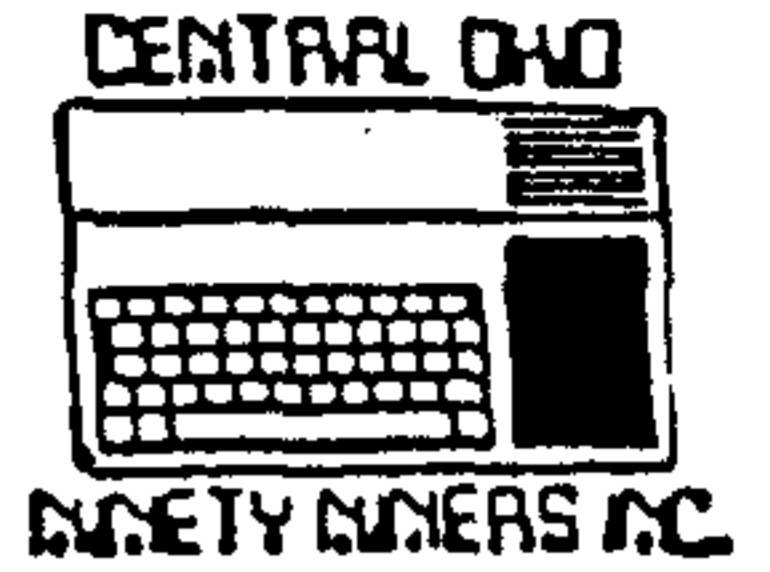


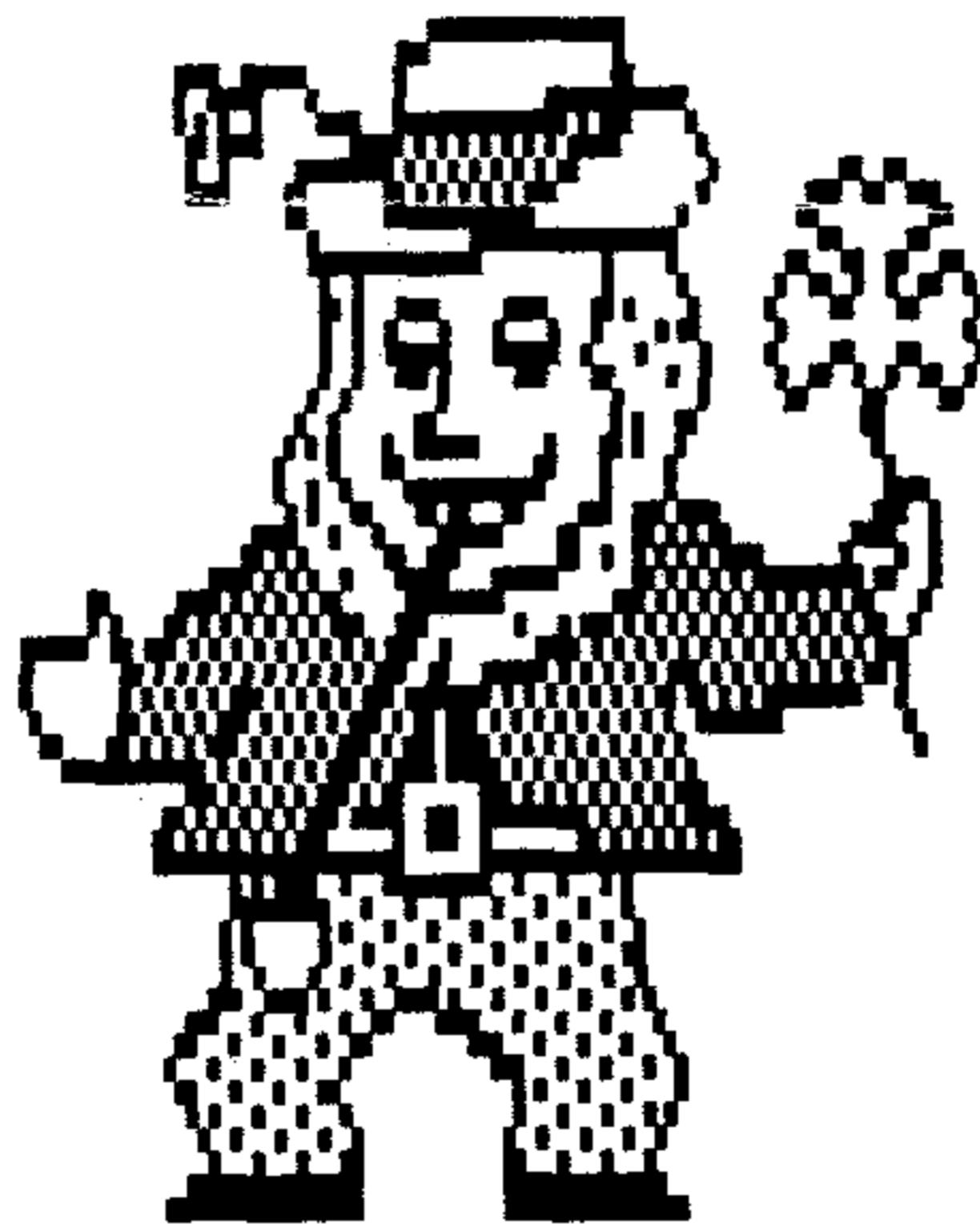
Texas Instrument 99/4A and Myarc 9640 Computers

# Spirit of 99



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

PUBLISHED MONTHLY IN COLUMBUS OHIO



\$1.50

VOL. 12 NO. 3

MAR 1994

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

Editorial, address is:  
181 HEISCHMAN AVE  
WORTHINGTON, OH 43085  
Subscription rate (USA) \$20.00 /1 year \$25.00 /1 year outside continental U.S. Third class postage paid at Columbus, OH  
CHANGE OF ADDRESS:

send both OLD and NEW address to address listed above. We assume no responsibility for manuscripts, programs (tape or disk) not accompanied by return postage. Letters to the Editor are 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 with-

out 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 \$20 and whose main objective is the exchange of Edu-

cational 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 Abstract, 2540 Olentangy River Road Columbus, OH. Meeting time is 8:30 AM til 2:30PM, Meetings are open to the public. Membership dues (\$20.00) are payable yearly to C.O.N.N.I. and cover the immediate family of the member. Please send check to our membership registrar and join C.O.N.N.I.

Please address it to: Everett Wade

179 Erie Road  
Columbus, OH 43214

## INDEX ##

	PAGE
4A HINTS.....	15
CALENDAR PROGRAM.....	14
CFORM HARD DR FORMATTER.07	
CSI\$INDEX.....	12
DOM.....	06
LIMA FAIR.....	10
MAIL BOX.....	06
MINUTES.....	02
POWER, TI POWER SUPPLY...05	
TEXAMENTS, RELOCATION...13	
TI-101 BY JACK SUGHRUE.03	
TI-BITS.....	11
T/TECH CARD.....	09
UNPROTECT A PROGRAM.....	15

## MINUTES OF FEB 19, 1994 MEETING

Had a discussion of letters received from several other user groups, including West Penn, Computer Voice, Tid Bits, TIUG of Mill County, and a card from VAST U6 of Temp, Arizona, all in commemoration of Jim Peterson. Thanks and praise for newsletter team. George Siebert has a lot of extra equipment available. Ken brought DOM's for Dec Jan. Jean brought TI-LAPTOP, donuts and coffee. Bill brought latest Micropendiums for sale. Comments from Harley, Harold and Ken regarding B.B.S. status were passed on to Irwin later in the week since he was absent.

## DUES ANNOUNCEMENT

Local dues are usually paid at or before the March meeting, and are \$20 per year for full membership, library and voting privileges, plus the newsletter. You may also pay your dues in two installments if desired: \$10 in March and \$10 in September. Those who join during other months of the year pay a lesser, pro-rated amount:

MAR-20.00 APR-18.33 MAY-16.67 JUN-15.00 JUL-13.33 AUG-11.67 SEP-10.00 OCT-8.33 NOV-6.67 DEC-5.00 JAN-3.33 FEB-1.67



OUR 4/A UNIVERSITY  
by Jack Sughrue



originally appeared  
BITS, BITES & PIXELS  
Lima, Ohio

### #7 MODULATING ACADEMIC LIFE

The TI, Class, in case you haven't been conscious the previous six classes, is unique in the computer world. Not only were there hexbuses and something like wafer tape available or almost available for awhile in its erratic history. No, Mr. Shakespeare, not erotic! I said erratic.

Anyway, Class, not only were there exotic forms of connection - No, Mr. Shakespeare, I said "exotic!" - and storage, but the variety of usable storage forms still exceeds anything out there for any computer.

In addition to hard drives, both size floppies, a variety of RAM disks and supercards and gram devices, and specific modules (and things that plug into or are soldered onto all kinds of places), the TI also uses ordinary cassette tape as storage/retrieval.

Now this may seem a surfeit of options, but there are Tiers out there who are using each and every one of these items on a daily basis, and their perception of our wonderful machine is viewed through these devices.

Because you are all taking this course to find out how best to use the TI as an educational tool for yourself, your friends, your family, your new TI converts, your own classrooms, we will explore ways in this session to modulate your TI to suit your needs. As most of you here are parents, grandparents, or classroom teachers and your concern is with the 4A as learning tool, let's first review your notes. You'll find that newsletters, user group friends, TIGERCUB, local fairs, and MICROpendium are your immediate best sources for what is educationally available for the TI. The magazine carries the classifieds, as well as ads for ASGARD, COMPRO-DINE, TEXCOMP and other agents for educational materials.

If you look at my greying temples you will probably understand that I have been at this computer game for a bit.

Ho! Thank you, Ms. Bronte. I wondered if anyone got the humor of that.

Well, being around a bit - particularly teaching these kinds of courses to teachers - I have learned that the old is not necessarily the worst, even in the whizzly world of electronics.

By a show of hands, how many of you have more than one console? Okay, that's most of you. How many have more than one P-Box? Ah, so there are many consoles not being used. How about tape recorders? So you all still have your tape recorders. Good.

Write today (and send \$10) for Mickey Schmitt's (196 Broadway Ave., Lower Burrell PA 15068) fantastic TI cassette book, GETTING THE MOST FROM YOUR CASSETTE SYSTEM, and another \$5 to Jim Cox (905 Edgebrook Dr., Boylston MA 01505) for MUNCH's incredible disk of the ultimate in cassette program-

ing (Disk 89, which also includes all of the cassette utility programs in the book, as well as others from all over the world). It has loads of samples, too. Did you know, for example, that you can use your cassette to actually run dumped modules like "Yahtzee?" Or that you can program your cassettes to locate at high speed from a cassette menu? And then run the programs automatically, whether XB or EA? Those programs are all on MUNCH Disk 89. And with cassette programs loaded and running there is no P-Box fan noise, because there is no P-Box!

I say all this, Class, because in looking through my notes after last session's discussion of textware, I uncovered a box containing cassettes. It was marked "Education for Home and Classroom." It should have been marked "Treasures."

So many of my teachers from the past couple years have told me that they are still using cassettes in their classrooms (mostly elementary, I might add), that I asked if they'd bring in a few for demoing. That's when I learned about all these new ways of cassetting. But, more importantly, I had a chance to renew my acquaintance with some of the best non-cartridge, non-disk learning material available. A lot of these great programs have been translated to disk, however, and are still in classroom and home use in that form, too. Most of these disks can probably be gotten from Jim Peterson of TIGERCUB (156 Collingwood Ave., Columbus OH 43213).

In this little box of treasures, though, were some extraordinary things I'd like to share with you. To begin with, there were some KIDWARE tapes. All KIDWARE tapes are superb. I pulled out "Lemonade" and played it. This is a thinking activity for running a lemonade stand. All kinds of decisions must be made by the players. I've played versions for other computers that have more toots, but this is more realistic and intelligent. I'd forgotten how great the KIDWARE educational tapes were. They still are. Collect all the KIDWARE programs you can.

That goes for a couple other companies, too, who made educational tapes specifically for the TI. Two of the biggest and best were SUNGEM and INTELLESTAR.

The former had the most extraordinary setups. In almost all their games, SUNGEM allowed you to use your console to the maximum. The opening menu asked if you were using BASIC or XB or Speech Synthesizer or TEII. It would build its high-level sound around your personal configuration. They had some monster tapes that haven't been equalled even today (for tapes, that is). Things like "Searcher of the Solar System," which is still one of the best ways to actively involve a learner in a challenging, creative, informative way about the planets. I know a lot of teachers who are still using their "Telling Time" program which not only shows the hands on a clock but speak the exact time in a series of build-upon activities. Their "Math Challenge" graphically challenged the students in addition, subtraction, multiplication, and division. There were other math and spelling and social studies games, too. Quite a company for educators and parents.

And, of course, kids.

INTELLESTAR's approach was quite different. First, they had science tapes, which nobody else had. These included the classic "CELLS: the Building Blocks of Life," which is one of the greatest things ever done on tape. Actually, it is on three tapes. Also in their Life Science series was "Inside



Frankie Stein," an interactive trip through the human body, and "Heart Attack," where you, as doctor or nurse, must monitor a patient to prevent an attack. Other science and math activities included "Fireball" and "Vyger" (their spelling). "States Alive" was their social studies contribution.

But their masterpiece is "E.T." - "The Everything Teacher." This 6-tape educational gem should be in every teacher's classroom, in every home where there are children. Basically, there is a file editor. This creates the master data base for all the programs that make up this classroom environment. The four one/two player or team games include "TV Sweepstakes," which is a game show that uses the created files. It's a funny and fast-paced and graphically well-designed show that requires quick thinking on the part of the participants. "Baseball" is just that. Graphically the "batter's team" hits and scores as in regular baseball, but only by answering the data-based questions. The same or different questions may be used for "Space Patrol - Lost!" and "Last Jellybean on Earth." All four of these "quizzes" are lots of fun and ingeniously created.

The "Everything Teacher" guides you easily through their data base to create, literally, everything you need for the children (or adults) you want to have play these games. Score is kept in each game, too. So, conceivably, you could have some math, language, science, social studies, and whatever files for all occasions.

SUNGEM can pretty well operate without its accompanying text materials; INTELESTAR's programs need the directions, KIDWARE directions are right on the screen menu.

But, can you imagine this kind of stuff out there on tape!

There were a couple companies that made educational tape programs for multiple computers, when those others had tapes, even though TI was the only one that worked well. Anyway, a couple of these educational companies made excellent TI stuff.

SCHOLASTIC put out three things: "Electronic Party," a colorful screen occasion card maker; "Square Pairs," the very best concentration-style game ever made for our computer; and "Turtle Tracks," an intelligent LOGO-like program that has some extra special items I wish were included in regular LOGO (such as their unique Picture Codes that let you draw in a pattern ) .

onal computer tool truly equals the ease of operation,

"Tiny LOGO," done on tape just for the TI, by the way, is another superb LOGO-like program that runs in BASIC, rather than XB, as in "Turtle Tracks."

SUNBURST produced two programs, at least, for the TI. The only one I own and have used is "Arrow Dynamics," which like most of the others I've mentioned, really take tape instruction and activity to its limits. The object is simply to move an arrow across a playing grid from one goal to another. However, the movements (one square at a time) must be stated in a LOGO-like structure. Then the obstacles are added (such as 90-degree deflection mirrors) and the fun begins! This is a stupendous thinking game. I only wish I knew where I could get hold of the other SUNBURST games, if they match up to this one at all.

Speaking of LOGO, which we will discuss in the last session next time in greater detail, there was also a language for teachers called ASPIC created specifically for the TI and used with tape recorders back in the old days. The BEST OF 99er book, mentioned last time, contains this entire language

in its educational section. Worth exploring if you only have the basic system, even without XB.

But dust off those tape recorders and look in your friend's or your group's library or at fairs or maybe even in tape-filled shoeboxes at the back of your closet to gather up and use these and hundreds of other exceptional educational tape programs. If you find them on disk, transfer them to tape using the automatic disk to tape transfer program from the NUNCH disk. And get more than one computer going. Or dedicate one just to the significant children in your life at home or school.

Believe me, your basic console with a tape recorder, coupled with an appropriate selection of educational tapes and cartridges, can provide enough educational material for anyone's childhood. And then some. And more than any other computer on the market today.

Oops! I almost forgot the two tapes that are in almost everybody's library: OLDIES BUT GOODIES I & II put out by TI. They contain some of the very best educational taped software in existence; things like Hamurabi, Hidden Pairs, Tictactoe, 3-D Tictactoe, Number Scramble, Word Scramble, Word Safari, Factor Foe, Peg Jump, and so on. Incomparable classics that the new generation of TI learners have probably not experienced, even though some may be old hat to you. Dig them out.

Matter of fact, even some of those books we mentioned from TEXCOMP last time can come with tapes, in case typing in those programs from the texts is a problem. I think ASGARD (P.O. Box 10306 - free catalog), which is still making cartridges, including an educational one for pre-school and primary children, still sells tapes and also educational materials.

So much for tapes, Class.

Last time I asked you to bring in all the educational cartridges you have at home or school for sharing and show and tell.

Cartridges are the best educational tool for any computer. The kids of any age can pop in the carts, turn on the computers and monitors, and run the stuff by themselves until bedtime. Though the modules were made by many different companies, including TI, I don't believe any other **educat**

the direct addressing of the desired skills, the positive reinforcement of successes (with colorful animation and music and loads of other toots and whistles and golden goodies unique to the 4A), and the understanding of the developmental level of the learner and the positive need for an entertainingly high motivational structure.

Anyway, Class, the TI cartridges still available in all the places we've been mentioning all semester long - Look to your notes! - include excellent card and board strategy games like BLACKJACK and CHESS and OTHELLO, which no one can deny are skill building, thinking activities. They also have the logic problems which enhance map skills (and foresight) such as A-MAZE-ING and HUNT THE WUMPUS and ZERO ZAP. Standard boxed games like YAHTZEE and CONNECT FOUR surely are strategy learning tools. So, too, would be the Adams' ADVENTURE INTERNATIONAL SERIES which is made for interactive play only on computers and demand high-level reading comprehension skills and long attention spans to even begin to play them properly. Cartridges like TI WRITER and MUSIC MAKER are

definitely educational tools, also.

Though nobody could deny the efficacy of these and many others as learning tools, they were not specifically designed as educational cartridges.

I want to take a few moments to put one list of some of the educationally-designed cartridges on the overhead here.

This is just a partial listing, of course, and it would not include the fantastic modular software that was created but never released in module form. Most of those items are available on disk, but many require a GRAM device or a GENEVE to operate. Nor am I including PLATO, TI's ultimate 180-disk courseware learning system for learners from primary through adult, including GED exam preparation.

No. What I'm showing is mostly the stand-alone education-specific cartridges I found available at the last computer fair I went to in Boston a few weeks ago, as they probably are available from all those other resources we listed this semester.

The ones with an asterisk use very sophisticated speech that still is not found in educational programs for other

computers.

EARLY LEARNING FUN, BEGINNING GRAMMAR, NUMBER MAGIC, VIDEO GRAPHS, EARLY READING\*, ADDITION & SUBTRACTION I/II\*, MULTIPLICATION I/II\*, READING FUN\*, READING (ON, ROUNDUP, RALLY, FLIGHT, etc.)\*, SCHOLASTIC SPELLING 1-6\*, DIVISION I/II\*, TOUCH TYPING TUTOR, COMPUTER MATH GAMES I-III, MILLIKEN MATH, ALIEN ADDITION, MINUS MISSION, ALLIGATOR MIX, METEOR MULTIPLICATION, DEMOLITION DIVISION, DRAGON MIX, COMPUTER MATH GAMES 1-6, NUMERATION I/II, HONEYHUNT\*, MICROSURGEON\*, TERRY TURTLE'S ADVENTURE\*, FACEMAKER, HANGMAN, STORY MACHINE\*, VIDEO GRAPHS and on and on and on and on.

Time's up! Homework this week is take, use (preferably with a young learner), and evaluate three of these modules. And be prepared to demonstrate them for us at the next session, which will be our last before the final.

No, Mr. Shakespeare, we will not be discussing things erotic next time. But we will be discussing a pretty hot topic: the very sexy LOGO II.

---

## POWER POWER POWER — by Ron Warfield

From B.C. 99ER USER GROUP

Recently I had my good old computer quit on me. On inspection it turned out to be the fuse blown on the Pbox transformer. Well when this was replaced there were more problems, which caused the fuse to blow. Two diodes were shorted on the power supply board. Decisions had to be made. Either repair the power supply or replace it with a switching regulated power unit.

I decided to install the better unit. Firstly the old supply and transformer had to be removed and the new one bolted into the power supply cabinet. Next wire all the new cables to the Pbox card slot board. I also reversed the fan so it would blow into the box and then past the cards and out the back. This is supposed to be more efficient cooling. When all connections were made the system was turned on without the cards and all voltages were measured to make sure everything was right.

The next thing to do was to modify all the cards in the box, which is to remove all the regulators because the new supply puts out the exact voltages the cards need. No need to regulate the voltage on the cards. The regulators are the source of all the heat on the cards.

The regulators are solid state devices which take the power supply high voltages and lower them to the voltages the cards need. The Pbox power supply puts out +16, -16 and +8 according to the diagrams. In reality the voltages are +24, -24 and +15, which the regulators have to drop to +12, -12 and +5. As you can see, the voltage drop is quite large which causes a great deal of heat.

The Geneve has five regulators, Myarc 512k has one, HFDC has three, Horizon has one, Myarc FDC has one, TI RS232 have three and the Rave speech card has two. The speech card has a minus 5 volt regulator which is not supplied in the box but is taken from the minus 12 volt supply, so this regulator has to stay as it was. Also the TI RS232 cards have a minus 12 volt regulator which is very small and is very easy to miss. If you are going to do this mod be very careful to check for every regulator. The new power supply will give plus 5 volts, plus 12 volts and minus 12 volts.

You will have to be very careful about these regulators, and only jumper the 7805, 7812 and 7912 series. If you see any 7905 regulators leave them alone. The Rave speech board, TI disk controller and the Pcode card have these -5 volt devices on them. These will stay in the circuit and will regulate the -12 volt down to the -5 volt supply.

To fix the regulators, you can remove them completely or just cut off the two outside leads and solder a jumper across the circuit board connections. Remember to jumper only the two outside connection and leave the center one alone.

Well the moment had come, install all the cards, hook up all the cables and turn it on. The system powered up just perfect and everything is cool and the noise level is much lower. This is a worthwhile project to do if you have the nerve to try.

After checking everything out I did notice a slight jitter whenever I typed or accessed the disk drives. I double checked and measured all the voltages and they were all ok. After studying the problem and asking a few questions a fix was discovered. Instead of using jumpers on the board I replaced them with diodes which filtered and isolated each card from the others. The jitter is very small now and it all seems to be fine.





MORE ABOUT JIM. . . .

We received the following letter from C.O.N.N.I. member Bob Zink in February. It is reported here with his permission:

02/19/94

Dear Dick:

After reading your poignant eulogy in our February issue of the "Spirit of '99", I had to thank you, Dick, and the other contributors for making known to me what a man James Warren Peterson really was.

Unfortunately, my only affinity with Jim was a mutual love of the TI, almost identical age and the same middle name.

Jim wrote me twice, immediately answering simple problems I had encountered. Would that I had asked more questions.

Please extend my sympathies to his wife and family as well as our fellow members.

Sincerely,

Bob Zink  
Naples, FL.

---

**ABOUT THE D.O.M. . . .**  
by Dick Beery

I have temporarily discontinued writing the column about how to access the contents of the Disk of the Month. The column was begun to help those users who were experiencing difficulty with running programs (I keep getting an I/O error 50) or with unpacking archived files, which are nearly all the files on each month's disk. I keep repeating the same things over and over, and enough is enough. What might end up being more highly productive would be to prepare a box, to be published each month, listing the more common problems with their solutions, but without reference to specific programs on each month's disk. If you like the idea, write and let us know and I will prepare the box and make it available to the editor(s). By the way, Jean Hall has a death in the family, so Bob DeVilbiss, our Associate Editor, is putting together this issue. Thanks, Bob, for stepping in and getting the issue out!

We have been refusing further subscriptions to the Disk of the Month because very little, if anything, new is now being produced and released for either the 4A or the Geneve. This sad, but not unexpected, development has forced us to fill the disks with earlier, but perhaps unknown to many programs that we feel today's users can enjoy. We have offered to refund the unused portion of the subscription, if the user would rather have the money in place of these programs. We plan to provide disks of some sort until each subscription has been completely filled. Mainly we are finding our materials in the extensive personal libraries of many of our local members. Outside members who have p.d. or shareware programs that they feel might be suitable for this purpose are urged to mail a disk to Jean Hall at the Heischman Rd. address. Our thanks in advance.

Alan Peterson, son of the late Tigercub, has promised to share Jim's PD/SHAREWARE collection and Tigercub products with C.O.N.N.I., and we plan to use those as well. Thanks very much, Alan.

I would like to say also that I was much impressed by Alan's determination not only to keep the 4A, but to use and know each of the programming contributions his father made to the T.I. world. Most of us should be so lucky as to have a son like this, who truly appreciates, and wants to be involved with, his father's life work.

Remember: if you want to see a box monthly that explains the mysteries of: Error 02, 06, 50, etc., please write and let us know, and we will do so.

And now, quoting my friend Jim, Memory full!...

## **CFORM - A Review**      **By: Greg Knightes**

From B.C. 99ER USERS' GROUP

CFORM is a new hard drive formatting program written by Mike Maksimik and distributed by Cecure Electronics Inc. It was written in C using TIC version 1.67 and executes from the ados prompt on the GENEVE using ados 1.23h and higher. It cannot be used with the TI-99/4a. What makes this product so exciting is the ability to format your hard drive from ados and gain extra storage space. This is accomplished by formatting each cylinder to 34 sectors instead of 32 sectors which is what MDMS uses. This is an effective increase of a little more than 6%. I have a Miniscribe 3650 40 megabyte hard drive. When I format with MDMS, I get approximately 144,000 sectors. Using CFORM, that was increased to approximately 165,000 sectors!

CFORM comes on a write protected disk and is individually prepared for each user. The User's Guide states explicitly that this software is for your use alone and is not to be used on any system or equipment other than your own unless prior arrangement is made with Cecure Electronics. This is to protect the author and distributor from piracy and it states their legal rights. I STRONGLY agree with their statements and encourage you to buy the software. You won't be disappointed! It's like buying another hard drive for a small fee. With that out of the way, let's continue with the review.

CFORM comes on a floppy disk containing CFORM the program, Beery Miller's WIN-DRIVE stand alone, single task windows driver and a sub-directory containing some files of formatting specs for many hard drives. Unfortunately, my original copy crashed after I made the backup and I wasn't aware they were in a subdirectory. An options file for your setup is created after the program is run.

To run the program, you have to have your HFDC upgraded to the 62256 Static RAM chip. If you have the 6264 Static RAM chip, contact Cecure Electronics about upgrading. You also need a minimum of 128K of ram available. If you don't have a Memex, keep TI MODE off and a minimal ramdisk. You will also need at least one floppy drive and hard drive. A color monitor is recommended as CFORM has a beautiful graphical interface and monochrome may be hard to read. Optionally, you can use a Myarc mouse or Logitech Bus/Serial mouse with Bruce Hellstros's mouse driver, however I have never been able to get my Asgard serial mouse to work in the ados environment. Also, a printer for recording your formatting specifications along with bad sector information is handy but not necessary.

CFORM looks very similar to Al Beard's GENBENCH SHELL and BACKUPMISER programs. CFORM may be run from SHELL but will run slower than if run from the ados prompt. I don't see any reason to have this program installed on the hard drive as once it is run, it will be lost.

Before you run CFORM, make sure you are using a backup copy and make SURE you have a BOOTABLE floppy of SYSTEM/SYS! I made the mistake of making a backup copy of SYSTEM/SYS but I found out AFTER I reformatted that it was a bad copy! Take the extra time to re-boot from that floppy, with your hard drive turned off, to make sure it works! Also, MAKE SURE you have a way of restoring your files to the hard drive once it is reformatted! I used BACKUP MISER to backup my hard drive (120 floppy's worth!). You might also want to have available on floppy disk Clint Pulley's "Directory Manager" (DM) and "Sector One" just in case. Oh yea, you have GENBENCH SHELL and BACKUP MISER on floppy also, right?

Ok, your ready to re-format. Make sure you run WIN-DRIVE first. This is Beery Miller's single task windows driver program. I made the mistake of running CFORM without this installed first. The drop down windows didn't drop and the Crystal Software logo overlapped the menu selections. Change the ados prompt to the drive or directory that you will be running CFORM from. If you normally boot from your hard drive and exit your AUTOEXEC file leaving you at the D> prompt and you want to run CFORM from floppy drive #1, change to the A> prompt. MDOS has to be in the directory that you want to run CFORM from. Typing in A:CF from the D> prompt won't work.

When CFORM has finished loading, you will be presented with a a screen with three windows. Across the top are your option menus. In the bottom right hand side is your program registration information. This stays on-screen all the time while the program is running. Various other menus appear and disappear during various stages of program execution.

The first option from the left on the top menu is FORMAT. Next is VERIFY, SETUP, INFO, HELP and EXIT. Each of these options has pull down menus using the mouse or arrow keys to navigate. The first time you run the program, you will



probably want to run SETUP. The choices for this option is Colors, System. Almost all the color choices can be changed except for the red highlight bar. The changes take effect after you exit Setup.

SETUP is what you should do first. You do need to tell CFORN some information about your system. First and most crucial is CRU Base of HFDC. If you don't tell CFORN the right address, all access to the hard drive will lock up your system requiring a re-boot. I've done it more than once! You can enable or disable the mouse.

CFORN has three different VERIFY methods that you can choose. After the format is complete, TURBO will verify but NOT update the sector bitmap if bad sectors are found. Choose this if you want to see if a drive is functional or the interlace setting is good. FASTCOMP will update the bitmap but will not display the head and sector progress. SLOWCOMP will display all the information: Cylinder, head and sector as each changes. Although the information is updated very fast, displaying all that information is time consuming. I would recommend FASTCOMP initially. If you get a lot of bad sectors, try changing the step-rate and or interlace and re-format with TURBO. If you find a better combination, write it down and re-format with FASTCOMP to update the bitmap. If nothing seems satisfactory, format with SLOWCOMP and make sure you get a print out. SLOWCOMP is SLOW! It took 6.5 hours to format my drive with SLOWCOMP! I started about noon on a Saturday and it finished about 6:30pm just after I checked it's progress for the last time! I did not get a chance to time TURBO or FASTCOMP.

You also need to tell CFORN what your printer's name is. Any legal `odos` or device name can be used. This means that you can send the output to a parallel or serial printer or a disk file for later editing. You also have the option to disable the printout. An illegal device name will cause an error and disable the report. You can also specify the initialization string for your printer. Get out your printer's manual and find out what it takes to set your printer for 132 column mode.

After all this work setting up CFORN, another window pops up and you are given the option to save these settings. I would suggest it for the first time!

When you are done with the setup, you can do to the other options. Info is an online help system that tells you everything you might have a question about without returning to the manual.

VERIFY will check a hard drive that you have connected. The verify type used is is whatever you have specified in your SETUP file. The different types are Turbo, Fastcom and Slowcomp as described above. This is useful for checking the condition of a drive that you have formatted. If you experienced power failure or movement of your drive while writing data (from an earthquake maybe), you can check to see if any physical damage was done. Slowcomp will print error codes for each sector if they are encountered. Verify will not proceed if there is an error in the first head, first cylinder.

Finally, the main part of the program. Formatting! This IS why you bought the program, isn't it? You will be asked to fill in the blanks for a number of parameters for your drive. You will be asked for number of cylinders, number of heads, write-pre-compensation, reduced write current, step rate, number of sectors per track, sector interlace and name you want to give your drive. There are a few things that you can alter, but most are determined by your drive. Unlike MDMS, CFORN can write 34 sectors per track instead of only 32. This is where the extra storage space comes from. You can also change the interlace to get better performance. The recommended interlace for `odos 1.50H` is 7. If the drive is to be used in a TI-99/4A, then use an interlace of 22.

When you press "enter" after entering the name of the disk, there is one last check. You must type the word "FORMAT" to start the format process. Pressing ESC will abort at this point and let you start over if you need to change something. If you do not have the right CRU address in the setup file, your computer will freeze and you will have to re-boot and try again.

The only thing that I wish was included in the package, but was not, is an explanation of the error codes upon verifying. I input some horrendously stupid numbers by mistake and started getting error codes printed out. Well, after a couple of pages, I said "enough of this." and I powered down by using `ctl-C` to abort the format. Some errors that I got were "SYNC error", "ECC correction attempted and CRC/ECC error detected" and "CRC/ECC error detected". It wouldn't have made any difference if I knew what these meant because there is nothing that I could have done about them. The only thing to do is to re-format properly.

Nike Maksimik has done an outstanding job writing this utility. This has to be one of the most useful `odos` programs



around. In conjunction with GEN-BENCH SHELL, BACKUPMISER, DM and SECTOR ONE, CFORN rounds out the stable of must have software for the Geneve. Mike Maksimik can be reached at: 635 Mackinaw, Calumet City, IL 60409-4014 - 708-891-2513

CFORN can be ordered from SECURE ELECTRONICS for \$15.00 plus \$3.00 for postage and handling at: P.O. Box 132, Muskego, WI 53150-032 Voice - 414-679-4343 / FAX - 414-679-3736 / BBS - 414-422-9669

## TRIPLE TECH - by Ron Warfield

From B.C.99ER USERS' GROUP

Recently I aquired a Corcomp Triple Tech card, which is a Pbox card, that has a 64k print buffer, a real time clock and a place to install your speech card inside the Pbox.

This is a very nice card and does enhance a TI system. The only problem is how to set the clock on the beast. Checking the library I found a program that will set the clock but has more features, like music and birthday wishes, which I do not need. I wanted a small program that would read the clock and display the time and then ask if you would like to set the clock.

I sat down and wrote this little program to do just that. I also added a systex lower case character set that does nothing but make it look better.

Here is the listing if you want to enter and use it on your clock card.

```
100 CALL INIT :: CALL CLEAR :: CALL LOAD(-31806,16):: ON BREAK NEXT
110 CALL CHAR(136,"0000FF0000"):: CALL COLOR(14,7,1)
120 FOR X=0 TO 12 :: CALL COLOR(X,16,5):: NEXT X
130 CALL SCREEN(5):: DISPLAY AT(3,5):"TRIPLE TECH CLOCK SET" :: DISPLAY AT(4,5):RPT$(CHR$(136),21)
140 DISPLAY AT(6,8):"By Ron Warfield" :: DISPLAY AT(9,3):"Today is:" : " Date is:" : " Time is:"
150 OPEN #1:"CLOCK" :: INPUT #1:D$,DA$,TM$
170 DS$=D$
180 IF DS$="0" THEN DS$="Monday"
190 IF DS$="1" THEN DS$="Tuesday"
200 IF DS$="2" THEN DS$="Wednesday"
210 IF DS$="3" THEN DS$="Thursday"
220 IF DS$="4" THEN DS$="Friday"
230 IF DS$="5" THEN DS$="Saturday"
240 IF DS$="6" THEN DS$="Sunday"
250 DISPLAY AT(9,13):DS$ :: DISPLAY AT(11,13):DA$ :: DISPLAY AT(13,13):TM$
260 DISPLAY AT(16,4):"Set the clock? Y/N Y"
270 ACCEPT AT(16,24)SIZE(1)VALIDATE("YN")BEEP:Y$
280 IF Y$="N" THEN CALL CLEAR :: CALL PEEK(2,A,B):: CALL LOAD(-31804,A,B):: END
290 IF Y$="Y" THEN CALL CLEAR :: DISPLAY AT(5,3):" Monday =0:" " Tuesday =1:" " Wednesday =2:" " Thursday =3:"
Friday =4:" " Saturday =5:" " Sunday =6"
300 DISPLAY AT(16,4):"Enter the day.." :: ACCEPT AT(16,20)VALIDATE("0123456")SIZE(1)BEEP:D$
310 CALL CLEAR :: DISPLAY AT(4,4):"Enter the date.." : "Format is 06/22/93" :: ACCEPT AT(10,6)VALIDATE("0123456789/")SI
ZE(8)BEEP:DA$
311 IF SEG$(DA$,3,1)<>"/" THEN 310 ELSE IF SEG$(DA$,6,1)<>"/" THEN 310
320 CALL CLEAR :: DISPLAY AT(4,4):"Enter the time.." : "Format is 06:24:00" :: ACCEPT AT(10,6)VALIDATE("0123456789:")SI
ZE(8)BEEP:TM$ :: CALL CLEAR
321 IF SEG$(TM$,3,1)<>":" THEN 320 ELSE IF SEG$(TM$,6,1)<>":" THEN 320
330 X$=D$&" "&DA$&" "&TM$ :: PRINT #1:X$
340 CLOSE #1 :: GOTO 130
```

## THE 1994 LIMA MUG CONFERENCE

Friday evening/Saturday May 13&14  
Reed Hall, The Ohio State University  
Lima Campus, Lima, Ohio

As in the past years this all TI/Geneve event is TOTALLY FREE. There is no admission charge and no charge for tables in the exhibit area. The Lima Campus is located just east of the city on the north side of State Route 309, 3 miles east of the junction of I75 and 309. There is ample free parking next to Reed Hall. For a package of tourist information about the Lima area send a request to the Lima/Allen county Convention Visitors Bureau, 147 N. Main St., Lima OH 45801-4920.

### TENTATIVE SCHEDULE:

Friday May 13 4PM-8PM. Equipment and table setup.

User group representatives may copy software from the Lima software library at no charge. This is a good time to meet friends and socialize.

Saturday May 14 8AM-6PM. The main event. Seminars will be given more or less non stop during these hours. User group representatives may copy software from the Lima library of the day.

6PM-8PM, Clean up time.

8PM. After the show pizza party at a local restaurant.

### HOTELS:

Call the hotel of your choice and about prices and make your own reservations. Many hotels in Lima have nice rooms for under \$40 per night. They are listed here in two groups: those at the most convenient location near I75 and route 309, and those a bit farther away. Most convenient location, 5 minutes driving time to campus!

MOTEL 6 (This is the place where most people stay). 419-228-0456

HOLIDAY INN 419-222-0004

ECONOMY INN 419-22-1080

EAST GATE MOTEL 419-229-8085

DIELMAN'S 419-225-2806

KNIGHT'S COURT 800-843-5644

Other hotels a bit farther away

RAMADA 419-228-4251

HOJO INN 419-228-2525

QUALITY INN 800-424-6423

DAY'S INN 419-227-6515

BEST WESTERN 800-528-1234

*Come to the Lima  
fair, Joe. They have  
a lot to offer*



### TRANSPORTATION:

The easiest way to get to Lima is to drive. The city is about mid way between Toledo and Dayton on I75, a major north/south highway. From the west take US30 to route 309 and then 309 to Lima. From the east take US30 to I75 and south to Lima.

Lima has no commercial air service, but we will TRY to arrange free transportation for you from the airports of nearby cities. Arrangements are made by members of local user groups in these cities. If you are flying to DAYTON OHIO (most who fly to Lima use this airport) phone Dave Szippel evenings at 513-498-9713.

If you are flying to COLUMBUS OHIO, phone John Parkins at 614-891-4965. If you fly to FORT WAYNE INDIANA phone Homer Kipling at 219-483-8886. Unless arrangements can be made in advance with these people, you will have to rent a car and drive to Lima. Lima is served by Greyhound bus.



# TI Bits part 2

by Jim Swedlow, UGOC, CA USA

(This article originally appeared in the User Group of Orange County, California ROM)

## BOOK REVIEW

The Orphan Chronicles by Ronald G. Albright, Jr. M.D., 172 pages, published by Millers Graphics

I planned to buy this book but never got around to it. Then I won a copy in the May raffle. I started reading it that night and finished it two days later. I just could not put it down.

Dr. Albright chronicles the TI Home Computer from the 99/4 (no A) thru TI's self-destructive marketing techniques to Black Friday (October 28, 1983 - the day TI announced that they were dropping the 99/4A) and beyond. Along the way he covers the International Users Group (a "commercial" user group - an oxymoron unique to the 4A world) and publications including Home Computer Magazine (and tells us who Regina really is).

Fully half of the book is devoted to the current status of our orphan. There are chapters on telecommunications, freeware, the future and on current 4A supporters.

An interesting chapter is the survival guide. In ten steps, Dr. Albright suggests practical strategies that we can take to help ensure our computers continued existence.

This informative book is clearly written. The material is comprehensive and logically organized. It will help you understand the history that led to today and will give you food for thought about tomorrow.

All in all, this is a "must have" for the serious 4A owner. It will help put the joys and sorrows of having an orphan into perspective.

The Orphan Chronicles is available from Millers Graphics, 1475 West Cypress Avenue, San Dimas CA 91733. The cost is \$9.95 plus \$2 shipping and tax.

## QUOTE OF THE MONTH

When you have eliminated the impossible, whatever remains, however improbable, must be the truth.  
-- Sir Arthur Conan Doyle, The Sign of the Four (1890)

## WHEN YOUR COMPUTER DOESN'T - PART II

Last month I mentioned that my trusty 4A was acting up and that I was sending it off to Lubbock. Here is what happened. I boxed it up and sent it via UPS on June 16th at a cost of \$4.00. Three weeks later, to the day, UPS delivered another TI.

Lubbock sent me what looks to be an unused console (black and silver - the same as I sent in) along with a power supply and an RF modulator (I did not send those in). In the box was a bill for \$33.50 (\$30.50 plus \$3 shipping).

Two notes: call 1-800-TI-CARES before you send anything in and be sure and keep your FCTN strip as they will not send you another.

## MORE QUOTES OF THE MONTH

Well, as you can tell, life in the Texas Instruments 99/4A orphanage is active and never dull.  
-- G. Albright in The Orphan Chronicles (1985)

The sellouts were a sight to behold. Rivalled only by the crunch to buy Cabbage Patch dolls the following year, when a J. C. Penney's or Sears or Montgomery Wards sold out TI, the buyers were lined up before the doors

opened . . . . Needless to say, stocks were easily sold out. Quickly and efficiently.

-- Ibid

## PLATO lives

The TI Mid-South 99/4A Users Group of Memphis, Tennessee reports that Control Data is still selling and supporting PLATO software for the TI. They operate an 800 number for customer support. Call 1-800-328-4951 or write to:

L. B. Lewytzkyj  
Control Data Corporation  
8100 34th Ave. So., HQBO2G  
Minneapolis, MN 55440

I have not personally verified this information.

## QUESTION

Do you remember where you were when you heard that TI was stopping production of the 4A?

## FIRST LOOK: THE LOST HITS

Tenex is selling a disk with three games: Computer War, Submarine Commander and River Rescue. According to their catalog, Thorn EMI wrote these for TI just before Black Friday and then they disappeared. Tenex 'rediscovered' them and is selling them for \$29.95 (plus shipping). Requirements are a disk drive, 32K and XB, EA or Mini-Memory.

Arcade games for \$30? Well, my 14 year old twisted my arm until I sent for them. I have not had a chance to try them because I cannot get the disk away from him. From over his shoulder I can tell you that they have excellent graphics, changing scenery or multi-screens (no Munch Man here) and require more than just a good hand with the joy stick. You have to think.

My son gives them his highest rating ("not bad" -- which is much better than "OK"). If you are into games, I would say that they are worth the \$30. Tenex's toll free order line is 1-800-348-2778.

## SOME THOUGHTS ON BLACK FRIDAY PLUS 3

As the third anniversary of Black Friday nears, it may be meet to ponder the future of our computer. You probably noticed that this column deals with this issue from a number of perspectives. Reading The Orphan Chronicles does make you think.

When TI opted out of the home computer market, I figured that the 4A would last for another two or three years. I decided to keep my system as I had too much time and money invested to dump it and move to another computer.

I never expected that, three years later, the support for the 4A would be as diverse, extensive, and strong as it is. The products available today far exceed those that TI gave us. Compare DM1000 to DM2, FAST-TERM and 4A TALK to TEII, TI ARTIST and GRAPHX to VIDEO GRAPHICS.

Look at the products that Millers Graphics, CorComp and Myarc (to name a few) continue to put on the market. Look at the quality fairware that keeps coming out.

The 4A will not live forever, but I believe that its useful lifespan is far from over.

There remains one key question: Now that we have done so well, what can we do to keep the 4A viable?

I do not think that there is any one answer. I do think, however, that it is time to stop and think about this issue and to think deeply. Time indeed.

Enjoy!

This one is for cassette tape users and for those interested in unusual programming techniques. Have you ever wondered if it was possible to mark with software the position of a specific program on a cassette tape full of many programs and then have the computer search the tape from the beginning until the specific desired program is found? TI did once develop such a system for its 99/8 computer, but TI's WAFER TAPE drive was never released. Coleco ADAM computers successfully use such a system. Not so for the TI99/4A, according to many well respected commentators. I have read again and again in our exchange newsletters expert comment to the effect that with the TI there is no way to automatically, under software control, advance a long cassette tape to the exact physical location where a program starts. Well....., way back as early as 1983 Joseph E. Bartel of Pasish NY wrote a TI BASIC program that does this for the TI! I recently acquired a copy 1985 update of Joe's CS1#INDEX program (still entirely in TI BASIC with no assembly routines) and after removing a few bugs I am quite impressed with the capability of this software.

CS1#INDEX will do its stuff even if you don't have a printed list of which programs are on a program tape, even if you are using a tape recorder that does not have a numerical tape counter that is not automatically controlled on/off by the 99/4A. CS1#INDEX finds semiautomatically the exact location of a program on a long tape. The manual tape recorder operates from the screen. If you are using a TI compatible recorder, CS1#INDEX will advance the tape to your program's location after you press fast forward, and then automatically stop the tape. If you are using a tape recorder that the TI cannot automatically turn on and off, CS1#INDEX will turn the screen from green to yellow and finally to red to indicate when you should manually press cassette STOP once the location of your program has been reached. Neat!

With CS1#INDEX you can create a catalog of up to 10 programs you want to put on one side of a C60 tape and put this catalog at the beginning of the tape. The catalog includes program name (up to 12 characters with spaces anywhere), and there is also provision for the catalog to display a 12 character comment for each of the 10 programs. You can then put your up to 10 programs onto the tape, with CS1#INDEX advancing the tape recorder to the correct tape location where you should SAVE CS1 each program. It is necessary to reload CS1#INDEX for each of the programs you put on the tape. Thus, users with only a console/cassette system will appreciate the fact that CS1#INDEX is designed to be small enough to load into the MINIMEMORY module with SAVE MINIMEM. Then each time you need to load CS1#INDEX, all you do is type OLD MINIMEM, and CS1#INDEX boots in a few seconds. Otherwise it takes about 90 seconds to load CS1#INDEX from tape.

Later, when you want to use the tape you load CS1#INDEX into the computer and then load the tape's catalog from CS1#INDEX. From the catalog display you select the number of the desired program on the tape. You are then instructed to rewind the tape to the beginning and press FAST FORWARD. CS1#INDEX then advances the tape to the program's location, automatically stops the tape if you are using a TI compatible recorder, displays the name of your program on the screen, and informs you this program has been located. Then CS1#INDEX BREAKs to command mode and allows you to load your program in the normal way by typing OLD CS1 and following all the usual

screen instructions, except that you DO NOT again "rewind cassette tape". CS1#INDEX can easily be modified in extended basic to load the located tape program into the computer from within CS1#INDEX rather than from command mode. Change line 1770 to read RUN "CS1".

If you already have a printed list of each program on the tape and in which order the program occur, you can bypass the catalog loading procedure. When you RUN CS1#INDEX SEARCH your first option is "LOCATION SEARCH (Y/N)". From here you can use CS1#INDEX to locate the first or second or third, etc, program on the tape without using time to boot the catalog.

What's the secret? How does CS1#INDEX using only TI BASIC with no assembly routines do what all the experts say can't be done? Have you ever noticed how the tape recorder behaves when you read or write tape serial FILES (as opposed to PROGRAMS)? The recorder starts, reads in or writes what I presume to be a file header, then stops and reads or writes the first record and then stops. Then the recorder starts again and reads or writes the second record and then stops, etc, etc. The total number of start/stop cycles equals the number of records plus one. The computer controls the turning on and off of the tape recorder motor and IT DOESN'T MATTER TO THE COMPUTER IF THE RECORDER IS SET FOR PLAY OR FOR FAST FORWARD. When searching for a program, CS1#INDEX writes a false file to the tape, turning the tape recorder motor on and off several times as this file is written. The tape recorder is set for FAST FORWARD rather than for RECORD as this file is written, so the tape never receives any data. The computer cannot directly sense that the tape is not getting any data, so the computer continues to turn the recorder motor on and off as it writes its fake file to the tape. When turned on, the tape is set for FAST FORWARD. A tape file designed to write up to 10 records with a record length of 192 will go through up to 11 start/stop sequences on a C60 tape before the tape is completely wound up on the take up reel. This is how CS1#INDEX locates physical blocks of tape space in which to insert programs, and can later find a specific program located at any one of these physical blocks of tape space. The first block (corresponding to the false file's header) is where the catalog is stored, and the next 10 blocks (each corresponding to a false file record) are where the programs are stored. Enough space is included in each of the program storage blocks to store the largest possible tape PROGRAM.

LIMITATIONS: 1--You can't use CS1#INDEX with already



existing program filled tapes. The spacing of the programs on the tape won't be right. You need to load programs onto your program storage cassette tapes using CS1\$INDEX. 2--Problems may occur if different tape recorders are used to store and later play programs. If the FAST FORWARD speed of the two recorders differ very much CS1\$INDEX will not correctly find the location of the desired program. 3--there is only room for a short program in the last (10th) program block before the tape runs out.

The author of CS1\$INDEX has written some rather wordy documentation files to explain the use of CS1\$INDEX. These files are in PROGRAm format so that they can be located from tape and read by console/cassette-only users. In general most

users can play around with the program and figure out how to use it without these docs. A samplertape program finding catalog is printed below as is the CS1\$INDEX program listing (checksums added using EZ-KEYS PLUS) with permission of the author Joseph E. Bartle. It is released to the TI community as FAIRWARE. If you like it, send whatever you think it is worth to Joe at the address in the REM statements at the beginning of the program. Joe has other fairware offerings. Write or call him for details. User groups, not individuals, may obtain a copy of CS1\$INDEX and the above mentioned doc files by sending a disk and paid return mailer to the Lina Usre Group, P.O. Box 647, Venedocia, OH 45894

#### Texaments - PRESS RELEASE

From: Barry E. Boone <boone@a.cs.okstate.edu> Date: Mon, 24 Jan 94 21:33:26 GMT (4 screens)

TEXAMENTS Micro Computer Specialists 701 South Wicklow Suite 506, Stillwater Oklahoma 74074 405-372-0819

For More Information Contact: Steven C. Lamberti, 405-372-0819

#### For Immediate Release

Texaments Relocates Entire Company to Stillwater, Oklahoma  
-----Stillwater, Oklahoma, January 24, 1994 -Texaments has relocated the entire company from Patchogue, New York to a new facility in Stillwater, Oklahoma. All product development, manufacturing, distribution, telemarketing, customer service and technical support operations are now being performed at the new location.

Due to the move, regularly scheduled product shipments were interrupted for a 45 day period. Effective immediately, all shipments to end users, dealers and distributors have resumed. Company officials pledged to continue their policy of shipping all orders to end users within 48 hours of receipt. During the last ten years Texaments has shipped 98% of its orders within this self-imposed

time limit.

The decision to relocate Texaments to Stillwater, Oklahoma was the result of a new partnership agreement between two well-known individuals in the TI community.

Steve Lamberti, the founder and long standing president of Texaments, and Barry Boone, a highly respected programmer and figure in the TI world, have agreed to merge their talents into a new venture involving interactive voice and fax

response, multimedia and networking technology.

"This year marks our 10th anniversary serving the TI community", stated Mr. Lamberti. "I am grateful to all of the wonderful 99ers who have purchased our products and supported our efforts for more than a decade. The move to Oklahoma allows us to distribute our products from a central location within the United States, and develop new ones with one of the most respected names in the TI community, Barry Boone."

Stillwater is the home of many high-technology companies, including Creative Labs, a worldwide leader in audio and video multimedia products, and many other innovative firms specializing in communications and other high-technology areas.

All orders, inquires and technical support questions should now be directed to Texaments at the following address and telephone number:

Texaments 701 South Wicklow, Suite 506 Stillwater, Oklahoma 74074 405-372-0819

Texaments has been serving the TI community for 10 years, and offers a wide variety of software, hardware, cables and accessories for TI-99/4a Home Computer. The company publishes and distributes many best-selling and critically acclaimed

software titles such as TI Artist Plus, GIF Mania, TI Base, TI Sort, Sound F/X, The Missing Link, Rapid Copy, the Artist's Companion Series, Artoons!, the Starfleet Technical Drawings, the CS6D Classics, and many more popular titles. A free product catalog is available upon request.

- \$\$\$ - \$ Excluding products manufactured by other vendors. --  
Barry E. Boone boone@a.cs.okstate.edu

CALENDAR

This is a public domain program which was written a few years ago by Dale A. Kloes. It prints the entire year on an 8 x 10 sheet of paper. It is great to place close to your computer so you have a glance at calendar easy to see. I want to caution you to turn on your printer. The program is in BASIC and it take a long time to run. The screen remains blank, so don't get worked up if you think the program has crashed. There is no auto load so you will have to type, RUN "DSKn.CALENDAR" to activate the program.

```

10 !CALENDAR3 - PRINT YEAR O
N PRINTER
20 !(C) 1983-88 BY DALE A. K
LOES PUBLIC DOMAIN.
30 CALL CLEAR
40 DEF INVERT(A)=A-INT(A)
50 DIM HEAD$(5)
60 DIM DOTW$(11,5,6)
70 GOSUB 1060
80 YRMSG1$="ENTER THE YEAR"
:: PFLG$="Y"
90 YRMSG2$="YEAR MUST BE 158
3 THRU 9999"
100 YRMSG3$="NO. OF COPIES"
102 DISPLAY AT(1,1):"
PRINT YEAR"
104 DISPLAY AT(2,1):"(C) 198
3-88 BY DALE A. KLOES"
106 DISPLAY AT(3,1):"
PUBLIC DOMAIN"
108 PFLG$="N" :: DISPLAY AT(
4,1):"ENTER PRINTER:"
109 ACCEPT AT(5,1)BEEP:PRNTR
$
110 DISPLAY AT(6,1):YRMSG1$
:: ACCEPT AT(6,23)VALIDATE("
1234567890")BEEP SIZE(4):YR$
120 IF VAL(YR$)>1583 THEN DI
SPLAY AT(24,1):" " :: GOTO 1
40
130 DISPLAY AT(24,1):YRMSG2$
:: GOTO 110
140 DISPLAY AT(8,1):YRMSG3$
:: ACCEPT AT(8,23)VALIDATE("
1234567890")BEEP SIZE(2):COP
YNO
150 CN=VAL(SEG$(YR$,1,2))

```

```

160 YR=VAL(SEG$(YR$,3,2))::
OLDYR=YR
170 HEAD$(5)=SP3$&YR$&SP27$&
" CALENDAR "&SP27$&YR$
180 FOR MONTH=1 TO 12
190 MN$=" "
200 ON MONTH GOTO 210,260,36
0,400,430,460,490,520,550,58
0,610,640
210 MN=11
220 YR=YR-1
230 MN$="J"
240 MX=31
250 GOTO 660
260 MN=12
270 YR=OLDYR
280 IF INVERT(YR/4)<>0 THEN
320
290 MX=29
300 IF YR<>0 THEN 330
310 IF INVERT(CN/4)=0 THEN 3
30
320 MX=28
330 YR=YR-1
340 MN$="F"
350 GOTO 660
360 MN=1
370 YR=OLDYR
380 MX=31
390 GOTO 660
400 MN=2
410 MX=30
420 GOTO 660
430 MN=3
440 MX=31
450 GOTO 660
460 MN=4
470 MX=30
480 GOTO 660
490 MN=5
500 MX=31
510 GOTO 660
520 MN=6
530 MX=31
540 GOTO 660
550 MN=7
560 MX=30
570 GOTO 660
580 MN=8
590 MX=31
600 GOTO 660
610 MN=9
620 MX=30
630 GOTO 660
640 MN=10
650 MX=31
660 !DUMMY STMT, START WITH
1ST DAY OF MONTH
670 DY=1
680 GOSUB 900 !DETERMINE THE

```

```

DAY OF THE WEEK
690 FOR K=0 TO 5
700 FOR I=D TO 6
710 IF DY=0 THEN 790
720 IF DY>MX THEN 780
730 DOTW$(MONTH-1,K,I)=STR$(
DY)
740 IF DY<10 THEN DOTW$(MONT
H-1,K,I)=" "&DOTW$(MONTH-1,K
,I)
750 DOTW$(MONTH-1,K,I)=" "&D
OTW$(MONTH-1,K,I)
760 DY=DY+1
770 GOTO 790
780 DY=0
790 NEXT I
800 D=0
810 NEXT K
820 NEXT MONTH
830 FOR I=1 TO COPYNO :: GOS
UB 1300 :: NEXT I
840 DISPLAY AT(24,1):"PRESS
ANY KEY TO GO ON"
841 CALL SOUND(200,1397,5)
842 CALL KEY(0,K19,S19)
843 IF S19=0 THEN 842
844 CALL CLEAR
845 DISPLAY AT(2,1):"PRESS 1
- SHOW MONTH"
846 DISPLAY AT(4,1):" 2
- PRINT MONTH"
847 DISPLAY AT(6,1):" 3
- CHANGE PRINTER"
848 DISPLAY AT(8,1):" 4
- PRINT YEAR"
849 DISPLAY AT(10,1):" 5
- EXIT PROGRAM"
850 CALL SOUND(200,1397,5)
851 CALL KEY(0,K19,S19)
852 IF S19=0 THEN 851
853 IF K19<49 OR K19>53 THEN
850
854 CALL CLEAR
860 ON K19-48 GOTO 882,884,8
69,870,890
869 PFLG$="Y"
870 GOSUB 1280 ! CLEAR TABLE
FOR NEXT CALENDAR.
880 GOTO 102
882 RUN "DSK1.CALENDAR1"
884 RUN "DSK1.CALENDAR2"
890 STOP :: CALL CLEAR :: GO
TO 890
900 !SUBR TO DETERMINE THE D
AY OF THE WEEK (D)
910 !REM SUN=0, MON=1,.....,S
AT=6
920 D=1+INT(2.6*MN-.2)+INT(Y
R/4+YR)+(INT(CN/4)-2*CN)
930 !IFD<0, KEEP ADDING 7 TI

```



```

LL DAY (D) IS POSITIVE
940 IF D>=0 THEN 980
950 D=D+7
960 GOTO 940
970 !MAKE MAKE D POSITIVE IN
ITGER
980 D=INT(7*INVERT(D/7)+.5)
990 !ADJUST D IF LEAP YEAR R
EQUIRES IT.
1000 IF YR+1<>0 THEN 1050
1010 IF INVERT(CN/4)=0 THEN
1050
1020 IF MN$="J" THEN 1040 !L
EAP YEAR TEST
1030 IF MN$<>"F" THEN 1050 !
LEAP YEAR TEST.
1040 D=D+1
1050 RETURN
1060 !SUBR. LOAD PRINTING CO
NSTANTS
1070 SP2$=" "
1080 SP3$=" "
1090 SP6$=SP3$}SP3$
1100 SP9$=SP6$}SP3$
1110 SP10$=SP9$}" "
1120 SP11$=SP10$}" "
1130 SP19$=SP10$}SP9$
1140 SP20$=SP19$}" "
1150 SP21$=SP20$}" "

```

```

1160 SP22$=SP21$}" "
1170 SP23$=SP22$}" "
1180 SP24$=SP23$}" "
1190 SP27$=SP24$}SP3$
1200 HEAD$(0)=SP9$&"JANUARY"
&SP20$}"FEBRUARY"&SP20$}"MAR
CH";
1210 HEAD$(1)=SP10$&"APRIL"&
SP23$&"MAY"&SP24$&"JUNE"
1220 HEAD$(2)=SP11$&"JULY"&S
P22$&"AUGUST"&SP19$&"SEPTEMB
ER"
1230 HEAD$(3)=SP9$&"OCTOBER"
&SP20$&"NOVEMBER"&SP19$&"DEC
EMBER"
1240 HOLD$=" S M T W TH
F S"
1250 HEAD$(4)=SP2$&HOLD$&SP6
$&HOLD$&SP6$&HOLD$
1260 GOSUB 1280
1270 RETURN
1280 FOR M=0 TO 11 :: FOR K=
0 TO 5 :: FOR I=0 TO 6 :: DO
TW$(M,K,I)=SP3$ :: NEXT I ::
NEXT K :: NEXT M !CLEAR TAB
LE FOR NEXT CALANDAR
1290 RETURN
1300 ! SUBR. TO PRINT CALEND
AR.

```

```

1310 OPEN #1:PRNTR$
1320 PRINT #1:HEAD$(5)
1330 PRINT #1:" "
1340 FOR Z=0 TO 9 STEP 3 !GR
OUP OF 3 MONTHS
1350 PRINT #1:HEAD$(Z/3)
1360 PRINT #1:" "
1370 PRINT #1:HEAD$(4)
1380 PRINT #1:" "
1390 FOR Y=0 TO 5 !LINE
1400 HOLD$=SP2$
1410 FOR Q=0 TO 2 !MONTH IN
LINE
1420 FOR X=0 TO 6 ! DAY OF T
HE WEEK IN LINE
1430 HOLD$=HOLD$&DOTW$(Z+Q,Y
,X)
1440 NEXT X
1450 IF Q=2 THEN 1470
1460 HOLD$=HOLD$&SP6$
1470 NEXT Q
1480 PRINT #1:HOLD$
1490 NEXT Y
1500 PRINT #1:" "
1510 NEXT Z
1520 PRINT #1:CHR$(12)
1530 CLOSE #1
1540 END

```

#### 4A HINTS AND TIPS

by Andy Frueh  
Lima U6

This little graphics program puts a helicopter against a night blue field with moving stars. It actually feels like you are watching a flying helicopter. Maybe someone can turn this into a game program.

```

10 CALL CLEAR :: CALL SCREEN
(5)
20 CALL CHAR(33,"0000000000
30000")
30 CALL CHAR(64,"0000000000F
F0000")
40 CALL CHAR(35,"0000000000F
F40E0")

```

```

50 CALL CHAR(94,"00000000000
00008")
60 CALL CHAR(37,"0709113F3F1
FB2FF")
70 CALL CHAR(38,"FC0E0F0F0F
E10FF")
80 CALL CHAR(36,"00000000000
00000")
90 CALL CHAR(36,"1C3CFCFC000
00000")
100 CALL CHAR(63,"00000000000
000000")
110 CALL VCHAR(12,16,38)
120 CALL VCHAR(12,15,37)
130 CALL VCHAR(12,17,42)
140 CALL VCHAR(12,18,36)
150 CALL VCHAR(11,18,94)
152 FOR I=1 TO 15
154 R=INT(RND*180)+10

```

```

155 IF R>70 AND R<110 THEN 1
54
156 C=INT(RND*180)+10
157 CALL SPRITE(#1,46,15,R,C
,0,+15)
158 NEXT I
160 CALL VCHAR(11,14,33)
170 CALL VCHAR(11,15,64)
180 CALL VCHAR(11,16,35)
190 CALL VCHAR(11,17,64)
200 CALL VCHAR(11,14,63)
210 CALL VCHAR(11,15,63)
220 CALL VCHAR(11,16,63)
230 CALL VCHAR(11,17,63)
240 CALL SOUND(135,-4,0)
250 GOTO 160

```

#### BREAK PROGRAM PROTECTION

To break protection on programs, enter the following: CALL INIT :: CALL LOAD(-32187,0) I know that CALL LOAD(-31931,0) does the same thing, but this one also appears to work. This is one of the little secrets that TI wouldn't tell us. Now, there is a way to back out of the PROTECT clause protection scheme. The XB manual easy there is no way, and there was at one time a commercial program that did this (it sold for about \$10!). Now, you can do it for free.

**MEETING DATES  
FOR  
1994**

**3RD SATURDAY**

19 MAR 1994  
16 APR 1994  
21 MAY 1994  
18 JUN 1994  
16 JUL 1994  
20 AUG 1994  
17 SEP 1994  
15 OCT 1994  
19 NOV 1994  
17 DEC 1994



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

Pres. - John Parkins	614/891-4965
Vice Pres. - Chuck Grimes	614/268-8821
Treas - Bill Sheppard	614/881-5742
Secretary - Dick Beery	614/459-3597
Membership - Everett Wade	614/262-6346
Librarian - Kem Marshall	614/876-1670
Disk - Dick Beery	614/459-3597
Cassette - Harley Ryan	614/231-1497
Cartridge - Chuck Grimes	614/268-8821
NL Exchange - Jean Hall	614/885-4223
Spirit of 99 BBS	614/263-3412
Vice Pres. - Chuck Grimes	614/268-8821
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

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

