THE GUILFORD 99'ER NEWSLETTER

OUR NEXT MEETING

DATE: May 2, 1989, Time: 7:30 PM.   Place:Glenwood Recreation Center,
2010 S. Chapman Street.

Program for this meeting will be a demo and discussion of "Archiver III"
version 3.03.   This is Barry Boone's very latest release. A discussion of
Archive programs in general will follow.

MINUTES

The April 4th meeting of the Guilford 99er Users' Group was held at the Glenwood Recreation Center in Greensboro. N.C. There were G members and one guest speaker present.

The meeting was called to order by V.P. Emmet Hughes at 7:30 P.M. due to a late arrival of the President. The March minutes were read and accepted as read. The financial report was also given at that time.

OLD BUSINESS:

1. Bill Woodruff brought the club's second disk drive back after replacing the board. Bill says he checked the drive out and it now does all it is suppose to do. A case will be forth coming for this drive.

NEW BUSINESS:

1. The secretary gave mention that the club had received a letter from Mr. Jim Peterson requesting an exchange of newsletter for "tips from the Tigercub". His offer was approved by all members.   Mr. Peterson will start receiving our newsletter with the May issue. 2. Herman was asked why the disk of the month had been discontinued and the answer was that no new material pretaining to the TI has made noteworthy entrance in quite a while. He asked that someone suggest a subject for the disk and he would provide the disk of the month again.

The program was then turned over to Dan Post who as you know is the SYSOP of the Groundstar BBS which carries all of our TI files. Dan has started selling the MACINKER which re-inks the ribbons for our printers for about a dime a ribbon.   Dan passed around samples of what can be done with the inker. The sample bore typing with the worn-out ribbon and underneath was writing that was made with the same ribbon after re-inking. The results were amazing! Dan says that with proper inking, the ribbon will outlast the print head.

After the demo, Herman made a motion that the club purchase one of the units which comes with the universal adapter kit for Epson FX/MX/RX 100 ribbons and another adapter was ordered for the smaller cartridges also. The club was made a price of $68.22 for the entire lot. A bottle of ink and applicator also comes with the unit. George vonSeth seconded the motion and all but 2 members voted to accept the offer.

It was suggested that members may bring one ribbon to each meeting and the ribbon can be re-inked while the meeting is going on. It will be available at the April meeting.

After Dan's demo, Bob Carmany demoed his new program writing disk that he has written. As most of the members did not make the March meeting, it was new to most attending this meeting.

The meeting was adjourned at 9:30 P.M.

Respectfully submitted.
L. F. "Mac" Jones, Sect/Treas.
Guilford 99er Users' Group

RAMBLING BYTES

by "Mac" Jones

For a change, we had right nice weather for our April meeting, but as the old saying goes....April showers, etc,etc.   It hit about 8:00 and it sounded like a mega-ton of water hit the roof of our building!! Fortunately, the twister they were looking for didn't show. By the time the meeting was over the showers had depleted their heaviest burden and just a drizzle was left. Wish you could have been there if you missed the meeting.
We had, as you read in the minutes, Dan Post come by and demo the MacInker for us. I had read some time ago about these things but I really didn't realize that they did such a good job. Joanne later told me that they have one at UNCG but none of the office force know how to use it, ha! Since the club has bought one, maybe I can show her how to use it and make her a heroine at work. Anyhow, talking to Dan, there are numerous businesses now using re-inkers at a vast savings to them as one ribbon will last, according to Dan, the life of the print head by re-inking it. The process is very slow as the ribbon only moves about 1/2 inch per second so you must time the inking to the length of the ribbon. Dan says that if he doesn't know the length, he just uses a dab of white out at the start and looks for it to come back to stop the ribbon. If you run it through twice it really don't hurt anything, but it does give a little shadow on the reverse side of the paper.
Any member wishing to ink his/her ribbon can feel free to bring it to the meeting and we will set up the unit at the rear of the room and let it work while the meeting is in progress. It has been suggested that maybe members could kick in 25 cents, just for ink, with each use. I think that compared to the prices of most ribbons, 25 cents is a drop in the bucket.
Remember when we were much younger a little query that was going around asking: "Would you rather have a million dollars or a penny a day doubled every day for 30 days"? Well I was sitting around the other night and for some crazy reason that came back to me after about 45 years. So...I sat down at the keyboard and wrote a little program to show just which one would be the best bet. You guessed it, the penny a day was much more than the million bucks. I have inserted the program for you to play around with. I have written it in basic but you could probably shorten it very much with an ex-basic statement.
```
100 CALL CLEAR
110 DAY=1
120 DISPLAY AT(10,20):"DAY ";DAY
130 DISPLAY AT(12,1):"ENTER AMOUNT"
140 ACCEPT AT(12,15):AMT
150 TOTAL=(AMT+AMT+1)
160 DISPLAY AT(15,1):TOTAL
170 DAY=DAY+1
180 GOTO 120
```
Line #150 adds a penny and also doubles the amount from the previous day. When you get the total from the first day,

just enter the total for day 2 and so on. You will be amazed at the total when you get into the late 20's and on the 30th day, WOW!! Wish it could happen to me, don't you?

I had been asking different members for the name of a game that my little grandson was wanting to play and I couldn't find it. He described it as a round yellow ball that climbed latters and jumped up and down on squares holding a monster inside. At first I couldn't remember the game and finally it came back to me just exactly what he was describing, but still could not think of the name or the disk it was on. Over a period of time I guess I looked at around 200 disks but to no avail. Well, just to show how dedicated to one another the TI community is, I put an entry into the TI-ECHO on Ben Mann's Opus board, which goes all over the country, asking for help in locating the name of the game. I gave the best description of the game as I remembered it. Within the week I got a message back from Don Mccalla in Pittsburgh Pa telling me the name of the game and also what disk it was on! The disk, incidently, was "The best of Great Britian #1", and the game name was "BB at the hatchery". Again I looked through my archived backups and sure enough, there was the arcked disk listed as games 1. Apparently, I had saved it from the BBS and unpacked it to another disk for playing and just stuck the arcked version in the back with the back-ups. After sending Mr. Mccalla a note of thanks on the ECHO, I made Grady a copy of it for his next visit. Thanks to a great group of people, I think the 99 4/A will go on for years to come. We will be getting the "tips from the Tigercub" soon and I look forward to getting into them. I understand from reading other newsletters that there is much to be enjoyed by Mr. Jim's contributions to the hobby, which are many.

Any of you who are into the Infocom games, the EAR 99'ers has a helpful hints column most months that help you improve/solve your games. This month is featuring the hints on "Plundered Hearts". These issues are available to any one who wishes to read them. Just let me know a little ahead of the meeting. As the April Shower song goes, "have no regrets" and since the dogwoods' are blooming and the grass growing high in the front yard, soon the May flowers will be here. Until the May meeting comes along...enjoy the good TImes.

DAYS OF YORE

FOUR YEARS AGO....By Rusty Keyboard

Four years ago the Guilford 99ers had their first meeting at our present address in the Glenwood Recreation Center. The Officers of the club on April, 1985 were: Pres.-Bob Carpany, V.P.-Carl Foster, Sect/Treas.-Andrew Small, Program Chairman-David Cohen, Newsletter Editor-Joe Martin, Program Lib.-George vonSeth, and Education-Sandy Carmany.

Some of the articles featured in the newsletter, which was Vol.2 No.4, was noises that your computer can make. President's corner, hardware shopper, software shopper, product reveiw, program reviews, want ad, and a small program to draw on a black screen with a white curser using joy stick.

Just thought you would like to know. 'Rusty'

DISK DRIVIN'

One of the things that I learned when I started to fill up my newly acquired P-Box was that all disk drives are NOT created equal. I had been using a pair of SSSD drives --- a Shugart drive in the PEB and a Tandon 100-1 as an external drive. Both of them worked satisfactorily although the Shugart is just a bit on the noisy side.

-- The logical step was to put a pair of DSSD drives into the PEB and eliminate the external drive altogether. After a bit of searching (and experimentation) I ordered a pair of "generic" disk drives from an outfit in San Jose, California named JDR Microdevices. The advertisement in the catalog gave the spec of the drives ---typical IBM-compatible 40 Track, 48 TPI (Tracks Per Inch), 360K drives. These specs are just what you need for the TI! The drives will read DSDD with a CorComp or Myarc controller but just single density with the TI card. The "generic" drives that they sent turned out to be a pair of Panasonic JU-455's which are excellent disk drives!

I unwrapped the drives and got ready to install them in the PEB (you can put 2 1/2 height drives in the PEB). I followed the directions that came with the drives --I found the jumper block easily enough. Next, it was time to find the terminal resister pack --- there wasn't one!! The Panasonics are 'smart" drives, the terminal resister packs are built in and all that was necessary was to choose the correct drive select for each. I hooked up the home-made disk cable and Y-power cable and installed the drives in the PEB. Everything worked great!

The only "problem" that I have encountered with the two drives so far is that they are so quiet that if it weren't for the LED I wouldn't be able to tell that they were running. In fact, they are faster than the old drives in both reading and writing. I used a download from Dan's BBS as a benchmark and quickly found that the download efficiency went up to above 90% with the new drives. Your efficiency percentage is governed in a large part by how quickly your buffer is written to disk once it is full. Copying programs also goes much faster with the pair of DSSD drives installed.

That brings up another interesting situation! I now have the task of going through my entire library and converting it to

DSSD --- a space savings of 50%. I figure to save 75-100 disks by the time that I finish. As Br'er Rabbit said "Please don't throw me in dat briar patch".

At one time there was a list of disk drives that were TI-compatible. With new models coming out all the time, I don't think that a comprehensive list exists anymore. Basically, for a disk drive to be compatible with the TI controller card (and the others) it must be a 40 Track, 48 TPI drive. Those specs cover most IBM 360K DSDD drives. If the drive you are looking at falls within those specs, it will probably work with your TI. Most of these drives are also 1/2 heights which means that you can fit two of them into the PEB. You will need a Y-power cable and a disk cable with a 34-pin IDS (Insulation Displacement Socket) on one end and two 34-pin IDC (Insulation Displacement Card) edge connectors adequately spaced on the cable. The disk drive cable can be constructed at home for about $15 from Radio Shack parts with a minimum of experience. You can also install two 1/2 height drives in a standalone power supply with the same cabling.

That brings us to the question of disks. To understand what you are getting in a disk, let's look and see how they are made. The process will vary slightly from manufacturer to manufacturer but essentially the results are the same. A long sheet of mylar coated with iron oxide is run through a mchine similar to a giant cookie cutter. The disks are simple stamped out of the sheet. Center hubs are added by pressing them onto the disks and the disks are placed in a semi-rigid plastic jacket. At this point, all of the disks are alike --there is no difference between double sided and single sided disks. Both have the appropriate coating of iron oxide on both disk surfaces and they are identical in appearance.

The final step is to certify the disks. All this is is a test to check and see if the disk can be initialized and if it will hold data. A single sided disk is tested on one side and a double sided disk on both sides. Defective disks are discarded and the disks are certified and warranted as either single or double sided disks. Basically they are all the same except for the fact that a single sided disk hasn't had the second side tested. That means that 99.99% of single sided disks can be used as double sided disks without any problems at all. If there is a problem, you will discover it when you try to initialize the disk as double sided. You will find the same miniscule percentage of disks defective whether they are double or single sided certified.

FAREWELL

One of the saddest notes lately is the probably exit of TENEX from the TI marketplace. Their latest catalog has shrunk from 48 pages to a meager 12 pages and the offerings of TI products has dwindled to almost nothing. I'm sure that they won't admit that they are leaving the market if you asked them but the signs are clear enough. There is the "clearance sale" brochure that they are sending but with orders and several items that I have called and asked about are "no longer in stock".

There are other signs if the impending pull-out. TENEX has recently come up with a smart, sassy catalog selling tons and tons of (ugh!) IBM equipment. Even though the exit is probably just a matter of months away, there are still some bargains to be seen in what remains of their inventory. Their disks prices are among the best --- the disks are certainly error-free! There are other software packages scattered throughout the catalog that you may not have seen before -- certainly not at the prices at which they are being offered!

TENEX has been selling TI equipment for just over six years and it is truly sad to see their stock depleted under the guise of "moving to a new warehouse". I have ordered from them through the years and the service that the have given me has been first-rate. So, it saddens me to see them slowly "ride off into the sunset" like the hero in a grade "B" western.

Dispite all of the gloom that the impending exit of TENEX engenders, there is still hardware and software available for our "orphan". TexComp has become a CorComp distributor (whatever that means) and there are other sources of both software and hardware listed in the pages of MICROpendium each and every month. In fact, some of the best hardware isn't coming from major manufacturers like Myarc any longer. Just look at the Horizon RAMdisk, QUEST 200 RAMdisk, GRAMulator, and others to see what the future holds. In fact, I got a letter from Australia the other day and they had a demo of 3 512K QUEST cads in a PEB --- a full 1.5 megabytes of on-line memory!! With Tony McGovern (F'WEB) and Ron Kleinschafer (QED cart Loader) writing the software, the QUEST card should be spectacular. Add the Dijit 80-col cards and the products from RAVE and you can see that the hardware market is very much alive, thank you!!

Another update of ARCHIVER (Vn 3.3) bodes well for the software market as well. F'WEB is in version 4.13 and there are updates of the TELCO utilities as well. PRBASE has just been updated and there are many other programs floating around.

So, despite the fact that we are saddened by the impending exit of TENEX, there is quite a bit to look forward to for the "orphaned" computer that wasn't supposed to last four months after TI left the market almost 6 years ago.

ORPHAN

ORPHAN NEVER LACKING LOVING PARENTAL CARE

By Steve Mickelson

Today's state-of-the-art computers have an abundance of features which would have been considered truly amazing only a few years ago. For example, it's not unusual for contemporary systems to include spreadsheet and wordprocessing capabilities, or archade games featuring multi-colored screens, music and digitized speech.

But a computer existed more than half a decade ago that already had all of the above features and more. That computer was Texas Instruments' TI-99/4A, also known as the original "Home Computer"(a term coined by TI). Despite being an orphan, for five years this computer has survived and thrived.

TI produced over 3 1/2 million of the 16-bit TI-99/4A computer consoles worldwide, including about 1/4 million Expansion Systems. Most of the early software produced for the TI was "locked" in GROM (Graphics Read Only Memory) cartridges distributed through TI. For each cartridge sold, TI collected a fee - a policy which unfortunately discouraged many potential software writers.

After TI unsuccessfully tried to undersell the popular Commodore Vic-20, the company decided to cut its losses. TI stopped production of the TI-99/4A in October 1983. By rights, this should have led to the disappearance of the computer within a couple of years.

But despite TI's failure in the marketing the 99/4A, the company had assured the survival of its orphan computer by implementing a policy of consumer satisfaction.

Support for the user

Back in the early 80's, TI responded to the computer literacy needs of many fledgling users by creating a number of regional workshops, exclusive to the 99/4A. Also a regular bulletin was mailed out to users.

As sales rose, demand for information outstripped supply. This led the company to encourage the formation of local user groups. TI sent out starter packages to aid in the formation of local user groups. These new groups began their own newsletters to their members. A number of user groups began to exchange newsletters. When TI pulled the plug on their popular home computer, the existing network of user groups filled the void, providing the invaluable technical assistance needed by users.

Additional technical and hardware support

The TI-99/4A endured for another reason. Since the 99/4A was built to the high commercial standards of Texas Instruments' mini-computers, many systems have been in use for five or more years with little or no need for repairs. For those users with problems, TI created a toll- free 800 line called "TI CARES". TI released updates for example existing TI software, and even some previously commercial software programs, to all user groups for release in the public domain.

Support for orphaned 99/4A's also came from many third-party sources. For example, a couple of magazines, Home Computer, MICROpendium and Asgard News, catered exclusively to the TI user (though Home Computer is now deceased). And many hardware manufacturers picked up the slack, increasing production of cards for existing expansion systems, as well as designing brand new add-ons and expansion systems. Among these companies, Myarc is probably the best known.

Shareware software and hardware kits have also come from talented individuals within the many 99/4A user groups. For example, the Horizon RAM disk and MBP real-time cards have come from user groups. And DM-1000, a disk manager from the Ottawa User Group, has become the standard in the worldwide 99/4A community.

From mail order to regional TI Fairs

Several mail order suppliers still meet the needs of TI users. And now another forum has emerged for users to not only see the latest hardware and software for the 99/4A, but also to meet the remaining software authors and distributors within the TI community. That forum is the local or regional TI Fair. Chicago just had their sixth annual TI Fair, with others taking place in Milwaukee, Philadelphia, Las Vegas, and Los Angeles.

In Canada, Ottawa and Halifax have been local focal points for TI forums. These events, usually held in community halls

or auditoriums, give TI users an opportunity to meet one another in person, see the latest hardware and software, and hear lectures and demonstrations on their beloved orphan computer. TI-ers have been known to travel hundreds or thousands of miles just to attend such an event.

The legend lives on

Today, many of the original TI computers are still in service. For example, some of these robustly built systems have seen two or three owners without enduring any hardware failure.

Surprisingly, more options are now available for the TI-99/4A, in hardware and software, than when Texas Instruments originally discontinued the computer. There are now several languages for the 99/4A: Extended BASIC, two versions of Forth, a Turbo Pascal, Pilot, Fortran, and c99, among others. There are currently also several data bases, including TI-Base (which looks similar to D Base III). Other available databases are Creative filing System and PRBase.

A host of other useful programs are now available too. For example, there are utilities that allow the user to port text files to and from an IBM, by reading/writing and even formatting in IBM disk format. There are several good graphics programs, including TI Artist, Picasso, Joypaint, and Graph X. And as for word processors, there are Companion, Writerease and the Press. As well, a number of advanced disk, diagnostic and assembler utilities are available for any interested 99/4A users.

New Hardware

New hardware add-ons for the TI include voice recognoition systems, trackballs, mice, 80-column cards, double and quad disk controllers, as well as hard disk controllers, real-time clock cards, speech cards, digitizers, music-synthesizer cards, and battery-backed RAM disks with up to one megabyte of pageable memory.

It is also possible to purchase IBM-XT keyboards interfaces, and hardware to dump the older cartridge software to disk.

One of the most recent hardware developments has been the Myarc 9640, also known as the Geneve. The Geneve, literally a computer on a single card, has many features of the discontinued TI-99/8, as well as a number of other features which are similpy state of the art.

For example, the Geneve uses the upgrade-compatible Yamaha 9938 video display chip. And this "intelligent" video chip has mouse and joystick ports built in, with 80 column display, digitizer capabilities, as well as composite, analog RGB, and RF-modulated video outputs.

The Geneve has the same sound chip as the TI and comes with IBM XT, 12- function keyboard. The operating system, M-DOS, has the same command set as MS-DOS. Yet, a GPL software interpreter creates a TI-emulated operating environment within the 9640, one which lets most of the 99/4A programs run on the Geneve as if they were booted on a 99/4A.

Nevertheless, the Geneve's 12 MHz clock speed allows the user to run programs at selectable speeds up to 3 1/2 times faster than those of the 4A. The 9640/Geneve has 32K or an optional 64K of 0-wait memory, plus 640K of RAM on the card. Also, the Geneve has a battery-backed real-time clock. The Geneve's graphic output is up to 512X424 pixels, in any of 256 colours.

Recent software offerings for the Geneve include a mouse-driven art program which can load and print 99/4A art and GIF pictures, as well as GEME, a mouse-driven windows-like utility, which allows up to four programs to run at the same time. Overall, the Geneve brings to the TI-user many advanced features not possible in the TI-99/4A.

A bright future

In the near future, we can expect a MIDI interface card, a Canadian built Z-80 card, Kermit software, GIF software for the TI, and possibly an IBM co-processor card. Also, expected in the near future is a stand-alone Geneve computer system, available to any user who does not already own a TI-99/4A system.

As long as we have a dedicated community of innovative enthusiasts, the Ti-99/4A orphan will continue to endure and prosper a contemporary classic, one of the true paradoxes in today's computing world.

Steve Mickelson is President of the Toronto 9T9 Users Group and edits Newsletter 9T9.