

net99er news

Newsletter of the NorthEast
Tarrant County
TI 99/4A Users Group

Vol. 7 No. 3

Mar. 1989

**NEXT MEETING:
SATURDAY
APRIL 1st**

at 9:30am in the NRH Community Center

CLUB OFFICERS

President	James Crosson
Vice President	Charlie Bathman
Treasurer	Lee Deforest
Secretary	David Shivers
Membership Chairman	Bill Duncan
Librarian	Joe Torres
Newsletter Editor	Tom Collins
TI-NET BBS SysOp	Phil Chappell

TI-NET 581-1421 ^{300/}1200-7E1-24 hours

The reviews, evaluations, and opinions contained in
this newsletter are the author's own and do not
reflect the views of the **NET99ERS** HCUG.

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This is an open letter to the members of the NET 99 HUCG.

I have been a member of the club for over six years and have enjoyed it a lot plus I have learned so much. I have held the office of Vice President and have had the honor of being your treasurer for the last two years.

We have had some real good people leave the club because of the pressure put on them to do too much, because no-one else would do it. We now have about five or six people who do all the planning and the work to put on a meeting and keep the club growing. I feel that these people need some help. You don't have to volunteer to fill a permanent position or a job, but if you could do a demo or help with a program once in awhile it would be of great help, even a suggestion as to what you would like to see or have a demo of at a future meeting would be of help. We don't know what you would like to see unless you tell someone.

Everyone has a favorite program that he or she uses, but someone else hasn't because they don't know what it will do, you could perhaps show or how you use the program. While on the subject of programs you know that you can donate programs to the library as well as take them out, that is how a library grows. See Ken Dominic anything dealing with the library.

We need help in putting ideas in the Newsletter. You don't have to type an article, if you come across something from a special on equipment to software or anything else, if it was of interest to you it may be of interest to someone else. See Tom Collins for anything on the newsletter.

We need help in doing up the disk of the month (DOM). Right now the same person spends about sixteen hours each month putting together, testing, and copying the DOM. We could use some help so that he only has to spend one or two hours. The DOM has been our main source of income for the club in the past, so we have to make sure that that one gets out each and every month. See James Crosson.

We could use some help in setting up for the meeting and taking the equipment down after the meeting.

These are just some of the things that we can use help on each and every month as the meetings just don't happen we need help.

PLEASE VOLUNTEER to help us help you learn your computer better.

One last item. At the Feb. meeting we brought the Ram Disk Boards for the people who had purchased them. One of the boards just disappeared and we don't know if someone picked up one by mistake or design. If it was by mistake then PLEASE see that the club gets either the money (\$30.00) or the board back. If it was by design then PLEASE BRING THE BOARD BACK AND PUT IT ON THE TABLE WHEN NO-ONE IS LOOKING or talk to me and pay for the board. In either case if you have the board and wish to keep it PAY for it. If it is paid for we will even help you put it together so that it will NOT BURN up your P.E.Box. - Lee DeForest

As you may have guessed, the next meeting of the NET99ers is going to be held on April 1, 1989, also known as April Fools Day. I just hope that the meeting is not a fools joke. The meeting place will still be the same, just off the corner of Rufe Snow and the service road at 820 Loop in the North Richland Hills Community Center. The meeting will start at 9:30 a.m. or whenever I can get people to set down and listen up. If we are lucky, we might be able to hold a meeting without having it cancelled by snow and ice. That was the bad news the last two times, but the good news is that we are still getting new members to join and old ones to renew and best of all were not broke. In fact, the club is doing so much better I think that we should consider a picnic for the NET99ERS and their families sometime soon, if that is the vote of the membership. I think that would be a very good idea, since this would give everybody a chance to meet one another and see the people behind the scenes, let me know your thoughts at the next meeting.

Recently I recieved an invitation to attend the Dallas group's mini-sig on the P-Brain card designed by John Guion and Robert Jones. I have heard a lot about this card, but had never seen the card demonstrated. I really didn't have much knowledge of what it did or how it did what it was supposed to do. The things I had heard was of course, was that it was simply another gram emulating device, except that it worked out of the PEB. I am glad to say that I had an opportunity to see this card demonstrated by the pro himself, John Guion. My friends if you have heard the same thing about this card, then you have not been told the truth by any stretch of the imagination, far be it from the truth. To tell you my honest opinion, I can hardly contain myself about how excited I am about the potential of this card in regard to software and hardware development. This card is not only easier to use than the Gram Kracker, the Gram Kart or the Gramulator, but you don't have to be a wizard to use it. Mind you that I have not used this card myself yet, but I am thinking seriously about purchasing one, if I can afford it in my budget. More on this card later.

There has been several new things that happened lately for the 9640, one of which is the release of Advance Basic for the machine, and I understand that it is quick and works super with TI basic and Extended basic programs written for the TI. Plus Al Beard has released his Fortran package for the 9640 that rumor has it will also work on the 99/4A. Also while were on the rumor trail, I heard thru the grapevine that Jack Riley has told certain people that the 'H' version of NDOB is about to be released and the program development package from Paul Charlton is being sold, now how about that. There seems to be a lot of good things happening for the 9640 now and for the future. By the way, the order has been made for the floppy-hard controllers and they should be in for the meeting, as well as the kits for the ram-disks project. It looks like things are looking up for the TI community. I guess it is time to close this thing and say as always, see ya at the meeting. James Crosson - President

----- Editors Input -----

This month we discuss club business. We have the same problem in our club as many throughout the country. The same officers preside over the club every year with little change. What we need is for the club members to do more for the club. After all, the club had performed a service to the members, has it not? Do you have a program that you use exclusively and are proficient at running? How about giving a demo at the meeting? It doesn't have to be elaborate or long. You've seen them before. We want more of the club members to take part in this area. Please contact a club officer and volunteer. We need your support. Another item of note, a Horizon Ramdisk Card is missing. It was in the box at the start of the meeting and at the end of the meeting it was gone. Perhaps someone picked it up by mistake or on purpose. I would like to think of it as a mistake. You can remain anonymous if you bring it back at any future meeting. It can also be paid for anonymously. Just mail the money or leave it quietly on the sign-in sheet. Please, this loss is being absorbed by the club, and to be fair to everybody we need to have the card or the money. What this means is that someone who ordered and paid for his HRD+ card didn't get one. That wraps up my INPUT this month. Please feel free to contribute to the club newsletter. Any and all is greatly appreciated. - Tom Collins - Editor

----- Treasury Report -----

I could only dream that we would have many more months like this last one from now on. It didn't start out so good with the bad weather and all. We had a partial meeting on the 4th which we collected \$319.09 then we had a full meeting on the 11th at which we collected another \$914.25 for a total of \$1233.34. This is the best month for income I can remember. We had expenses of \$250.65 so far leaving the club with 1603.83. We will have a sizable expense for parts kits and HFDC Cards of approx. \$800.00. These items have been purchased by some of the members and were prepaid. Still the Treasury is in pretty good shape with a balance of over \$800.00. - Lee DeForest

----- Membership Department -----

As most already know we are overhauling the membership updating system. This will take time and effort so please bear with us. If you do not see the correct expiration date on your mailing label please contact Bill Duncan. If you are not receiving the newsletter due to the changes being made then contact Tom Collins. We want to welcome all new members and when the changes are completed we will list all new members and renewals in the newsletter. Thank you for your support. Bill Duncan - Membership Chairman

President James Crosson called the meeting to order at 9:45 AM. The minutes of the last meeting were read and accepted. The treasurer's report was also read and accepted. A short discussion of the Horizon Ramdisk (HRD) was held during which members were advised that HRD kits, other than memory chips, are available for \$50. Contact Bill Duncan for details. Lee DeForest advised that NYARC Hard/Floppy Disk Controller Cards are available for less than \$270. The group is trying to get an order together for at least 4 to get the best price. See Lee for details. Lee DeForest then gave a demonstration of how to make a "Flippy" disk from a double-sided disk with only one Read/Write notch. This process allows folks with single-sided disk drives to use both sides of a disk. Lee also gave a demo of the HXI program for the Geneva 9640 and a demo of 5FI Pictures. These programs are available on diskettes from 9610 NEWS from Berry Miller. James Crosson gave a "Disk-Of-The-Month" demo followed by Ron Miller's demo of funnelweb. After a short BUY-SELL-SWAP session and break, the balance of the meeting was occupied, as advertised, in copying disks from the library for any members so desiring. The meeting adjourned at 12:30 PM when riot and mayhem broke out over who was going to carry all the stuff down to James' car after the elevator broke.

Respectfully submitted, by Charlie B., BS, MS, PHD. (Seriousness ain't one of my strong points folks)

----- TECH TALK by Mike Maksinik -----
From the Chicago Times

Some of you may have followed TI's developments in the time that the 99/4A was at it's childhood. All sorts of plans, marvels, new things for the home computer that "was ahead of it's time." There were several peripherals developed by TI but were only released in tiny quantities, mostly to the TI employees that got the pick of the crop. Some of these never made it to the production lines, but only a few prototypes survived.

The modem card, which essentially was a Novation Cat 300 baud modem, was placed on a peripheral card, and a DSR ROM was given it to control very low-level functions, such as modem-to-vdp RAM interrupt routine, powerup routine, etc. It would work with a command module, like TE II just as the disk manager module works with the low-level routines in the disk controller to perform the DOS functions. Only a very few of these survived. Another little known card was the IEEE 488 bus controller card. It contained the TM9914 GPIB (general purpose interface bus) that allowed the lab and mechanical equipment that used GPIB to interface to the TI. One could access the GPIB like a file device. This same standard is found in unexpected places. Any of you have a Commodore 64? The communications bus used to connect it's ring-style bus of peripherals is a modified GPIB, one of Commodore's own designs. The SCSI interface (small computer systems interface) is essentially a multi-GPIB, allowing very fast buffered serial transfer between storage devices. SCSI also has interrupt lines to alert the host that data is waiting to be read or written. CONTINUED NEXT PAGE

The VCR controller, a \$500.00 range peripheral, along with support software, was introduced as a means to combine video from a VCR and the video from a TI. The card would control playback, hold, framing, and other functions. Digital Research created a similar product to control videodiscs that attached to an apple or a commodore 64, although much later than TI's development. The debugger card, a little known device, was in existence when the 99/4A was born. In fact, it's design can be rooted to the support hardware in the 990 minicomputer series. Essentially, the TMS9900 is a minicomputer on a chip. The editor/assembler GRON was a virtual image of the DX10 assembler used on the 990 minicomputer. Some directives one would only find on a minicomputer exist in the editor/assembler package, but were dormant in the 99/4A. The debugger board was designed to bring the 99/4A closer to a minicomputer's environment. The DEBUG program, included with the editor/assembler package, has several features that cannot be used without this piece of hardware. In fact, the editor/assembler looks as if it was taken direct from a 990 itself. The only added features were the GRON utilities, such as VMBW, DSRLNK, LOADER, etc. that didn't support the features that a 990 could handle. It's too bad that TI wishes to keep the plans for this card on ice, it would be a dream to program with. It allowed multiple breakpoints by using the XOP 3 opcode, which would allow you to step your program through and look for errors or miscalculations. Although we can do this through software, the debugger board used a hardware approach. The design of this board, and what it contained, are up for grabs. If anybody knows, I'd appreciate you sharing with the rest of us. Send me a letter.

COMPUTER USERS, MODEM USERS, SYSOPS AND BBS USERS BEWARE!

by Cynthia Becker

reproduced from the CW 99ers newsletter

I have been involved in telecommunications now for a few years, and as a result of it have met some of the nicest people I could ever hope to know! It has served as a means of information gathering, learning more about the computer, and sharing a rare kind of camaraderie. Enter the 'HACKER'! Yes, folks, they do exist, and they are still the veritable "thorn in the side" where telecommunications and bulletin board systems are concerned. They think nothing of calling a bbs and wreaking havoc by trying to 'crash' the system or erase a data base or tap into closed systems, stealing, if they can, highly classified information. It has been done in the past, and now the terminology 'hacker', has taken on a new shade of meaning. I am referring to the 'hacker' who, using sophisticated computer equipment, has infiltrated the telephone systems, invading the privacy and security of private phone users as well as company and guarded systems. It was reported in the SEATTLE-POST INTELLIGENCER today (July 22, 1988) that our phone systems are very vulnerable to such 'hackers' as a result of computer-controlled switches replacing electromechanical call-routing equipment. An expert 'hacker' can illegally connect to the phone network via personal computers. If they know the proper commands, they can eavesdrop, ADD CALLS TO SOMEONE'S BILL, forward calls to another number or keep someone's line BUSY. CONTINUED NEXT PAGE

The Manager of electronic security operations in San Francisco (PACIFIC BELL TELEPHONE CO) disclosed the above in a memorandum and in an interview with company officials. He warned that an 'electronic intruder' could disable an entire central switching office for routing calls and could disrupt service to an entire neighborhood! Can you imagine the implications? "Organized crime groups or terrorists might use such technology to their advantage", he said. This memo was provided by a teenage 'hacker' to the New York Times, stating that it had been obtained by a fellow 'hacker' who "illicitly eavesdropped on a facsimile transmission between Pacific Bell offices in San Francisco." Pacific Bell verified the memo as being "authentic", concluding that "the number of individuals capable of entering Pacific Bell operating systems is growing, and computer hackers are becoming more sophisticated." The memo mentioned two 'hackers' who were able to 'monitor each other's lines for fun', and 'seize another person's dial tone to make calls appear on their bill.' Another used his abilities to disconnect and tie up telephone services of people he didn't like, even going so far as to 'add several custom-calling features to their lines to create larger bills.'

When police searched the Southern California home of a man suspected of breaking into the computers of a Santa Cruz software company, they discovered that he could also gain access to ALL of Pacific Bell's Southern California switching computers! They found files containing codes and employee passwords for connecting with the Pacific Bell switching systems and related computers. He also had commands for controlling the equipment. They also reported a former programmer for Sun Microsystems who had done the same thing, but because of certain implications, the case was taken over by the federal government because "there are some potential national security overtones."

What we have here is a highly vulnerable and potentially dangerous situation that, if not corrected, could feasibly cause our telecommunications 'hobby' to go down the tubes! A 'hacker' has already tapped into the lines of a SysOp on the East Coast, running up a \$500 phone bill. The sad part of this situation is that this person has accused a member of the TI community for doing it. BBS numbers are a public commodity, and are available for all to see on any system one logs on. Most of the bbs's we call are not 'closed' systems, so I guess all SysOps are opening themselves up for such 'attacks'. So, folks, it's up to the honest users of modems and phone equipment to do something about it, else we will have to deal with the possible eventuality of not having the freedom to call a bulletin board! THINK ABOUT IT!

----- WANTED -----

Universal Terminal Unit - An interface for Amateur Radio hook-up. Please contact Jo Nell Thompson at a meeting or call 817 237 9447 or mail info to 6212 N. Hill Lane, Fort Worth, Texas 76135

