BY PAUL YORKE : 1200
STARFISH LANE : STUART, FL.
33494
120 REM REQUIRES DISK SYSTEM
130 REM OP$ + EN$ ="105 OPEN
#1:"SPEECH",OUTPUT" IN COND
ENSEND DISK CODE (TOKENS)
140 REM *****
*****
150 REM ***** PROGRAM RE-WRI
TTER *****
160 CALL CLEAR
170 REM *****INSTRUCTIONS**
****
180 REM *****
*****
190 PRINT "                PRO-RIT
                        BY PAUL Y
ORKE" :: FOR I=1 TO 6 :: PRI
NT :: NEXT I
200 PRINT "THIS PROGRAM WILL
CONVERT ANY NON-MODULE DE
PENDENT PROGRAM TO A TEII
SPEECH PROGRAM."
210 PRINT
220 PRINT "IT DOES THIS BY A
DDING AN OPEN STATEMENT AN
D REWRITING"
230 PRINT "ALL PRINT STATEME
NTS ADDING SPEECH REQUIREMEN
TS."
240 PRINT
250 PRINT "THE ORIGINAL PROG
RAM MUST BESAVED IN MERGE FO
RMAT."
260 PRINT
270 PRINT "BE SURE TO USE 'R
ES' TO SORTYOUR PROGRAM BEFO
RE YOU PUT IT INTO MERGE FOR
MAT."
280 PRINT
290 PRINT "THE NAME YOU GIVE

```

```

IT      MUST BE EIGHT LET
TERS OR "
300 PRINT "LESS BECAUSE THE
SPEECH   VERSION WILL BE T
HAT SAME "
310 PRINT "NAME WITH 'SP' AD
DED TO IT."
320 PRINT
330 INPUT "PRESS ENTER TO CO
NTINUE":DUM$
340 CALL CLEAR
350 OP$=CHR$(0)&CHR$(105)&CH
R$(159)&CHR$(253)&CHR$(200)&
CHR$(1)&CHR$(49)&CHR$(181)&C
HR$(199)&CHR$(6)
360 EN$=CHR$(83)&CHR$(80)&CH
R$(69)&CHR$(69)&CHR$(67)&CHR
$(72)&CHR$(179)&CHR$(247)&CH
R$(0)
370 DE$=OP$&EN$
380 DISPLAY AT(18,1):"FILENA
ME>"
390 REM YOU TELL THE PROGRAM
WHERE TO FIND ITS RAW MATER
IAL
400 ACCEPT AT(18,11)SIZE(10)
BEEP:X$
410 CALL CLEAR
420 PRINT "      WORKING" :
: FOR I=1 TO 11 :: PRINT ::
NEXT I
430 REM E$= END OF FILE
440 E$=CHR$(255)&CHR$(255)
450 X$="DSK1."&X$
460 Z$=X$&"SP"
470 REM OPENING TWO FILES ON
E INPUT ONE OUTPUT
480 REM THE PROGRAMS ARE FIL
ES WHEN SAVED IN MERGE FORMA
T
490 OPEN #1:X$,DISPLAY ,INPU
T ,VARIABLE 163
500 OPEN #2:Z$,DISPLAY ,OUTP
UT,VARIABLE 163
510 REM P#="PRINT #1:" IN CO
NDENSED DISK CODE
520 P$=CHR$(156)&CHR$(253)&C
HR$(200)&CHR$(1)&CHR$(49)&CH
R$(181)
530 X$=DE$
540 GOTO 730
550 REM "LINPUT" READS NEXT
RECORD(LINE)
560 LINPUT #1:X$
570 IF SEG$(X$,3,1)=CHR$(156
)THEN 620
580 REM CHR$(156)=PRINT. SO
310 IS LOOKING FOR PRINT ST

```

```

ATEMENTS.
590 IF SEG$(X$,1,2)=E$ THEN
760 ELSE 730
600 GOTO 560
610 GOTO 560
620 PRINT #2:X$
630 REM TESTS TO SEE IF LIN
E NUMBER IS LEGAL
640 IF ASC(SEG$(X$,2,1))+5<2
57 THEN 690
650 A=ASC(SEG$(X$,1,1))+1
660 REM A AND B ARE LINE NUM
BER IE A=0 B=256 =LINE 256 0
R A=1 B=1 =257
670 B=ASC(SEG$(X$,2,1))+5-25
6
680 GOTO 710
690 B=ASC(SEG$(X$,2,1))+5
700 A=ASC(SEG$(X$,1,1))
710 X$=CHR$(A)&CHR$(B)&P$&SE
G$(X$,4,LEN(X$)-3)
720 REM INSERTS "105 OPEN#1
:"SP...." INTO PROGRAM
730 PRINT #2:X$
740 GOTO 560
750 REM INSERTS AN END OF F
ILE FLAG.
760 PRINT #2:E$
770 CLOSE #1 :: CLOSE #2
780 CALL CLEAR
790 PRINT "YOUR PROGRAM CAN
BE FOUND AT";Z$;" . TO GET I
T YOU MUST "
800 PRINT "DO SEVERAL THINGS
."
810 PRINT "FIRST TYPE IN 'NE
W'"
820 PRINT "THEN PRESS ENTER"
830 PRINT "THE SCREEN WILL G
O BLANK "
840 PRINT "THEN TYPE IN
      'MERGE'";Z$;"'"
"
850 PRINT "THEN ENTER."
860 END

```

DATABASES

Using the Navarone Database Management System

STANDARD: 1A 2DB 3B (o) 4B 5A 6B 7A
9A 10A (o)

The Navarone Database Management (DBM) package is one of the most

-->

widely owned programs of its type for the 99/4A. It is because of the great interest shown in the product that we are offering coverage of it. This should not be construed to mean that it is necessarily the best product in its class. This is not a review!

Here are some of the questions we've been asked about the DBM and our answers:

Q.: Page 18 of the new DBM manual mentions control characters, but is vague as to the number system related to the codes. Is there a list of the codes anywhere?

A.: Yes! On page III-2 of the User's Reference Guide (the mostly green book that came with your computer), there is a list of control code keys. Use the column labeled "Pascal Mode". Also, you are not restricted to the pascal mode codes. For instance, if your printer manual says that you should enter 27,51,28, you can press <CTRL> <.> <FCTN> <D> <3> <CTRL> <>> <.>. Note that we frequently use "<>" to indicate a keystroke -- you enter the keystroke inside the "<>" and all CTRL and FCTN strokes should be pressed at the same time as the next keystroke. The "3" has the ASCII code of 51, as shown in the list on page III-1 of the User's Reference Guide.

Q.: Is it possible to create a printout of records placed horizontally as wide as my printer allows, such as for multiple-wide mailing labels?

A.: We have found no way to print in this manner from the DBM. This can be done from Extended BASIC. If you examine your data disk, you will note that a DBM record is one disk record. So, you use DBM's SETUP to arrange the fields as you desire, then access the records entered from the ENTRY mode from Extended BASIC. Use LINPUT to read the record in, SEG\$ to pull out a field from the record and PRINT USING to structure the printed output. A string array accessed in a loop can be used to store the fields of each record so that corresponding fields

can be placed on the same printed line. Be sure to remember to use an error trap to properly exit the loop after accessing the last record, as the number of groups of records to print may not evenly divide into the number of records in the file (use the EOF function for the error trap).

Q.: Is there any advantage to planning the size of my records?

A.: Yes! You will conserve disk space and/or maximize record storage space if the length of your records is evenly divisible into 256 (the number of bytes in a sector).

Q.: Would there be any advantage to creating records from outside the DBM environment? If so, what method(s) would you recommend?

A.: The DBM does a very nice job of merging the prompts established with your SETUP file with the input fields that will make up your record(s). Therefore, the DBM provides a very good input method. However, you can only view one record at a time. If you would prefer viewing many records at once and can use an 80 length record, consider using the Editors of either TI-Writer or Editor/Assembler. Remember, one line equals one DBM record. Be sure to save the file as FIXED. When you have a somewhat garbled format in a file or have multiple disk records that you want to use as a single record in DBM, you will likely want to use Extended BASIC to convert your file(s) to DBM format. The DBM doesn't use wierd imbedding of characters, so most DIS/FIX files can become a DBM file.

Q.: Do you have any general tips on constructing a SETUP file?

A.: Yes! Test the SETUP file by using only a few records and then follow through all of the sections of the DBM, such as SORT and ENTRY. Be sure to consider the longest possible length of a field! Converting a large file to a new SETUP format can be a much more cumbersome process than getting the SETUP right early on!

-->

If you have any questions on the Navarone DBM, drop us a letter. Be sure to be as specific as possible. It is much easier for us to read through a lengthy explanation than to have to assume your objectives!

TI-WRITER

Word Processor Dump: A Followup

STANDARD: 1A 2TW XB 3B 4B 5A 6B 7A
9A 10A

We received several very good questions about last month's screen dump program.

Our tests were done on a Gemini and a Panasonic printer. Users of TI or Epson printers were unable to properly tab. Our code was actually for a left margin printer command, which is not available on the TI and Epson printers. However, a tab command is available. If you own a TI or Epson printer, change line 25070 to the following:

```
25070 PRINT #1:".TL 1:27,65,  
8,10,13,27,68,"&STR$(T)&","0,  
9,27,"&SEG$("7576",DE*2-1,2)  
&","0,"&STR$(DE)
```

The above code will also work on the Panasonic and Gemini printers, but is not required and is not particularly desirable except from a compatibility standpoint.

In line 25190, the parameters in the POS statement were not in the proper sequence. The error was "non-fatal". That is, the program works with only minor side-effects in spite of the error. The line should read as follows:

```
25190 FOR I=2 TO 122 :: IF P  
OS(C$,CHR$(I),1)=0 THEN PRIN  
T #1:".TL "&STR$(I)&":"&STR$(  
I)
```

On page 5 of the May issue, the reference to 27,75,0,256 should have

been 27,75,0,1 and the reference to 27,75,0,512 should have been 27,75,0,2 as the values we gave were the number of characters the printer recognizes, not the actual sequence sent to the printer.

The value of 20 that we stated would center a tab was incorrect. The correct tab for center is 18.

And, here is another option! The modifications below will allow a dump with compressed width. If you do a "cut and paste" newsletter, this could be just what you've needed for printing bar charts and such. To access the half-width option, use .5 as the DE (density) parameter. The printout will be in double density, but will use only half as many bit images as the regular double density printout. The center for this type of printout is 29. Once again, this is the Gemini version, so if you have a TI or Epson printer, modify line 25070 as shown above in addition to the changes shown below (the only change to line 25070 below is the addition of the MIN statement).

```
25030 IF (DE<>2)*(DE<>.5)THE  
N DE=1  
25035 R=DE :: IF DE=.5 THEN  
DE=2  
25070 PRINT #1:".TL 1:27,65,  
8,10,13,27,108,"&STR$(T)&","2  
7,"&SEG$("7576",DE*2-1,2)&","  
0,"&STR$(MIN(DE,R*2))  
25075 IF R=.5 THEN DE=1
```

As most of you seemed to realize, the "Word Processor Dump" was much more difficult to theorize than write. Now, we're working on ways to fine-tune the program to make it run faster!

MULTIPLAN™

More on Using SYLK Files

STANDARD: 1A 2XB MF 3B 4B 5A 6B 7A 9A

Before proceeding with more
-->

programs using SYLK files, let's take a deeper look at the SYLK format and discuss some temporary solutions to allow immediate work with what has been covered thus far.

Hopefully, you have now examined a file created from last month's program at least a little. If not, you may want to use your sector editor to do so now.

Refer to Appendix 4, pp. 205-208, of the Multiplan™ manual. Having actually constructed a file, we can now use the information. What follows is a brief discussion of the record types we used last month.

Record type ID is used at the beginning of the first (only the first) record. It does not require any special parameters -- it can be a standard instruction.

Following the ID is the F record type. At this point, it is important to note that a "record type" does not correspond to a "record". Normally, several record types or several of one record type will be stored in each disk record. The F types used in line 230 of our Extended BASIC program established the dimensions of our spreadsheet. See the manual's descriptions of F;W and F;D. The F;D can be standard and the F;W can be defined as the horizontal dimension of the spreadsheet -- in our program it was 5 cells wide, with each cell having a width of 16.

The B record type indicates the overall dimensions of the spreadsheet. The Y value is the number of cells vertically and the X value is the number of cells horizontally.

The really important record type is the C type record. The C type includes the X and Y coordinates of the individual cells. The significant aspect of the C type is the additional designator and how it is used. In our program, we used the K designator with input enclosed in quotes, designating text (string) type data. As the manual explains, non-text data is not

enclosed in quotes. Obviously, the C type record is where we will need to devote our primary attention for future projects.

We realize that this is likely to all seem rather impossible to grasp at this point. It helps to concentrate on only the required record types and designators and ignore the fancy stuff until you get a handle on the basics. Eventually, you may come to understand concepts such as how SYLK recognizes records that simulate COPY DOWN, etc.

Now, we'll explain what can be done from the point at which we now stand, having covered converting a DISPLAY FIXED 80 file to SYLK format.

By use of the VALUE and MID functions in Multiplan™, you already have the capability of producing data from a BASIC program or TI-Writer or Editor/Assembler that can be used as numeric data in Multiplan™. The MID function is very similar to the BASIC SEG\$ function and the VALUE function is equivalent to the VAL in BASIC. So, let's look at an actual example.

Let's assume that the input that we wish to work with has been entered as the fifth through tenth characters on the first line of an Editor/Assembler file. After converting to SYLK, this places the data in the cell at ROW 1 COL 1 of the spreadsheet. We can now place the data into ROW 1 COL 6 as a numeric value. The formula needed is VALUE(MID(RC1-4],5,6)). The instruction takes 6 characters, beginning at the fifth character, from the cell that is 4 cells to the left of the current cell and converts that text to a numeric value! You can then merge in a formula from another sheet and you are on your way!

Of course, our eventual goal is to be able to create any portion of a spreadsheet, including numeric data, text and formulas from a source other than Multiplan™. Why do we want to be able to do this? There are two reasons. First, it is essential that data for spreadsheets be accurate. For instance, ideally accounting data

-->

used by a computer should be traceable as being positively accurate -- trying to key data from a general ledger to a spreadsheet does not offer such an assurance. Second, the input in the MultiplanTM module is dreadfully slow! While our conversions may not represent an overall time savings, the user's time can be better utilized by having available a rapid input method and then allowing the computer to convert to a usable file at a convenient time, such as during a coffee break, thus avoiding the frustration of having to wait on the input cycle of the spreadsheet. We have heard from a number of users who have stated that they simply will not use MultiplanTM because it frustrates them to have to wait to input another cell or they type faster than the program accepts characters.

Until next month, happy spreadsheeting!

SPEECH

Phone Talker

STANDARD: 1A 2TE 9A 12A

Are you tired of the computer age passing you by? Would you like to call that special someone who has an answering machine and show them that you are just as modern as they are? Would you like to call the phone company and talk synthesized voice to synthesized voice? Well, John Singleton of Westlake, Louisiana has supplied the solution. John wrote the speech program that follows so that you don't have to speak into the phone -- the computer does it for you! Of course, it could also have more serious uses for persons who have impaired speaking ability or laryngitis. You'll need to modify the speech PRINT statements for your own needs. And, in case you're wondering, TOBOR is ROBOT spelled backward.

100 CALL CLEAR
110 CALL SCREEN(4)
120 OPEN #1:"SPEECH",OUTPUT

```

130 PRINT "RESPONSE CHOICES:
"
140 PRINT " A) HELLO, MAY I
SPEAK TO--"
150 PRINT " B) ASK HER TO CA
LL--"
160 PRINT " C) WHEN DO YOU E
XPECT HER--"
170 PRINT " D) TELL HER THAT
TOBOR          CALLED"
180 PRINT " E) THANK YOU"
190 PRINT " F) SO LONG"
200 PRINT " G) PLEASE REPEAT
"
210 PRINT " H) THIS HAS BEEN
SPOKEN BY     TOBOR"
220 PRINT " I) END"
230 PRINT #1:"//38.20"
240 CALL KEY(0,CHOICE,STATUS
)
250 IF STATUS=0 THEN 240
260 ON CHOICE-64 GOSUB 300,4
00,500,600,700,800,900,1000,
1020
270 GOTO 240
300 PRINT #1:"HELLO MAY I SP
EAK TO MIZ SINGLE TON"
310 RETURN
400 PRINT #1:"ASK HER TO CAL
L TOE BAR"
410 RETURN
500 PRINT #1:"WHEN DO YOU EX
PECT HER?"
510 RETURN
600 PRINT #1:"TELL HER TOE B
AR CALLED"
610 RETURN
700 PRINT #1:"THANK YOU"
710 RETURN
800 PRINT #1:"SO LONG"
810 RETURN
900 PRINT #1:"PLEASE REPEAT
"
910 RETURN
1000 PRINT #1:"THIS HAS BEE
N SPOKEN BY TOE BAR"
1010 RETURN
1020 END

```

CORCOMP CONTROLLER

Doodler

STANDARD: 1A 2XB 4B 5A 6B 7A 9A

Have you been working with your
-->

CorComp Toolshed Statements? Well, we have a project this month that has been covered for conventional statements in numerous publications. That is why we chose making a "cursor" move around the screen while leaving a trail as our Toolshed project -- to show that Toolshed statements can make even the most common routines easier to write and make such programs execute faster. The program below will allow you to use the arrow keys (without pressing <FCTN>) to move the cursor around to draw block graphics. Pressing "0" toggles the trace character to a blank for erasing and pressing "1" toggles the trace character to a solid block for drawing. It's really easy to use! If you'd like for us to adapt the program to do something in particular, let us know what you have in mind and we'll do our best to come up with something for you! It could be expanded into a screen design aid, a sprite editor, a game or any one of a number of other programs. Due to the fast execution of the Toolshed statements, many branches could be used to allow various responses to keystrokes. For now, we'll simply call it a "Doodler".

```

100 CALL INIT :: DELETE "LD-
CMDS" :: CALL CHAR(128,RPT$(
"F",16),129,"FF818181818181F
F"):: A$=CHR$(128):: B$=CHR$(
129):: P=0 :: CALL CLEAR
110 CALL LINK("VPOKE")(P,96,
B$):: CALL KEY(5,K,S):: IF S
=0 THEN 110
120 CALL LINK("VPOKE")(P,96,
A$):: ON POS("ESXD10",CHR$(K
),1)+1 GOSUB 140,150,170,190
,210,230,240
130 GOTO 110
140 RETURN
150 IF P>31 THEN P=P-32
160 RETURN
170 IF P>0 THEN P=P-1
180 RETURN
190 IF P<735 THEN P=P+32
200 RETURN
210 IF P<767 THEN P=P+1
220 RETURN
230 A$=CHR$(128):: RETURN
240 A$=" " :: RETURN

```

COMMUNICATIONS

Dialing Around

STANDARD: 1A 2TE EA (o) 3A 5A (o) 9A
13A

Word from the Suncoast 99er UG in St. Petersburg, Florida is that the "Computronics Comm Link", Ken Hunt, Sysop, is the first TIBBS™ to make use of a 10 megabyte hard disk! The BBS is up 24 hours and operates at both 300 and 1200 baud. Over 200 programs are available for download with true TE2 protocols. The number is (813) 526-1265. Computronics is a retail outlet that offers 99/4A products in addition to providing the BBS.

We hope we didn't give anyone the wrong impression about the use of surge suppressors last month. A surge suppressor is not a lightning protector! However, surge suppressors do provide needed protection against spikes that can damage your computer equipment and would likely be a lot better than nothing in case you are caught by surprise by lightning (it surely won't hurt!). The only real protection against lightning is to unplug both your phone (assuming you have a modem connected) and your computer equipment, everything! If you need another horror story, another local user has gone through the misery of having his system hit by lightning. The annihilated equipment consisted of a 99/4A console, speech synthesizer, Peripheral Expansion Box, 32K Memory Card, Extended BASIC module, modem, RF Modulator and telephone! DO NOT leave your system plugged in during storms or while you are away! And, to further protect yourself, check out your insurance policy! Some policies do not automatically cover computer equipment for theft or "acts of God"! If you use your computer for business, you may need a policy separate from your homeowner's policy (if you are not sure, check with a friend!).

Our editor, Richard Mitchell, will be live on a COncference on the TI

-->

FORUM on CompuServe™. A date has not yet been set, but it is anticipated that it will be on a Saturday at 7 PM CDT. A message to everyone entering the TI FORUM will announce the date and time a few days before the CO. Everyone is invited to attend the online CO, but in case you miss it, a transcript will remain on file for five months.

And, speaking of TI FORUM CO's, on July 24, at 8 PM PDT, LA 99ers User Group will have a live online meeting! Mark your calendar, as we're sure you'll want to drop in and chat with the members of that very highly regarded user group! Can you believe it? A user group meeting from the comfort of their own home! Isn't the world changing fast?

XMODEM protocol, an industry standard, is now available for the 99/4A. There is a stand-alone public domain terminal emulator available on the TI FORUM. The program was written by the author of FAST-TERM (see the FREEWARE section on page 11), Paul Charlton. The latest version of FAST-TERM also supports XMODEM. XMODEM allows faster transfers, as well as transfers that were previously not easily accomplished from services that do not support TEII protocols. Users on the TI FORUM have been very excited about XMODEM. Without XMODEM or TEII protocols, the only option commonly available is ASCII transfers, which makes transferring BASIC and Assembly Language programs very cumbersome.

Also available on the TI FORUM is a file called SPEECH.4TH, which provides speech capabilities from FORTH! Adding a boot option to have the computer greet you might make a great language even more attractive!

If you still haven't gotten into communications, you may not realize that there is a "gold mine" of free software out there just waiting to be downloaded to your computer! And, communications is a great way to share your computer interest with your friends directly from your favorite

chair at your home or office. If you have been fetching a lot of programs with your modem, pass them around to your friends so they will notice the benefits of owning communications equipment.

Woodrow A. Wilson, a reader from San Diego, recently wrote to tell us that he found a fix to TK-Writer on the San Diego TIBBS™. As you may recall, we mentioned that the problem with TK-Writer is that if you use SD to Show Directory, the computer locks up and, unless you happen to be lucky with a Recover Edit, your document is gone. The fix, which was posted by Jim McGarvie, is to use a sector editor to change byte >14 (decimal 20) of the third sector of EDITA1 (a TI-Writer file) from >53 to >20. This will disable the SD command, giving a beep instead of a lockup. By the way, if you are using "Advanced Diagnostics", you can use the "FF" command to find the file on your disk. Woodrow also mentioned that he uses a few Extended BASIC lines to get a catalog while using TK-Writer. His suggestion is to use this two line program to call in TK-Writer:

```
10 RUN "DSK1.TK-WRITER"  
20 END
```

Then, in the program TK-WRITER, Woodrow added line 265, RUN "DSK1.CAT", with CAT being a catalog program from Tigercub Software. Before you take off on this project, remember to backup your disk before sector editing it! If you don't, we hope you know somebody close by who has a copy! Backing up the TI-Writer disk was supposed to be the first thing you did when you got TI-Writer, remember?

In case you've wondered, yes you can transfer Multiplan™ files to and from a TIBBS™ BBS or between two modems using either TEII or FAST-TERM. With FAST-TERM, you must load the FAST-TE2 file before keying TERM to start the program.

-->

FORTH

A Better Loader Program

STANDARD: 1A 2EA 4B 5A 6B 7A 9A

Last month's loader program did not place the FORGET in the proper place. Many thanks go to Mr. Warren Agee, who posted some useful tips to us on the TI FORUM as to how to avoid the floating point routines we had used. Warren added the words LEN and ACCEPT and altered the definition of SELECT. Warren states, "Given the address of a string, LEN computes the length. ACCEPT works like EXPECT, except it also stores the count in the byte preceeding the string. Now the string is ready to be manipulated by COUNT and TYPE.... NUMBER is the resident word which converts a string to a double-length number; however, this word (NUMBER) seems to go hyper unless the string is followed by a blank space or two. That is why I calculated the address of the end of the string (PAD+cnt+1), then tacked on 2 blanks. Since the screen will never exceed 3 digits, just drop the extra zero and you're home free! It seems like a lot of work... but this saves much more space and time than loading and using floating point." Warren, thanks again!

For those of you who missed the beginning of this thread, we originally defined SELECT back in October to allow the input of a variety of numbers. As our loader program is seeking only integers, Warren's method is much better. In fact, floating point can often be avoided entirely (and should be).

We've expanded the program onto two screens, which is helpful in listing more screen descriptions. Here is the new program:

```
SCR #113
0 BASE->R DECIMAL -SYNONYMS -EDITOR
1 0 VARIABLE GET
2
3 : LEN ( addr --- count )
4 255 0 DO DUP I + C@ 0= IF I
5 LEAVE ENDIF LOOP SWAP DROP ;
6
7 : ACCEPT ( addr n --- )
8 OVER 1+ DUP ROT EXPECT LEN SWAP C! ;
9
10 CR ." 90 - 99 BLOAD (EDITOR)"
11 CR ." 100 - 111 BLOAD (64SUPPORT)"
12 CR ." 113 - 114 DIRECTORY"
13 CR ." 115     PHONE LIST"
14 CR ." 116 - 117 GRAPHICS #1"
15 -->

SCR #114
0 CR ." 118 - 119 GRAPHICS #2"
1 CR ." 120     GRAPHICS #3"
2 CR ." 121     GRAPHICS #4"
3 CR ." 122 - 124 S99MGAME"
4 CR ." 125     UTILITY #1"
5 CR ." 126 - 138 UTILITY #2"
6 CR ." 139     BOOT MY WORDS"
7 CR ." 140     NEXT DIRECTORY"
8
9 : SELECT PAD 3 ACCEPT PAD DUP C@
10 1+ + 2 BLANKS PAD NUMBER DROP GET ! ;
11 CR SELECT CR GET @ FORGET GET LOAD
12
13
14
15 R->BASE
```

You may also want to include in the directory the word that executes the program, such as RUN or whatever.

99 POTPOURRI

News, Corrections, Updates, Editorials, Kudos, and Come-what-may

CORRECTIONS:

April: In the "Reminder" program, change CHR\$(129) to CHR\$(126) in lines 140, 1440 and 2800.

May: Corrections and modifications to the "Word Processor Dump" program are included in this month's TI-Writer article.

Corrections to the FORTH program are included in this month's FORTH article.

All you 99'ers in Connecticut will be glad to learn that there is a new user group in Waterbury. For more information, write to Nutmeg Ninety Niners, c/o David Gallagher, 139 Grassy Hill Rd., Waterbury, CT 06704.

A retired collector in Maryland is interested in establishing a 99/4A Museum. To contribute items, send to TI-99/4A Museum, 9818-49th Avenue, College Park, MD 20740-1432. For more information, phone Harold E. Simmons at (301) 441-2786.

FREWARE

One of the most exciting items we've run across is FAST-TERM. The program supports TEII protocols, XMODEM protocols, ASCII transfers (including line-by-line!) and has many "bells and whistles", including great chimes sounds. The suggested FREWARE price is \$10 and updates will be \$3.50 from Paul Charlton, 1110 Pinehurst Ct., Charlottesville, VA 22901. Paul also hopes to soon complete a FORTH XMODEM project which

would allow copying of FORTH screens!

Ron Rutledge, 1020 3rd Street, Waukee, IA 50263, has "The DIRECTOR", a multi-function disk cataloger that is available as FREWARE. Send disk, mailer and return postage or \$5 to the Rutledge address.

Millers Graphics has released a program called "Explorer". Ads do not put a label on the type of program it is, but it is a debugger plus. For more information, write to Millers Graphics, 1475 W. Cypress Ave., San Dimas, CA 91773. S.R.P. is \$24.95 plus \$2 S and H.

"Console Writer", from Navarone, is now available from Unisource, P.O. Box 64240, Lubbock, TX 79464, in a new version (1.1) that allows cassette storage. The cassette SAVE is said by users to be more efficient than that of similar products. The price is \$29.95 plus \$3 S and H.

CSI Design Group, Inc. has released "Windows", which is a very useful program for interchanging and manipulating screen displays. It is available in a user format for \$24.95 or \$49.95 as a developer package (for persons who wish to write commercial software using object code from "Windows"). We'll have more information on "Windows" in a future issue.

Support your local user group! They're supporting you!

[] CompuServe is a registered trademark of CompuServe Information Services. []
[] Multiplan is a registered trademark of Microsoft Corp. []
[] TIBBS is a register trademark of Ralph Fowler. []

SUPER 99 MONTHLY ORDER FORM

SUBSCRIPTIONS (PER YEAR):

U.S. AND POSSESSIONS
 FIRST CLASS \$16.00
 THIRD CLASS \$12.00
 OTHER COUNTRIES
 AIR MAIL \$26.50
 SURFACE MAIL \$16.00

INDIVIDUAL COPIES:

U.S. SUBSCRIBERS
 FIRST CLASS \$ 1.35
 THIRD CLASS \$ 1.00
 CANADA SUBSCRIBERS \$ 1.35
 OTHER \$ 1.50

NAME _____
 ADDRESS _____
 CITY _____ STATE _____
 ZIP _____ COUNTRY _____

For back issues, specify which:

READER FEEDBACK: (Attach comments)

Super 99 Monthly is published monthly by Bytemaster Computer Services, 171 Mustang Street, Sulphur, LA 70663. All correspondence received will be considered unconditionally assigned for publication and copyright and subject to editing and comments by the editors of Super 99 Monthly. Each contribution to this issue and the issue as a whole Copyright 1985 by Bytemaster Computer Services. All rights reserved. Copying done for other than personal archival or internal reference use without the permission of Bytemaster Computer Services is prohibited. Bytemaster Computer Services assumes no liability for errors in articles.

EDITOR

Richard M. Mitchell (CIS 70337,1011)

CORRESPONDING STAFF WRITERS

Barry A. Traver
 Charles M. Robertson

STANDARD KEY

1	Computer	A	TI-99/4A
2	Cartridge	XB	Extended BASIC
		EA	Editor/Assembler
		TW	TI-Writer
		MP	Multiplan (TM)
		TE	Terminal Emulator II
3	RS-232	B	TI
4	Disk Drive	B	TEAC 55B
5	Expansion Box	A	TI
6	Disk Controller	B	CorComp
7	32K Card	A	TI
9	Monitor or TV	A	TV & RF Modulator
10	Printer	A	Gemini 15-X PC
12	Speech Synth Synthesizer	A	TI
13	Modem	A	Volkmodem (TM)
14	Cassette	A	Any

Volkmodem is a registered trademark of Anchor Automation, Inc.

Bytemaster Computer Services
 171 Mustang Street
 Sulphur, LA 70663

Bulk Rate
 U.S. Postage
 PAID
 Sulphur, LA 70663
 Permit No. 141

08/85 23

POSTMASTER: ADDRESS CORRECTION REQUESTED.