



Atlanta
99/4A
Computer
Users
Group

CALL NEWSLETTER

VOLUME II NUMBER 2

FEBRUARY 1984

Atlanta, Georgia

PRESIDENTS CORNER

I enjoy my computer hobby, and as a part of that hobby I try to read as much as possible about it. I specially enjoy reading books and magazines that support the 99/4A, because these are to me the most useful.

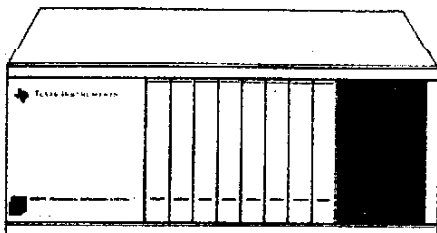
Recently a new magazine touted by its publishers as very qualified has come out. Called **FAMILY COMPUTING** and published by **SCHOLASTIC INC.** So I purchased it. The first issue really supported the 99/4A along with several other machines. But after that things went quickly downhill.

Their reviews of the machine retold the same old half truths that I've heard for some time now, from people who think that if the label doesn't say Apple it just has to be junk.

The last straw was in the December issue where they reviewed word processor programs on eight machines. For the 99/4A they could only find one available word processor, obviously TI's **TI-WRITER**. When it comes to fairly simple research that is either deliberately not done or is overlooked on one of several machines, I get hot under the collar.

Our newsletter, 'CALL NEWSLETTER' was first published using **EXTENDED SOFTWARE'S** **TYPWRITER** program, available on disk or cassette. Recently a program called **COMPANION** by **INTELPRO** was released, and it appears to rival the **TI-WRITER** program. **ADVANCED SOFTWARE** has just released a mini-memory word processor, cassette based, which also looks like a good program. Then of course there are the old standbys that have been around for a while, aside from **TYPWRITER**, which I already mention, there's **TEXTIGER**, and **FUTURA SOFTWARE'S** word processors, and finally **DIRECT WRITER II**, also a very good program. Please note this is not a review, I have not had the opportunity to work with all of these programs.

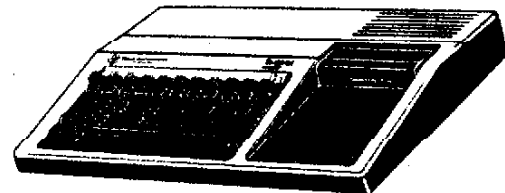
The purpose of listing these programs is simply an exercise in research. In just a few minutes, I've been able to list six word processors for the 99/4A, covering disk, cassette, Extended Basic, Assembly Language, and Mini-memory, and that's not counting three word processors in our public domain library, and one that you can type in from 99'er magazine.



Just as an aside in the February issue they discuss Data - Bases. They list four very popular data bases that they state are available for the 99/4A, from three different companies. I called all three, to find out where these programs could be obtained, and found out that none of them were or will be available for the 99/4A.

Any magazine that claims to be an offshoot of such a rich educational heritage as **SCHOLASTIC INC.**, and either refuses to do the necessary research or doesn't know how to, should not be allowed to publish. In my opinion their idea of 'supporting' the 99/4A deserves to be ignored. Specifically don't write and complain, because it falls on deaf ears, ignore their magazine totally. Don't purchase it, don't help them exploit the 99/4A with the nonsense they call support.

Marshall



REDO
The Incredible Key

The **TI-99/4A** computer is capable of many powerful tasks. Its uses and functions are more frequently limited not by the machine itself, but by the imagination and knowledge of the user.

One feature that is most often overlooked by many is that of the mighty **REDO** key. This key coupled with the power of Extended **BASIC**, provides for many extremely useful functions.

Imagine you are entering a series of program lines in which the content of each is similar to each other, except perhaps that the variables differ. After entering a line then press **REDO**. This will cause the line you just typed to appear below your manual entry with the cursor positioned on the line number. You may then alter this line number and make any other changes in that program line rather than typing in a completely new entry.

For a simple example, consider this. You want to write a two line program that prints:

```
TESTING 1,2,3
TESTING 4,5,6
```

To accomplish this using the REDO key the following would be performed.

Type first line

```
100 PRINT "TESTING 1,2,3"
```

and enter that line.

Next hit REDO. This line appears below the one you just typed.

Now simply change the line number to 110, move the cursor over to the numbers 1,2,3 and change them to 4,5,6 and press enter. At this point list your program. You will discover that line 100 still remains intact as you originally entered it, but in addition there is now a line 110 with the modifications that were required to write this as a two line program.

Another use for the REDO key is found when saving and loading programs. Perhaps you wanted to load a program from disk called BUDGET, so you typed in:

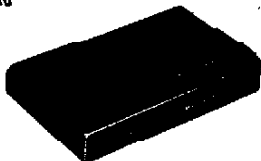
```
RUN "DSK1.BUSET"
```

Upon pressing enter and receiving an error code you realized you misspelled the program name. Now for the magic. Instead of retyping your RUN line, press REDO. This causes the misspelled line to reappear. You may now simply insert the D into BUDGET, press enter, and your program will now load.

Finally one more suggestion for use of the REDO key. A friend has expressed an interest in having a copy of your wonderful WIDGET program. To copy this program simply type OLD "DSK1.WIDGET". Now instead of typing SAVE "DSK1.WIDGET" to place a copy onto your friend's disk, press REDO. Your earlier statement of OLD "DSK1.WIDGET" will appear. Change the OLD to SAVE and press enter; the program will now save to disk.

There are of course other applications that can be performed using the REDO key, some of which are to be found only by experimentation. Don't be afraid to try something new, and let us know if you find any other useful tidbits.

Thomas H. Boisseau



EAST SIDE SUBCHAPTER

The East Side 99'er Computer Users Group (ES9CUG), a subchapter of the Atlanta 99/4A Computer Users Group, will hold its next meeting on Thursday evening, March First at 7:30 pm. The meeting place is the Decalb College Central Campus Library on the second floor.

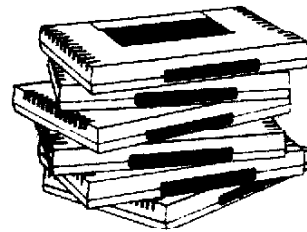
From here after the ES9CUG will regularly meet on the first Thursday of each month and will offer all the benefits of the Atlanta main group, although the meeting contents themselves may vary.

The East Side group hopes to provide a special emphasis for the TI user who is working with little more than just the console itself, and to give an informative session to those who might be somewhat new to the world of computing.

The March meeting will include a special session on some of the many undocumented features of the 99/4A console, TI BASIC, and TI Extended BASIC. You may be surprised at some of the things you didn't know. Also at this meeting will be some discussions regarding computer gaming and computer education.

Whether you attend the main meetings or not, the ES9CUG is a good place to be. And for those of you on the east side of Atlanta, it sure beats driving into town. Hope to see you there.

Thomas H. Boisseau



***** CLUB SALES *****

Diskettes, box of 10	\$25.00
Cassette Tapes (each)	
C-10	\$.90
C-20	\$ 1.00
C 30	\$ 1.10
Printer:	
MCR Reconditioned Thermal	\$50.00
Printer Paper 9 1/2 x 11	
540 sheets	\$ 8.00

PROFITS FROM CLUB SALES GO TO THE CLUB.

SAILBOAT GRAPHIC PROGRAM

by Terry E. Manning

The following program will create the design of a sailboat on your video screen for use with your TI home computer programs. Add a title of your choice to create a unique video title screen.

```

110 REM SAILBOAT GRAPHIC
120 CALL CLEAR
130 REM DEFINE GRAPHICS
140 CALL CHAR(96,"0000000010101E17")
150 CALL CHAR(97,"00000000000000C0")
160 CALL CHAR(98,"11101010101010B4")
170 CALL CHAR(99,"F07C0F")
180 CALL CHAR(100,"00000000030C30C0")
190 CALL CHAR(101,"630C30C0")
200 CALL CHAR(102,"5456565555545454")
210 CALL CHAR(103,"0000000000808040")
220 CALL CHAR(104,"000000000000001")
230 CALL CHAR(105,"030C3040408080")
240 CALL CHAR(106,"5454545454545454")
250 CALL CHAR(107,"4020201010080804")
260 CALL CHAR(108,"0102020404080810")
270 CALL CHAR(109,"0402020101")
280 CALL CHAR(110,"000000000808040")
290 CALL CHAR(111,"10101010101010")
300 CALL CHAR(112,"10101010100C03")
310 CALL CHAR(113,"0000000000000C0")
320 CALL CHAR(114,"300C03")
330 CALL CHAR(115,"000000FF")
340 CALL CHAR(116,"545454DF1F101010")
350 CALL CHAR(117,"000000FFFF")
360 CALL CHAR(118,"040202FFFF")
370 CALL CHAR(119,"000000E0F0")
380 CALL CHAR(120,"0F070301")
390 CALL CHAR(121,"FFFFFFFFF73F1F")
400 CALL CHAR(122,"FFFFFFFFFFFFFF")
410 CALL CHAR(123,"FFFFFFFFF0F0F0F0")
420 CALL CHAR(124,"00C000FF000000FF")
430 CALL CHAR(125,"00000000000000FF")
500 REM DRAW GRAPHIC
510 CALL HCHAR(10,9,96)
520 CALL HCHAR(10,10,97)
530 CALL HCHAR(11,9,98)
540 CALL HCHAR(11,10,99)
550 CALL HCHAR(12,9,102)
560 CALL VCHAR(13,9,106,5)
570 CALL HCHAR(18,9,116)
580 CALL HCHAR(19,6,120)
590 CALL HCHAR(19,7,121)
600 CALL HCHAR(19,8,122,5)
610 CALL HCHAR(19,13,123)
620 CALL HCHAR(12,8,101)
630 CALL HCHAR(12,7,100)
640 CALL HCHAR(13,6,105)
650 CALL HCHAR(13,5,104)

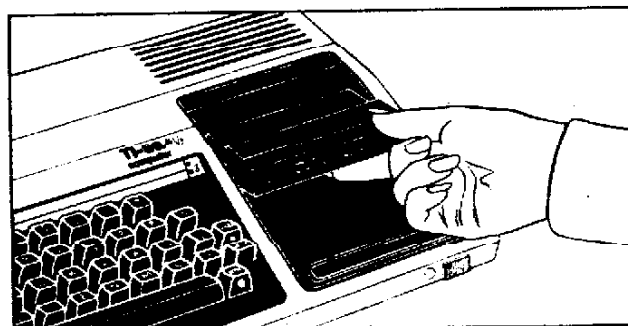
```

```

650 CALL HCHAR(14,5,108)
670 CALL VCHAR(15,5,111,2)
690 CALL HCHAR(17,5,112)
690 CALL HCHAR(17,6,113)
700 CALL HCHAR(18,6,114)
710 CALL HCHAR(18,7,115,2)
720 CALL HCHAR(18,10,117,2)
730 CALL HCHAR(18,12,118)
740 CALL HCHAR(18,13,119)
750 CALL HCHAR(12,10,103)
760 CALL HCHAR(13,10,107)
770 CALL HCHAR(14,10,109)
780 CALL HCHAR(14,11,110)
790 CALL HCHAR(15,11,107)
800 CALL HCHAR(16,11,109)
810 CALL HCHAR(16,12,110)
920 CALL HCHAR(17,12,107)
830 CALL HCHAR(20,7,115,2)
840 CALL HCHAR(20,9,124)
850 CALL HCHAR(20,10,125)
860 CALL HCHAR(20,11,124,2)
870 CALL HCHAR(20,13,115)

```

End of listing



```

#####
#####

```

```

##### CLUB OFFICERS #####

```

```

#####
#####

```

- | | |
|-----------------|----------------------|
| Marshall Gordon | President |
| Sary Matthews | Vice-President |
| Elise Gordon | Secretary/Treasurer |
| Bill Kleinsorge | Program Chairman |
| Tom Boisseau | Newsletter Chairman |
| Bob Willis | Library Chairman |
| We need one | Education Chairman |
| We need one | Recruitment Chairman |

```

#####
#####

```

BROTHER EP-22 PORTABLE PRINTER

When TI went out of the home computer business late last year, I decided to accelerate the expansion of my system. Toward that end I started looking into the options for printers which work with the TI system.

Because I had just purchased the disk drive, Expansion box, memory expansion, RS232 card and Extended BASIC cartridge, the well of my checkbook was beginning to run rather dry, and the options for printers all ran into the \$400 range by the time the necessary cable was added to the purchase.

As chance would have it, I received a flyer with my Visa bill telling me about the Brother EP-22 portable, electronic typewriter/printer.

I went to a store to check out what sounded like a machine that was too good to be true, especially at the asking price of \$215, including tax. I was so impressed that I bought one on the spot.

The electronic typewriter's stats are indeed impressive:

- 1) It is a dot-matrix thermal printer, which can also use a ribbon.
- 2) It has a 2K built-in memory which can be used as a mini-word processor, and the memory is held even when the typewriter is off, as long as the power supply remains intact.
- 3) It offers the option of using only the built-in LCD screen, which shows you 16 characters or spaces at a time, or by using the correction mode you can type 16 characters ahead of what is printed so you can catch mistakes before hand. There is also a direct-type mode for those of you, few in number I'm sure, who don't make mistakes while typing.
- 4) There is an RS232 port on the side which interfaces perfectly with the TI computer.
- 5) There is a built-in calculator which you can use either to print and calculate equations, or use it as a calculator with the LCD screen.
- 6) To me the most remarkable factor is that you get all of these functions in a package which weighs only 5.5 pounds and can fit inside a briefcase, which

makes sense because it can also run on 4 D cell batteries. For those times when you don't desire portability, the printer also comes with an AC adaptor.

It is not extremely fast as a printer at 17 characters per second, but for my purposes the speed is more than ample.

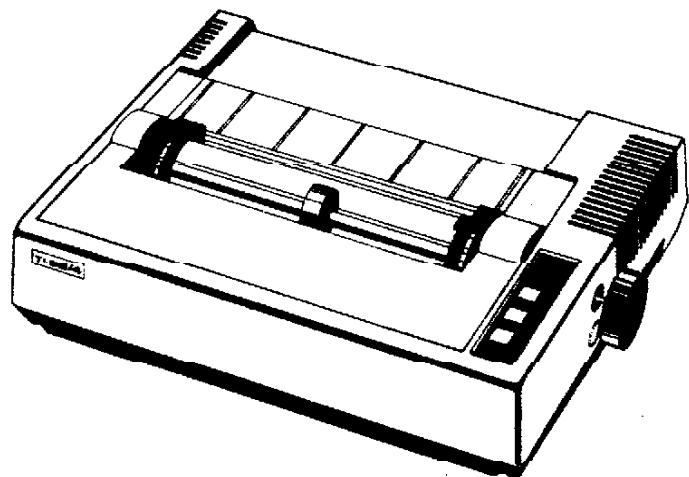
The one drawback, albeit a minor one to me, is the fact the printer only prints a 75 character line. This means that when listing a program the computer's automatic line feed at 80 characters causes the printer to print the last 5 characters on a separate line by themselves.

While Brother includes a small supply of 8x10 sheets of thermal paper it is capable of using 100 foot rolls of thermal paper instead. The 8x10 sheets proved difficult to locate anyway. Brother makes no mention of using 100 foot rolls. I discovered this possibility by simply buying a roll of paper and trying it on the printer. It required building a small stand to hold the paper and to allow it move freely.

The biggest problem for those of you who purchase this typewriter may seem to be "where do I get the cable?" Actually, this is a simple problem to solve, because Brother chose, for whatever reason, to make their typewriter/printer a perfect match for the TI-99/4A.

While the printer works for a number of home computers, (Atari, NEC, etc.) the pin sequence for different systems requires either the knowledge to build your own or ordering a specially built one. But for TI you can get a standard cable with the pin sequence of 1-8 plus pin 20. The cable is standard and so is the price, \$39.95 plus tax.

Mark Barnette



PASCAL CARD OWNERS

It seem that many TI owners such as I felt that when the price of the Pascal card for the 99/4A dropped to \$100 that this peripheral was something to be considered. The price drop then coupled with the announcement of Texas Instruments' discontinuing of the machine was more than a sufficient push to cause this crowd to make a mad dash to purchase what was most likely to be their last TI made accessory.

Many of these new Pascal card owners were probably somewhat ignorant (perhaps I should speak for myself; I was most certainly ignorant) as to what were the capabilities, advantages, disadvantages, available programs, and support for this language. For most purchasers of this device I would dare say it remains almost an entirely inactive unit that serves only to occupy an additional slot in their expansion box. And why should this be a surprise; TI only ever offered but one program to make use of the Pascal card.

One way to make this new little addition to the family earn its keep, is to write your own Pascal programs for it. To do this however requires the purchase of three software packages - the Pascal Assembler-Linker, the Editor-Filter, and the Compiler-Utility. The documentation provided with these is good and should set you on your way into the world of p-code. The bad news however, is that this assortment of software (if you can find it!) will cost you a grand total of nearly \$300.

I for one have no intention of spending such money, nor do I have any present interest in learning another language. My purchase of a p-code card was made, besides for reasons of being part of a mass hysteria, for the purpose of having a greater availability and diversity of existing software. Unfortunately, as was just mentioned, TI only sells one Pascal program. To this dilemma there is a solution.

Please meet USUS. Pronounced as "use us", USUS stands for the UCSD p-System User's Society. USUS is a user's group for the UCSD p-System. There are thousands of USUS members across the country and also abroad, and because p-code is considered a "portable" language, this club keeps company with dozens of different machines as well. As you might expect, or at least hope so, this group has a fairly extensive software library that is available to all members for duplication costs only.

Recently USUS added the TI-99/4A to its list of supported machines and most of their library has been formatted to our little computer. Much of their library contains utility programs to assist one in Pascal programming, however there also is much in games and seemingly a special interest in the way of business software.

Included in membership is what USUS calls a newsletter. With an average of 100 pages per issue and considering the professionalism with which it is published, I call it a

journal. This is heavy duty material! The newsletters are very technical and intended for the serious p-code user/programmer. It may take some time to understand the language they speak, but it is doubtful that one could find any greater resource than this.

Other features that this club offers include a CompuServe SIG called MUSUS and semi-annual meetings that are held in various cities across the country, thus enabling the great expanse of its members to take advantage of these meetings as they enter their area at different times.

If you are serious about using or writing Pascal, then USUS is a must. The information and resources they offer are excellent. Do not however be fooled; these people go deep into p-code theory, so be prepared to do some studying - that is if you intend to become a Pascal programmer.

For myself, I intend to only make use of their library, and leave the programming to those Pascal jocks. Somehow though, I have a feeling that just running some of these programs will require a bit of learning; one look at their library listing and you would understand what I mean.

Annual membership dues for USUS are \$25. To join send your check along with your name, address, phone number, type of computer, and any special interests relating to the club or Pascal to:

USUS
P.O. Box 1149
La Jolla, CA 92038
Attention: USUS Secretary

You may also write to this address for additional information or for a printed membership application.

Thomas H. Boisseau



MEMBERS HELP US ADVERTISE OUR MEETINGS

Members will find enclosed a sheet that that can be cut into two pieces with the meeting date left blank to be filled in by you. This will allow you to copy them and post them for more than just one meeting. PLEASE post these where ever you can (stores, arcades, bulletin boards). One of greatest needs is for more members and stronger support at each club meeting. New members pay a large part of the cost of publishing this newsletter. There are several thousand T.I. owners in this city that do not know about our club. They need us and we need them!

DID YOU KNOW?

The computer enables you to do many things almost automatically. So how about some small routines that'll help you.

1) CENTER A LINE

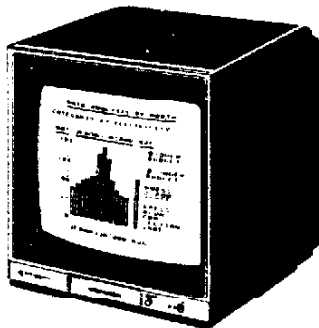
```
PRINT TAB((27-LEN(A$))/2);A$
```

This will print any string called A\$ (up to 28 letters) centered on the screen. Anybody want to write on why I used 27 and not 28 in the 'TAB' statement. No more need to count each line and tab each line individually.

```
10 DATA ATLANTA, 99/4A COMPUTER, USERS GROUP, STOP
20 CALL CLEAR
30 GOSUB 5010
40 GOTO 40
5000 REM CENTER LINES OF TEXT
5010 REM
5020 READ A$
5030 IF A$="STOP" THEN 5100
5050 PRINT TAB(27-LEN(A$))/2;A$
5060 GOTO 5020
5100 RETURN
```

2) You can also TAB vertically, add this to the program:

```
5010 CU=0
5030 IF A$="STOP" THEN 5070
5040 CU=CU+1
5070 FOR I=1 TO (24-CU)/2
5080 PRINT
5090 NEXT I
```



This can be used as a subprogram, with the data strings anywhere in the program. The centering routine can be put at the end of your program and accessed by a 'GOSUB'. Then when you get to a place in your program that you want text to be printed and centered all you have to do is write the strings as 'DATA' statements, with the last word as STOP and a 'GOSUB' to 5010 and your all set. One final word, if you want a spacer line between printed lines try this'

```
10 DATA ATLANTA, "", 99/4A COMPUTER,
"", USERS GROUP, STOP
```

3) How about centering numbers, or rather lining up the decimal points.

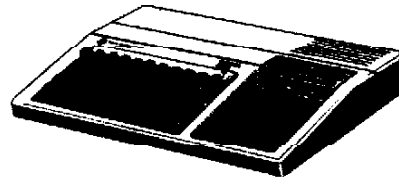
This is from Jeb Hamilton in the 4A FOURN of the Central Iowa 99/4A Users Group.

```
PRINT TAB(C-POS(STR$(X)&".", ".", 1)-
(X<0));X
```

Where 'C' is the column selected for the decimal and 'X' is the number to be columnized.

I have to admit that I overlooked this one, Jim Peterson brought this to our attention in a newsletter he sends to all of the Users Groups, Jim who runs a 'Now and Pop' programming outfit - and from the programs I've seen, is offering fine programs at very reasonable prices - his catalog is \$1 and the programs are \$3 each. If you're asking what can you get for \$3- then let me say that the 'freebe' above would be well worth \$3 if the output of your pet program needed to be lined up. I think an investment of \$1 for the catalog is well worth it.

TIGERCUB SOFTWARE
156 COLLINGWOOD AVE.
COLUMBUS, OHIO 43213



4) Writing a line anywhere on the screen, in BASIC. First a word of caution this procedure uses a 32 column screen, I use a T.V., for a CRT and I don't get columns 1,2,31, and 32 in too well. So I've got to start at column 3 and end at column 30. The screen has 24 lines and all of them can easily be seen.

```
5000 PRINT ON SCREEN
5010 REM
5030 FOR I=1 TO LEN(A$)
5040 CALL HCHAR(ROW,COL+I,ASC(SEG$(A$,
I,1)))
5050 NEXT I
5060 RETURN
```

Line 5030 is a FOR NEXT loop from 1 to the 'LEN'gth of A\$(or the number of characters in the string of A\$)

Line 5040 Is a 'CALL' to a TI assembly language program that will print the form of any character code or any redefined character code at the position named by ROW and COL. In this case we are turning the characters in A\$ one at a time into their 'ASC' code.

You need to define ROW, COL, and A\$ in the program and do a 'GOSUB' to 5010:

```
10 CALL CLEAR
20 A$="ATLANTA 99/4A "
30 ROW=10
40 COL=8
50 GOSUB 5010
60 SOTO 60
```

By the way when you define A\$ use a space as the last character in the string, I don't really know why but it makes the string print smoother and faster.

Now for those of you who are up to a little bit more programming "PACKING". You all have packed a suitcase, you cram as much as you can in there and then hope you can untangle the mess when you get it open. Well computer packing is much the same thing, and TI's BASIC makes it very simple. In the example above it takes 3 lines each time you define a string. How about doing it in one line?

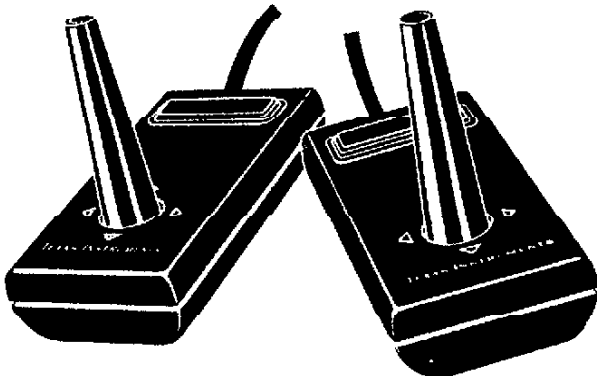
```
20 A$="1008ATLANTA 99/4A"
(REN DELETE LINE 30 AND 40)
```

Well we packed it now we have to unpack it, and change the "String" numbers into "VAL"ues. First we cut it into "SEG"ments. SEG\$(A\$,1,2), which reads take the "SEG"ment of A\$, starting with the first column of A\$ and going two columns (or "10"). Now we "VAL"ue it VAL(SEG\$(A\$,1,2)) and end up with the number 10.

```
5010 ROW=VAL(SEG$(A$,1,2))
5020 COL=VAL(SEG$(A$,3,2))
5030 FOR I=1 TO LEN(A$)-4
5040 CALL HCHAR(ROW,COL+I,ASC(SEG$(A$,
4+I,1)))
```

Remember, on the first pass 'I' will equal 1, therefore you need to set the starting position back 1, and the 'LEN'th of A\$ has to be reduced by the number of positions used for Row and Column.

Marshall Gordon



USER'S GROUP DUES

This User's Group started in November 1982. At that first meeting in Perimeter Mall, we had about forty-five chairs set up. One hundred and forty people showed up. Several people were so anxious to find a T.I. group that they paid their dues on the spot at that first meeting, and their support was greatly appreciated. In December 1982 we did not have a regular meeting since we were still looking for a meeting room that could hold all those people. Our first Newsletter came out January 1983 and we have used that date as a point of reference for yearly membership dues.

On the front of this newsletter, next to the address label, is a red mark if your membership for one year is up. We hope that you have found the club and this newsletter helpful and worthwhile. We have certainly enjoyed doing them.

If your address label indicates it you can send your membership renewal fee to:

A 9 C U G- Dues
P.O. BOX 19841
Atlanta, Ga. 30325

LOAD PROGRAM DEBUG

Last month's newsletter contained a listing for a load program. Two of the lines listed, lines 140 and 260 contained multiple errors. Please accept our apologies for these mistakes and note the corrected lines listed below.

```
140 D$="DSK"&D$&". " :: OPEN
#1:D$,INPUT,RELATIVE,INTERNAL :: INPUT
#1 :MS,A,I,K :: DISPLAY ATII,IFRASF
ALL:SEG$(D$,1,4)& - DISKNAME= "&D$;
```

```
260 CALL INIT :: CALL PEEK(-31952,
A,B) :: CALL PEEK(A#256+B-
65534, A,B) :: C=A#256+B-65534
:: A$=D$&P$$(K) :: CALL LOAD
(C,LEN(A$))
```

Thomas H. Boisseau

This final note is a Reminder from Ralph Danson, who went and looked up one of the earlier versions of this Load program in the 99'er.

Line 280 RUN "DSKX.1234567890" must be the last line of the program, if another line follows it, even a REM statement, the program will not work.