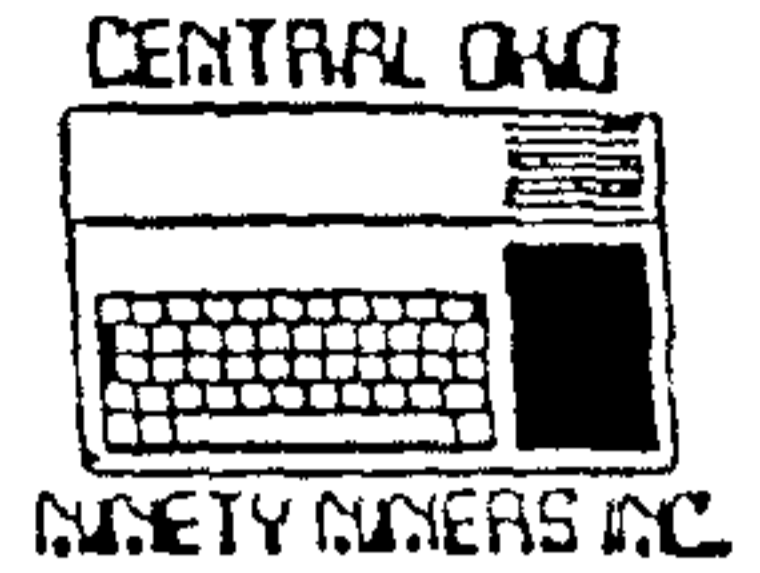


Texas Instrument 99/4A and Myarc 9640 Computers

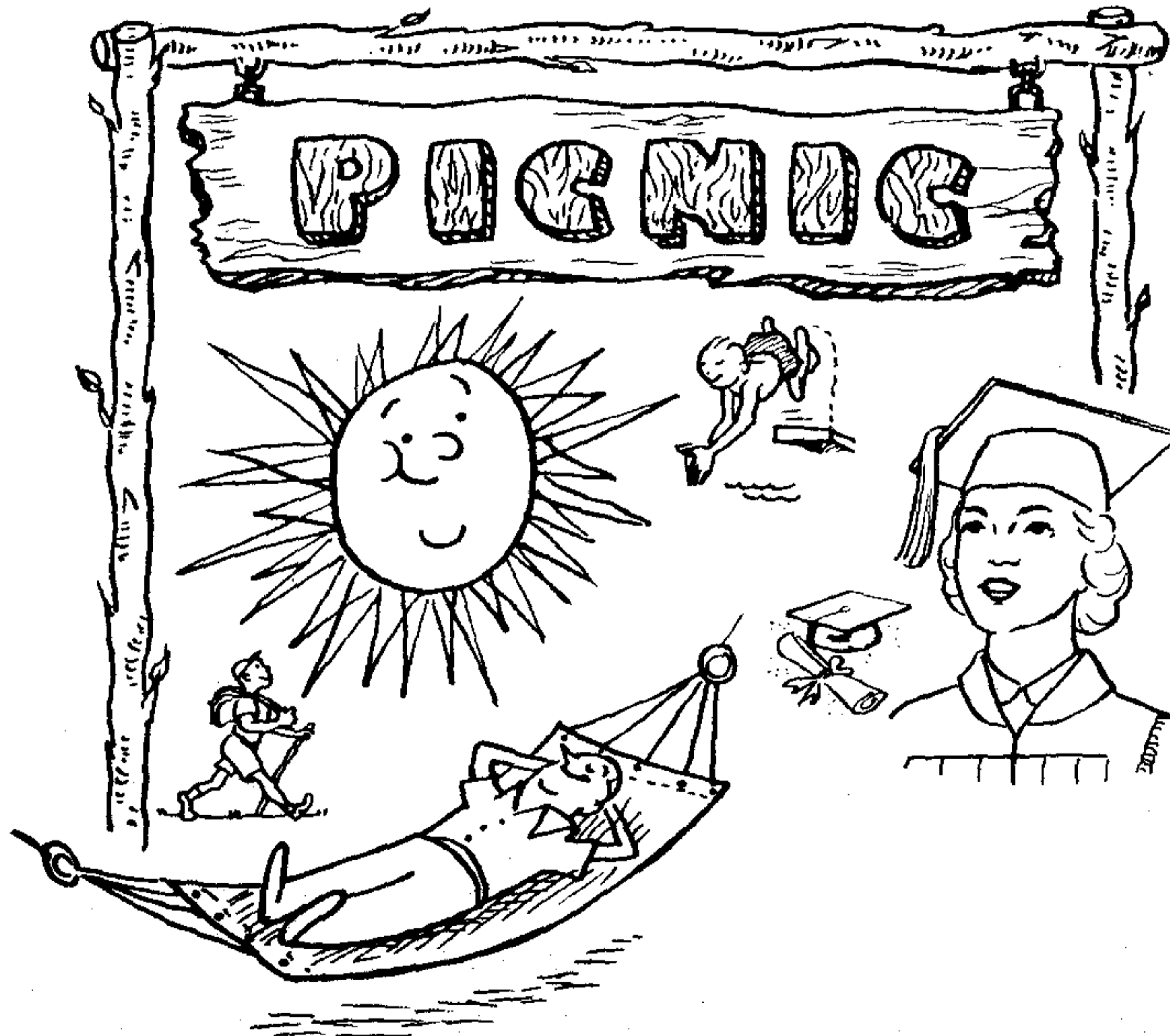
# Spirit of 99



THE OFFICIAL NEWSLETTER OF THE CENTRAL OHIO NINETY-NINERS INC.

PUBLISHED MONTHLY IN COLUMBUS OHIO

"IN THE GOOD OLD SUMMER TIME"



\$1.50

VOL. 9

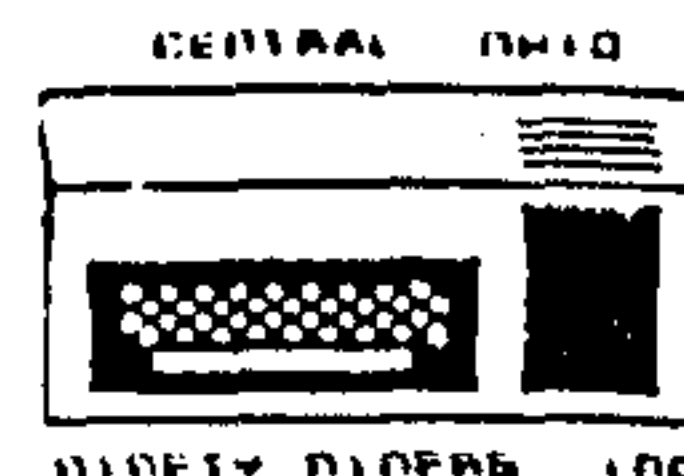
NO. 6

JUNE

1991

# Spirit of 99

THE OFFICIAL NEWSLETTER OF CENTRAL OHIO NINETY-NINERS



COPYRIGHT C 1985  
Central Ohio Ninety-Niners Incorporated (C.O.N.N.I.), Columbus Ohio 43212, USA. All rights reserved. Spirit of 99 is published monthly for Central Ohio Ninety-Niners Inc. by C.O.N.N.I. members and is the official news letter of C.O.N.N.I. User Group.

Editorial, advertising and subscription address is:  
181 HEISCHMAN AVE  
WORTHINGTON, OH 43085

Subscription rate (USA) \$30.00 /1 year for newsletter and Disk of the Month: \$15.00/1 year, newsletter only. Third class postage paid at Columbus, Ohio.

CHANGE OF ADDRESS: Send both OLD and NEW address to: Subscription address above. WE assume no responsibility for manuscripts, programs (tape or disk) not accompanied by return postage. Letters to the Editor become property of Spirit of 99. If published, we reserve the right to edit at our discretion.

OPINIONS EXPRESSED HEREIN ARE THE AUTHORS AND ARE BASED ON VALID DOCUMENTABLE RESEARCH. THEY DO NOT

NECESSARILY REFLECT THE OPINIONS OF THE PUBLISHER.

We will not knowingly publish copyright material without the permission of the author and credit due.

All programs published herein are of public domain unless otherwise noted.

Other non-profit user groups may use material from this newsletter only if source and credit is given.

Central Ohio Ninety Niners Inc. is a non profit organization comprised of MEMBERS who own or use the TI99/4A computer and it's related products and have paid a yearly membership fee of \$28.00 and whose main objective is the exchange of Educational and Scientific information for the purpose of computer literacy.

C.O.N.N.I. meetings are held the 3rd Saturday of each month at Chemical Abstracts, 2540 Olentangy River Road Columbus, OH. Meeting time is 8:30 AM til 2:30PM. Meetings are open to the public. Membership dues (\$28.00) are payable yearly to C.O.N.N.I. and cover the immed-

iate family of the member. (An application has been placed

in this newsletter for your convenience) Please address it to:  
Harley Ryan Jr  
4178 Chandler Drive  
Whitehall, OH 43213

ADVERTISEMENT:  
We do accept commercial advertisement at The following rates:  
Business Card (2x3.5): \$5.00/issue  
1/4 Page: \$25.00  
1/2 Page: \$45.00  
Full Page: \$75.00  
Write this newsletter for other size arrangements.

All ads should be submitted (camera ready) to advertising address above, payment enclosed. Members ads are published at no cost. (Limit of 25 words and must not be commercial please.)

\*\* INDEX \*\*

	PAGE
ANNOUNCEMENTS.....	03
CASSETT TRICK.....	18
CONFIDENTIAL FILE.....	19
CONTRIL CSI REMOTE.....	18
GENTLEMEN GENIUS.....	10
IT'S LATER THAN U THINK.	13
LIMA FAIR COMMENTS.....	06
NEW/AGE SPECIAL.....	16
MINUTES, C.O.N.N.I.....	07
PICNIC, C.O.N.N.I.....	07
TEX TALKER.....	12
THE OTHER GUY.....	14
TI LIMITATION.....	09
TI WORLD NEWS.....	08
WHAT'S HOT.....	04

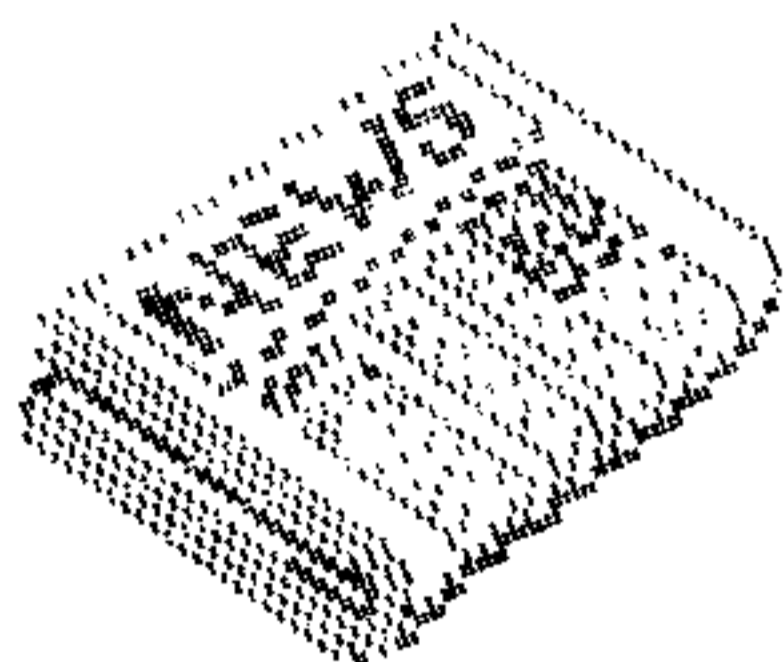
## NEW MEMBERS

ROBERT PETER  
ED GILLEY

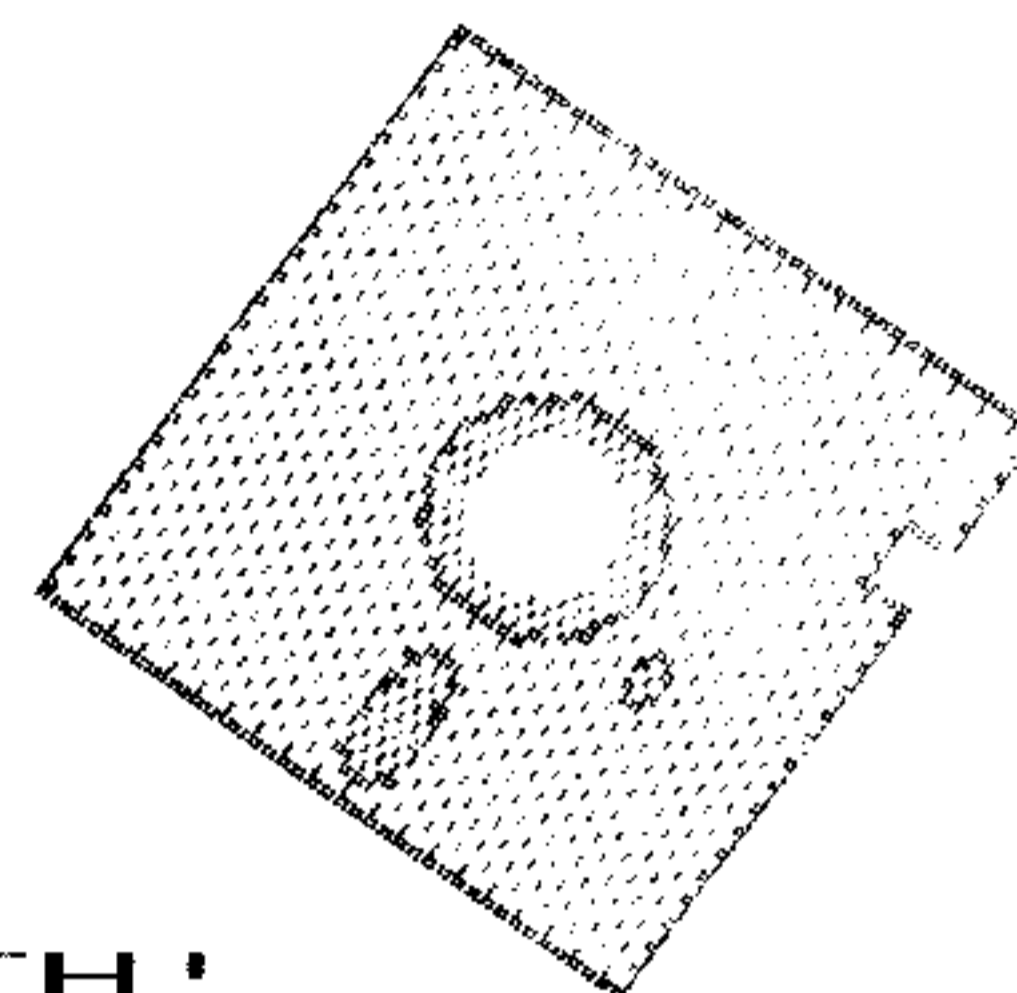
## DUES ANNOUNCEMENT

Dues are usually paid at or before the March meeting, and are \$28 per year for full membership, library and voting privileges, plus the newsletter. You may also pay your dues in two installments if desired: \$14 in March and \$14 in September. If only the newsletter is desired, then payment is \$15 per year. Those who join during other months of the year pay a lesser, pro-rated amount:

MAR---28.00	APR---25.75	MAY---23.50	JUN---21.00	JUL---18.75
AUG---16.50	SEP---14.00	OCT---11.25	NOV---9.50	DEC---7.00
JAN---4.75	FEB---2.50			



A DEAL  
YOU CAN'T  
PASS UP!



**SUBSCRIBE TO BOTH!**

Now you can have the best of both worlds--  
Keep up to date on the latest news from  
the TI-99/4A world with a subscription to  
the Spirit of 99 Newsletter AND get an  
up-to-date collection of new public domain  
and shareware programs with the Disk of  
the Month--both brought to you by the  
Central Ohio Ninety-Niners, Inc.

### SUBSCRIPTION RATES

---

Newsletter only	---\$15/yr. (Continental U.S.)
	\$25/yr. (Outside Continental U.S.)
Newsletter PLUS	---\$30/yr. (Continental U.S. EXCEPT
DISK of the MONTH	Delaware, Fairfield, Franklin, Licking, Madison, Pickaway and Union Counties, Ohio)
	\$40/yr. (Outside Continental U.S.)
CONNI Club membership	\$28/yr (see above information)

### CONTACT

HARLEY RYAN, Membership  
Central Ohio Ninety-Niners, Inc  
4178 Chandler Dr, Whitehall, OH 43213  
(614) 231-1497

This month I'll take a look at progress on the Clearinghouse, comment briefly on the Lima fair, and look at what's new on the BBS.

Just a quick note about what the Clearinghouse is: At the 1990 Lima fair the idea was discussed to use a BBS to make available original articles from User Group newsletters to newsletter editors across the country. The hope was that the material could be made available in a more timely manner, and that a considerable amount of postage could be saved since not as many newsletters would have to be distributed to user groups. I was asked if C.O.N.N.I. and I would be interested in working on such a project. After a considerable amount of discussion C.O.N.N.I. agreed to set up the Clearinghouse.

We have made quite a bit of progress, though not as much as I would have liked. We are now running at 2400/1200/300 BAUD. That took some major changes in the BBS software. We had been running with the TIBBS version 5 program, which did not allow for an easy change to 2400 BAUD. There are a few BBS's running TIBBS at 2400, but at a cost of \$300.00 to upgrade. If we had gone that route we still would not have Assembly Source Code so that other needed changes could be made.

There was a BBS source code file on GENIE (file number 2399 in the TI section) that I had looked at before. It used to be used on the Miami Users Group BBS. In fact it had an XMODEM routine for the old Myarc Personality Card in it as it had been uploaded. I was able to replace the XMODEM routine, and after a lot of experimentation was able to re-write the XB part of the BBS to use the "new" Assembly links. Thanks to Chuck Grimes, Kenneth Marshall, and Dick Beery for their hours of help in bug hunting. There are currently no bugs that I am aware of, but there is an occasional lock-up problem. which

could be caused by overheating, since we went right from Spring to Summer with no preamble.

You will see very few changes in the way the BBS operates. Currently "CHAT" is not available. Since the SysOp's keys are "hot" while the user is on-line I could no longer use the spacebar to enter chat, since XB could not tell whether the keystroke came from the user or the SysOp.. I didn't want to use a key for chat that the user could hit. It might be difficult for a user who accidentally entered "CHAT" to get out of it. I couldn't use the chat routine supplied with the source code as there was no way to direct the output to the speech synthesizer.

Mike Ballman is looking at the source code to see what can be done about "CHAT" and a few other things I would like to have changed. By the time you read this article, we may have "CHAT" available.

As for the hardware changes: We purchased a Zoom 2400 BAUD MoDem from Ralin (800-752-9512) for \$162.95 including shipping. It is MNP5 and BIS.42. That should make throughput much faster for those callers who have a similar MoDem, and should be very good at noise rejection. Thanks to Chuck Grimes who compiled a list of 81 different MoDems/companies for us to explore. This was by far the best price for what seems to be a high quality MoDem. The MoDem comes with a 7-year warranty. We needed a new MoDem cable and I added a 2nd RS232 card for the speech synthesizer, since port 2 is used for carrier detect. Now the speech is on port 3.

As to changes you might expect when you call the BBS: You must wait about 15 seconds from your "CONNECT" message before pressing "enter." Enter is used to detect your BAUD rate. This is longer than I would like, but without completely changing the BAUD rate detection routine, there is not really much that can be done about it. We have had several reports that the BBS seems faster at 1200

BAUD. File transfers are, of course, much faster at 2400 BAUD.

We have not decided what to do about a hard/floppy disk controller. At last word ESD did not have a shipping date in mind. I have some reservations in using the Myarc hard/floppy controller, since we need a reliable, quickly repairable controller for the BBS. ESD is an unknown quantity with a new unproven controller, and the record of Myarc in quickly repairing controllers is less than admirable from what I have seen and read. We may go initially with more floppy drives on line. Bud Wright wrote and used to use an assembly routine which bank switched sets of drives through the cassette port. We might be able to use that routine to give us more file space. We could relatively easily add 2 more DSDD floppy drives to the four we now have.

Barry Traver has tentatively scheduled a TI roundtable conference on GENIE for Monday June 17th at 9 P.M. where I will be available to discuss and answer your questions about the Clearinghouse. Thanks Barry.

Now to the Lima fair: I was very pleased with this year's fair. It was great to renew acquaintance with several BBS users, and meet some new people. As usual, the Lima user group did a fantastic job of organizing the fair. Be sure to see Dick Beery's article on Lima elsewhere in this issue. Lima is making video tapes of the conference available again this year. I would urge you to order the tapes. It is a great way to keep up with the newest developments in the TI world. One of the sessions at Lima concerned the Clearinghouse, and there was a lot of discussion on how the Clearinghouse should develop and what users should expect.

Here's a look at some of the new files on library 5 on the BBS:

TIBBS\* 37 sectors INT/FIX 128 From JAMES DAVIS on 05/27/91 This is the latest TI bbs listing dated May 15, from Mike McGaughey's BBS

Archived. 37 sectors.

BASIC\_ASM 207 sectors INT/FIX 128 From Irwin Hott on 05/17/91  
NOTE FROM IRWIN: GENIE file Number: 4353 Name: BASIC\_ASSEMBLY.#1 Address: GENIAL.AL Date: 910515 You'll have to check with MICROpendium for my "BASIC Assembly" articles if you don't already have them (back issues are available from MICROpendium, P.O. Box 1343, Round Rock, TX 78680 for \$2.50 each), but here are the programs and files (some of them revised) that go with the articles published from June 1990 to April 1991. Files include GET/SEND/S, OUTLINE/S, WINDOW/S, CAPS/S, CLEAN/S, ALSAVE, ALLOADM, CHAR/S, COLOR/S, FONTALS, GRAPHICOMP, GC/TESTER, demos, and more. GENIALMICROware from Barry Traver. Enjoy! Archived, 207 sectors.

MOVIE/ARK 92 sectors INT/FIX 128 From HAROLD TIMMONS on 05/15/91 This Disk contains 6 songs from famous movies. Songs included are LIVE AND LET DIE from the movie of the same name and written by Paul McCartney formerly of the Beatles, WHERE DO I BEGIN a beautiful song from the movie Love Story, BABY ELEPHANT WALK a Henry Mancini creation for the movie Hatari, WHAT ARE YOU DOING THE REST OF YOUR LIFE a classic ballad by Michel Legrand from the movie The Happy Ending, AXEL F a familiar tune from the movie Beverly Hills Cop, and the ever popular THE ENTERTAINER a Scott Joplin Rag Time Two Step from the movie The Sting. ---HOPE YOU LIKE!!! HAROLD TIMMONS.

Archived, 92 sectors. LOGIK/ARK 31 sectors INT/FIX 128 From JIM PETERSON on 05/09/91 LOGIK, an excellent "brain game" in assembly by Jean-Francois Dore. This fairware game hasn't been well-known because the instructions are in French but Ida McCargar has now provided an English translation in a README file.

Have fun on the BBS.

## COMMENTS ON THE LIMA FAIR

by  
Dick Beery

I came away from this year's fair with feelings of happiness and great satisfaction, as did many of the C.O.N.N.I. members to whom I spoke. This was in spite of the fact that not many new products were displayed there. Once more, hats off to Charlie Good, Dave Szippel and all the others who worked so hard and accomplished so much in presenting the fair. This year, the event was billed as a multi-computer fair, and there were some items available for both Commodore and IBM computers for the first time. A sad aspect was the number of T.I. systems offered for sale. More than one booth had PE boxes stacked four high. We hope that those purchasing them will join local user groups and help keep the TI-Geneve alive and vital.

The long-awaited MIDI was available at the Chicago Users' Group booth hosted by its creator, the talented Michael Maksimik, who demonstrated its many capabilities both at the booth and in one of the featured presentations. Mike ran out of finished products to sell and had to send out for parts to help him complete more on the spot.

Asgard Software offered a couple of new products, as did Comprodine, and probably some others I didn't get around to seeing. Bud Mills' presentation on the Memex and other items was well received. We were delighted to see Bruce and Mrs. Harrison there. When queried about his announced abandonment of the T.I., Bruce replied that he had completely reversed himself and planned to remain. We hope many will buy heavily from Bruce to help strengthen his resolve. I myself purchased his two newest music disks, and wished I had more time to question him about features of his Word Processor, which I am told shows great promise. Eunice Spooner and her student, Chris, from the Oakland Computer Club, showed a fine videotape of that club's activities. We are hoping that teachers reached by this newsletter who are using, or would like to use, the T.I. with their classes will write to us. If enough people are interested, perhaps a section of the National Clearing House can be devoted to exchange of original classroom programs by these teachers, as well as p.d. and fairware programs already available that might not yet have been received by those who can use them.

I enjoyed the presentation by Mickey Schmidt and Mike Sealy of products from their new company, MS EXPRESS, (watch this one, it's going to go places!), of helps for Adventure games and their own new games including their new puzzle that has you manipulate colored blocks of three sizes. It is similar in concept to the old 15-number puzzle, but looked a lot more appealing to me.

A couple of the original 99/4's were offered for sale, and I watched a great presentation by, I think, Mike Wright, on the history of the T.I., including many items that were either produced in a limited fashion or not at all. Some 99/8's and accessories were offered for sale, I think by L. L. Conner.

I regret not having seen Gary Bowser's presentation on Rambo and other products. I especially regret having missed Jim Horn's demo? on the "Sex Life of the 4A"--I've wondered a little about this but never before had the opportunity to observe. (continued)

If I have one complaint about the fair, it is that there were so many wonderful things going on that it was impossible to help man the table, eat (required!), and get around to all that I wanted to see. What a great kind of problem to have! Thank goodness we will be getting the videotapes so that both at home and during meetings I will be able to catch up on what I missed. We are already looking forward to next year's fair. Congratulations and good wishes to the Lima group for an outstanding job!

=====

C.O.N.N.I.  
Minutes  
Wednesday  
May 22, 1991

Our vice-president, Bill Sheppard, conducted the meeting in the absence of president Chuck Grimes, who had to work late. The minutes of the April Wednesday meeting were approved and the treasurer's report was likewise accepted. The main focus of the meeting was the Lima fair of the preceding Saturday. Various members who attended gave their impressions, and Dave Truesdale showed the Accelerator demo and part of Irwin Hott's Clearing House presentation which he had taped. Dick Beery announced the results of the disk-newsletter-hardware sale. Thanks to the generosity of Jean Hall in donating a printer and disk controller card plus the entire TI-Counts program, we took in more than two hundred dollars, part of which will pay for blank disks purchased. Bill Wood sold some T.I. equipment, and his ten percent donation also helped raise the total. Sincere thanks to both Jean and Bill for their generosity. Dick Beery demonstrated a Weird Music disk and a disk of checkers and backgammon he purchased at the fair. A former member, Dave Foster, attended and received help getting his T.I. system back to operating condition. The meeting adjourned shortly before 10 p.m.

Respectfully submitted,

Dick Beery,  
Wednesday Secretary




C.O.N.N.I

PICNIC!

Mark your calendar for our July 21, 1991 picnic. We will return again to Blendon Woods Metropolitan Park which is located on SR 161 just east of I-270 across from Little Turtle. Come in the morning and stay until????

Bring your whole family and friends.

Two  and charcoal will be needed. One has already been lined up.

Each person or family should bring a covered dish and your choice of meat for the grill such as



, or plus your beverage (no alcohol). Bring along some table games and other sporting games you think the group would be interested in playing. SE YOU AT THE PICNIC...

Compiled by Jim Peterson

According to the "Confidential File" written by Christopher Pratt, Tony McGovern is delaying his move to the Amiga in order to make further improvements to Funnelweb. He plans a complete rewrite of the Editor, and also wants to add hard drive support. Tony has given up hope on the Myarc HFDC and has turned to the new ESD H/F Controller card. Shane Truffer, the CEO/President of Electronics Systems Development Corporation, has promised to provide Tony with the card and a hard disk and any technical information he may need.

According to the same source, there is now a Digitizer for the TI, which ties together your VCR, TI and printer and produces a nice picture. The equipment is reported to be available from RFW Enterprises, 111 Oakridge St., Chicobee MA 01020, phone (413) 593-3274, and the "Imagewise Portrait Print" software can be obtained from Circuit Cellar Inc., 4 Park St. Suite 12, Vernon CT 06066, phone (203) 875-2751.

The West Penn 99'ers newsletter has reprinted a message from the Unix TI conference, by Thomas Opheys of the University of Passau in West Germany, regarding his project of writing a TI-99/4A emulator for the IBM PC! He states that the entire range of hardware will be supported - keyboard, VDP in all modes, sound processor (in only one channel because the PC has only one tone generator, but SoundBlaster owners will get all four), 32k card, MiniMemory, GROM/ROM modules like Extended Basic, Editor/Assembler, and peripheral cards such as the P-code card. The RS232 and Disk Controller cannot be emulated correctly on the hardware level, so the DSR ROMs will be patched to handle calls to those cards by DOS. Therefore, programs which access those cards directly, such as Telco, Turbo-Copy, TapidCopy, etc., will not work. Emulation of the Speech Synthesizer is not considered possible. Mr. Opheys states that the emulator is not yet finished.

Another BBS message reprinted in the same newsletter reports a flyer from McCann Software concerning a new Geneve program called HQ-Stacks, said to be similar to Hypercard and the like.

MS Express Software (P.O. Box 498, Richmond OH 43944) has released Adventure Hints - Series II by Lynn Gardner. The price is \$9.95 plus \$1 SH and sales tax for Ohio purchasers.

Mike Maksimik and Chris Bobbitt of Asgard Software have had a complete falling out. According to messages posted by Mike on the Chicago BBS, his Midi Master will not be sold by Asgard Software. It has been renamed MIDI Master 99 and will be sold by Crystal Software, 635 Mackinaw Ave., Calumet City IL 60409-4014. The current version 2.2, which includes interface, software, two connecting cables and documentation, is available now for \$45 (make checks payable to Michael Maksimik). This version allows loading of disk-based music files, and compiling of symbolic music files, for playing on the MIDI interface. It will NOT record keyboard-based music; that part is under development and will be released, hopefully toward the end of May, as version 3.0 (the Cakewalk compatible version). Mike states that those who purchase version 2.2 will be entitled to version 3.0 at no charge if they send in the registration card.

A message on Delphi's TI Forum reported that a "Trojan Horse" virus had been discovered in Telco, which causes the disk drive to wipe files off the drive while downloading.



## TI-99/4A LIMITATION? by Jan Knapp

I get to speak to a lot of different people about how they use or want to use their computer being the Newsletter Editor. I'm usually the first one they contact when they decide to sell-out. One of the comments that bothers me the most is when I hear someone say that they have "outgrown" the TI-99/4A and are moving on to an IBM compatible. In some instances this can be true if they are using an IBM at work or have need for an extensive data base but many times it's just a case of not realizing the full potential of this computer. I hope to explore this potential.

The TI-99/4A is a wonderful computer for the home and especially for children with it's speech snythesizer. Some of the programs, such as data bases, are limited due to the fact that you are operating on only 16K of computer. This does not mean that you cannot accomplish what you want to do, however. A simple manipulation of files can accomplish a lot. Say that your mailing list program can only handle 80 names and you need it to hold 400-500 names. You do not need to buy a new program. Instead of having all the names on one file, make 6 files. In file 1 you include names the begin with the letters A-C, file 2 letters D-G, file 3 letters H-L, file 4 letters M-P, file 5 letters Q-S, and file 6 letters T-Z. This allows you all the benefits of the data base with just a little work on your part. If you would also PRINT the file to Disk you can load the files onto TI-Writer and merge them together for a beautiful written directory in elite, pica, condensed, it's your choice.

I hear a lot of complaints on flipping through screens on TI-Writer. You do not have to have an 80 column card to solve this problem. If you set your tabs for 0 and 39 and remove the line numbers (FCTN 0), you will not flip screens and everything will be easily read. If you use FORMATTER that will take care of everything. If for some reason you would like to see the end results or want to print it through the EDITOR simply reset the tabs to the desired amount and reformat each paragraph (CNTRL 2). Remember that if you indent each paragraph in the EDITOR mode you need to reinstate them while reformatting (FCTN2, FCTN 7).

Another way of getting the most from your computer is to shop around when buying software. The most common choices are the ADVANCED and the USER FRIENDLY. The ADVANCED software might do all that you can ever think of wanting to do, but because it's memory is used to do the tasks it requires much documentation and TIME for trial and error. The USER FRIENDLY software may be a WYSIWYG (what you see is what you get) type of program that will prompt you and double check every entry. This is great for BEGINNERS and COMPUTER USERS that may not have the time to play with the more advanced programs. USER FRIENDLY programs are limited in functions due to the memory being used in prompts and screen documentation. When considering it's purchase look for programs that will interact with other programs that you may want to purchase in the future. Decide what you want to use as your STANDARD and work from there. Consider buying software like you would an appliance. If you have trouble setting your watch you don't need the VCR with all the bells and whistles that you will never use. If you need or like the bells and whistles go for the ADVANCED.

I hope I've been some help. If anyone has any other tips on expanding our TI contact me by way of the COMPUTER BRIDGE.

~~~~~  
W-AGE/99 \* NEW-AGE/  
99 \* NEW-AGE/99 \* N  
EW-AGE/99 \* NEW-AGE  
/99 \* NEW-AGE/99 \*  
~~~~~

\* by JACK SUGHRUE, Box 459, East Douglas, MA 01516 \*  
# 1 4

## GENTLEMAN GENIUS

Of the two tags, Gentleman and Genius, I think the former gets my approbation concerning the best way to describe John Willforth. My wife, Elaine, agrees. For John is first a real gentleman; and that is what you think of before realizing he's also a genius. Gentlemen, I think, are rarities today, even among TIers; though I've discovered more in the 99er ranks than in other walks of life. People like Charlie Good, Jim Cox, Jim Peterson, Barry Traver.

Geniuses, though, are a dime a dozen in the computer world, and most of them are far from civilized.

An example, small but significant: Lots of TIers have been to my home, all of them treated to Elaine's gracious welcome, her extended hospitality in the matters of food and lodgings, so they get to know her and discover, too, that we two rattle alone around our hut, now that our four tykes have leapt into the grownup world, returning us to "couplehood" these past two years. So any female voice answering our phone will be Elaine. But John is the ONLY "adult" TI person who will acknowledge Elaine's existence on the phone. He always says, "Hi, Elaine, this is John Willforth," when she answers, just as if she's not a non-person. Sometimes they converse so long I have to pry the phone from her fingers so I can get to talk to John.

With others who've been here, however, it's usually "Jack there?" when she answers, without even mentioning who they are.

I don't know. Maybe I'm old fashioned, but I still believe a lot in courtesy and friendliness and the acknowledgment of the existence of someone I've met.

Anyway, John's old fashioned in this way, too, and I like it: 19th Century values in a 21st Century mind. It's fun being in tune to someone as family oriented as he is. He talks about his wife (Fay) and his three daughters with such joy that you know love and sensitivity are a VERY LARGE part of his nature.

My wife and I talk about John so much that my son Matthew and his wife (Carolyn) wanted very much to meet him. The last time he came over for dinner, we had the "kids" over, too, and all of us enjoyed his pleasant, witty company all evening.

John's a talker. That's a compliment. And he can converse about almost anything but literature (as he claims he doesn't have time to read novels, thus leading to the time-worn argument in THIS house that all the major social changes in the world have been brought about by fiction ... and so on). It's fun arguing with John because the conversation is stimulating and he's still your friend in the end.

John's logical. He even tries to use logic with his teenagers (which probably makes him illogical, when you think about it).

He's hardworking (to a workaholic degree, I think) at some pretty heavy duty electronic wizardry. John even has a calculator on his watch, which he uses.

He writes well. His articles on printers, as well as the long-term articles on hardware (and software) are lucid, practical, and scary: SCARY in the sense that he takes apart consoles and P-boxes and anything else mechanical, electrical, and electronic that he can get his hands on and performs vivisectionist surgery on their innards. He seems to be able to radically modify anything, from computer chips to his backhoe and assumes everybody else should be able to do so.

Whew! Not me. My hands shake when I have to dump my pencil sharpener or fill my stapler.

But John's made me a believer. One evening he came up to my computer room, still chatting about his family, and, while carrying on the conversation, took apart my working P-box. Completely! Screws, nuts, bolts, fans, stuff, whachamacallits, and thingamajigs. Then he reversed my fan, explaining that it would keep my box cool (maybe even cooler) while it would cut down the noise to one-third. It did. We turned on other P-boxes in the room and compared them to the fix.

He also told me where and how to order floppy drives and how to install them (5.25 and 3.5 operate with no cable modification on the TI). I learned that I could buy any IBM compatible half-height disk drives and put them in my TI. [ERM Electronic Liquidators (1 800 776 5865)] for fully warranted reconditioned drives. I called, bought two Panasonic DSDD (\$29 each!!!!), installed them myself, just like a computer grownup. Though they also sell cables and disks (for as low as .15 each DSDD), I ended up getting a Power Y cable for internal power connector (\$.99) and an AT-HDDR cable set for double connector to controller (\$2.89) and a whole lot of other things from another company he recommended: National Computer Accessories (916-441-1568). So, thanks to John, I was able to convert my setup on my school system from one SSSD to two DSDD at a cost of around \$60! And does that make a LARGE difference in my ability to do TI things in my classroom. As a matter of fact I'm writing this at school on my quiet P-box, DSDD system and it! Everything works great. (Remember, we're talking about John teaching me, the man who has to use a manual to open a jar of peanut butter. You readers are chuckling over this "big" hardware deal, but John opened up new worlds to me. I plan to confidently upgrade another system soon and maybe even do a user group demo.

Which brings me back to John's generous spirit. While at a training session in Connecticut some months ago, John willingly came to our M.U.N.C.H. in Worcester, Massachusetts, one evening and shared some great insights and answered all kinds of questions, including some about things he had written as newsletter editor of the West Penn user group, which he founded many years ago to reach out to users outside the Pittsburgh area.

He was also the hit of the New England Fayuh that same week. Everyone there was thrilled to meet the man they all knew through his writings and references to his work by others. He ended up being the biggest TI star at the whole event. People at the fair were in awe of him and still talk about his visit, yet I've met very few humbler men.

Now, back at my desk at home, I'm using a console John modified a while ago and recently gave to me. It has a plexiglass cutaway of the interior housing of a Zenoboard containing a clock, speech, 32K, E/A, XB, ADVENTURE, TIW, DM, and a system Pause button. All switchable. I feel as though I died and went to TI Heaven.

The man's a genius, no doubt, but more important, he sure is a warm and sensitive friend. To me, it's worth owning a TI just to have met John Willforth.

(If you use NEW-AGE/99 please put me on your exchange list.)



TEX TALKER

By Ed Machonis  
QB-99ers, Bayside, NY

One of the great features of our computer, too often overlooked, is speech. The TI can still talk circles around most other computers. Yet few User Groups take advantage of this feature when demonstrating the TI at Malls and Fairs where other computers are also being shown. I can tell you from experience, speech can be a real crowd stopper.

Last year when the QB-99ers were asked to put on an exhibit at the college, we decided to show off the 4A's speech capabilities. I wrote a little extended basic program which performed the same way that TEX TALKER does but used the Text To Speech disk. It worked fine and did stop whoever happened to wander down to the sub-sub basement where we were located. The only problem, if we wanted to show something else, subsequent reload of the Text To Speech files took forever and a day.

TEX TALKER has since been rewritten in console basic so that the Terminal Emulator module can be used instead of Text To Speech. A speech synthesizer is also required, as with Text To Speech.

Using the program is quite simple. With the Terminal Emulator module plugged in, select TI Basic. Type OLD DSKn.TEXTALKER. At the cursor prompt, type RUN. The program will read the first DATA statement, display it on screen and speak it. If you press ENTER, the speech will be repeated. If you enter a period, the next DATA statement will be read, displayed and spoken.

At any time, you can type in anything you or the crowd desires and it will be spoken. It's a good idea to have the keyboard positioned so that onlookers may use it and interact with the computer. Again, pressing enter will cause the last speech to be repeated.

Enter your own DATA statements, using commas for short pauses and a period for longer ones. The use of commas requires that each DATA statement be enclosed in quotes. Be sure the last DATA statement is ZZZ.

90 REM \*\*\*\* TEX TALKER \*\*\*\*  
By Ed Machonis, QB-99ers  
Requires TERMINAL EMULATOR  
MODULE & SPEECH SYNTHESIZER

100 OPEN #1:"SPEECH",OUTPUT

110 READ A\$

120 IF A\$="ZZZ" THEN 130 ELSE  
E 150

130 RESTORE

140 BOTD 110

150 PRINT :::::::A\$:::::  
!!

160 BOTD 190

170 IF B\$="" THEN 190

180 A\$=B\$

190 PRINT #1:A\$

200 INPUT B\$

210 IF B\$="." THEN 110 ELSE  
170

220 DATA "HELLO. I, AM A TEX  
IS INSTRUMENTS T I 99, 4A CO  
MPUTER. I KNOW HOW TO TALK,  
BUT SUM PEOPLE THINK I, HAV  
E. A FUNNEE ACCENT. "

230 DATA "SUM COMPUTERS CANT  
TALK. WE CALL THEM. DUMB. C  
OMPUTERS. . YOU CAN CALL ME,  
TEX. "

240 DATA "THE, DUMB, COMPUTE  
RS SAY I TALK JERKEE, BECAUS  
E I, WAS TAUGHT TO TALK BY A  
, JERK. "

250 DATA "I, SAY, HOW. CAN Y  
OU BELIEVE ANYTHING SAID BY  
A, COMPUTER THAT CAN NOT TAL  
K. "

260 DATA I CAN ANSWER THE TE  
LIPHONE. WOULD YOU LIKE TO H  
EAR ME?

270 DATA "HELLO. I,CANT CUM,  
TO,THE,PHONE,RIGHT,NOW. BUT,  
IF,YOU,WILL,LEAVE,YOUR,NAME,  
AND,NUMBER,I,WILL,GET,BACK,T  
O,YOU, AS,SUNE,AS,I, CAN. "

280 DATA ZZZ

We can all relate to the following, from Sister Pat Taylor.

IT'S LATER THAN YOU THINK....

If you remember ages ago when a boot referred to footwear, not a program coming on a computer...

Or the days when a bulletin board was simple school equipment and not electrically sent messages...

Or times when we spoke of animation in reference to a person's enlivened spirit, not a screen imitating life...

Or those eons ago when conversations were political or religious, not binary or ASCII...

Or utilities were electrical bills, not terrific helpers to aid a floundering computer novice...

Or when default referred a failure to meet an obligation instead of a comfortable choice made for you...

Or another century when alpha and omega were companions in speech instead of alpha and lock...

Or a time in the past when dip referred to a condiment and switches were a tool for chastisement...

When strings were musical instruments, not a sequence of characters...

When terminals were bus and train depots, not input, output devices...

When a buffer shined one's floors and was not a temporary storage device...

When bugs were insects, not an error in a computer program...

Or when monitors watched school halls and lavatories instead of you watching a screen performance...

When emulation was striving to excel, not computer imitating computer...

Or a bus was transportation, not a circuit...

When call ment to phone, not to branch to a subroutine...

When a dump took care of waste materials, and was not a lovely print-out...

When address was where you lived, not an operand portion of a computer instruction...

When memory belonged to people, not computers...

Those belonged to another day, another year, and even at times another century!!! Is it later than we thought, or is it simply a question of the past not quite yet converted to the future!!! Could it be only a year ago when computers first overwhelmed me!!

=====  
"If you can't find anything nice to say about your friends, you have the wrong friends."

THE OTHER GUYS vs TI-99/4A

by

Richard Lynn Gilbertson

Little do most of us know just what we have in the TI-99/4A. So it made sense to write about it. First off just what do these other guys have, well more memory and a faster processor. They also have hundreds of companies with support lines and so many different versions of the same machines and software too, that it quite boggles the mind to count them. The other guys have years of major research invested into every software package and so many different operating systems of disk and processing data that it would take several books just to list the names.

Ok what does the TI-99/4A have to compete with that? Well hold on to your hat, the 99 does have several things and none of these are by any means minor.

First off lets get into a little history. When one of the other guys stores data onto a disk like say "STORE THIS" what you will find on the disk is "STORE THIS crlf". now the "crlf" means it's universal among the other guys for Carridge Return and Line Feed. So every line of the data on the disk has to have this at the end: "crlf" to tell the computer that this is the end of the string of data. Now the 99 has a simpler approach, "OASTORE THIS" is how the 99 does the same thing. The "OA" stands for 10 in hexadecimal and you can see being at the front instead of at the rear of the string means you don't have to read the whole line to see how long it is. The other guys have to load the whole line and make the computer count how long it is, while the 99 just looks at the first one and knows how long it is. If you are searching a disk you can see why it takes so long for the other guy.

The history of why that is comes from the concept the other guys system uses which was conceived in 1953. The 99 uses a concept from 1975. And yes the other guys have not changed because if they did all the software written would have to be totally re-written. Also forget them doing it any time soon. I should also mention that this system of ours is already being used on newer main frames.

Today I was asked if the 99 was compatible with the other guy and as usual was quite insulted. Let me show you why. Go ahead and ask another guy when was the last time he got out his Soldering Iron and added something unique to his system. First off he will look at you like you are truly crazy. Then he will ask 'what do you mean unique?!?'.  
 Say 'unique like a interrupt switch to halt everything and do something else previously loaded. Or just stop what you are doing and do nothing. Or do a total reset and start over.' He will reply 'oh yea, I can do that last one.' and he is right he can only do the last one. His software has to do the others, the 99 is already built for those and doesn't care if hardware or software causes it to happen. Or ask the other guy to load and run his very best Telecommunications, Word Processor, Disk Manager, and Assembly Compiler from one disk without changing disks. Honestly he will day 'you can't get all that on one disk', reply 'Really! I can do it on mine. And I still have room for almost a third more.'

Also mention that most of the other guys you've shown your 99 to really love your telecommunications program. (Telco)

How about Operating Systems? The other guy on most of them has to load one before he can do anything. First off what are the advantages

of this, one is for a particular application this will allow you to have the fastest program loaded possible, and the second is it will be as small as possible for the application. Disadvantages? History should be explained now as the advantages are distorted. Back in 1950 the concept of loading a new Operating System to speed things up was the best solution to lack of memory. Also it had the other advantages mentioned and it made sure the system was running at peak ability. But that is also where all the trouble started. You see if you want to run something else you'll load it someplace that is already being used. This means you will have to load a program that moves it out of the way, so you can load something else, then you can load this other program.

Does it require much thought to see it is similar to digging a hole and filling it with dirt from another hole so you can re-dig the original hole. That is not even without mentioning the fact that the other guy may on some systems have as many as three types of Operating Systems, and they are not compatible with each other even though they are all written for the same computer.

So the 99 doesn't have a problem of creating while loading the third program because it is too large. It knows the 2nd program used up all the space. The 99 uses what's called Relocatable Code, which means it just loads where there is space left, and knows how much memory is left. This is Artificial Intelligence. The 99 does not have to ruin everything in memory to see there is a problem, the other guy has to reboot from scratch.

Expansion of the system over time on the other guy also requires a history lesson. For lack of a better term we will say the other guy has a 'Hard Coded' system. I got that term from a Computer Science Professor as he coined it on the air. Hard Coded means that you can't run any program from the area dedicated to the disks or the RS232 or other peripherals. You can't load anything there or even move anything there without special hardware and software. The 99 only has one Hard Coded area, the operating system. The other guy has several and can't move them to another location, remember they are Hard Coded (physically located by hardware).

Let us say we want to add a 1 Meg of memory to a fully expanded system the guy has. Sorry no can do, Hard Coded. For the 99 that is no problem as it can without any modifications at all talk to 128 devices, so just make it a device and add it on. An example is the 192K Video Display Processor (9958) added to the 99. It can be upgraded and increased in size also. And the GRAM/GROM port for cartridges can talk to 640K of GRAM/GROM but turned into a device could be expanded to an unbelievable 4095 Meg or 4 Gigabytes. This is without even mentioning the RAVE CARD which is an other guy approach to expansion, but that is only 3.5 Meg maximum for the 99.

Five years from now I'll have my TI-99/4A and will still be adding devices and Cards to it. The other guy will have gone through two systems by then just to stay current with expansions. I mentioned one thing the Professor said. He also said that current Mini and Micro computers are similar to shoot-and-throw-away cameras.

The Tamira, 990/10, TI-99/4A, and NXT are the only Memory to Memory transfer, Memory Mapped Memory, and Memory to Memory Archetechiter computers ever built. So I don't think he knew about the TI-99/4A or it's relatives. All the rest are all like the 'Hard Coded' machines he mentioned, why do you suppose they have to replace the mother board for the simplest upgrade? 1950's concept in the 1990s!! Does the other guy really have that much on the TI-99/4A? We shall see. We shall see!

## NEW/AGE SPECIAL

\* by JACK SUGHRUE, Box 459, East Douglas, MA 01516 \*

### GOOD, BETTER, BEST!

There is only one program in the TI disk community that is (as my 5th-grade pupils would say) "totally wicked awesome rad to a gnarly degree." I agree with the sentiment, if not the mode of expression.

Nothing else in our world computer community has equalled the impact of the FUNNELWEB environment created for us by Tony McGovern and his son, Will. These two Australian geniuses (and I do not use the word lightly) put together what all of us deemed impossible for the TI.

FUNNELWEB just grew and grew. The original American release was a TI WRITER and EDITOR ASSEMBLER combo, more or less (actually more). Next version a few months later contained a bit more with lots of enhancements of what went on before. TIW, for example, does not contain a ruler or address recall or macro-key CAPS or LC. Tony put all these things in fairly early versions, all of which we take for granted in our word processing activities. The environment always loaded by either E/A or XB, thus making it ideal for supercards (again from earlier versions) or RAMs or whatever device hardwarers could devise. Then things like Disk Manager 1000 and Diskpatch were added and modified. As were loaders for c99, FORTH, etc. Each time Tony (primarily) would unravel the complexities caused by these needs and create new and better solutions than dreamed possible.

When he came up with the windowing effects for the CONFIG program, for example, which established a profound systems configuration (still able to be ported *en masse* to any newer version, I felt he had reached his peak. Boy, was I ever wrong.

FUNNELWEB is not a program. It is an environment which gives you, the user, some great computing tools in such a complete package that it becomes almost impossible to do without them after using them.

Probably 80% or more of normal (non-programmer) use of computers - especially the TI - is word processing. People need to communicate. FUNNELWEB turned TIW into a great word processor, adding so many features that should have been in the original cart/disk combo that when you go back to that combo you are appalled at its limitations. As I say, we have become spoiled by Tony and take for granted what is surely a remarkable achievement.

Much as I ♥ my TI, I know that if FUNNELWEB did not exist I would no longer be TIing. I couldn't. FWB's a structure equal to the best that any home computer has to offer its users at any price.

Let's face it. It serves as a Master DOS. What does a Disk Operating System do? Well, it lets you load up other programs, primarily, or lets you handle some disk management tasks. FWB does all that as a sideline.

With the new 4.31 FUNNELWEB the console 99 disk user has just leaped quantumly into an exciting era. The 40-column (standard) TI computer fan now has available to him or her a package heretofore only available to non-standard 80-col upgraders.

Before I go on, I'd like to say:

### STOP!

The bad news is this: Will went over to the Amiga a long while ago, and his father will be following shortly. This will mean that the greatest single piece of software for the TI will no longer grow; nor will we be seeing any other pieces come from Funnelweb Farm; nor will there be any more great tutorials (particularly those on exploring XB). This is not only BAD news, it is HORRIBLE news. Not that I can blame Tony. Although close to 100% of all TI disk users use FWB and its



upgrades, an extremely small number has ever paid the author a penny - and a tinier number, still, has ever given a second contribution (though the original to present upgrade is similar to the difference between my salary and Donald Trump's). And a tinier number, still, have ever written to Tony to tell him how much they use and appreciate FUNNELWEB and all the other great things he has done for us.

Remember, this is not commercialware. Fairware authors need and deserve our support. Fairware authors of the stature of Tony McGovern have earned massive support financially and socially. They just don't get it.

I urge every user group to "charge" a minimum \$10 copying fee to each member for this upgrade and send the entire collected sum to Tony. Send a group letter. Write him up in your newsletter. Let's let '91 be the Year of the McGovern. Even more, I urge every single reader to sit down at your first opportunity and write (probably using FUNNELWEB) a supporting letter, enclosing the largest cash (certified check, international coupon, money order) contribution you can really afford. It'll still be cheaper than anything you'd have to pay for that would be in the same league as FUNNELWEB (if such a thing exists). People couldn't wait, for example, to shell out \$60 for PRESS (sight unseen) or \$25 to \$60 for data bases. Many of our game cartridges cost at least five times what some consider a "fair" price to pay for the finest piece of software ever for the TI.

How about this for a rule of thumb? Take the most expensive piece of software you ever bought (and probably don't even use anymore) and double it. Send that as a donation. Remember what you paid in those pre-inflationary days for LOGO and MULTIPLAN and TI WRITER and DISK MANAGER II and E/A and whatever?

Well, the new FUNNELWEB has so many new features that most of those expensive cartridges and upgrade disks can be chucked in the basket.

What's your TI worth to you? What'll it be worth to you down the road with Tony McGovern gone? Decide soon about your commitment and make the investment today in your future.

~~~~~

So what are a few of these outstanding features? Well, for one, there is no more Disk Manager 1000 nor Disk Patch, because the new Disk Review performs all the functions of both (and then some) from within the FWB environment, including COPYING FILE BY FILE (to eliminate fractures) WHOLE DISKS TO MULTIPLE DRIVES! So stick a disk in Drive 1 and copy to Drives 2, 3, AND 4, while you go comb your wallaby. Disks can be FORMATTed to Quad density, if you have the right controller. Any program can be RUN right out of DR, including the huge IV254s. The Quick Directory now lets you mark a file from WITHIN the FORMATter or ASSEMBLER. And the disk editing functions are plentiful and profound.

The whole FUNNELWEB 4.31 environment is profound. You'll realize this immediately when you see BOTH central menus displayed on the screen simultaneously and you just have to move the cursor around to either RUN the program (or VIEW and/or PRINT the text file).

This is a must for everyone!

Get it from your user group today, being aware that everything worthwhile in life costs.

{If you see NEW-103/99 please put me on your exchange list.}

# CONTROL OF THE CS1 REMOTE

by Ed Hall

(Reprinted from the Nov. 1990 issue of MANNERS)

Have you ever wondered if there might be a way to control the remote line which turns on and off the cassette motor? Well there is a way and it doesn't take too much work either. You do need the 32K memory and for the following program the XBASIC cartridge as well. First let's talk about why you would want to control this line for anything else. What about using the computer to control other devices? With a little bit of circuitry and the following code a program could be written to turn on and off lights or maybe a stereo. Your TI could be at work while you're away. It could be used for security.

The following set up a link program will to allow user control of the cassette remote control for CS1. By doing so, an XBASIC program can be used to control external items other than the cassette recorder.

This program has to be loaded and run in Extended Basic with the 32K memory expansion operating.

```
110 CALL INIT
120 CALL LOAD (16368,79,70,70,
32,32,32,36,252)
130 CALL LOAD (16376,79,78,32,
32,32,32,36,244)
140 CALL LOAD (8194,37,4,63,240)
150 CALL LOAD (9460,2,12,0,45,
29,0,4,91,2,12,0,45,30,0,4,91,203,78)
```

Once the program is run, control of the remote is accomplished by the command, CALL LINK("OFF") to turn off the control and CALL LINK("ON") to turn on the control. I would suggest trying this first while watching the cassette spindle, with the cassette on, to see how it operates. Once you get a feel for it, you can write a program in XBASIC to perform the timing.

REPRINTED FROM  
ST. LOUIS 99ERS  
(FEBRUARY 1991)

```
*****
*                               *
* CASSETTE TRICK *
*                               *
* by Harold Hoyt *
*                               *
*****
```

If you have a tape recorder that apparently won't load data or programs to the 4A, try removing the red (microphone) jack while loading or verifying data. Put the microphone jack in only when saving data or programs to tape.

At this late date, Gene and I have discovered a nasty kink in the cassette Input/Output of the TI 99/4A. We think that we are the only people to have noticed this, and have never seen anything about it in all the newsletters we have read over the years.

Ordinarily, the cassette interface is a very well behaved part of the 4A. Wide variations of tape quality, recording levels and junky tape recorders work well with the 4A. Inexplicably, till now, some tape recorders refused to work with the 4A.

Most older tape recorders have a little impedance matching transformer which isolates the tape recorder electronics from the monitor speaker. A look at the console schematic shows the monitor lead from the cassette recorder (white lead, pin 8 and it's return, pin 9) ungrounded in the console. In fact the 4A requires a "floating", ungrounded input from the recorder since the 4A mixes a gating signal on the pin 8-9 combination.

Some modern tape recorders save the price of the output transformer by driving the speaker directly from an integrated circuit, which has no electrical isolation. Pulling out the microphone lead allows the tape recorder to "float".

# CONFIDENTIAL FILE

A monthly series  
By: Christopher Pratt

## Funnelweb Upgrades

As promised, this month the *Confidential File* has been reopened. Everyone in the TI community will be pleased to hear the report that Tony McGovern, co-author of Funnelweb, has delayed his move to the Amiga for the time being to pursue some rather large Funnelweb programming projects!

---

"Tony McGovern...has delayed his move to the Amiga..."

---

Funnelweb is well known to the TI community and has been for quite some time. The versatile program has seen many updates and revisions. Funnelweb is not simply a cute, ☺, TI Writer package anymore, it has developed into a complete applications package well suited for even the most tame TI users. The current version, 4.31, is stock full of enhancements this editor now takes for granted! <My most favored is the 80 col. support.> But there is still more to come...

Tony McGovern is currently concentrating his programming efforts on the Funnelweb Editor. Tony plans a complete re-write of the editor which should prove beneficial to the efficiency of the files to say the least.

Tony has also wanted to add hard drive support to funnelweb for quite some time. Currently there is limited support which

---

"Tony plans a complete rewrite of the editor..."

---

allows one to load Funnelweb from a hard drive sub-directory, but it is a far cry from what Tony envisions as his completed work. Given up hope on the Myarc HFDC, Tony has turned to the new Electronic Systems Development Corporation H/F Controller card. Shane Truffer, CEO/President of ESD, has been quoted as saying, "I will personally send Mr. McGovern any equipment and technical information he may need to complete his project." Some of what ESD will be providing includes a new, brand name 40MB MFM hard disk and of course the new H/F Controller card. The hard drive support would include file support in the editors and hard drive access in the DiskReview program.

---

"[ESD] will personally send Mr. McGovern any equipment and technical information he may need to complete his project."

---

As a TI user for many years I am very excited about the continued support by programmers like Tony McGovern. The TI is quite a computer and it will continue to be my computer for a very long time!

--WP♦

**MEETING DATES  
FOR  
1991-1992**

**C.O.N.N.I. BOARD MEMBERS**

|                    |                |                                    |                |
|--------------------|----------------|------------------------------------|----------------|
| 3RD SATURDAY       |                | Pres. - Chuck Grimes               | 614/268-8821   |
| 15 JUN 1991        |                | Treas - Everett Wade               | 614/262/6346   |
| SUNDAY 21 JUL 1991 | --PICNIC--     | Sec/Sat - Jim Peterson             | 614/235-3545   |
| 17 AUG 1991        | BLENDON WOODS- | Sec/Wed - Dick Beery               | 614/459-3597   |
| 21 SEP 1991        |                | Membership - Harley Ryan           | 614/231-1497   |
| 19 OCT 1991        |                | Librarian - Chuck Grimes           | 614/268-8821   |
| 16 NOV 1991        |                | Disk - David Truesdale             | 614/238-0719   |
| 21 DEC 1991        |                | Cassette - Sonny Grubb             | 614/1-873-8708 |
| 18 JAN 1992        |                | Cartridge - Jim Seitz              | 614/875-5519   |
| 15 FEB 1992        |                | NL Exchange - Jean Hall            | 614/885-4223   |
| 21 MAR 1992        |                | Chuck's BBS                        | 614/268-1994   |
| 18 APR 1992        |                | TIABS BBS                          | 614/852-4579   |
| 16 MAY 1992        |                | Vice Pres. - Bill Sheppard         | 614/881-5742   |
|                    |                | Spirit of 99 BBS                   | 614/263-3412   |
|                    |                | Irwin Hott                         | 614/263-5319   |
|                    |                | Dick Beery                         | 614/459/3597   |
|                    |                | Co-Editors/Spirit of 99 Newsletter |                |
|                    |                | Jean Hall                          | 614/885-4223   |
|                    |                | Bob DeVilbiss                      | 614/891-0566   |
| 4TH WEDNESDAY      |                |                                    |                |
| 26 JUN 1991        |                |                                    |                |
| 24 JUL 1991        |                |                                    |                |
| 28 AUG 1991        |                |                                    |                |
| 28 AUG 1991        |                |                                    |                |
| 25 SEP 1991        |                |                                    |                |

**Spirit of 99**

|                                                                                   |
|-----------------------------------------------------------------------------------|
| <p>Bulk Rate<br/>U.S. Postage<br/>PAID<br/>COLUMBUS 43221<br/>Permit No. 1945</p> |
|-----------------------------------------------------------------------------------|

C.O.N.N.I.  
181 HEISCHMAN AVE  
WORTHINGTON, OH 43085

TIME SENSITIVE MATERIAL  
POSTMASTER - PLEASE DELIVER PROMPTLY