CHARLOTTE TI 99
USERS GROUP
NEWSLETTER

February 1988

From the Editor...

After we started off the new year with a snow—cancelled meeting, the February meeting was fairly well attended. I'm looking forward to the March meeting, which should be good. Give another member a call, and let's have a good attendance for it.

The editor's privilege is to ruminate on whatever is his pleasure, but certain things are like housekeeping—— they have to be done.

Let's start by encouraging the full club to renew membership for the coming year. This is the last month you can renew without missing an issue of the newsletter. There has never been a better time to be a 99er——and that's no lie. I cannot even keep up with all the hardware coming out for this machine, to say nothing of what is out for the 9640. This is no time to let your connection to other Charlotte 99ers dwindle away. The responsibility is a two—way street of course——the club owes something to you, too; but that just means that you get the best of things going and coming! So let's get dues in. At the very latest, do it by the March meeting. March 13, 7:00.

Task two: New officers need the support of each member. I read these words all the time in other newsletters and it is a worthwhile question to ask what it means to "support" your officers. Speaking as an officer, I consider it to be a help when people call me to inform me of things they know which might be useful to the rest of the club. Change of address, materials gotten in the mail, tips on good buys, etc., are all good fodder for a secretary. Presidents and vice presidents enjoy getting ideas for programs, requests for special items during meetings, and volunteerism for anything.

There will be several demos at the meeting on the 13th, some programs we think you will like. And Cokes (really this time). One piece of new business will be to brainstorm ways for maximum benefit this year——how to stimulate the greatest possible interaction between members, with the highest rate of information exchange. Sort of like beefing up our club BAUD rate from 300 to 1200 (or maybe 2400).

End of housekeeping, beginning of advice. One of our faithful suggested I should take a few lines to encourage members to backup their important disks. This is solid, proven wisdom. In my computer infancy, I boasted I had never had any problem with blown directories and trashed files. But then life happened. Now, I keep duplicates of all my important disks in little boxes neatly tucked in another place. Programs I write, major software like TI Writer, Funnelweb, term programs, et cetera, et cetera. Every time I get an update, I replace the archival disk with an updated copy. I do not use these permanent disks. In addition, with programs in BASIC or XBASIC which I have written, and a few others, I keep listings in a notebook. The ultimate backup. It increases the size of my bookshelf load, but it cannot be doubted that it is better to be safe than sorry. I recently experienced some sort of power problem which I think Mr. Duke had something to do, and trashed my main TI Writer disk. It was more extensive than a directory, which I could have fixed with Disk Fixer. But not to worry, I simply pulled out my archival copy, and with the exception of a minor, dozen—line file or two, I was able to reconstruct the entire original disk. So backup, backup, backup.

I end my gentle tirade on another note: This year, make more use of the club's rather extensive newsletter library. I have worked to get our exchange with other clubs increased this past year, and have managed to get about fifteen additional clubs to send us their newsletter in return for ours.

CLUB INFORMATION

THE CHARLOTTE TI-99 USERS' GROUP meets the second Monday of each month at the Mary Eliza Computer Learning Center (at the Department of Social Services, 301 Billingsly Road, Charlotte, NC). Visitors are invited to enjoy our meetings without obligation. Membership is only $15 per calendar year per family or individual. Privileges of membership include borrowing from the software library, monthly newsletters, special interest group meetings, and low rate ads in the newsletter. For more information contact any of the officers.

THE USERS GROUP NEWSLETTER is printed monthly, and includes news concerning the Charlotte TI-99 Users' Group, as well as items related to the TI-99/4A computer system in general. Product reviews and announcements should not be considered endorsements or the official stand of the users' group as a whole, but only represent the opinions of the authors. Articles from this newsletter can be reprinted freely, in whole or in part, by any other bona fide computer users' group if credit is given to both the original author and to the Charlotte Users' Group. Articles from other users groups' publications may be included in this newsletter to help broaden our range of topics. Full credit will be given to any reprinted articles. Submissions for the newsletter are welcomed. We need long or short programs, technical tips, software or hardware reviews, problems, etc. Credit is given to the author of every item printed. Copyrighted material will be not be accepted without the author's permission, and articles may be edited for reasons of space. Newsletters are also available to other TI Users Groups on an exchange basis. Any group interested in this arrangement should contact the secretary at the address below.

ALL CORRESPONDENCE, submissions, ads, changes of address or other requests should be sent to: The Charlotte TI-99/4A Users Group, P.O.Box 9353, Charlotte, NC 28299-9353

1988 OFFICERS		*UPCOMING MEETING DATES:*	
Dave Wentzel, President	(704)334-8302		
Jim Lucus, V. President	" 534-2497	March	14
Robert Simms, Editor/Sec	" 563-0820	April	11
Arnold Wollman, Treasurer	" 542-1903	May	9
Jack Foy, Systems Operator		June	13
Bill Morrison, Software Lib.	" 525-1583		
Wayne Hollar, Hardcopy Lib.	(704)264-7803		

Some of these clubs have especially fine publications. I am able to pass along to you only a SMALL amount of what I am privileged to be the first to read. Then, I pass along the mail to the hardcopy librarian, usually after collecting a stack of a couple of months worth of newsletters. While I still have them, I read every one, and digest the information. The column called "In Other Newsletters," which appears here each month, is a concise compendium of the significant information contained in them. Read these brief summaries carefully. Check the ones you have interest in or think you MIGHT have interest in somewhere down the road. Then call me, if it's within a month or so of the date of the newsletter——I will probably still have the issue. After that, call the hardcopy librarian. One of us will be glad to make you a copy of the article or illustration——and you can pay us the few cents it costs when you pick it up.
I personally want each of you to have the same kind of information at your fingertips as I have because I am the secretary. I am doing the best I can to let you know what WE have; you have to do the rest.

This column has gone on longer than most I have written. Which is good because we may be a bit sparce in material for this month. Enjoy your reading. And see you Monday.

FOR SALE

FOR SALE:

MAKING A GOOD THING BETTER
...Hardware Modifications You Can Do, Made Simple.

TI users and programmers are constantly extolling the virtues of the machine, and there is no doubt that the 99−4A is a great little computer. But the wizards of hardware have come up with several ways to make a good thing better. You have probably read about these various modifications elsewhere, and if you were at the Charlotte TI Users group meeting in December, you saw one or two of them done. But if you will indulge us once more, we will put it down in black and white (or black on tan, as the case may be), and give you a detailed pictorial and instructions for doing these mods on your own TI−99/4A. On the pages that follow, the three modifications which would enhance the operation of every TI computer are shown. As usual, it is reasonable for us to run the disclaimer that we cannot be responsible for any damage you do to your computer if you attempt these procedures. But don't let that ward you off if you have any handiness at all with small tools. If you follow procedures and take precautions, it will be improbable that you will experience any difficulty.


VDP LOAD RESISTOR

#1:TMS9918
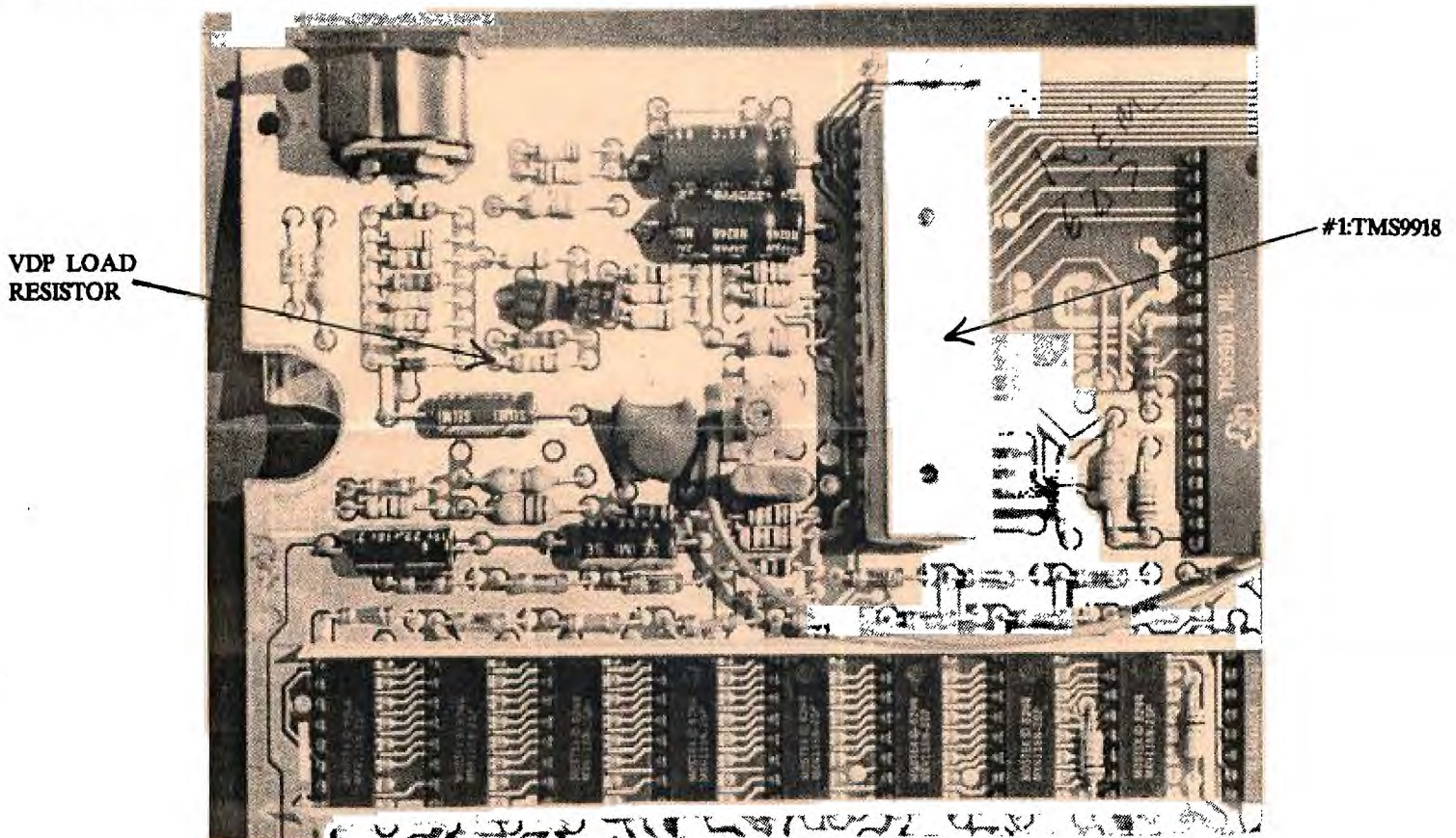
1. Making Your Video Better

This modification will improve your video appreciably if you use the RF converter, especially if you use a television which is prone to not be sharp. The video scan has what is called a "fall time," which is controlled by the value of a resistor in the VDP circuit. The one installed in your TI is most probably a 560 ohm resistor. Go to an electronics store and purchase a 330 ohm, 1/4 watt resistor (they often come in packs of two, for about 60 cents). Now refer to the picture above. (For information on getting into the computer, if you need it, see page 5.)

Notice in the picture that the corner of the main board where the five-pin DIN plug comes out is shown. The large chip (arrow #1) appears white because of heat-sink compound on it. To the left of this chip, and below two black transistors shaped like cylinders with a side shaved off, are two resistors. The second resistor underneath is the VDP load resistor. Check its colored stripes to ascertain its value (probably 560 ohms)). Turning the board over and locating the leads of this resistor on the other side, apply a low wattage (25-40 watts), pencil-type soldering iron to them, pulling the resistor out from the other side with needle-nose pliers or a similar instrument. Bend the 330 ohm resistor to the appropriate shape, clip the leads somewhat, and install it. Always be careful not to put hands on the leads to integrated circuits as you handle the board.

Pause, Quit, or Interrupt

Three buttonswitches could have been very useful on the 4A if TI had put them there; but they probably didn't think the 99 would get this far. The three are: A pause switch, a reset or quit button, and a load interrupt switch. Some of us have the load interrupt switch sold by Tenex; but it requires a separate piece to be inserted in the already cumbersome "foot" construction, and is unwieldy. Here is a simple modification to install all three in one sweep.
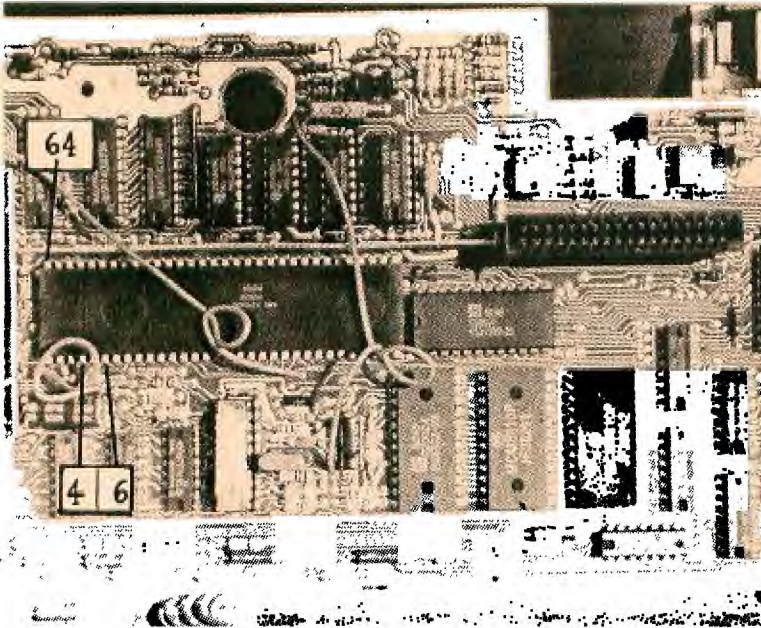
STEP 1: Locate the main processing chip (CPU); it is the largest chip on the board. Looking at the chip from the top (component side), identify pins 4, 6, ad 64. #64 will be on the side of the CPU nearest the large hole in the board, and farthest from the GROM port socket (see drawing at left). #1 is directly across the chip from it; so 4 and 6 are the 4th and 6th pins to the right.(All this is very elemental unless you have never worked with chips before.) Now, turn the board over and identify these same pins from the back (solder side). Don't get confused!

STEP 2: Get four pieces of stranded wire about a foot long, or a section of ribbon cable of that length and containing four wires. Separate about two inches of the wires on each end of the cable. Strip the ends of the wires about 1/4 inch, and tin them (heat with solder gun and touch solder to the wire to make it stiff). With needle nose pliers or tweezers, bend each lead into a tight curl. Put one end of three of the wires over the protruding pins of 4, 6, and 64, and deftly solder each in place. Be sure to use a low wattage iron, with a sharply point tip, fully preheated, so that you can solder the leads within a second or so. Now solder one end of the fourth wire to a nearby strip of the ground of the board, such as that which runs around the outside of the board.

STEP 3: Secure two switches: a miniature, momentary pushbutton, and an three position toggle switch, normally open, momentary one direction and closed the other. If you cannot find the toggle switch with one side momentary, get one with both sides locked. Mount the two switches on the console in a place that will be convenient without being dangerous (I put mine on the right side, right up next to the front of the speech systhesizer).

STEP 4: Connect the opposite end of the wire from pin 6 to one side of the momentary pushbutton. This is a reset switch. Connect the wire from pin 4 to the momentary side of the toggle switch. This is now the load interrupt switch. Connect the lead from pin 64 to the other toggle. This will be the pause button. Now connect the wire from the ground on the board to the other sides of each of the three switches. This completes the modification. Route the wires out of the silver cover to the computer board through the slot on the bottom side, and reassemble the computer.
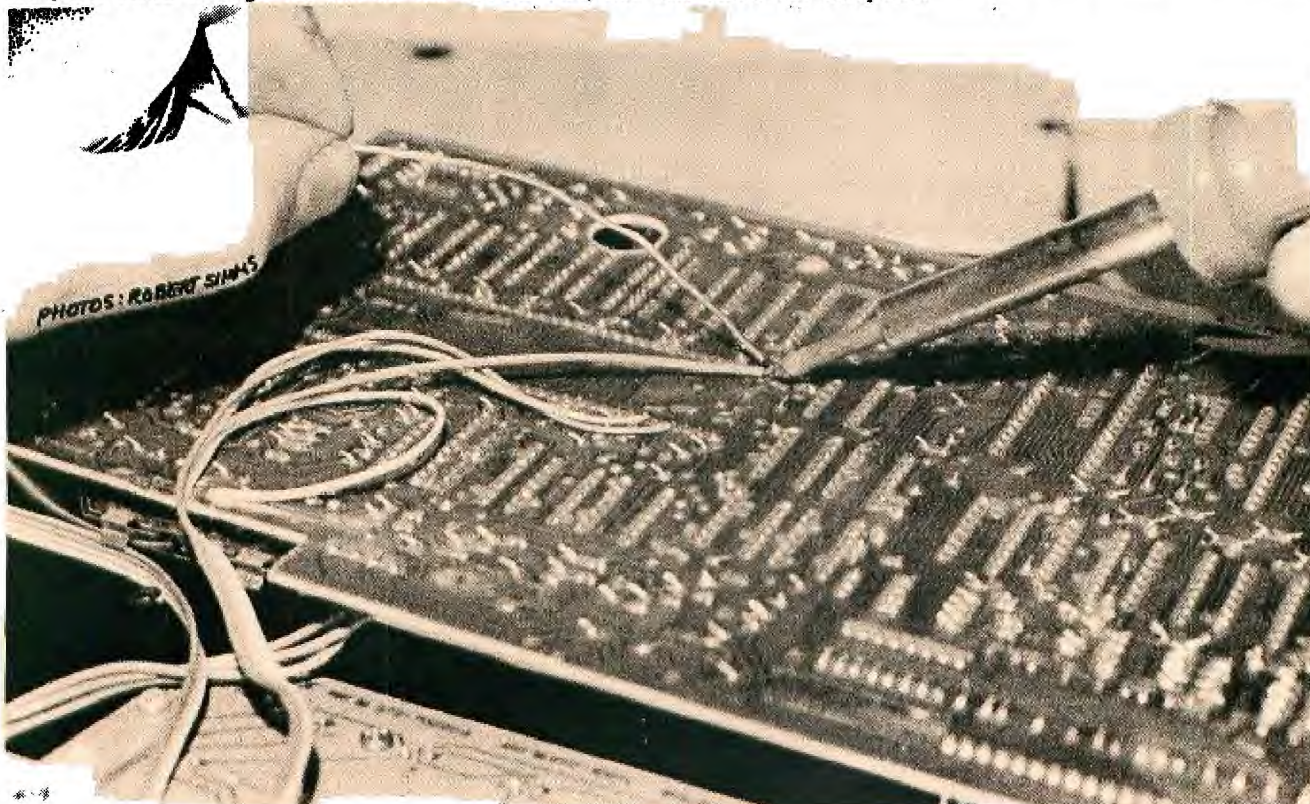
RESET: Use like the quit button (FCTN =).

PAUSE: Stops a program cold; release switch to continue.

INTERRUPT: Runs an assembly program in upper memory if one has been previously loaded, such as a screen dump routine. Press for only a half second or so.

Getting Into The Computer Itself

If you want to perform the modifications on the previous pages but have never been inside the computer and are not certain you want to tackle it, take heart. It is not hard to get into, and if you just take your time and do it in an organized way you will have no problems.

Start by removing the screws from the bottom of the computer, and lifting the bottom off. With the keyboard nearest you, the board to the left is the power supply, and the silver box along the top is the computer proper. Remove the screws to the power supply (picture 1), and the keyboard (helpful but not absolutely necessary). Making sure there is no cartridge in the slot, lift out the computer board from the right end, unplugging it as you can from the keyboard. Now take out the screws which hold the silver shield/box together, two of which are located on the right end, and one on the far left (in picture two, the screwdriver is in one screw head, with another nearby, and a finger points to the screw on the other end).

Carefully separate the halves of the shield. Avoid touching the components themselves or the pins on the other side: handle the board by the edges. Now procede with the modifications. -Ed.

NOTE: Before removing the bottom, take the power switch button off by prying it and pulling it straight forward.
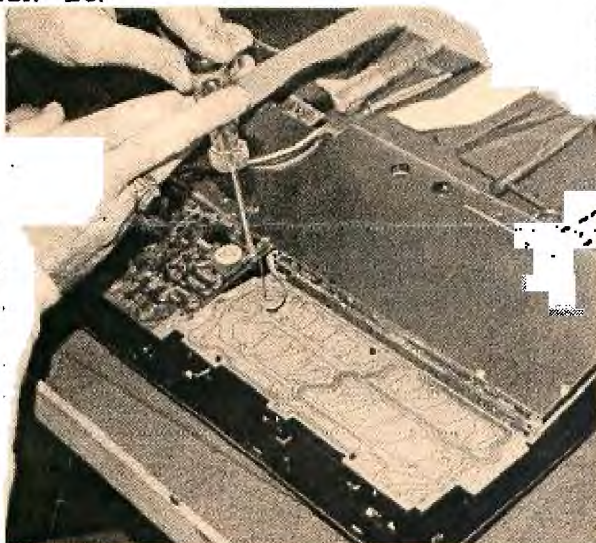
PICTURE 1
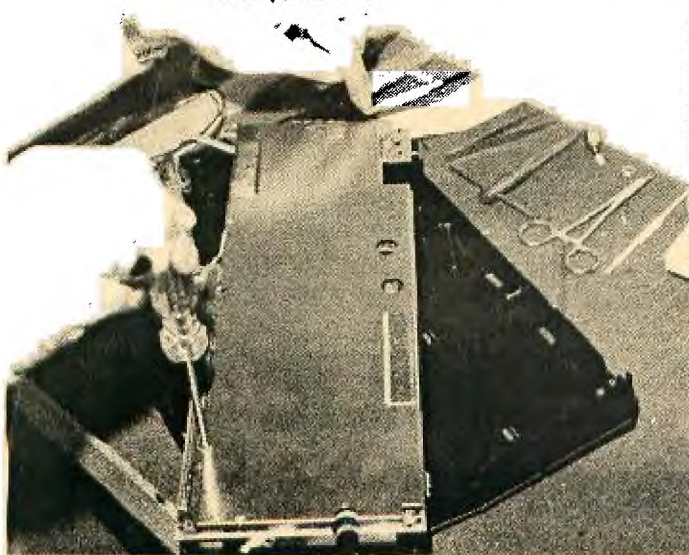
PICTURE 2

SHORT PROGRAM OF THE MONTH
Enjoy this short game program.
Credits to the listed author and to the QB Monitor, the newsletter of the Queensborough Club, with whom we have exchange.

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1 !    FORTUNE OF WHEELS
          A TINYGRAM
     by Mike and Ed Machonis

2 CALL CLEAR :: INPUT "ENTER
 THE MYSTERY PHRASE    ":M$
:: CALL CLEAR :: L=LEN(M$)

3 D$=RPT$(CHR$(30),L):: FOR
J=1 TO L :: IF SEG$(M$,J,1)<
>" " THEN 4 ELSE D$=SEG$(D$,
1,J-1)&" "&SEG$(D$,J+1,L)

4 NEXT J :: PRINT D$

5 T=T+1 :: PRINT :"TRY No.";
T:;: :: INPUT "TYPE LETTER O
R ENTIRE PHRASE":A$ :: IF LE
N(A$)>1 AND LEN(A$)<L THEN 5

6 W=L+1-5 :: IF A$=M$ THEN 9

7 FOR J=1 TO L :: IF SEG$(M$
,J,1)=A$ THEN D$=SEG$(D$,1,J
-1)&A$&SEG$(D$,J+1,L)ELSE 8

8 NEXT J :: PRINT :D$ :: GOT
O 5

9 FOR J=1 TO W :: CALL SOUND
(200+J*10,330+40*J,0):: NEXT
 J :: PRINT :"YOU WIN ";STR$
(W);",000 WHEELS!":;: :: INP
UT "PRESS ENTER TO PLAY AGAI
N";G$ :: T=0 :: GOTO 2
```

Of interest to our readers may be a source for some TI parts. Lolir-Main in Dallas is advertising TI-99/4A surplus. An ad appears in the January 1988 Computer Shopper on page 444. They have switching power supplies (for the console, and for various projects which have been shown in this and other newsletters), for $3.50, a replacement keyboard assembly for #3.50, and an RF modulator, also for $3.50. They will accept Visa or MasterCard. The address is:
LOLIR-MAIN
13933 N. Central #212
Dallas, TX 75243
214-234-8032

THE TYPICAL TI USER

Ali Ulgen, a member of the NorthCoast 99ers in Ohio, did a survey last year of TI owners, in which 753 forms were returned, from 73 groups. The results are out, and they simply give a picture of what TI owners are like. We thought it would be interesting to show what the "typical" TI user is like, according to the survey results. Mind you, this is not a scientific illustration.
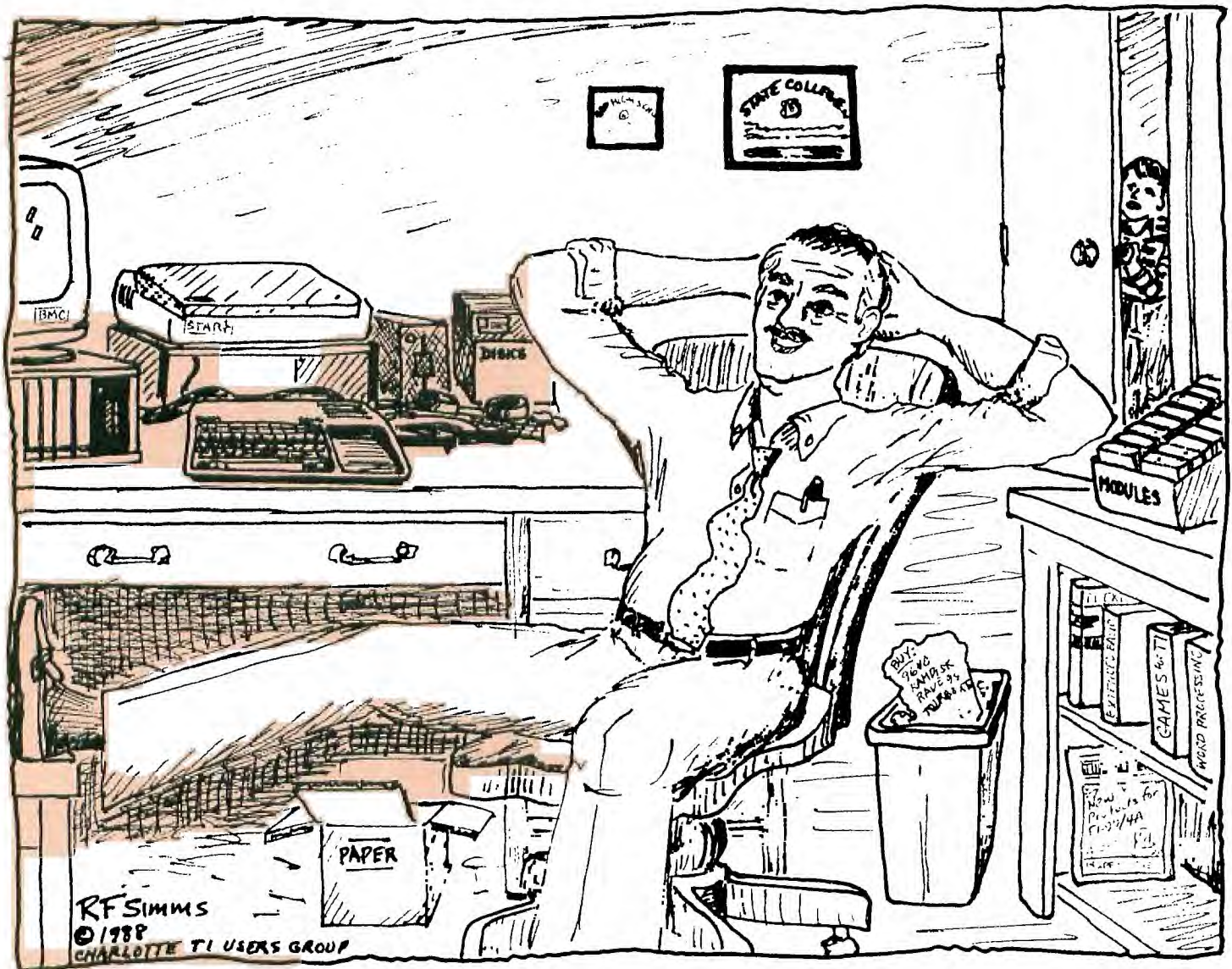
He is a he, over 45 years old, with a high school and a college degree. He is a self-employed, or professional man, who uses a computer to some extent at his work. He owns two TI's, one of which probably IS at work. But only one of his systems is fully expanded. And that one has the standard TI equipment, 32K, TI controller, and still has one SSSD drive in it, with a second drive external. He owns no hard disk, RAM disk, 9640, Turbo XT, Rave 99 keyboard, mouse or any body else's peripheral card, and probably doesn't plan to buy any of them. His printer is a Star, most likely a Gemini. He did graduate to a monitor some time ago, and picked up one of the less expensive BMC's--but only for one of his computers. The other still has a TV hooked up to it. On his shelves are quite a few disks, and more than twenty-five modules. Some of those modules are games, for he still likes to shoot spaceships and capture treasures. Outside of that, he uses his TI for word processing, doing letters and other small tasks with it. More and more, he is trying to find ways to organize his life with that "perfect" database, which he hasn't really found yet. He programs some, mostly in Extended BASIC, but has never had the nerve to put it on the fairware market. His kids are waiting to use the computer for some of the educational and game cartridges he bought back when he justified the computer by saying it would help the children in school. Once in a while he gets on the telephone, spends an hour or so with a friend and transfers a program over his slow modem. More and more of his friends are online with a national electronic service, so he is thinking about it himself. Tonight, he will go to his user group meeting, which he wouldn't think of leaving--it's his lifeline to continuing enjoyment of his TI

In Other Newsletters...

AMARILLO 99/4A, NOV 87
Great tips for using and improving the RF modulator;
Comparison of 4A/Talk and Fast Term; Trackball tip;
Cartoons.

AMARILLO 99/4A, OCT 87
"Permanent" screen color change; Technical data on control
signals in the RS232; Money and the TI; The Constitution and
the Computer (humor); Grand Ram specs.

AMARILLO 99/4A, FEB 88
Cassette dubbing cable; Build a burglar alarm; Review of the
Rave 99/105 keyboard; Cartoons; Comparison chart of drawing
packages; Reprint of some of our graphics.

BOSTON COMPUTER SOCIETY, FEB 88 (NOT an exchange)
9640 column on operating systems; Review of PC Transfer;
Source for parts for TI, including power supplies and RF
modulators; c column; Peter Hoddie on memory cards.

BOSTON COMPUTER SOCIETY, DEC 87
Mapping the P-Code card; 9640 stuff, archivers, etc; c Column,
doing arrays; Esperanto for BASIC?.

BAYOU BYTE, JAN 88
Overview of the protoboard, projects it will make possible;
Profile of Barry Traver; Historical notes on TI; Rounding
numeric input; Comparison of database programs.

99ER OUTPUT (BRAZOS VALLEY), FEB 88
Multiplan mania, part 4-Naming cells and copying; Details on
ordering Horizon RAM disks.

BYTEMONGER, JAN 88
Article on Musicprint, a companion program for TI Artist
which facilitates producing excellent music manuscripts; A
program for kids, "Bees;" Address lists (program listing); Using
Gemini block graphics to produce graphs; Grom port
replacement.

BYTEMONGER, FEB 88
Review of Funnlweb 4.0; A realist's computer glossary
(humor); Kidkeys program listing-A Fortune of Wheels; Ways
to list a program-25 of them; Various bits by Bob Krause on
clamshell cases, 16-bit processors funneled through 8-bit buses,
more; Notice to CFS users.

CALGARY 99ERS, FEB 88
9640 details; Review of My-Art (9640); More raving on the
9640-How to best configure it (the editor is getting green).

CALGARY 99ERS, JAN 88
Lots of little bits on various items-9640, IBM compatibility,
pirating; The GIF format for RLE's.

CIN-DAY USERS, JAN 88
Error trapping in XBASIC; Highly technical piece on data
chain pointer blocks; Tigercub #24; Floppy compatibility chart.

CLEVELAND AREA, JAN 88
Using "Certificate 99"; Update on the Picasso Publisher
controversy—is it fairware or not?; 4th Plot, a forth program;
Results of Al Ulgen's survey.

CLEVELAND AREA, DEC 87
Updates on new products and programs; Using Miniwriter II,
word processing for the user without an expansion box;
Information on Disk Traveller and how to subscribe; A high
speed cassette oader; Review of Enhanced Display Package;
Review of Asgard's Legends; Using the Imagewise Digitizer
with the TI; Review of Chainlink, a game; Features of the
Gramulator for TI.

CPUG (CENTRAL PA), FEB 88
Features of the TI/IBM connection, which transfers TI text
files to IBM format; TI 99 supplier list.

CPUG, JAN 88
CFS update; Colister-a tinygram; Lightpen construction and a
program for it; TI Writer tips; Making REM statement
mid-line; Sprites and sound-listing of phone emulation;
Lightpen construction and program; a 3.5 inch disk drive for
TI; Saving Multiplan spreadsheets to disk in several ways.

DATABUS, JAN 88
Duke Power and the voltage to your computer; The design for
the TI logo, in CALL CHAR's; Word processing with
MultiPlan?; Corrected light-pen program; Using TI Writer to
transmit files via modem; Routing TRACE references to your
printer (this could be very helpful); Review of WriterEase, a
fast editor/spell checker.

EAR 99ER, JAN 88
The TI-99SG, the newest upgrade of the TI (humor);
Minimemory part 4, on assembly programming (seems pretty
thorough,and understandable to the novice); Review of Picasso
Publisher.

EAR 99ER, FEB 88
MiniMemory part 5, on moving and incrementing; Kid's
program listing, Tickle Bone; Review of Enchanter.

EDMONTON ONLINE, JAN 88
TI Writer tips, many basic ones; Building a load interrupt
switch (seems like the hard way); Reset switch (also the hard
way).

FORSYTH 99ER, JAN 88
PRBase tutorial; Tigercub #42.

CALL SAY (GRAND RAPIDS), FEB 88
Using PRINT USING with a printer; Comparison of squeeze
routines in archivers; Using archivers; Willforth on RAM
disks; Peter Hodie on comparisons of TI hardware available.

KC 99ER, JAN 88
Chicago Faire report; Discussion of interrupts (very
informative for this editor); A program to help you distinguish
letters and numbers when programming; Tigercub #45; The
Blood Bank (listing).

KC 99ER, FEB 88
Warning about an electronic VIRUS program (serious); A fix
for FUNNLWEB (version unknown).

LA 99ER TOPICS, FEB 88
(This is a 33 page newsletter, packed with full articles. Only a
sampling indicated here:) Column of general interest by Mike
Dodd; Sector Comparison; Their library listing.

LEHIGH 99ER, NOV 87
An explanation of file processing (Editor recommends this for
learning how to manage files in your own programming);
Arrays and Sorts, by Jim Peterson.

LEHIGH 99ER, DEC 87
Various reviews, introduction to the 9640.

LEHIGH 99ER, JAN 88
Geneve facts.

LINCOLN 99, FEB 88, internal information only.

LINCOLN 99, JAN 88, internal information only.
Print a Tag, by Ed Machonis, prints gift lables.

MONTREAL 99ER, FEB 88
Introduction to spreadsheets; Math tutor; Tigercub #26; Turtle
planning guide; Introduction to LOGO.

NEWS NET99ER, NOV 87
Thoughts on the 9640; Game reviews, short; Graphics
Expander, by Peter Hoddie, expands fonts or pictures.

NEWS NET99ER, DEC 87
The Night Before Christmas in Texas; News release on the
Gramulator; How to start moonlighting with your computer.

NORTHEASTERN 99ERS, FEB 88
General information on diskettes; Positive TI talk. Flow chart
for Funnelweb 4.0 (reprinted in this issue of our newsletter);
Putting a program together, by Jim Peterson.
OH-MI-TI, JAN 88
Report on MDOS 1.0; Make your own subroutines using
CALL; FairWare program listing.
OH-MI-TI, DEC 87
Using My Art with the 9640; No-no's for disks and drives;
Using arrays to build tables; Interfacing to the real
world--using programs to control physical functions (in depth
article detailing ways to control circuits, etc).
OTTAWA USERS, FEB 88
Q&A on Multiplan; Super Extended BASIC from Triton;
Expansion port interfacing; Another lable program.
OTTAWA USERS, JAN 88
Discussion of archives and archiving; Disk catalogger; thorough
review of Printer's Apprentice; programming disk files.
PUG PERIPHERAL, FEB 88
Getting the most from your cassette system, on error codes
and messages; PRBase bugs; Multiplan tutorial, part 4;
Willforth on RAM disks (more); TI Writer tips; Tips for
beginners, on databases.
PUG PERIPHERAL, JAN 88
Cassette system, error codes; Getting started in Multiplan; Tips
for beginners, on printer operation, load programs, more; TI
Writer tips; Tigercub #43.
QB MONITOR, JAN 88
"Cleaning up" programs; Zork II; Brain teaser.
QB MONITOR, DEC 87
Declaring variables in Forth; Fortune of Wheels; Setting your
printer; Control key codes and the Rave 101 Keyboard; La
Styler, by Ed Machonis (listing).
R/D COMPUTING, VOL 2, 87
32K on the 16 bit Bus; Improving your powerstrip.
ROCKY MOUNTAIN 99ERS, JAN 88
Forth for fun; File processing; more on RAM disks;
Letterheads with TI Artist (a companion program disk).
SAN FRANCISCO 99ERS, JAN 88
Pinouts for TI ports; Call loads; P-Term Instructions (Many
use P-Term enthusiastically with national bulletin boards).
ST LOUIS 99ERS, COMPUTER BRIDGE, FEB 88
Notes of interest on various things, a new book on TI Writer
especially for beginners; Basic banners; making a test fixture
to measure the power requirements of a disk drive (do this
before putting half-heights in your box).
ST LOUIS 99ERS, DEC 88
Notes on Cave Man; Tigercub #41; Editorial on computer
"users."
ST LOUIS 99ERS, JAN 88
Floppy disk drive compatibility guide; Review of PC Transfer;
A small game listing; Peter Hoddie's 9640 enlightenment.
SUDBURY 99ERS, JAN 88
Tips on playing Spad XIII; Horizon RAMdisk ROS 7.1 info.
SUDBURY 99ERS, FEB 88
Using Disk Utilities by John Birdwell; Drilling template for
half-heights in the PE box; Tunnels of Doom list of monsters
and stats; recovering an apparently erased RAMdisk, when it's
just the directory.
TRI VALLEY 99ERS, CHANNEL 99, DEC 88
Kiddy Korner, game listing; Some subroutines for delay, erase,
inkey, etc.; Comparison of serial and parallel printer operation;
Some c programs.

WEST PENN 99ERS, JAN 88
Adding an option to your Navarone Cartridge Expander; Tips
for beginners; List of GROM chip numbers for replacements,
and source for ordering.
WEST PENN 99ERS, FEB 88
Valentine program; Understanding, using, creating cassette files;
A review of Wordwriter II; TI 32K memory expansion test
program and locator; Tips for beginners, various subjects.
__Thus finally endeth this months digest. Make use
of our hardcopy collection, by calling the secretary for
recent issues, or the hardcopy librarian for issues over

MUSIC MANUSCRIPTS With TI Artist

Bytemonger, the newsletter of the
Bluegrass Computer Society, contained an
article in its January 1988 issue about a new
set of files by Dallas Phillips called
MUSICPRINT, which works with the TI
Artist SLIDES feature to produce music
manuscripts. The article describes the music
as of "professional quality," depending on the
resolution of your printer. The program is
being distributed as "honorware" by its
author. To obtain it, send him a disk and a
self-addressed, stamped mailer, and specify
whether you want single-sided (a flippy), or
double-sided. If you want a sample of music,
sent $1.00. To take care of your contribution
to the author from the start, sent $7.00 for
the program. Where to send it:

Dallas Phillps
Route 4, Box 310
Mt. Olivet Road
LaGrange, KY   40031

A REALISTS'S COMPUTER GLOSSARY

BASIC: Computer language used for generating error
messages.
EXTENDED BASIC: Similar to BASIC but with more error
messages.
ASSEMBLY: Very complicated method of crashing your
system.
MINIMEMORY: Yes, except for the price.
PRINT: Program statement that displays information in
the wrong screen position.
DISPLAY AT: Similar to PRINT, but quicker.
ARRAY: A quick way to lose track of store tabulated
data. Often described as a system of filing in nested
shoeboxes, but not nearly as easy to understand.
DIM: How you feel when trying to sort out
multi-dimensional arrays.
EXPANDED SYSTEM: Refers mainly to TI's projected
profits. (Of historical interest only.)
SPEECH SYSTHESIZER: Small talking box that teaches you
to spell in A-mare-ikun.
CASSETTE SYSTEM: Slow method of storing programs you'll
probably never use again.
DISK SYSTEM: Faster method of storing programs you'll
probably never use again.
END: Statement you type when you THINK your program is

complete.

EDIT: Method of deleting END and inserting five more program lines.

CURSOR: Small blob on the screen that flashes in time with your swear words.

NEW: The random keys always found by your young son while you answer the phone.

NUM: What you become while programming until you try a softer chair.

I/O: Meaningless except when prededed by EIE.

RANDOMIZE: Shakes up two small foam-rubber dice somewhere inside the console.

PORT: Let's air into the side of the console. Much discussed by hardware buffs.

CALL SOUND: Laborious method of generating music with wrong notes.

RS232: A complicated techinal method of failing to get a printer to work.

MODEM: A device that fails to connect two computers by telephone.

CALL CLEAR: Blanks the screen to get ready for the next error message.

QUIT: The key you gently brush with your sleeve after three hours of typing.

PRK: A module that took 3 hours and forty-two minutes to put this glossary into alphabetical order.

DEF: Used in combination with other words by programmer's wife.

LET: Reserves space inside the computer, as in "Room for Let."

INT: Exasperates computer by removing all those decimal places it sweated over.

SPRITE: Small graphic that moves across the screen, and eludes the control of the progoram user.

PI: Substance which gums up the keyboard when deposited there during late-night sessions.

RAM: Male sheep with a good memory.

RUN: Command that the manual falsely claims will get your program going.

OPEN: A statement that cuts the computer off from the outside world and erases your disks at random.

CLOSE: A statement that frees your computer again and locks in all your mistaken decisions.

MAX: Valley Girl programming word.

GOTO: An incomplete statement.

IF THEN ELSE: Form used in making idle threats against the computer when it does not cooperate.

READ: What very few users do with the documentation supplied with their programs.

SIN: Trigonometric term representing what it is to spend all your time with your computer when your wife is waiting in bed.

A REALIST'S COMPUTER GLOSSARY
Written by Tiny Tim, Reprinted from the TI*MES,
　　-the newsletter of the UK Users Group
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