

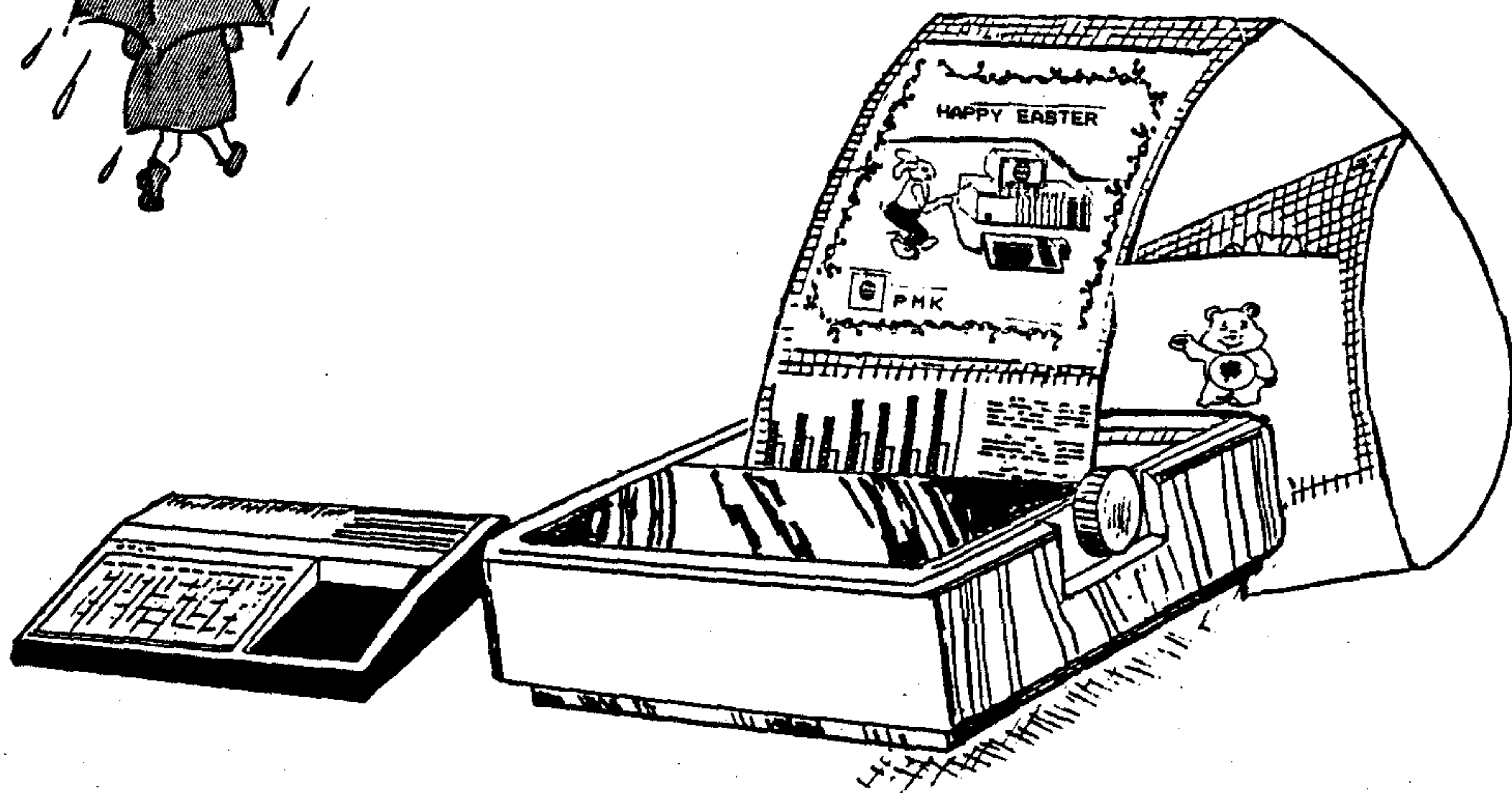
# Spirit of 99



THE OFFICIAL NEWSLETTER OF THE CENTRAL OHIO NINETY-NINERS INC.

PUBLISHED MONTHLY IN COLUMBUS OHIO

## APRIL



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lished for Central  
Ohio Ninety Miners  
Inc. by C.O.N.N.I.  
members and is the  
official newsletter  
of C.O.N.N.I. User  
Group.

Editorial, address  
is:  
181 HEISCHMAN AVE  
NORTHINGTON, OH 43085  
Subscription rate  
(USA) \$20.00 /1 year  
\$25.00 /1 year out-

side continental U.S.  
Third class postage  
paid at Columbus, OH

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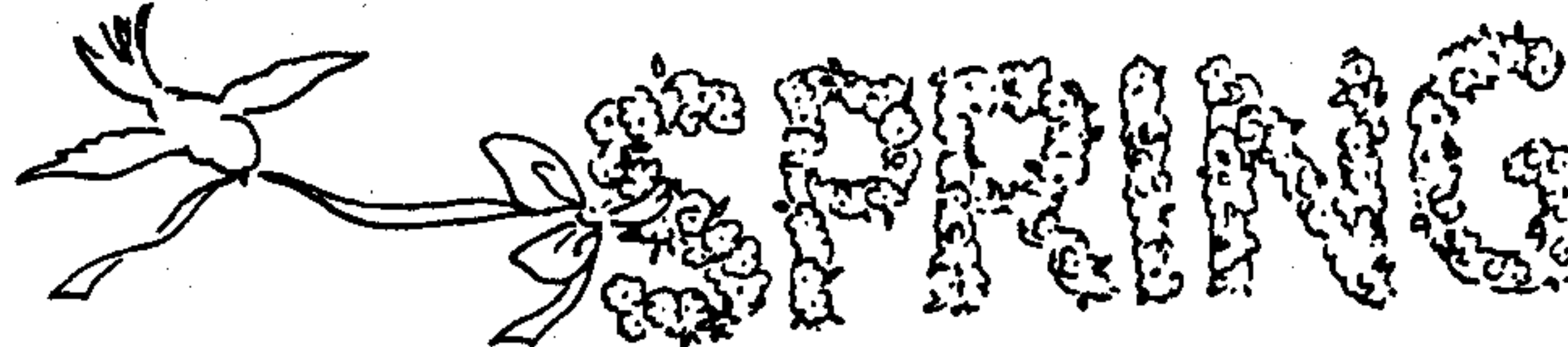
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the purpose of comp-  
uter literacy.

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urday of each month  
at Chemical  
Abstract, 2540  
Olentangy River Road  
Columbus, OH. Meet-  
ing time is 8:30 AM  
til 2:30PM, Meetings  
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Columbus, OH 43214

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## DUES ANNOUNCEMENT ! ! !

Local dues are usually paid at or before the March meeting, and are \$20 per year for full membership, library and voting privileges, plus newsletter. You may also pay your dues in two installments if desire: \$10 in March and \$10 in September. Those who join during other months of the year pay a lesser, pro-rated amount:

MAR-20.00 APR-18.33 MAY-16.67 JUN-15.00 JUL-13.33 AUG-11.67 SEP-10.00 OCT-8.33 NOV-6.67 DEC-5.00 JAN-3.33 FEB-1.67

Send your check to Everett Wade, 179 Erie Rd, Columbus OH 43214  
(614) 262-6346 Make check out to C.O.N.N.I.

**THE 1994 LIMA NUG CONFERENCE - REPORT #2**  
Friday evening/Saturday May 13&14  
Reed Hall, The Ohio State University  
Lima Campus, Lima Ohio

As in past years this all TI/Geneve event is **TOTALLY FREE**. There is no admission charge and no charge for tables in the exhibit area. The Lima Campus is located just east of the city on the north side of State Route 309, 3 miles east of the junction of I75 and 309. There is ample free parking next to Reed Hall.

**INFORMATION:** To schedule a seminar, reserve free exhibit area tables, or for any additional information contact us in any of the following ways:

Write the Lima User Group at P.O. Box 647, Venedocia OH 45894.

Phone Dave Szipp evenings at 513-498-9713

Phone Charles Good evenings at 419-667-3131

Send internet messages to cgood@magnus.acs.ohio-state.edu

**TENTATIVE SCHEDULE:**

Friday May 13 4PM-8PM.

Saturday May 14 8AM-6PM with on site food service

**DISK COPYING:**

During the above hours a representative of any user group may make free copies of all disks added to the Lima software library since the 1993 NUG conference. We expect to have about 100 disks (about an equal number of floppies, DSSD disks) available for copying. Details of the contents of these disks will be mailed in mid April to those user groups likely to attend.

**REGISTRATIONS TO DATE:**

We have received requests for tables and/or seminar time from the following as of March 21; CIN DAY user group

Rancharged Computers

Asgard peripherals, 1 table and seminar

Bruce Harrison, 1 table and seminar

9649 News, Berry Miller 2 tables and seminar

Mid South User Group 2 tables

Bud Mills tables and seminar

L.L. Conner enterprise

Competition Computer

Barry Traver table and seminar

**CONSIGNMENTS:**

We will have a "self service" consignment area for individuals wishing to sell stuff. Paper, markers, tape, and envelopes will be available. We suggest individuals mark their equipment with requested sale price and ask buyers to

leave the money in envelopes. The Lima User Group does not offer to provide security, nor do we offer to collect money on behalf of individuals using the consignment area.

**VIDEO TAPES:**

As in previous years all seminars will be video taped. We will copy these videos for user groups for \$5 per 6 hour tape (pays for the tape and postage) or \$1.25 per 6 hour tape if you provide your own tape. Tapes for this purpose can be left at the Lima table if they are will marked with the owner's return address. As of this writing we don't know how many video tapes will be required.

**HOTELS:**

Call the hotel of your choice about prices and make your own reservation. Many hotels in Lima have nice rooms for under \$40 per night. They are listed here in two groups; those at the most convenient location near I75 and route 309, and those a bit farther away.

Most convenient location, 5 minutes driving time to campus:

**MOTEL 6** (This is the place where most people stay).  
419-228-0456

**HOLIDAY INN** 419-222-0004

**ECONOMY INN** 419-222-1080

**EAST GATE MOTEL** 419-229-8085

**DIELMAN'S MOTEL** 419-225-2806

**KNIGHT'S COURT** 800-843-5644

Other hotels a bit farther away

**RAMADA** 419-228-4251

**HOJO INN** 419-228-2525

**QUALITY INN** 800-424-6423

**DAY'S INN** 419-227-6515

**BEST WESTERN** 800-528-1234

**TRANSPORTATION:**

The easiest way to get to Lima is to drive. Lima has no commercial air service, but we will TRY to arrange free transportation for you from the airports of nearby cities. Arrangements are made by members of the local user groups in these cities. If you are flying to DAYTON OHIO (most who fly to Lima use this airport) phone Dave Szipp evenings at 513-498-9713. If you are flying to COLUMBUS OHIO phone John Parkins at 614-891-4965. If you fly to FORT WAYNE INDIANA phone Homer Kipling at 219-483-8886. Unless arrangements can be made in advance with these people, you will have to rent a car and drive to Lima. Lima is served by Greyhound bus.

**\*DONE\***





# TI-Bits Number 3

by Jim Swedlow, CA USA

[This article originally appeared in the User Group of Orange County, California ROM]

## THE INPUT-OUTPUT BUFFER

When you send data to your printer or to disk, your TI stores information in the input-output buffer. Generally it will keep data until it sees the end of a record.

To illustrate, consider this program that demonstrates the graphics abilities of Epson and compatible printers:

```
10 OPEN #1:"PIO.CR"
20 PRINT #1:CHR$(27);"L";CHR$(127);
   CHR$(0)
30 FOR I=1 TO 127
40 PRINT #1:CHR$(I)
50 NEXT I
60 PRINT #1:CHR$(13)
70 CLOSE #1
```

Line 10 opens your printer and tells your 4A NOT to send a carriage return and a line feed every 80 characters. Line 20 puts your printer in graphics mode and tells it to expect 127 graphics characters. The loop in lines 30 through 50 send the entire range of graphics characters. Line 60 sends a carriage return to clear the printers buffer.

Since there is no print separator after the CHR\$(I) in line 40, each character is taken as a record and sent to the printer. If you added a semi-colon after the CHR\$(I), all 127 graphics codes would be held in the input-output buffer until line 60 executed.

The difference is speed. Without the semi-colon, it took about 10.2 seconds for this program to run. When the print separator is added, run time dropped to 7.5 seconds.

## TRACKBALL TIP

The following article was on a disk someone sent me and was written by Rick Kellogg. I do not know where he can be reached.

A few months ago I purchased a trackball for my computer. I planned to use it with a few of the games that I had and with 'TI ARTIST'. Being somewhat lazy, I soon grew tired of switching the trackball and joystick plugs. Then an idea came to me. I pulled out my old (ahem!) ATARI 2600 and took the "Y" adaptor. Lo-and-behold, when this adaptor was hooked up to the TI joystick port, I could plug in both my TI joysticks and the trackball at the same time. Not only was this convenient, but at any time I could switch from joystick 1 to the trackball and not even loose a life in a game. For those of you who use ATARI compatible joysticks, all you have to do is plug your TI "Y" adaptor into the ATARI "Y" adaptor and you are all set. You 'TI ARTIST' fans will love it.

## THE SMART PROGRAMMER

This is probably old news to most of you, but if you have not heard, Richard Mitchell of Bytemaster Computer Services has taken over Miller Graphics THE SMART PROGRAMMER. As a result, Bytemaster no longer publishes SUPER 99 MONTHLY. The new publication, however, continues many of the traditions of both the old SMART PROGRAMMER and SUPER 99 MONTHLY.

Craig Miller has contributed to both of the new SMART PROGRAMMER issues released thus far. While it can get a bit techie sometimes, it remains an excellent publication. Further, it meets the needs of all TI owners, from novice to expert. The cost is \$15 (\$18 for first class). Write to:

Bytemaster Computer Services  
171 Mustang Street  
Sulphur LA 70663

## QUOTES OF THE MONTH

The best laid schemes o' mice and men  
Gang aft a-gley  
—Robert Burns 1759-1796

But it does move!  
—Attributed to Galileo Galilei  
1564-1642

## ON SUBPROGRAMS

SUBprograms, if you remember, use different variables from the main program. As a refresher, consider this:

```
10 A=3 :: CALL TEST :: PRINT A
20 SUB TEST :: A=10 :: SUBEND
```

If you run this, you will get the number 3 on your screen because the variable A in line 10 is a different variable from that in SUB TEST.

I wondered about how DATA strings and DEFINitions worked in SUBprograms. So I ran some experiments.

It turns out that a XB program can read a DATA statement anywhere. It works if the DATA statement is inside a SUBprogram and the READ command is in the main program or vice-versa. In other words, for purposes of READING DATA, the special rules about SUBprograms do not apply.

No so with DEFINitions. If you DEFINE A in the main program, it does NOT carry over into the SUB program. For example:

```
10 DEF A=10 :: C=A :: PRINT C
20 CALL TEST(C) :: PRINT C
30 SUB TEST(C) :: C=A :: SUBEND
```

This little program will first print 10 from line 10 where C is set equal to A, which is DEFINed to be 10. It will then print 0 as inside SUBprogram TEST, A is not DEFINed so it is zero. In the same manner, if you DEFINE something inside a SUBprogram, that DEFINition does not operate outside of that SUB.

Enjoy!



~~~~~ TI-101 ~~~~~

OUR 4/A UNIVERSITY

by Jack Sughrue  
Box 459  
E.Douglas MA 01516

originally appeared  
Bits, Bytes and Pixels  
Lima US newsletter

#8 EUNICE AND THE KIDS

or

LIFE AMONG THE LOGOPHILES

In this last session, Class, I wanted to spend some time explaining why the TI is still the best educational tool you can have in your homes or classrooms for young and old children. And everyone in between. By old, I mean in the 90's. Sister Pat Taylor's learners even include Centenarians! To learn more about this extraordinary woman and her extraordinary group of elderly computer buffs, write to her at 1050 Carmel Drive #456, Dubuque, Iowa, 52001. I don't know if Sister Pat calls her very active TI devotees an official user group, but they are. And they are probably the only All Nun User Group in America (The ANUGA Group of Iowa?).

And, yes, Class, I checked our map here at the university and there really is a place called Iowa.

Sister Pat is one of the two most active Tiers with whom I have ever had the opportunity to correspond.

The other does officially operate the only All Kids TI User Group in America. No, not AKTIUGA, Mr. Shakespeare. It is the Oakland US from Maine. And the energetic and ingenious leader is Eunice Spooner (Webb Road, Box 3728, Waterville ME 04981). Though the group puts out a newsletter that includes delightful programs written by the students and though the kids take field trips to the Computer Museum in Boston and though there is a highly developed TI computing program in the schools as well, I am not going to discuss any of those achievements by Mrs. Spooner. Except to say they and others are considerable.

Instead, I want to focus this particular class on a particular specialty of that remarkable woman: LOGO.

Now, don't shake your heads and shut down, as if LOGO were beneath you. Especially you, Ms. Bronte, who keep pestering me about adult stuff. I can guarantee all of you - those with little kids somewhere, including inside of you, and those who were born elderly - that LOGO can fit everybody's need to learn, to discover, to create, to explore, to develop the intellectual discipline of logical reasoning. There just is not another tool like it.

The computer is the perfect tool for the learning that only LOGO can provide. The TI LOGO II, as you will see, is our perfect educational tool.

I'd like to begin our last session together by reading a recent review (ah, nice alliteration there) from NEW-AGE/99 about Eunice's video tape package:

"There is a great video now available to TI owners: the full-length LOGO video done by Eunice Spooner (RFD 1, Box 3728, Webb Road, Waterville, ME 04981). It is wonderful! It also comes with a disk full of lots of the items she demos and a hardcopy listing of the items and footage for easy tape locations.

"Eunice is a certified elementary teacher and it is obvious on this tape. She's terrific: kind, patient, step-by-step logical, no panic; and she makes everything seem easy and fun. Which it is, if you do the things she suggests.

"I always liked LOGO. Then I put it away for a long time. After viewing this tape and trying her programs, I discovered I loved LOGO.

"If you own LOGO, get this package instantly. At \$10 it is a total steal. And it is used as a fundraiser to support the only ALL KIDS TI USER GROUP IN THE WORLD! If you don't own LOGO, buy it instantly. (It's on sale everywhere CHEAP! Years ago I paid \$119 for my first, and recently bought an unopened boxed one for \$15.) But, new or used, pick one up for this video/disk set alone. You'll rediscover the joys of computing and the real fun (and learning, which is why it is fun) of your remarkable 4A. Don't delay."

But before I discuss Mrs. Spooner's extraordinary LOGO adventures, I'd like to give you a bit of LOGO's history.

A few years before the 4A was born, MIT Professor Seymour Papert formed a team to create a powerful, high-level computer language specifically designed for educational purposes involving some of the ideas from the field of Artificial Intelligence. Papert was a disciple of (and worked with) noted Swiss psychologist Jean Piaget, the Father of Developmental Learning (creating learning environments in which learners learn naturally in the same way we all learned to walk and talk). Papert's classic book, MINDSTORMS, defines these ideas and explains the computer/learner relationship that led to his creating LOGO, still the most effective educational language - tool, if you will - that has ever been created. The book is still in paperback print. It should be in every computer buff's library, along with THE SECRET GUIDE TO COMPUTERS, which we mentioned a few sessions ago.

When TI asked Papert to create an enhanced version (with music, sprites, and the like, peculiar to the TI), the field testing and the results thereof made TI history. It is a singular module in that it, in effect, allows each user to create his/her own PERSONALIZED computer language.

What can LOGO do?

Well, you can write programs with it. You can write text with it that can rewrite itself in poetic ways. You can draw with it, including making animated films. You can use it for math activities, for problem-solving, for puzzles, games, logic activities, for creating musical scores. It does use all the various built-ins we take for granted on our TI's. For example, you can create a unique design in the turtle drawing mode and animate it; then create a pile of new sprites (beyond the few that are built in); then create bigger piles of new "tiles" which make up the character sets. Now, with your newly created animated design as background (with instant colors of your choice for back and foreground), you



may now set those sprites you created loose. Each of the 32 sprites can be set in motion at different speeds, in four different directions at the same time (using word terms like "EAST" or directional numbers), and each can be color defined from the TI's 16 color palette. All this, Class, can be done easier than in any other computer language. As a matter of fact, the learner takes him/herself through the stages needed to achieve these very complex routines. According to the philosophy of the LOGO developers, "LOGO has no threshold, no ceiling." The beginner can immediately do meaningful, exciting things with the program, while the most adept can do some very advanced things.

And now we come back to Mrs. Spooner's tapes. There are two: the one described earlier in the NEW-AGE/99 review and a second done at the recent Lima faire and part of Tape #2 (which can be ordered from Charles Good, Box 647, Venedocia OH 45894 for only \$5). This latter tape is a gem. Mrs. Spooner teaches Dr. Good's first-grade daughter how to experience LOGO. Meaghan had never dealt with LOGO before, but she sits down confidently at the console, while Mrs. Spooner, in her wheelchair behind her, begins the lesson.

It's the perfect teacher doing a perfect job (with a perfect student, I might add). Step by step she works Meaghan from the opening "TELL TURTLE" through some very sophisticated LOGO-ing that I wouldn't have believed a six-year-old was capable of handling. And each mini-lesson builds upon the previous in such a way that Meaghan anticipates most of what would be happening after a very short time.

For all of you teachers in the room here, I can only say that watching such a pro at work is certainly inspirational. I only wish the people who made the tape had been able to keep the room noises down and had been able to get the camera closer and in better light. In spite of these preventable problems (which I hope they cure next year by finding a small, quiet room to tape Mrs. Spooner's teaching activities), the tape is one you'll watch again and again.

The tutorial tape and software Mrs. Spooner made for her club's release, however, is easy on the eyes and ears. Everything about the package is exceptional, including the price. I can't even begin to imagine anyone not leaping into LOGO after watching just a few minutes of it.

Don't worry, Ms. Bronte, you'll have a chance to see both of these tapes at the end of class. Then we'll all head for the lab, where we will all have more than enough time to get onto LOGO and play with some of the ideas we've learned.

That's why I save LOGO for our last class. One third of your mark will be based on how well you can program your turtle to create a flower.

Mrs. Spooner, by the way, begins her lesson with Meaghan and her tape tutorial by introducing the turtle and explaining how it has to take steps forward or back, how it needs to be told to move its head in the direction it is about to go, how it can be made to repeat its little learned activities in such a way that its expertise allows it to perform like no other turtle has ever performed.

Other LOGOohiles, however, think it's best to introduce this educational program through its Sprites and its Makeshape options. Still others feel its safest to start with the text and math PRINT options. Musically oriented types would probably feel the music learning should come first.

Having watched many teachers introduce LOGO in many different ways, including the ultimate mind-killer of learning all the terms first, I have to concur with Mrs. Spooner. The turtle seems the most logical, the easiest, the most fun. The turtle immediately allows the learner control of his/her environment with minimum instruction.

There is so much written about LOGO, so many manuals, so many tutorials.

After watching the tapes, look through the manuals which come with LOGO II and, after playing with the program a bit, load some of the samples that come with LOGO (disk and cassette come with the package, which, by the way, can still be purchased from TEXCOMP, at fairs, from clubs, and from vendors listed in newsletters and MICROpendium) and just enjoy and marvel. Call up the program and admire its efficiency. Then modify it and play some more.

For the TI? Yes, Mr. Shakespeare, there's a lot written on LOGO for the TI. The BEST OF 99er has some good articles, but they're a bit techie and are best read after you've used LOGO for a long time.

Look over your book list from your notes a couple sessions ago. In there I mentioned THE LAST WHOLE TI99/4A BOOK by Paul Garrison, ACADEMIC TI by Howe and Mumaw, and Russ Walter's immense SECRET GUIDE. These are all excellent sources for LOGO-ing and lots of other educational and informational items. Don't confuse Garrison LAST book with THE LAST WORD ON THE TI-99/4A by Linda and Allen Schreiber, which is really lousy.

There are many, many other good LOGO books, though, some of which devote the entire book to LOGO.

But there are four LOGO books you should beg, borrow, or steal for, if you come across them:

TI's PROGRAMMING DISCOVERY IN TI LOGO STUDENT GUIDE. This was part of Texas Instruments Computer Advantage Club program. This 32-page 8X11 workbook is a quick tutorial and extremely handy quick reference guide, along with a presentation of all kinds of neat and peachy-keen Procedures (the term LOGO uses for Programs).

Scholastic's LOGO FUN by Pat Parker and Teresa Kennedy first shows you how one can easily convert Apple, Atari, Krell, Terrapin LOGOs to and from TI's. It's 112 pages (8X11) have large type, lots of pictures, lots and lots and lots of procedures and ideas. It's a super book, but it doesn't explore all the unique aspects of TI LOGO II.

A book that goes a lot farther along the LOGO line is Donna Bearden's A BIT OF LOGO MAGIC: Adventures for Intermediate Programmers. This is one of the most creative books ever written for any computer. (Actually, there are many versions out there.) The "TI" identification is on the front cover. Reston published our version in hard and paper (8X11). Donna also wrote 1,2,3, MY COMPUTER AND ME: a LOGO Funbook for Kids, which I would also highly recommend. This one, though, is a bit more advanced and is unique. It's written as a novel about Aristotle, a wise old wizard, and Little Bit, a mischievous dragon. Brad Foster's delightfully detailed drawings don't just enhance this "novel," but become an integral part. The chapter titles should give you an idea about how different this book is from any like it. Come to think of it, there aren't any like it. Here are some of the chapter titles: Elaborate Designs with Simple Shapes;

Patterns, Tessellations, and Optical Illusions; Spider Webs and Other Magnificent Designs; Fractured Fables and Customized Cliches; An Adventure in the Dark Forest.

This book even teaches you how to create quizzes. This is the one book on LOGO I wish I had written. Ah, well.

And the last book is certainly not the least book. SPRITES, A TURTLE, AND TI LOGO by Jim Conlan and Don Inman (one of the original 4A manual writers) is the best (in the sense of complete) LOGO source you can buy. This is also published by Reston (which competed successfully with Hayden and COMPUTE! and SAMS to publish the most and best TI books on the market in our 4A's heyday.

This book, though, is unequalled, as far as anything I have seen, to make the best use of LOGO. Nothing touches its sections on math, tiles, sprites, and the use of joysticks with LOGO. Its 228 pages (6X9) in small type are jam-packed with detailed tutorials on almost all phases of LOGO (nothing on music).

If you could couple some of these books with the LOGO manual, you would have a whole world to explore with your TI,

still the best educational computer on or off the market.

Anyway, Class, time is drawing nigh. You've been a good

group. We'll be watching the Spooner videos next before we move to the lab for our final session.

Review all your notes and all your cassettes and disks and cartridges and texts and magazines and newsletters for our final next week.

What? Yes, Mr. Shakespeare, there was a LOGO I. Lots of people are still using it. But II has many more enhancements. It's a better tool and toy.

Although your projects are important and your lab work and, of course, your paper and your final, Class, THE most important thing you can take from this course is sharing your wisdom and newly-gained knowledge with some learners in your lives. Bring someone new to the TI: a spouse, friend, teacher, grandchild, grandparent, seventh cousin three times removed, Dan Quayle. Somebody. They are your next generation of 99ers. They and YOU are essential for our future. The 4A, itself, of course, is indestructable.

You've been a good class. Hope we meet again.

Adios.



THANKS TISHUG UG

Word Processing #2 con'td from page 8

```
160 RANDOMIZE :: DIM M(40,40):: INPUT "HOW MANY MAZES?":
  Z :: PRINT
170 INPUT "LEVEL OF DIFFICULTY?":L :: IF L<0 OR L>9 THEN
  170 ELSE OPEN #1:"PIO"
180 DISPLAY AT(10,11)ERASE ALL:"LEVEL ":L: :TAB(9);"Init
  ializing"
190 FOR X=0 TO L :: READ S,N :: NEXT X
200 FOR X=1 TO N :: FOR Y=1 TO N :: M(X,Y)=0 :: NEXT Y :
  : NEXT X
210 FOR X=1 TO N :: M(N+1,X),M(X,N+1),M(0,X),M(X,0)=16 :
  : NEXT X
220 C,X,Y=1 :: DISPLAY AT(12,9):" "; "1 /";N^2
230 RANDOMIZE :: W=INT(RND*4):: DX=X+(W=0)-(W=1):: DY=Y+
  (W=2)-(W=3):: IF M(DX,DY)THEN 230
240 M(X,Y)=M(X,Y)+2^W :: IF W AND 1 THEN W=W-1 ELSE W=W+
  1
250 X=DX :: Y=DY :: M(X,Y)=M(X,Y)+2^W :: C=C+1 :: DISPLA
  Y AT(12,9)SIZE(4):USING "###
  #":C :: IF C=N*N THEN 280
260 IF M(X+1,Y)=0 OR M(X,Y+1)=0 OR M(X,Y-1)=0 OR M(X-1,Y
  )=0 THEN 230
270 RANDOMIZE :: X=INT(RND*N)+1 :: Y=INT(RND*N)+1 :: IF
  M(X,Y)THEN 260 ELSE 270
280 DISPLAY AT(12,9):" Printing" :: PRINT #1:CHR$(27);"
  1":"Start";TAB(30);"Level: " ;L
290 PRINT #1 :: PRINT #1:"#";TAB(S+1);RPT$("#",S*(N-1)+1
  ):: S=S-1 :: S$=RPT$(" ",S):: X$=RPT$("#",S)
300 M(N,N)=M(N,N)+8 :: FOR Y=1 TO N :: FOR W=1 TO S :: P
  RINT #1:"#";:: FOR X=1 TO N :: PRINT #1:S$;
310 IF M(X,Y)AND 2 THEN PRINT #1:" ";ELSE PRINT #1:"#";
320 NEXT X :: PRINT #1 :: NEXT W :: PRINT #1:"#";:: FOR
  X=1 TO N :: IF M(X,Y)AND 8 THEN PRINT #1:S$;ELSE PRI
  NT #1:X$;
330 PRINT #1:"#";:: NEXT X :: PRINT #1 :: NEXT Y :: S=S+
  1 :: PRINT #1: :TAB(S*N-4);"Finish":CHR$(12):: Z=Z-1
  :: IF Z>0 THEN 200
```

ARE NO TWO CONSOLES ALIKE?

By: Andy Frueh, Lisa UG

THANKS LIMA UG

These are some things I have observed concerning the TI consoles. I know it seems odd, but I have had experience with 3 black and silver consoles and 2 beige, and none of them are 100% identical to another one. Strange.

I suppose the thing that is the most different are the keyboards. Of the five consoles, I have noticed 3 distinct styles of keyboard. This is excluding color. I'm talking about "feel". The first console I had was fairly quiet (black) and mushy. The next black keyboard was VERY noisy and clanky. The beige console I am using now is very quiet and slightly firm. I have seen one beige keyboard that compares to the second clanky black model.

There are other little differences, too. For example, I sent my console (black & silver) to TI to get repaired. I was using one of the club's gray consoles. The on/off indicator was orange (a little orange strip shows up by the switch to show it is on) and the side shielding was silver. It is gold on all black models. Some peripherals will not work with silver shielding. However the console I got in exchange from TI was beige and had a blue on/off indicator and gold shielding.

Definitely one of TI's problems, albeit a small one, is lack of consistency!



by Col Christensen  
Brisbane User Group

In Part 1 I covered quite a number of keystroke functions that were necessary to know to get started in word processing. I hope you have practised all these and are fairly conversant with the procedures for each so that their use comes automatically as you encounter a need for them. Part 2 will deal with some of the Command mode functions of the WP.

### LINES

The L command will display the four lines options: Move, Copy, Delete and Show lines. To execute any one of them you do not have to go to Lines first, just go directly to it in the command mode by typing M, C, D or S then pressing <ENTER>.

### COPY and MOVE

This is the cut and paste function used by our WP. The main difference between the two is that the COPY function leaves the original text intact and merely makes a copy somewhere else while the MOVE deletes the original section after making the copy. It is, unfortunately, restricted in its use to only whole lines of text. This is a slight drawback but the limitation can be overcome with a little extra effort.

To effect a COPY or a MOVE, you need to know the first line number and the last line number of the section to be copied or moved, and the line number after which the text is to be placed. Escape to the command mode and type C to copy or M to move and press <ENTER>. The prompt, "start line, stop line, after line" appears. Suppose you want to copy lines 19 to 24 inclusive and place them after line 16. You now type your line numbers in either of two ways, whichever you are more comfortable with. You can type 19,24,16 with commas to separate each or 19 24 16 using spaces instead, then press <ENTER>. After a brief delay depending on how much text has to be manipulated it will be done and your cursor will be ready waiting for you. Try out both the Copy and the Move and check the text to convince yourself that what you wanted to happen actually did.

Note that the WP will not allow you to copy or move text to a line number that is not currently existent. Suppose your text so far ends at line number 41. You can move text after line 41 but not after line 42 or higher. Note also, and this applies to most places where line numbers are involved, that line number 0 is valid and indicates the first line or before line 1 and line number E (for End) indicates the last line. So, in a MOVE, an entry such as 68,E,0 will move lines 68 to the end of your text and put them before line 1. Note thirdly that when you COPY some lines of text, you will end up with a larger number of lines than before, but if you MOVE lines, the final line count will be the same as before.

Now suppose you want to move, say, a long sentence and place it in a different position in your text. The sentence will be sure to start and end somewhere in the middle of a line. Murphy's Law makes sure of that. As the lines commands operate only on entire lines, we have a few extra steps to do. The idea is to use the insert keystroke to split both the start and ending lines so that the complete sentence and nothing else occupies a unique set of line numbers ready for moving. You also need to split the line into which the insertion must go.

I will not go into detail on the steps to follow to effect a MOVE but leave it for you to sort out. But just one little pointer though. When you use the insert keystroke to split lines of text and wish to move the cursor down the screen, do so with the arrow keys and not the <ENTER> which will leave a C<sub>r</sub> symbol that you most likely do not want. By all means use the <ENTER> key after the insert if you want that point eventually to be the end of a paragraph.

Now that you are making insertions and moves within a paragraph and leaving a mess in the text buffer and on the screen you will probably like to tidy things up by reformatting. What I want to impress is that it is not necessary to go way up to the beginning of a paragraph to do this. Just move the cursor to a point anywhere before the mess, press insert (FCTN/2) and press reformat (CTRL/2).

Although this section relates to tab settings, it has a bearing on reformatting too, for, as I explained before, reformatting takes place between the left and right tab settings. Tony McGovern has incorporated dual TAB sets into the later versions of our WP. You can now have one set of tabs for part of your document and different tab settings for another part. Both sets of tabs will be saved to disk with your document and retrieved again the next time you load it into memory. To change the tabs, escape to the command mode and type ST (swap tabs). If the alternate set had not been set up, do so now, and press <ENTER> to accept the new set. The screen format and reformatting will follow the new tab settings. To revert to the other tab setting at some point in the text, escape to the command mode, type ST and press <ENTER> twice, one to accept the "ST" input and one to accept the tab settings. It is so simple to make the change over and is a very useful addition to the WP.

### MARGIN RELEASE (CTRL/Y).

The cursor movement is limited by the tab margin settings so that it can only move within the left and right margins. If you find a need, however, to move the cursor outside these settings, it can be done on the next keypress after pressing CTRL/Y. In other words you need to move the cursor to the margin you wish to cross, press CTRL/Y and then the appropriate arrow key.

### DELETE LINE

Normally you would delete a line or two of text by using FCTN/3 but there are times when a large number of lines have to be deleted. This is done in the command mode after typing D and pressing <ENTER>. The prompt, "start line and stop line" tells what to do. Separate the relevant line numbers with either a comma or a space and press <ENTER> when you are sure you have typed the numbers correctly. OOPS will not help you recover from an error here. Tony has greatly improved the speed of the delete function in later versions.

### SHOW LINE

The S command allows you to control which line numbers will appear at the top of the screen. Suppose the assignment you are writing is nearing 500 lines in length and you want to refer back to the first paragraph. SHOW will speed up the process of displaying it for you. Escape to command mode, type S and press <ENTER> and type a suitable line number. That part of the text will appear the instant you press the <ENTER> key. The line number, E for End, is valid and quickly shows the very last line of your work. Roll down (FCTN/4) and Roll up (FCTN/6), remember, also move the text up or down 24 lines at a time.

That is all for now. In Part 3, the Search function will be discussed and there will be details on File Handling. Also we can make a start in using the Text Formatter to make our printouts look more professional.

Before we go, in case you do not have them, here is a list of the top row key presses that appear on the keyboard overlay and also a list of other key press combinations.

Continued on Page 7



Transferring Multiplan files between the TI99/4A-Geneve and IBM clones.  
By Dick Ohi West Penn 99'ers  
THANKS LA 99ERS US

You will need the program "PC Transfer" and "PC Transfer Utilities" for the TI99/4A and Geneve 9640 by Mike Dodd. "PC Transfer" requires a CORCOMP or MYARC disk controller and two double sided disk drives. These programs are distributed by 9640 News & Beery Miller. The following was tested using a TI99/4A and a Gateway 2000 IBM clone running Quattro Pro SE. These procedures should work with any IBM spreadsheet that will import files in the Symbolic Link format.

Begin by running Multiplan on your TI. Load the file you wish to transfer to the IBM.

1. Press T(ransfer), O(ptions), S(ymbolic), ENTER. This sets all transfer operations to the symbolic link format.

2. Press T(ransfer), S(ave) and type in a new file name so that you do not overwrite the original file, or you may want to save the new file to another diskette. (Recommended)

3. If you want to transfer more than one file you have to reset the normal mode for Transfer operations.

Press T(ransfer), O(ptions), N(ormal), ENTER. Load the next file to be converted and repeat steps 1 and 2 above.

4. When you have saved all the files you wish to transfer, exit Multiplan and insert the Extended Basic cartridge in the consol. Insert the PC Transfer diskette in drive 1 and select Extended Basic, PC Transfer will auto load from DSK1.

5. Using the prompts on screen, select a DOS drive and a TI drive.

6. At the "Conversion File Name" prompt type: DSK1.SYLK and press ENTER.

7. You may now remove the PC Transfer diskette from the drive. Insert the disk with your TI files in the designated TI drive, and either a blank diskette or a DOS formatted diskette in the designated DOS drive.

Note: It is possible to format a DOS diskette with "PC Transfer" but it is a very slow process. I recommend using a formatted 360K DOS diskette.

8. Load the TI disk catalog.

9. Select the files to be transferred by pressing C when the cursor is next to the file name. Use the space bar or down arrow to move down through the list of files, the up arrow allows you to move back up the list.

10. When all files have been selected, press E to execute the procedure.

11. You will be asked for a DOS file name for each file to be transferred. Type in a file name using up to eight characters plus a period and SLK (e.g MYFILE.SLK) and press ENTER. The .SLK extension is required for the DOS program to recognize the file.

12. When all the selected TI files have a DOS file name entered the transfer procedure will begin.

Take the DOS diskette to your PC clone, load your spreadsheet program and either open or import the file from the diskette. All data and formulas should be transferred to the DOS spreadsheet. You may have to make some changes in some cells as to how the data is displayed.



# PROGRAM OF THE MONTH

THANKS BUG NEWS by Bob August

The program this month gives you fancy letters on the screen.

My wife bought some paper towels for the kitchen that have fancy letters printed on them. This was a challenge to me to put them into the computer.

So here is the result.

The program is in extended basic.

Hope you enjoy.

```

100 ! FANCY LETTERS IN
110 ! TI EXTENDED BASIC
120 ! BY R.W. AUGUST
130 DISPLAY AT(12,1)ERASE ALL:
L:"one moment please, working.."
140 CALL CHAR(65,"1010282844
44AA00",66,"5824245824245800
",67,"1824404040241800",68,"
5824225222245800")
150 CALL CHAR(69,"5824205020
245800",70,"5824205020205000
",71,"1824404A44241800",72,"
AA4454AA5444AA00")
160 CALL CHAR(73,"2810102810
102800",74,"2810102810502000
",75,"5224285028245200",76,"

```

```

5020205020245800")
170 CALL CHAR(77,"AA54545454
54AA00",78,"5428282828285400
",79,"1824424242241800",80,"
5824245820205000")
180 CALL CHAR(81,"3448483408
081400",82,"B04848B04844AA00
",83,"1824201804241800",84,"
926C921010102800")
190 CALL CHAR(85,"4244444444
443A00",86,"AA44442828102800
",87,"C682AA92546C4400",88,"
AA4428102844AA00")
200 CALL CHAR(89,"AA44281010
102800",90,"3C42040810221C00
")
210 CALL SCREEN(5):: FOR C=0
TO 12 :: CALL COLOR(C,16,1)
:: NEXT C
220 DISPLAY AT(2,5)ERASE ALL
:"<< FANCY LETTERS >>"
230 DISPLAY AT(8,1):"THIS IS
A TEST OF THE FANCY": "LET
TERS THAT YOU CAN PUT IN": :
"YOUR PROGRAMS."
240 DISPLAY AT(14,1):"SAVE L
INES 140 TO 200 AS A": "MER
GE FILE AND THEN MERGE": "T
HEM INTO YOUR PROGRAM."
250 DISPLAY AT(20,1):"A B C
D E F G H I J K L M": "N O
P Q R S T U V W X Y Z"
260 CALL KEY(O,K,S):: IF S=0
THEN 260
=====
100 ! DISK FILE CATALOG
110 ! IN TI EXTENDED BASIC
120 ! BY R.W. AUGUST
130 DIM FT$(5)
140 FT$(1)="DIS/FIX" :: FT$(
2)="DIS/VAR" :: FT$(3)="INT/
FIX" :: FT$(4)="INT/VAR" ::
FT$(5)="PROGRAM"
150 DISPLAY AT(2,3)ERASE ALL
:"<< DISK FILE CATALOG >>"
160 DISPLAY AT(5,1):"ENTER T
HE NUMBER OF THE":"DRIVE TO
CATALOG:": "ENTER THE DRIVE
NUMBER OF:":"OF THE DATA DIS
K:"
170 ACCEPT AT(6,19):CD$ :: A
CCEPT AT(9,19):DD$ :: DISPLA
Y AT(11,1):"CREATE NEW DATA
FILE Y/N Y" :: ACCEPT AT(11,
26)SIZE(-1)VALIDATE("YyNn"):

```



```

CNF$
180 DISPLAY AT(13,1):"PLACE
DISK TO BE CATALOGED": "IN
DRIVE NUMBER: ";CD$
190 DISPLAY AT(17,1):"PLACE
DISK TO SAVE DATA ON": "IN
DRIVE NUMBER: ";DD$: "PR
SS ENTER WHEN READY."
200 CALL KEY(0,K,S):: IF K<>
13 THEN 200 :: CALL CLEAR ::
DISK=0
210 DISPLAY AT(10,1):"ENTER
FILE NAME TO SAVE YOUR": "D
ATA TO." :: ACCEPT AT(14,1)S
IZE(10):DF$ :: CALL CLEAR ::
FN$="DSK"&DD$&". "&DF$
220 ON ERROR 420 :: OPEN #2:
FN$,APPEND,VARIABLE 80 :: IF
CNF$="N" OR CNF$="n" THEN 2
50 ELSE 230
230 PRINT #2:TAB(6);"FILE NA
ME SIZE TYPE DISK NAME
FILE COMMENTS"
240 PRINT #2:TAB(6);"-----
-----
-----
"
250 DISK=DISK+1 :: CD=0 :: O
N ERROR 450 :: OPEN #1:"DSK"
&CD$&".",INPUT ,RELATIVE,INT
ERNAL
260 INPUT #1:X$,W,X,Y :: U=(
X-Y)+2
270 DISPLAY AT(6,1):"Disknam
e is ";X$;TAB(24);"#";STR$(D
ISK): "Available =";Y;TAB(1
8);"Used =";U :: CD=1
280 DISPLAY AT(11,1):"Catalo
g this disk Yes/No Y": "or En
ter S to stop."
290 ACCEPT AT(11,26)VALIDATE
("NnSsYy")SIZE(-1):YN$ :: IF
YN$="N" OR YN$="n" THEN DIS
K=DISK-1 :: GOTO 370
300 IF YN$="S" OR YN$="s" TH
EN CLOSE #1 :: GOTO 410
310 FOR F=1 TO 127 :: INPUT
#1:A$,A,J,K :: IF LEN(A$)=0
THEN 370 ELSE DISPLAY AT(11,
1):"FILE NAME SIZE TYPE": "
-----
"
320 DISPLAY AT(13,1):A$;TAB(
12);J;TAB(17);FT$(ABS(A)):
:"Enter Comment Yes/No Y" :
: ACCEPT AT(16,22)VALIDATE("

```

```

NnYy")SIZE(-1)BEEP:YN$
330 DISPLAY AT(16,1):"" :: I
F YN$="N" OR YN$="n" THEN FI
LECOM$=" " :: GOTO 350
340 DISPLAY AT(16,1):"Enter
File Comment" :: ACCEPT AT(1
8,1):FILECOM$
350 PRINT #2:TAB(6);A$;TAB(1
7):: PRINT #2,USING "####":
J:: PRINT #2:TAB(22);FT$(AB
S(A));TAB(30);X$;TAB(41);FIL
ECOM$
360 DISPLAY AT(18,1):" " ::
NEXT F
370 CLOSE #1 :: DISPLAY AT(6
,1):"":"PLACE THE NEXT DISK
TO BE": "":"CATALOGED IN DRIV
E: #";CD$: "":"LEAVE THE DATA
DISK IN": "DRIVE #";DD$
380 DISPLAY AT(14,1):"": "":
PRESS ENTER WHEN READY OR":
:"PRESS Q TO QUIT"
390 CALL KEY(0,K,S):: IF K=8
1 OR K=113 THEN 410
400 IF K<>13 THEN 390 :: CAL
L CLEAR :: GOTO 250
410 CLOSE #2 :: CALL CLEAR :
: STOP
420 DISPLAY AT(12,3)ERASE AL
L:"<< ERROR IN DATA DISK >>"
430 FOR D=1 TO 1000 :: NEXT
D :: IF CD=1 THEN CLOSE #1
440 STOP
450 DISPLAY AT(12,1)ERASE AL
L:"<< ERROR IN CATALOG DISK
>>" :: IF CD=1 THEN CLOSE #1
:: CLOSE #2
460 IF CD=0 THEN CLOSE #2
470 FOR D=1 TO 1000 :: NEXT
D :: END
-----
100 ! < PRINT DV/80 >
110 ! < FROM EX-BASIC >
120 ! < BY R.W. AUGUST >
130 CALL SCREEN(5):: CALL CL
EAR
140 FOR I=0 TO 12 :: CALL CO
LOR(I,16,1):: NEXT I
150 DISPLAY AT(6,8):"< PRINT
DV/80 >": : : "DISK DRIVE
[1-4]:[1]"
160 ACCEPT AT(10,19)VALIDATE
(NUMERIC,"1234")SIZE(-1)BEEP
:N
170 N$=STR$(N):: DK$="DSK"&N

```



```

$&". "
180 DISPLAY AT(12,1):"ENTER
'filename'"
190 DISPLAY AT(14,1):DK$
200 ACCEPT AT(14,6)SIZE(10)B
EEP:FS :: FILE$=DK$&FS
210 OPEN #1:FILE$,INPUT ,DIS
PLAY ,VARIABLE 80
220 OPEN #2:"PIO",OUTPUT,DIS
PLAY :: DISPLAY AT(18,1):"PR
INTING FILE: ";FS
230 PRINT #2:CHR$(27);"N";CH
R$(3);
240 LINPUT #1:A$
250 IF EOF(1)THEN 280
260 PRINT #2:A$
270 GOTO 240
280 CLOSE #2
290 DISPLAY AT(22,1):"FILE "
;FS;" PRINTED"
300 CLOSE #1 :: END
-----

```



More Tips and Tricks  
By: Andy Frueh, Lima OG

THANKS LIMA OG

TWO TONE THAT TI KEYBOARD!  
A simple keyboard alteration  
by David Hetkerthin  
Lima Ohio User Group

Remember when people would editing a line and accidentally erase it by pressing FCTN 3? The old advice was to type Fctn P, the " marks, and then press enter. You get an error then get your line back. There is an easier way to do this. Besides using any of the keys that when used alone on a line will generate an error, you can simply press FCTN 4 then retype the line number you accidentally erased and press the up or down arrow key.

And it's a similar thing with OLD CSI. You do NOT have to press Shift E. Just press E. I think the reason people were worried about losing a program is that the old 99/4 usually would lock up the system when an error in cassette loading occurred. This bug was fixed in the 4A. In fact, when loading, you see a "menu" of Rlead, C)heck, or Elxit. These apply whenever you have the option of pressing ENTER. Try it. Typing OLD CSI and instead of pressing ENTER, press C. Then go through the usual procedure. Instead of "Reading" you see "Checking."

This isn't a tip, just a question. Does anyone know what the two monitors that TI offered with the 99/4 looked like? The originals, I mean. I've seen the rare 13", but am not sure if the other model (10") is the same as the one we use now or not.

As you probably already know, there are two colors of TI keyboards, black and tan. but what you probably didn't know is that there are at least two types of posts attaching those keys to the keyboard. There are the more common HOLLOW square or (O) posts and the less common SOLID or (+) posts.

If you have, or know someone else who has a keyboard of the opposite color and the same post type, then you BOTH have the opportunity of having a TWO-TONE keyboard which will make programming and games like "Amazing" easier.

Suggested keys to swap and make a contrasting color are: ENTER, FCTN, ALPHA-LOCK, \$4, +=, J,K,I,M,E,X,S, and Q.

The only tool needed is a large paper clip, straightened out and bent into a "J" or fish hook shape. Keep the hook small. Insert the hook between the keys and lift GENTLY, first one side of the key then the other until the key cap pops off.

As with any hardware modification you undertake, you do so AT YOUR OWN RISK.

Until next time, take care and enjoy your TI.  
D.H.



# BEGINNER PRINTER

DOT GRAPHICS 93I... by Jim Leather

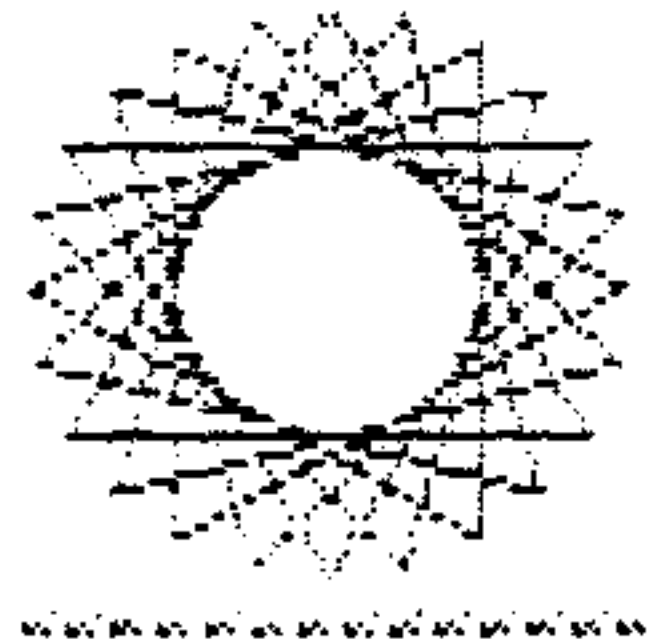
THANKS KAWARTHA UG

If you think this program looks familiar, you are right. My apologies to those who may have spent hours trying to get last month's program to work. Somehow line 240 was truncated, apparently in transmission over the modem. This is a reprint of the program in its entirety, with one small exception, the values in lines 410 and 430 have been changed to print a beautiful sunburst. Here is an interesting program Gemini Star had published as a subroutine and then some good and intelligent soul converted it for the 99/4A. Using DOT GRAPHICS and a lot of math, the polygon is very interesting, and if you play around with some of the numbers within the program, you can create some more of your own. But, First I must tell you, it takes about 90 seconds for it to start printing, so be patient. The computer must do a lot of calculating and computing before it can start printing. So to get some interesting effects change the 135 in line 430 to 180. Here are some numbers to give some more shapes. 144, 45, 90, and 120. It is better to use a number which divides evenly into 360, but you can insert any number you wish, to see what it will do. Then after you print those out, change the 45 in line 410 to any number you want. If you like geometrical figures, you will like these. I would really appreciate it if someone would figure out a way to place the shapes further over on the page and also change the size of the figures. Also would appreciate some other programs to make the printer do some interesting things.

```

5 REM 93ISUN
10 OPEN #1:"PI0"
20 MAXCOL=75 :: MAXROW=14
30 DIM BIT(75,14)
40 MASK(1)=64 :: MASK(4)=8
50 MASK(2)=32 :: MASK(5)=4
60 MASK(3)=16 :: MASK(6)=2
70 LX=20 :: LY=20
80 LXFAC=72/LX :: LYFAC=87/LY
90 GOSUB 390
100 PRINT #1:CHR$(27):"A":CHR$(6)
110 FOR ROW=0 TO MAXROW
120 A$=""
130 PRINT #1:CHR$(27):"K":CHR$(MAXCOL):CHR$(0)
140 FOR COL=1 TO MAXCOL
150 A$=A$&CHR$(BIT(COL,ROW))
160 NEXT COL

```



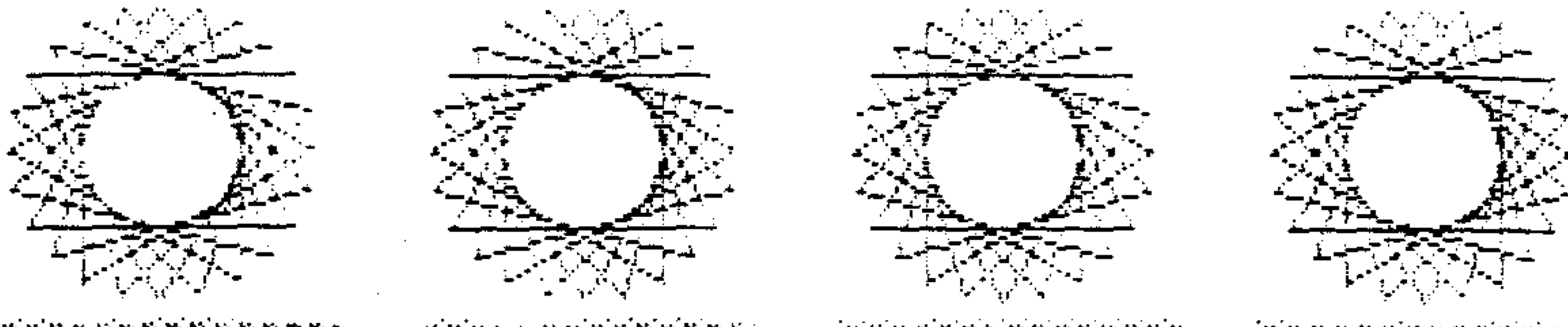
```

170 PRINT #1:A$;" "
180 NEXT ROW
190 PRINT #1:CHR$(27):"2"
200 END
210 REM
220 XL=X2-X1 :: YL=Y2-Y1
230 NX=ABS(XL*LXFAC) :: NY=ABS(YL*LYFAC)
240 IF NX<NY THEN NX=NY
250 NS=INT(NX+1)
260 DX=XL/NS :: DY=YL/NS
270 FOR I=1 TO NS
280 X1=X1+DX :: Y1=Y1+DY
290 GOSUB 320
300 NEXT I
310 RETURN
320 REM
330 XX=X1*LXFAC :: YY=Y1*LYF
AC
340 COL=INT(XX)+1
350 ROW=INT(YY/6)
360 XIT=INT(YY-ROW*6)+1
370 BIT(COL,ROW)=BIT(COL,ROW)
JOR MASK(XIT)
380 RETURN
390 REM
400 RAD=9
410 FOR ANG=0 TO 360 STEP 15
420 RANG=ANG*3.14159/180
430 RANG2=(ANG+120)*3.14159/
180
440 X1=RAD*COS(RANG)+10
450 Y1=RAD*SIN(RANG)+10
460 X2=RAD*COS(RANG2)+10
470 Y2=RAD*SIN(RANG2)+10
480 GOSUB 210
490 NEXT ANG
500 RETURN

```

Should you need any help call or write to:

Jim Leather / 722 Huntley, Dallas Tx 75214 / 214-821-9274



4. Your text file will then be quickly up-loaded and you can monitor the progress by the up-loaded line numbers shown at

A black and white line drawing of a rabbit, facing left, holding a carrot in its paws. The rabbit has long ears and a small tail. The carrot has a leafy top. The drawing is simple and cartoonish.



- Affordable (paid for)
- Inexpensive (parts obtained inexpensively)
- Reliable
- Affordable and Modify-able
- (mods are relatively inexpensive)
- Improved (extra hardware is available)
- Good software base
- Custom software available (it is possible to get custom stuff written for you!)
- Benefit of the User Group
- Great people in the User Group
- Interaction to Ham Radio

And a heck of a lot of FUN!

## TRANSFERRING TI-BASE FILES

----- by Dick Ohl

### TO A PC

from the pages of the West Penn 99 newsletter, Sep. 1993

This article describes one method of transferring TI-BASE data files from a TI-99/4A to an IBM compatible. It assumes that you are familiar with TI-BASE and with the programs that you are using on the PC. Most database programs will import data in an ASCII table format. This format is basically a text file that has one record of a data per line and each field has the same number of characters in every record. As ASCII table file would look like the following example.

| REC  | LN    | FN   | PHONE        |
|------|-------|------|--------------|
| 0001 | JONES | SAM  | 311-555-1234 |
| 0002 | SMITH | ANN  | 613-555-4321 |
| 0003 | GREEN | JOHN | 555-555-9876 |

This method of file transfer was done using a TI-99/4A and a Gateway 2000 computer connected by a RS232 cable. This requires that the two computers are set up near each other. I used a ribbon cable with the appropriate DB25 connectors wired to the same pin numbers. Radio Shack PN 260-1408 should work. Load TI-BASE on the TI computer and change the set up with the following commands at the dot prompt.

```
SET PRINTER RS232.BA=4800.DA=8.PA=N.LF
SET SPACES 1
SET PAGE 200
```

NOTE: The PAGE parameter should be set to a value greater than the number of records in the data base file. The PRINTER parameter assumes the cable is attached to the RS232 port 1, if you are connected to RS232 port 2 then the command would be:

```
SET PRINTER RS232/2.BA=4800.DA=8.PA=N.LF
```

The SET SPACES 1 command will place a space between each field, this will cause each field length in the new database on the PC to be one character longer than in the TI database.

Load the database to be transferred into TI-BASE.

On the PC end you will need a communications program that has a Loq feature. A Loq feature will capture to disk anything that is received by the program. In this example I used Procomm Plus. Set up the PC to the same parameters (4800, 1, N) on the port the cable is connected to (COM1 or COM2), open the Loq file.

On the TI type the command PRINT ALL at the dot prompt in TI-BASE. What happens here is the TI thinks it is printing the database to the RS232 port and the PC thinks it is receiving data on the COM port. Procomm saves the data to disk as it is received. When TI-BASE has finished printing, close the Loq on the PC.

Load your Database program on the PC (I use Alpha 4) open a new database, select the import feature, type in the path to the Loq file and follow the procedures to set up the new database. If the Loq file is clean, that is each line of text is the same length and the data in each field begins at the same column and there are no extra control characters (PAGE BREAKS, or formatting characters) in the Loq file you should have all your data transferred. If the new database has some of the data split in different fields, exit the database program and load the Loq file into a text editor and look for extra control characters or fields that do not have the correct number of characters according to the structure of the original TI-BASE file. Remember that we added one space character to each field in the printing process. Try to use a text editor that will display control characters. Notepads in PC Tools, Word for Windows, and WordPerfect have this feature. As in the above example the data will appear in columns or in table form if it were printed on paper. If the records are longer than the number of characters displayed between the margins on the text editor the lines of text will wrap to the next displayed line and not look like a table. Another possible reason for the text not appearing to line up table fashion is the font used for displaying the text is a proportional font, that is the characters are different widths so that even if there are the same number of characters in each line the lines appear to be of differing lengths on the screen. Try to use a font that will display each character the same width. There should be a Hard Return or CR/LF at the end of each record. Eliminate any other control characters, and check to be sure that each field in each record is of the correct length and try to create the database from the cleaned up file.

Other database programs for the PC should have import features that will accept an ASCII table file as input, the terminology may be different such as fixed record length or system data format.

# MEETING DATES FOR 1994

3RD SATURDAY

16 APR 1994  
21 MAY 1994  
18 JUN 1994  
11 JUL 1994  
20 AUG 1994  
17 SEP 1994  
15 OCT 1994  
19 NOV 1994

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