Southwest Ninety-Niners Newsletter

contributed by

- Tom Wills -

compliments of

TI99ers
On-Line
User Group

www.ti99ers.org

MARCH 1987

P.O. Box 17831 Tucson, AZ 85730

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ATTENTION MEMBERS

Next Meeting: March 3, 1987 at 7:30pm.
Location-Tucson Fire Department Training Center on Ajo Way just west of Park.

General Users Workshop: 2nd Thursday of each month at 7:30pm (March 12th). Includes: Basic, ExBasic, Hardware/Software Problem-solving, etc. Mathis Home - 5941 E 26th -747-5046.

Applications Workshop: 3rd Thursday of each month at 7:30pm (March 19th). Includes: Writer, Multiplan, DataBases, etc. Mathis Home - 5941 E 26th - 747-5046

Advanced Languages Workshop: 4th Tuesday of each month at 7:30pm (March 23rd). Includes: FORTH, Assembly Language, etc. Rod Stallard's Home - 7575 E. Logan - 745-6071

PRESIDENT'S CORNER

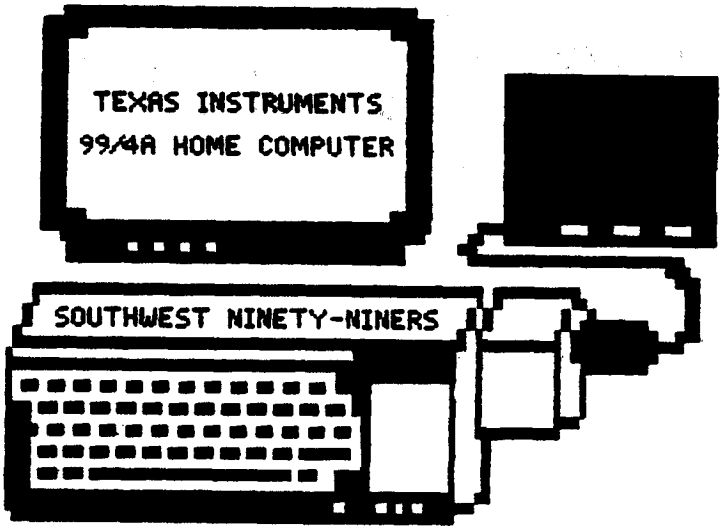
New editors are taking over newsletters throughout the TI community. The caliber and information level have greatly improved. I am finding it more and more difficult to limit the amount I put into our newsletter. This month Dick Paschal offered to help me by using his AT&T computer to format and print our newsletter. In an effort to get as much information out as I possibly can, I took him up on the offer. By next month I hope to have one of the multiple column programs in my possession, then I can do this on a TI. For this month I want to thank Dick for this wonderful offer.

We will have a door prize for a lucky group member that attends the next meeting. Ryte Data is giving a year's subscription to their newsletter in return for the advertisement in our newsletter. So come and get your name on the list!

The date for 99 Fest West '87 in LA has been changed to the 16th and 17th of May. They apologized for the erroneous information given out last month and confirmed the new dates.

We are implementing a new policy for the Lending Library, due to the number of items not returned in the recent months. Starting with the March meeting you will be required to fill out a receipt for the items you borrow. This will be a three part receipt. You should make sure it is signed off when you return the items. Ida will be in charge of the receipts for the Lending Library.

Ida McCargar and Les Neff are typing and reading their way through all the newsletters we have received over the last three plus years. They are indexing them and as each group is finished the newsletters will be available from the Lending Library. Ida has included a partial list of one of the newsletter's offerings in this newsletter.
*BJ Mathis * 747-5046*



IBM COMPATIBLITY FOR THE 99/4A

By MG - Downloaded by Dave Talan Cleveland Area UG, Ohio - Feb 1987

TECHNICAL INFO:
1. Two part system. A TURBO XT and a small bridge box that connects to the side I/O port on your 4A.

2. The TURBO XT is an 8 Mhz (switchable) mother board, power supply, XT style case, CGA color graphics card (both RGB and Composite), Floppy disk controller, 1 half height DS/DD disk drive, parallel port and 256K of RAM on the mother board. The mother board has sockets for up to 640K of RAM. There are 8 expansion slots, two of which are used by the CGA card and the floppy disk controller.

3. The bridge box has inputs for 4A Video in, XT Video in and outputs for XT keyboard out and monitor out. It also contains the software for keyboard switching between 4A mode and XT mode and the software to convert the 4A key strokes into XT keycodes. It also has a pass through so you can keep your P-box or other peripherals hooked up.

4. Mode switching from 4A to XT can be done through Basic or X-Basic with CALL XT or by holding FCTN CTRL ENTER on power up of the 4A.

5. Mode switching from XT to 4A is done by pressing FCTN CTRL ENTER.

6. The ONLY item shared by the two systems are the 4A keyboard and your current monitor or TV. Yes, you can get 80 columns out of a composite monitor, but it is easiest to read with the color turned off in 80 column mode. THe XT allows MODE 40 which also gives you 40-column mode.

Graphics programs such as games and drawing programs work fine in programs, and most other software that doesn't combine weird foreground and background colors are also quite reasonable.

7. By not sharing the disk drives, it is possible to do concurrent processing on the XT. Example: Go into XT mode start up your COMMUNICATIONS software, log on to a BBS and start a download. Now you can switch modes back to the 4A and do whatever you would like in 4A mode while the XT is still downloading from the BBS!!!

8. We have tested this system on a number of 4A system configurations and have found it to be very compatible. Since it is an IBM clone, it is also fully compatible with both IBM and IBM HARDWARE. Yes, you can add any IBM cards you would like to the system.

9. The minimum 4A system requirements: a TI-99/4A console and a monitor or a TV set with RF modulator.

GENERAL INFO:

1. This system is being marketed by Triton Products Company in San Francisco, CA. They are also handling the production of the bridge boxes and they have contracted for the TURBO XT clones their specifications.

2. The system has a 30-DAY money back guarantee and a 1-YEAR parts and labor warranty.

3. The cost for this system (TURBO XT, Birdge box and cables) is $499 plus $19.90 for shipping and handling.

4. Their toll-free number for additional info and/or a 6-page 4-color brochure on this system is 800-227-6900, Monday thru Friday - 6am to 6pm and Saturday 9am to 4pm, Pacific time.

5. Delivery is scheduled to start March 1 of this year.

We have been using this system for awhile now, and we are very pleased with its performance. This isn't vaporware, ALL R&D, testing and software is complete, and the units are ready for production, so the March time frame is a reality.

At last a MAJOR expansion for the 4A. We hope you are as pleased with this product as you have been with our other products in the past. As the Triton brochure says:
"MAKE THE IBM CONNECTION TO YOUR TI-99/4A."

SO YOU THINK YOU WANT THE TI/IBM CLONE!!!

by Deanna Sheridan
Northcoast 99ers Cleveland Area U6, Ohio - Feb '87

You have seen the announcement by Millers Graphics of the so-called upgrade for the TI to use IBM programs. As I read the announcement, it is 'not' an upgrade for your TI. Rather it is an IBM clone on which you can use your TI keyboard. A true TI upgrade would be one that would give you an economical way to add the 32K needed for most programs, and RS232 and disk system. If you do not now have these items, the TI/IBM will NOT let you run TI disk-based software. It gives you no more use of your TI than you had before. Instead you will find that you have an IBM with a TI keyboard for all practical purposes.

With the price of the clones dropping almost daily, you might as well have two complete systems and have the use of an IBM style keyboard for your IBM. I was personally very disappointed by this announcement as I cannot see how it is going to help keep our TI alive. Instead you will see the demand for TI software decrease (which can only hurt) and that for IBM type software increase.

If you do go the clone route, you may be quite surprised to find it is even dumber than your TI. After being used to having my TI fire up with a nice welcome screen, all ready for me to type in a program or load some software, it was a real shock to turn on my Epson compatible and find there was nothing but a black screen with a little C) at the bottom. I had a hard disk so that my DOS (Disk Operating System) had already booted. On a floppy-based system you have to insert your DOS diskette each time you boot before you can do ANYTHING. Commercial diskette-based programs will boot without DOS if they include the Command.com file. Otherwise you have to run DOS BEFORE you do anything else. Some DOS commands are resident and others are not, so you will find yourself constantly reinserting the DOS diskette, as programs require certain commands.

DOS is a whole new set of commands and utilities which you will have to master. After getting over the shock that I was stuck with a black and white screen (at least for a while), I went out and spent $40 on books to tell me how to use DOS and write my own colorful screen menu program. You will have to learn about 'Batch' files, directories and many other things that are taken care of automatically for you with the TI.

Want to run a Basic program? Get out the BASIC diskette and load basic before you run the program. Again, better get used to the black and white screen until you learn a few tricks. Getting color in basic was fairly easy as I wrote a small program with the screen colors I wanted and when I load Basic I load this program. But, if I run a basic program, the colors aren't permanent and if I want to do some programming, I have to redo my screen.

What kind of software do you think you want to run on this fancy machine? Remember, you are used to paying $10 to $40 for some excellent games, utilities, etc. for the TI. I have three word processing programs for the compatible and if TI-Writer would support 80 columns and have decimal tabs (I do a lot of statiscal typing), it would be my number 1 choice. It is versatile and easy, and the transliterate command lets you do almost anything you want. I spent hours trying to get my other three to do something TI-Writer did without a hitch, none would. My word processing programs are the ones I got with my Leading Edge (I know I said Epson above...long story), PC Write (A fairware program compared to WordStar) and IBM Writing Assistant. These are probably the types you would be working with since not many can afford WordStar or MicroSoft Word, etc. I still like TI-Writer the best for versatility and ease of use. This is being written on my Leading Edge WP and it does a nice job if you don't want to get fancy with a lot of formatting within your document which I sometimes have to do with special accounting reports and I still revert to the TI-Writer.

I have an excellent general ledger package which would do all of your accounting, but you wouldn't want to spend as much for it as my boss did. Got a great tax package the other day (anyone want their taxes done reasonably?), but again you wouldn't want to have to buy it yourself. Same with spreadsheets. Would you have that much use for them for what they cost? Why spend that kind of money on a computer to play games? The compatible does nothing for me on a personal basis that my TI would not do. I have the luxury of additional memory and that is about it.

Of course, one of the first things I did was join a C users group. They must be exciting after a TI users group, right? WRONG! It is a different world, you can say that much. How about the library? Must be lots and lots of program available. They get their library disks from the PC SIG. You pay $2 per disk. You know you are getting a disk of utilities, or games, or word processing, whatever, but after that you are completely on your own. You have to go in and check out each program to see what it will do and try to find out how to do it. Files are not grouped. It is a real mish mash. They don't have to do any innovative things such as adding 32K inside the machine, replacing cooling fans in PEB boxes, etc., etc. If they have any local programmers in the group, they don't have them featured in their library. They depend exclusively on the PC SIG and seem to have no other sources. The program presentations at the meetings have been varied, but for the most part were not things I could use on a personal basis. However, I have run into business situations since then when I was able to relate and be knowledgeable in conversations with clients because of the presentations in areas such as security, backup proceedures for hard disks, and a database with its own language called 'Mapper'.

Speaking of hard disks. Now that you have a hard disk that can hold the equivalent of 60 to 90 floppies, you can get rid of all your floppies. Wrong again. Exactly one month after I purchased an Epson, the hard disk failed. Would not boot. I lost EVERYTHING. At least I had backed up the accounting clients I was working on each day, but all else was lost and I had to start over from scratch.

Still want to 'upgrade' to another computer?

Short Bytes

Northern Nevada 99ers - Jan '87 - By Matt Patrovsky. Are you tired of the dull CALL CLEAR statement? Sure, it's effective, but it doesn't seem very exciting or different. Try these out, they should spice things up just a bit.

It does help if you have something on the screen, so type in CALL HCHAR(1,1,64,768), before you run each example.

example 1:
```
10 CALL HCHAR(1,1,32,768)
```

example 2:
```
10 CALL VCHAR(1,1,32,768)
```

example 3:
```
10 FOR X=25 TO 1 STEP-1
20 FOR Y=32 TO 1 STEP-1
30 CALL HCHAR(X,Y,32)
40 NEXT Y
50 NEXT X
```

example 4:
```
10 FOR Y=32 TO 1 STEP-1
20 FOR X=24 TO 1 STEP-1
30 CALL VCHAR(X,Y,32)
40 NEXT X
50 NEXT Y
```

example 5:
```
10 FOR X=1 TO 24
20 CALL HCHAR(X,1,32,32)
30 NEXT X
```

example 6:
```
10 FOR X=24 TO 1 STEP-1
20 CALL HCHAR(X,1,32,32)
30 NEXT X
```

example 7:
```
10 FOR Y=1 TO 32
20 CALL VCHAR(1,Y,32,24)
30 NEXT Y
```

example 8:
```
10 FOR Y=32 TO 1 STEP-1
20 CALL VCHAR(1,Y,32,24)
30 NEXT Y
```

example 9:
```
10 X=1
20 Y=1
30 XZ=24
40 YZ=32
50 CALL HCHAR(X,Y,32,32)
60 CALL VCHAR(X,Y,32,24)
70 CALL HCHAR(XZ,Y,32,32)
80 CALL VCHAR(X,YZ,32,24)
90 X=X+1
100 Y=Y+1
110 XZ=XZ-1
120 YZ=YZ-1
130 IF X(=12 THEN 50
140 END
```

Northern Nevada 99ers, Jan '87 - By David Belanger. If you have Extended Basic did you know you can program in any color combination you want? Try this:

```
CALL CLEAR :: CALL SCREEN(13):: FOR SET=0 TO 14 :: CALL COLOR(SET,16,13):: NEXT SET :: ACCEPT AT(24,1):Z$
```

Press (ENTER) then FCTN(4). This will let you program with a dark green background and white letters.

LA 99ers TopIcs, Dec '86, 'Did you know..?' By Chick de Marti 'When entering DATA, type NUM(enter). At line 100 enter CTRL S, space, enter the data. That's all there is to it. The CTRL S will show a blank, but when listed it displays DATA.'

Note: I tried the last item, it works, faster than typing DATA. Ida.

FAIRWARE REVIEW: 99-CALC

From ROM Newsletter, Fountain Valley, CA, June '86

99-CALC is a spreadsheet written for the 4A. What makes this program valuable is that it will run on a bare bones system (no memory expansion and no disk drive). It requires only a cassette player and Extended Basic. A printer, disk drive, and memory expansion are optional.

Given the small size of the requirements, 99-CALC compares well with full featured programs. You can do arithmetical functions (add, subtract, multiply, divide and percent) and you can total and average columns and rows.

You have full screen editing, can move from one cell to an adjacent one or jump to any active cell. The spreadsheet can be printed to an 80-column printer. You can opt to print formulas.

Phil Barnes, who wrote 99-CALC has truly come up with an ingenious program. He uses every bit of memory possible. For example, you can hide numbers under column and row titles. The program is filled with nice touches. 99-CALC comes with on-disk documentation (that prints 7 pages) and a sample file.

RECOMMENDATION: If you do not have memory expansion and have need of a spread sheet program, 99-CALC would be a valuable addition to your library.

For those of you with 32K and a disk drive, MULTIplan has more features. 99-CALC is worth getting if for no other reason than to see what can be done with the 4A's 16K of VD RAM.

HOW TO ORDER: Send a disk and postage paid, self-addressed return mailer to:

Phil Barnes
24631 Via San Fernando
Mission Viejo, CA 92692

Phil will send you a flippy back with some good public domain software on the flip side. If you write Phil for information, be sure and send a self addressed, stamped envelope (SASE) if you want a reply. Phil asks for a donation of $10 if you like the program. It's well worth it!

Review: CSGD III

by Bill Sager from New Horizons Users Group

This program allows the 99/4A owner to design and create unique and distinctive labels, as well as print out TI-Writer type files in six new and different font styles.

Once you have stepped through the process to create a label or letterhead, it can be saved as a file for future printing. Let's take a look at some of the sections of the program.

LABELS
You can choose from over 80 font styles and sizes. Twenty-five of these are included in the CSGD III package. Each line of the label can be the same font or different - the choice is yours. The number of label lines is determined by the size of the label and the font chosen. You also have the option of printing each and every font in

either the regular or a compressed mode. The program will either center your label lines if you desire.

A small graphic picture can be included on the label. Forty of these are in the package, but over 320 are available. The graphic can be on the right, left, or both sides. If on both sides, it can be two different graphics. For large labels, up to four graphics can be used. As if that was not enough, each graphic can be printed in its normal way, or as a negative. (black is white, white is black) and in mirror image (right is left, left is right). This makes for very customized labels.

Common peel and stick labels come in three heights and varying widths. The program supports all of these standards so that you can print your lables for whatever size you need.

One of the neatest features is the ability to have a frame printed around the label. There are eight different frames built into the program. Of course, you can choose not to have a frame, too. The frame is not "saved" as part of the file so a different frame can be used when you print labels the next time.

LETTERHEADS

You can create custom designed neat and professional letterhead and stationery for business or personal correspondence. One large font text line for your name or business followed by up to three small font text lines for the address and telephone number is provided for. As in the labels, graphics can be included if you wish. A choice of top, bottom, or both top and bottom design letterhead is allowed.

There are fewer user options when creating a letterhead, however the huge number of fonts to pick from and the fact that they can be used in the regular or compressed mode, along with the hundreds of graphics gives thousands of possible combinations.

MESSAGES

This section of the program provides for printing headlines, signs, greeting cards, T-shirt iron-on transfers, and has limitless possibilities.

Again, many options in the program allow for a great deal of flexibility. Some have been described already, such as regular or compressed mode for printing out the fonts, use of graphics and the ability to produce a negative or mirror image. But there are many other features too.

The text/graphic lines can be centered. Not only can they be centered on a full width page, but they can also be centered on either the right or left side of the page, which is particularly useful when making cards. To make a greeting card from a 8 1/2"x11" sheet of paper, we must be able to print text and graphics upside down so when the paper is folded the cards inside text will be correct. Yes - this can be done.

Have you ever wished you could turn out a T-shirt, sweatshirt or baseball cap with your own wording for a gift, team, or club? Maybe you need to mark your children's names on their clothes for camp. Special ribbons or paper for your printer allow you to do iron-on transfers. The catch is the wording must be printed out backwards so when it's ironed-on the message will be right. The program does this also.

DOCU PRINTER

This section of CSGDIII allows you to print out TI-Writer files in any one of six different fonts by using the graphics capabilities of your printer. You no longer have to select from just the type styles that your printer offers. Line spacing can be varied and you can print in full page or two columns.

Page numbers can be added as well as setting the top and bottom margins of the document. For notes and other short writings, a typewriter mode is available so that you do not even have to prepare a TI-Writer file first. Just sit down and type in the words and they will be printed in whichever of the six fonts you have selected.

CSGD III

There are some other features that permit the user to further customize the printer output from this package but they are minor. What do you need to run CSGD III? A disk drive, 32K memory, X-Basic, and a Epson compatible (Star, 10-X) or Prowriter printer. CSGD III consists of three disks for $17.95, plus $2 shipping. Printer type should be specified when ordering. Send order to Texaments, 53 Center Street, Patchogue, New York 11772.

Review: DISK UTILITIES Fairware by John Birdwell

by Jim Swedlow - ROM Newsletter Fountain Valley, CA - Feb '87

You may have a favorite disk editor - one that you know and love (?) - one that meets your needs. Mine has been Miller Graphics' Advanced Diagnostics. At least until now. John Birdwell's DISK UTILITIES has jumped to the top of my list. It is easily the best sector editor I have used.

It is what a sector editor should be. You can dump a file to your printer in HEX and ASCII. DISK UTILITIES will follow the file on the disk even if it is fractured. The file dump is like Disk-Aid with HEX on the left and ASCII on the right. The print out can be in condensed print. You can also print a sector or a group of sectors.

You can compare two files or disks. Any sectors that do not match will be dumped to your printer. It can also give you a detailed file report.

DISK UTILITIES supports string search. You can search a disk, any part of the disk or within a field. The string can be in HEX or ASCII.

The sector editor gives you a full screen editor. The various controls are easy to remember. Pressing CTRL H and CTRL A, for example, switches the screen display between HEX and ASCII. CTRL W will WRITE the sector back to disk. Unlike Advanced Diagnostics, DISK UTILITIES keeps track of the current sector for writing sectors. You can, however, write to any sector on any disk.

Another nice feature is the Disk Report. This prints a disk catalog with two new features. First, the catalog includes each field's sector numbers. Invaluable if you have it before you blow a disk directory. Also, DISK UTILITIES hides a short file description in the file header and prints it out as part of the catalog.

This program is a sector editor only. It doesn't have the ability to look into your 4A's memory that Disk-Aid has nor the extensive dosumentation and diagnostic features of Advanced Diagnostics. But it does have all the features one needs in a disk editor.

There is more, but this should give you an idea what DISK UTILITIES can do. Without a doubt, it warrants your serious consideration. If you like it be sure to send John the $10 he asks for. It is well worth the price.

Note: DISK UTILITIES is available from the SW 99ers Fairware Librarian. BJ

MYARC DS/QD DISK CONTROLLER

by Tom Nellis from Northcoast 99ers
Cleveland Area 99/4A Users - Feb 1987

Recently Myarc introduced a quad density disk controller. I already owned a set of quad density drives, I had been using with the TI Disk controller and wanted to upgrade to the DS/DD-DS/QD. The quad density option costs $10 more than the DS/DD version, and you must specify that you want DS/QD.

When the card arrived, the only indication it was a quad controller was a note on the label attached to the clam shell and an extra page of documentation.

The instructions were to take the clam shell apart and set the dip switches to either DS/DD or DS/QD, depnding on which type of drive is DSK1,2,3, or 4. The clam shell is held together by plastic tabs, not screws. Getting them apart was an exercise in patience, since you need three hands and four screwdrivers, so that you don't break any of the tabs. Once apart, the dip switches are located in the center of the card and can be switched easily. While apart, I gave the card a once over; the solders were good, but the overall appearance was BAD. It is obvious Myarc doesn't have a quality control program set up, because this card would not pass inspection on looks. I set the dip switches and got the clam shell back together without breaking any of the tabs. 'Time for Installation'.

Installing the card was a simple matter of replacing the TI controller for the Myarc and reconnecting the cables. Then power up and insert Myarc's disk-based disk manager SS/DD in drive 1. I hit Option 2 for XB and 'nothing'. Moved the disk to drive 2, typed 'OLD DSK2.LOAD' - Nothing. Drives 1 and 2 on my system are MPI B52-DS/DD. On to drive 3 which is a CDC DS/QD. I typed in 'OLD DSK3.LOAD' and VIOLA, it loaded the disk manager after changing a line in the XB load program.

Following instructions in the Disk Manager manual, it was time to format a few disks. When formatting DS/DD you have the option of 16 or 18 sectors per track. When formatting DS/QD, you have the option of 40/80 tracks. One, note if you choose 40 TPI, you are only formatting one-half the disk on each side - not a wise choice and with this option, you are only formatting DS/DD. The formatting came off without a hitch in SS/SD, SS/DD, DS/SD, DS/DD, SS/QD, and DS/QD. Cataloging a DS/QD disk shows 2878 sectors free - 2 used - 720K of floppy storage.

Myarc warns you to avoid writing to the DS/QD drive, then reading the info with a DS/DD drive, as not all drives are capable of reading DS/QD format and I have avoided this area altogether. I copied Myarc's Disk Manager to another floppy, and I can now load it from drive 1. I am not sure why it didn't load in the first place. 'A head alignment problem somewhere', but on my floppy it's ok.

Overall the card works fine. A few programs just will not work with the card, some are Quick Copy II, Disk Surgeon 99, Turbo, and Track Hack. DM-1000 Vers 3.3, when cataloging the DS-QD drive doesn't reflect the sectors free/used correctly, and I haven't tried to format a disk with DM-1000 on the DS/QD drive. The DS/QD drive will read any disk format...SS/SD to DS/QD. I only use the Myarc disk manager to format the DS/QD drive and DM-1000 for everything else.

Overall rating is a C+. The fact that I needed three hands to open the clam shell; the card's appearance was very poor, and the Myarc DM didn't load (every other program I have purchased with a load works fine). I should also tell you that my drive 2 was DOA after installing the Myarc card. I replaced the jumpers for configuring the drive with a dip switch and the problem went away. I installed Myarc's DM on Funnelwriter 3.3, and it works fine. This also does away with Myarc's load program.

FROM THE LENDING LIBRARIAN

One of the better newsletters we receive on an exchange basis is the Front Ranger - Colorado Springs, CO. Some of the excellent articles in recent issues are:

1. Instructions and hints for TI-Writer, by Dick Altman, June '86, pg 12-15. Very clear explanations for formatting and printing text. He evidently has this information on a disk as a freeware item.

2. An explanation by Joe Nuvolini of how to control your printer from MULTIplan, with specific instructions for condensed mode. Aug '86, pg 8.

3. A comprehensive article on rercovering lost files, by Rich Klein of the Chicago TI users group(a reprint) Jan '87, pg 4-10

4. Part 5 of Bonnie Snyder's series on speech has a program using TEXT TO SPEECH which demonstrates the TI 'singing' a song and accompanying itself. Jan '87, pg 12-14.

5. A comprehensive listing of product reviews compiled by Bill Gaskill, giving the source of each review. The list includes programs, botx commercial and freeware, and hardware. Jan '87, pg 17-20.

6. An article by William Warren (author of PRBase) on converting files to PRBase format. Oct '86, pg 6-9.

7. Using Funlwriter with Ramdisk, by Joe Nuvolini. Nov '86, pg 20-21.

8. Program reviews: STAR; GRAM KRACKER UTILITY 1; DISKMASTER I; SUPER SPACE. Nov '86.

9. Comparisons of 8 Data Base Managers, by Bill Gaskill. Nov '86, pg 4-8.

10. A review of Computer Wars and others, by Bill Gaskill and a review of version 3.4 of Funnelweb by Joe Nuvolini, each consisting of 2 pages, in Dec '86.

11. Odds and Ends by Bill Gaskill - 3 pages of short items of miscellaneous information in Oct '86.

These newsletters will be available at the March meeting for you to examine.

Tips from Tigercub #35, reprinted from AVTI newsletter, idea by Scott King. Do you sometimes forget the exact filename under which you are saving a program? When you load a program to modify it, put a reminder of the file name in the first line with a REM, e.g. 1 ! SAVE DSK1.FILENAME

When you are ready to save it again, list Line 1, FCTN 8(redo), use the space bar to erase the 1! and ENTER

Programming music: To save time and the typing of all those numbers,store the note frequencies in variables early in the program. For example A=440. Use A in CALL SOUND instead of 440. Use a system of naming that is easy to remember, such as AS for A sharp, A1, A2 (or AH,AH1 etc) for notes above the 440 A and AL for low A. A table of such variables can be stored in Merge format and called up when needed. Since only the values used in a particular composition are needed, after merging blank out all notes not needed, to speed running and conserve memory. If you do this, you only have to look up all those frequencies once.

I now have 5 disks from Barry Traver's GENIAL TRAVelER diskazine, plus 2 bonus disks. One bonus disk is Funnelweb, v. 3.4, the other is PRBase. You may see the disks at the March meeting. - *Ida McCargar * 294-3024* -

NEW FROM MONTY SCHMIDT: **GPL LINKER V1.1 Run Time Version**

now $49.95
w/Linker $59.95
plus Intern $69.95
add $3 shipping

GPL Linker is an ingenious program that places the power of Graphics Language Programming (GPL) at your command. No extra hardware is required beyond standard 32k and disk system. In short, Linker creates runnable program files from compressed (or uncompressed) GPL Assembler object files. You can then run these programs with "Option 5 Run Program Files" of the Editor Assembler Module.
Up to 24k GPL programs can be developed and run on standard 32k systems. Included in the run time version are two demonstration programs and "CONVERT," a public domain conversion program that converts MS BASIC statements to TI BASIC statements.
Price: $21.00 CDN funds $15.00 US funds.

GPL price Reduction

ENHANCED GPL Assembler V2.1

NØW with high memory loader package

UNLOCK ALL THE SECRETS! New GPL Assembler Version 2.1 available exclusively through Ryte Data.

This program provides the power to write, edit and assemble true GPL programs for the TI 99/4A. Create code that accesses console operating system routines directly. Develop programs that use the GPL Interpreter and all the features of the TI 99/4A.

This package includes the GPL Assembler disk, printed documentation, GPL tips and hints, update support service and commented GROM/ROM listings (with the book "INTERN"). An example for a command module type GPL program is included with source, object and list files on disk.

Requires: 32k memory, disk drive(s), TI Editor Assembler package. Printer/RS-232 recommended.

R/D COMPUTING

Technical Newsletter

with Bill Gronos on assembly!

We have a vision. Our vision is one of continued TI 99/4A support. We're dedicated to the power of the machine. From the novice to the experienced computer user; for management, home, education, entertainment or advanced applications our publication "R/D COMPUTING" is for you. TI never revealed all the important inner workings of the 99/4A. We bring you this vital information every month.

A major feature of R/D COMPUTING is the regular "upgrade projects." These electronic construction projects are designed to give the 99/4A owners more features and improvements. For example, it is possible to increase the speed of your computer with a very simple part and switch. Each month we present new circuits, diagrams and projects for your computer.

From the moment your new subscription arrives at your home, you will have access to critical technical information that makes your computer more valuable, powerful and versatile.

We believe that the TI 99/4A deserves new products, innovative hardware, software, information and a dedicated technical publication. This is what makes a computer "viable" in the fast paced microcomputer industry. Now that the 99/4A has been 'opened up,' all the secret information is available. You can have all these benefits and more each month. SUBSCRIBE NOW!

$14/year - back issues 3 - 19 available

THANK YOU! Our business has grown 300% this year. To show our appreciation we are **giving away** hundreds of dollars in TI products to 99/4A owners or users groups. To enter drawing, (no purchase necessary) send your name and address on a postcard to Ryte Data. For **subscribers** to R/D Computing we are giving away XBII plus, 32k memories, GPL Assembler package, etc. **Enter your subscription today!**

Prices listed in U.S. funds.

New catalogue available.

Super Clock Support

Designed for the CorComp Clock Peripheral—Triple Tech Card or Stand-alone models. This utility package provides more functions for use in your Extended Basic programs. Direct access to the clock ROM at assembly speed gives you these features: three independent timers to set and read; alarm function; two interrupt routines to display time and date on screen with CTRL T—continuously or on your command; all time and date displays are in 12 or 24 hour format using **TEXT.** This program also allows the week, date and time to be set independently rather than all together.
Program disk is not copy protected to allow you full use in your Extended Basic programs. Package includes disk and instructions. Only $17.95 plus $2

XBII plus

As reviewed in Micropendium October 1985. This command module gives you all the features of Extended Basic PLUS 40 new commands. Totally compatible with TI's XB, this enhanced version gives your programs more power to access your 99/4A. Commands such as MLOAD, MSAVE, VPEEK, VPOKE, GPEEK are superior to most other Basic environments. Various demo programs and new applications using high resolution graphics make this module a "must" for Extended Basic users. Comes complete with a 95 page manual. Requires console and 32k. $75.00 (US) plus $2 shipping.

BASIC Compiler V1.1

New Basic Compiler that is finally easy to use! Supports virtually all Basic and Extended Basic commands in existing programs. Simply load and compile programs from a menu driven directory on your screen. No extensive re-writing, variable declarations or conversions are required. Compiler produces code-list in one pass containing all variable addresses and jump list. Package includes Extended Basic Loader, Floating Point Loader, Integer Loader, Disk Menu program and DSR program for the Compiler support. This Compiler cannot unravel DEF statements and stops on the END statement—no SUB's allowed. TRACE, BREAK, ON ERROR, CALL LOAD and CALL LINK may produce execution errors.
Requires 32k, disk. Price: $20.00 plus $2 shipping (US funds).

Ryte Data

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A GUIDE TO BUYING MODEMS AND HOW TO HUOK THEM UP

by Fred & Amy Mackey - Pittsburgh Users Group, PA - Jan '87

The world we live in today is an electronic universe where information and messages streak arouond the world, or just across town, at the speed of light. In this world you can search for a job, play games, meet friends consult an encyclopedia, all without ever leaving your house. Entering this universe is a possibility for any one owning any computer. The only additional hardware and software you need for most machines is a printed circuit board called a "serial card" (RS232), a modem and a telecommunications software package. When buying a modem, there are five basic features you should look for:

1. Direct Connect which means it plugs directly into a modular telephone jack, eliminating all outside noise. The other option is an accoustic modem, the only advantage to it being it can be used with any phone, whether or not a modular jack is available. If your home does not have a modular jack, you can purchase an adapter to make the conversion for about $5.

2. 300 Baud - This is how fast the modem will send and receive data. A 120 baud modem is 4 times faster than a 300 baud modem, but costs twice as much. Although you can receive information 4 times faster, Compuserve and most databases charge extra to send information at this speed.

3. Auto Originate - This feature causes the modem to dial the number you have entered from the computer keyboard, as opposed to you dialing the phone yourself. The real advantage to this is that the modem will also have the ability to keep trying the number if it is busy, which frees you up from dialing over and over.

4. Auto Answer - This feature is necessary if you want to have the ability to receive call via your computer. If you ever want to set up your own BBS, this feature is a must.

5. Full Duplex - This is the ability to send and receive signals at the same time. Simply put, the database computer is constantly asking your computer if it ready, and your machine is constantly responding 'yes'. Without full duplex, there would be a line turn around delay between each question and answer. Full Duplex can be compared to having a conversation on the telephone, as opposed to Half Duplex which can be compared to having a conversation on a CB radio.

Any modem can be used with any communicating computer. However, serial cards (and software packages) are designed for specific computers. To hook up the modem, you need to have a serial card. The job of the serial card is to take the internal language of your computer, which is "spoken" in 8 bit "words" and send the "words" out of the computer to the modem one bit at a time, instead of 8 at a time. ("Serial" for transmitting bits individually in a series, and "parallel" for transmitting bits in a parallel - 8 at a time.) So, the serial card takes the specific language of your computer, and makes it common language for any brand of modem to receive. If you own a serial printer, as opposed to a parallel printer, or have an RS232 stand-alone or in your P-box, you already have a serial card in your machine.

There will be a "port" or plug on the serial card, and a port on the modem. Now, just because you bought a modem doesn't mean it comes with a cable to connect it to the serial card in your computer. The two are hooked together by plugging in a flat 25-wire "ribbon cable" to each port, which must be purchased separately. Most modems and serial cards have female ports and require ribbon cable with male plugs on either end. There are always exceptions to the rules so make sure you buy a cable with the right sex for your equipment. The plugs are called DB25 connectors.

WHAT IS A RAMDISK?

by Gerald Smith from Mid-South User's Group - Dec '86

A ramdisk is a certain portion of RAM memory that has been partitioned and set up to imitate or "emulate" a disk drive. For all practical purposes the RAMdisk IS a disk drive. It just stores the files in RAM rather than on a floppy disk. The main advantage of this is speed. If you have ever seen a hard disk drive in operation, then you have a pretty good idea of how fast a RAMdisk operates. Think back to when you first upgraded your TI from cassette to disk operation. You were probably thrilled with loading a program in 10 seconds instead of 2.5 minutes. Now that time has been cut down to 1.5 seconds. Of course, the time differential will increase the larger the program. Once you get used to using a RAMdisk, you'll want to store large files into it that you will be accessing a lot in one session at your computer. MULTIplan would be a good candidate for that. In comparison, a program which takes 6 seconds to load from a disk drive will take 2 secodns to load from a RAMdisk; a program that takes 16 seconds to load from a disk will take only 4.25 seconds to load from a RAMdisk.

GETTING THE MOST FROM YOUR CASSETTE SYSTEM

By Mickey Schmitt of Pittsburgh User Group, PA - Feb '87

Before you try to do anything with a cassette system you need to start with the right equipment. There are many different models of standard cassette recorders available which will work with your TI Computer (Besides the Official TI program recorder). However, for Best operation and a lot less mental aggravation, you should use a cassette recorder with the following features:

1. Volume Control: For best results, set between mid-range and maximum settings.

2. Tone Control: For best results, also set between mid-range and maximum settings.

3. Microphone Jack: Needed to receive information from your computer.

4. Earphone or External Speaker Jack: Needed to send information to your computer.

5. Remote Jack: Makes it possible for your computer to control your cassette recorder's drive motor.

6. Digital Tape Counter: Will save you a lot of unnecessary aggravation. This feature enables you to easily locate the correct tape position of your program or data file. This is especially useful when you want to store more than one program on the same side of the cassette tape.

Next, you will need to have the TI Cassette Interface Cable, which is used to connect your recorder to your computer. Although, this cable comes with the official TI Program Recorder, it must be purchased separately if you are using another type of cassette recorder. *

Connecting your cassette recorder to your computer using the TI interface cable:

1. Locate the nine-pin plug at the one end of the cassette recorder interface cable, insert this plug firmly into the jack on the right rear of the keyboard.

2. Locate the set of three plugs at the other end of the cable. This wires that lead to these plugs are color-coded: red-white-black.

3. Locate the jacks labeled MIC, EAR (or EXTERNAL SPEAKER), and REM on your cassette recorder.

4. Insert the plug with the RED wire into the recorder's microphone jack (labelled MIC).

5. Insert the plug with the WHITE wire into the recorder's earphone jack (or EXTERNAL SPEAKER) jack (labeled EAR).

6. Insert the plug with the BLACK wire into the recorder's remote jack (labeled REM).

That's all there is to it! Your cassette system is ready to go.

Editor's Note: If you get an error of NO DATA FOUND , your volume may be set too low. If you get an error of ERROR IN DATA, your volume tone may be set too loud or your tone may need to be adjusted.

CATALOGING LIBRARY

From Erie Ninety Niner, Erie, PA

A Fairware program by Marty Kroll, Jr. that features:

1. Catalogs up to 123 disks & 900 files on each set of data files.

2. Allows storage of multiple data files on one data disk. In fact, one bare DSSD disk holds more than 5 full sets of data enabling you to store more than 5000 programs and 600 disks on one data disk.

3. Saves data for later listings, additions, or deletions.

4. Load and/or reload data fields without rebooting the programming. Works on single or multiple disk systems.

5. For single disk systems there is no need to continually switch disks until all deletions & additions are made.

6. For multiple disk systems you can catalog a disk from any drive.

7. When adding disks, catalog is listed on the screen. You have the option of adding the disk or not.

8. When adding disks, you are informed if the diskname is already on file. If it is, you can either replace the old listing with the new (in the case of an update, etc.), or you can give the new listing a temporary name (as in the case of a backup disk, etc.).

9. Catalogs 'funny sectored' disks that appear not initialized, and those that appear empty because sector 1 has been altered.

10. Eliminates all non-printable characters from file and disk names, replacing them with a period, since no legal name contains a period. This eliminates sending unwanted control codes to your printer.

11. Prints a standard format catalog of any disk on file in your library, including the funny sectored disks.

12. Outputs to screen or printer summary of disks, complete listing of files, and/or conventional catalog listing of any disk on file.

13. Outputs complete catalog of all disks, disk by disk, either for all disks or selectively, to the printer.

14. Choose 1, 2, or 3 columns for printer outputs.

15. Part assembly language for fast sorts.

PIRATING MAY BE HAZARDOUS TO YOU & YOUR SYSTEM'S BEST HEALTH

by Fred & Amy Mackey - Pittsburgh Users Group, A - Jan '87

The Federal Bureau of Investigation is responsible to enforce the Federal Copyright Laws. The very nature of this subject causes information to be somewhat difficult to obtain from the parties involved. It is embarrassing and damaging to one's integrity to be at the wrong end of criminal and/or civil copyright charges. Due to this and other factors, the identities of the computer user group and members will not be given.

Here is the story as reported. The User Group meeting began normally enough. The UG was conducting business as normal, when one of their members produced to a few other members an F.B.I. ID card and informed a few members they were under arrest for violation of United States copyright laws. Their computers, equipment and media were seized.

Allegedly, programs were copied illegally. The UG officers pointed out before every meeting all members were told not to participate in illegal activities. Also, they have placed a notice in their newsletter a guideline of offenses for members who do attempt to participate in such illegal activities at group meetings. No charges against the UG have been filed in this case. There are laws on the books that could make that copy the most expensive program you ever gave or received.

BUYER'S GUIDE

The following information is provided as a service to our members. The items listed are for sale by the individuals indicated and are subject to prior sale. The group assumes no responsibility for items listed and makes no claims as to their condition or interface capability with the TI-994A computer. Only computer related items will be accepted for publication in this newsletter.

TI-99/4A Console, Cassette cable and two games $60. Call Ejaz 623-8257.

TI-99/4A Console $50; TI LOGO $15; (plus the following cartridges) Car Wars; Tax/Investment Record Keeping; Attack; Number Magic; Tombstone City; and TI Invaders. Documentation and cables included. Call and make an offer John 296-8198.

TI Program Cassette Recorder w/cable $25. Call Mike 722-8620 evenings and weekends.

Thermal Printer w/one roll of thermal paper and cable $45. TI 32K Memory Card for -box $80. Full height SS Disk Drive PHP 1240 $40. Call Jack or BJ 747-5046.

Star Micronics Thermal Printer w/4+, 100' rolls of Thermal paper & instruction book. Requires parallel RS232 hook up - $100 o.b.o. Shugart SS Disk Drive HP 1250 for use in PE Box w/TI Disk Controller Card HP 1240 & TI Disk Manager 2 - $100 o.b.o. Manuals and ribbon cable included. Call J.F. Hale 296-5602 evenings.

Sakata SG1000 high resolution green monitor composite video w/video cable $60. Call George 742-3091.

TI-99/4A Console, TI Joysticks, Thermal printer, Cassette Recorder, 12" TV(BW), Selling all for $125 or best offer. Call Paul Garrison 747-3884 (Days) or 573-0572 (Evenings).

Printer, Gorilla Banana, slightly used. Make offer. Call Ida McCargar 294-3024.

From the SOUTHWEST NINETY-NINERS - For members only: TI-99/4A Consoles $35 each, Cassette Cables & Monitor Cables $3 each. Call BJ or Jack 747-5046.