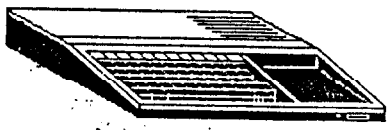

President Ira Lieberman 820-6332
Vice-pres John Rejician 767-9679
Secretary Ann Halko 262-8206
Treasurer Barbara Rejician 767-9679

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Editor Jack Zawediuk 821-1043

LEHIGH 99'ER COMPUTER GROUP

Next meeting: 7:30 PM, Monday
May 16, 1988

Conference Room A-D, Second Floor
Sacred Heart Hospital
4th and Chew Streets
Allentown, Pennsylvania

PRESIDENT

The time has come for our annual elections. Nominations will be held at the April meeting and the election of officers will be in May. Ann Halko has been our secretary for 5 years. She has deceided to take over the portion of the disk library that her son John has been handling, as his school work is taking up all of his time. Vice President John Rejician gets home from work late and is haveng trouble getting to the meetings on time. If he doesn't come his wife Barbara won't be here either. And so it goes. It's time for a few more people to come up and say "If you need me I'll be able to help".

While our group is quite small we have a lot to offer, not the least of which are the hundreds of programs in our various libraries. Even though a few people have dropped out, we keep adding new members every month. And the organization is largely made up of people who have rather complete systems and several who are quite knowledgeable in both hardware and programming.

The Geneve WAS here - Finally - And those who came to the March meeting got to see Jerry Boyer show and demonstrate some of it's capabilities. There seemed to be a lot of interest as almost everyone stayed around for this demo.

Editor Jack Zawediuk wants to get this issue in the mail before the postal rates go up, so we'll have to save our reports about the TICOFF 88 computer show until the next meeting. See you then.

IRA LIEBERMAN

```
10 ! SQUIRMY SCREEN
20 ! TIPS FROM TIGERCUB #45
30 !
40 ! FROM NORTH JERSY TI US
ERS GROUP DEC 87
50 !
100 CALL CLEAR :: FOR SET=1
TO 8 :: CALL COLOR(SET,1,1)
:: NEXT SET :: CALL CHAR(10
0,"0",101,"0")
110 X$(0)="4043241818244202
" :: X$(1)="402126181864840
2" :: X$(2)="2020131C38C804
04" :: X$(3)="1010101FF8080
808" :: X$(4)="081010907E11
1020"
120 X$(5)="080808F81F101010
" :: X$(6)="0404C8381C13202
0" :: X$(7)="02846418182621
40"
130 A$=RPT$(CHR$(100)&CHR$(
101),13):: FOR R=1 TO 24 ::
 C=C+1+(C=2)*2 :: DISPLAY A
T(R,C):A$ :: NEXT R
140 CALL VCHAR(1,29,1,168)
150 CALL SCREEN(2):: CALL C
OLOR(9,5,16):: FOR S=1 TO 8
CALL COLOR(S,16,2):: NEXT S
160 DISPLAY AT(5,5):" TIGER
CUB SOFTWARE ";:: DISPLAY A
T(8,6):" SQUIRMY SCREEN ";
170 FOR J=0 TO 7 :: CALL CH
AR(100,X$(J)):: CALL CHAR(1
01,X$(7-J)):: NEXT J
180 CALL KEY(0,K,S):: IF S=
0 THEN 170
```

THE GENEVE IS HERE , FINALLY .

Part 6
by Jerry Boyer

Well, this month I've received an updated version of the MYARC MY-ART system disk version 1.4 dated Mar. 1988. Also on the disk were 3 new pictures in the high resolution mode. They were: DRAGON ; UNICORN ; WOLF. These drawings are so good that they look like photographs. Along with the new disk were 13 pages of instructions showing how to use the new commands in addition to all of the regular MY-ART commands. From what I can tell, the only new features are:

Control H = creates a horizontal mirror image of your picture
Control V = creates a vertical mirror image of your picture
Control left arrow = deletes last letter of text entered with the Text command if the enter key has not been pressed.

You can get the updated MY-ART ver. 1.4 by sending a photo-copy of your MY-ART package original sales receipt or invoice and $10.00 to:

MYARC INC.
2624 RAINIER DR. N.E.
BIRMINGHAM, AL. 35215

Now I think I'll show some of the features most used in the M-DOS mode.

Control C - Breaks the operation in progress
Control S - Pauses the operation in progress
CLS - Clears the screen
DIR - Shows a directory of disk in DSK1.
DIR B: - Shows a directory of disk in DSK2.
DIR >PRN - Prints out directory of disk in DSK1.
DIR B: >PRN - Prints out directory of disk in DSK2.
TYPE "filename" /M - Prints D/V 80 file to screen with a pause feature using the space bar
COPY "filename" PRN - Prints D/V 80 file out to printer
COPY CON PRN - Lets you print from console to printer directly
Control Z - Stops the above command and returns to M-DOS
COPY CON "filename" - Creates a D/V 80 file from console
Control Z - Stops the above command and returns to M-DOS
COPY A:"filename" B:"filename" - Copies file from DSK1 to DSK2
DISKCOPY A: B: - Copies DSK1. to DSK2. in one pass up to 720 sec.
DATE - Allows you to change the date in memory if incorrect
FORMAT /V - Formats disk in DSK1 (it asks for the new disk name)
TIME - Allows you to set the correct time of the computer clock

One of the best features of M-DOS is that you can set up a D/V 80 file called AUTOEXEC to include your most used commands and put them in a menu which you can execute with a single letter input. AUTOEXEC autoloads and executes as soon as M-DOS is booted up. This makes handling the most used commands a simple task.

(Page 2)

My AUTOEXEC file is:

```
ECHO OFF
ECHO
ECHO
ECHO
ECHO
ECHO MENU
ECHO ====
ECHO
ECHO ============
ECHO A. G.P.L.
ECHO B. MY-ART
ECHO C. M-DOS
ECHO D. DIR B
ECHO E. PRN DIR B
ECHO F. FORMAT B
ECHO G. COPY DISK
ECHO
ECHO <type "N" space and selected letter>
```

Along with my AUTOEXEC file I have a D/V 80 file called "N" on my M-DOS boot disk. I have GPL also on the same disk. You need a DS/SD with 720 sectors for a boot up disk to get it all on. My "N" file looks like this:

```
IF %1==A DSK1.GPL
IF %1==B DSK2.MYART
IF %1==C ECHO M-DOS  GO AHEAD
IF %1==D DIR B:
IF %1==E DIR B: >PRN
IF %1==F FORMAT B: /V
IF %1==G DISKCOPY A: B:
```

The "N" file is the executing commands for the AUTOEXEC MENU file. Therefore anytime at all while I'm in M-DOS, all I need to press to get my most used commands is an N,a space,and a letter (A to G). You can customize either file to suit your own special needs. This menu system will be even better if you have a RAM-DISK with a battery so you can keep your most used files ready to load. Just substitute whatever disk drive numbers that you're using for my disk numbers. This set up saves a lot of time when in M-DOS. When you create your own AUTOEXEC and "N" files use the: COPY CON "filename" command in M-DOS. This creates a D/V 80 file without any control characters in it like when you create a file with TI-WRITER and print it to disk using C DSK1."filename" as a device name in the Print File command. Well that is all that I have to pass along this month. Bye now.

HOW TO USE THE IMAGE STATEMENT WITH A PRINTER

OR

HOW TO READ THE 'PRINT USING' INSTRUCTIONS IN THE X-BASIC MANUAL 800 TIMES UNTIL CHECKING THE 'IMPORTANT PRODUCT INFORMATION FOR TI EXTENDED BASIC' FOLDER FOR THE CORRECT FORMAT

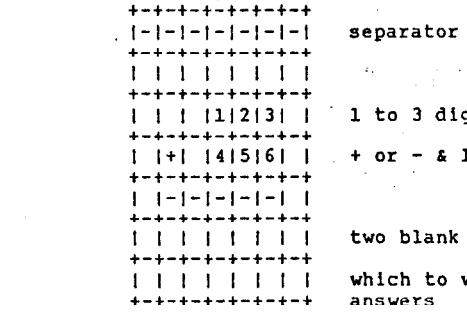
by Brad Snyder
LEHIGH 99'er COMPUTER GROUP

First of all, the correct format is: [#file-number[,REC record-number],] not as stated on page 150 of the XB manual. (That last comma is missing).

The image and print-using statements can be very useful in formatting output to a printer, just as they are when printing to the screen.

The program with this article prints out six pages of addition / subtraction problems for children in about 2nd grade to practice, then a final sheet of the answers for the previous pages (for us parents who don't? need the practice). The problems will range from one to three digits and we won't allow a subtraction problem with a negative answer.

Let's define how we want the printout to look:



As you can see each problem takes up 7 rows by 7 column. We are going to put the printer in elongated mode, so remember to think in 40 columns. Five problems will fit across the row (5 x 7=35, leaving 2 spaces to preceed the problems and 3 to follow). With 11 inch long paper there are 66 lines, so nine problems will fit down the sheet (9 x 7=63, leaving 1 line for the page number, 1 line for the title, and one blank line).

So for the first line of the problem the IMAGE statement would be " ### " for the next line " # ### " and for the answers " #### " , of course repeated 5 times for the number of problems per line, and with 2 spaces added before the first problems for the 2 space margin.

Now we can start talking about the program.

Line 180: reserve space for variables and set EL$ to the code to set the printer to elongated mode. (more on EL$ a little later).

Line 190: set text color to white, screen to dark blue.

Line 200: gets your printer port. The CALL KEY(3,K,S) before the ACCEPT AT statement needs an explaination. It seems that ACCEPT does not set the keyboard to the scan that it wants, so by setting the key-unit to 3 (the 99/4 scan, no lower case) ACCEPT also uses that scan. Even if alpha lock is up, the letters that appear will always be upper case. Sure the validate command will be sure not to allow any lower case letters through, but this way you just enter the port name in upper or lower case without the annoying honks from trying to enter lower case.

Line 210: opens a channel to the printer.

Line 220: waits until you have your printer ready.

Line 230: randomize and display program screen.

Line 240: sets up the PAGE counter, displays the page number, PRINTS the page number and title to the worksheet.

Remember I said to think in 40 columns? So how can we tab to column 37 and print 'PAGE ' and a number yet? Well, when we print EL$ (two characters) to get the elongated printer mode, the computer remembers that two characters have been printed. Never mind that the printer head just sat there for those two characters. And when the computer gets the tab(37) it just figures how many spaces it has to print to get from the column it thinks it is at to column 37. Since it thinks it has printed 2 already, we have to lie to it and tell it to tab 2 more columns than we really want. (I have run this program many times and the computer has never caught on to the lies).

I print the string value (STR$(PAGE)) so that the number occupies only one space.

Line 250: sets N (the number of the problem on current page) to 1, sets up a loop to count the number of problem LINES per page, displays the line being worked on, an finally sets up the loop counting the number of problems per line.

Line 260: decide to have an addition or subtraction problem. SN$(PR) holds the sign for the current problem.

Line 270: decide the values to use for the problem.

Line 280: if a subtraction problem, make sure the kiddies don't end up with a negative number (larger number always on top). And LET V3= the answer to the problem.

Line 290: save the values and answer in arrays.

Line 300: add 1 to N, do more problems until 5 have been done, after 5 have been done- display PRINTING prompt.

Line 310: we're ready to print a line of problems now, so first print a line of '-' signs (80 because we didn't put the printer in elongated mode first).

Line 320: set the printer to elongated mode, then print out the first line of the problems using the IMAGE statement in line 420. The IMAGE statements take into account the two chatacters for the left margin

Line 330: put the printer in elongated mode for the next line of the problems.

Line 340: prints the signs and next row of values of the problems.

Line 350: prints EL$, then 2 spaces, then the lines in the problems. Also the two blank lines.

Line 360: do nine lines per page, do six pages.

Line 370: done with printing of the problems, print answers next. Display the prompts for printing of the cheat sheet.

Line 380: set up page loop, set N (problem counter) to 1, display page number, print page number.

Line 390: setup line counter loop, display line number, print EL$.

Line 400: print line of answers using line 440.

Line 410: add 5 to N because 5 problems have been printed. Do next line until 9 have been done, then print a blank line, then do the next page until 6 have been done. Then close the printer port and end the program.

Lines 420-440: IMAGE statements.

If your printer takes a different command string than CHR$(27);CHR$(14) to set elongated mode, just edit line 180 to the proper values. But if your command is only one character long, such as CHR$(14), simply double up on it so that EL$ is always 2 characters long. (EL$=CHR$(14)&CHR$(14)). If you don't do this it will mess up where our tabs fall.

```
100 REM +----------------+
110 REM | WORKSHEET GEN. |
120 REM |      BY        |
130 REM |  BRAD SNYDER   |
140 REM +----------------+
150 REM
160 REM TI X-BASIC 12/12/87
170 REM
180 OPTION BASE 1 :: DIM ANS
(45,6),SN$(5),PROB(2,5):: EL
$=CHR$(27)&CHR$(14)
190 CALL CLEAR :: CALL SCREE
N(5):: FOR S=0 TO 12 :: CALL
COLOR(S,16,1):: NEXT S
200 DISPLAY AT(12,1)ERASE AL
L:"ENTER PRINTER PORT:":"PIO
" :: CALL KEY(3,K,S):: ACCEP
T AT(13,1)BEEP SIZE(-28)VALI
DATE(DIGIT,UALPHA,"/."):P$
210 OPEN #1:P$,OUTPUT,VARIAB
LE 80,DISPLAY
220 DISPLAY AT(12,1)ERASE AL
L:"PRESS ANY KEY WHEN PRINTE
R  IS READY" :: CALL KEY(0,K
,S):: IF S<1 THEN 220
230 RANDOMIZE :: DISPLAY AT(
2,3)ERASE ALL:"MATH WORKSHEE
T GENERATOR": : :"  GENERATI
NG  PAGE" :: DISPLAY AT(23,4
):"Written by Brad Snyder"
240 FOR PAGE=1 TO 6 :: DISPL
AY AT(5,19):PAGE: : :"" :: P
RINT #1:EL$;TAB(37);"PAGE "&
STR$(PAGE):EL$;TAB(14);"Math
Worksheet": :
250 N=1 :: FOR LINES=1 TO 9
:: DISPLAY AT(8,3):"WORKING
ON  LINE";LINES :: FOR PR=1
TO 5
260 IF RND>=.5 THEN SN$(PR)=
"-" ELSE SN$(PR)="+"
270 V1=INT(RND*999)+1 :: V2=
INT(RND*999)+1
```

```
280 IF SN$(PR)="-" THEN V3=M
AX(V1,V2):: V2=MIN(V1,V2)::
V1=V3 :: V3=V1-V2 ELSE V3=V1
+V2
290 PROB(1,PR)=V1 :: PROB(2,
PR)=V2 :: ANS(N,PAGE)=V3
300 N=N+1 :: NEXT PR :: DISP
LAY AT(8,3)SIZE(11):"PRINTIN
G"
310 PRINT #1:RPT$("-",80): :
320 PRINT #1:EL$;:: PRINT #1
,USING 420:PROB(1,1),PROB(1,
2),PROB(1,3),PROB(1,4),PROB(
1,5)
330 PRINT #1:EL$;
340 PRINT #1,USING 430:SN$(1
),PROB(2,1),SN$(2),PROB(2,2)
,SN$(3),PROB(2,3),SN$(4),PRO
B(2,4),SN$(5),PROB(2,5)
350 PRINT #1:EL$;"  ";RPT$("
----- ",5): : :
360 NEXT LINES :: NEXT PAGE
370 DISPLAY AT(5,1): : : : :
: :"  PRINTING CHEAT SHEET!
": : :"  PAGE": : :"  LINE"
380 FOR PAGE=1 TO 6 :: N=1 :
: DISPLAY AT(14,7):PAGE :: D
ISPLAY AT(17,7):0 :: PRINT #
1:EL$;"PAGE";PAGE
390 FOR LINES=1 TO 9 :: DISP
LAY AT(17,7):LINES :: PRINT
#1:EL$;
400 PRINT #1,USING 440:ANS(N
,PAGE),ANS(N+1,PAGE),ANS(N+2
,PAGE),ANS(N+3,PAGE),ANS(N+4
,PAGE)
410 N=N+5 :: NEXT LINES :: P
RINT #1 :: NEXT PAGE :: CLOS
E #1 :: CALL CLEAR :: STOP
420 IMAGE "      ###     ###
  ###     ###     ###"
430 IMAGE "   # ###  # ###
# ###  # ###  # ###"
440 IMAGE "    ####   ####
 ####    ####    ####"
```

Announcing TI-ECHO

What is TI-ECHO? It is a form of telecommunications that is probabably new to most TI people. It is a topic oriented message base that is carried by several bulletin boards at the same time. The topic in this case being TI-99/4A's and Myarc 9640's. A message entered on any one of several boards will get "echoed" to all the other participating boards. You can ask a question on a bbs in Portland and have someone in another state answer you. The msgs (sometimes called mail or ECHOmail) are usually exchanged by the bbs's on a once or twice, nightly basis and more times on weekends. Most of the mail traffic is carried on the PC PURSUIT network to keep costs to a minimum.

Where can TI-ECHO be found? It is on one of these bbs's with more joining soon. We hope to have at least one participating bbs in all of the cities serviced by PC PURSUIT.

Dakota InfoNet CO-OP Opus	605 338 7050	Rory Binkerd
NC Central	919 471 0466 (PCP)	Ammon Nissan
Oregon OPUS	503 692 7024 (PCP)	Rich Hill
TI Raleigh	919 833 3412 (PCP)	Walter Tietjen

For now, these will be the main bbs's in the Echo. All are run by Sysops that still own TI-99/4A's. As we pick up more and more bbs's, we will post the info in the TI ECHO area and also on the major network services. We have had inquiries from Boston, California and Toronto so the echo is growing! A recent write up in the Computer Shopper didn't hurt anything either!

What does it cost to use TI-ECHO? NOTHING, nada, zip, zero bucks. (so don't ask for a discount!)

What can you do to help TI-ECHO? CALL!

Spread the word! And also ask any of your local Sysops that handle Echomail if they would carry the TI-ECHO. If he/she is interested, have him contact any of the above bbs's.

GRAMULATOR

The Gramulator is now in production and I've sent for mine. When I receive it I will bring it to the meeting for a demo. The following is a list of updated features.

The Gramulator simulates 64k of GRAM and 16k of RAM (in two 8k banks at >6000-7FFF) and as an option, 32k of RAM (in four 8k banks). You can customize the built-in TI operating system and TI Basic in GROMs 0 or 1 and 2 while a cartridge is in the slot. You can backup your GROM and ROM cartridges to disk. Acts as a "Super Space". Capable of loading user written GPL code. A total of 80k (96k with option) of memory with lithium battery backup. Battery located outside case for easy replacement. All loading and saving of cartridges is software controlled for ease of use by the novice.

The software needed to load and save GROM and GRAM will be built in for instant access. A memory editor, which will be supplied on disk, will alow you to alter any program loaded into GRAM or RAM. User documentation and technical information will also be included.

Memory expansion and a disk drive are REQUIRED to take advantage of the Gramulator.

The Gramulator should be compatible with all 99/4A peripherals. It has been tested with TI and Myarc disk controllers as well as the Myarc 512k ramdisk.

At a cost of $180.00 each the Gramulator, with all the features listed above, would be a worthwhile investment for any TI 99/4A owner. Information on the RAM option will be available for user installation or can be ordered at the time of purchase for an additional $50.00, Mass. Residents add 5% sales tax. Please allow 8 to 10 weeks for delivery.

Send your CHECK or MONEY ORDER to:

CaDD Electronics
52 Audubon Road
Haverhill, MA 01830

If you have any technical questions call (617) 372-0336 after 6:30 pm EST.

Jack Zawediuk
Editor