THE GUILFORD 99'ER NEWSLETTER

Ken Bailey, President
Bob Carmany, V. Pres.
Carl Foster, Sec/Treas.

Edwin Simpson, Newsletter Ed.
George Von Seth, Program Lib.
Sandy Carmany, Education

OUR NEXT MEETING

DATE: November 6,1984
TIME: 7:00 P.M.
PLACE: Zayre's Department Store
       1421 E. Cone Blvd.
       Electronics Dept.
PROGRAM: Business   meeting   and
"Graphics   in   Basic".   The   G.F.I.G.
class   will   follow   the   meeting.
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GUILFORD 99'ER USERS' GROUP
OCTOBER 2, 1984

The   meeting   was   opened   by   the
President, Ken Bailey. The minutes of
the   last   meeting   were   read   and
adopted, and the Secretary reported a
balance of $98.00 in the Treasury.

The club Librarian circulated a
listing of the tape and disk programs
available for use by club members.

New members attending then meeting
were: Howard Arnold, Robert Graham &
Son, and John Odom.

An   appeal   was   made   by   the
President   for someone to volunteer to
be   Program Chairman. Since there were
no   volunteers,   it was suggested that
an   appeal   be   made   in   the   next
newsletter   for   a   volunteer   to fill
the position.

The   first   TI   Forth   class   was
scheduled   to   meet   at   the   Public
Library   in   Kernersville,   Saturday
October 6, at 1:00 P.M. The next class
was   scheduled   for   October   9,   at
Zayre's   Dept. Store at 7:00 P.M. Bill
Tidwell   made   the   motion,   which
carried,   to   schedule   classes   of
interest immediately after the monthly
business   meeting   to   include   Basic,
Extended   Basic,   Assembly   Language,
and Forth.

The President demonstrated the use
of TI Forth, Wycove Forth, Basic, and
Extended Basic.

There   being no more business, the
meeting was adjourned.

Respectfully Submitted,
Carl Foster Sec-Treas.

COMPUTER CLASSES

The G.F.I.G. class will meet after
the   meeting   on   November 6, 1984 and
again   on   November   20,   1984 at 7:00
P.M.   at   Zayre's. You should continue
to   bring STARTING FORTH by Leo Brodie
to the classes.

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While   we   are   on   the subject of
Forth, the TI Forth application screen
#72 has an error in it. Line #5 should
read   PAB-ADDR   instead   of   PAB_ADDR.
This   will   eliminate the unrecognized
character.   To   use a parallel printer
with   this   screen, substitute PIO for
the   references   to RS 232... in screen
#72.

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The   other   projected   classes are
still   in the planning stages. We need
more applicants for the Basic class as
well   as   the   others.   So,   if you or
anyone in your family is interested in
Beginning   Basic,   Extended   Basic, or
Assembly   Language,   let   Bob   Carmany
know   at   the   meeting   so we can get
started.

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Triton   is   having   a   sale   on
selected   cartridges   ---   they have
some   27   at $5.95 each   or   6   for
$29.95.

SOFTWARE   CITY   has a few Extended
Basic   cartridges in stock (25% off if
you   mention   your   membership   in the
Users'   Group).   The   rest of their TI
cartridge   stock   is   35% off --- they
are   liquidating   all   of   their   TI
products.

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We   have   another cassette tape of
programs   available   ---   there   is   a
listing later in the newsletter.

Here are two programs that we are going to use at our monthly meeting. Bring your newsletter and any questions that you have to the meeting. We will be using these programs to illustrate graphics in basic programs. Both came out of the September issue of HOME COMPUTER MAGAZINE.

```
100 REM ********************
110 REM *   LITTLE STARS   *
120 REM ********************
130 REM BY MELODY COVINGTON
140 REM HOME COMPUTER MAGAZINE
150 REM VERSION 4.1.1
160 REM TI BASIC
170 REM
180 REM SET UP
190 RANDOMIZE
200 CALL SCREEN(2)
210 CALL CLEAR
220 CALL COLOR(2,16,2)
230 REM PLACE 25 SETS OF * THEN PLACE
25 BLANKS
240 FOR M=42 TO 32 STEP -10
250 FOR I=1 TO 25
260 GOSUB 300
270 NEXT I
280 NEXT M
290 GOTO 240
300 REM SUBROUTINE
310 REM RANDOMLY GENERATE COORDINATES
320 R=INT(RND*24)+1
330 C=INT(RND*32)+1
340 REM PLOT CHARACTER PLUS 4
REFLECTIONS
350 CALL VCHAR(R,C,M,1)
360 CALL VCHAR(25-R,33-C,M,1)
370 CALL VCHAR(R,33-C,M,1)
380 CALL VCHAR(25-R,C,M,1)
390 RETURN
```

```
100 REM ********************
110 REM ********COLOR********
120 REM ****KALEIDOSCOPE****
130 REM ********************
140 REM BY MELODY COVINGTON
150 REM HOME COMPUTER MAGAZINE
160 REM VERSION 4.4.1
170 REM TI BASIC
180 REM
190 CALL SCREEN(2)
200 CALL CLEAR
210 RANDOMIZE
220 REM DEFINE CHARACTERS
230 S$="0103070F1F3F7FFF"
240 T$="80C0E0F0F8FCFEFF"
250 U$="FF7F3F1F0F070301"
260 V$="FFFEFCF8F0E0C080"
270 FOR A=96 TO 152 STEP 8
280 CALL CHAR(A,V$)
290 NEXT A
300 FOR B=97 TO 153 STEP 8
310 CALL CHAR(B,T$)
320 NEXT B
330 FOR C=98 TO 154 STEP 8
340 CALL CHAR(C,U$)
350 NEXT C
360 FOR D=99 TO 155 STEP 8
370 CALL CHAR(D,S$)
380 NEXT D
390 REM DEFINE COLORS
400 CALL COLOR(16,14,15)
410 CALL COLOR(15,12,10)
420 CALL COLOR(14,9,16)
430 CALL COLOR(13,7,11)
440 CALL COLOR(12,15,14)
450 CALL COLOR(11,10,12)
460 CALL COLOR(10,16,9)
470 CALL COLOR(9,11,7)
480 REM THESE LOOPS PLACE 25 SETS OF
EACH COLOR COMBO
490 FOR M=96 TO 152 STEP 8
500 FOR I=1 TO 25
510 GOSUB 550
520 NEXT I
530 NEXT M
540 GOTO 490
550 REM SUBROUTINE
560 REM RANDOMLY GENERATES
COORDINATES
570 R=INT(RND*12)+1
580 C=INT(RND*16)+1
590 REM PLOT CHARACTER PLUS THE
REFLECTIONS
600 CALL VCHAR(R,C,M)
610 CALL VCHAR(25-R,C,M+1)
620 CALL VCHAR(R,33-C,M+2)
630 CALL VCHAR(25-R,33-C,M+3)
640 RETURN
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SUPER SKETCH II
PERSONAL PERIPHERALS, INC.
930 N. Beltline, Suite 120
Irving, TX 75061
$59.95

The SUPER SKETCH II is a new peripheral that allows for the creation of intricate graphics. The user manipulates a stylus on a "clip-board" type pad and the graphics appear on the CRT screen. It comes with a plug-in cartridge called "Sketch Master".

With the SUPER SKETCH II, you can erase all or part of the drawing and use any combination of the 16 colors available on the TI.

The SUPER SKETCH II is vaailable from Triton Products or from the manufacturer.

Last month, we covered a few of the printers that are currently on the market. Triton Products has expanded their catalogue to include several of the more economical printers.

We also ran into an interesting review of the GEMINI 10X printer by Star Micronics. It is available for upwards of $250.00 (depending on the source). It has a listed speed of 120 CPS but it is faster than the EPSON FX-80 (100 CPS) by between 5 and 10 seconds per page --- the difference is due to the fact that it has a much faster line feed. In fact, a review in the D.C. Users Group Newsletter rated it much superior to the EPSON in performance and options. It is a parallel printer.

The next item might be of interest to those of you who have not expanded their system to its ultimate capability.

MPES/50 SYSTEM
MYARC, INC.
P.O. Box 140
Basking Ridge, NJ 07920
$299.00+

MYARC, INC. has released a series of peripheral expansion systems for the T.I. 99/4A. The group starts with the MPES/50-RPM which is for cassette-based systems. It retails for $299.00 and comes with 32K memory expansion and an RS 232 with both a parallel and serial port.

The MPES/50 also comes with the above and a disk controller and a double-density, single sided disk drive. It retails for $595.00.

Of course, they have another MPES/50 that comes with the 32K, RS 232 with both ports, the disk controller, and two double-density, single sided disk drives for the retail price of $785.00.

The least expensive of the line can be upgraded with a controller and disk drive to the full capacity of the MPES/50 system.

This system is similar in function but much larger than the CORCOMP 9900 and 99000 series. It is also more expensive!

SHUGART has put out a dual half-height drive kit for the PEB. The SHUGART 455 is a double-sided disk drive that retails for $189.00 each. So, the two will run you about $1.00 per K of storage capacity --- they will give you 360K of on line storage. There is a review of this product in the September issue of HOME COMPUTER MAGAZINE.

That about does it for this month's Hardware Shopper. If you have any questions about hardware availability send them in to the newsletter.

This month, we are just going to touch on some of the software programs that are available for the TI. STARSOFT, 601 Alleghany St., Blacksburg, VA 24060 has come up with a series of utilities for the TI. The first of these is one called MICROKEY. This program allows the user to program Extended Basic commands into a function key through the use of a string. That means that the user will be able to enter an entire command by simply pressing a key. The program lists for $19.95.

The second is a disk-based program called NIBBLER. This program is a sector-by-sector disk copier and formatter. With it, you can copy specific sectors, change sector numbers, and format the destination disk. It sells for the same price as MICROKEY.

The third offering from STARSOFT is called UNPROTECTOR. It comes in either cassette or disk and allows the user to break the protection on Extended Basic programs on either tape or disk while they are in memory. This will enable you to make back-up copies of your previously protected programs. UNPROTECTOR is $14.95 in either format.

MICROCOMPUTERS SOFTWARE, 34 Maple Ave., Armonk, NY 10504 has introduced a cassette-based version of LOGO called TINY TURTLE. The advantage of this program is that it does not require any additional memory. It will run with the basic console and a tape recorder. It is also $19.95.

Of course, there is always NAVARRONE INDUSTRIES. They are the "heavyweight" of the software industry. Ask Carl Foster about the DISK FIXER program that he has --- it is a real eye-opener!!

Well, here are some more program offerings that may be of interest to you. They are from various manufacturers and cover a wide range of topics.

The INFOCOM cartridges MICROSURGEON and DEMON ATTACK are offered in a special package from TRITON for $19.95 -- that is for both of them!!

SST SOFTWARE has dropped the price of its cassette-based Basic compiler to $40.00. It requires the Mini-Memory cartridge.

KIDware has more than 100 titles available in the realm of education for school-age kids and pre-schoolers. Their address is P.O. Box 9762, Moscow, ID 83843.

The Latest issue of HOME COMPUTER MAGAZINE has a program called Tax Filer to keep a running account of your income tax deductions. It also has a stock market game called Market Madness that will introduce you to the "bulls" and the "bears". It also contains one called Boolean Brain --- a mythical tour through the computer in search of the CPU. It is a maze-type game with good graphics.

The PARKER BROTHERS cartridges Q*BERT, FROGGER, and POPEYE have been reduced in price to $19.95 each. They can be purchased from TRITON or TEX-COMP at that price.

TRITON also has reduced prices on ESPIAL ($19.95), BUCK ROGERS ($15.95), MINER 2049er ($19.95), and KILLER CATERPILLER ($24.95). These are all new or relatively new cartridges.

They also have a wide variety of educational programs in the $10 range.

That about does it for this month. There are more than enough programs out there to satisfy every interest. TRITON's address is in another article in this newsletter -- write for their catalogue.

PROGRAMMING TIPS

PROGRAMMING IN EXTENDED BASIC

Input statements allow the user of a program to enter values and other information. Commas and quote marks may affect input, so programmers will occasionally want to substitute the LINPUT statement, which will not edit data that is entered. Commas and quote marks may be included in this data.

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TI Extended Basic has many built-in functions that simplify programming. Your Extended Basic manual lists these on page 20. In addition to these, you may define your own functions for use in your programs. This can be done by using DEF statements, and can eliminate repetitive mathematical calculations, etc. Try this Extended Basic program:

```
100 DEF PAY(OT)=40*RATE+1.5*RATE*OT
110 RATE=5.00
120 OT=5
130 PRINT PAY(OT)
```

```
RUN
237.50
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When the program was run, the computer figured the base rate of pay (40 hours @ 5.00/hr=200.00). Then, overtime pay (5 hrs X 5.00/hr X 1.5=37.50) and printed the sum of the two as the total pay.
Once a function such as this is defined in a program, it can be used over and over again without repeating the program lines.

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The October issue of COMPUTE Magazine contains an article called "TI Disassembler". It converts the programming codes used in machine language into a form that is more easily understood. See the next article for another program!

MORE INFO

The latest issue of the Miller's Graphics newsletter has a couple of programs of interest. The first is an Assembler-to-Extended Basic converter that will convert Assembly Language programs to Extended Basic.
The second is a 3-pass disk copier for Forth users. It will copy all or part of a Forth disk in just 3 passes.
In fact, there are several other tips, tricks, and items of interest in the newsletter that make it well worth the $12.50 yearly subscription fee!!

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OBITUARY

This is to announce the impending demise of our monthly newsletter! For months, we have been asking for reviews of software, hardware, and other items of interest to the members of our group. If you wish for the newsletter to continue in its present form, we need submissions ----- so far, we have gotten 2 in the last five months!!!

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We also need a Program Committee chairperson to help plan the programs for our monthly meetings. If you are interested, see Ken Bailey at the meeting.

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TENEX and TRITON (the remaining II supplier) have come out with their newest catalogues. If you have not gotten yours, write for a copy. There are some excellent values inside.

TRITON PRODUCTS CO.
P.O. BOX 8123
SAN FRANCISCO, CA 94128
1-800-227-6900

TENEX COMPUTER EXPRESS
P.O. BOX 6578
SOUTH BEND, IN 46660
1-800-348-2778

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            LIBRARY NOTES
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Another month has elapsed and we still are waiting to hear from the first of you regarding our library.

Any comments will be appreciated and all requests will be handled as promptly as possible. We only ask that when you do take anything from the library, you return it no later than the next meeting -- others are waiting and we cannot have more than one duplicate disk or cassette in the library at this time.

For your continued enjoyment, we are adding Cassette #6 "Utilities".

There are some very good programs to help you with your finances, social obligatiuions, UNCLE SAM, the former MA BELL, record auto manitainance, etc.

CASSETTE #6

BINARY NUMBERS	MAIL LIST
BUDGET	STOCK
CONVERT	STOCK 1
FINANCE	TI WORD/BAS
IRS 1040	WORDS2/BAS
MA/BELL	AUTO MAINT
FUTURE VALUE	MORTGAGE
	HOME SECY

Again, we ask that you look through your program index at home to see if there are any that you would like to share with the other members of the club. We will download and return promptly to you -- along with the thanks of many !!!

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              MORE NOTES
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I do not know how many of you realize it, but TI produced two versions of TI Extended Basic. The first runs just a little bit slower than the newer one. To find out which one you have, type in the following:

CALL VERSION(V) :: PRINT V

The older, slower one will return a value of 100 and the newer one will return a value of 110.

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PARALLEL SYSTEMS is offering C-10 cassettes for $.58 each and SS/SD Disks (Elephant or Sentinel Brand) for $1.58 each. There is a flat $2.00 shipping charge on any quantity. They include a game with each order of 20 cassettes or 10 disks. Their address is Box 772 - Dept. T, Turnersville, NJ 08012.

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HOME COMPUTER MAGAZINE has taken an unusual step. They are no longer printing any advertising in the magazine. It seems that they feel that it "cramps their style" when it comes to lay-out and content. They do publish a small pamphlet 10 times a year with some ads in it and they still review new products as they come on the market but there is no direct advertising in the magazine itself. I wonder how long that will last!!

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As cold weather approches, PROTECT YOUR COMPUTER FROM STATIC ELECTRICITY!!!

If you had not noticed, we will not be meeting at GTCC this month. In fact, we will not be meeting there at all. It seems that they had a change of heart and decided that they did not have room for us. That means that we will be at Zayre's on a more or less permanent basis.

In this column we will pose several problems that you might routinely encounter while typing in your own program or copying one from one of the magazines or newsletters.

In the first case, you have entered a program which contains several lines of DATA information. When you try to RUN the program, you get a *SYNTAX ERROR message in LINE xxx. When you check the line, you find that it is typed in correctly. It is, however, one of the lines containing a READ statement. What are the possibilities?

First of all, READ and DATA statements are notorious for returning error messages that may not reflect the line in which the actual error occurs. If you have a READ statement in the line with the syntax error, check the DATA statement that it is READing. Often then actual error is in the DATA statement. The READ may be expecting to encounter string DATA and because of a typing error, may be READing numeric DATA.

Of course, you may have made a typing error in the line where the syntax error occurs. Make sure that you check the 0's and O's to make sure that they are correct. If you are programming in Extended Basic, check to make sure that you only have two :: as the statement seperater. In either case, you will get a *SYNTAX ERROR message.

Check the July issue of the newsletter for more information on DATA – READ errors and how to determine where the bad value is within the DATA statement.

In this one, you have typed in part of a program, RESEQUENCEd it by typing in RES 1,1. Being in a hurry, you started at the appropriate line number and continued. It will not RUN because of a *BAD LINE NUMBER. What happened?

The first place to look in this one is in the segment of the program that you RESEQUENCEd. If you had a GOTO, GOSUB or IF – THEN statement with reference to a non-existant line number, the computer will substitute 32767 for the referenced line when it RESEQUENCEs. You should ALWAYS LIST your programs when they are RESEQUENCEd to make sure that this has not occurred.

If you get an I/O ERROR 00 IN LINE xxx message when trying to access a peripheral device such as a printer, it means that the computer does not know that the device is out there. If you are going to use a printer or other device, make sure that you turn it on BEFORE you turn on the computer. The first thing that your computer does when it is turned on is look to see what peripherals are attached.

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If you have Memory Expansion, Mini-Mem, or Editor/Assembler you can use CALL LOAD(-31888,63,255) to shut down all of your disk drive files. It is the same as entering CALL FILES(0) which is not allowed as a command. You can then type in NEW to open up the additional space for programming.

The drives can be turned back on by typing in BYE. You can also use CALL LOAD(-31888,55,215) and then RUN, NEW or editing your Extended Basic program will turn your files back on. It is possible to use these CALL LOADs in your programs if you have Memory Expansion. Experiment on your own before you use them on a program that you do not want to use.

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If you have encountered any problems while you are programming, send them in to the newslletter and we will do our best to answer them as promptly as possible. From time to time, we all run into something that, for one reason or another, we are unable to solve. Sometimes all it takes to solve it is a fresh prospective.

GUILFORD 99'ER USERS' GROUP NEWSLETTER

P.O. BOX 21691

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