# BUG NEWS

## EDITOR'S CORNER

This month, we would like to welcome a new chapter of TIBUG. The group held its first meeting several weeks ago at the Springville Road Library on Old Springville Road, and serves the Centerpoint-Huffman area. This group is scheduled to meet on the 2nd and 4th Tuesdays of each month. For more information, you may call Mike Hartline at 853-4106.

TIBUG recently held another one of its pizza parties at Big Daddy's Pizza in Roebuck. We had a very large turnout, and everyone had a great time--the group even made a little money on the deal!

## TIBUG LIBRARY

In order to help our members make their selections from our library, below is a complete listing of the tapes and diskettes currently available from the library:

CALCULATION OF PI
LUNAR LANDER
ENEMY ATTACK
INVASION FROM SPACE
TEXTHELLO
ROCK, PAPER, SCISSORS
ACEY DUCEY
SAN FRANCISCO TOURIST
MAZE RACE
CHECKERS
BARTENDER
CIVIL WAR
ANTI-AIRCRAFT GUN
LET'S LEARN NOTES
COUNTING LESSONS
TYPING FOR ACCURACY
TYPING SYMBOLS
CONSUMER LOAN ANALYSIS
REAL ESTATE LOAN ANALYSIS
INTERPLANETARY RESCUE EX.    BASIC
N-VADER EX.    BASIC
HOME SECRETARY EX.    BASIC
CHECKBOOK BALANCE
HAMURABI EX.    BASIC
BATTLESTAR EX.    BASIC
FORCE 1 EX.    BASIC

TINY PLAN-SPREAD SHEET EX.    BASIC
PLOT EX.    BASIC, MEM.    EXPANSION
JOYPLOT AND CIRCLE EX.    BASIC, MEM. EXPANSION
LIFE-LINE TO TITAN EX.    BASIC
WAGONWHEEL
CLOSE ENCOUNTERS OF THE SIMON KIND
BLOCK LETTERS
YAHTZEE
ANIMAL
ROBOT JOKES TE II, SPEECH SYN.
MOTHER GOOSE TE II, SPEECH SYN.
HAPPY SPELL TE II, SPEECH SYN.
CABOOSE TE II, SPEECH SYN.
GENERAL INVENTORY
FROGGER (JOYSTICK) EX.    BASIC
TI-TLES EX.    BASIC
FINANCIAL STATEMENTS
ADDRESSES
TYPING TEACHER BASIC OR EX.    BASIC
DISASSEMBLY BASIC, MINI-MEMORY
CASSETTE LISTER
GENEALOGY INDEX VERSION 1
GENEALOGY INDEX VERSION 2
SPACE PATROL EX.    BASIC
AMAZING GRACE EX.    BASIC
BEETHOVEN'S NINTH EX.    BASIC
DOGFIGHT POET EX.    BASIC
PHOTON 1
SOUNDS
GOLDRUSH EX.    BASIC
LEAPFROG EX.    BASIC
VOCABULARY
FINGER SIGNS
MUSIC CREATOR
MUSIC MEMORY
ALGEBRA

## CAHABA HEIGHTS USERS' GROUP

We meet on the 2nd and 4th Mondays of each month at 7:00PM, at the Cahaba Heights Elementary School library.

Our group now has 33 members-we have added 8 new members since the last publication of the newsletter. Joe Patrick has done an outstanding job as President of our group, but Joe will be turning over the reigns to someone else as soon as an election can be held. Our group was organized around the first of this year.

We continue to have good programs for our meetings. We recently had a demonstration of LOGO, and special programming demonstrations by Barron Bartlett and George Lambert.

The group's tape library continues to grow-although it seems we are having a supply and demand problem. More demand than supply!

At our last meeting we passed out a Needs Questionaire to be filled out by members. This was done in an effort to find out what kind of programs and services were needed by the membership. We asked 11 questions, most of which were multiple choice. Briefly, here are some of the results:

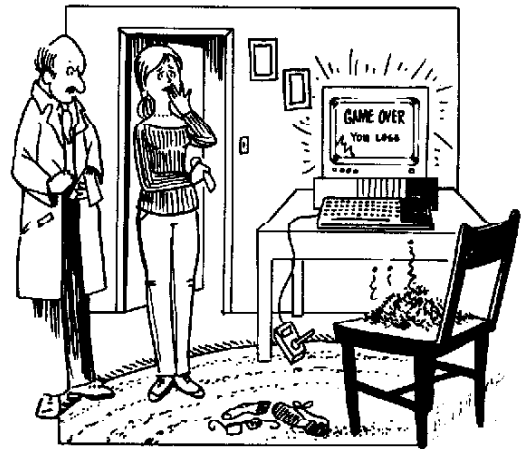1) What was your primary reason for buying your TI?
Response was:
6 members said Entertainment
8 members said Education
9 members said Computer Literacy
1 member said Household Management
5 members said Job-related homework
1 Member said Professional use

2) What peripherals do you currently use:
6 members -Per. Exp. Box
19 members-Cassette Recorder
5 members-Disk cont.drive(s)
3 members-RS232  3 members- Printer
4 members-32K Mem. Exp.
12 members- Speech Synth.
14 members- Joysticks  1 member- Modem

3) What types of tapes would you like to see in the Group Library?

9 members- Games
8 members- Home Financial Management
11 members- Educational
7 members- Word Processing
11 members- Math and/or Scientific
3 members- Secretarial and/or typing



IT WAS JUST TERRIBLE.... I WARNED HIM NOT TO GET SO INVOLVED....!

4) What type of activities would you like to see conducted by this group?
Tutorials:
1 member- Designing programs
3 members- Educational programs
1 member- Basic Programming
1 member- Special Programs
2 members- Free programs  2 members- Social
This last question was not a multiple choice, therefore we received many different answers.

I think the results of this survey show that we have a wide variety of peripheral use and that the wishes and needs of the group are varied.

We continue to have visitors at every meeting. Visitors are always welcome. Of course, we would lide for our visitors to become members. Our annual membership fee is $15.00 for an individual or $20.00 for a family.
    -BOB JONES

## SPRITE ONE LINER

Want to frustrate and amaze your Atari, VIC-20, Color Computer friends. Just type in the following in the command mode with Extended BASIC.

```
CALL CLEAR::CALL SCREEN(5)::CALL
MAGNIFY(2)::FOR I=1 TO 28::CALL
SPRITE(#I,64+I,16,80,80,3*I,8)::NE XT
I::FOR J=1 TO 5000::NEXT J
```

Hit ENTER and watch all 28 sprites do their tricks. If you want to see it again, simply hit function REDO then ENTER again as many times as you wish.
You can also INSERT, DELETE, etc. to try different speeds, colors, caracters, or even add a line number to make it a one line program.

    -Barron Bartlett

## TI BOOKS

In the May 15 BIRMINGHAM NEWS, the assistant manager of B. Dalton Bookseller at Brookwood Mall was quoted as saying "Texas Instruments computer books have been the most popular at this sort.". How refreshing to finally have a selection of TI books to choose from!

Here is a listing of some of the titles available:
1. KIDS AND THE TI-99/4A by Edward Carlson. $19.95 Published by Datamost.

2. 36 TEXAS INSTRUMENTS TI-99/4A PROGRAMS FOR HOME, SCHOOL, OFFICE by Len Turner. $8.95 Published by ARCsoft.

3. 101 PROGRAMMING TIPS TRICKS FOR THE TEXAS INSTRUMENTS TI/99/4A HOME COMPUTER by Len Turner. $8.95 Published by ARCsoft.

4. USING PROGRAMMING THE TI-99/4A INCLUDING READY-TO-RUN PROGRAMS by Frederick Holtz. $9.95 Published by TAB BOOKS.

5. PROGRAMS FOR THE TI HOME COMPUTER by Steve Davis. $14.95 Published by STEVE DAVIS PUB. CO.

6. TEXAS INSTRUMENTS COMPUTER PROGRAM WRITING WORKBOOK by Len Turner $4.95 Published by ARCsoft(available at BOOKLAND).

Of this list, I think that Steve Davis's book is the best investment. I was also quite impressed by Holtz's book. It is written for the beginner in mind and does not require additional peripherals to run the programs contained within. A 21-page chapter is devoted to explaining and programming graphics.
Another book is available from TAB called TI-99/4A GAME PROGRAMS and is priced at $10.95 (softcover) or $17.95 (hardcover).
So visit your local bookstore and look over what's available for the TI.

　　　-Jackie Sanford

WE WISH TO THANK RON COUNCIL, OF ADVERTISING & ART COUNCIL FOR PRINTING BUG NEWS.

## LIFE MAGAZINE WANTS YOU!

TIBUG has received a letter from LIFE Magazine requesting help in discovering a "computer" family. They want to do an article on home computers and are searching for a family to visit. This family should not be involved with a profession immediately identifiable with computers. That is, they do not want a computer programmer or technician but rather someone who uses programming or computer experience. If you know of a family that "fits the bill", write to:
　　　Linda Gomez
　　　Time Life Building 31-24B
　　　Rockefeller Center
　　　New York, NY 10020

## TIBUG TUTORIALS

For the eight of us who attended the free course in BASIC programming during the week of April 25th, it was a very rewarding experience. We attended classes for three hours each night on Monday, Wednesday, and Friday, for a total of nine hours of excellent instruction. On Monday night we were taught how a computer works internally, using binary code to represent the different characters. This is the foundation for understanding computer programming. That night we were given homework to study on the decimal, binary, and hexadecimal codes, and on the methods used in converting from one code to another. For some of us who have not done homework in what seems like a zillion years, it was a very productive experience.
The Wednesday and Friday night classes covered the greater portion of the USER'S REFERENCE GUIDE. These sessions created a good interaction between teacher and students, from which everyone learned a great deal. If the class had been a larger group, instead of just eight, this interaction would not have occurred, so the decision to limit class size was a good one.
I think that our users' group is very fortunate to have such talented teachers as we have. For those on the waiting list for future courses, your wait will be well rewarded, I am sure, and you can look forward to becoming a proficient programmer.

　　　-Allan Cox

# TI BASIC TIPS

Over the past eight months, we've answered many questions dealing with the use of the BASIC language found in the console. In general "TI BASIC" is a very powerful language that can do a great deal of processing in the home. Nevertheless there are times when it appears to be inadequate for certain types of processing. In most cases EXTENDED BASIC will do the job since it is a more complete BASIC language, but often times the console BASIC will do the same types of things!

The following are examples of a few BASIC tricks. Some of these tips are available on "Programing Aids I" from TI;"Handy Dandies" from the group's library; and of course the 99'er Magazine.

### 1. Screen Formating

In many BASIC languages you have the means to format data to fit in blocks. With 12 digit formats you sometimes have data presented in such a way that it is difficult to read. EX.: $102.346654348

It would be much better to read $102.35. It is very easy to do this in TI BASIC with the following line:

    N=INT((100*N)+.5)/100

N=the number that you wish to round off. If you wish to round off to 3 significant digits then use 1000 instead of 100 in the above formula(etc).

### 2. Quick Editing

If you are editing lines of your program, it can be extremely slow to type "EDIT 120";"EDIT 130";etc.. You can accomplish the same thing by typing--120 "Down Arrow(function "X")" or 120 "Up Arrow(function "E"). If you want to delete or change three lines in a row you can follow this next example:

    120 (function "X")

Change or delete the line.

    (function "X")

Line 130 now appears on the screen. You can now edit it.

    (function "X")

Continue your editing until you hit "ENTER" or "CLEAR"

3. Display text and data anywhere you want on the screen(Without Scrolling from the BOTTOM).

Use the following short program:

```
500 REM DISPLAY AT FUNCTION
510 REM
520 A$="1020 ANY STRING(TEXT)"
530 REM "10,20"IS LOCATION DATA
540 REM LOOP BELOW DISPLAYS DATA AT
SPECIFIED SCREEN LOCATIONS
550 REM
560 REM SCREEN LOCATION(ROW 10,
COLUMN 10)
570 ROW=VAL(SEG$(A$,1,2))
580 COL=VAL(SEG$(A$,3,2))
590 A$=SEG$(A$,6,LEN(A$)-5)
610 FOR DISP=1 TO LEN(A$)
620 CALL HCHAR(ROW,COL+DISP,
ASC(SEG$(A$,DISP,1)))
630 NEXT DISP
640 REM IF THIS PROGRAM IS USED AS A
SUBROUTINE THEN PLACE A RETURN HERE.
```

NOTE: You will get an error if your text displayed exceedes the right hand edge of the screen.

4. "IF" statements with "AND" and "OR".

In translation of a program from a general BASIC book you encounter a line that reads:

    45 IF X=10 AND Y=45 THEN 180

What do you do?
Well, you could write it as:

    45 IF X=10 THEN 46 ELSE 50
    46 IF Y=10 THEN 180

Or you can write it as the following:

    45 IF (X=10)*(Y=10) THEN 180

By the same token to represent the statement with an OR use the "+" sign between the statements as in IF (X=10)+(Y=10) THEN 180.
(NOTE: This information may be found in the USER'S REFERENCE GUIDE page II-51 paragraph 3)
If you have some suggestions of your own please call Jo Ann or David at 681-5630. May your programming nights be long and fruitful!

    —David Grissom

## LARGE LETTERS

Several programs I have seen lately have used enlarged letters. The most recent was "SAY AND SPELL" in the March, 1983 issue of the 99'er. This program used a large amount of coding to generate a 64-character hexadecimal string for each of the 26 letters of the alphabet. This string was then used to create four characters to form an enlarged letter.

The subroutine below can be used to create the 64-character strings necessary with much less effort and coding, and it is not limited to the alphabet. It also works on symbols and punctuation. Because of the CHARPAT command, Extended Basic is required.
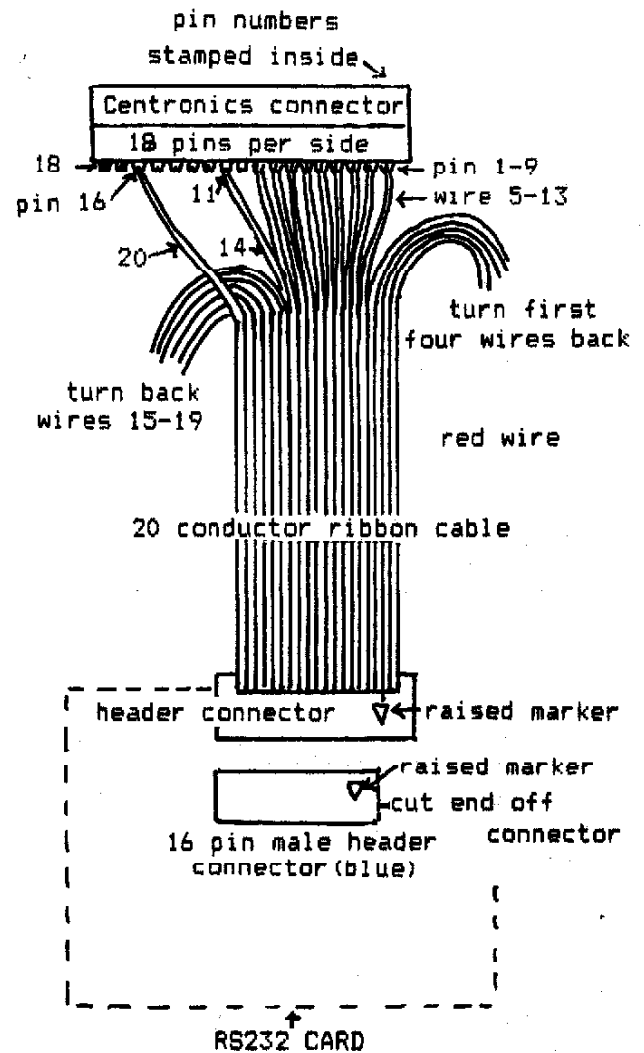
Lines 110-200 are a simple program to illustrate the use of the subroutine which follows. A$ contains the letter to be enlarged, and the subroutine returns p$, a 64-character hexadecimal string which can then create the four characters needed to print the enlarged letter.

```
110 CALL CLEAR
120 INPUT A$
130 CALL CLEAR
140 GOSUB 210
150 CALL CHAR(100,P$)
160 CALL HCHAR(12,15,100)
170 CALL HCHAR(13,15,101)
180 CALL HCHAR(12,16,102)
190 CALL HCHAR(13,16,103)
200 GOTO 120
210 ! ***SUBROUTINE MAGNIFY ***
220 IF FLAG=1 THEN 270
230 FLAG=1
240 DIM W$(15)
250 FOR X=0 TO 15 :: READ W$(X):: NEXT X
260 DATA 00,03,0C,0F,30,33,3C,3F,C0,C3,
    CC,CF,F0,F3,FC,FF
270 CALL CHARPAT(ASC(A$),I$)
280 P$=""
290 FOR Q=0 TO 1
300 FOR P=1 TO 16 STEP 2
310 V=ASC(SEG$(I$,P+Q,1))
320 IF V<58 THEN V=V-48 ELSE V=V-55
330 P$=P$&W$(V)&W$(V)
340 NEXT P
350 NEXT Q
360 RETURN
```

—George Lambert

## PARALLEL PRINTER CABLE



pin numbers
stamped inside

Centronics connector
18 pins per side

18 — pin 1-9
pin 16 — wire 5-13
11 —
20 —
14 —

turn first four wires back

turn back wires 15-19

red wire

20 conductor ribbon cable

header connector ⊽← raised marker

raised marker
cut end off connector

16 pin male header connector (blue)

RS232 CARD

Required parts available for approximately $14.00:

1 - 20 pin female header connector
1 - 36 pin Centronics type male connector
1 - 4 foot length of 20 conductor ribbon cable.(attached to header by Forbes Distributors).

To use the above equipment will require removing the end from the male header connector on your RS232 CARD. This could void the warranty, but the only alternative presently is to order a cable from DENALI DATA DESIGN (405) 524-7764 approx. $40 or CINTRONICS (503) 232-7784 $30.

—Barron Bartlett

## TI BUYING
## INFORMATION

### FREE PERIPHERAL EXPANSION BOX

This offer is available at K-mart and Video Concepts and through various mail order establishments. Buy any 3 of the following and receive the P-Box free:

Memory Expansion Card
Disk Controller card
P-Code Card
TI Disk Drive
TI-Writer(Software)
Microsoft Multiplan(Software)

### FREE SPEECH SYNTHESIZER

Beginning June 1st, purchase any 6 pieces of software OR 3 pieces of software and 1 entertainment value pack and receive the speech synthesizer FREE.

### FREE SOURCE SUBSCRIPTION

Purchase the Anchor Signalman Mark III Modem (89.95 from S.A.V.E.-Atlanta) and receive $100 SOURCE Subscription free. This offer good for a limited time.

### FLIP-FILE FOR DISKETTES

These sell for $30 up elsewhere. Computer Supplies, Inc. (4001 2nd Ave So.) sells these handy diskette organizers for $17.95

### DISCOUNT DISKETTES

10 5 1/4 Diskettes for $17.95 also at Computer Supplies, Inc.

### 10% DISCOUNT ON TI PRODUCTS

Don't forget that card-carrying members get a 10% discount on all TI hardware and software at ZAYRE on Crestwood Blvd. This mean that you can buy your 2nd or 3rd TI for $85.00!

### K-MART GREENSPRINGS

See Jeff for great prices on all TI products!

—Jackie Sanford

## USER'S GROUP
## CORRESPONDENCE

We are receiving a growing number of newsletters from other groups and are really enjoying the exchange of information and ideas. Newletters from the following groups are in our TIBUG library:

The Daytona 99'ers (Florida)
South Bay TI Users Group (California)
Atlanta 99/4A Computer Users' Group (GA)
Rocky Mountain 99'ers (Colorado)
Kentuckiana 99/4 Computer Society (KY)
Washington DC Area TI Home Computer Users' Group (Virginia)
JSC Users' Group (JUG) (Texas)

We also have received some wonderful program and several copies of the 99'er from Ed Weist, Texas Instruments Users' Group Coordinator. Everyone that saw Sam Moore's musical programs demonstrated was very impressed. The second diskette we received contained several games that are library favorites: PI-RING SQUAD and TI RESCUE. We are very grateful to Mr. Weist for sharing these programs and information with our group. These programs are public domain. I have written Mr. Weist about the possibility of visiting our group in the future. We hope something can be arranged in the fall.

A REMINDER: If anyone is not receiving the TEXAS INSTRUMENTS HOME COMPUTER NEWSLETTER and if you have not given me your name and address yet, please do so immediately so that your name can be added to the mailing list.

—Jackie Sanford

## TIBUG LIBRARY
### continued from page 1

THE GAME OF NIMS
CARS AND CARCASSES II
TERMITE
TI TREK
ICBM EX. BASIC
DUNE EX. BASIC
MORSE CODE CHAR. IDENTIFICATION
MORSE CODE PRACTICE
SUPER JACKPOT
SOUND EXPERIMENTER
TRIGONOMETRY
BLACKJACK
UPSCOPE
HANGMAN
DIXIE
TEX-SCRIBE EX. BASIC
UPSCOPE EX. BASIC
SPRITE-GENERATOR EX. BASIC
REM REMOVE
BATTLESHIP EX. BASIC
MINER
PINK PANTHER
TRAP SHOOT EX. BASIC
WAR EAGLE
COORDINATE GEOMETRY

FORCE ONE EX. BASIC
STOCK TRANSACTION
DEPRECIATION SCHEDULE
HOME WORK HELPER-DIVISION
DODGE'EM,EX. BASIC
MINI PLAN,EX. BASIC
GRAPH PLAN,EX. BASIC
TEACH YOURSELF. EX. BASIC
MESSAGES AND GRAPHS,BASIC OR EX.BASIC
TRUCKER'S DOMAIN.EX. BASIC
PI-RING SQUAD,EX. BASIC
TI RESCUE,EX. BASIC
BASKETBALL INST. AND STATS.EX.BASIC
CHEMISTRY
TALKING WITH FROGGY
SPEAK AND SPELL
FOOTBALL RATING
BEETHOVEN'S FIFTH
COUNTY FAIR DERBY
AIR-SEA BATTLE
WORD WORLD
HANDY DANDY
CONNECT 4,EX. BASIC
ALPHA-ROLL,EX. BASIC
SANDWICH SHOP
CHECKBOOK
BLOCK LETTERS
SPACE PATROL,EX. BASIC
FOOTBALL

## APPLICATION FOR MEMBERSHIP

Please complete the information below, and return with your check to:
Jackie Sanford, TIBUG
709 Nytol Circle
Birmingham, AL 35210

To join TIBUG-SOUTH, the Cahaba Heights group, make your check payable to Steve Fahy, and send with your application to:
Joe Patrick
3505 Far Hill Rd.
Birmingham, AL 35243

YES, I would like to be a regular member of TIBUG, and have enclosed my check for the annual fee of $15.00 ___ for single membership, or $20.00 ___ for a family.

NAME_____

ADDRESS_____

CITY_____STATE_____ZIP CODE_____

HOME PHONE_____BUSINESS PHONE(OPTIONAL)_____

OFFICIAL USE ONLY:

--------------------------------------------------------------------------

## TIBUG LIBRARY
continued from page 7

### PURCHASED TAPES:

| | |
|---|---|
| TI ASTEROIDS | ATTACK MAN |
| SHUTTLE COMMAND | UTILITIES 1 |
| LUNAR PILOT | FROGGERY |
| RING DESTROYER | THIEF |

NOTE: We have been having some problems with programs being checked out and not returned on time. Please do not monopolize the program over the allotted 30 day period. We may have to start charging for tapes, charge fines, or ask for deposits on library materials unless we receive more cooperation.
You may return your tapes by mail to:

Linda Biddinger
42 Sunscape Drive
Birmingham, AL 35215
(205) 856-0801

## TIBUG
## INFORMATION

TIBUG is an organization of Texas Instruments Computer owners. We are not a part of the Texas Instruments Company. Dues received by the group is used entirely for the group's benifit.

MEETING NIGHTS:(Irondale)    1st Wednesday and 3rd Tuesday of each month.
MEETING TIME: 7:30 TO 9:00 P.M.
LOCATION:    Irondale    Public Library--Irondale, Alabama

The group offers a free software library to members, computer tutorials, and a bi-monthly newsletter as a part of its services to TI computer owners.

VISITORS
ARE WELCOME!

**BUG NEWS**
A Newsletter for
Texas Instruments
Birmingham Users' Groups
Rt. 1, Box 539-E
Trussville, AL 35173
Telephone: 681-5630   956-5044

TIBUG
709 NYTOL CIRCLE
BIRMINGHAM AL 35210

BIRMINGHAM AL
JUN 14
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1983

EDITOR--Jo Ann Grissom 681-5630

CENTRAL ALABAMA 99/4 USERS GROUP
551 LARKWOOD DR
MONTGOMERY, AL 36109

POSTAGE DUE 17¢