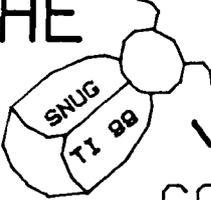


THE  **SNUGLETTER**  
FROM THE SOUTHERN NEVADA USERS' GROUP

Vol. 3 - No. 2

March, 1985

**NEXT MEETING**

**MONDAY, MARCH 11, 1985 - 6:30 PM**

**CHARLESTON PLAZA LIBRARY MEETING ROOM**

PRESIDENT'S MESSAGE

March 1985

I never expected to be writing a column titled "PRESIDENT'S MESSAGE". I am not usually one to get involved in clubs and social events. If you missed the February meeting, you should know that we had elections to replace Roy Hufford and his wife, Beverly, as President and Secretary respectively. Unfortunately, their work situation has prevented them from executing the duties of their offices for the past several months. Gordon Leonard has done an excellent job of filling in for Roy during this period, but declined to accept the office himself, preferring to remain as U.P. The nominating process produced only one candidate for President and one candidate for Secretary. I am your new President. My name is John Martin. Bob Sherburne has agreed to be our new Secretary. We will both serve out the remaining terms of our predecessors.

It is my belief that the Southern Nevada User's Group is more than just a place to sit and listen to the reports and presentations of the officers and members. It is more than just a place to kill a couple of hours once a month. Part of the purpose of SNUG, according to our constitution, is to be a forum to encourage all efforts and activities in connection with the TI-99/4A Home Computer, meet and socialize with other owners, TI Staff, Dealers, etc. To utilize knowledge of members for exchange of ideas, opinions, and discoveries.

We need to have more of our members start sharing ideas, opinions, and discoveries with the group. This is how we grow. This is what will keep the group fresh and interesting. Even ideas about what kind of things you would like to see would be helpful.

Is there some area of programming that you are interested in, but can't quite figure out? Call me. Let me know. Maybe we can arrange to have a demonstration by someone who knows all about it.

Do you have a program that you are proud of? Would you mind sharing it with the rest of us? Call me. I'm sure we can set up the demo.

[continued on page 2]

Do you have an article or even an idea for an article for the newsletter? Call me. Or better yet, call Rudy Johnson, our newsletter editor. We need more articles for the SNUGLETter.

Remember, SNUG is just about the only source of information and programs for our computers that we here in Southern Nevada have left. Without the participation of our members, even that source will eventually dry up. Please participate, even if only to suggest topics for future meetings.

That's it for this month. Call me if you want to discuss any SNUG business. I am always willing to talk computers. Please plan to attend the meeting this month. Monday, March 11, 1985--Charleston Plaza Library--6:30 PM.

-JOHN MARTIN-

----- SNUG AGENDA MARCH 11, 1985 -----

The meeting will start at 6:30 PM. Following a reading of the minutes from the Feb. meeting and some announcements, we will get to the guest speakers for the month.

This month, we have two speakers. The first one is Nancy Bates. She has taught LOGO at Computer Magic and has agreed to come and give us a demonstration of the power of this unique language. I am confident that she will be able to explain the workings of TI LOGO II much better than I was able to at the January meeting.

Our second speaker will be Steve Buchanan. His topic will be "An Introduction to Flowcharting". Steve says that flowcharting does not have to be difficult or intimidating. He says that it can really help you to write good programs. I am looking forward to his presentation.

The remainder of the meeting will be the "open meeting" format that allows you to get together in smaller groups to discuss problems, new products, new discoveries, and make suggestions to the officers of the group.

Please plan on attending. Remember, the meeting will be at the Charleston Plaza Library, 6:30 PM, March 11, 1985.

-JOHN MARTIN-

\*\*\*\*\*  
\* The SNUGLETter is published monthly by the Southern Nevada Users' Group \*  
\* (SNUG). SNUG is a non-profit organization of individuals with an inter- \*  
\* est in all aspects of Texas Instruments' 99/4 & 4A computer, including \*  
\* all related hardware and software by third party vendors. The GROUP \*  
\* meets at 6:30 PM on the second Monday of the month - currently in the \*  
\* Clark County Library meeting room, 1726 E. Charleston Blvd. (Charleston \*  
\* Plaza Mall.) Visitors and guests are welcome to attend the meetings. \*  
\* Information on membership is available at the meeting. \*  
\*\*\*\*\*

The following is based on an article in the May, 1984 Cedar Valley 99'ER Newsletter, written by Bryan Hawkins.

I know that many of you out there are in the dark as to how logical numerical instructions can be of benefit in program construction. Maybe this will help to clarify some of it a bit.

In the program below, lines 120 through 270 demonstrate a simple way to move a character back and forth along row 12.

Starting at line 290, is a program that does the same thing, but with 7 less lines of coding. The reason for the difference in length resides at line 350.

Let's look a little closer at this line.

```
350 C=C+((K=68)*(C<32))-((K=83)*(C>1))
```

There are 4 conditional relationships involved in this line. 1 and 2 are combined into a single relationship by parentheses. The same is true of 3 and 4.

If we press the right arrow key, "D" or ASCII 68, the relationship 1 returns a value of -1 (true). Since we didn't press "S" (ASCII 83), relationship 3 is false, or 0. Since 3 and 4 are multiplied together, their product is 0, as 0 multiplied by anything is still 0. Therefore, everything to the right of the minus sign in line 350 is 0, and affects nothing. However, we did press key 68 or "D". Relationship 1 is true (-1) and relationship 2 is true (-1) as C is still less than 32. We remember from high school math that -1 times -1 is equal to +1. So, C is now equal to C+1 or 13. If we keep holding down the "D" key, eventually the "+" sign will reach the right side of the screen and will equal 32. At that time relation 2 will become false (0) and the product of 1 and 2 will become 0. No further rightward movement can occur. The same thing is true for the leftward movement, when C is 1.

The third version, starting at line 380, also adds a line to include vertical motion of the "+" character.

I hope this has helped you, (as it did me) to better understand conditional relationships.

-BOB SHERBURNE-

```

100 REM // COMPARE THESE           | 200 CALL HCHAR(R,C,43)           | 83)*(C>1))
THREE ROUTINES FOR MOVING A      | 210 GOTO 150                     | 360 CALL HCHAR(R,C,43)
FIGURE AROUND THE SCREEN --     | 220 IF C>31 THEN 210             | 370 GOTO 320
TYPE "RUN 280" OR "RUN 380"     | 230 C=C+1                        | 380 REM //THIS LAST VERSION
TO SEE ROUTINES 2 AND 3.        | 240 GOTO 200                    | 390 CALL CLEAR
110 REM // THE SHORTER          | 250 IF C<2 THEN 210             | 400 CALL SCREEN(5)
ROUTINE STARTS ON LINE 280      | 260 C=C-1                        | 410 CALL COLOR(2,16,1)
/THE THIRD ROUTINE, WITH        | 270 GOTO 200                    | 420 R=12
VERTICAL MOTION STARTS ON       | 280 REM // THE NEXT FEW         | 430 C=12
LINE 380                        | 290 CALL CLEAR                  | 440 CALL KEY(0,K,S)
120 CALL CLEAR                  | 300 R=12                        | 450 IF S=0 THEN 490
130 R=12                        | 310 C=12                        | 460 CALL HCHAR(R,C,32)
140 C=12                        | 320 CALL KEY(0,K,S)             | 470 C=C+((K=68)*(C<32))-((K
150 CALL KEY(0,K,S)             | 330 IF S=0 THEN 360            | 83)*(C>1))
160 IF S=0 THEN 200             | 340 CALL HCHAR(R,C,32)         | 480 R=R+((K=88)*(R<24))-((K
170 CALL HCHAR(R,C,32)          | 350 C=C+((K=68)*(C<32))-((K    | 69)*(R>1))
180 IF K=68 THEN 220            |                                | 490 CALL HCHAR(R,C,43)
190 IF K=83 THEN 250            |                                | 500 GOTO 440

```

The following article is excerpted from TI RUG, Feb., 1985, the Riverside, California, Users Group.

PRES. RELEASE

by Ed Butcher

In last month's newsletter I mentioned that I had installed a numeric keypad on my "4A". Since our Editor was ready to print the news and my contribution was all that he lacked, I hastily finished and sent what I had written to him. Now that I have had more time I will go into more detail about the installation.

The TI-99/4A keyboard is connected to the computer with a 15 conductor ribbon cable and it is at this cable that you can tap into the circuit board for an extended keyboard. For possible future use I soldered a ribbon cable to all 15 conductors. This cable could be used to connect a full featured external keyboard. Back to the pad. After searching locally to no avail, I spotted an advertisement in "Computer Shopper" for a Numeric pad from the Arnold Company in Red Oak, Texas. The pad sold for \$9.95 including SH and their service was expeditious.

Each of the 18 keys on the pad have two pins extending from the bottom to which I soldered wires and connected them according to the schematic numbers that I had determined by ohm meter checks. You will find this matrix included for your convenience. You may have noticed that I said 18 keys. In addition to the 0-9 keys there are 8 keys that you can wire to any of the console keys. Included are (.), (,), (=), (+), (-), (SPACE), (TAB), and (ENTER). Since some of these are shifted on the TI, I traded (+), (-) and (TAB) for (CTRL), (FCTN) and (;). A spare keyboard that I recently purchased yielded the necessary key caps that fit on the pad's keystands. Now, what you see is what you get. Not all of the replacement keyboards have the correct caps. They must have square shank keys to fit the pad.

After adding the pad, all of the console keys are still usable. The only thing that changes is your ability to exchange your console for a factory reconditioned unit. If you want to unsolder the cable, even that is not forfeited.

I mounted the pad in a Radio Shack #270-252 box that I cut to angle the pad like the keyboard. I cut an "H" shaped window in the top and the tabs of this window, when bent down, make mounting brackets for the pad. Holes are then drilled in the tabs for short sheet metal screws that can be screwed into the pad's heavy plastic base. The pad now sits at the right side of my console and is a dream for numeric entries, data statements, CALL CHAR statements and Multiplan data. No more crossed hands and tangled fingers when typing on that top row of keys. Even the old ten-key touch is coming back after all of these years.

Now a word of explanation about the keyboard matrixing. To determine which wires go to which switch you find the character of your choice on the matrix and follow up to the top and find the number that is in the ( ). Now for the left side of the board go to the left and find the number that is in the ( ). For example, wires 1 and 9 go together to make a (4) while wires 1 and 14 make a (7). If you touch the two wires together that are soldered to these leads the chosen character will appear on the screen. The wire numbers on the right side are found by following to the right and the top. The keypad will require 12 of these 15 wires if you wire it as I have it configured. The choice is yours as you can include any key function that is found on the keyboard.

KEYBOARD MATRIX

	(10)	(4)	(8)	(3)	(2)	(1)	(7)	(7)	(1)	(2)	(3)	(8)	(4)	
(9)	- ALPHA- LOCK	- FCIN	- 1	- 2	- 3	- 4	- 5	6	- 7	- 8	- 9	- 0	-	- (14)
(6)	-	- CTRL	- Q	- W	- E	- R	- T	Y	- U	- I	- O	- P	- ENTER	- (15)
(13)	-	- SHIFT	- A	- S	- D	- F	- G	H	- J	- K	- L	- ;	- SPACE	- (12)
(5)	-	-	- Z	- X	- C	- V	- B	N	- M	- ,	- .	-	- =	- (11)

(Note)- The Red tracer is on wire #1 of the 15 wire ribbon cable.

----- NOTE FROM THE EDITOR -----

I selected the article on the previous page for this month's SNUGLEtter since I am interested in this addition on my TI. I have also contacted the author for more info, and received the firm's address. It is: Arnold Company, 214 Hill Lane, Red Oak, TX 75154. Phone: (214) 576-2291.

I have also put this info to use on my TI. I ordered an 18 button keypad from All Electronics Corp., P.O. Box 20406, Los Angeles, CA 90006-0406. Phone: (213) 380-8000. [They have a WAITTS 800 order number but I don't have it handy as I loaned my catalog out.] I also ordered an extra 5 button strip with four arrow keys and a HOME key. With these two units I set up my pad with all the numbers, 0-9, period, comma, enter, function, four arrow keys, and a single key which produces the quotation mark. This is actually done with two button/contacts under one double-wide key cap. It is set so that the function contacts close before the P contacts. Anyway, the two keypad units were \$6.00. [The minimum order is \$10 - I ordered some other things, surplus TI keyboards, 2/\$11, 16 pin PIO connector (\$1 each).] I also took advantage of Radio Shack's sale on DB-15 15 pin connectors to connect the keypad box to my console. This gives me the ability to disconnect it quickly when I'm moving things around.

I will bring my console and keypad to the next meeting to show the results of all this.

Next I must offer my apology to any of you who have attempted to use the programs which were published with the FILE TUTORIAL in last month's newsletter. I assembled the newsletter on a non-TI system so I did not try the programs as they were listed. Several typing errors were in the X BASIC disk version and the cassette BASIC version was not as clean as it could have been. The following reedited, running versions are straight from my TI.

```

100 REM #HERB BURGETT FILE T : 160 DISPLAY AT(16,2):"5.SAVE : IXED
TUTORIAL EXBASIC FOR DISK # : UPDATED FILE" : THEN 380
105 CALL CLEAR :: CALL HCHAR : 170 DISPLAY AT(18,2):"6.END : 270 FOR X=1 TO 5 :: PRINT #1 : 390 IF K=89 THEN 105
(24,1,66,64):: CALL VCHAR(1, : SESSION" : :A$(X),B$(X),C$(X) : 400 END
32,66,48) : 180 DISPLAY AT(21,2):"INPUT : 280 NEXT X :: CLOSE #1 :: GO : 410 CALL CLEAR
110 CALL SCREEN(11):: DISPLA : YOUR CHOICE?" : TO 105 : 420 OPEN #1:"DSK1.MYFILE",IN
Y AT(3,6):"FILE TUTORIAL MEN : 181 ACCEPT AT(21,21)VALIDATE : 290 CALL CLEAR : TERNAL,RELATIVE 100,UPDATE,F
U" : (DIGIT)BEEP SIZE(1):Z : 300 OPEN #1:"DSK1.MYFILE",RE : IXED
120 DISPLAY AT(6,2):"1.CREAT : 190 ON Z GOTO 200,290,340,41 : LATIVE 100,INTERNAL,UPDATE,F : 430 INPUT "WHICH RECORD#(1-2
E NEW FILE" : 0,250,400 : IXED : -3-4-5)? ":X
121 DISPLAY AT(7,4):"(SAVE D : 200 CALL CLEAR :: PRINT "THI : :A$(X),B$(X),C$(X) : 440 PRINT A$(X): :: PRINT B$(
SK1.MYFILE)" : S PROGRAM CREATES 5 RECORDS" : 330 NEXT X :: CLOSE #1 :: GO : (X): :: PRINT C$(X): : :
130 DISPLAY AT(9,2):"2.INPUT : : : TO 105 : 450 INPUT "LAST NAME - FIRST
DATA" : 210 FOR X=1 TO 5 :: INPUT "L : 340 CALL CLEAR :: FOR X=1 TO : :A$(X)
131 DISPLAY AT(10,4):"(OLD D : AST NAME-FIRST ":A$(X) : 5 : 460 INPUT "STREET ADDRESS ":
SK1.MYFILE)" : 220 INPUT "STREET ADDRESS ": : B$(X) : 470 INPUT "CITY, STATE & ZIP
140 DISPLAY AT(12,2):"3.REVI : B$(X) : (X): :: PRINT C$(X): : : :C$(X)
EW RECORDS" : 230 INPUT "CITY, STATE & ZIP : 360 NEXT X : 480 CLOSE #1 :: GOTO 100
150 DISPLAY AT(14,2):"4.CHAN : ":C$(X) : 370 PRINT "RETURN TO MENU? ( :
GE A RECORD" : 240 NEXT X : Y/N)" :
250 OPEN #1:"DSK1.MYFILE",RE : 380 CALL KEY(0,K,S):: IF SK1
LATIVE 100,INTERNAL,UPDATE,F :

```

```

100 REM $HERB BURGETT FILE ; 190 PRINT "1.CREATE (OUTPUT) ; ERNAL,FIXED ; 430 CLOSE #1
TUTORIAL $ ; " : " A NEW NAME/PHONE FILE" ; 310 ENTRY=1 ; 440 GOTO 130
110 REM $TI BASIC FOR CASSE ; 200 PRINT ; 315 CALL CLEAR ; 450 OPEN #1:"CS1",INPUT ,INT
TTE$ ; 210 PRINT "2.REVIEW (INPUT)" ; 320 PRINT "type END to close ; ERNAL,FIXED
120 CALL CLEAR ; " : " AN OLD NAME/PHONE FILE" ; the file" ; 455 CALL CLEAR
130 PRINT TAB(13);"MENU" ; 220 PRINT ; 330 PRINT :: ; 460 PRINT ::
140 PRINT ; 230 PRINT "3.END SESSION" ; 340 INPUT "NAME-> ":N$ ; 470 INPUT #1:N,N$,P
150 PRINT "cassette file dem ; 240 PRINT :: ; 350 IF N$="END" THEN 420 ; 480 PRINT ::
a program" ; 250 CALL SCREEN(11) ; 360 INPUT "PHONE->":P ; 490 IF N=999 THEN 530
160 PRINT "refer to the char ; 260 CALL HCHAR(1,1,66,32) ; 370 PRINT #1:ENTRY;N$;P ; 500 PRINT "ENTRY";N
t to make" ; 270 CALL VCHAR(1,32,66,48) ; 380 PRINT ENTRY;N$;P ; 510 PRINT "NAME: ";N$;"PHONE
170 PRINT "changes in your f ; 280 INPUT "INPUT YOUR CHOICE ; 390 ENTRY=ENTRY+1 ; :";P
ile options" ; ?":C ; 400 PRINT :: ; 520 GOTO 470
180 PRINT :: ; 290 ON C GOTO 300,450,550 ; 410 GOTO 315 ; 530 CLOSE #1
; 300 OPEN #1:"CS1",OUTPUT,INT ; 420 PRINT #1:999;ZZZ;999 ; 540 GOTO 120
; ; ; 550 END

```

This morning, I recieved the following letter from Jerry Glaze. Jerry is one of our charter members, but has not been active in the group for some time. John Martin

Dear John,

Thank you for your recent phone call re SNUG. I had dropped out mainly due to time of meetings -- 6:30 was just too early for me to get away. Here, however is a programming tip I discovered while typing a program out of the "99er" for EXTENDED BASIC only.

> DISPLAY AT(12,1): "NO SIZE NEEDED";

Putting a semi-colon AFTER the close quotation does the same as:

> DISPLAY AT(12,1)SIZE(14): "NO SIZE NEEDED"

It saves time by eliminating the need to count\_out the characters in quotes and it saves memory, too. (and typing time)

Type in this program and you'll see how it works:

```

100 CALL HCHAR(1,1,42,768)
110 DISPLAY AT(10,1):"NO SIZE NEEDED";
120 DISPLAY AT(20,1)SIZE (14):"SIZE IS NEEDED"
130 DISPLAY AT(22,1):"NO SIZE OR ;"
140 GOTO 140

```

Press FCTN/4 to "QUIT"

Notice that lines 110 and 120 do\_not\_disturb the (\*\*) graphics. Line 130 does disturb the graphics.

I'm sure many "advanced" members already know about this, but anyone who programs a lot in EXTENDED using DISPLAY AT WITH graphics, will find it helpful.

I thought it was a valuable "find". I also have a lot of programs. I will be happy to share with the group if they are interested.

Regards to all. - Jerry

----- BASIC TO TI-WRITER -----

The following tip comes from Jim Swedlow in The ROM Newsletter (2/85), UG of Orange County, CA. It completes the cycle of the TRANSL program in the Jan. and revised in Feb, issues of The SNUGLETter in that a BASIC program can be converted to the format required by TI-Writer and back to a BASIC program file. [Ed.]

LISTING TO DISK: In the XB book it suggests that you can list a program to a device but the material points you toward a printer. TEACH YOURSELF XB adds that you can list a program to disk. The command is:

LIST "DSK1.TEST"

The program is now saved on disk exactly as you last saw it on the screen. The file parameters are DISPLAY, VARIABLE 80.

Since those are the parameters for a TI Writer file you can load the file onto TI Writer. Why? Well, it could be helpful when doing a newsletter. [Amen. Ed.] Also, the FIND STRING command could help you locate something in a long program. Mainly, however, just to see what you could do.

----- WANTED OR UNWANTED -----

WANTED: Used TI compatible modem, used printer and/or TI speech synthesizer. Contact Jim Adkerson - 876-9125.

FOR SALE: Centronics/TI-PIO cable wired for a Gemini 10X printer. 4 foot. \$20. I needed a longer one. Contact Rudy Johnson - 871-9583.

FOR SALE: Foundation 32K Memory CARD, TI Speech Synthesizer, TI Logo. Contact Llew Williams - 798-2138 (work), 451-2290 (home).

FOR SALE: Futura Business Packages - GL, AR, APay, Billing, Inventory, Payroll. Contact Fran at Computer Magic - 456-0858.

----- PRODUCT NEWS -----

Computer Magic has received word that the CorComp 9900 Micro Expansion System has finally been released. They provided reviews by two "Beta Site" testers, John Phillips (DLM Software) and John Clulow (New Horizons UG). Both of them reported that the fully equipped box ran perfectly with all the functions which they tried - and they did quite a lot of work with the "MES". J. Phillips gave it a 5 Star (out of 5 rating).

CorComp also said in their newsletter that: "Due to several significant design changes in the final upgrade board containing the 32K Memory and the DSDD Disk Controller for the 9900 Micro Expansion unit, it will be company policy to

require factory installation of the board to all RS232 Stand Alone units. Early RS232 units will require changes on that board to properly work with the upgrade board." They also said that the factory installation will extend the warranty coverage for an additional 120 days. There is quite a lot more to the newsletter. A partial copy of which will be at the next meeting.

----- SNUG FINANCES -----

Steve Buchanan has just passed along a brief recap of SNUG's financial situation since the much delayed opening of the Group's new checking account.

----Starting Balance - \$ 703.85

Expenditures:

- Library Rent - \$ 40.00
- Newsletter
  - Postage - \$ 49.87
  - Post Office Box
    - Rental - \$ 14.00
  - Newsletter Cash
- On Hand - \$ 40.13
- Total \$144.00

----Ending Balance - \$ 559.85

----- MEETING TIP -----

It is suggested that when attending the the SNUG meetings you have paper and pencil to take notes on those items you find of interest. The long time members have found that they tend to forget that vital tip they heard at the meeting by the time they had the opportunity to use it in their own situation.

----- TIPS FROM THE TIGER CUB-----

by Jim Peterson

BUSS IN YOUR PROGRAM? Try this:

- 1 FOR @=1 TO 4
- 2 CALL COLOR(@,16,1)
- 3 NEXT @
- 4 GOTO 4

Add these temporary lines to the beginning of the program that is not running as it should. Now, type LIST and stop the scroll with FCTN 4 as the first lines of the program listing nears the top of the screen. Now, type RUN. The numbers and the punctuation all turn white. If you have accidentally inserted a letter for a number it will show up immediately. After correcting any errors in this part of the program, clear with FCTN 4 again. Then LIST. Let the program scroll until the next section in which you want to look for errors arrives on the screen, then type FCTN 4 and RUN, etc.

This comes to us from the Eugene, Oregon, Users Group.

----- NOTE!! MAILING ADDRESS CHANGE -----

All SNUG members and those who correspond with SNUG should note that SNUG now has a new mailing address. We would like to have all future correspondence sent to this new address:

SNUG (Southern Nevada Users Group)  
P.O. Box 26301  
Las Vegas, NV 89126-0301

SNUG  
P.O. Box 26301  
LAS VEGAS, NV 89126-0301

FIRST CLASS

TO: