Texas Instruments
USERS GROUP
TORONTO

FOR THE TI-99/4A COMPUTER

FEBRUARY 1985

CANADA
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NINE T NINE USERS GROUP

29 INGLESIDE DR.
DOWNSVIEW, ONTARIO
M3K 1V2

Edmonton User's Group

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Emile Verkerl

LIBRARY COMMITTEE

Randy Rossetto

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 March 26, 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 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.

E D I T O R I A L

Hello again. Against all odds, another newsletter was filled and printed. I had no idea of the enormity of the job before I accepted, but if you're happy with reading it, then I'll be happy to continue editing it.

As you have already seen on the title page of this newsletter is an Interim Executive. The people listed there decided at an executive meeting what posts they felt capable of filling. This list will be presented to the general membership at the February meeting for a vote.

First order of business, THANK YOU to those of you who took the time and effort to send in articles and tips. The ones that haven't been used yet have been filed away for future use and will most certainly make my job here a lot easier.

Secondly, I have my wife to thank for buying me a printer, DMP-105 from Radio Shack. The cable was a slight problem, but thanks to perserverance and per sonal sacrifice, it is finally working. This newsletter was printed on it.

As well, I have acquired a copy of TI-Writer so that format is now acceptable for submissions. Thank the stars for little favours.

Continuing in this issue is PROFILE, this month concerned with the VOLKSMODEM. Also, the second half of Gary Willert's article, BRANCHES??? I DON'T SEE ANY TREES, is somewhere inside. The first half of Gary's article was printed in the November/December 1984 issue.

Another feature in this issue is the report by the Library concerning what programs we actually have. Each month, they will try to describe the contents of a disk so that we all know what is on it. Copies of the disk will be on sale at the general meeting and always available from the library.

Because of the amount of contributions I am running out of space, so Happy Computing and see you all next month.

                                                    Emile Verkerk


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* * * * * * * * * * * * * * * * * * *
*  9T9 FINANCIAL STATEMENT (1984)  *
* * * * * * * * * * * * * * * * * * *
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                    prepared by Gary Willert

** REVENUE **   **** EXPENSES ****

Opening Balance	$ 450.00	Postage	$ 316.65
Memberships	3692.00	Printing & Paper	769.45
Library	515.90	Library	1030.00
Advertising	155.00	Equipment & s/w	996.05
Miscellaneous	67.72	Show	52.66
	---------	Miscellaneous	204.44

		Total Expenses	$ 3369.25
		Bank Balance	$ 366.35
		Cash on Hand	1511.87

		Total Expenses &	
Total Income	$ 4881.12	Cash	$ 4881.12
	---------		---------
	---------		---------

Note - Some of the membership dues recorded in 1984 were prepaid dues for 1985.

by GARY WILLERT

BRANCH??? I DON'T SEE ANY TREES!

This is all pretty dry and mostly a rehash of what you have already read in
your manuals; let's look, then, at some examples:
1) In order to save space in your disk file, you want to save numeric variables
as strings of the numbers rounded to 2 decimal places; then, when you have read
them from the file, you wish to convert them back to numeric values:

```
:
120 DEF S$(N)=STR$(INT(N0+.5)/100)
:
:
530 PRINT #1:S$(NBR)
:
:
840 CALL INP(NBR,F$)
:
:
1500 SUB INP(N,FILE$)
1510 OPEN #2:FILE$, ...
1520 INPUT #2:N$ :: N=VAL(N$)
1530 CLOSE #2 :: SUBEND
```

In this example, assuming that you wanted to perform this task with more than
one variable, the subprogram is a better choice than a subroutine because it
does not require any extra commands to assign values to variables and then
reassign them afterwards.
2) The next sample is a program that has been printed in these pages before, a
disk catalog program. It fills all the requirements of a good sample program:
it is short; it illustrates use of all the techniques under discussion; it
fills a practical purpose.
    For the record, in case you have trouble spotting them, we have: GOTO in
LINE 280; GOSUB in LINE 280; a DEFINITION in LINE 90, used in LINE 200; a
SUBPROGRAM from LINES 280 to 350, called from LINE 200.
    In addition, of course, there are a number of FOR...NEXT loops, another
form of branching that I have not discussed here.

```
10 ! ****************
20 ! * DISK CATALOG *
30 ! *     WITH     *
40 ! * PRINT OPTION *
50 ! *      BY      *
60 ! * GARY WILLERT *
70 ! ****************
80 !
90 DEF LINE=((LOOP-1)/20-INT((LOOP-1)/20))+4
100 PR$="PIO" :: PC$=CHR$(27)"X_MX_"X_ :: M$="1"
110 CALL SCREEN(13):: DISPLAY AT(1,1)ERASE ALL:" DSK1 CATALOGUE": :"OUTPUT  TO
PRINTER? Y"
120 ACCEPT  AT(3,20)VALIDATE("YyNn")SIZE(-1):YN$  ::  IF  YN$="" THEN 120 ELSE
P=3-P OS("YyNn",YN$,1)
130 IF P<1 THEN 150 ELSE DISPLAY AT(5,1):"LEFT MARGIN ";M$
140 ACCEPT AT(5,15)VALIDATE(DIGIT)BEEP SIZE(-3):M$ :: IF M$="" THEN  140  ELSE
M=V AL(M$):: IF M>102 THEN 140

150  OPEN  #1:"DSK1.",INPUT  ,RELATIVE,INTERNAL :: INPUT #1:A$,J,J,K :: DISPLAY
AT( 1,1):A$;TAB(12);"AVAILABLE =";K
160 DISPLAY AT(2,1):"FILENAME SIZE TYPE P":"---------- ---- ---------- "
```

```
170   IF   P<1   THEN   190   ELSE   OPEN   #2:PR$,VARIABLE   132   ::   PRINT
#2:PC$;CHR$(M):A$;TAB (14);" CAPACITY =";J:"AVAILABLE =";K;TAB(19);"USED =";J-K

180 PRINT #2:"FILENAME SIZE TYPE P":"---------- ---- ---------- -"
190 FOR LOOP=1 TO 127 :: INPUT #1:A$,A,J,K :: IF LEN(A$)=0 THEN 250
200   CALL   TYP(A,K,T$,P$):: CALL HCHAR(LINE,3,32,60):: DISPLAY AT(LINE,1):USING
27 0:A$,J,T$,P$ :: IF P>0 THEN PRINT #2,USING 270:A$,J,T$,P$
210 CALL KEY(0,KEY,S):: IF S=0 THEN 240 ELSE  DISPLAY  AT(24,1)BEEP:"press  any
key to continue."
220 FOR DELAY=1 TO 300 :: NEXT DELAY
230 CALL KEY(0,KEY,S):: IF S=0 THEN 230 ELSE CALL HCHAR(24,3,32,28)
240 NEXT LOOP
250 DISPLAY AT(24,1):"press REDO or PROCEED."
260 CALL KEY(3,KEY,S):: IF NOT(KEY=6 OR KEY=12)THEN 260
261 IF KEY=12 THEN END
262 CLOSE #1 :: CLOSE #2 :: P,M,A=0 :: GOTO 110
270 IMAGE ########### #### ########### #
280   SUB   TYP(A,K,T$,P$)::   IF   ABS(A)=5   THEN T$="PROGRAM" :: GOTO 340 ELSE ON
ABS(A )GOSUB 290,300,310,320 :: GOTO 330
290 T$="DIS/FIX" :: RETURN
300 T$="DIS/VAR" :: RETURN
310 T$="INT/FIX" :: RETURN
320 T$="INT/VAR" :: RETURN
330 T$=T$SI_TI_RI_$I_(I_KI_)I_
340 IF A<0 THEN P$="Y" ELSE P$=""
350 SUBEND
```

In these examples, as in any other case, remember that, if it gets the job
done, no method is wrong. Each programmer has his own style, and it is the
myriad possibiliies that make programming interesting and exciting.

F O R   S A L E
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It has been very uplifting to see the emergence of those with a story to tell and the capability to place that story on paper. This month, PROFILE takes you into Randy Rossetto's system to investigate a modem produced by Anchor Automation, Inc. in Van Nuys, California.

Manufacturer: Anchor Automation, Inc.
6913 Valjean Ave.
Van Nuys, California
USA, 91406
(213) 997-6493

Products made for the TI 99/4A:
VOLKSMODEM
(at this time not aware of any others)

The VOLKSMODEM is a self-contained telephone interface which enables your computer to exchange information with other computers over ordinary telephone lines. The VOLKSMODEM is compatable with all popular computer systems, provided that they are equipped with the standard RS232C interface.

It communicates with BELL 103 compatable modems used with most time-shared computer systems and allows normal use of your telephone when the modem is not in operation. It selects "Answer" or "Originate" mode automatically and sends or receives information in either Full or Half Duplex, as required by the host computer. It has been designed for longlife (9 volt) battery operation. An audio tone tells you when you have established communication with a remote computer or terminal.

Physically, it is 7.6 in. x 3.6 in. x 1.3 in. (19.3 cm x 9.1 cm x 3.3 cm) and weighs 15 oz. (423 gm) with the battery. The case is a medium shade of grey, that goes well with the PE box. It is easily connected to your computer and the telephone system.

The connection between modem and telephone service is with a cable having modular plugs at each end. One end goes into the telephone jack and the other goes into the modem jack marked LINE. Your telephone plugs into the modem jack marked PHONE.

The VOLKSMODEM is connected to your computer system by a cable matched to your type of equipment. There is a 5 pin DIN connecter on the VOLKSMODEM and the other end should be an RS232, D-sub mini 25 pin connecter (the standard for most RS232 connections), for the RS232 card in the PE box.

A cable specifically for the TI 99/4A RS232 interface card is available but it was not difficult to make up a cable with locally purchased parts.

It is very easy to use. With the Terminal Emulator II module or other communications software loaded and configured, just dial the other computer's phone number and when you hear the carrier tone, switch the Talk/Data switch to Data and the host system should tell you what to do next.

The original cost was $96.00 Cdn, purchased in April '84 from Computer Mail Order, 2505 Dunwin Dr., Unit #3B, Mississauga, (416) 828-0866. The VOLKSMODEM came with a free subscription to the Source (an information and communications service) and a lifetime limited warranty.

There are approximately 30-40 Bulletin Board Systems (BBS) in the Toronto area that are free or charge a nominal fee to join. This opens up a whole new area of interest and application for your TI 99/4A home computer.

Randy Rossetto

** Editor's note **

The phone number for TIBBS (Texas Intruments Bulletin Board System) in Toronto is (416) 826-4510.

Starting this month 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 1

Nicos Evdeman

23-MATCHES	XB/BASIC	BACKGAMMON	BASIC	DRAGON	BASIC
AUTOBAHN	BASIC	CANOE-RACE	BASIC	MINE FIELD	BASIC
BASIC-TTT	XB/BASIC	CLOSE/ENCT	BASIC	OTHELLO	BASIC
BOGGLER	BASIC	DEATHSHIP	BASIC	PAC-MAN	XBASIC

23-MATCHES: A BASIC programm that runs in XBASIC as well. The computer flips a
----------- coin to see who goes first. You start with 23 matches and you pick
up to 3 matches at a time, the loser being the one who picks up the last one. It
doesn't take long to figure out that the first move wins. It's a fun game that
should be in your collection.

BASIC-TTT: A BASIC program that runs in XBASIC as well. It's one of the better
---------- Tic-Tac-Toe games with a large graphics display and fast execution.
Logically, one should always have a tie, but on this one you can beat the progr-
amer.

BACKGAMMON: This is a Board Game written for the debugger. I get "BAD ARGUMENT"
----------- messages in some lines. For the one that fixes this one, a free copy
of a library disk (if you tell us how you did it).

DEATHSHIP: This adventure runs only with CS1. It has good instructions. The adv-
---------- enture starts in the radio room of a ship. Naturally, it is not as
elaborate as the Zork series but it is still interesting enough. A good addition
to your Adventure collection.

DRAGON: This is a Board Game written in BASIC. It has instructions included and
------- 1 to 6 people can play. In the beginning, playing the Dragon Hunt I felt
that very young children would have fun with it. As I progressed into higher
levels, adding more Dragons and Knights, it wasn't that easy to catch the Dragon
and the game became a lot more interesting. The computer dictates your luck and
it will add to your Board Game collection.

PAC-MAN: An XBASIC program, and surely a different type of PAC MAN. It can't be
-------- be eaten, but then again it can't eat the ghost. There are invisible
ghosts which can get you but they can be avoided as `they leave a trail behind
themselves. There is no provision for joysticks and it is naturally much slower
than the arcade cartridge, but I'm quite sure the game wasn't written to compete
with Atari or TI-Munchman. You will find it entertaining and be happy to add it
to your collection of games.

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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.

TUNNELS OF DOOM

by
David Rust

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At the last meeting, one or two people came up to me and asked how to save the game that comes on tape to disk. It really is very simple! Insert your module as though you were about to play a game, and follow the instructions on loading the game program, you know... CS1. Actually, the screen asks if you are going to load from: 1) CASSETTE 2) DISK 1 or 3) OTHER.

O. K., so you select #1 and you follow the standard procedure, rewind and press enter, press play and press enter and so on. Finally, about three minutes later, you got the program in! Great. Now you're all set to save to disk. This is the ridiculously easy part. Press <FCTN BACK>. This takes your right to the screen that asks you in two parts to either Load or Save data. Look down the list and you will see that you can save to Disk 1 by pressing #5. So, you press number five and it asks for a filename, which you can use any valid file-name (I suggest something like QUEST, rather than DOOM). If you have more than one drive, or you wish to use the modem, or whatever, select number six, and type in whatever your device and file is going to be.

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Here are some tips, by the way, in case you haven't ferretted them out of the manual: You keep on sending one of your fighters into battle with his secondary weapon in his hands, rather than the one you prefer, because of what-ever reason, like it was in his hands when he last fought. Instead of wasting a turn in battle, before you go into a room, check player status, key number 1, and press the down or up arrows until you get the character that you want. When you got him on the screen, press W (weapons change). You will see that the ar-row now points to other weapon.

It's a good idea to make actual maps when you get the map for a floor before you go down to the next level. This will save you needless points on the Timer by looking at the computer's map. Also, don't stick around on that level once you have your map. Go rescue the King and the Rainbow Orb! You can come back to it later with better equipment and whip the daylights out of those mon-sters after you complete the Quest on your way to the surface.

Beware of Fire-Breathing Dragons!!

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* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
*                                                                         *
*     In last month's BITS & BYTES, there was an item that indicated that in *
* order to gain more memory when the disk drive was attached, that all that  *
* had to be done was to type in CALL FILE (1), type in NEW and then load your *
* program. Unfortunately, that was not true. I made an error. The corrected  *
* sequence is CALL FILES(1), NEW and then loading your program. My apologies *
* to those of you who were inconvenienced.                                 *
*                              - the editor                                *
*                                                                         *
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
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