

WASHINGTON DC AREA  
TI HOME COMPUTER  
USERS GROUP

# NEWSLETTER

VOL. No.2

APRIL 1983

ISSUE No. 4

\*\*\*\*\*

Bill Whitmore, *President*

Richard D. Sturgell, *Editor*

---

## MONTGOMERY COUNTY TI USERS GROUP

Will meet in the Library of The SLIGO INTERMEDATE SCHOOL  
1401 Dennis Ave., Silver Spring, Md.

Enter at the front of the Building. Time 7:30 PM. April 28--Dick Cooke presents a review of "Teach Yourself Basic". May 26--Rev. Keith Koch presents his slide show "Inside Your TI99/4". DIRECTIONS: From the Washington Beltway (I495), Exit at Georgia Ave. North, go about 1/2 mile to the second light this is Dennis Ave. turn right (east), go about 1/2 mile and the school is on your left. For more information please phone ALLEN MINTON at (301) 949-4085

---

## HAGERSTOWN-WILLIAMSPORT TI USERS GROUP

Meeting will be held on Learning Basic Programming Friday April 8, regular meeting Friday April 15. Learning Session 1st Friday, Regular meeting 3rd Friday. DIRECTIONS: From Hagerstown area and I 70 take I 81 South to US Rt. 11, Williamsport Exit. Proceed through the first light and watch for the library prior to the second light. For further information write Sam. Williams Box 376, Williamsport, MD. 21795 or call (301) 223-8014

---

## BALTIMORE TI USERS GROUP

Special May meeting Friday May 13, see page 19 for details

---

## WASH DC AREA TI USERS GROUP

Next Meeting - THURSDAY APRIL 14 7:00PM  
SEE PAGE 8 for full details.

Special Meeting MAY 14 - THIS IS A SATURDAY MEETING  
SEE PAGE 19 for details.

Minutes of Meeting  
Washington Area TI 99/4 Users Group  
10 May 1983

Fred Gray, Secretary

1. The March meeting was held at the auditorium, Fairfax High School, on 10 May 1983. The meeting was opened by President Bill Whitmore at 7:10 PM. The next meeting will be at Suitland HS, Suitland MD.
2. Bill Whitmore announced the formation of several new TI users groups in the area: one in Montgomery County, one in Baltimore, and possibly one in Richmond. This is a natural result of the exponential growth in local users. He opened a discussion over the sharing of our program library with other clubs. There was no objection voiced. The possibility of establishing a master "Mid-Atlantic TI Users Group" was mentioned, and will be explored along with the possibility of a master newsletter.
3. TI has changed its attitude with regard to users groups, and now seems interested in supporting them. They will send a squad here on Saturday, 14 May, to show new equipment, answer questions, etc. Bill asked if there was objection to having the May meeting on that Saturday afternoon to coincide with the TI visit; there was none voiced.
4. The club is exploring the possibility of setting up a DC version of the TI Fest some time in August. The fest will mirror the successful one held last year in San Francisco, and include demonstrations and discussions. Stay tuned.
5. There was discussion over group prices on disk drives and electric typewriter-printers. More current information should appear elsewhere in the newsletter. Mike Lambert discussed the 'SMART' Bulletin Board System, and details also appear in this newsletter.
6. Larry Hughes led a paean for Ken Jeremiah, who has produced over 3000 program-laden tapes for club members in the past few months. He has asked for a day off and we are considering his request. In order to reduce his workload, we will now require use of the official form for tape requests. IF Ken receives your form by 31 March THEN you will get your tapes at the May meeting ELSE June. Some folks are confused about the numbering system for disks and tapes; fret no more: they are the same. Disk B23 has the same programs as tape 23. Aren't we clever?
7. Larry also led a plea for more member participation in producing new programs to expanding our library. We have received four (count 'em: 4) programs submitted in the last four months. This is crummy. Members are urged to unlace their brains and limber their fingers and begin anew the tide of programs that has brought us 25 tapes so far. Not to worry about quality or the fact that your program is similar to others already in the library. Tape 25 will be out soon, and Rev. Keith Koch has added a most welcome embellishment: voice cues between programs.
8. Jim Horn mentioned that the Pascal User's Group (not our subgroup) will have a UCSD International Group Meeting in the DC area in October. All interested are encouraged to bone up their Pascal in apprehension.

9. Stan Viet, the Senior Editor for Computers and Electronics Magazine (formerly Popular Electronics) (the magazine, not Mr Viet) will attend our April meeting. Also, the magazine will have a cover article on the 99/4A. It's amazing how a million owners can get a magazine's attention.

10. Don Moore, head of the local TI Exchange Center, where one takes errant TI products to exchange for working ones (at slight cost if the warrantee has expired) offered to set up an exchange service for those who wish to trade or sell "old style peripherals" (those in the cute silver boxes). If you wish to buy, sell, or trade, call him.

11. Don also spoke about the well publicised "shock hazard" found in the Home Computer power supply by a consumer test organization. No one has experienced the problem yet, and if the hazard should develop, the transformer will belch forth smoke and unpleasant stench in response. The hazard would be internal to the machine and would reach users only through the access ports (module, expansion, etc) or the RF modulator. TI is providing a fused auxiliary cord to all who want them, and will give these automatically to those who sent in for the rebate. The machines affected are only those since Sep 82, so us older owners can ignore all of the above.

12. Debby McFadden, project director for "Mainstream", a project to match up handicapped workers with jobs, has a need for programming help. They have gotten two TI systems and need someone to assist in showing them how to use them, and to write a program that will set up the data base and do the people-jobs matchup. Those interested call 833-1160.

13. The main event was Katie Shubert from Scott, Foresman, makers of educational products for the TI (and other lowly home computers). She demonstrated several products and gave a nice demo of TI LOGO. The local distributor for Scott, Foresman products in Alpha Resources in Sligo, MD. (301-423-5058). Ask for Ronnie.

14. From the Rumor Mongrel: 4 TI programmers have left TI, the folks who gave us Munchman and Parsec, and are forming their own company. This might kibble up program production at Lubbock for a while. On the other hand, TI is working up a way to lock up modules so that only those produced by TI can be read by TI computers. This will work by having the 99/4A look for a code in the module and not work if the code is wrong or absent. Of course, this will affect only those 99/4A produced after the decision is made but will greatly inhibit the production of third party modules, at least until someone figures out how to beat the system. Tape and disk programs won't be affected.

See you at the next meeting. Remember it is in Maryland.

WANTED:     One   PHP1700     RS232   Accessory Interface  
          Call   Gordon   Gipe   (301) 921-3291 (days)

Dear BIT

The weather and its storm of "83" made my newsletter late. I understand some folks never got a newsletter. Why? As you recall, this months tale is about cassette recorders, Part I. I hope you did your home work and have the answers this month.

Sincerely BYTE's

p. s. What does the V... Computer advertisement mean? Do the facts boast?

Dear Sincerely BYTE's

Have patience as the computer that did the newsletter mailing list has been properly reprimanded. Also, we are getting an improved version of the mailing list. Now on to the cassette recorder.

A cassette recorder is a must if you are building a software library or plan to do a lot of programming and you do not have the disk drive memory system (PHP 1240 1250) or Texas Instruments (TI) new Wafertape Digital Tape drive (HX2000), a poor mans disk drive system. Why? The cassette recorder is required to store or save programs you've written or want to use that are printed in the newsletter or other magazines. By storing the programs on the cassette tapes you can recall them rather quickly into the RAM (Random Access Memory) and immediately begin to use the program. As you probably realize, your RAM goes to sleep when you turn off the console power and any program loaded into the computer is lost forever unless it is recorded on paper or on cassette tape or other memory device. Of course you can manually reload a program each time you use it. But this method is time consuming and is not any fun.

To use your cassette recorder Bit you will need the interface Dual Cassette Cable (PHA 2000), a C-5 or C-10 cassette tape and one C-30 or C-60 tape. The cable normally is furnished and packed with your TI-99/4A when you purchase it. If not you can buy one from Jay, Eddie, or some other TI dealer, but get the TI cable as other computer will not work with your console. The C-5 and C-10 tapes are good for developing your programs and during debugging as they are easy to rewind, fastforward, etc. Most important, however, is the short C-5 and C-10 tapes do not stretch as longer tapes seem to do. The highspeed rewinding stress can stretch long tapes. The C-30 or C-60 tape will be used to permanently store your programs after they have been debugged and tested on the C-5. Oh yes Bit--buy high quality cassette tapes. They accurately record the tones and they do not stretch easily. Unfortunately, a tiny stretch can easily cause loss of your programs on that tape. I lost a long and complex new program from a cheapee tape that stretched during debugging. No great loss you say! My program was not yet documented nor was the tape duplicated. Two very, very painful lessons and three weeks of midnight oil burning wasted.

Anyway your cassette recorder needs to talk (communicate) with your 99/4A. Communicating is accomplished using two tones, each tone being a different frequency. The lower frequency tone can translate to mean "off" to your computer. The high frequency than translates as

"on" to your 99/4A. These two frequencies then serves as bytes of data which your computer can read. (More on this subject in future issues.)

Since the 99/4A recognizes only these two tones, it will skip over all other tones on the tape. Therefore, to read your program from the cassette recorder tape the tone must be loud and the frequency right. The tones loudness is set using your volume control. To assist your computer record the high frequency tones properly, set your tone control at or near the highest level setting possible. Should your tape recorder not have a tone control, it may only be capable of recording the low frequencies of us humans speaking. If your message recorder does not have a tone control you will normally get an error message of "NO DATA FOUND" when the high frequency is not read during the CSI SAVE command process. If your recorder is thus limited, forget my instructions and go purchase TIs Program Recorder (PHP 2700) which is completely compatible with your 99/4A.

To continue, setting your volume control too high can also cause trouble. Distortion can not be read accurately by your computer which causes an error when your computer can not validate the tape data because of a parity error. This means it counts the number of high tones and if the count does not match the computer knows something is amiss. If your 99/4A said "ERROR IN DATA", your volume setting may be recording at too high a level and the volume should be reduced slightly using the control setting.

We mentioned last month your cassette recorder may not have the same polarity as your computer when using the remote control jack that controls the drive motor on your tape recorder. If the polarity is wrong, your computer can not automatically turn your cassette motor on and off during the CSI SAVE command or loading process. The control is through the PHA 2000 cable that interfaces between the computer and the tape recorder. You can purchase an adapter (cost under (\$5.00) to plug into the jack control cable which will reverse the polarity and let the automatic control feature operate. As a last resort, except for cassette files, you can manually turn your tape recorder off and on to load or save program Oh yes, polarity is the direction the electricity is flowing out of the recorder either negative or positive. To work the computer and cassette must match. Its like two people facing each other and they want to touch hands which will form a circuit. If both persons raise their right arms they will not touch. However, if one raises the left arm and one raises the right the two hands will meet thus completing a circuit. (same polarity)

Well Bit, if you have a tape recorder you can experiment with it before deciding to buy a new one. Should you purchase a new recorder, remember get a high quality machine with a counter. Well thats the end of Part 1 for the cassette recorder. Write me next month.

Sincerely, bit

F. S. The V\_\_ computer facts just did not go far enough, they need to tell the rest of the story as a well known broadcaster frequently does.

BEGINNERS and INTERMEDIATE CHALLENGE

March answers

A program line number uses two (2) bytes of storage.

A space in strings does occupy memory space. Why? Strings are enclosed in quotes " " and all spaces, numbers or letters, characters must occupy memory since the string is counted as one unit.

Program, programmable, and programs all refer to computer instructions. The program is the instructions, programmable means it can accept instructions of some sort, and programming is the process of writing instructions. (30 words--no ones perfect.)

BEGINNERS CHALLENGE

The largest program that can be stored on a cassette tape is \_\_\_\_K bytes in size.

The cassette tape should never be placed within \_\_\_\_ feet of the monitor or a television set, an electric motor, or any other source of magnetic fields.

INTERMEDIATE CHALLENGE

What is the American National Standard for Minimal BASIC?

Write a program that will give a random number between three and nine.

PROS CHALLENGE

What, no answer to last months squares figure. Must I offer a monetary reward for an answer instead of a challenge?

Believe it or not

One billionth ( $1/1,000,000,000$ ) of a second equals 11.8 inches (at the speed of light) while a micro second equals 984 feet. (complements of "60 Minutes")

---

Questions, answers, or comments may be sent to BIT and BTYE's at 4100 Canterbury Way Temple Hills, Md 20748. Material will not be returned unless sent with a self addressed envelope with correct postage. response to mail inquiries is limited to our newsletter space allotment.

---

WANTED: One 300 Baud Modem (acoustic or direct connect). Please call Gordon Gipe at (301 921-3291 (days)

## COMPU-SOURCE CORNER

By Rick Stickle  
TI0121  
70220,242

The first month I covered the basics of the Source and CompuServe, these are the basic systems for general users. For others there are special systems and I want to take a quick look at one of those this month. Each field these days seems to have its own trade type information publications. Most of us can probably name a few that deal with computers. I have dealt with psychology and safety trade journals. Now, what does this have to do with computers? BRS After Dark!

BRS After Dark is a collection of databases that cover six major areas: sciences/medicine, business/financial, reference, education, social sciences/humanities, and energy/environment. Each of these databases contain from one to nine professional journals. To get online the initial cost is \$50. The subscription fee entitles you to a users manual which the company will update as required, and naturally your account number and password.

Aside from the journals, this database also includes a electronic mail system, a newsletter, and a shop-at-home service. The price for all of this? All you can say is it varies. The minimum monthly charge is \$12 per month. The individual journals vary in price starting from only \$6 per hour up to \$15 per hour. The hours that the user is restricted to are between 6pm and midnight. The method of access is via UNINET. If anyone wants more information they can contact BRS After Dark, 1200 Route 7, Latham, NY 12110.

Still have questions? Let me suggest you get an encyclopedia. You say they take up too much room, they go out of date! I guess you're right! I guess that the only way to solve the problem is to logon to CompuServe, then at the prompt enter "GO WBE-1". You might be surprised to find the entire World Book Encyclopedia right there online.

Having two school age children I have found myself getting very well versed in the use of the World Book. In the past couple months I've looked up such well known figures as King Arthur and Knights, to such obscure figures as Crispus Attucks (the only black man to die during the Boston Massacre). I think that this is probably the most useful database for those of us that have children. The only drawback is that most kids being slow readers, at least in the early grades, this could cost a fortune. I usually download the information from CompuServe and print it out then give it to the child. This saves a lot of line time if you have the equipment to do it.

There is a new kid on the block! A company called PrograManagement Systems has what is called S\*M\*A\*R\*T Library News. This is a free local bulletin board system that is available to all area users at (301) 681-5065. Once again we are lucky since the TI-99

sysop is a member of our users group (Mike Lambert). Mike will be doing a series of articles over the next few months to include sample menus to aid people in finding their way around the system. Like most of the smaller systems one has to be patient. There is only one phone line into it, so there will be many busy signals. To compensate for this the people at the system have come up with an idea that is unique. They allow you only 20 minutes of use per day! It looks like an excellent area system for this area and will even include excerpts from our club newsletter. I'll leave the rest of the explanations in the capable hands of Mike.

Another month has gone by and I'm still looking for people and suggestions for this section so let me hear from you online users out there.

---

**WASHINGTON AREA MEETING**  
**THURSDAY APRIL 14, 1983**  
**7:00PM**  
IN THE AUDITORIUM  
**AT THE SUITLAND HIGH SCHOOL**  
**SUITLAND MARYLAND**

**DIRECTIONS:**

From Virginia - Beltway outer loop

Take Beltway 495-95 to Exit 7B. Take Exit 7B (Branch Ave & Silver Hill Rd.). Go four (4) miles on Branch Ave. to the fourth traffic light and turn right on Silver Hill Rd. When turning at Silver Hill Rd., Iverson Mall and Montgomery Wards will be on the left of Branch Ave. Go 1.9 miles on Silver Hill Rd. to Suitland High School. Turn left at the traffic light and enter the school parking lot. The Auditorium is adjacent to Silver Hill Rd.

From Maryland - Beltway inner loop

Take Beltway 495-95 to Exit 7B. Take Exit 7B (Branch Ave & Silver Hill Rd.). Turn left at Auth Rd. Go one (1) block and turn right at traffic light (this is Branch Ave.). Go 3.9 miles on Branch Ave. to the third (3) light and turn right onto Silver Hill Rd. Then go 1.9 miles to The Suitland High School.

Cont. Next Page



## STAN VEIT ON COMPUTER SOFTWARE

---



NEW YORK CITY/Stan Veit, Technical Editor of the monthly magazine, Computers and Electronics, will speak at the April 14 meeting of the Washington D.C. Area TI Users Group. Mr. Veit, editor, prolific author, teacher, and official telecommunications "Wiz" will be discussing with the DC Area TI Users the home computer marketplace.

Mr. Veit is a close observer and reporter of TI activities along with the entire market. He was one of the early members of the home computer press to spot the resurgence of TI as a maker of home computers. He has persuaded the management of Computers and Electronics to feature TI products in a future issue.

In the more fluid world of electronics publishing, Mr. Veit established a special TI interest area on the Computers and Electronics sponsored "Special Interest Group". The Computers & Electronics Special Interest Group is on COMPUSERVE, a sophisticated network of nearly 100,000 users in the United States and Canada. That network is tied together by multiple computers connected to the phone system. Mr. Veit created the TI Group, the first of its kind on COMPUSERVE, by virtue of being a "WIZ", a sort of combination editor, umpire, and guru on what is still a highly experimental medium.

Mr. Veit is an energetic writer, who recently completed two technical works AT ONCE, polishing them off in an intense three week period. It is expected he will share with the DC Users Group some of this information, still weeks away from publication and common knowledge.

Computers and Electronics Magazine is a Ziff Davis Publication, with over half million in circulation. Computers and Electronics is a new name for the magazine formerly called Popular Electronics.

The Washington D. C. Area TI Users Group is a consumer organization made up of home computer owners, primarily those produced by Texas Instruments as well as those using TI components. The 500 member group is two years old, and meets in various locations in the D.C. Metro area. Special interests within the group include education, programming, telecommunications, and activities. The group can be contacted by writing TI Users Group, Box 267, Leesburg, VA 22075.

Also, Miss Nancy Dinan of the TI Digital Systems Group will demonstrate the NEW TI-PC (Professional Computer-Pegasus) and answer any questions that you may have.

### MUNCHING OUT

These are directions to access the Test Model/ of **MUNCH MAN** which should provide (provoke) even greater enjoyment.

To access the Test Mode, you have 3 seconds from the time the Munch Man screen appears to type **\*\*\***. (Hint: When the screen says, "press any key to begin," hold the shift key down and type **B,3,B (\*\*\*)**).

You know when you're in the Test Mode when the screen changes and the first prompt asks which round you'd like to play in. When "RND(0-2)" appears on the screen, type your either 0, 1, or 2.

The second prompt asks you which screen you'd like to play. When "SCN(0-19)" appears, type your choice (from 0 through 19).

The third (and, last) prompt asks you for the number of Munch Men you'd like to play with.

When "MM(1-9)" appears, type your choice (from 1 through 9). Note: the computer expects you to type "9" and has a strategy to deal with this choice as you'll quickly learn.

These three prompts appear on the same screen in the order described. Be quick about typing your choices for the three prompts or the timing will advance the game automatically for you.

And for those who have difficulty counting (as initially I did) remember that for the first and second prompts, 0=1!

As long as you "win" at any level the game continues to the next higher level screen (a total of 60). Whenever you do NOT win, Munch Man automatically reverts to the first screen-or, if you want to access any higher levels, you repeat the procedure to access the Test Mode.

When you "play" the 20th screen (type 19, please), be prepared. Irrespective of the round (RND 0, 1, or 2) chosen, you'll be at the supercalifragilisticexpialidocious level!

J.L.VAUGHN

We need some NEW programs for the Library, please pick some of your better home brew programs and submit them to Larry Hughes at the next meeting.

## MORE DEFINITIONS:

42. Intelligence terminal-A programmable terminal capable of interfacing with a central site computer and performing limited processing functions at the remote site.
43. Interactive-A computer mode of operation where the operator has the option of making decisions during the execution of a program which affects the operation of a program. Contrasts with batch processing which does not allow for correcting errors or intervening in the processing.
44. Interface-The shared connection of boundary between two devices or systems. The point at which two devices or systems are linked. Common interface standards include EIA standard RS-232 adopted by the Electronics Industry Association to ensure uniformity among manufacturers.
45. I/O-Acronmy for Input-output.
46. JCL-Acronmy for Job Control Language.
47. K-A unit of measurement for the internal memory capacity of a computer. K equals 1024 bytes of memory.
48. Keyboard-The set of keys on a terminal that allow alphanumeric characters or symbols to be transmitted when keys are depressed. Inputs text and instructions to the computer.
49. LF-LineFeed character.
50. Line speed-The maximum rate at which signals may be transmitted over a given channel, usually measured in bauds or bps. Varies with capability of equipment.
51. Mbyte-1,048,576 bytes
52. Memory-Usually defined in K. The memory expansion available for the TI is 32K and 128k.
53. Microcomputer-A computer with a CPU consisting of a single LSI chip. Usually the least expensive of the computers.
54. Micrpprocessor-A single chip central processing unit incorporating LSI technology.
55. Mnemonic-A short, easy-to-remember name abbreviation as in LA for Los Angeles. Assembly language uses mnemonics.
56. Modem-An acronmy for MOdulator/DEModulator. A device that converts computer signals(data) into high frequency communications signals and vice versa. The high frequency signals can then be sent over telephone lines.

## NEWSLETTER DEADLINES:

To ensure that your Newsletter is ready for mailing at a time so that the readers will receive their Newsletter before the meeting we need your material no later than the previous meeting night. This time frame will allow ample opportunity edit and organize. Give your material to the editor. If he is not available give it to the club president.

All subgroups and area clubs should submit a write-up of their meeting and activities.

## CASSETTE TIP:

Two simultaneous cassette program recordings can be made with either the SAVE CS1, or SAVE CS2 commands - for example: If the SAVE CS1 command is used, the computer will start and stop cassette #1, however cassette recorder #2 can manually started the same time, thus 2 recordings, or copies can be made of the program to be saved.

The same procedure can be used for SAVE CS2, only this time the computer controls cassette recorder #2, and cassette recorder #1 will have to be manually started, and again 2 copies of the program can be attained.

Apparently the SAVE command produces program information on both CS1 and CS2 lines simultaneously, and the designed cassette recorder is controlled by the computer.

Submitted by

Peter Anderson

## **TI Unwraps Fast Speech Synthesizer**

DALLAS — Texas Instruments Inc. (TI) has introduced a speech development system for OEMs (original equipment manufacturers) that the company said offers real-time speech processing capabilities and "instantly" translates spoken words into data to produce synthesized speech.

The new "SDS50" system, which consists primarily of four microcomputer boards, provides a tool to OEMs and designers who want to incorporate solid-state technology into a product design, TI said.

The system's main innovation, according to TI, is that it instantly translates spoken words into linear predictive coding (LPC) speech data and produces synthesized speech. Other systems may require weeks of processing time and substantial hardware before the user can hear the synthesized speech from a recording session, TI said.

According to a TI product description, the SDS50 allows users to edit LPC speech data via any "RS-232-C" compatible terminal. The user can modify pitch, energy and vocal-tract configuration, then produce the sound through the system's loudspeaker to hear the result. The user also can give commands to store the result in EPROMs (erasable programmable read-only memory) with an optional built-in EPROM programmer, TI said.

The SDS50 is available for \$16,000 with a four- to six-week delivery time.

## **Timex-Sinclair Buys Alphacom Printers**

CAMPBELL, Calif. — Timex Computer Corp. and Alphacom Inc. have signed a multi-year contract under which Alphacom will provide computer output printers for Timex-Sinclair computers.

According to Robert Beese, a spokesman for Alphacom, the printer has been designed for Timex alone and will be sold under the Timex-Sinclair trademark.

Alphacom Inc. is a California-based manufacturer and supplier of high-performance thermal printers and print mechanisms for both the original equipment and retail marketplaces.

S\*M\*A\*R\*T LIBRARY NEWS (301) 681-5065

TI99 SYSOP, Mike Lambert (703) 920-3955

\*\*\*\*\*

The SMART LIBRARY is a local bulletin board available to all users. It is a free service provided by:

PROGRAMANAGEMENT SYSTEMS  
S\*M\*A\*R\*T COMPUTER SYSTEMS  
1377 K Street NW, Suite 100  
Washington DC 20005

Utilizing a  
RADIO SHACK  
TRS-80 Model I  
Microcomputer

To take advantage of this service the following hardware and software is necessary:

- 1 - TI99/4(A) console
- 2 - RS232 interface plugin  
OR  
Expansion box and RS232 card
- 3 - Telephone modem
- 4 - TE2 or some other terminal software (it is possible to use basic, see TI99 SYSOP for details)
- (optional) 5 - A mass storage device is recommended.

First time users are required to read policies, set terminal defaults, apply for service, and give themselves a password. \*\*\*\*\* IMPORTANT \*\*\*\*\* Smart definitely looks for the required upper or lower case in your password. Be sure you input it EXACTLY as you did when you created it. New users will be validated within 24 to 48 hours provided they applied properly. Failure to apply properly will delay validation.

The intended purpose of this service is to provide a place for TI99 users where they may meet, exchange information, etc., and is available 24 hours a day.

The time allocated per user is 20 minutes. For experienced users this is sufficient time to complete normal business. New users will find the 20 minutes insufficient to 'explore'. Take one section at a time (each logon) to explore a different area.

The following are available from the TI99 SYSOP and are being incorporated into the library:

- 1 - Textscribe  
This is the program seen in 99er magazine. It will allow the user to create text files.
- 2 - Smart File Utility V1.2  
This program will enable the user to upload to SMART the messages created offline. Using this program the user will have more time to use because significantly less time is necessary to produce messages. Program can also be used to review messages prior to upload and check size of message. The program is written in extended basic but can be rewritten in TI basic and is fully documented.

\*HELPFUL HINTS FOR NEW USERS\*

- 1 - Use the (TE2 option - ctrl 2) to store all the different menus, Micro News, Broadcasting News, E/mail, and messages of interest on your mass storage device so you can review them later offline.  
 \*\* NOTE \*\* You'll need 40 to 50 disk sectors per news and info items (more next time).
- 2 - Call the TI99 SYSOP <h> 920-3955 and get the Smart Utility to upload messages you create offline. Uploading a message is faster, more accurate, and can be composed at your leisure.
- 3 - Use E/Mail option to leave questions for 'TI99 SYSOP' rather than using a public message.
- 4 - Use the (S)ystem option from the SMART CENTRAL LIBRARY menu to set the defaults for you. Don't worry if you set your level too high because you can enter a '?' or a <cr> to get the prompts for that menu. A '?' will give you the long version and a <cr> will give you the short version of the menu.
- 5 - Don't forget the public message board. Items not TI specific are in this area.

THE FOLLOWING ARE EXAMPLES AND SHORT EXPLANATIONS OF SOME OF THE MAIN MENUS:

S\*M\*A\*R\*T Computers CENTRAL LIBRARY

== Some Sections are RESTRICTED! ==

- <N>EWS/INFO - \*\*\* OPEN SECTION \*\*\*
- <E>MAIL (CHECK ON EACH VISIT)
- <M>ESSAGE BOARDS (GENERAL/PUBLIC & SIGS)
- <B>ROADCAST Systems & Services
- <F>C.C. Data Base Section
- <G>OVERNMENT Services & Projects
- <O>FFICE Automation Systems & Services
- <R>ETAIL Automation Systems & Services
- <T>IME elapsed since you logged-on
- <S>YSTEM Operation Functions
- <Q>UIT - Logoff and Terminate call
- <\*>ADD-INFO - Request for Additional Information

Command:

+++++

This is the CENTRAL menu, the first menu you will get. From here you branch to News, E/mail, system options, and to all message boards.

S\*M\*A\*R\*T Computers CENTRAL LIBRARY

== Some Sections are RESTRICTED! ==

- <N>EWS/INFO
- <E>MAIL

*Note: By the time that you read this article a few of the Menus may have minor changes.*

<M>ESSAGE            <B>ROADCAST        <F>ULL.       
 <G>OVERNMENT        <O>FFICE             
 <R>ETAIL             <T>IME                
 <S>YSTEM             <Q>UIT                
 <\*>ADD-INFO

Command:

+++++

This is the same central menu in short format. No matter what help level you are at, a <cr> will give you this menu. Remember that if you are at a more expert level, a '?' will give you the full menu description.

+++++

S\*M\*A\*R\*T NEWS & INFORMATION SECTION

-----  
 - OPEN TO ALL - News updated weekly  
 -----

<M>ICROS - Micro-Computer News  
 <S>YSTEM - Info about this system  
 <N>UMBERS - Public BBS Numbers  
 <R>EPAIR - Wash Area Computer Repair  
 <E>XIT - Return to previous Section  
 <Q>UIT - LogOff & Terminate call

Command:

+++++

This is the menu you will get when you use the 'N' option from the central menu. From this menu you can access news and info sections.

S\*M\*A\*R\*T PUBLIC MESSAGE BOARD

-----  
 Please KILL your OLD messages!  
 -----

<R>EAD General Board Messages  
 <S>CAN General Board Messages  
 <P>OST message to General Board  
 <K>ILL your old messages  
 <+>E/MAIL Functions  
 <M>ERCHANDISE Available On-Line  
 <O>RDER Merchandise On-Line  
 <T>IME Elapsed since you Logged-On  
 <G>ROUPS - Special Interest Sections  
 <E>XIT and return to LIBRARY CENTRAL  
 <Q>UIT and Log-Off the system

Command:

PAGE 16

This menu will be displayed if you use the 'M' option from the central menu. From this menu you will be able to use the GENERAL message board. To select the SIG sections use the 'G' option.

S\*M\*A\*R\*T PUBLIC MESSAGE BOARD

-----  
Please KILL your OLD messages!  
-----

<R>EAD	<S>CAN	<P>OST
<K>ILL	<+>E/MAIL	
<M>ERCHANDISE	<O>RDER	<T>IME
<G>ROUPS	<E>XIT	<Q>UIT

Command:

+++++++

This is the short version (hitting a <cr> for command) of the General Message Board.

+++++++

S\*M\*A\*R\*T PUBLIC MESSAGE BOARD \*\* SIG  
SECTION \*\*  
(Access individual SIG Boards with "D"  
command)

<N>EWSLETTERS from SIGS  
<D>IRECT selection of single SIG Board  
<A>CTIVATE - Select combination of SIG Boards  
<R>EAD messages on all COMBINED/ACTIVE SIG Boards  
<S>CAN messages on all COMBINED/ACTIVE SIG Boards  
<P>OST a message to a select SIG Board  
<K>ILL a message on a COMBINED/ACTIVE SIG Board  
<T>IME since you logged on the S\*M\*A\*R\*T\* Library  
<Q>UIT - Logoff System and Terminate call  
<E>XIT and return to PUBLIC MSG BOARD

Command:

+++++++

This is the menu you will get by selecting the 'G' option from the General Message Board. From this menu you can use ALL the special boards. The <R>ead option will read all the boards you have activated (more on that next issue). If you <P>ost or <N>ewsletter you will get another menu to select the particular group you wish.

S\*M\*A\*R\*T Public Message Board - SIGS  
>>SELECT SINGLE SIG BOARD FOR ACCESS<<

<1>TRS-80  
<2>APPLE



<3>ATARI  
 <4>OSBORNE  
 <5>COMMODORE  
 <6>IBM-PC  
 <7>NEC  
 <9>TI/99  
 <E>XIT and return to COMBINED SIGS

Command:

+++++

If you were to use the 'D' option to select a single SIG Board you would next get this menu. Now you would select the particular SIG Board you wish to work in. The next level you enter from here is the lowest level and has the least number of options because you are only working with the SIG you have selected.

S\*M\*A\*R\*T E/MAIL (For ALL Users)

-----  
 Also check MSG BOARDS for notes!  
 -----

<R>EAD YOUR MAIL  
 <S>CAN YOUR MAIL  
 <L>EAVE MAIL FOR OTHERS  
 <K>ILL YOUR MAIL  
 <T>IME SINCE LOGON  
 <E>XIT BACK TO PREVIOUS MENU  
 <Q>UIT - LOGOFF SYSTEM

Command:

+++++

If you selected the 'E' option from the CENTRAL menu OR the '+' option from the General Message Board, you will be in the E/mail menu. Once you have selected the function, another menu is shown to request the range that you want that function to effect. This menu should be entered on every visit to check <B>oth your in and out going mail even if you are not alerted that mail is waiting (more on E/mail next issue).

SYSTEM FUNCTIONS SECTION - Main Menu

-----  
 This section provides for user control  
 of this system's operating options.  
 -----

<U>PDATE-REGIS - Update your system registration  
 <R>E-CONFIGURE - Change your terminal communications settings  
 <H>ELP-LEVELS - Adjust the length of menu texts  
 <P>ASSWORD - Change your system Password  
 <T>IME - Display Elapsed Time since Log-on  
 <C>ENTRAL - Return to the Central Library Index  
 <E>XIT - Return to previous Library Section

<Q>UIT - Log-Out of the Library and Terminate Call

Command:

+++++++

This is the System menu called by the <S>ystem option from the central menu. Here you can reset certain defaults (more on this next issue). If you need it use it it is self explanatory. Should you have difficulty leave E/mail for TI99 SYSOP.

There are several, more or less, standard functions. Option 'Q' always means QUIT. Quit will log you off the system. If you accidentally use it don't worry, you will have a second chance at the 'message for sysop' section. Option 'E' almost always means EXIT with the exception of meaning E/MAIL at the CENTRAL menu. Exit will return you to the last menu (next higher level). There will be more on standard functions in later issues.

Mike Lambert

\*\*\*\*\*

#### CALLING SHERLOCK HOLMES (or would be's)

Our 99/4A Home Computer is full of surprises--not all of them documented. Here are two items for you to work over and should you discover the clues or meaning, please let me know.

1. Those having Extended Basic Version 110 pretend you are making a program:
  - a. Put in--100 !
  - b. Follow the ! with the alphabet while you are holding down the Control Key. The cursor will move, but the screen will remain blank.
  - c. Now LIST. How about that! Could I program this way and thus save typing effort? No! The 99/4A will show "Unrecognized Character" and throw away your line.
  - d. OK Sherlocks--How do we get around that problem?
  
2. The 99'er Magazine Vol. 1 No.3 page 77 and Vol. 1 No.4 page 54 show the "Condensed Format Code Table" for our little 'toy'. However, translations for Code Numbers 171-175; 185; 198-201; 226-231; and 242 are not given. That is, the computer prints out 'junk'--at least to our eyes.
  - a. "Sherlock" John Clulow, the author, discovered enough clues to convict the following:
    - 1) 199=Quoted string
    - 2) 200=Unquoted string
    - 3) 201=Line number
  - b. My sleuthing came upon these culprits:
 

1) 171=INTEGER	5) 229=DAT\$
2) 226=UPRC\$	6) 230=INTG
3) 227=STATUS	7) 231=ALPHA
4) 228=TIMES	8) 242=TEMPORARY
  - c. OK you other Sherlocks:
    - 1) What did I discover and how do you use them?
    - 2) Convicts 172-175; 185; and 198 are still missing. Should you discover them contact Rev. Keith G. Koch--459-6826--. Let's round-up all of these "at-large" items, so that the 99/4A can be under our control where it belongs!

Rev. Keith G. Koch

**TI WILL BE HERE IN MAY**  
**BALTIMORE**  
**FRIDAY MAY 13**  
**PERRY HALL SENIOR HIGH SCHOOL**  
**4601 EBENEZER RD.**  
**7:00PM**

**DIRECTIONS:** Baltimore Beltway 695 take EXIT 32 (US Route 1 North) go approximately 5 miles to the traffic light at Ebenezer Rd. TURN RIGHT, go about 1.5 miles and the school will be on the right

**WASHINGTON**  
**SATURDAY MAY 14**  
**FAIRFAX HIGH SCHOOL**  
**3500 OLD LEE HIGHWAY**  
**1:00PM**

**Directions:** From I-495 (Washington Beltway) exit 8 West, U.S. 50, go 3.5 miles (at 3 miles you will drive thru Fairfax Circle), another 1/2 mile at a traffic light turn left. There is a small sign on the right shoulder of the road directing your left turn to Fairfax High School. Also on the right is a Denny's Restaurant (good food, inexpensive), and P. J. Skidoos Restaurant. After turning left the road winds around the athletic field to the school building. At the school building enter to the left side of the pillared center section. Located just inside the entrance will be a bulletin board directing you to the meeting room.

**Alternate Directions:** From Beltway take I66 west to the exit at Va. Route 123 South. Go south on 123 about 3/4 mile to the second traffic light, and turn left, this is U.S. 50 east, then go about 1/2 mile, pass the Red Lobster Restaurant, the Old Budapest Restaurant. Watch for a Fire House on right, then go to the next traffic light and turn right to school. This is the same light as described above at Denny's and P.J. Skidoos Restaurants.

# PETE EDDY

## TI 99/4A COMPUTER EQUIPMENT & ACCESSORIES

<u>MODEL</u>	<u>DESCRIPTION</u>	<u>RETAIL PRICE</u>	<u>SALES PRICE</u>
PHA2100	R.F. Modulator (TV Adaptor)	\$ 49.95	\$ 37.00
PHA2000	Dual Cassette Cables	14.95	12.00
PHA4100	10" Color Monitor	399.95	335.00
PHP1100	Wired Remote Controllers (Pair)	34.95	27.00
PHP1200	Peripheral Expansion Box	249.95	175.00
PHP1220	RS-232 Card	174.95	125.00
PHP1240	Disk Controller Card	249.95	178.00
PHP1250	Disk Drive Card	399.95	283.00
PHP1260	Memory Expansion Card (32K RAM)	299.95	212.00
PHP1270	P-Code Card	249.95	178.00
PHP1280	PASCAL Development System	499.95	354.00
PHP1300	Hexbus Interface(TI 99/4A only)	59.95	45.00*
PHP1500	Solid State Speech Synthesizer	149.95	114.00
PHP1600	Telephone Coupler (Modem)	224.95	160.00
PHP2400	P-Code Peripheral	399.95	286.00
PHP2500	TI Printer	799.95	546.00
PHP2700	Program Recorder (includes cable)	69.95	55.00 *
HX1000	Printer/Plotter	200.00	150.00 *
HX2000	Wafertape Digital Tape Drive	140.00	105.00 *
HX3000	RS-232 Interface	100.00	75.00 *
AC9201	AC Adaptor for Wafertape Drive	15.00	12.00 *
HXC	36" I/O Cable w/Hexbus Connector	10.00	9.00 *
WT50	50' Blank Wafertape Cartridge	8.00	9.00 *

### COMMAND MODULES, PROGRAMS, ACCESSORIES

PHM3002	Early Learning Fun	29.95	25.00
PHM3003	Beginning Grammar	29.95	25.00
PHM3004	Number Magic	19.95	17.00
PHM3006	Home Financial Decisions	29.95	25.00
PHM3007	Household Budget Management	39.95	32.00
PHM3008	Video Chess	69.95	52.00
PHM3011	Speech Editor	44.95	34.00
PHM3013	Personnel Record Keeping	49.95	37.00
PHM3014	Statistics	44.95	34.00
PHM3016	Tax/Investment Record Keeping	69.95	52.00
PHM3018	Video Games I	29.95	25.00
PHM3023	Hunt the Wumpus	24.95	21.00
PHM3025	Mind Challengers	24.95	21.00
PHM3026	Extended BASIC	99.95	75.00
PHM3027	Addition and Subtraction I	39.95	32.00
PHM3028	Addition and Subtraction II	39.95	32.00
PHM3029	Multiplication I	39.95	32.00
PHM3033	Blackjack and Poker	24.95	21.00
PHM3035	Terminal Emulator II	49.95	37.00
PHM3036	ZeroZap	19.95	17.00


VA Residents add 4% Tax \* New items available soon

<u>MODEL</u>	<u>DESCRIPTION</u>	<u>PRICE</u>	<u>PRICE</u>
PHM3037	Hangman	19.95	17.00
PHM3038	Connect Four	19.95	17.00
PHM3040	TI LOGO	99.95	75.00
PHM3041D	Adventure (Pirate Adv. Disk Incl)	49.95	37.00
PHM3041T	Adventure (Pirate Adv. Cassette)	49.95	37.00
PHM3042T	Tunnels of Doom	59.95	45.00
PHM3043	Reading Fun	54.95	40.00
PHM3047	Reading Roundup	54.95	40.00
PHM3048	Reading Rally	54.95	40.00
PHM3052	Tombstone City: 21st Century	39.95	32.00
PHM3053	TI Invaders	39.95	32.00
PHM3054	Car Wars	39.95	32.00
PHM3055	Editor Assembler	99.95	75.00
PHM3057	Munch Man	39.95	32.00
PHM3058	Mini-Memory	99.95	75.00
PHM3059-62	Scholastic Spelling - Levels 3-6	54.95	45.00 ea.
PHM3064	Touch Typing Tutor	39.95	32.00
PHM3083	Computer Math Games II	39.95	32.00
PHM3088	Computer Math Games VI	39.95	32.00
PHM3109	TI LOGO II	99.95	75.00
PHM3111	TI Writer	99.95	75.00
PHM3112	Parsec	39.95	32.00
PHT6007	Teach Yourself BASIC	29.95	25.00
PHT6019	Teach Yourself Ext. BASIC	19.95	17.00

## DISKETTES

PHD5001	Mailing List	69.95	52.00
PHD5004	Programming Aids I	14.95	13.50
PHD5005	Programming Aids II	24.95	21.00
PHD5007	Teach Yourself BASIC	34.95	26.00
PHD5043	Pirate Adventure	29.95	25.00
PHD5049	The Count	29.95	25.00

## OTHER ACCESSORIES

WICO			
 15-9714	Joystick & TI Adapter	47.90	32.00
C.ITOH	Prowriter Dot Matrix Printer (Parallel Interface w/o cable)	499.95	390.00

## FUNWARE

FW1001	Henhouse		28.00
FW1002	Video Vegas		21.00

## Classic Covers

TI55	TI 99/4A Plastic Cover		8.00
------	------------------------	--	------

The above prices are for TI Club members and depending on availability can be obtained in two to four days from time order is placed. Please contact Pete Eddy (703) 631-1744 6-10 P.M. daily or all day on weekends.

Reprinted from: TIC TALK  
The Colorado 99/4 User's  
Group March 1983

UCSD p-SYSTEM  
by Pete Crowell

This is the first of several articles on the UCSD p-System for the TI Home Computer. The first question that you may ask is, "What is that?" The UCSD stands for University of California, San Diego and p-System stands for pseudo-code system. This system is marketed by Softech Microsystems for all of the popular 8- and 16-bit microcomputers. It has been running on the TI9900, the heart of the 99, since 1977.

The p-System is a whole operating system with an almost unbelievable amount of power. Many otherwise well-informed professionals in the microcomputer industry think the p-System is "only a Pascal compiler". These misunderstandings are brought about because the usual access to the p-System is through the facilities provided by the UCSD Pascal language. To understand the full power of the operating system you should think of it in more traditional ways. The following are a few useful facts about the p-System.

1. It supports UCSD Pascal, Fortran-77, BASIC, and assembly language for ten different microprocessors.
2. A compiled application program can be executed without change or recompilation.
3. The p-System runs most major microcomputers including Apple II, Osborne I, IBM PC, Commodore, TRS 80, Hewlett Packard, Texas Instruments, Zenith, and the new DEC Professionals.
4. The system has been used for a very wide range of applications including VisiSchedule, accounting and financial systems, graphic composition for broadcast television, and real-time control of solar collectors.
5. Full-scale software development systems are running on over 75,000 personal computer systems, which provide the professional software developers the means to write truly "portable" programs in a wide range of application areas.

The usual contact with the operating system is through the command language. The command language of the p-System is designed to be used interactively from the keyboard. It is balanced

between simple, single-keystroke commands and understandable, easy-to-remember English language commands. These commands are arranged as a tree. Then the user selects a command, the next set of commands becomes available. As was mentioned in the newest issue of the 99'er magazine, there is a menu of commands displayed at the top of the screen, and a single letter keystroke will invoke that command. Depending on the command that the user invokes, there may be another full set of commands brought to the top of the screen which will expand the first command which was invoked. An example of this would be striking the "E" key which tells the system E(dit). The invoking of the E would bring up all of the commands needed for editing. These include such things as C(opy, D(elete, F(ind, I(nsert, R(eplace, and X(change.

Pascal is not hard to understand, since many of the commands are quite similar to BASIC. An example is instead of the command "INPUT" as in BASIC, Pascal uses READLN. Most of the program in Pascal is easily readable and can be followed more easily than BASIC. There are added commands to help make writing programs in Pascal easier than in BASIC. In loops, the familiar "FOR I=1 to 10" and "NEXT I" is replaced by "FOR I:=1 TO 10 DO". You will notice the "NEXT" statement no longer exists. There are two additional loop commands in Pascal, the first is a WHILE...DO, and the second is REPEAT...UNTIL. Both of these are for conditional loops when you don't know exactly how many times the loop should be repeated.

Before closing this article, I want to state that the p-System is not only just another language; but it has a faster execution time BASIC. While it is not as fast as assembly language, it is from 3 to 10 times faster than BASIC. This translates to a much shorter time from when the program is loaded until it is actually executing. Not only that, but it will run a lot faster while it is executing (naturally).

The next article will cover one of the points which makes the UCSD p-System an amazing operating system for the 99, memory management.

\*\*\*\*\*

Members who have an idea for a future program are asked to submit the idea to the Program Committee,



# TEXAS INSTRUMENTS

## INCORPORATED

POST OFFICE BOX 10508 • LUBBOCK, TEXAS 79408-3508

Consumer Products Group

March 4, 1983

Dear Users' Group,

We at Texas Instruments are excited about the tremendous response to the TI-99/4A and it's local Users' Groups. Presently, there are over eighty 99/4A Users' Groups worldwide and that number is growing every day! Users' Groups are an excellent means of learning more about your TI-99/4A, but then I don't need to tell you that.

Because Users' Groups perform such a vital service to 99/4A owners, I feel we should support you as best we can. Enclosed you will find our latest brochures, newsletters, Users' Group List and a 99'er Magazine. This packet provides information which should be very useful.

I have received many complaints about people not receiving the Home Computer Newsletter. To correct this problem, I would like your group to compile a list of the names and addresses of those people in your group who are not receiving the newsletter. If you then send this list to me, I will make sure those people get on the newsletter mailing list.

I hope you find the information in this packet helpful. Look for similar packets in the future, as I plan to keep you up to date on all the latest TI developments.

You're doing a fine job, keep up the good work!

Sincerely,

Edward K Wiest  
Users' Group Coordinator  
Personal Computer Division

*Edward Wiest has been named the new Home Computer Users' Group Coordinator for TI. He started his duties on January 3rd. Ed is looking forward to tremendous growth in the number of Users' Groups in 1983.*

## THE COMPACT COMPUTER 40 IS OUT!

By Mike Lambert

I bought a CC 40 from TI yesterday at the Federal Office Systems Expo (FOSE), held at the Washington Convention Center, 15-17 Mar. In case you have just returned from a three month expedition to Antarctica and haven't heard of the CC40, I'll give you a quick description of the new system. The console (9.25" x 5.75" x 1") is a totally portable 22 ounces of computer using four AA alkaline batteries for up to 200 hours of use. Power is conserved by the unit powering itself off if it is idle (not running a program - don't worry, if awaiting input in a program it will not time out) for 11 minutes. In the 34K RAM is the operating system and TI Enhanced Basic, using the 6K RAM included in the console. The display is a 31 character, 5x8 dot matrix that extends to a full 80 character line. There are 18 screen indicators, six of which are user programable. An optional, 16K RAM expansion cartridge, to be released soon, expands memory to 18K.

The peripherals include a Wafertape Digital Tape Drive. Utilizing a continuous loop tape cartridge that can store up to 48K. It is accessible by filename and is fast, can load a 4K program in 10 seconds. The Wafertape is formatted on command by the processor. The Drive is also powered by four AA batteries. There are two RS-232 interfaces available, (serial only, and, serial and parallel ports) allowing you to connect a 80 column printer and/or a telephone modem. The unfortunate thing about this peripheral is it's requirement for 120V AC (plugs in the wall) making it the only non-portable unit. With the printer/plotter you can print in 10 different type sizes (up to 11 characters per second) or X-Y plot in four colors (red, blue, green and black) on 2 1/4 inch plain paper. The printer is powered by rechargeable AA batteries. The Hex-bus adapter is an intelligent interface with it's own memory that interfaces the CC40 to the 99/4 via the I/O port on the right side of the 99/4, Wafertape, RS232, printer, and a data display (CRT).

There are several spectacular features in this little machine. The Enhanced Basic is a very comprehensive language and is resident in the machine. With the exception of sprites, sound, 'MIN/MAX', 'DEF', and 'OPTION BASE' ; the Enhanced Basic of the CC40 is every bit the excellent language that TI 99/4 Extended Basic is. Extended Basic programmers will have little difficulty becoming familiar with the with the syntax of the Enhanced Basic. Math oriented people will be very pleased with the many math functions that are preprogramed. These many functions may have been provided because there is no 'DEF' statement. This makes the CC40 an excellent and versatile calculator (for instance, a equation could be programmed into one of the number keys, easily recalled and executed). There is the very useful ability of using the 'RUN' and 'CONTINUE' commands with an optional line number making it possible to only run a specific portion of the code in memory and continue at any point in the program you choose when a break occurs. Editing with the CC40 is a dream. You can list and edit lines several different ways. There are 10 programable keys (0-9) that can be programmed with any equation, line, or string. Those of you who liked the "REDO" option in Extended Basic will appreciate the "PB" (play back) key which will recall the last display. File processing promises to be as easy as with a disk system, without the expense of a disk controller and drive. Using a 'FRE' statement, memory size is described in six different ways so you know exactly how much space is available. The computer can display system messages in seven different languages. Other features are: full character definition, error



handling, sub programming, and a large set of subprograms are provided. A basic program can run another basic program. Formatted output is easily accomplished with the 'image' and 'print using' statements.

The documentation provided with the CC40 is a users guide that is actually a book the size of the Extended Basic manual. Besides the expected sections (use, basic programming, and reference) this manual also has a short technical information section explaining memory organization and usage, overhead and memory requirements per programming function, data structures, and a short explanation of what a Hex-bus is. The Editor/Assembler manual promises more info for the technically oriented.

There is a varied software library to chose from (and it should grow quickly). These mostly seem to be geared toward the business type to do on-site analysis (mathematics, statistics, finance, electrical engineering, business graphics, production planning, inventory control, dynamics, etc.). The CC40 is easily programable to do any job required and is especially suited for tasks requiring a full system capability that is portable. The only limit is the individual. We have now the capability to almost do anything, anywhere.

It's hard to not be awed by the potential of this machine. The obvious drawbacks that would be noted by those comparing the CC40 to a non-portable computer are: 1, the size of the keyboard; and 2, the one line display. No, I wouldn't want to put a speed typist on the CC40, however the keyboard is not uncomfortable. And, no, I can't have a full size display remotely (note that a full sized data display is possible though). However, looking at the advantages: I don't have to carry around a CRT (TV monitor), it's portable (no outside power needed except the RS232 interface), and I don't have to spend \$800 to have fast multi file mass storage, and the small size allows it to fit in a large pocket or in the corner of your briefcase. I do have one complaint though, there is only one 'shift' key (left) and the position for the right shift key is occupied by the 'enter' key. This has given me some grief in that I wanted to shift a letter on the left side of the keyboard and I ended up 'entering' my incomplete line! I've looked at other manufacture's pocket computers and they couldn't hold a candle to the CC40 (and that's not including the level of basic included in the machine). Price-wise it is also hard to beat the CC40 because you can buy individually only the peripherals you need. I don't think there is a better buy in the market than the TI CC40. I'll have more in the next newsletter on the CC40 as hardware and software is available.

---

The Washington DC Area TI Home Computer Users Group is ready to submit a group purchase of Double Sided Disk Drives that will fit into the Expansion Box.

TANDON TM100-2 \$240                      SIEMENS FDD200-5 \$235

or a single sided drive    SIEMENS FDD100-5 \$195

Please send your check and order to:  
 Richard Sturgell, Tres., 16092 Radburn St., Woodbridge, Va.  
 ZIP 22191. Please note that these prices are tentative and may be slightly less if the order is large enough, also the Users Group will act as your agent in the purchase of these drives. (Being ordered from out of state any tax liability will be the responsibility of the purchaser.)

# TI Files \$1M Lawsuit Against Compaq

HOUSTON — Texas Instruments Inc. (TI) has filed a \$1 million lawsuit against Compaq Computer Corp. here and 10 former TI employees who formed the company, charging Compaq with theft of trade secrets, patent infringement and employee raiding. TI also is asking the court for a permanent injunction to prevent Compaq from selling its personal computer, which TI claims is based on its designs and patents.

At presstime, Compaq's attorneys were preparing to file "substantial" counterclaims against TI. They spent last Thursday morning meeting with TI. Compaq president Rod Canion said the charges in the lawsuit are "totally groundless and will have no effect on Compaq's production and shipment of the Compaq Portable Computer."

In the suit, filed Jan. 27 in U.S. District Court here, TI claims the Compaq computer was designed

and developed by the 10 employees who left TI last February to form Compaq Computer Corp. TI first made the charges in a state civil suit filed in Houston last April.

Named as defendants in the suit are: Canion, who resigned his position as TI's Terminal Systems manager in December 1981; William Murto, vice president of marketing and sales, who resigned as a planning manager for Terminal Systems in

February 1982; James Harris, vice president of engineering, who resigned as TI product development branch manager in December 1981; Gray Stimac, who resigned as TI section manager of storage products in February 1982.

Also, Kenneth B. Roberts, who was a TI section manager in production engineering until he resigned in February 1982; Steve Ulrich, a former TI section manager of electrical design engineering who resigned in February 1982; John Riley, who left his position as section

manager, mechanical engineering, last March; Gary Henderson, a TI manager of manufacturing strategy who resigned last April; Timothy Tindle, an electrical technician in storage products who resigned last March, and Steven Flannigan, who resigned as program manger last March.

## "Valuable...Secrets"

"Each was exposed to extremely sensitive and valuable trade secrets and confidential information during their employment at TI," the lawsuit states. "Each and all are now employees of Compaq and are engaged in projects at Compaq which are similar, if not identical, to those in which they were engaged while at TI."

Compaq introduced its portable computer last November, only months before TI unveiled its TI Professional Computer two weeks ago. The Compaq was billed as an International Business Machines Corp. (IBM) PC-compatible computer with a price tag of \$2,995. Shipments of the computers began at the end of last month to authorized dealers and retail outlets.

Like the Compaq product, the TI computer, code-named "Pegasus," is based on the Intel "8088" microprocessor. The high end of both the TI computer and the Compaq computer is 256 kilobytes (Kbytes) of RAM (random-access memory) and both offer 320-Kbyte diskette drives.

TI's desktop computer, priced at \$2,595, also features voice recognition and natural language options.

In a statement released last week, Canion said the Compaq computer is "a full-function portable computer that is compatible with the IBM PC, meaning that it can operate all the popular software packages developed for the IBM PC and is unlike any TI product. The recently introduced TI Professional Computer is not claimed to be portable or IBM-compatible."

## Suit: Still Continuing

TI also charges in the suit that Compaq officials Canion, Murto and Harris have been and still are engaged in a "systematic effort to appropriate and use valuable trade secrets and confidential information of TI," and it claims they induced key employees to leave TI, planning departures at intervals.

The three defendants "conspired to approach key TI employees to resign from TI and accept employment with Compaq in order to misappropriate and convert such trade secrets and confidential information that would be helpful to Compaq," the suit charges.

In response to the charges, Canion said, "We do not know what TI's motivation is, but we do know such suits are common in this industry when companies, such as TI, engaged in large-scale layoffs of employees, attempt to restrict the voluntary departure of additional key personnel."

"In short we view this matter merely as a nuisance suit," Canion added.

REPRINTED FROM MIS WEEK

BASICBASICBASICBASICBASICBASICBASICBASICBASIC

Are you having trouble learning the BASIC programming language?

Do you feel that there is more to TI than Munchman?

Do you really want to know how to program in TI BASIC?

If you answered yes to any of the above questions, I urge to call:

(703)670-3906

today.

Why not make that call right now. Let Dick and Becky

Sturgell help you. We have three years experience.

Classes availbel for children, teenagers, and adults.

Make that call before you forget.

BASICBASICBASICBASICBASICBASICBASICBASICBASIC

TI's 99/4A Defect May Cost \$50M

## Shock Hazard Found

DALLAS — Texas Instruments Inc. (TI) disclosed last week it has temporarily halted new shipments of its "99/4A" home computer after a potential electrical shock hazard was found in the computer's transformer. The interruption is expected to cost TI up to \$50 million in lost sales and revenues for the first quarter.

A TI spokesman said the possibility of electrical shock was discovered through "industry scuttlebutt" that an international testing agency had some questions about the transformer, which is manufactured by an outside vendor. The spokesman said TI called the testing agency and, based on discussions with it, began its own tests.

New shipments of the 99/4A were stopped Feb. 17 and five days later the company discussed with the Consumer Products Safety Commission "the remote possibility that, in the case of transformer failure, the operator of the TI 99/4A home computer could be exposed to the hazard of an electrical shock." TI said no incidents have been reported.

Shipments are expected to resume by mid-March, but TI said the delay will have a "very severe impact" on first quarter results.

"The lower revenues resulting from lost sales of home computers and associated software and peripherals, plus the costs of the transformer adapter program, are expected to impact pre-tax earnings for the first quarter 1983 by approximately \$50 million," TI said in a statement issued last Wednesday.

The impact on results for the year will depend on how quickly the company can regain its momentum in the home computer market, TI said.

The company last week also announced that all known TI home computer owners will be sent a free adapter device to be plugged in between the wall outlet and the transformer to prevent any potential hazard if the transformer fails. TI said it is also supplying adapters for all 99/4A home computers in inventory at retailers.

### NEWSLETTER ADVERTISING RATES


Two Pages	\$40.00
One Page	25.00
Half Page	15.00
1/4 Page	10.00

6 month above X5  
12 month above X10

Camera ready artwork

J&KH SOFTWARE © 1982  
 2820 S. ABINGDON ST. • ARLINGTON, VA 22206 • (703) 820-4131

**SUPER CATALOGER**  
**MULTI-DISK CATALOG PROGRAM**



Have you ever forgotten on which disk a particular program is located? Imagine being able to determine in just a few seconds which disk contains the program you're searching for! **SUPER CATALOGER** accepts up to 500 filenames from as many as 63 disks and produces a sorted catalog on any printer. *And it's fast too!* *...an Assembly Language subroutine sorts 200 filenames in six seconds!* Requires: TI-Extended-BASIC, memory expansion, disk drive and printer.

Virginia residents add 4% sales tax. **\$ 2 9 . 9 5**

# ROBINS Inc.



## THE SMALL COMPUTER SUPPLIES STORE

### LABELS

3/4 x 15/16 (5,000) **\$16.00**

**PAPER (15, 18 & 20 lb.)**  
 9 1/2 X 11 **\$24.95**

### RIBBONS

Radio Shack  
 Daisy Printer II **4.75 each**  
 Line Printer III & IV **6.50 each**  
 Line Printer VI & VIII **6.50 each**  
 Diablo 620 M/S **7.45 each**  
 Hytype II M/S **46.50 doz.**  
 NEC 5500/7700 M/S **63.00 doz.**  
 Cloth 3500, 8023 **11.90 each**  
 C. ITOH Prowriter **11.90 each**

### QUME

M/S I & Cloth **33.50 doz.**  
 M/S IV **54.00 doz.**  
 IDS 560 **5.75 each**  
 EPSON MX 70/80 **8.50 each**  
 MX 100 **18.00 each**

### LOAD YOUR OWN!

Refills for Diablo, QUME,  
 RICOH, NEC **1.50**  
 EPSON MX 70/80 **3.50**  
 MX 100 **8.99**

### PRINT WHEELS

Diablo Plastic **6.40**  
 Diablo Metal **41.50 & 49.95**  
 Diablo 620 **11.40**  
 QUME **6.40/7.90**  
 Smith? Car TP 1 **4.90**  
 Olivetti **15.50**

### DISKETTES

5 1/4 Single Side  
 Double Density  
 SYNCOM "Et type" **20.95**  
 Scotch, KYBE, Memorex,  
 Verbatim **26.50**  
 Double Side Double  
 Density SYNCOM **\$35.70**  
 Double Side 96 tpi  
 SYNCOM **39.95**  
 8 1/4 Single Sided  
 Single Density **26.50**

**560-5900**

8304 Hilltop Road  
 Fairfax, Virginia 22031

(Merrifield Area)

**Hours: Monday thru Friday 9-5, Saturday 10-2**

TI NEWS  
 BOX 267  
 LEESBURG, VA  
 22075

DATED MATERIAL  
 MAILED