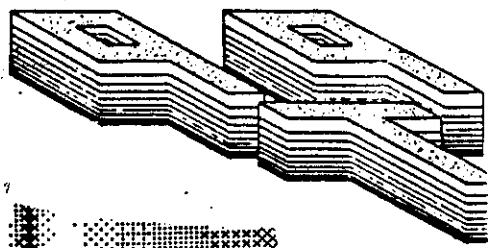
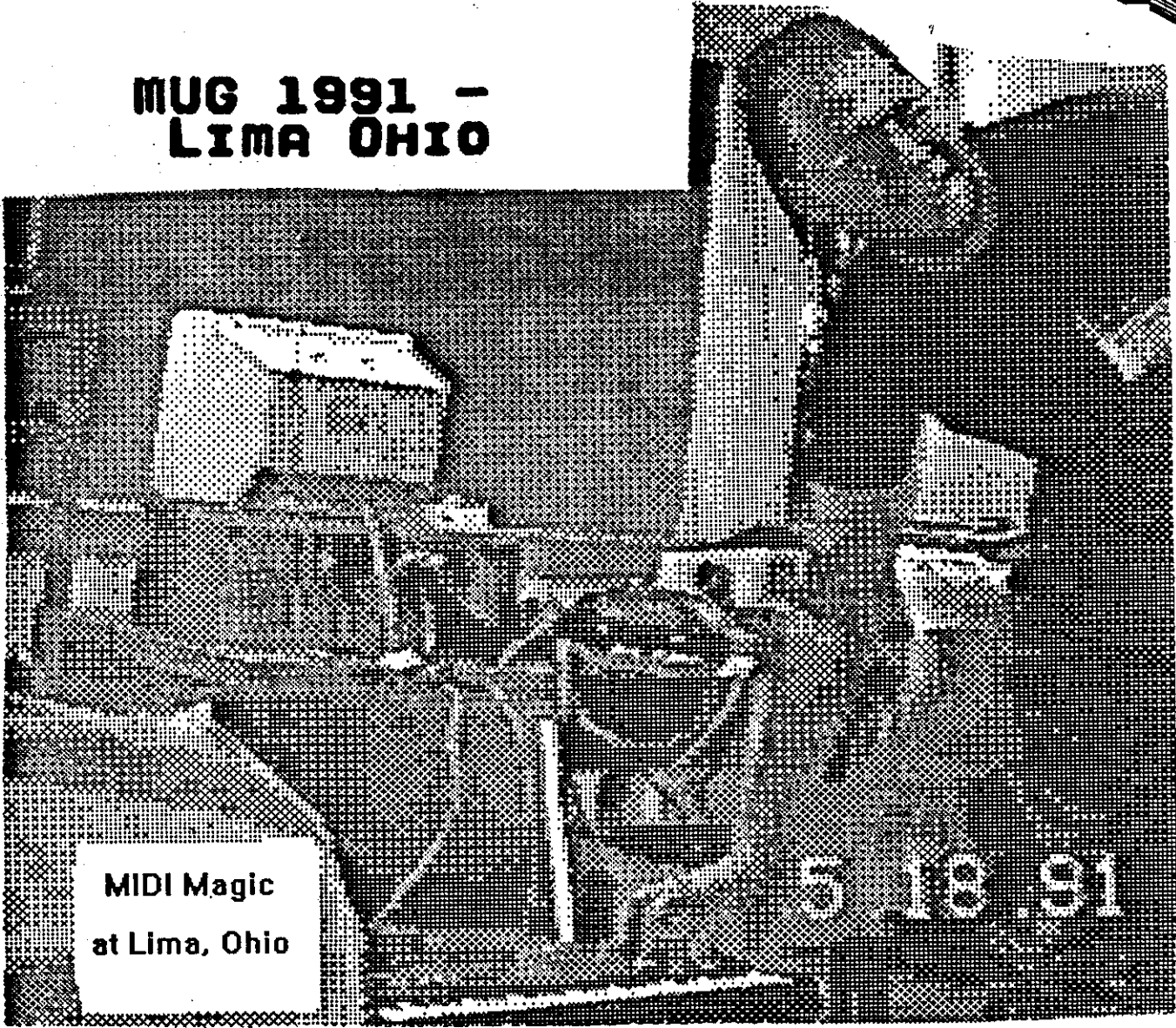


# NEWSLETTER NINE-T-NINE

MAY 1991 ISSUE



**MUG 1991 -  
LIMA OHIO**



MIDI Magic  
at Lima, Ohio

5 18 .91

**FROM:  
9T9 USERS GROUP  
15 KERSDALE AVE.  
TORONTO, ONT., M6M-1C9  
CANADA**

**To:**

JANUARY							FEBRUARY							MARCH								
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S		
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APRIL							MAY							JUNE						
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Circled are the 9T9 Meeting Dates for 1991

OCTOBER							NOVEMBER							DECEMBER								
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S		
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28	29	30	31				24	25	26	27	28	29	30	24	25	26	27	28	29	30		

McCann Software (New Address)  
4411 North 93rd Street (Please Note)  
Omaha, NE 68134

Geneve Software Available

- The Geometer's Apprentice.....\$39.95
  - The Printer's Apprentice(mdos).\$29.95
  - Ti-Forth for MDOS.....\$15.00
  - HQ\_Stacks.....\$49.95
  - HQ\_Stacks Demo only\*.....\$10.00
- \*deducted at time of purchase.  
All prices include U.S. ship&handle.



2372A Yonge Street  
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Tel: (416) 440-1792  
Fax: (416) 440-1794

121 King St. West  
Toronto, Ontario M5H 3T9  
Tel: (416) 367-1050  
Fax: (416) 367-3275

**9T9 USERS GROUP**



"Melvin, is it true you bought an exercise bike for your robot?"

9T9 USERS GROUP EXECUTIVE COMMITTEE

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VICE-PRESIDENT Neil Allen (255-8606)  
SECRETARY/MEMBERSHIPS Randy Rossetto (469-3468)  
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NEWSLETTER EDITOR

Steve Mickelson (657-1494)

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NEWSLETTER SUBSCRIPTION ..... \$20.00 / year  
DISK OF THE MONTH subscription add \$30.00 / year  
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All memberships are household memberships. A newsletter subscription is only for those who do not wish to attend meeting, 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 either our president, in writing, at the club address on the front cover or by phone.

The meetings are usually held on the last Thursday of each month (exceptions are December's meeting date, usually mid-month and the months of July and August, when there are no meetings. Consult this issue of Newsletter 9T9 for the date and time of the next meeting. Meetings are usually held in the lecture room main, at Canada Remote Systems, 1351 Crestlawn Dr., Unit D, Mississauga (Eglinton Ave./Dixie Road Area), from 7:30 - 10:30 PM.

BBS

The 9T9 Users Group supports the Toronto BBS. The TI Tower BBS # (416) 921-2731, 300/1200/2400 BPS, 24 hrs. Sysop, Gary Bowser.

MAILING ADDRESS:

9T9 Users Group, 15 Kersdale Ave., Toronto, Ontario, M6M 1C9, Canada

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FULL PAGE (7" x 10") ..... \$30.00  
HALF PAGE (7" x 5") ..... \$15.00  
QUARTER PAGE (7" x 2 1/2") ..... \$7.50

Please have your ad's camera ready and paid for in advance. For more information contact the editor. Don't forget, that any member wishing to place ad's, may do so free of charge as long as they are not involved in a commercial enterprise.

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Members are encouraged to contribute to the newsletter in the form of articles, mini programs, helpful tips, hardware modifications, 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 the editor. The names, 9T9, Nine-T-Nine, Newsletter 9T9, 9T9 Users Group, and Nine-T-Nine Users Group are Copyright (C), 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, by the 9T9 Users Group of Toronto, Canada, all rights reserved.

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## TIDBITS

#49

-By Steve Mickelson, President 9T9 Users Group  
Compuserve 76545,1255; Delphi SMICKELSON; GENIE S.MICKELSON

### This Month's Newsletter:

There is so much news this month, that my Tidbits, alone, could just about fill the complete issue of the newsletter!

Mike's (O'Dowd) Corner is back with an interesting article, laced with a good touch of humour! There is news of a 99000 accelerator card for 99/4A, a TI software emulator for the IBM world, printing GIF's using TI Artist, and many pic's from the Multi User Conference in LIMA, at which six members of our club attended!

### Home Movies Next Meeting:

We will have a showing of an hour-long video taken at the Lima Conference, featuring the vendors, some unique and interesting hardware and software, for the TI, plus an extensive demonstration of Mike Maksimik's "MIDI Master" for the 99/4A and Geneve.

### Telco Trojan Tamed:

The bug in Telco, reported earlier in the newsletter, which erased instead of files was on a bugged version of a mod that adds Y-Modem file transfer support to Telco. A good version of this batch file, written by Barry Boone, is now available. Also, a number of 80 column programs, ( six diskettes worth), and utilities have been added to our library.

I wanted to keep this month's Tidbits brief to make room for all of the above! BFN!



Ralph Goodwin at the Toronto 9T9 booth at the Lima Multi User Group Fair.

MIKES'S CORNER  
OR  
Butter Fingers Repair Section

By Michael O'Dowd, 9T9 Users Group

I decided it was time to clean one of my old single sided drives to see would it perform any better and I did not want to use one of the disk cleaners.

One of my extra drives is in a power box so I removed the four case screws and the bottom screws which were holding the disk drive in the box. Knowing how one can forget where a part goes when it comes time to put things together again, I made a sketch and notes of everything I did, no matter how small.

All those resistors and chips looked very formidable, so taking the bull by the tail, I removed the power plug and put a dot with a marker pen on the male and female parts of the plug. The four pins are marked but a magnifying glass is required to see the numbers properly. The dot saves time and when replacing parts, I also removed the 34 pin cable from the edge connector, the other end goes to the disk controller card.

With the disk drive removed from the box I then removed the connections plugged into the rear of the board. There are several of them and I sketched and marked them as well. Then the two screws holding the board were removed and the board slid out from under two tags, and I gazed at the unknown.

Remembering my Sea-going days when I cleaned the Gyro Compass Parts with carbon Tet (dangerous stuff) I decided to use alcohol. I cleaned the edge connectors with a soft rubber eraser and set the board on some aluminium foil to protect it from static. I bought some alcohol and cleaned around the worm gear mechanism being careful not to disturb the head, I used cotton swabs and changed them frequently and cleaned the head with a new swab dipped in the alcohol. Some teflon lubricant was applied on moving parts and I blew and sucked out dirt with a vacuum and put everything back together and bingo to my surprise the drive functioned on all cylinders. Later I will go into this operation a little deeper and other problems tackled.

In most books on electronics the old Mathematics rears its ugly head and it always surprises me how we humans are scared out of our wits with such a statement as "A+B=C".

After a good belt of Irish Mist I decided that if Einstein could understand this problem it must be easy. If A is equal to 2 and B is equal to 3 then C must equal five. (For solving this problem I have been given a free trip to the Moon with no return ticket.

In Most electronic books the solving of the equation  $I=E/R$  is often explained by putting the three letters in a triangle, the R at the top and the other two at the bottom. To solve for one of the letters you cover it with your finger and juggle the other two. (Sketch #1).

In the formula  $I=E/R$  means that the Current (I) is equal to the Voltage (E) divided by the Resistance (R).

The possible combinations are as follows:-

- (1)  $I=E/R$ .
- (2)  $R=E/I$ .
- (3)  $I \times R=E$ .

IF we know the value of two of these letters the other quantity can be found.

Given that Electric Motive Force (also called Voltage) (E) is equal to 110 volts.

Resistance (R) is 10 ohms.

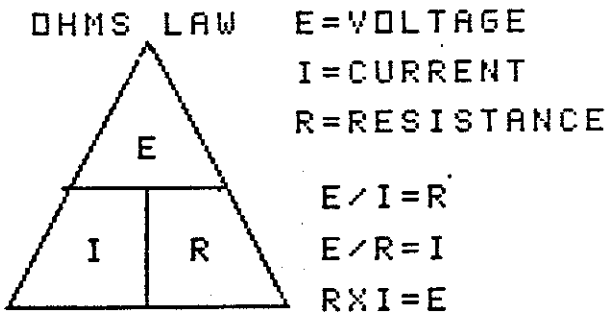
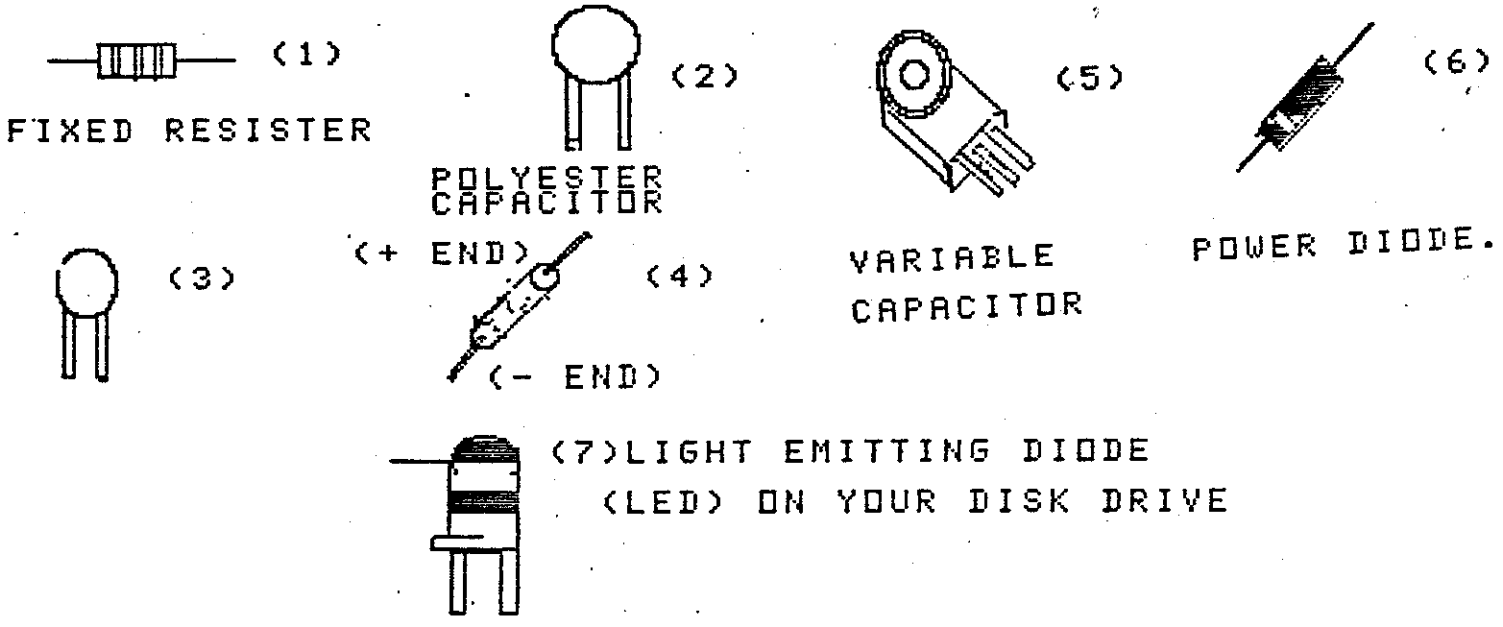
Then Current (I)=E/R which is 110 divided by 10 which is  $110/10=11$  amps

Current (I) is equal to 11 amps.

If the current was 11 amps and the resistance was 10 ohms then by formula  $I \times R=E$  which is (I) multiplied by (R) is equal to  $11 \times 10=110$  so voltage (E) is 110 volts.

This is very basic but I have mates that juggle dartboard figures in their head yet run for cover when the problem is given in the form of letters.

Any person really interested in electronics should do a basic maths course and learn to cross multiply and juggle formula. It is much easier than talking computer lingo. In my next article we will go into how the above formula are expanded and how maths can help us understand what is happening in a circuit.



VOLTAGE (E) DIVIDED BY CURRENT (I) = RESISTANCE (R)  
R MULTIPLIED BY I = E

(FIG 1).



"When I said that we are dealing with 'limited memory', I was not talking about the computer, I was talking about you!"

FOX TROT



This is a short tutorial on printing "color" on your "black and white" printer! I hope you understand what I'm about to explain and get some use out of it!

By now most of you have either seen or heard about Giffy. A great program from the very talented programmer Barry Boone.

The program allows you, not only view, but save GIFs in TI-Artist form so that, they can be used in your own programs. The Missing Link is a good place to use them in for one, however did you know they can be printed?

Using TI-Artist you can get the quality print you've never expected. In order to use the GIF pictures in this way, you'll have to do a little work.

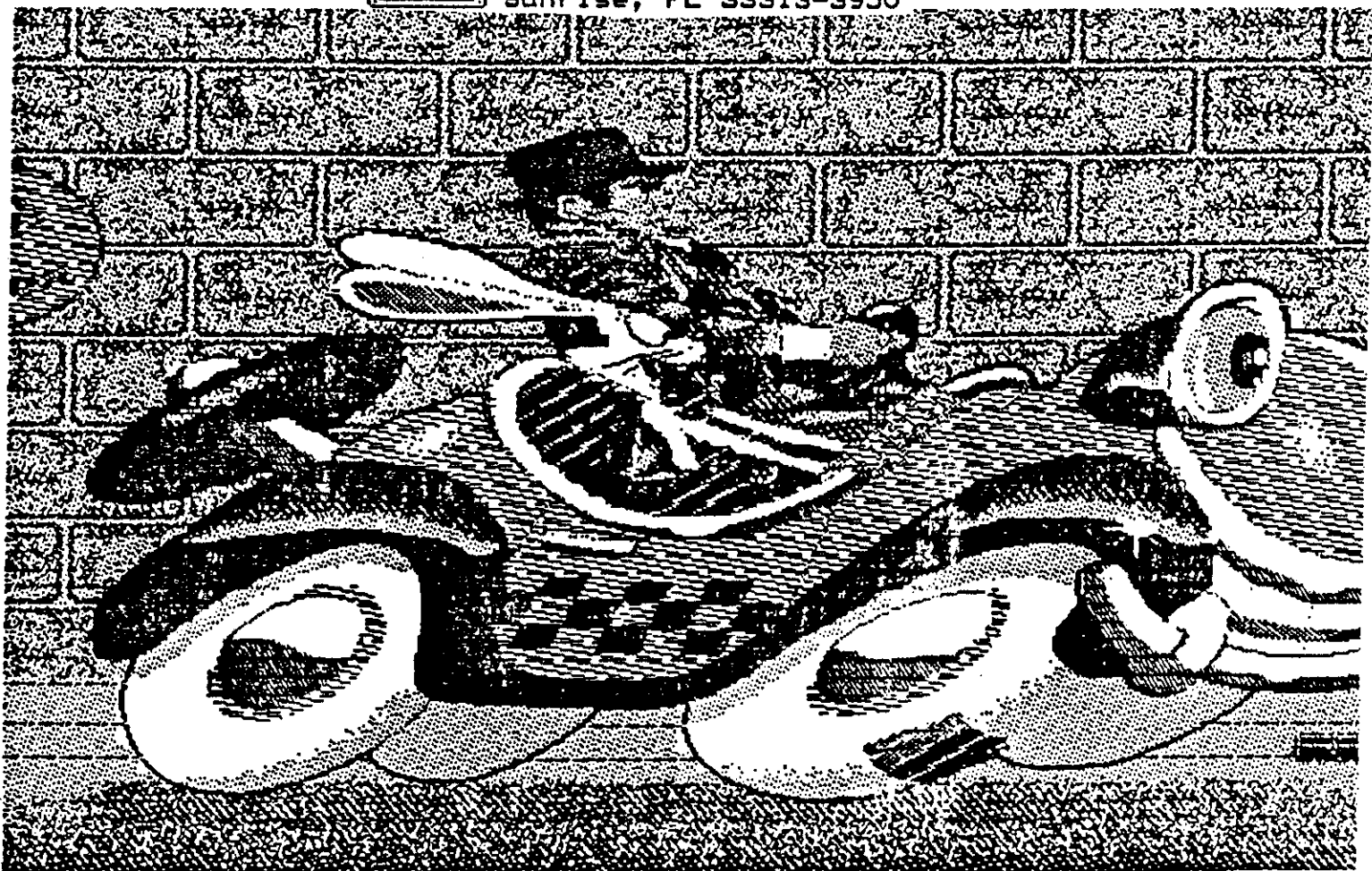
I'll run you through the steps I took to get the picture displayed below.

I used the GIF picture ROGER. Then I've chosen the default "1", selected not to have the "Black Line" mode, and did not want to "Condense" the picture. I then entered "g" for "Left" up shifts, and the picture loaded. I then chose option 2 to save to TI-Artist as, "ROGER1".

I repeated this again only I changed the "Left Shift" to 256, as the screen on the TI is 256 pixels wide. Then save the second picture as "ROGER2". I did this two more times shifting the next left "g" and up "192". This created "ROGER3", and the last picture left "256" and up "192". "ROGER4" was the last file saved. Now I had my pictures to work with.

I exited the GIF program and loaded TI Artist, selected the print option. I then chose too print 2 pictures. I then entered DSKX.ROGER1 and DSKX.ROGER2. Pressed, "y" as for the color option and went back to main print menu. I selected "S" to scrunch them together and printed them out. Then did the same with ROGER3 and ROGER4. On the next page you can see my results! Have fun!!! Till next time!  
Mark Wacholtz

C/o Mark Wacholtz  
2141 NW 64th Ave #15  
Sunrise, FL 33313-3950



# MUG 1991 - LIMA OHIO SATURDAY, MAY 18

A REPORT BY STEVE MICKELSON, 9T9 USERS GROUP  
COMPUSERVE 76545,1255; DELPHI SMICKELSON; GENIE S.MICKELSON

## MUG Conference:

The Multi User's Group Conference is an annual event held at the Ohio State University campus at Lima, Ohio. This year's event, though my first, was well attended by members of at least ten TI Users Groups, including several Canadian groups. Six 9T9ers attended the fair, including Randy, Ralph, John, Gary, Andy and myself. I think it was Ralph who said that you can tell the Canuks, they're the one's with the camcorders, as the editors of North Bay, Oshawa and Toronto newsletters captured the event on video.

I have digitized some of the images for the newsletter and wouldn't be surprised if North Bay's newsletter had some pic's as well! As the Lima group sells tapes of the event to users groups, as a fund raiser, I avoided taping any of the seminar's, with the exception of the second given by Mike Maksimik on the MIDI interface for the 99/4A and Geneve.

The schedule of events was, as follows:

7:00 AM Doors open, display set-up time.

8:30-9:00 Charles Good previews Funnelweb V4.32, showing the DISK REVIEW management of file comments.

9:00-10:00 Mike Sealy with the latest software from MS EXPRESS.

10:00-11:00 Eunice Spooner and Christopher Bedard of The Oakland Computer Club, discuss an elementary school users group.

10:30-11:00 Barry Traver showing programs that write other Assembly and XB language programs.

11:00-NOON Irwin Hott on current status of the newsletter clearing house.

11:30-12:30 Chris Bobbitt on software and hardware from Asgard.

NOON-1:00 Multi user group conference, informal discussions among user group officers.

12:30-1:30 Latest hardware from Bud Mills Services.

1:00-2:00 Mike Wright with bits and pieces from the history of the TI 99/4A.

1:30-2:30 Barry Traver on GENIE and Genial.

2:00-3:00 Gary Bowser on hardware and software from OPA.

2:30-3:30 Joe Ross on C-SHELL 99.

3:00-4:00 Beery Miller on 9640 NEWS, and 99/4A NEWS.

4:00-5:00 Chris Bobbitt on more Asgard products.

5:00-6:00 E.M. Smith shows Art Gibson's NEWSLETTER PRINTER and revised TI Writer Formatter.

The conference ended at 6:00 PM and was followed by an informal gathering at the local Holiday Inn.

## MIDI Magic:

While I am not musician, both my wife, Sophie, and daughter, Athena, are local musicians, I appreciate music enough to appreciate Mike Maksimik's MIDI interface for the Ti. There are two versions, a TI and Geneve version, respectively.

MIDI Master consists of a hardware interface between an electronic instrument, (typically a keyboard with a MIDI connector), along with sequencer software which permits the user to "record" and "playback" music, at the same time modifying and manipulating the music.

Using an \$80.00(US) Casio keyboard, Maksimik demonstrated the MIDI's ability to play four-part and six-part harmonies. The Casio, ( I believe he said it was a model MT240), has the ability to play one of a number instruments, using a 210 tone bank. MIDI Master expands the Casio's capabilities to around 5,000 tones.

The current version of MIDI Master, (V2.21, release dated 5/7/91), uses 2 bytes of RAM memory per note, so that a 180 measure song, such as "The Dwelling Place", uses only about 8K of RAM or roughly one third of the available memory space.

The next version of MIDI Master software, dubbed as the "Cakewalk Version", (V 3.0, which will be released free automatically to all V2.21 users), will use 6 bytes per note, but will allow direct "recording" from the keyboard, simultaneous record and playback, recording of MIDI signals from another, (non-TI), computer's MIDI output, plus possibly note velocity manipulation. Note velocity is controlling the individual volume of each note, as is found on more expensive, (\$1,000US and up), keyboards. Also, the Cakewalk MIDI Master will eliminate the need to use PC Transfer to port IBM MIDI Cakewalk files to a TI.

Currently, MIDI Master allows for up to 127 instruments, and when used in a system which has four RS-232 ports, (using two TI serial cards), with four levels of devices, for a maximum of sixteen MIDI devices. This makes possible the establishment of a MIDI network, all linked by and communicating through the MIDI language interface.

For software writers, Maksimik has written a number of Extended BASIC programmer routines. This would allow a program to teach music or chords on a TI or Geneve, equipped with a MIDI Master interface.

Because of the greater memory required for the six-byte-per-note, a decision may have to be made as to which memory expansion device to support, (eg GRAM Kracker, Supercart, RAMBO version of the Horizon RAM disk, etc.). Work is underway to convert these routines to Myarc Advanced BASIC, which will automatically give the user more program memory space.

For the musician, MIDI Master at \$50.00 US, is a bargain

Also at the MUG Conference:

I was treated to a demo and given a copy of an article, by Harold C. Hoyt Jr. of a modification to the TI console to make access of the Function and Control switches, through single switch actuation, of a toggle switch added to the console.

At the L.L.Conner table, I was shown a German "GROM (sic)" device, which can even dump and load MBX carts, except for baseball. Gary bought this device at the end of the day.

Also shown by Conner, was an Australian diagnostic device, that permits checking and recording all RAM, ROM and/or GROM and then use the recorded data as a baseline for comparison, so that a defective console or cartridge is compared to the data of a good reference. The user will be told what RAM, ROM or GROM should be replaced.

Another device was HAMSOF for the TI-99, which can read CW from a shortwave receiver, and translate the code to ASCII for display on the screen or to a printer. I bought one of the two of these devices AKA as RF DATA Communications Modem. I hope to give a demo of the HAMSOF unit.

I also bought an incomplete MBX system, which was missing the rotate pot on the joystick, as well as the microphone and power supply.

New Digitizer for 9640:

I spoke with Beery Miller, who said he is working on a 9640 digitizer, which will piggyback onto the Geneve's 9938 Video Processor Chip a 9958 and circuit.



Asgard's ReflecTions:

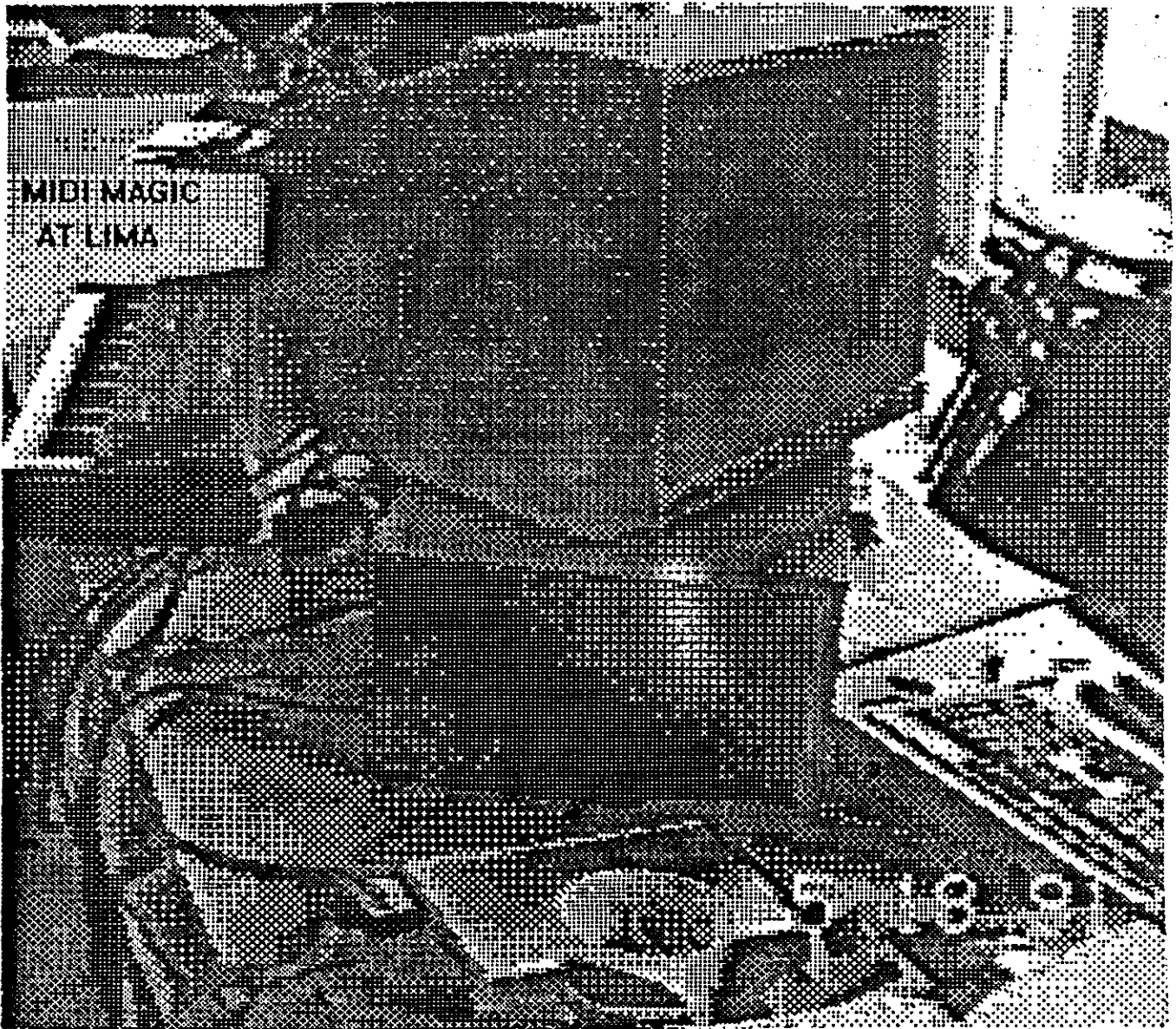
Due to an untimely demise of Chris Bobbit's NEC Laser Printer, Asgard's product and news magazine was put on hold. Chris told me he plans to soon bring his readership up-to-date, with the next issue.

LOGO Tutorial Package:

Eunice Spooner was kind enough to make available her LOGO Tutorial Package for only \$10.00. The price pays for a VHS Tape with six one-hour lessons, which covers the Turtle commands, variables, plus music, (on TI LOGO II), and sprites. Also Included, was a disk of LOGO procedures shown on the tape. I hope to add this to our library, as well.

Conclusions:

The MUG Conference succeeds, because of the uncounted hours of Charles Good and the rest of the Lima users group. It gives a platform for various TI groups to openly exchange thoughts and ideas on our system. Though commercial vendors are present, the Conference's appeal is that it concentrates on the user group and the group's influence upon the community. Group problems are discussed, software and hardware needs are addressed, in a casual atmosphere, which belies the avid devotion to the most famous orphan, since Annie. Every Tler should make at least one pilgrimage to this Mecca of the 99/4A.



by

**HAROLD C. HOYT JR.**

A lot of people have trouble with the function and control keys on the TI keyboard. TI used to supply on special order, "handicapped keyboards", with the control and function keys "alternate action", just like the alpha lock. With these special keyboards, one would press the function or control key once to set it and then press it again to release it.

For instance, to do a left arrow in TI-Writer, press the function key once to set it, and then press the key as desired. Then, if you are through with the function key for a while, press the function key again to release it. While awkward for most people, this approach would allow a one handed person, or a person with no hands and a pointer on his head to use key combinations.

The modern approach is, of course, to use a full keyboard with separate function keys. Even the modern IBM style keyboards have ignored the key combination problem, especially as pertains to the control keys. A lot of this is software dependent.

To protect against accidental key entry some DOS commands want you to hold down as many as four keys at once! That's really ignoring the handicapped! Somebody real clever might just make a special version of TI-Writer that intercepts key presses, and when a control or function key is pressed, a routine would toggle in memory an on-off flag for the function and control keys. The routine would display an "F" or "C" in the lower or upper corner of the screen, as a reminder.

This still is only a solution for one piece of software. The alternate action mechanical switch is still the best solution for the TI keyboard.

I was going to try to change the "ctrl" and "fctn" keys to alternate action keys by extracting the "ctrl" and "fctn" keys from a keyboard the way a dentist pulls teeth replacing the extracted keys with alternate action alpha-lock keys cannabilized from old keyboards. Good idea, but you can't do it! First, the keyswitches are force-fit during manufacture, and don't

come out easily. Second, the alternate action part of the alpha-lock switch is a little piece of stainless steel wire separate from the keyswitch itself, which isn't easily moved (By anybody but TI).

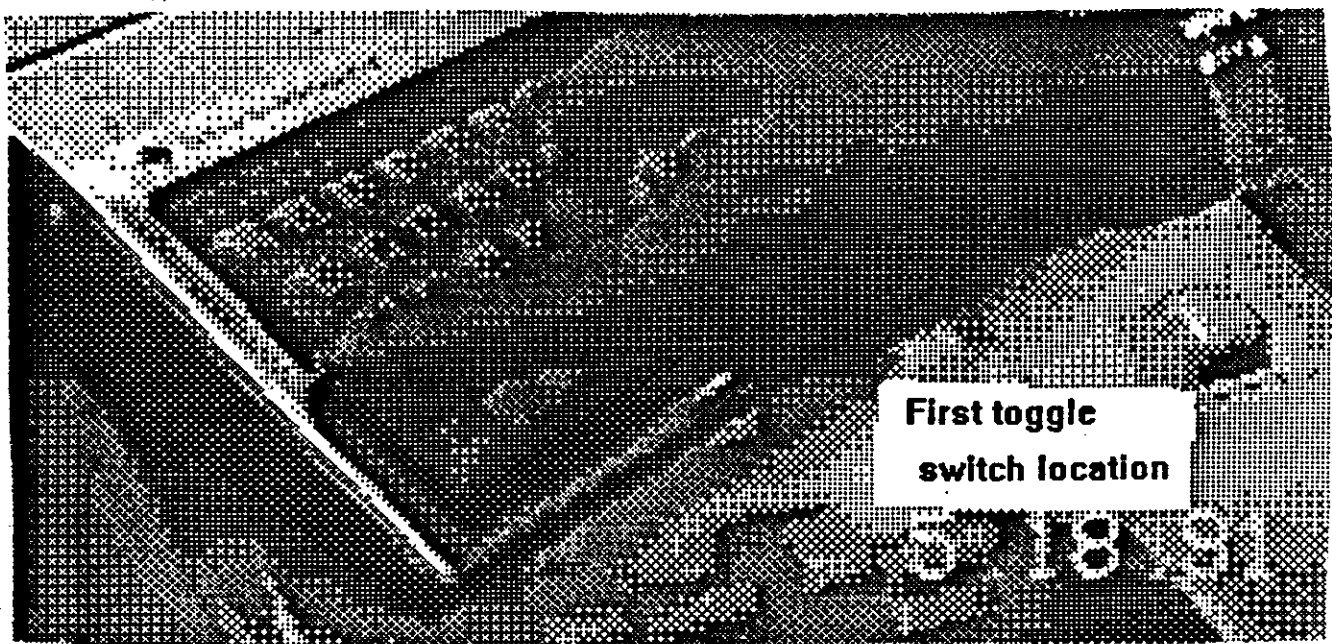
I finally hit on a reasonable solution. Buy some small alternate action switches somewhere and wire them in parallel with the fctn and ctrl keys. In the first model of this approach, I used two small Alco toggle switches. They are not alternate action and have to be poked either on or off, but have the advantage of displaying their state, either on or off. There is just room enough to drill two 1/8" diameter holes in the plastic surrounding the keyboard. One switch fits right next to the function key. The second switch, for the control key, fits just above the left shift key.

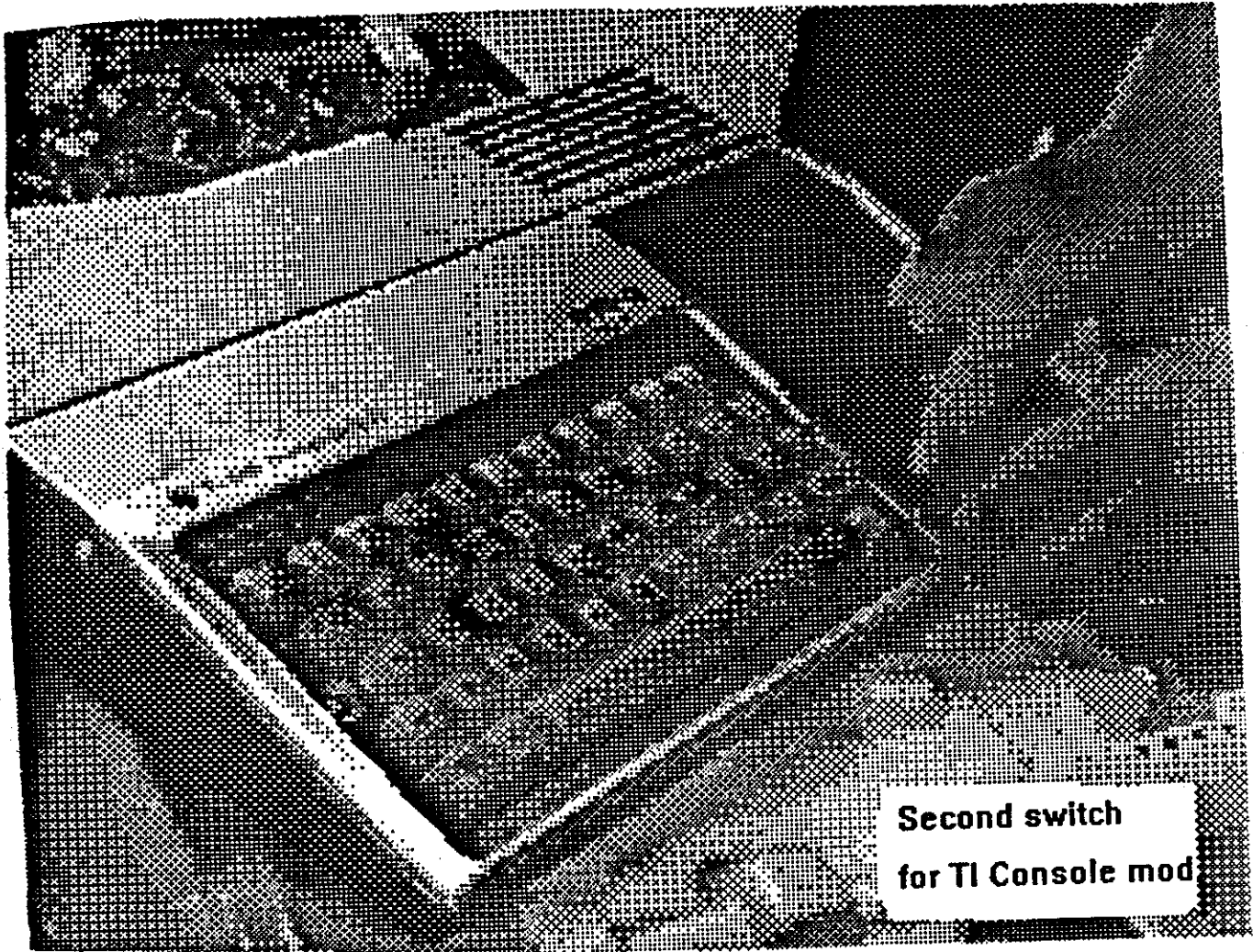
Solder two wires from each of the two switches to make a parallel connection to the keyboard printed circuit right on top of the fctn and ctrl keys. With the added switches in the off position,

the keyboard can still be used normally.

This project, like a lot of my stuff, is about a year behind schedule. The console with it's new switches, has survived initial testing and will probably be returned to the owner by the time you read this.

A messy workbench allowed me to lose the plastic console on-off switch piece that comes off easily when the console is dis-assembled. I replaced the on-off switch with a rocker switch near the back of the console. This accident turns out to be a blessing in disguise. The rocker switch is much easier for someone with hand impairment to operate than the original equipment slide switch. Simply leave the console switch in the on position and nibble a hole for the rocker switch near the back of the left hand side of the console. Use a double pole switch, since TI interrupts both sides of the transformer input coming into the console.





Second switch  
for TI Console mod

### 9T9 Want Ads

#### FOR SALE

1 TI-99/4A COMPUTER CONSOLE WITH ALL MANUALS, ETC.  
C/W CASSETTE CABLES, JOYSTICKS AND 3 MODULES,  
HOUSEHOLD BUDGET MANAGEMENT, INVADERS AND MUNCHMAN.  
-WOULD LIKE TO SELL AS A PACKAGE, ALL IN ORIGINAL BOX,  
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WRITE: MR. A.T.J. VANZON,  
R.R. #2  
KIPPEN, ONTARIO  
N0M 2E0

#### FOR SALE

I would like to place the following ad in the next 9T9 Users Group newsletter:

11 Books (including Compute's Guide to Sound and Graphics and Best of 99er)  
.....\$3.00 each.

20 Cartridges (including Pacman, Terminal Emulator II, Music Maker, Physical Fitness, Video Games,  
Personal Record Keeping, Touch Typing Tutor, Fractional Numbers, plus twelve more)  
.....\$3.00-\$5.00 each.

Speech Synthesizer.....\$30.00

TI tape recorder.....\$30.00

Infocom interactive adventure games:

Witness

Planetfall

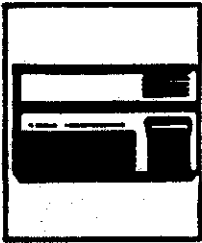
Zork

Hitchhiker's Guide to the Galaxy

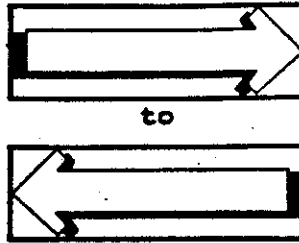
Deadline

.....\$10.00 each or \$40.00 /set

-> Phone Laurie at 690-9623 (Leave message)



Texas  
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IBM  
Compatible

**The following reprint from the Unix TI conference is a message from Germany about implementing TI emulation in an IBM environment...**

Message #3762 - Unix TI conference!

Date : 16-Apr-91 20:04

From : Thomas Opheys

To : All

Subject : Info about TI-99 emulator

-- @PTH 1:250/98.0@FidoNet

Newsgroups: comp.sys.ti

@Organization: University of Passau, W-Germany

@Message-ID: <1991Apr16.200420.26467@forwiss.uni-passau.de>

@Date: Tue, 16 Apr 91 20:04:20 GMT

Information about my TI-99/4A emulator. I would have answered all the mails I received but at my university I am not allowed to mail that much outside of Germany because of the costs. So I try to answer all questions in comp.sys.ti hoping not to bore those who aren't interested.

The emulator will require the following hardware: an IBM PC, any DOS version, and a standard VGA card capable of the 640x480x16 mode. The faster the machine, the better...

The emulator is 100% written in Assembler, for speed reasons. Someone asked me if it was possible to port it to the Amiga. Now you know the answer: naturally I could give you the source code but it will be a full time job to rewrite it for an Amiga or any other machine. You won't get a good TI emulator written in any higher language, not even C.

How will the emulator work? You'll see the original TI screen on your PC monitor. While the TI graphics only uses 256x192 pixels, there is enough space to display more information on the PC screen. When running in debug mode, the emulator displays the processor data like registers, status, debugged assembler instruction, VDP and QROM addresses and lots more.

In addition, there is a display of the current QPL instruction being executed by the QPL interpreter. The rest of the screen is reserved for some switches (ON/OFF, Load Interrupt) and Lamps (access of the peripheral cards, interrupts).

Naturally, the performance of the emulator isn't too good with that huge amount of data displayed. So you can switch it to speed mode which just displays the TI screen. As I see it now, the emulator will be only slightly slower on a 20 Mhz 386 than the original TI. But I can get it faster...

The whole hardware is supported: Keyboard, Video Display Processor with all modes (text, graphics, bitmap, multicolor), Sound Processor (in the moment, only one sound channel (of four), because of the restrictions in PC sound, but SoundBlaster owners will get the full TI sound), 32k memory expansion, MiniMemory, GROM/ROM modules like Extended Basic, Editor/Assembler and peripheral cards like the P-code card, RS232 and Disk Controller. RS232 and Disk Controller can be the only sources of incompatibilities. Because of timing problems, the Disk Controller and RS232 hardware can't be emulated correctly on the hardware level. So the DSR ROMs will be patched so that every software level call of the card routines are handled by DOS. That means that you can print to "RS232.BA = 9600.CR.LF" without problems, but terminal software like Telco won't work because they access the hardware directly.

Even more complicated will be the disk controller access. I will provide a patch of the ROMs that enable you to access every file name on your PC hard disk just by giving the normal DOS name (i.e. RUN "C:\TI\LOAD" in ExtendedBasic). And whenever accessing "DSKx" or using programs that read sectors of these DSKs (like Disk Manager 1000), the emulator accessed special files on your PC hard disk that represent a TI disk. A utility to copy whole TI disks to the PC will be provided. Again, software that directly accessed the hardware of the controller won't work (COPY-C, Turbo-Copy and RapidCopy).

Another thing you can forget is the speech synthesizer... But I shure hope that you didn't even expect that. SoundBlaster owners can perhaps play the words in ROM, but I think I can never emulate the Speech Synthesizer due to lack of hardware information...

In the moment, the emulator is absolute not ready. The processor is nearly ready (only three instructions are missing) and the TMS9900 instructions, registers and status and the GPL code are correctly displayed debugged on screen. If anyone wants to play a little with the program in its actual state, the only way in the moment is to send me a disk and money for mail return (poor student...) because they kill me if I post it to comp.binaries.ibm.pc... And, as I said before, I CAN, but I am not allowed to E-mail outside Germany.

Any suggestions, hints, hardware information (NEDDEDI) and testers are welcome! Everyone can get the source and I don't want any money. I am just loving that GREAT machine...

Thomas Opheys, Franz-Stockbauer-Weg 1, App. 88, W-8390 Passau, Germany

-- lws9012@eva.fmi.uni-passau.de Sledge Hammer and I - we're just good friends --- Fred-Uf 1.7(L)(BETA) | Origin: EGSgate UseNet < - > FidoNet Gateway (1:250/98.0)@PID: FredMail 1.7-BETA



Dear Steve,

Thank you for sending the notice regarding the Change Of Address for 9T9 Users Group.

Unfortunately, we no longer operate EAR 99'ers (East Anglia Region 99'ers) and had put out our own Change Of Address Notice over a year ago. I also sent out several "follow up" notices as many User Groups did not take note of it.

EAR 99'ers is still in operation, although Newsletter Exchanges should be sent to the following address:

MIKE CURTIS  
21 TRELISKE ROAD  
ROSELAND GARDENS  
REDRUTH, CORNWALL  
ENGLAND TR15 1QE

Please note that there is no longer an American mailing address for newsletter exchanges to be sent to. If this causes a problem, please do not hesitate to contact an Officer of the group regarding the exchange. All names and addresses are listed on Page One of our newsletters. Thank you.

I will forward your Change Of Address Notice to the Newsletter Exchange Officer and ask that he correct his records for future mailing purposes.

Again, thank you for notifying us of the change of address, and we wish you and your group continued success in all TI endeavors!

Sincerely yours,

Jo Ann Copeland, [for]  
East Anglia Region 99'ers



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Thank You,  
 Bill Shores

Your comments and suggestions are welcome:

You don't HAVE to have it all!

by Jim Peterson

Do the conversations at your user group meeting sound like a coffee break in Silicon Valley? Are you confused by talk of GROMs and GRAMs, puzzled by references to HFDCs, intimidated by discussions of megabytes and frightened by talk of burning EPROMs? Well, join the crowd, buddy - so am I!

There are basically three types of people interested in computers. First, there are those who use a computer to run programs, to accomplish something useful or just to have fun. I believe that those people are still in the great majority, although we don't hear much from them.

Then, there are those who get their kicks out of writing programs, of creating software for others to use. There aren't too many of those left in the TI world.

And finally, there are those who like to tinker with the computer, soup it up, plug in doohinkies and thingamajigs, and talk in that strange language I mentioned above. I don't know how many of those folks there are, but they are certainly the most knowledgeable, active, and interested, and they tend to dominate the conversations and the printed material in the TI world nowadays.

I presume that those fellows also do actually run programs on their souped up systems. And, some of them must be skilled programmers, because many of their hybrid hardware creations would be useless without specialized software.

I'm very glad that those people are around. Once in a while they invent something that I actually find useful, and they are a lifesaver when my equipment breaks down.

But, don't be intimidated by all that high-tech talk, and don't think that the computer world is passing you by. There are so many things to do with a computer that no one could possibly find time to do them all. Do your own thing and don't worry about the rest.

I have operated a TI software company for seven years, and I also spend a lot of time writing programs, using the

computer as a word processor, etc. I probably spend more time on my TI than 90% of the users. So, what does my equipment consist of?

I have a console with the Extended Basic module plugged in, attached to a P-box which contains a TI disk controller, two double-sided drives, the 32k card, RS232 card, and a Horizon Ramdisk. Also plugged into the RS232 card is an old Gemini 10X printer and an Avatex 1200 baud modem.

I also have a Speech Synthesizer, a pair of TI joysticks, a TEII module and an Editor Assembler module, all of which I plug in occasionally when I need them; also, a cassette recorder and cable which hasn't been used in a long time.

I use Triton's Super Extended Basic module because it has some editing features which are useful when programming. It also has some limited plotting capability which I have never used - and have never heard of anyone who has. If you don't program, it would hardly pay to switch from the old TI Extended Basic. I also have the Mechatronics module but never got around to trying it.

I had a Gram Kracker but soon sold it and bought a Ramdisk instead. The Gram Kracker has fantastic capabilities if you have the skill and knowledge to take advantage of them, but most users don't seem to have done much beyond personalizing the title screen.

I had a widget, and I guess it is still collecting dust around here some place. It was a nuisance, and since I use XBasic 99% of the time I didn't need it. There are now widgets or "module expanders" that allow you to access more than one module from within a program. That is, if you have the skill to write such a program. I don't know that anyone has released such programs to the public domain, and I can't think of any practical use except to access TEII speech from XBasic - but you can do that with the Text-To-Speech disk.

The ram disk is the one tool that I would not be without. In order to assemble my TI-PD catalog, I screened over 4000 programs, debugged and modified, merged in help files, conversions to XBasic and loaders, and assembled over 400 disks of programs. It took me hundreds of hours of work -

SPIRIT OF 99



without a ram disk it would have taken thousands of hours and I would not even have attempted it.

The ram disk enables me to switch from one program to another almost instantly, and with John Johnson's Boot program I can just as quickly catalog a disk or view a file. Mine has 256k of memory. I could get one with much more memory but I see no reason to do so; I have every program on it that I am apt to use even once a month, and it is only half full. That leaves plenty of room for temporary storage and downloading.

However, if you only use your computer to play games, do a little word processing and a bit of record keeping, a ram disk would be an expensive convenience rather than a necessity.

Since my ram disk is only half full, I would consider a hard drive to be about as useful as the mammalian appendages on a swine of the masculine persuasion. If I was running a BBS, sure - or if I was doing a lot of work with those memory-gobbling graphics and needed everything quickly accessible.

My old Gemini printer has been a faithful workhorse, although the hood over one sprocket wheel has lost its spring and is being held down by a loop of elastic cord. I will have to give it up soon, because the Gemini printer codes are becoming obsolete and I need to be able to write and test Epson codes. But, I hate to give up these 79-cent typewriter ribbons and start getting ripped off on \$2.50 cartridges! As for a color ribbon, the temperature will have to go way down, down under, before I pay for one of those.

Once in a while, when someone sends me a double-density diskfull of stuff, I wish I had a CorComp disk controller. Otherwise, with diskettes selling for a quarter or less, it wouldn't pay to change.

If I ever get around to subscribing to GENie or Delphi, it will pay me to get a 2400 baud modem.

I can't think of anything else I need, and I don't want what I don't

need. If I really wanted to play joystick games, I would certainly get something better than the TI joystick. And if that MIDI interface cable becomes a reality, I will be sorely tempted.

I can't see any advantage in putting the 32k under the hood, or anyplace other than where it is now. If I used speech a great deal, it would be nice to get rid of the synthesizer - but I know only one user who uses speech that much. I don't need a clock built in because I have a watch on my wrist. If I really did a lot of serious writing, an 80-column card would be wonderful. But then I would have to buy a monitor capable of displaying 80 columns. I certainly don't want to give up color, and high-resolution color monitors cost more. I would still want to use my old monitor for programming, because I like to write programs for folks who have basic equipment. I don't have room on my computer desk for two monitors, so I think I'll pass.

I'm a three-finger typist, so a RAVE keyboard wouldn't speed up my typing very much. If I really wanted an IBM keyboard and 80-column capability, I would throw in a few bucks more and get a Geneve.

So, what about the Geneve? If I had an irresistible urge to run the few great programs that have been written for it, or if I wanted to explore its great programming capabilities, I would get one. But, I like to write programs for other people to use. When so few are interested in programs that I write for a computer that sold in the millions, why would I write programs for a computer purchased by a couple of thousand people?

I am sure that many folks will disagree with what I have written. That's why I wrote it. I hope they will disagree so strongly that they will immediately boot up Funlweb and compose a blistering reply. But don't send it to me - send it to your newsletter editor. The newsletters are badly in need of more articles by more writers!

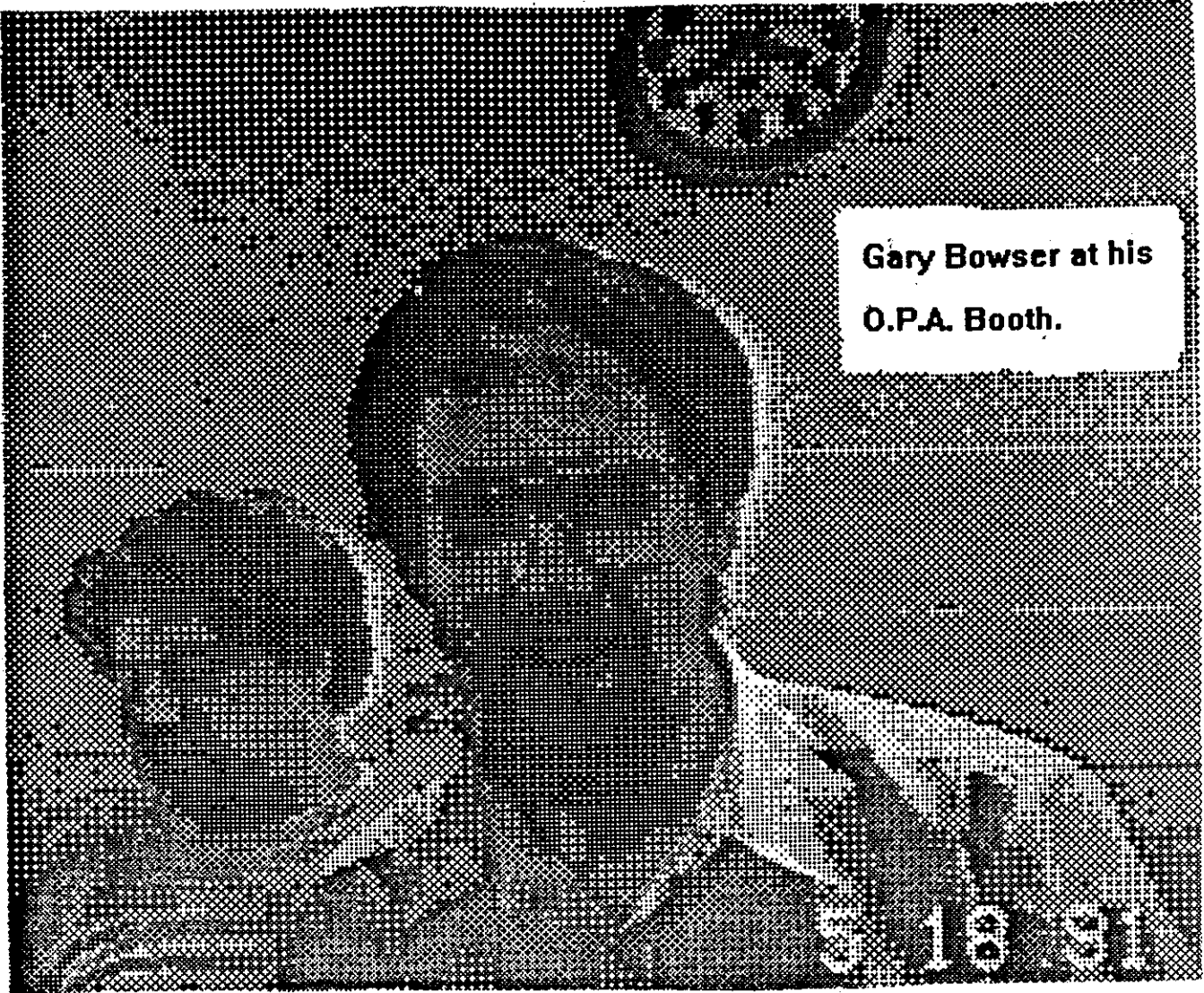
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"Byron, the computer company sent the retrofit instructions on a floppy disk."



"The computer is down again"



Gary Bowser at his  
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