

CLEVELAND AREA T199-4A USER GROUPS NEWSLETTER

MARCH 1988

OFFICERS	NORTHCOAST	TI-CHIPS	MEETINGS DATES	
PRESIDENT	MARTIN SHOLEY 1-257-1661	GLENN BERNASEK 238-6335	NORTHCOAST 1:30 P.M.	TI-CHIPS 10:00 A.M.
VICE PRESIDENT	ERNIE MALNAR 289-7742	RUSS SHIMANDLE 1-887-5330	EUCLIDIAN ROOM	NORTH ROYALTON LIBRARY
TREASURER	JIM MEKEEL 286-3179	LIN SHAM 235-3912	EUCLID SQUARE MALL	STATE ROAD & RT 82
MEMBERSHIP	CHUCK POLLIN 731-6473	JOHN PARKEN 331-2830	THIRD SATURDAY	THIRD SATURDAY
	361 E. 280TH ST	4172 W. 217TH ST.		
	EUCLID, OH 44132	Fairview Park, OH 44126		
SECRETARY	CHUCK POLLIN 731-6473	MARY PHILLIPS 582-4009	MARCH 19, 1988	
LIBRARY(DISK)	ERNIE & DON NITSCHKE 888-4845	MARK McCAULEY 235-8888	APRIL 16, 1988	
(TAPE & MODULES)	TOM NELLIS 475-4067	(TAPE) JOHN PARKEN 331-2830	MAY 21, 1988	
(HARD COPY)	DICK ALDEN 1-352-9172		JUNE 18, 1988	
			JULY 16, 1988	

Many Many thanks to all the local input again this month! It makes getting out the newsletter a real pleasure! It was almost a disaster as my printer died on Friday night before the newsletter meeting. I ran out to the office and borrowed a Citizen MSP to get the job done.

Got my ram disk and LOVE it. If you are a Tier "plans to take your machine with you to the great beyond", just be sure it has a ram disk before you go. Seriously, if you plan to keep your T1, this is a MUST. John Wilforth of the West PENN group says there are rumors a print spooler for the HRD is being developed.!

Got an announcement from Great Lakes Software that Certificate 99 has now been rewritten in Assembly for faster execution. Also you can save your certificates for later use. There is also a companion disk available already. To get the new version, send \$9.95 and your original disk, or order the \$9.95 companion disk and get it and the upgrade for \$14.95.

Several newsletters said that MYARC would be shipping their hard disk controller this month. It will replace the current controller in your box and will support two hard disks, four floppies and a tape backup. Cost said to be about \$300. I asked Judy Thainer if these rumors were true and she said that was the same information available to them.

Warren Agee (who used to write software for Asgard) has gone on his own and is now using Pilgrim's Pride (Barry Traver and J. Peter Hoddie) to distribute his wares. He is working on a database written in C99 that sounds very exciting. No dates for release were mentioned or price.

How about our own All Ulgen getting his survy published in MICROpendium? On a lesser scale, we do get to see our names in other newsletters almost every month and have had some kind words from several sources, so keep up the good work!

ASCII FILES AGAIN! I am disappointed that no one asked me how I did the two-column layout for the Picasso review

last month. Those columns can be viewed as is (without the graphics) on a regular T1-Screen. I created two separate T1-Writer files of about 26 characters wide (Picasso will only handle 56, if you were printing from T1-Writer they could be about 38 apiece so as not to exceed 80 columns when doubled and a couple of spaces added to separate them). I used Marty Swoley's "132-PRINT" to butt them up side-by-side by redirecting the output from "P10" to DSKx.FILENAME. They can then be reloaded into T1-Writer with special headings, whatever added, just as long as you don't insert any reformat commands to upset the two-column alignment. Tom Freeman's two-column program WILL NOT work because it inserts printer codes when you print to disk.

Don't forget that if you are interested in graphics, a group is meeting at my home (20311 Lake Road, Rocky River) from 7p.m. to 10p.m. the Monday after each group meeting. Don't know what Matt is planning for next month, anyone is welcome. If you are interested in any particular area of the T1, you could start a SIG too!!

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EXECUTIVE NOTES-TI-CHIPS

The February meeting had 24 members out of 41 in attendance. That's really quite good! It was great to see so many happy faces turn out for elections.

Our Treasurer's report showed a net reduction of \$177.51. The principle cause was the new disk drives for our system. However, we are still on sound financial footing with a balance of \$238.81 in the treasury.

Mark will be getting together with Northcoast shortly to coordinate updates of software from both clubs. A new disk library update should be ready soon. John reports that the tape library now has 11 cataloged tapes.

John Parken has the phone number of someone with two consoles for sale. The Thalner's also know of sources of consoles, disk drives, and expansion systems.

Glenn Bernasek gave an interesting discussion on copyright laws. A handout was given to everyone of a government publication on this subject. Software programs are copyrighted under the literary code of the law. The mechanics of the program is not copyrightable, but the literary part of the code is copyrighted. Also, how it is presented on the screen is copyrightable. This led to an open discussion amongst the members concerning the importance of honoring the monetary requests for "fairware".

Les Kee presented another interesting Extended Basic program. This one creates Artist Instances using data statements.

Harry Hoffman gave a fine presentation on the graphic program "Picasso". It is a nice "paint" program that works with Epson compatible printers. All commands are single letter commands which makes it easy to use. The software comes with 10 fonts on the disk, which can be edited pixel by pixel. File utilities will permit transfer from TI Writer. A S.I.G. meets at Deanna's every Monday following the Saturday meeting where people get together to discuss graphics and paint programs.

Harry won the raffle of a TI modem.

Elections were held with the following results:

- President.....Glenn Bernasek
- Vice President..Russ Shumandle, Jr.
- Secretary.....Mary Phillips
- Treasurer.....Lin Shaw

Our congratulations to all officers!! The members gave a round of applause to our out-going President: Terry Vacha, and I'd like to give a special thanks for a very fine job in pulling the Chips through the past year.

See you all next month!!!!... Russ

ENHANCED DISPLAY PACKAGE
review t.vacha

Enhanced Display is an additional command set which you can add to your extended basic. If you are familiar with STAR, then you'll know how this works. First, ED (from now on used for Enhanced Display), is loaded from disk using your EXBasic cartridge. Once the loading is done, you now have a command set for programming which includes all the EXB commands and the ED commands (listed in this article). You now have amazing versatility! You can turn on and off "windows", you can scroll within these "windows", you can turn on a clock and place it anywhere on the screen, and even use the time on the clock as a variable in other commands! The clock even has an alarm. You can switch from

32 to 40 column and back. You can print a line of text in a different color than the rest of your text. Well, you can see from the list of commands here that new programs made with ED will have a great new look for the TI'er.

The program comes from PARAGON COMPUTING and was developed by Curtis Provance. They even include a method for YOU to make money if you pass along a copy of their program!

Programs written with Enhanced Display can be loaded so that both the ED and your program are loaded together. Also the program comes with a small DEMO.

I have a few suggestions for the authors of STAR, Enhanced Display, Draw and Plot, etc.. When you write a program with multiple new commands, include a provision for the user to load only the commands he/she needs, so that the user can use several of these fine programs simultaneously.

This program is well worth looking over and is available in the club library. If you write a program with it, PARAGON COMPUTING will help you distribute it.

As you'll notice from the command list, in no way have I explained fully the commands available to you. They are listed below for your reference. By the way, the docs on the disk are extensive and excellent. CALL

```
LINK("ACCEPT"[,row,column]
[,option-list][,size]
[,validation-string-expression][,variable])
```

```
CALL LINK("ALARM"[,hours[,minutes
[,seconds]])])
```

```
CALL LINK("BUFFER",string-expression)
```

```
CALL LINK("CHAR",character-code,
string-expression)
```

```
CALL LINK("CHRPAT",character-code,
string-variable [,number-of-characters])
```

```
CALL LINK("CHRSET"[,character-code]
[,number-of-characters (negative number
for reverse-video)][,pattern-number])
```

```
CALL LINK("CLOCK"[,hours[,minutes
[,seconds]])])
```

```
CALL LINK("CLEAR"[,character-code])
```

```
CALL LINK("COLOR",character-set,
foreground-color, background-color
[,number-of-sets])
```

```
CALL LINK("DSPLAY"[,row,column]
[,option-list][,size] [,expression])
```

```
CALL LINK("FLASH",character-set,
foreground-color, background-color
[,number-of-sets])
```

```
CALL LINK("GCHAR",row,column,
numeric-variable)
```

CALL LINK("GTEXT",row,column,
string-variable,size)

CALL LINK("HCHAR",row,column,
character-code[,repetitions])

CALL LINK("INTOFF")

CALL LINK("INTON")

CALL LINK("LOADR",register-number,
register-value)

CALL LINK("LOADV",VDP-address,
numeric-expression(...))

CALL LINK("MODE",1-GRAPH or 2-TEXT
negative doesn't reset))

CALL LINK("PEEKV",VDP-address,
numeric-variable(...))

CALL LINK("READ",device,filename)

CALL LINK("RESET")

CALL LINK("SCREEN",color-code)

CALL LINK("SCROLL"[,number-of-lines]
[,0-lose or 1-buffer])

CALL LINK("SHOW"[,row,column])

CALL LINK("STEADY"[,character-set]
[,number-of-sets])

CALL LINK("STRING",variable-name
[,length][,starting code])

CALL LINK("TEXT",foreground-color[,
screen-color])

CALL LINK("TIME"[,hours[,minutes[,
seconds]]])

CALL LINK("TXTPAT",string-expression,
string-variable [,negative number for
reverse video])

CALL LINK("VCHAR",row,column,
character-code[,repetitions])

CALL LINK("WINDOW",first-row,last-row,
first-column, last-column)

CALL LINK("WRITE",device.filename)

PARAPRINT
OR

(Why Doesn't it Work?)

Glenn Bernasek - TI Chips - Cleveland, Ohio

Did you say you bought this neat dot matrix parallel

printer, and then purchased DataBiotics' PARAPRINT to interface your TI-99/4A with this neat printer? When you plugged in everything - nothing worked? You wrote to DataBiotics for help, and nobody was there? Is your printer making a good impression of a paper weight? Is that what's troubling you Bucky?

Well, hold your head high, and whistle a happy tune, help is on the way. The PARAPRINT should work with any parallel printer. That is, if it receives the 5VDC it requires to operate its circuits.

It seems that some parallel printers do not generate a 5VDC output, and therefore, the PARAPRINT just sits there waiting for something that isn't going to come. Before you read any further, check the output connectors on the back of the printer with a voltmeter to see if there is a 5VDC output or not. If there is, go read another article in this newsletter. If not, read on.

What? You say you can't find either a pulse or 5VDC at the parallel port? Well then, the following instructions might turn your dot matrix paper weight into a real live printer.

First off, look at your PARAPRINT and determine which end goes into the TI and which side is UP. Got it? Ok. Now put some kind of mark on the plastic cover of the LARGE connector on the PARAPRINT. This is important in that it's easy to put everything back together UPSIDE-DOWN.

Now turn over the PARAPRINT so that the bottom side is up. What you're about to do will void any warranty you might have left. Oh well, DataBiotics wasn't listening in the first place.

You will see two small long holes on each side and a round hole in the center. There are retaining clips in these holes. All you have to do is to pry the long ones toward the outside and pry the round one toward the rear. With a little edge prying, the bottom of the PARAPRINT should lift off. Be patient. It really does come off.

What you're looking at is the underside of the PARAPRINT circuit board. If you're curious about what the top side looks like, I hope you marked which side is UP! You're not going to work on the top side anyway, so why add to the confusion?

Here is where we fool the PARAPRINT into believing that your printer is providing the 5VDC it's looking for! The TI-99/4A, as luck would have it, outputs 5VDC at the I/O Port Pin No. 1, and the PARAPRINT doesn't use this pin! With the LARGE connector facing you, LIGHTLY AND NEATLY solder a short length of #30 solid conductor computer wire from PIN No. 1 (the far left contact on the I/O connector) to a small solder point just below and to the left of PIN NO. 17 (second contact from the left, as you are looking down at the SMALL edge connector at the other end of the circuit board). If the editor was able to print the photo I included with this article, then you should be able to see what I'm struggling to convey.

Now, if you're confident, put the whole thing back together. Be careful, don't pinch the jumper you just installed when you snap shut the PARAPRINT shell. (It would be a good idea to label your PARAPRINT - "5VDC JUMPERED". This way you'll remember to REMOVE the jumper if you use another printer that delivers 5VDC.) Plug in your jumpered PARAPRINT, turn on the printer, take a DEEP BREATH, hold down the SPACE BAR on the TI and turn on the TI's power switch. If everything's all right, your neat dot matrix printer should conduct a self-test. How about that! Happy printing, Bucky!

EXECUTIVE NOTES - NORTHCOAST 99ers

I got a little nervous before this meeting because most of my support group was a little bit late and without them the meeting wouldn't take place. This is probably a drag for some of you, but I would like to thank some of those people again. Ken Gladyszewski has been doing a lot of traveling for his employer. Ken brings the club system, and one of the monitors to our meetings and I know with his present schedule it is very difficult for him. Tom Nellis brings the Cassette Library, the Cartridge Library, and one Monitor. For this meeting Tom came directly from a difficult dentist appointment directly to the meeting, "I don't know if I could have done that." Ray Rapp runs the raffle and has also been greeting people at the door. His regular car had some sort of brake failure, so Saturday morning Ray rented a car so he could get to the meeting. I don't want to forget people like Jim Mekeel, Chuck Poulin, and Deanna Sheriden. Especially not Deanna. Possibly the biggest thanks should go to Deanna Sheridan. She works for a company that is involved in professional income tax services. I can imagine what a nightmare that job must be, particularly at this time of year. She still finds the time to do ninety percent of the work on our newsletter. These people and many other are the reason NorthCoast keeps thriving. We also had a great demo of the Picasso software by Harry Hoffman. The program is very useful and interesting, and the members were intrigued by Harry's demo.

Thanks Harry. People such as these are a wonderful asset to any group, and I am glad we have them in our group. The people I just mentioned are some of NorthCoast's best volunteers. This makes a good segway into the subject of **Volunteers.**

VOLUNTEERS !

We need several people who are willing to set up and clear out the Euclidian Room for the meetings. It would be nice to have at least six people who can arrive a little before 12:00 on meeting days to help set up the tables and chairs. We need another six people who can put the chairs and tables away after the meeting. This could be as late as 4:30 Saturday afternoon, so we could use one team for setup and another for teardown if you can't stay that long. Also, we can use volunteers for many other projects, or start your own project. If you have a special project you are interested in, let us know about it. If you are trying to write a special program, or researching an item of special interest to you, we will try to help. We may be able to introduce you to other members with the same interests, or supply you with information that will help you realize your goal.

SOMETHING NEW

This is the official announcement of the seminars to be held before the regular meetings. At first the seminars will not have an agenda, and will be directed more toward beginners and people with basic systems. They will be more like help sessions, where a person can find out how to run programs, or use their printer. I have heard questions such as how do I load and set up Funnelweb, and how do I print things on my printer with an extended basic program. I have also had people (non-members) call me on the phone and say "I have a console, TV set, and a tape player. I don't know which plug to put in which hole. Please help me." We will try to help everyone.

Note: If you are coming to these sessions for help, feel free to bring your system. Bring everything you need including a long extension cord. This way if we help you with a problem it will be easier for you to relate to that when you get home. Also, bring pencil and paper to take notes. Most program tips are very specific. You cannot even add an extra blank space. **AND NOW MY CALL FOR HELP.**

HELP ! ! ! ! !

I have really stuck my neck out on this one. I told all these people that I would help them if they came to the meetings early. As some of you have probably guessed, I am not physically or mentally capable of helping everyone with everything. Therefore, I must now ask for help from anyone and everyone. If you can help someone load cassette programs, if you know anything about hardware or software and would be willing to help someone, if you can bring some equipment you know how to use, we need you. We also need any of our regular support group who can arrive early to do so. If all you can bring is an extension cord or a multiple plug strip, put your name on it so it won't get lost, and bring it. You might bring pliers, wire cutters, or some screwdrivers. I always forget something.

For Your Information

The adopt a zip code program is still in place for those of you who might be interested in sponsoring a club mailing in your area. Tom Nellis recently donated twenty dollars which will pay the postage for mailing the clubs promo sheets for new members near his own zip code area. I say near his area, because several months ago Tom paid for the mailing in his actual area. Tom is really dedicated to making the NorthCoast 99ers grow and prosper. **More FYI:** We sold the clubs 256K Corcomp RAM Card. After Deanna's mention last month of how much she liked the card, we got several bids on the card. The card was a bargain though, with the high bidder and purchaser of the card being Ron Minadeo at \$110.00.

Marty's Wish List

I thought I'd put together a short wish list to give everyone a small idea of the things that run through my mind from time to time. The first one is more of a thought. I wish that some of the great people that left the 4A for the Geneve would have stuck with the 99/4A. We have made some great progress in the past year, but if some of the great minds of the past were still working on TI software and hardware, I can just imagine where we could be now. My next wish is for someone to come up with a set of instructions on how to build an interface device that uses IBM TTL Monitors. There are IBM TTL Monitors around for \$19.95. The 99/4A is a hobby to many people, so we need more hobby-type projects to keep us going.

The Next NorthCoast Meeting

The next demo will be by Ernie Malner. The demo will be on CS6D. We seem to have a series going on graphics type software. If we have enough of these in a row, I might learn how to do some of the graphics printouts everyone else is doing. **"FYI"** at the April meeting we will have Steve Bagstad doing a demo Multiplan, Harry Osterman will demo Certificate 99 in May, and Steve Weinkaner will do EZ-Keys at the June meeting. **See you all at the next meeting. Marty**

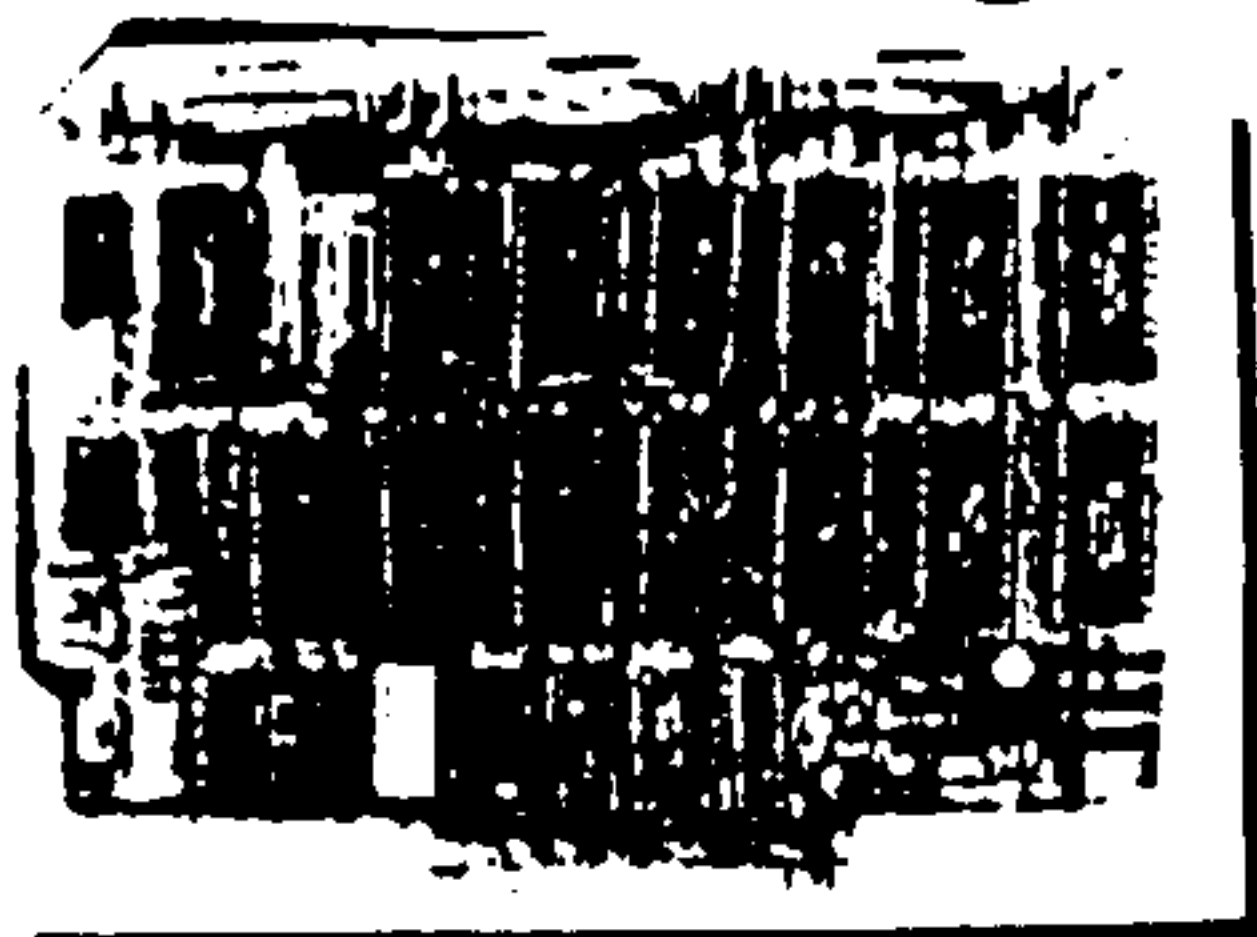
This information is a continuation of Marty's Mind Dump from February newsletter of the NorthCoast 99er's. It may or may not make sense if read alone. **Tips and Tricks:** This is your first tip. "I forget things." When reading my column use your own judgement. If something sounds way out of line, don't do it until you check first.

This is tip number two: "I forgot." One of the first things I should have told you was this. If the disk or disks you received with your RAMDisk were not write-protected, do that first. Do not allow your ROS to write anything to the original disks, and do not save anything of your own to those disks. If you wish to pass these disks on to a friend, they should be in the original form. "Also", if you write some junk to them and mess them up, you'll probably regret it very soon.

Now back to the original info. Last month we partially set up the ROS and moved the programs, MENU, CFG, and MGR1-2 to your RAMDisk. It's time to get in the habit of backing up the system. Initialize a fresh disk the same size as your RAMDisk, or as large as possible if your RAMDisk has a very large capacity. Name it RAMOP plus your initials. For example, my disk names are "MS_RAMOP", "MS_RAMOP1", "MS_RAMOP2", etc. After this has been accomplished and the disk is in drive one, go to the file utility section of DM-1000 and select Copy files. Use it to copy the LOAD program and the program named YLOAD from the original RAMOP disk to your new RAMOP1. Next go to the RAMDisk (No 5), and copy MENU, CFG and MG-MH (which we renamed) to RAMOP1. You can also copy any other programs you have on the disk to RAMOP1. Do not copy MEGTEST or any other programs from RAMOP to your new RAMOP1. If you accidentally select 3 from this loader, you will run the MEGTEST program, which will wipe out the RAMDisk. If you need MEGTEST, you can always get it from the original copy of RAMOP. NOTE, I have the Funnelweb LOAD program on 5. I renamed it FNLOAD and then copied it to RAMOP1. This kept it from being copied over the RAMOP LOAD program, it made it easily recognizable when cataloging the disk, and it's still easy to change back to LOAD. After you have done all that, take your RAMOP1 disk out of the drive, quit DM-1000, and upon restarting the system select Extended Basic. Place the RAMOP1 disk back in drive 1 and type "OLD DSK1.LOAD" (no quotation marks). "I'm going to leave out the quotation marks from now on, they're a pain in the neck." When the LOAD program has loaded, type LIST to list the program, or LIST "PIO" etc. for a hard copy on your printer. What we are doing is changing the load program to load DM-1000 with the name MG and MH instead of MGR1 and MGR2. Look for any occurrences of the phrase MGR1. This is my exact procedure. The LOAD program I am looking at came with Ver. 7.1 on the RAMOP disk. When listed to my printer, it has twelve lines, starting with line number 100 and ending with line 220. The only occurrence of MGR1 is in line 170. Type 170 and press FCTN X. This will bring up line 170 for editing in Ex Basic. I now see the following on my screen, 170 DISPLAY AT(5,6)ERASE ALL:"LOADING DM-1000" :: CALL IK("LOAD","DSK1.MGR1"). Use FCTN D (arrow right) to position cursor over the R in MGR1, and then FCTN DEL to delete the R and the 1. Press ENTER and this should leave you with only the MG part of MGR1 remaining. Type 95 !, press ENTER. Now type 90 ! Modified to load MG and MH for DM-1000 (the date) and press ENTER. Lines 90 and 95 are REM statements which will allow you

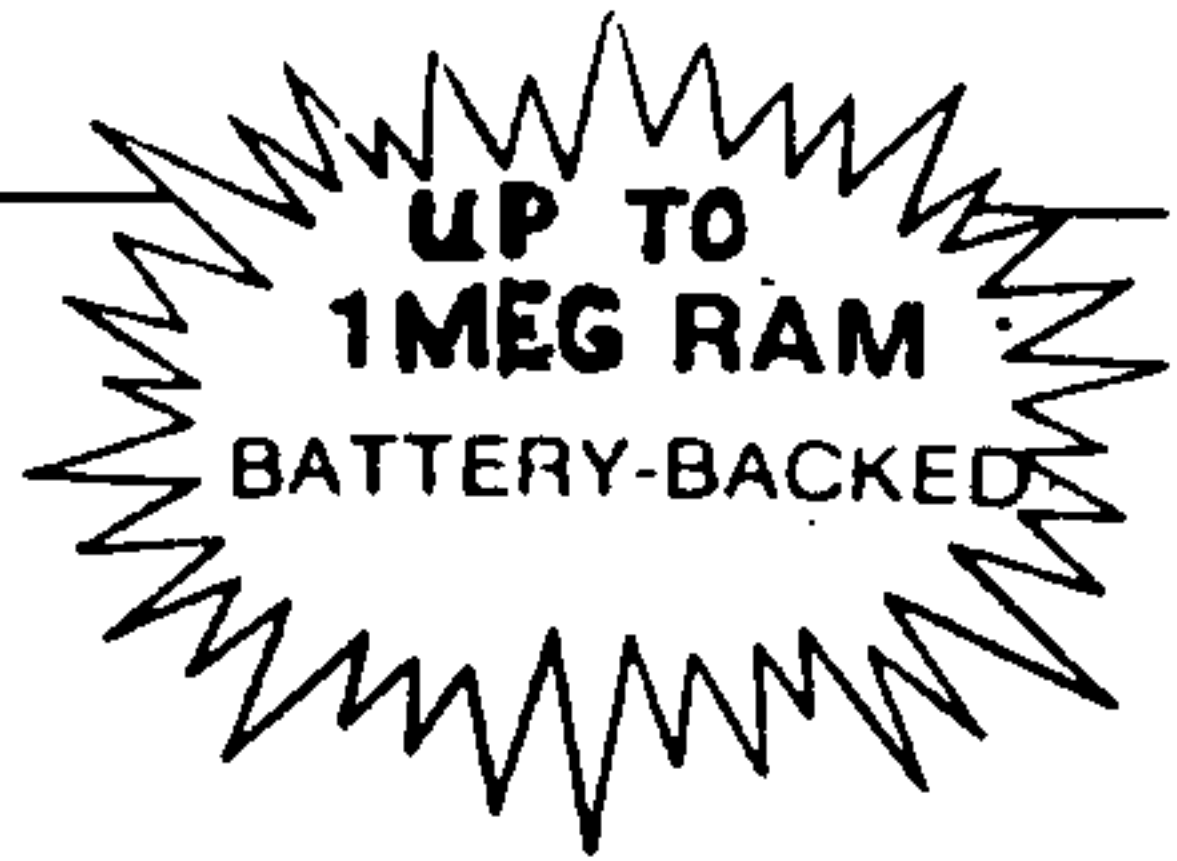
to see that this version of the load program has been modified. If you are not using an exact copy of the load program I have described, be careful. Place these two lines at the beginning of your load program, and use any line numbers which are not already used by the program. Having completed this I saved my new copy with SAVE DSK1.LOAD. Here is a concept you should understand and remember. MENU and ROS are separate from each other, but they work together. The first and second screen of the menus you are using are part of and are stored in the program called MENU which you see on the RAMDisk. When you edit either of these first two screens by pressing FCTN 5, enter your program selections, and save the changes with FCTN 9. The changes are saved to the program called MENU. If you want to change the third screen of the MENU set, you must use the CFG (CONFIG) program which displays SCREEN SEVEN which we have been discussing up to this point. If you Edit this screen and then use FCTN 9 to get out of the Edit Mode, you can Quit the program and use your changes immediately. The changes are automatically saved. Normally you will not find any program on the RAMDisk named ROS. You are probably thinking, why do I need to know this? The answer is this. We have been developing a backup disk and a backup technique. You have started building the disk called RAMOP1. If you wish to add a new program to your RAMDisk, such as a program to print out mailing labels, we'll use a program I wrote a while back in Ex Basic called MS/LABELS2. Copy this program to the RAMDisk. Add the name MS/LABELS2 to the second screen of the MENU set. By pressing that particular number, run the program and see if you are satisfied. If you are, copy the program MS/LABELS2 to the RAMOP1 disk. In order to maintain a proper update at this time you must also recopy the program named MENU from the RAMDisk to the RAMOP1 disk. This will register the changes you made to the menu screen 2 on your backup disk (RAMOP1). Now that you have saved this new load program to disk 1, type CALL CFG and press ENTER. This will load the Menu config program and display SCREEN SEVEN from last month's issue. Type E for Edit and arrow down until you get to Power On? N. Change the N to Y and press FCTN 9 to get out of Edit. "I think you'll like the Power On feature of this program." Now press S for Save. You will see Save To Filename: DSK1.ROS at the bottom of the screen. This change would automatically be saved if you press FCTN 9 and then Quit the edit, but I'm still trying to demonstrate that anything you do to page 3 of the MENU screens is part of ROS and must be saved separately. *NOTE: If you get into a Load or Save mode unexpectedly, pressing FCTN 9 or FCTN BACK will take you back to the previous screen without performing any task." But for now, press ENTER to save ROS to your RAMOP1 disk. Any changes you make to menu screen 3 via the CFG program must be Backed up or Saved separately in this manner. Therefore, you will have both MENU and ROS on RAMOP1, and you should update them whenever you make permanent changes to the RAMDisk. If you get in the habit of backing up your system by copying all the programs from your RAMDisk to a complete system disk such as RAMOP1, when your system crashes (and it will) you will be ready. You merely place RAMOP1 in drive one and select Ex Basic. When SCREEN ONE comes up, load CONFIG. When SCREEN TWO comes up, load ROS from RAMOP1. After that Quit SCREEN TWO and FCTN QUIT to get back to Ex Basic to reload SCREEN ONE. This time load DM-1000. Now copy all the files from RAMOP1 to the RAMDisk except LOAD and YLOAD. "YOUR BACK IN BUSINESS."

Until next month "GOOD LUCK". Marty.



The

HORIZON RAMDISK



- 45* PC BOARD with MANUAL and SOFTWARE
- 38* PC BOARD only

HORIZON COMPUTER LIMITED has been purchased by BUD MILLS SERVICES. The bare Horizon Card may still be purchased as before, but your orders should be sent to:
BUD MILLS SERVICES
 166 Dartmouth Drive
 Toledo Ohio 43614

ANNOUNCING THE HRD+ RAMDISK

This Ramdisk is constructed on the HORIZON Ramdisk Board using the Hitachi 62256LP12 (32K) CMOS Memory chips (or the equivalent NEC 43256LP12).

The Card is available NOW in several memory sizes- ONE+MEG, 800K (GENEVE), 512K, 384K (DSDD), 192K (DSSD), and 96K (SSSD). See attached Order Form for Prices.

The Operating System (Thanks to John Johnson and Mike Ballman of the Miami Users Group) allows the Ramdisk to be divided into TEN logical drives or less. Only two DSK (numbers) are used, the remaining drives will respond to DSK(name). The Menu program (Ver. 7.3) allows for 9 calls plus fifteen menu selections that you can edit on screen to customize the way you want it to appear - no more sector editing. XB programs can now be loaded from a call.

The HRD+ Kits include:
 The HORIZONS RAMDISK BOARD
 Assembly instructions
 Op System and MENU Software
 User Documentation
 and ALL required parts.

Note: This Menu Ver. 7.3 works on ANY Horizon Ramdisk and allows BOOTING the Geneve.

Call TI-COMM BBS on 419 385 7484 For current prices or information 300 Baud, 7bit, even / 1200, 8bit, no

To BUD MILLS SERVICES
 166 Dartmouth Dr.
 Toledo Ohio 43614 DATE _____

From name _____
 address _____
 city _____ state _____
 zip _____ phone () _____

Please "RUSH" my HRD+RAM kit(s)
 PRE-PAID by Check or Money Order

Quan	Type Kit	cost/ea	amt
	HRD+RAM ONE MEG	:\$435.00	
	HRD+RAM 800K/GENEVE	:\$375.00	
	HRD+RAM 512k	:\$265.00	
	HRD+RAM 384k DSDD	:\$225.00	
	HRD+RAM 192k DSSD	:\$165.00	
	HRD+RAM 96k SSSD	:\$140.00	

The above Kits include the HORIZON Card Instructions, MENU RDS and ALL parts

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Item total \$
 5% discount 5 or more of each KIT. \$
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will this HRD+ be used with the Geneve?? AMOUNT ENCLOSED \$

your signature X

LEGO FORTH

Paul Newmeyer - NorthCoast 99ers - Cleveland, Ohio

When my children were young and our family visited Grandmother's house, the kids ran straight to her toy box. Before long they had recarpeted her floor with toys. One favorite toy was a set of building blocks which they could fasten together and thus construct all sorts of imaginative objects.

We call today's version of these blocks "legos"--dozens of peculiar looking pieces that a creative mind can fit into a large construction to assemble multitudes of multifarious items. Kids spend hours engrossed in this creative way.

May I suggest that many of our excellent Forth programs (and I won't mention names or authors for fear of omitting someone) constitutes all sorts of lego-pieces for kids like me. I certainly enjoy and appreciate the excellent work some orphaned programmers are doing with Forth. I love to get into their toy box of disk programs or newsletters, and build, build, build.

I'm not much of an original programmer, but I surely am fascinated with putting together the pieces they make. I come up with all manner of constructions--some strange, some practical, some frustrating, and some amazing. But creating with their pieces so engrosses me that days, even weeks, pass me by.

In Forth pieces fit together so nicely. For example, I can grab a super-cartridge loader from one author, an editor from another, a screen routine from another source, a CHARAI file from yet another, a printer routine from another, a new word list from someone else, and put it all together, along with some personal modifications, and come up with the most amazing and self-fulfilling invention I have ever seen.

A stiff purist comes along and says, "Don't you think that's plagiarism?" Well, if I had a herd of 30 cows, and I milked each cow, I reckon the butter I churned would be all mine.

Someone has said that the only difference between men and boys is the price of the toys. May I change one word of the quote? "The only difference between men and boys is in the level of their toys." One place Forth occupies in a computer buff's life comes, not in shooting down asteroids, but in the pure delight it can have for those who enjoy high-level play. Some people like to play with little, inactive things, and others prefer watching others play, but others enjoy playing with the real stuff--like Forth.

We don't all have to function as innovative purists and start from scratch. But we can have a lot of fun finding unique uses for things others have made. So, Forth fans, let's get out those pieces, dump them on the floor, and see what we can make. Let's go with Lego-Forth.

DON'T EVEN BOTHER TO TRY...

by Jim Mekeel - NorthCoast 99ers - Cleveland, Ohio

I have said it before and I'll probably need to say it again - DO NOT TRY TO CATALOG A PRBASE DATA FILE DISK !!!

Ever since William Warren's excellent data base program appeared on the scene, people have been trying to catalog the data file disks. I guess that it is just a natural reaction to see if there is something on the disk. Since I have been supplying Fairware data file disks for the PRBase program, the first question I get from people after they take the disk home is... "The #!\$% disk doesn't have anything on it !" Well folks, let me try to educate you.

The very first page of the PRBase manual states the following:

PRBase uses a unique disk format that cannot be read by the TI Disk Manager Command Module (or DM1000 or any of the others currently on the market). With PRBase, the first 10 sectors are dedicated to storing information on your data screen design, tabular report format data, printer codes, and mailing label information.

Obviously, if the disk directory does not reside in the first two sectors, a catalog program cannot work with the data file disk. But wait, there is more! When a data file disk is initialized, all the remaining sectors are filled with hex E5's and no volume or sector allocation information is stored. Why is this done? By using this unique disk formatting PRBase is able to do the quick searching and sorting that many of us have come to expect.

So when you take home one of the data disks and you want to see if something is on it, what do you do? Just load it in as if you were going to do some data management. Here's how:

- 1) Turn on the computer and disk drive with the Extended Basic module in the slot.
- 2) Insert the PRBase program into DSK1 and select Extended Basic.
- 3) At the first menu, select 2 - Data Management.
- 4) At the title screen, press the space bar and the cursor should appear over the DSK1. prompt.
- 5) Remove the program disk and insert the data file disk into DSK1.
- 6) Change the prompt to read DSK1? (not DSK1.? or DSK? but do make it DSK1?).
- 7) Now press <enter>. The data screen stored on the data disk should appear after the disk access.
- 8) You are now ready to use the data base!

I hope that the above procedure and commentary helps to answer the questions that you folks have. Once you start to use this powerful program, I'm sure that you will enjoy it.

Now a word about FAIRware. It is only fair to send the author of a program some contribution towards his work. And believe me, it is a lot of work to put out good quality programs and answer all mail/phone calls from the users. But most FAIRware authors are glad to do it because they are good people. Let's show our gratitude by sending them a check or some cash. The contribution for PRBase is \$10.00. You can send it to:

William Warren
2373 Ironton Street
Aurora, CO 80010

Or you can put some cash in the PRBase Kitty at the NorthCoast meeting. Once we get enough cash in the Kitty, we will send it in to William. I like Deanna Sheridan's idea of a conscience box next to your computer. The idea is to put some spare change into the box any time you use some fairware. Before you know it, there will be enough to send to the author of the programs you are using.

If you want to obtain the data file disks that I am supplying for the PRBase program, here is my address:

Jim Mekeel
11596 Forest View Drive
Chardon, OH 44024

If you send a SASE to me I will send back a list of what disks are available. Currently I have these data disks: ADDRESS/PHONE/DATES data disk, INVESTMENTS, and HOUSEHOLD INVENTORY. And the list is growing. The contribution for each disk is only \$1.25 with user supplied disk and postage paid mailer. Add \$1.00 per disk if I supply the disk and postage. There is other fairware available that is also on shown on the list.

CARE AND CLEANING OF DISK DRIVES
COURTLAND GRAY NUTHEG TI-99ERS

Load your program, load your data, save your data. Load another program. In all these operations your disk drive is revolving your disk at the rate of 5 times per second with the read/write heads in contact with the disk. During this contact the read/write heads pick up small particles of iron oxide which is the coating on the disk that contains our valuable information (either programs or data). The heads require periodic cleaning of these particles in order to maintain error-free operation.

The frequency of cleaning is dependent upon the frequency of use; every three months, six months or a year. The methods of cleaning are also many. There are "dry" cleaning disks, "wet" cleaning disks, "wet" cleaning disks (using a special disk and a solution) and disassembly of the drive from its box and cleaning with a swab and DENATURED alcohol. Regular isopropyl alcohol is not recommended because it leaves a residue on the heads.

Considering the three methods available, the least desirable is the "dry" method as it is abrasive to the heads and leads to premature wear. The disassembly and swab method is the most efficient and the technique used by professional drive service companies. The simplest method and the one most of us would use is the "wet" disk solution. These are available as Disk Cleaning Kits, available through office supply houses and computer supply stores. These kits range in price from \$6 to \$30 and offer multiple cleanings which make the per-cleaning cost average between \$.50 and

\$1.00.

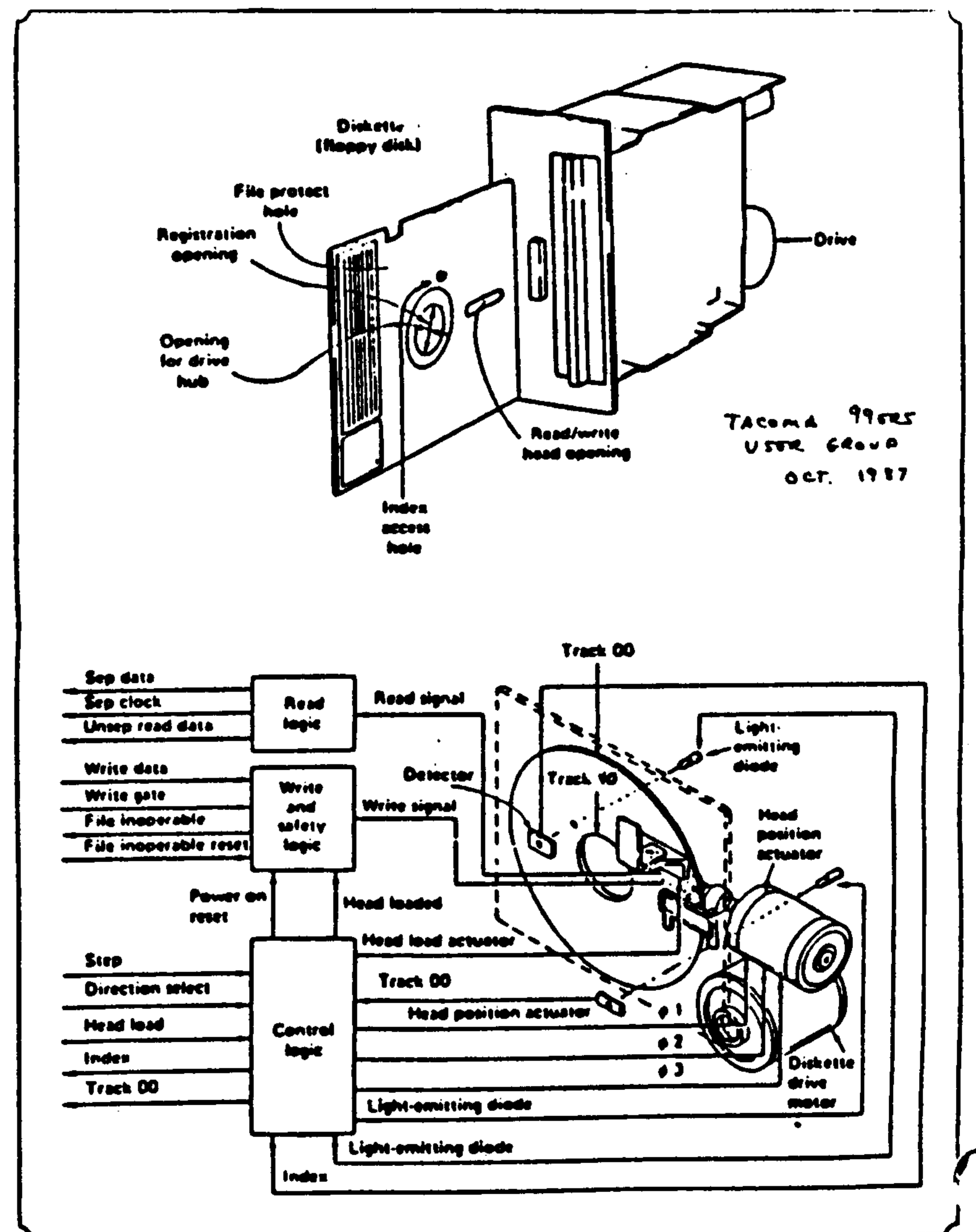
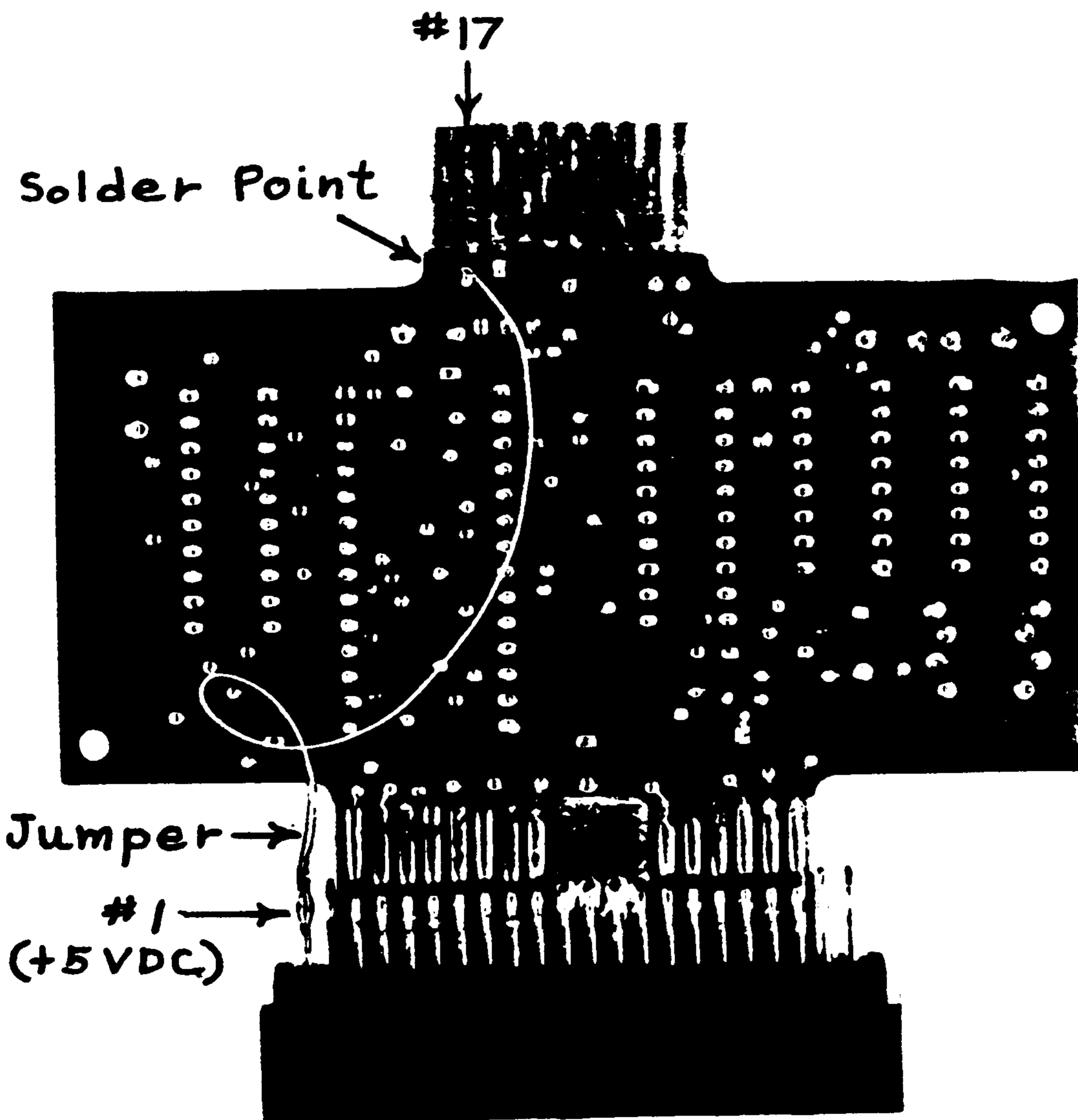
Last, but not least, if you are transporting your drives, place the cardboard shipping protectors in the drive and close the door. Lacking the shipping protectors, put an old disk in the drive backwards. This prevents the heads from vibrating and misalignment.

RUN THIS PROGRAM WHILE CLEANING YOUR DRIVE

```

100 REM HEADCLEAN
110 REM HEAD CLEANING PROGRAM
120 REM !! TI Extended BASIC only!!
130 REM by Milo Tsukroff NUTNET TI-99ers
140 CALL CLEAR
150 DISPLAY AT(3,1):" HEAD CLEANING PROGRAM"::"Run this
program while the cleaning disk is in the ":"drive."
160 DISPLAY AT(9,1):"To stop it, press and hold CLEAR (FCTN
4) until the":"prog ram stops."
170 DISPLAY AT(15,1):"DISK DRIVE: 1"
180 ACCEPT AT(15,13)SIZE(-1)VALIDATE(DIGIT):6
110 on error 200
200
210 CLOSE #1
220 END
230 PRINT "RETRY #";
240 X=X+1
250 PRINT X
260 RETURN 190
    
```

DataBiotics' PARAPRINT
(Circuit Board - Underside)



THE NEW FEATURES OF FUNNELWEB v4.0
 by Charles Good
 Lima Ohio User Group.

The last update of FUNNELWEB v3.4 was dated May 14 1987. Subsequent improvements have all been incorporated into v4.0, and this new version has now been released as fairware. This is a major update designed to be compatible with Myarc's Extended Basic II as well as TI Extended Basic. This review describes the v4.0 release dated Oct. 20, 87. No doubt improved versions with more recent release dates will soon appear. However all v4.0 releases will have the same basic organization, so this review should remain valid for future v4.0 releases.

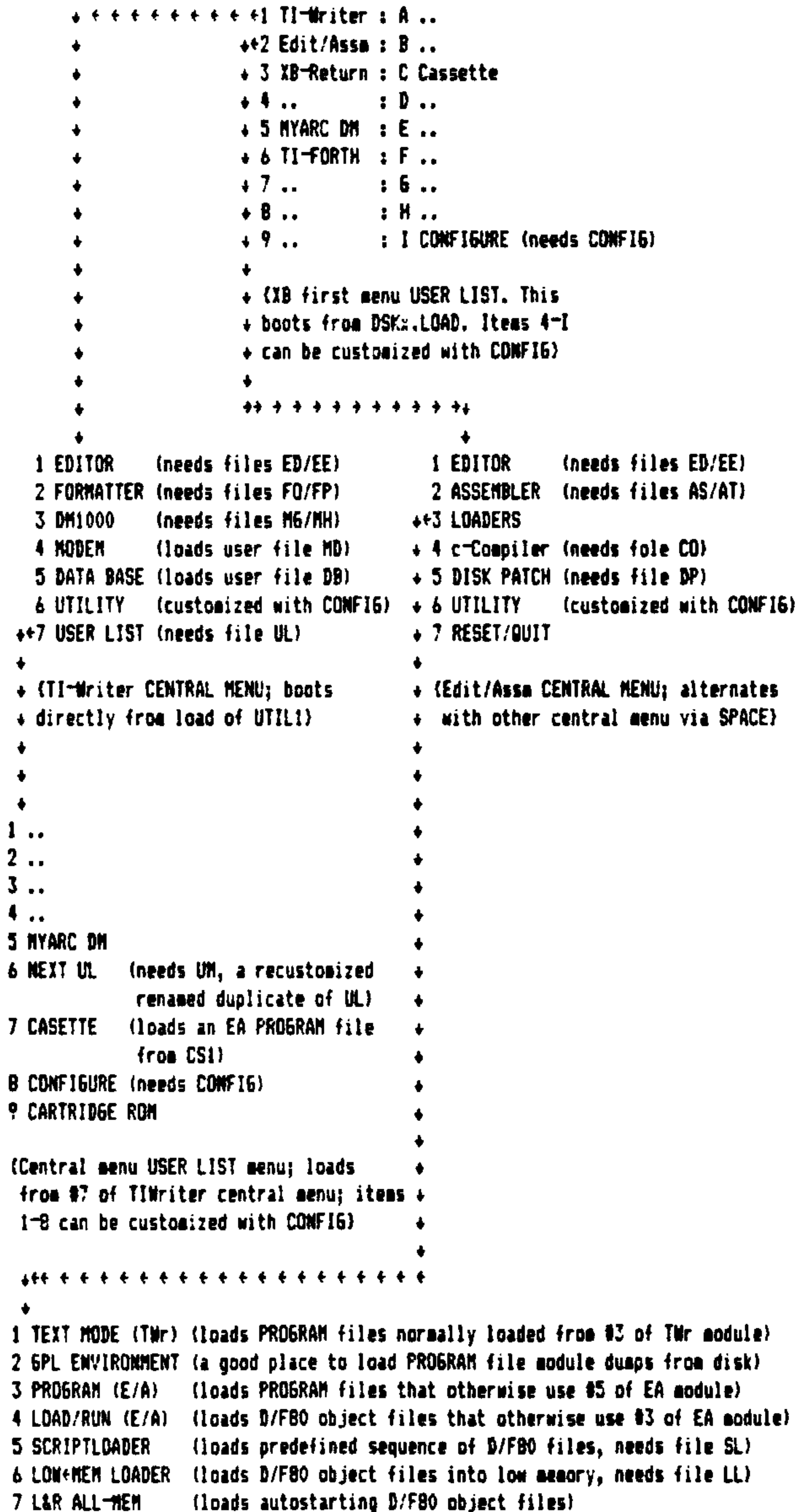
THE CONFIG PROGRAM:

The most obvious improvement in v4.0 is CONFIG which can be accessed from the first XB User List menu or from the central User List menu. CONFIG allows the user to customize FUNNELWEB in numerous ways without any programming. All you do is follow the screen prompts. Any idiot can do it, but in case you aren't just any idiot check out the CONFIG flow chart accompanying this article.

Although the v4.0 LOAD program remains a hybrid of XB and assembly code, the FwB authors advise against trying to directly edit the XB part of LOAD. One reason is that if you are using MYARC XBII the XB portion of LOAD cannot be resaved properly. Also, there is no longer a UPATCH file to transfer LOAD customization to UTIL1. All configuration of LOAD, UL, and UTIL1 should now be done with CONFIG. If a later release of v4.0 is obtained the newer release should be configured from scratch with CONFIG. It is no longer recommended that you customize newer releases by merging the old LOAD XB code onto the newer LOAD. If you attempt to customize future v4.0 updates this way there is no easy method to transferring the customizations to UTIL1.

CONFIG allows the user to set up FUNNELWEB on a primary AND secondary drive (or ramdisk). Configured this way, FUNNELWEB suspends boot disk tracking and expects the TI-Wr central menu files to be in one drive, and the Ed-As central menu files to be in another drive. If you run out of space on one disk for the FwB files and all of the your assembly user files which FwB expects expects to be on the boot disk, then this is a useful option.

FUNNELWEB V4.0 MENU FLOW CHART
 (This file written by Charles Good, who is responsible for any errors)



(LOADER menu; loads from #3 of Edit/Assm central menu; all options need file EA)

CENTRAL MENU USER OPTIONS:

Menu item #6 in each of the two central menus now is a UTILITY option whose menu name and two character file name can be customized with CONFIG. Any PROGRAM image EA&E software can be loaded directly from the central menus with a single keypress via these options without first having to first select the central menu User List. The FwB authors suggest that the TI-Wr central menu utility would be a good place to load a spell checker.

MULTIPLE USER LISTS:

The central menu user list now has an option that reads "Next UL". This loads another user list file named UM which in turn can be configured to another user list file UN, etc. You can load from menu unlimited numbers of assembly language user programs in this way. Each of these user lists is a copy of file UL that is configured separately with CONFIG. After all UL files are independently configured, they are renamed UL, UM, UN, etc.

TAB RULER SHOWS IN EDITOR:

The EOF line that originally showed in the editor immediately below the last line of text has been modified into a 40 column ruler similar to the tab ruler that shows at the top of the screen when you set tabs. The modified EOF line is very useful for centering text in an editor screen and for the manual indentation of paragraphs and columns. The EOF line is numbered 0, 1(0), 2(0), and 3(0) with the other positions for columns 0-39 indicated by dots. The EOF line shifts with left/right windowing and with line numbers on/off and as such is not a true tab ruler. You see the same line number which window you are viewing. The numbering doesn't change to 40-80 when viewing the right window, for example. The modified EOF line is only visible at the end of the text file.

NEW DISK DIRECTORY FEATURES:

Screen displays have been improved for disk directories called with AID (for assembler, or a central menu) and SD (from the editor). A prompt line at the bottom of each directory tells you which keys to press for each feature. Pressing EQUAL after a directory is loaded shows if PROGRAM files are EA or BX (either basic) programs. This feature isn't new to v4.0 but it is worth mentioning here because it is so neat. If a

- + +1 Continue Normally (Use this the first time you run CONFIG.)
- + + +2 Redo User Lists (Use to alter and/or add to already configured XB and/or central menu User Lists.)
- + +
- + + 3 Redo Configuration
- + + 4 Back to FwB Vn 4.0
- + + (First and last CONFIG menu)
- + \
- + +
- + "Boot drive tracking on? (Y/N)"
- + +Y.. FwB expects all its own files and the user files accessed directly
- + + from central menus to be in the boot drive or in DSK1.
- + + N.. Overrides boot drive tracking, allows specifying specific drives
- + + + for TIW and Edit/Asa central menu files. Particularly useful
- + + + with ramdisks or with multiple floppy drives.
- + + +
- + + "Fixed drive # (TI-Wr) DSK_" Enter a single digit drive number.
- + \ "Fixed drive # (Ed-As) DSK_" Enter a single digit drive number.
- + + +
- + "Utility drive default? DSK_.UTIL1" Enter a single digit SECONDARY DRIVE
- + + number that will be the default number displayed when LF/SF
- + + is used in the editor. If you only have one drive, then
- + + enter a 1 so primary and secondary drives are both DSK1.
- + +
- + "Editor printer device" Enter PIO, or whatever your printer name is.
- + "Format printer device" Enter your printer name followed by ".LF"
- + +
- + "Workfile name default" If you enter something here, the name will appear
- + + after "DSKx." the first time you LF or SF from the editor after booting
- + + FwB. If you leave this blank, as I do, then you can exit FwB, do
- + + something else with the computer, then reboot FwB and usually find the
- + + old file name still in the mail box.
- + +
- + "Edit Utility Choice #6" Type in the screen display name of an assembly
- + "Edit Opt #6 file name" language PROGRAM user file you want to be able
- + + to boot from a central menu. Then enter a 2 character name for this file.
- + + Repeat the process for the other central menu. These user files must
- + + be on the same disk as the other files accessed by the displayed TI-Wr
- + + or Ed-As central menu.
- + +
- + "Color choice selection" Colors and their hex values are displayed. Ten
- + + foreground/background combinations are shown with the first being the
- + + combination showing at powerup. The other 9 are can be cycled through
- + + by pressing zero from most FwB menus. Edit the color combinations, or
- + + press ENTER to cycle through all ten without editing. You then get this
- + + menu:
- + + +
- + + 1 Cycle Colors (Press 1 repeatedly to see each color combination)
- + + 2 Select Again (Re-edit the colors you just entered)
- + + 3 Original Set (Re-edit the colors originally present on the FwB disk)
- + + 4 Next Screen
- + +
- + GOTO NEXT
- + PAGE

PROGRAM file is not indicated as EA or BX after pressing EQUAL, the program file is a data file for the ADVENTURE, PRK, or similar module. A number (1-0) which has been added to the left of each displayed file name tells you which number key to press in order to mark a file. The marked file is put in the mail box memory and appears on the screen when you LF from the editor or when you boot the formatter or assembler.

The directory obtained from the editor with SD has some VERY USEFUL new features not found in the AID directly. Press "P" to print the directory to the editor print device, usually a printer. To delete the marked file from the disk press "D". An especially nice feature is the ability to view a marked file by pressing "V" without disturbing what you are editing in the editor's text buffer. After viewing the disk file you can then go back and continue editing the text buffer, since it is not necessary to save off what is in the buffer before pressing "V". If you press "O" (meaning 'old file', not 'load file') the current marked file becomes unmarked and the DLD previously marked file name replaces the just unmarked file as the mail box file name. It is a good idea to press "O" after viewing a file with "V" if text is in the editor's buffer. This will prevent you from accidentally overwriting the viewed file when you later save the text buffer contents with SF.

OTHER MINOR CHANGES:

Disk Patch (file DP) has again been modified. The instructions are displayed on the first DP screen for easy reference. With the contents of a sector in view, pressing PROCEED brings up the previous sector, and BREAK displays the next sector. Always before in earlier versions of FwB and in the original DISKO, PROCEED displayed the next sector as would seem logical. I find PROCEED incrementing sectors in reverse to be confusing.

Color combinations can now be cycled through by pressing ZERO from almost any FwB menu that requests a number key press. In earlier FwB versions the color cycle key varied from menu to menu.

In my humble opinion (I'm modest too, just ask me some time and I'll tell you about my modesty.) FUNNELWEB is the most significant single piece of software ever for the 99/4A. These improvements make

```

*   *
*   *
*Do you wish to edit the central menu screen UL before saving UTIL1? Y/N*
Y..You get a display of screen and file data for the first 8 items in the
central menu User List. Press N(next) and B(ack) to cycle through
these 8 items. Press E(dit) to enter data or change data of the
displayed XB UL item. Editing screen prompts are identical to those
shown below for XB User List editing beginning with "Edit file name
loader." When you have finished editing all the items you wish to
edit, press S(ave) and follow screen prompts to save data to DSKx.UL.
Then press BACK (FCTN 9) to exit this part of CONF16.

N.. *
*   *
*Do you wish to edit the XB LOAD program UList before saving UTIL1? Y/N*
Y..Follow screen prompt and load LOAD. You then see the XB User List first
menu with the cursor on choice #4.

*
*+++Choices 4 through I must be cycled through before leaving XB UL con-
* figuring portion of CONF16. Type in what you want the menu to display
* for each item, then press ENTER. Or, to rapidly cycle through the XB
* UL menu, just press ENTER if you like what you see displayed. ENTER can
* be used instead of any called for screen prompt in XB UL configuration.
* Not finished with cycle:                               Finished with cycle*+
*   *
* 1 XBasic Program*+++*(User file is XBasic.)           *
* 2 Assembly Loaders*+++*(For assembly language user file.) *
*+++3 Return to XBasic *(Causes this XB UL item, when pressed, to im- *
*   *                               * immediately return to XBasic, as does UL item #3) *
*+++4 Leave unaltered *(Returns you to the XB first menu UL display so *
*   *                               * you can edit the next UL item.) *
*   *
* "Edit file name for loader" Enter a file name including a drive *
*   *                               * number in the form DSKx.FILENAME. *
*+ + + + If XB program: If assembly file: *
*   *                               *
*   *                               *
*   *+++1 Memory Image Program (Assembly language file that lists as *
*   *                               * PROGRAM in a disk directory) *
*   *                               *
*   * 2 Tagged Object Code+ (A single D/F80 assembly language file)+ *
*   * 3 Script Load File + (A sequence of D/F80 files) *
*   *                               *
*   * + + + + + *
*   * + +1 No special conditions (This is what you usually choose.) *
*   * ++++++2 Load low memory first *
*   * + + +3 Autostart - E/A LFMH *
*   * + + +4 Intercept autostart *
*   *                               *
*   * + + + + + *
*   * + + +1 Text Mode (TI-Wr) (Usually loads from #3 of TIM *
*   * + +                               * module.) *
*   * + + +2 GPL Environment (Good for module disk dumps.) *
*   * + + +3 E/A Program file (The usual choice.) *
*   * + +                               *
*   * GOTO NEXT *
*   * PAGE *

```

GOTO
NEXT
PAGE

FUNNELWEB even better. You should give an additional Fairware donation to the Funnelweb authors serious consideration, even if you have paid for a previous version.

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CHECK YOUR EXPIRATION DATE!
this may be your last issue

```

GOTO      + +
PREVIOUS  + +
PAGE      "Boot tracking off (Y/N)" Y prevents the boot drive number from
          + overwriting the drive number you specified as part of the
          + file name.
          +
          "Secondary Disk (Y/N)" This is the drive # specified near the
          + beginning of CONFIG for the Ed-AS central menu if you turned
          + off boot drive tracking. If this number is different than
          + the boot drive number and if you answer Y to this question
          + then FwB will look for the user file in the secondary drive.
          +
          "Provide reminder (Y/N)" If the user file is not on the same disk
          + as the rest of your FwB files then answer Y. FwB will stop
          + when the user file is selected from a User List and the
          + message "Insert Utility Disk in Drive x" will be displayed.
          +
          + + + + + The x is the secondary drive number.
          +
          N..(You don't want to edit XB User List)
          +
          +
          + "Select F'WB File Name" (Press 1 or 2 for the correct name
          + 1 UTIL1 of the reboot file. FwB originally
          + 2 RELOAD comes configured as UTIL1.)
          +
          + + + + +
          +
          "Save file to drive #?" Select a single digit number and/or press ENTER.
          +
          "Press 1 to save configuration" You may also redo your configuration by
          + pressing 2 or 3, or return to FwB with 4.
          +
          "Configuration saved" You are now returned to the first CONFIG menu at the
          + start of this flow chart.

```



*Please deliver
by March 18!*