



Texas Instruments
USERS GROUP
TORONTO

FOR THE TI-99/4A COMPUTER

APRIL 1985

NINE T NINE USERS GROUP

29 INGLESIDE DR.
DOWNSVIEW, ONTARIO
M3K 1V2

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MEMBERSHIP FEES

FULL MEMBERSHIP	\$25.00 / year
ASSOCIATE MEMBERSHIP	\$12.50 / year

All memberships are household memberships. An associate membership is only for those who live beyond the consulting distance of Toronto, but wish to receive our newsletter and have access to our library. You are welcome to visit one of our general meetings before joining the group. If you wish more information contact our secretary in writing at the club address on the front cover or call and leave a message with his answering machine.

NEXT MEETING

The meetings are held on the last Tuesday of each month. The next meeting will be held on May 28, 1985 at Shoreham Public School, 31 Shoreham Dr. in Downsview, starting at 7:30 pm. Shoreham Dr. runs east/west from Jane St. north of Finch Ave. The entrance to the school is a few hundred yards east of Jane on the south side of Shoreham.

COMMERCIAL ADVERTISING

Any business wishing to reach our membership may advertise in our newsletter. The rates are as follows. (width by height):

FULL PAGE	(6" x 7 1/2")	\$40.00
HALF PAGE	(6" x 3 1/2")	\$20.00
QUARTER PAGE	(3" x 3 1/2")	\$10.00

Please have your ads camera ready and paid for in advance. For more information contact the treasurer.

Don't forget, that any member wishing to place ads, may do so free of charge as long as they are not involved in a commercial enterprise.

NEWSLETTER ARTICLES

Members are encouraged to contribute to the newsletter in the form of articles, mini programs, helpful tips, jokes, cartoons and questions. Any article may be submitted in any form by mail or modem. We welcome the reprinting of any article appearing in this newsletter providing credit is given to the author and 9T9. If more information is required, call Emile Verkerk.

DISCLAIMER

Opinions expressed in this newsletter are those of the writers and are not necessarily those of the 9T9 USERS' GROUP. 9T9 cannot assume liability for errors or omissions in articles, programs or advertisements.

COMING EVENTS

COMPUTER FAIR

On May 8, 9, 10, 11 1985, Hunter Nichols Inc. is presenting the 3rd annual COMPUTER FAIR, in the Metro Toronto Convention Centre. On display will be the wares of over 100 companies involved with computers from 3M Canada Inc. to Xerox Service Centres. The Nine T Nine Users Group Toronto has a booth here (donated by Hunter Nichols). Our booth will be manned by volunteers, and we need your support for the TI at this show. Hope to see you all there.

COMPUTER AUCTION

On May 23, 24, 25 1985, there will be a computer auction at the College Park, downtown Toronto, with the proceeds going to the Unicef Africa Relief Fund. This auction allows the public to sell their old equipment and/or upgrade their present systems. Hundreds of computers, software, and other electronic equipment will be available by Dutch auction. For more information call Ron Smith at (416)429-4822.

FROM THE EDITOR'S DESK

Another month, another newsletter. My thanks to those who have contributed and as for the rest of you, I hope you enjoy reading it. It has been a very busy month, starting my garden, writing exams, but I persevered. Here it is.

You should have in your possession right now your membership package. My apologies for the length of time it took to get together, but, you know how it is. I sincerely hope it is to your liking.

Speaking of being busy, May promises to be a very busy and exciting month as well. One computer show and one computer auction (see above). I would like to see everyone out in force to give support to our TI.

For those not attending the meetings, the club has arranged for T-shirts with club logo on the front. The T-shirts are baby blue, look good and if you're getting one for your wife, we can have COMPUTER WIDOW printed on the back. The cost is approximately \$10.00 per T-shirt.

Also, in this issue we have the first full page ad, from a company in Port Perry, Ontario. Their prices seem reasonable on most items. Seems to me to be worth checking out.

As I run out of editorial material, let me just say, please keep those articles coming. Until next month, Happy Computing ...

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FOR SALE

32K stand alone memory card \$100.00 and RS232C card \$125.00 - leave name and number on answering machine. - Call Steve (416)471-5111.

## UNDERSTANDING DATA COMMUNICATIONS

a review by David Rust

This is one of the Understanding... series published by Texas Instruments for the average Joe like you or me to help us electronics, and puts it in language that we can all understand. In the latest issue (Vol. 5 No. 1) of Home Computer Magazine a review is given on the general series, saying that they are available for \$14.95 US. Well, at the local Radio Shack store, they are only \$4.99 and \$5.99 in a compact 6 x 8 1/2" format. (No tax is payable on these books, by the way).

In my spare time in the bath tub, I've been digesting the contents of "Understanding Data Communications", published by the Texas Instruments Learning Center. This is a most fascinating book. Like most of the manuals written by the T.I. staff, it has an entertaining way of explaining how data transmission is accomplished.

Starting off with "an Overview of Data Communications" the book gives a background of how data was originally sent; by telegraph wire. That formed the basis for character codes like Baudot and Morse. Telex (or CCITT International alphabet #2) and EBCDIC (Extended Binary-Coded-Decimal Interchange Code) pronounced eb-see-dick, are in use today, the latter in IBM and other compatible equipment. ASCII, the American Standard Code for Information Interchange) is in use on our computer, as well as most micros, with the notable exception of Atari using ATASCII (whatever that is) and Commodore computers, which use a ridiculous system starting with character #1 is "A". (Crazy, isn't it!!).

Good old ASCII has several advantages, one being able to change from upper to lower case by changing only one bit! As well as being quite regular on our keyboards (we create an octothorpe "#" by shifting "3" -- we change one bit), it is the way we can transfer files from one computer to another. We simply send a "text" or ASCII file from say, an Apple to a TRS-80. Very easy to do, without a great deal of problems.

Perhaps the most informative to me was the fourth chapter entitled "Asynchronous Modems and Interfaces". This is where you can get the nitty gritty on how exactly a modem operates, and what exactly the RS232C is.

As some members may know, I have recently acquired a modem, and let me tell you, that this was very informative. No longer do I call a DB-25 connector an RS232 connector, for one. It is one of many that will fill the bill, but it certainly is not "THE" connector. Actually, there is no standard.

I got an explanation as to why I had to change pins two and three on my connector to make my modem work. (I could have spent thirty bucks at Radio Shack for a null modem adapter, but I figured that I could do it just as easily myself.) Contained elsewhere in the book are explanations of why you can't just send everything down the telephone wire without modulation, and how higher baud rates are accomplished through manipulation of phase and frequency.

Other chapters go into fiber optics, LANetworks, packet switching and what really is Full Duplex.

If you want to test your knowledge, there is a short quiz at the end of each chapter. Buy this book, and you may be able to answer the multiple choice question: (from the book) Buffering is: a) The process of temporarily storing data to allow for small variations in device speeds, or b) a method of reducing the severity of communications headaches, or c) storage of data within the transmitting modem until the receiver is ready to receive.

"UNDERSTANDING DATA COMMUNICATIONS", developed and published by the Texas Instruments Learning Center, 272 pages, \$5.99 CDN at Radio Shack stores (cat. # 62-1389), published 1984.

Next month, "Understanding Telephone Electronics."

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TI-WRITER'S SPECIAL FUNCTIONS

by Nicos Evdemon

Our TI-WRITER certainly is a powerful word processor. Some of our experts say you can print graphics and even play games with it. Well, I haven't looked in great detail into all of these extra abilities, but I have explored it's SPECIAL FUNCTIONS (page 146 of the manual).

I have a Mannesmann Tally, Spirit-80 parallel printer and have had a lot of surprises trying these special functions.

By imbedding these commands before and after your letter, word or sentence, your printer will execute these commands without of course, printing the symbols or the spaces on which they were written.

Here is a list of the commands:

```
CTRL U SHIFT N   CTRL U -> LARGE CHARACTERS ON
CTRL U SHIFT T   CTRL U -- LARGE CHARACTERS OFF
CTRL U SHIFT O   CTRL U -  COMPRESSED CHARACTERS ON
CTRL U SHIFT R   CTRL U -  COMPRESSED CHARACTERS OFF
CTRL U SHIFT NO  CTRL U -  DOUBLE STRIKE ON
CTRL U SHIFT RT  CTRL U -  DOUBLE STRIKE OFF
CTRL U [ml       CTRL U -  UNDERLINE ON
CTRL U [m@       CTRL U -  UNDERLINE OFF
CTRL U [t        CTRL U -  (italics on)
CTRL U [u@       CTRL U -  ITALICS OFF
CTRL U [         CTRL U SA - (mini characters on)
CTRL U [         CTRL U T  - MINI CHARACTERS OFF
CTRL U [O        CTRL U SA - (micro characters on)
CTRL U RE        CTRL U T  - MICRO CHARACTERS OFF
```

This note was originally intended for the February newsletter, but the editor didn't print it because it wouldn't print with his printer. (see editor's note at end of article) I hope the following explanation will help to make the necessary changes for the printer that don't accept the above control commands.

In the manual that came with your printer (hope you didn't throw that one out), you can find the different control codes and the corresponding decimal numbers. If, for example, your printer needs a 14 to turn on the large characters, you add 64 to it and look the answer up on your TI reference card. You can then see that 14+64=78, and that 78 represents the letter N. To use this function, you now enter the special function by pressing CTRL U, type SHIFT N, and then exit the special function by pressing CTRL U again.

There are many surprises hidden in TI-WRITER as well as in your printer. The best way to find them is to play with them. If there are any further questions, please call me at 690-6644.

**** Editor's Note ****

I did refuse to print this article in February, because the last three special commands would not work on my printer (DMP-105 from Radio Shack) and I felt that in order to appreciate them you would like to see them printed. Nicos convinced me that you all have good imaginations, so where I placed parentheses around what should be

italics, mini and micro characters, you're going to have to close your eyes and pretend.

F R O M O U R L I B R A R Y

Starting in February and hopefully continuing every month, the library committee has been commissioned to report to the membership on the contents of the disks in our library. Since we lack the space to give every program on every disk an indepth description, we will be limited to giving the contents of each disk, but only describing some of the programs. Also, copies of the described disk will be available from the librarians in either cassette or disk form during our monthly meetings. Many thanks to Nicos Evdeman for making this possible.

L I B R A R Y D I S K 9 9 L I B B C A 0 3

Nicos Evdeman

CHECKERS	BASIC	MONSTR-MAT	BASIC	SCRABBLE-1	BASIC
CLONES	BASIC	PIC-STICKS	BASIC	SPC-ATTACK	BASIC
MARS-LANDG	BASIC	ROBOT	BASIC	MISION-*GT	BASIC

CHECKERS: A BASIC Game. Your peripherals should be OFF when loading this program
----- from CS1. It's a treat to see the Checker Board almost as large as the
screen, unlike similar programs for which you need a magnifying glass.

CLONES: A nice treasure hunt with ten levels of trying to avoid spiders, crabs,
----- snakes and dragons. A very colorful, fast and challenging game. If you
take all of the treasures from the tenth level (show us a picture) you'll get a
free library disk.

MARS-LANDG: You have to land your craft on a small landing pad. If real space
----- craft land with the same difficulty, I'm glad I'm not an astronaut.

MONSTR-MAT: 3 levels of guessing fun as the monsters are hidden in an 81 grid
----- board. You place your men one at a time on the screen and hope that
there's no monster hidden there. Fun.

PIC-STICKS: You can beat the programmer on this one and it is quite a colorful
----- game. The number of sticks varies every time. The best one yet!!!

ROBOT: Slow set up time, but a colorful game. 1 to 3 players have 3 rows of five
----- robots each. You can shoot 1 to 3 robots at the same time from any row,
but the player who has to shoot the last robot is the loser. The computer does
not have a chance. With other players, it depends.

SCRABBLE-1: Up to 4 players can build words, trying to use as many letters as
----- possible. The letters can be given by either the computer or another
player and the computer keeps score and awards bonuses. Definitely a great game
for great minds.

MISION-*GT: I loaded this program with my P-Box off, from CS1 and I still got
----- a MEMORY FULL message while running it. This is one for the debugger
The only problem is that no debugger has yet stepped forward.

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\*\* Notice \*\*

As we all know, there are quite a few programs in our library that either lack proper instructions or need to be debugged. Any member, who debugs a library program and can supply written documentation for the program (see Programming Committee for standards), will receive FREE of charge, the contents of any disk in our library. For all the others, we will print the modifications here so that you can all change your versions.

- the Library

IF  
YOU  
HAD  
CONTRIBUTED  
TO THE  
NEWSLETTER  
YOUR  
ARTICLE  
WOULD  
HAVE  
APPEARED  
ON THIS  
PAGE

contact the editor  
for further details

# HOME COMPUTER SYSTEMS

THE COMPLETE COMPUTER SUPPLIER-APPLE, ATARI, T.I., COMM & IBM  
P.O. BOX 1217, 487 McDONALD ST., PORT PERRY, ONTARIO L0B 1N0  
(416)-985-3744 OR (416)-985-3126

## TI 99/4A SOFTWARE IN STOCK

|                                 |          |
|---------------------------------|----------|
| EXTENDED BASIC                  | \$129.95 |
| TE II                           | \$49.95  |
| VIDEO CHECK                     | \$49.95  |
| ALL INFORMATION TITLES          | \$49.95  |
| STAR TREK                       | \$35.95  |
| STAR ROVER                      | \$35.95  |
| CENTRIFUGE                      | \$35.95  |
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## MILTON BRADLEY MODULES

### TI

|               |         |
|---------------|---------|
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| SPACE BANDITS | \$29.95 |
| METEOR BELT   | \$29.95 |
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### BOOKS

|                                     |         |
|-------------------------------------|---------|
| LEARNING & PROG. THE TI             | \$15.95 |
| HOW TO PROGRAM FOR TI HOME COMPUTER | \$19.95 |
| TI 9900 SOFTWARE DEVELOPMENT        | \$15.95 |
| HOW TO PROGRAM IN BASIC LANGUAGE    | \$19.95 |
| TI HOME COMP. ASSEMBLY LANG.        | \$29.95 |

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