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 \* VOL.1 NO.3 CAROLINA 99/4A USERS' GROUP \*  
 \* NEWSLETTER \*  
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Welcome to the April edition of the Carolina 99/4A Users' Group Newsletter. For those of you who missed our March 6 meeting, new officers were elected for the club as the first step of reorganization. Our Previous officers requested the election because of unexpected demands on their time. We greatly appreciate all that Dave Thomerson and others have done for the club, and look forward to their continued support. Our new officers are:

- KEN BAILEY, PRESIDENT
- BOB CARMONY, V. PRES.
- CARL FOSTER, SEC/TREAS.

The new officers are in the process of setting up several committees and appointing committee chairmen. The education committee will re-organize our instructional classes. the schedule, topic, and teacher for each class will be published in advance in the monthly Newsletter. Sandra Carmony has volunteered to teach a computer course for children whose parents are members of the Carolina 99/4A Users' Group. She is a Media Assistant with the Greensboro City Schools and has worked in this capacity. Further details will be provided.

I have been asked to head up the Newsletter. I would like to receive questions regarding the club, the News-

letter, software, or hardware, send your inquiries to us at P.O.Box 21691, Greensboro, NC 27420. All questions will be answered in the Newsletter. in addition to articles written by the editorial staff, columns by the President and Vice President will appear in the Newsletter on a regular basis.

An addendum to the "Program Tips", method 2 that appeared on page 2 of last month's Newsletter is in order. For the Program to work properly after you receive the "MEMORY FULL" statement, you must type in 'Print a'. The screen will then show the approximate number of free bytes available.

Edwin Simpson, Editor

### SURGE PROTECTORS

Power surges can be annoying as well as destructive. they can destroy data or programming in your computer, and may even damage the computer. Surges can be caused by air conditioners starting or stopping, or by other large appliances. Most Power strips offer little or no protection against power surges and generally a good protection device costs \$60 - \$70, or more. Surge Protection can be added to a Power strip at a much lower cost using spike protectors available at local Electronic shops.

## HOW TO GET THE MOST OUT OF YOUR SCREEN

At different times in the past TI has advertised both a 28 X 24 display and a 32 X 24 display for their system. Which is correct? They both are. The following examples were done with a TI Color Monitor. If your TV is not adjusted specifically for the TI computer, you may not get the same results.

Call up basic on your computer and type anything that will fill up one horizontal line. If you count the characters and spaces from the left side of the screen to the right, you will find 28. If you were to fill up the entire screen and count from top to the bottom, you would count 24. This means that you have a 24 X 28 display. Now try this:

```
10 CALL CLEAR
20 CALL HCHAR(1,1,65,32)
30 GOTO 30
RUN
```

Count the A's and you will get 32. Type in FCTN(4) to clear the screen and edit line 20 of your program so that it looks like this:

```
20 CALL VCHAR(1,1,65,32)
```

Run this program and count from top to bottom and you will get 24. Now you have a 32 X 24 display. Now try the following program:

```
NEW
10 CALL CLEAR CLEAR
20 CALL SCREEN(10)
30 CALL CHAR(33,"FFFFFFFFFFFFFFFF")
40 CALL HCHAR(1,1,33,32)
50 CALL HCHAR(2,1,33,23)
60 CALL VCHAR(2,32,33,23)
70 CALL HCHAR(24,2,33,30)
80 GOTO 80
RUN
```

When you run this the screen will be red with a solid black border on all four sides. You will see red outside of the border as well as inside the border. The following conclusions can be made from the above examples:

1. The Print statement will give you a 28 X 24 display.
2. The CALL HCHAR and CALL VCHAR statements give you a 32 X 24 display.
3. CALL SCREEN will change the color of the entire screen all the way to the edge.

Professional programmers study the size of the screen before writing a program so they may use as much of it as possible. The above illustrations may help to make programs eye appealing and easy to read.

2 X  
24 display The CALL HCHAR and CALL VCHAR statements give you a 32 X 24 display for their system. Which is correct? They both are. The following examples were done with a TI Color Monitor. If your TV is not adjusted specifically for the TI computer, you may not get the same results.

### NEXT MONTHLY MEETING:

DATE: April 3, 1984  
TIME: 6:30 p.m.  
PLACE: Zayre, Cone Blvd.  
PROGRAM: Cleaning and care of the TI 99/4A - Ken Bailey, Presenter.

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**THE SOFTWARE SHOPPER By Bob Carmany**  
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This month we are going to take a look at a few of the utility Programs that are currently available from third-party authors.

**HI-RES GRAPHICS EXPANDER**

Basic-Calc99

UMC Software  
 P.O.Box 326  
 Cambria Hts.N.Y. 11411  
 Extended Basic  
 Cassette (\$15.95)

The first of these two offerings is a Plotting-Graphics Package which can be used to upgrade the TI 99/4A's Graphics capability to true high resolution Pixel-by-Pixel Graphics. The program is advertised as having 6 additional commands.

The Second of the two is a mini-spreadsheet that runs on the basic 16k console without any Peripheral requirements. Both are available on cassette only.

**WYCOVE FORTH**

Wycove Systems  
 P.O.Box 499  
 Dartmouth, Nova  
 Scotia Canada  
 Cassette or Disk \$50

Wycove Forth is a unique Package that enables the Programmer to run structured Programs at impressive speed. Forth Language runs 40 times as fast as basic and twice as fast as assembly language. There are several differences between this offering and TI's recent release.

Wycove can be run on ANY of the following command modules: Editor/Assembler, Extended Basic, and Mini-memory. The TI version will only run on the Editor/Assembler. You must specify the command module when you order. You might want to invest in a beginner's book on Forth Language as well. The Wycove version does have the advantage of having been thoroughly de-bugged, however.

**SCREEN DUMP**

Extender Software  
 11987 Cedar Creek Dr.  
 Cincinnati, Ohio 45240  
 Extended Basic Printer  
 Cassette or Disk (12.00)

This program allows the Programmer to dump the screen display to a dot-addressable, 8-bit Printer. It would be of great help in plotting and saving graphic material of any kind.

This month we have tried to present a few more of the wide variety of Programs available for the TI 99/4A. Most of the suppliers produce a number of Programs and other Products. they will usually send a catalogue or brochure upon request. So, take advantage of the ever-increasing world of software

and send off to the software Producers and see what has become available for your computer system.

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Do you have Extended Basic? If so try this:

```
100 OIL CLEAR:: CALL SCREEN(4)::
  CALL MAGNIFY(4):: FOR I=1 TO 28::
  CALL SPRITE(#1,64+I,15,88,88,3#1,8)
  110 NEXT I:: FOR J=1 TO 5000:: NEXT
```

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## THE HARDWARE SHOPPER By Bob Carmany

This month we will look at the world of disk drives. A disk drive system is much faster than cassette storage and allows the user to process random files. In exchange for the increased speed and versatility, a concession must be made in the realm of price. A disk system costs several times as much as cassette storage.

TX-99

Percom Data

Price \$389.00

Percom Data has introduced a disk drive that does not require the Peripheral Expansion Box. It is a self-contained unit that includes a built-in disk controller, a Disk Manager II Module, and a cable. The drive plugs into the expansion port on the right side of the console. The controller will control two additional disk drives. The drive is a 5 1/4" single-sided, single density drive with 92K formatted storage capacity.

A dual drive(\$649.00) and an add-on drive(\$319.00) are also available. When you add this Peripheral, it must be last in line because it does not have an expansion port of its own for more peripherals.

The disk drive is available from Uni-Source Electronics, P.O. Box 64240, Lubbock, Texas, 79464 for the advertised price of \$289.00.

There are many manufacturers of "bare" disk drives that will fit into the PEB (Peripheral Expansion Box). These "bare" drives must have the disk controller card installed in the PEB to operate. You will also need a Disk Manager II Module. The PEB has a power supply (in fact that is all it is) so you do not have to worry about that.

Most of the mail-order suppliers (ie. Tenex, Uni-source, Tex-Comp, etc.) list both the single and double-sided "bare" disk drives that will fit in the PEB by such major manufacturers as PERCOM DATA, TANDON CORP., SIEMENS, TEAC, SHUGART, and others. Most standard height disk drives will fit into the PEB with no trouble.

You can daisy-chain a "bare" disk drive with the unit produced by Percom Data but you will need a box with a power supply. Again, they are available from most of the major suppliers. The cost for a separate power supply box in which to mount your add-on drive is about \$60.00.

All of the disk drives produced by name brand manufacturers are reliable and equal in quality and performance. Shop around for the best bargain based on the configuration of your system.

