

99'ER NEWSletter



Vol. 4 No. 11

November, 1986

FOR SALE
32k Stand-alone Expansion Card
Must Sell! Was \$180.00
Now \$50.00
Contact Barry Long - 564-2975

MINI-MINITS

The meeting opened with Nick announcing the closing of Computer Dynamics! This caused a quite a stir among the members present and prompted the group to begin to actively seek a new meeting place for the November meeting. After much discussion, it was decided that Dot Swartz could obtain the East Shore branch of the Dauphin County Library for the next meeting, at least.

Terry Longenecker announced the T-shirts would be available at the next meeting. The price will be \$6.00ea.

Discussion was then permitted from the floor pertaining to obtaining new speakers etc, at our meetings. More next meeting.

Nick demo'ed the hardware modifications to the console. we now have speech on-board. Next project will be an updated clock crystal on the CPU board. And an RGB chip.

The motion was made that we purchase 500 more blank disks from MEI and resell at .40ea. Voted and passed.

The motion was made to purchase both X-BASIC and FA for the group's system. Voted and passed.
Till next time,
Barry

99/4A Console	}	\$275.00
Expansion Box		
Disk Drive		
Disk Controller Card		
RS-232 Card		
32k Memory Expansion		
Disk Manager Module		
Amdek Color Monitor		\$100.00
X-BASIC		\$ 25.00
Terminal Emulator II		\$ 15.00
Speech Module		\$ 25.00
Screen Dump Disk		\$ 5.00
TI Writer		\$ 25.00
Personal Rec. Module		\$ 10.00
Home Finances Module		\$ 10.00
		<u>\$115.00</u>
Complete - All Items		\$450.00

Karl Krodel
944-9563 After 4:00 PM

TIPS FROM THE TIGERCUB

#48

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156 Collingwood Ave.
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Over 138 original programs in Basic and Extended Basic, available on cassette or disk, only \$3.88 each plus \$1.50 per order for PPM. Entertainment, education, programmer's utilities. Descriptive catalog \$1.88, deductible from your first order.

Tips from The Tigercub, a full disk containing the complete contents of this newsletter Nos. 1 through 14, 58 original programs and files, just \$15 postpaid. Tips from the Tigercub Vol. 2, another diskfull, complete contents of Nos. 15 through 24, over 68 files and programs, also just \$15 postpaid.

#
Tips from the Tigercub
Vol. 3 is now ready.
Another 62 programs,
routines, tips, tricks.
from Nos. 25 thru 32.
Also \$15 postpaid. Any
two Tips disks \$27 or
all 3 for \$35 postpaid.
#

Nuts & Bolts (No. 1), a full disk of 188 Extended Basic utility subprograms in merge format, ready to merge into your own programs. Plus the Tigercub Menuloader, a tutorial on using subprograms,

and 5 pages of documentation with an example of the use of each subprogram. All for just \$19.95 postpaid.

Nuts & Bolts No. 2, another full disk of 188 utility subprograms in merge format, all new and fully compatible with the last, and with 18 pages of documentation and examples. Also \$19.95 postpaid, or both Nuts Bolts disks for \$37 postpaid.

Tigercub Full Disk Collections, just \$12 postpaid! Each of these contains either 5 or 6 of my regular \$3 catalog programs, and the remaining disk space has been filled with some of the best public domain programs of the same category. I am NOT selling public domain programs - my own programs on these disks are greatly discounted from their usual price, and the public domain is a FREE bonus!

TIGERCUB'S BEST, PROGRAMMING TUTOR, PROGRAMMER'S UTILITIES, BRAIN GAMES, BRAIN TEASERS, BRAIN BUSTERS!, MANEUVERING GAMES, ACTION REFLEX AND CONCENTRATION, TWO-PLAYER GAMES, KID'S GAMES, MORE GAMES, WORD GAMES, ELEMENTARY MATH, MIDDLE/HIGH SCHOOL MATH, VOCABULARY AND READING, MUSICAL EDUCATION, KALEIDOSCOPES AND DISPLAYS

For descriptions, send a dollar for my catalog!

The READFILE subprogram on my Nuts & Bolts #2 disk has a backward parentheses in line 21161. This is the corrected line -

21161 DISPLAY AT(17,1):"OPEN PRINTER #":NAME? " :: ACCE
PT AT(17,15)VALIDATE(DIGIT)6
IZE(-3):P :: ACCEPT AT(18,7)
:P# :: OPEN #P:P# :: GOTO 21
163

When Texas Instruments developed Extended Basic, they took away the ability of Basic to redefine or color the characters in sets

15 and 16, ASCII 144 to 159, in order to make room in memory for sprites (they did let us have color set # instead. That is why Basic programs which use sets 15 and 16 will crash if you try to run them in XBasic.

Finally, John Behnke published in the Chicago Times newsletter an amazing routine which gave us back those missing sets. His routine was 13 sectors long. Recently, Richard Heath published in the L.A. newsletter a shortened version. And, without having any idea how it works, I have managed to scrunch it down to only 4 sectors -

1 CALL BXB
29999 !BXB by Jim Peterson, adapted from VDPUTIL2 by John Behnke/Richard Heath
30000 SUB BXB :: CALL INIT :
: CALL LOAD(8194,37,194,63,2
48)
30001 CALL LOAD(16368,88,79,
67,72,65,82,37,58,88,79,75,6
9,86,32,37,168)
30002 !
30003 FOR J=1 TO 136 :: CALL
LOAD(9529+J,ASC(SE6*(J)\(J\$
,J,1))):: NEXT J :: SUBEND
30004 SUB CHAR(A,A\$):: CALL
LOAD(9500,A):: CALL LINK("PO
CHAR",A\$):: SUBEND
30005 SUB COLOR(A,B,C):: CAL
L LOAD(9492,8,15+A,(B-1)*16+
C-1)
30006 CALL LINK("POKEV"):: S
UBEND

Note than line 30002 is missing. That's because there is no way to key it in. Once again we need a program that writes a program -

100 FOR J=1 TO 136 :: READ A
:: M\$=M\$&CHR\$(A):: NEXT J
110 OPEN #1:"DSK1.BXBDATA",V
ARIABLE 163,OUTPUT :: PRINT
#1:CHR\$(125)&CHR\$(8)&"J\[\]\$
"&CHR\$(198)&CHR\$(199)&CHR\$(1
36)&M\$&CHR\$(8)
120 PRINT #1:CHR\$(255)&CHR\$(
255):: CLOSE #1
130 DATA 2,224,37,28,3,8,8,8

,2,5,48,48,2,6,37,2,285,133,
2,134,37,17
140 DATA 17,252,4,192,2,1,8,
1,2,2,37,1,2,3,18,8,212,131,
4,32,32,28
150 DATA 208,4,9,88,2,32,3,8
,2,1,37,2,2,2,8,8,2,7,11,8,2
,8,7,8,193
160 DATA 1,192,193,193,188,9
7,133,145,135,21,1,113,136,6
,198,145
170 DATA 135,21,1,113,136,21
8,71,18,198,177,137,228,198,
2,131,37,18
180 DATA 17,248,4,32,32,36,1
6,6,2,224,37,28,3,8,8,8,4,32
,32,32,4
190 DATA 192,216,8,131,124,2
,224,131,224,4,96,8,112

RUN that to create a file BXBDATA on the disk. Then load the BXB program, and enter MERGE DSK1.BXBDATA. The unprintable line will pop into place. SAVE this completed BXB routine in MERGE format, and merge it into any Basic-only program. If you want, the result can be run through a Compactor program and turned into multi-statement program lines for more speed.

Or, you can write an Extended Basic program using all 16 character sets for graphics and color - actually 17, because set # is also available. Even the characters 24 through 31 can be redefined! Craig Miller has warned against fooling around in that area of memory, but there seems to be no problem with redefining the cursor (38) or the edge character (31).

Sprites can only use characters between 32 and 143 and their color cannot be changed with CALL COLOR(#, #). I have not found any other bugs, but have not had time for much experimenting.

Here's an easy Tigercub challenge - run this one in Basic, not Extended Basic.

Here is a lottery program presented to me from William Ford, I hope you can use it.

John Sterner

```

100 REM *****
200 REM *** PICK SEVEN ***
300 REM *****
400 REM EXTENDED BASIC
500 CALL CLEAR:13)
600 DISPLAY AT(10,12):"1986."
700 FOR T=1 TO 300
110 NEXT T
130 CALL CLEAR
140 PRINT "THIS PROGRAM WILL PICK SEVEN RANDOM NUMBERS, BETWEEN ONE AND EIGHTY,
FOR LOTTERIES LIKE PENNA'S LUCKY SEVEN."
150 PRINT "TO ACTIVATE THE PROGRAM, PRESS 1 THROUGH 8 FOR THE NUMBER OF GRO
UPS OF SEVEN YOU NEED."
160 PRINT "TO END THE PROGRAM YOU MUST PRESS FUNCTION AND CLEAR."
170 PRINT "GOOD LUCK!"
180 CALL KEY(0)KEY(15)
190 GOTO 180
200 GAMEEND:48
210 CALL CLEAR
220 CALL SCREEN(4)
230 CALL CHAR(128,"000000000000")
240 CALL CHAR(129,"FFFFFFFFFFFFFF")
250 RANDOMIZE
260 CALL HCHAR(5,1,128,32)
270 R=4
280 FOR Y=1 TO SAMENUM
290 R=R+2
300 DISPLAY AT(3,1):"GAME"
310 DISPLAY AT(4,2):"NO."
320 DISPLAY AT(3,14):"NUMBERS"
330 DISPLAY AT(8,1):Y
340 C=C+1
350 FOR X=1 TO 7
360 N(X)=INT(RN)*80)+1
370 FOR J=1 TO Y
380 IF N(J)=N(X-J) THEN 370
390 NEXT J
400 NEXT X
410 L=L+5
420 SW=0
430 FOR X=1 TO LIM
440 N(X)=N(X)+1
450 N(X)=N(X)+1
460 N(X)=N(X)+1
470 N(X)=N(X)+1
480 SW=1
490 LIM=X
500 NEXT X
510 IF SW=1 THEN 430
520 CALL HCHAR(R+1,1,128,32)
530 FOR X=1 TO 7
540 DISPLAY AT(R,C):N(X)
550 C=C+3
560 NEXT X
570 NEXT Y
580 GOTO 590

```

THE DIRECTOR

A very good question was brought to my attention by new members - How do I get a list of what is in the Disk Library? - I had to think for a minute and realized new members don't have access to a list. When the new library was formed I put the 7 page directory into the newsletter and have been adding updates later on in the newsletter. With this question, I have added two new disks to the front of the library. One the DIRECTOR which is already in the library, but this version is the one I use so it will print out things just like you see them in the library. Two, a floppy with DIRECTOR on side one, and PGM-REVIEW on side two. DIRECTOR is the disk that contains all the disk catalogs of the library, as seen in the library and must be used with the DIRECTOR. PGM-REVIEW is the program review or comments of all the disks and programs in the library and may be printed out with TI-WRITER. I hope these disks will help all of you with knowing what is in the library. Also added to the Library are

- * 99-CALC * - An electronic spreadsheet, 9 files, and Auto-loads in XB. Added to the BUSINESS section of the Library.
- * BA-WRITER * - A multi-function program, A word processor, file printer, tube copy, and rapid 40 and 64. 14 files, XB auto-load. Added to the BUSINESS section.
- * FORTH/ARTI * - JP Graphics, A drawing program written in Forth. 3 files and runs out of E/A option #3. Added to the Graphics section.
- * JPDOCS * - The documentation for JP GRAPHICS. 1 file, print it out with TI-WRITER. Added to the Graphics section.
- * SPEEDREAD * - Learn more about reading and possibly improve your reading skills as well as speed. 13 files, XB auto-load. Added to the EDUCATION section of the Library.
- * SUPERBU0II * - A new improved version of SUPERBUG a disassembler which has 8 files, loads out of XB or E/A. Added to the UTILITIES section.
- * TI-FORTH-4 * - TI FORTH that loads out of XB. 4 files, and is added to the FORTH section.
- * TOOLKIT * - 12 files, these are individual utility programs which are added to the UTILITIES section.
- * VANDAVANT * - XB auto-load, 25 files. A few more utilities for you to try out. Added to the UTILITIES section.
- * VIDTEX * - 12 files, XB auto-load. Put RLE pictures onto your screen with this program. Added to the GRAPHICS section.
- * WORDS * - 5 files, XB auto-load. A Word Processing program written in Forth. Added to the BUSINESS section.

John Sterner

If disks aided this time, more will come later.

*** DISK DIRECTORY ***

FILENAME	SIZE	TYPE	FILETYPE	FILENAME	SIZE	TYPE	FILETYPE
"99-CALC"							
FILENAME	121+237=358	P		FILENAME	8/13/86		
99-CALC	25	PROGRAM		99INST-3	14	PROGRAM	
99INST-1	11	PROGRAM		99INST-4	15	PROGRAM	
99INST-2	13	PROGRAM		99INST-5	14	PROGRAM	
"BA/WRTITER"							
FILENAME	346+12=358	P		FILENAME	8/13/86		
#FILE	3	DFX	80	EDITA2	33	PROGRAM	
#PRINT	34	DVR	254	FILE/PRINT	37	IVR	254
BA-WRTITER	12	PROGRAM	Y	FORMA1	33	PROGRAM	Y
CHARA1	9	PROGRAM	Y	FORMA2	33	PROGRAM	Y
EDITA1	26	PROGRAM	Y	LOAD	17	PROGRAM	
"FORTH/ARTI"							
FILENAME	358+0=358	P		FILENAME	8/13/86		
FORTH	6	DFX	80	FORTHSAVE	39	PROGRAM	
"JPDOCS"							
FILENAME	93+265=358	P		FILENAME	8/13/86		
JPDOCS	93	DVR	80				
"SPEEDREADR"							
FILENAME	343+15=358	P		FILENAME	8/13/86		
CATALOG	4	PROGRAM		RATECHK2A	37	PROGRAM	
LOAD	8	PROGRAM		RATECHK2B	19	PROGRAM	
MENU	8	PROGRAM		RATECHK3A	35	PROGRAM	
RATECHK1A	38	PROGRAM		RATECHK3B	13	PROGRAM	
RATECHK1B	19	PROGRAM		SPDREAD2A	11	PROGRAM	
"SUPERBUGII"							
FILENAME	358+0=358	P		FILENAME	8/13/86		
LOADSBUG	9	DFX	80	SBDCCB	78	DVR	80
SBDCC	62	DVR	80	SBDCCC	46	DVR	80
SBDCCA	49	DVR	80	SBUG	3	PROGRAM	
"TI-FORTH-4"							
FILENAME	358+0=358	P		FILENAME	8/13/86		
FORTH	15	DFX	80	LOAD	2	PROGRAM	Y
FORTHSAVE	39	PROGRAM	Y	SYS-SCRNS	302	DFX	128

*** DISK DIRECTORY ***

FILENAME	SIZE	TYPE	FILETYPE	FILENAME	SIZE	TYPE	FILETYPE
"TOOLKIT"							
FILENAME	298+60=358	P		FILENAME	8/13/86		
COMP_DF80	15	PROGRAM		DUMP_OBJ	37	PROGRAM	
COMP_DF163	15	PROGRAM		FILE_LIST	34	PROGRAM	
DUMP_DF80	20	PROGRAM		LABEL_DISK	12	PROGRAM	
DUMP_OBJ	34	PROGRAM		PROOF_READ	27	PROGRAM	
"VANDAVANT"							
FILENAME	310+48=358	P		FILENAME	8/13/86		
CLOCK	12	PROGRAM		DV2-JFLTSH	3	IFX	255
DEFAULTS	3	IVR	255	HELP	21	IFX	255
DEFAULTS_IX	2	IVR	23	LOAD	9	PROGRAM	
DV002	49	IVR	254	O/IXIO	16	DFX	80
DV002-WP	9	PROGRAM		O/IXSRCH	5	DFX	80
DV008-ML	6	PROGRAM		O/WINDOW	14	DFX	80
DV013-SP	8	PROGRAM		S/IXIO2	26	DVR	80
DV015-NT	7	PROGRAM		S/IXSRCH	17	DVR	80
DV016-SRT	9	PROGRAM		S/WINDOW	61	DVR	80
"VIDTEX"							
FILENAME	292+65=358	P		FILENAME	8/13/86		
99RLE	34	DFX	128	FORTH	15	DFX	80
99RLEDOC	13	DVR	80	FORTHSAVE	39	PROGRAM	Y
COBXY	12	DVR	80	HERRON	43	DVR	80
ELVIRA	15	DVR	80	LOAD	2	PROGRAM	Y
"WORDS"							
FILENAME	357+1=358	P		FILENAME	8/13/86		
FORTH	33	PROGRAM		FORTJ	26	PROGRAM	
FORTI	33	PROGRAM		LOAD	8	PROGRAM	

11 DISKETTES, 106 FILES

TI-WRITER HELP: EDITOR

by Tom Kennedy
CIS ID# 74176,774

How many of you have a typewriter, please raise your hand. Keep your hand up if your typewriter has interchangeable text. How about automatic bold and underline? Or some amount of memory storage (for letter heads, etc.)? How about an erase key? Those of you left have probably got a pretty expensive piece of machinery, but TI-WRITER has ten times the functions, or features of the best typewriters. With TI-WRITER, your only limitation is your own creativity.

To start off with, what will you need to operate your Word Processor? You must have the 99/4A console (TI-WRITER won't work with the 99/4), a TV or monitor, the cartridge and disk package, the disk system, memory expansion, the RS232 interface, and a printer. In other words, the whole works. The printer is something you definitely want to be careful in choosing because all of your work will be in vain if you can't print out exactly what you type in, and with an attractive appearance.

First, let's look at the command line. That's the line at the top of the screen when you're in the command mode. There are seven commands shown and sixteen sub-commands that are options of the main seven. The commands are selected by typing only the letters that are capitalized in the word. For instance: "F" for Files, "SH" for Search, or "LF" for Load File. That's an interesting point: you can access any of the sub-commands from the main command menu. In other words, to ShowDirectory (which is a disk catalog) you would enter the command mode, (FCTN 9), and either type "F" for files, and "SD" for ShowDirectory, or just type "SD" immediately. This feature saves a lot of time and keystrokes.

The first command is Edit. This simply enters you into the text-edit mode in which text is created.

Next is Tabs. When you hit "T", the top part of your text is shown with a scale across the top showing the current tabs and margins. Changes are made by simply typing over existing entries with the appropriate symbol (L,R,T, or I). "F" for files allows you to work with your text file as a whole. To load, Save, Delete, Print, Purge, or ShowDirectory, "PF" for print file is not what you'll get when you print out through the text formatter it just prints a "hard copy" of the whole file, just as you see it on the screen. I doesn't print with any of the modifications made by the format commands (more on those later). "PF" is useful for making a fast copy of a long letter, or whatever, in order to check for errors without having to scroll back and forth or up and down. Purge simply erases the file from memory to prepare for a new entry. It is similar to the "NEW" command in BASIC.

Next is "L" for Lines. This allows you to work with whole lines or groups of lines by moving them to somewhere else in the text, copying to somewhere else and leaving the original intact, to delete groups of lines, or to quickly move the cursor to some line in the text with the ShowLines option.

Search (or "SH") gives you the option of either the FindString routine or the ReplaceString routine. FindString will move the cursor to the first and/or each successive use of the word string you give. ReplaceString searches the text for a given string and replaces all or one occurrence with the new string. This is great for correcting a repetitive spelling error.

RecoverEdit is a failsafe repair in case the text buffer was purged in either the File or Quit command. It will pull back everything but the first line and restore the file. I guess the loss of the first line is the penalty paid for accidentally erasing a file, which can't be done very easily.

Finally, Quit, as the name implies, blows it all apart and leaves you with the title frame. But before it goes, all open files are closed (such as to disk

or printer) so no data is lost. Fortunately, it first gives you the option of saving your file (in case you forgot to do that already) or just purging the file and going back to the edit mode. But if you really want to quit, you type "E" for Exit and it shuts down.

Now let's go over the keyboard. TI-WRITER makes extensive use of the FCTN and CTRL keys and uses every possible function of the top line of keys (the numbers). There are also many functions that have duplicate methods of keystrokes to activate them. For instance, to enter the command mode, you either press FCTN 9 or CTRL C. The reason for this duplication is to allow you to choose which is easiest to use depending on where your fingers are at. The problem though, is that it can be very confusing trying to remember the fifty different key combinations that activate the thirty functions. A better method is to just pick which keys you're going to use for what function and ignore the rest. What I do is use the number line keys for anything shown on the overlay strip and just memorize the few functions hidden down in the keyboard. Let's start by going down the overlay strip, left to right.

- ```

* CTRL 1 * This can be a real lifesaver. It recovers, or "backs up"
*(CTRL Z) * a -unction that you didn't mean to hit. Like if you goofed
* and hit "Delete Line" instead of "Insert Character", you
* just hit "OOPS!" and the line comes back.
Del Char * FCTN 1 * This is the same as "DEL" in console BASIC. It deletes
*(CTRL F) * one character under the cursor and pulls the rest of the
* line up to fill.
Reformat * CTRL 2 * This is used to close up the text after using Insert
*(CTRL R) * Character. It deletes all spaces between the cursor and the
* next word in the text. Then it draws all subsequent words up
* through the paragraph until it encounters a Carriage Return.
Ins Char * FCTN 2 * Characters are inserted after the cursor and the bulk of the
*(CTRL G) * text is pushed down the line. After insertion of new text,
* you hit Reformat and any remaining spaces are removed. In
* the Fixed mode (hollow cursor), this operates the same as in
* console BASIC.
Screen * CTRL 3 * This allows you to choose which of the five color
Color * combinations of text/screen you prefer. The default, for no
* good reason, is white on dark blue. But I find this hard on
* the eyes. I prefer to turn down the color on my monitor and
* use either black on green or black on light blue.
Del Line * FCTN 3 * Deletes the entire line that the cursor is on, including
Next * CTRL 4 * the space of the line.
Paragraph*(CTRL J) * This advances the cursor to the beginning of the
* following paragraph and puts the first line at the top of
* the page.
Roll Down* FCTN 4 * This is called a "vertical block scroll", which means
* that the next 24 lines of text are shown. This is handy for
* scanning quickly down the text to get to some point.
Dupl Line* CTRL 5 * This creates an exact duplicate of the line the cursor
* is on and places it directly below. Some have questioned
* its value in writing text, especially since the Move/Copy
* function can do the same, but this key makes it faster and
* easier to create repetitive lines such as a double row of
* asterisks under a title.
Next * FCTN 5 * This is a "horizontal block scroll". It jumps across to
Window * * display the next block of 48 characters, in increments of
* 20. For example, the screen starts out on column one to
* forty, then twenty to sixty, then forty to eighty.

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