YES! IT'S STILL GOING STRONG!

<u>DID YOU EVER DREAM OF OWNING A COMPUTER</u>
<u>THAT WOULD HAVE</u>
A POWERFUL DATABASE?
A SPREADSHEET EQUIVALENT TO THE BIGGEST COMPUTERS?
AN EXTRAORDINARY WORD PROCESSSOR THAT COULD OPEN UP ALL THE POSSIBILITES
OF YOUR PRINTER?
A HIGH-RES GRAPHICS SCREEN FOR DYNAMIC ARCADE GAMES?
A DISK-MANAGER THAT COULD DO <u>ALL</u> THE DISK AND FILE MANIPULATIONS USUALLY
ONLY FOUND IN MAINFRAMES?
AN ABILITY TO RUN FORTH AND c AND PASCAL AND LOGO?
A BUILT-IN LANGUAGE THAT WOULD INCLUDE SUBPROGRAMS AND AUTOMATIC ITEMS NOT
EVEN INCLUDED ON THOSE EXPENSIVE MACHINES?
UNTAPPED "HIDDEN" FEATURES CONSTANTLY BEING UNCOVERED?
UPDATINGS WITH ALL NEW PERIPHERALS, HARDWARE, SOFTWARE,
LOTS AND LOTS OF UNDREAMED-OF FILES AND PROGRAMS FROM MANY SOURCES?
AND BE INEXPENSIVE?

<u>If you own a TI-994/A you ALREADY have that Dream Machine!</u>

Since TI drifted out of the Home Computer market a lot has happened to our powerful machine. For example, there are over 700 companies world-wide now making materials for the TI. Software items are in the tens of thousands! Each month new "discoveries" about the TI are made.
TI user groups continue to flourish, providing the networking for this great, international TI Family.
As a TI owner *YOU* are a part of that large community of almost $2^{1}/_2$ million families. And these families include educators, kids, business people, writers, artists, truck drivers, cooks, parents, cowboys, pilots - in short, just about every kind of human from just about anywhere on Earth. And the software being created almost daily reflects this universality. It is very exciting right now to be a TI owner and watch with amazement to see how much other computer owners pay to achieve what our machine does at $^1/_{100}$ of the cost (or even *less* in many instances).
We have probably the largest base of Fairware, Public Domain, Groupware, and Freeware programs and files in existence for ANY computer. This, alone, makes the 99 the most affordable, most adaptable, most powerful home computer still around. And the commercial ware gets better and better for you.
But only if you take advantage of your ownership.

To find out about your "NEW" TI-99/4A come to a user-group meeting on the third Tuesday of every month at the U.Mass Medical Center. Enter the main entrance and follow the yellow M.U.N.C.H. (Massachusetts Users of the Ninety-nine Computer for the Home) signs. We start at 7 PM. We have workshops; demonstrations; new materials; sales tables; libraries of disks, books, tapes, magazines; monthly raffles; lots of family and professional activities. Everyone is welcome. Come along. See if you'd like to join (or rejoin if you've been away for a while). If you do you will receive our monthly newsletter filled with up-to-date info and - FREE! - a choice of disk or tape: *The Best of M.U.N.C.H.*, a collection of unusual programs.

MINUTES OF MEETING 3/17/87

The meeting was called to order by acting "moderator" Bruce Willard at 8:00 P.M. There were 12 members present. After a short discussion the minutes of the February meeting were approved.

Bruce announced that the preparations for the fair continued. Volunteers were assigned times to work at the M.U.N.C.H. table.

Corsin Wyman gave us the latest news on the 9640 computer and ask ed who was interested in buying one. Most members present expressed interest in the new computer.

Jack Sughrue, who has taken over as newsletter editor, asked that all items for publication be sent to him by the Tuesday following the monthly meeting. This will aid him in getting the newsletter out in a timely manner.

Jim Cox gave the Treasurer's Report. Income for the month was $53.45, Expenses were $127.72 and our check book balance is $422.36.

The business meeting was adjourned at 8:30 P.M.
****

TV GENIES / Wireless remote control for TV or VCR or computer combinations. Multiple units (as many as you want at one time!). Operates on transmitter. $79.

ELECTRONIC MARVEL! Eliminate all system lockups. Your own console will be completely modified to prevent such frustrations from happening again. All parts and labor included. $79.

For either or both of the above contact Don Mason.
****

ADS - If you are a fully-paid member and wish to advertise your services or materials, there is no charge. For commercial ads or non-member ads please see the rates on the back inside page.
****

BYTES 'n NIBBLES

Some handy pieces of knowledge from here and there. The 3.4 version of *FUNLWEB* (formerly known as *FUNLWRITER*) has some handy changes. The docs include the further log kept by author Tony McGovern. One of the updates is a faster cursor. No more wordwrap character losses from fast typing. The screen/menu structure is also new. Additional colors are added and screen colors are maintained during Show Directory. Easier personalizing of menus. Better file copy structure (eliminating all but the word processor, for example). Within the DM1000 (new version 3.5) structure there are also many changes. The best is PRINT and TYPE added to the FILES menu. Pressing P on the N of any printable file will (if your printer is on) type out that file instantly in subscript (including the FORMAT codes). Pressing T at the same prompt will put that same file onto the screen for reading. Pressing ENTER will advance by one whole screen block. Every time a new version of WEB comes out, the package becomes that much more useful and powerful. The Ottawa User Group and the Hunter Valley (Australia) User Group (especially Tony McGovern) deserve much applause and lots of donations.

FUNLWEB menu, you can press FCTN/7 to get a screen listing of anything on disk in any drive without losing control of the menu. You can also use the same key after cataloguing in *DM1000*'s Disk phase. This will print a beautifully tiny catalog for your envelope.

A couple other items of more than passing interest to me came from the *CALL SOUNDS* newsletter of Central Westchester and *SUNCOAST BEEPER* of St. Petersburg, Florida. First, to get a 28-column printout of your program LIST, do the following in the immediate mode while your printer is on:

```
OPEN #1:"PIO"
PRINT #1:CHR$(27);CHR$(81);CHR$(28)
LIST "PIO"
```

(81) calls up the printer's right margin code; (28) sets it at 28 characters wide. (28 could just as easily be changed to 40 [or at 132] in condensed.)

The fastest known key press detector in XB (or BASIC)

```
250 FOR S=0 TO -1 STEP -1
260 CALL KEY(0,K,S)
270 S=S=1 !THAT is correct!
280 NEXT S
```

If a key wasn't pressed at 260 then S will be 0 when 270 is executed. 270 will note the expression is false and set S to 0. Since S will never equal -1 and is in the FOR/NEXT loop, the loop cannot continue until the key is pressed.

Anyone who purchased *FUNLPLUS!* disks can bring them to the next meeting to get a new version. I changed, deleted, and added new things to make it better. The newest version of *FUNLWEB* will also be available to members.

I'll be giving a demo on the word processor at the May meeting. Anyone interested in learning how to improve your word processing skills please come. All questions will be answered (hopefully). Bring a pad for notes. A handbook I put together will be given out to participants. I'll be using the newest updates from *FUNLWEB, DM1000, and FUNLPLUS!*.

Please bring your old *FUNLPLUS!* disk for updating and two blanks (or a flippy) for the *FUNLWEB* 3.4. The newest *FUNLPLUS!* will be sold that night for $8, if you haven't yet purchased one. A dollar will go to the club for each sale.

Please come with recommendations about any phase of TIW you'd like explained.

ALL FORMER MEMBERS WELCOME TO THESE TIW WORKSHOPS! If you have the word processor (particularly the FAIRWARE updated *FUNLWEB*) you have one of the best word processing environments in the entire computer world. Learn to use it to your advantage.

All workshops are free, as always.

TI BANNERMAKING

Before I begin discussing *BETTER BANNERS* I must offer an apology or two to my non-99er friends: Yes, there is nothing equal to *PRINT SHOP* for our computer. I went out on a limb describing how much better off I am to have *GRAPHX, TIARTIST, CSGD, BETTER BANNERS, FUNLPLUS!, FONTWRITER*, and lesser graphic/text programs than those poor slobs with Apples, Commodores, IBMs. I'm not. They have *PRINT SHOP* and I don't. *PRINT SHOP* by Broderbund does everything. And does it wonderfully easy. And lets you DO anything you want. Quickly, efficiently, *joyfully!*

I only hope that with GENEVE (or whatever it is called these days) the TI community will finally get something as good as (or even almost as good as) *PRINT SHOP*. It and its companions deserve to be exactly what they are: the most popular utilities EVER for home (and now office and school) computers.

Having said all that (with a tear or two in my eye for having admitted that in ONE area, at least, the Apple or Commodore may be better than TI), I am hoping, still, that after ASGARD's *COMPANIONS*, Chris Faharty's *ARTIST* stuff, Dave Rose's *CSGD* programs, and Peter Hoddie's wonderful *FONTWRITER* our world will begin to open to us.

Now *BETTER BANNERS* and *BANNER GRAPHICS*. Even as a distinct banner program it does not equal that miniscule portion of *PRINT SHOP*. However, it IS the best banner program for the TI, providing you make some immediate and large modifications.

Because of TICOMP's massive and ridiculous protection scheme, *BETTER BANNERS* is initially a chore, rather than the reasonably good banner program it could be.

To get enough different graphics it really pays to buy both *BETTER BANNERS* and *BETTER GRAPHICS*. BB comes with Set 1. BG includes Sets 1, 2, 3, and 4. Though graphics come in two sizes (the small size graphics are horribly deformed but you wouldn't be apt to use those on banners anyway), there is only one font style no matter which set you use.

Like all good printer software, BB lets you establish your printer setup and permanently (or temporarily, which is an advantage, as you will see) onto your disk.

I have a Gemini 10X. Code #35 remains undefined in this program, fortunately, so I change it to 239 (the solid block) to make it work well. It does, but I also try 173 (the empty diamond), 175 (the empty block), 230 (the double solid block), and so on to see what the new designs will look like. Some are better suited to certain graphics and some make the single font provided look different (so does removing the default for line spacing). Thus, I was glad the program failed to redifine graphics on the Gemini. It gave me lots of flexibility.

Because I am irresistibly drawn into making changes on programs to see what will happen, I am taking a big risk with BB. For example, all the printer changes must be made without the write-protect tab on the disk, obviously.

But you are told often and in no uncertain terms not to attempt to make a backup as this will "RESULT IN THE LOSS OF DATA AND VOID YOUR WARRANTY" even though only one disk comes with your $20 cost.

This is one of those programs (as many graphics programs have to be) that requires getting into and out of the disk often. This one is more dangerous and considerably more annoying than most because you MUST transfer your graphics sets onto the BB disk WHICH DESTROYS THE SET ON THE BB DISK! (Believe it or not!) So you must first be certain you have a working data disk. BUT WITH THIS PROGRAM THERE IS NO SUCH THING! (Again, believe it or not!) [I told you this was a protection-crazy program.] Graphics data may only be saved on the BB or BG disks themselves. Each time you make a new design you may save it only by replacing an existing design in the set on the BB disk. This means you should print out the lengthy code of the design you are replacing and save it on paper for future use. Then you must destroy ANOTHER design to retype this coding back in. Very, very cumbersome.

Although I can't suggest you do anything that might destroy your disk or void your warranty, I know what I would do if I wanted a pretty good banner program for the TI. I'd buy both disks and some odd-colored blank disks (like yellow Sentinel or Fuji).

I'd put the protect tab on BB and, using *TRACKCOPY*, make four copies of BB. (Flipping the disks will mean only two blanks are required.) Then I'd put the codes I want on each one. It takes less than a minute. Then I'd load up *BANNER GRAPHICS* and transfer Sets 2, 3, and 4 to three of these BB copies. Set 1 is already on all copies to start with. As you transfer each set of 15 graphics to a copy of BB, the set on BB will be eliminated. The process takes about an hour and a half! But it's worth it. Otherwise, I can only use the set presently on the untabbed BB or take the half hour EACH TIME I USE THE PROGRAM FOR EACH DIFFERENT GRAPHIC FROM A DIFFERENT SET. (To put five different graphics onto one or five banners would take a minimum of two-and-a-half hours, even though the graphics print out in a few seconds.)

However, with copies I can interchange even from different sets by reloading (40 seconds) from inside the menu, I have a program with excellent features and, for the most part, reasonably good graphics.

I would then put my original BB and BG disks safely away in case of future problems or warranty replacements . Then I can fiddle

3

with the backup disks to my heart's content without fear of expensive losses.

Once I have safely transferred my graphics sets, I can now explore the BB potential. I put 239 for the ASCII prompt. Then I put 27, 65, 7, 27, 69 for line spacing (tight) and dark print (emphasized). Then I put PIO for my printer.

It then gives me a menu. I Select large graphics. Small are awful! I am given a list and choose number (say 2 for Heart) of graphic. I may then write a lengthy banner message putting a SHIFT/2 wherever you'd like the graphic(s) to appear. This is a really nice feature (and one that *PRINT SHOP* doesn't have yet for the banner part of their program; nor does it have the speed of printout that *BB* does).

I think if I were marketing BB and BG, I'd recall them all from dealers and put out BB #1 with Set #1 and Font #1. Then I'd put out Set #2 with BB #2 AND Font #2 (another *different* font). The same with 3 and 4 and, hopefully, 5 and so on. Each time a new set is developed with a new font, then a new disk can be made. Each could sell for $7.95 (about the cost of BB and BG right now for all four sets). It would be in a considerably more convenient format, and there would be no need for the ridiculous protection that presently prevents the BEST features of BB from being accessed.
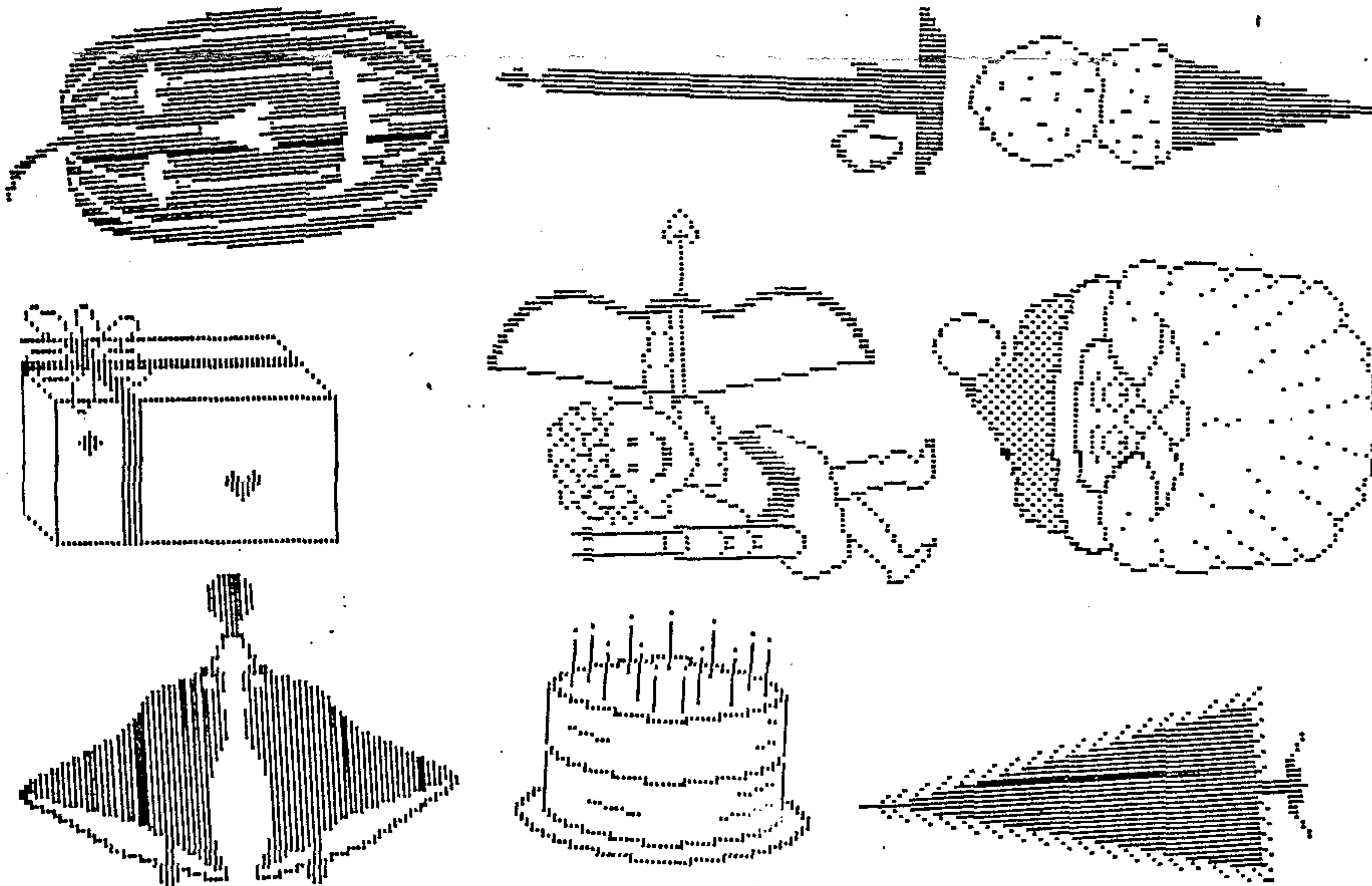
I'd also write some documentation which would include a *page of reduced illustrations of each* graphic. This graphic program comes with NO illustrations and NO catalog of the sets. The ONLY way to find out what is on the disks is to print out all 60 illustrations (about 5 hours), as there is no screen showing. Samples and listings are essential to the continued marketing success of this product.

The documentation is poor (is almost not existent beyond protection warnings). This article explains both BB and BG better than anything that comes with the programs.

For those of you who already have the *free banner programs* that come with *FUNLPLUS!* or the *Boston Computer Society PD* disks, you may still want BB and BG. *BETTER BANNERS* is different from these. The first offers multiple sizes and fonts and an easy (though limited) graphics maker, the second vertical banners. BB compliments, rather than competes with, these programs.

In spite of the overall negativism which seems to pervade this article, I would recommend the programs based on the understanding that modifications really are necessary to make them efficient, practical, and fun. ★

Sample Graphics from Better Banners
(reduced to 1/4 size)

★ Just received PRINT IT, a Fairware item by Rodger Merritt. It is better than ALL of the above combined. More in a future column.

NEVER HAVE ANOTHER PERIPHERAL CABLING PROBLEM AGAIN!!!
INTERFACE PERIPHERAL CARD

If have an interface card for your TI and have wondered how to make your own cables, this article is for you. There have been many times when I have to get my interface to work with a printer, modem or some other kind of input/output device. It is only after hours of aggrevation trying this and that, that I finally have the answers. Here is what I have learned by trial and lots of error!

PARALLEL PORT INTERFACING

The parrallel port is used soley for a printer sending all data bits in 8 parallel data lines. Parallel printers are compatable with most computers. They make no judgement as to what kind of system you use. The cable that connects between the computer and the printer can vary greatly. This is where most of us go to the nearest computer store and try to find a preassemblied cable instead of doing it our selves. There is nothing really special about making your own cables. Most of the connectors are now built so that you don't need to strip off wire insolation or solder connections.

The tools you will need consist of the following:
SISSORS, HAMMER, A SMALL FLAT SCREW DRIVER

To make your parallel cable, you will need the following parts that can be purchased at your local RADIO SHACK store:
36-POSITION MALE PRINTER RIBBON CONNECTOR #276-1533
RS232 RIBBON CABLE 25 CONDUCTORS #278-77

The only part you may have trouble finding and need is the other 16-POSITION HEADER RIBBON CONNECTOR. There are only a few sellect stores that stock them and it is not a very standard item. I got mine at a computer trade show this past year. I still have a few left. If you have trouble finding it, I can get you one.

All of the parts will cost you about $12 to $15 dollars total. If you should find a parallel cable for $17.00 or less, BUY IT and stop reading this.

Building A Parallel Cable

1. Cut one end of the extra wide ribbon with the sissors just enough so that you can with your fingers strip away 16 wires from the rest of the ribbon. The 16 pin connector can now be added to one end of the 16 wire ribbon cable. The connector should have a bump on one side. This is the side you insert the ribbon into with the colored striped side facing the bump. This end of the cable is a "strait thru" connection. There is no need to flip-flop or change wires.
2. Carefully tap the connector with the hammer to close it tightly.
3. Trim off the excess ribbon remaining with the sissors. Hold up the connector with the pin holes facing you and the index bump on the top side. Pin ONE is the first pin in the upper left.

Now comes the hard part.

The other end you must flip, cut and move wires. Most, but not all, of the these wires will lead into the other connector.

4. Four wires must be cut off entirely. Wires 12, 13, 14, 15 are not to be used.
5. Using the sissors, carefully cut between the wires (about 3" inward) separating them from each other.
6. Place the wires individually into the connector following the pin to pin connections below for proper placements.
Note: The 36 pin connector also has a pin ONE numbered on it as well located in the left corner on the wide edge side.
7. Again carefully tap the connector closed with the hammer.

PIN NO. FUNCTION/DESCRIPTION
36 to 16 Pin Connector

```
01 to 01 Handshake OUT
02 to 02 Data, LSB
03 to 03 Data
04 to 04 Data
05 to 05 Data
06 to 06 Data
07 to 07 Data
08 to 08 Data
09 to 09 Data, MSB
11 to 10 Handshake IN
19 to 11 Logic ground (GROUND)
NC to 12 10-Kilohm pull-up resistor to +5 volts
NC to 13 No connection
NC to 14 Logic ground (GROUND)
NC to 15 1-Kilohm pull-up resistor to +5 volts
16 to 16 Logic ground (GROUND)
```

If you have a continuity meter, check your connections for any errors. If you don't have one, try using the cable as is. The chances of damaging your system from improper placement of the pin connections is very slim. If you have made a mistake,

take the connector apart with the end of the screw driver and try again.

If you are still having trouble, please contact me as your last resort. I will be happy to try and give you a hand with it. Contact me at my home number (617)839-5116.

SERIAL PORT INTERFACING

The serial port is used for communication with a computer with another serial port interface and a modem.

The serial port can also be used for a printer as well. There are some people that have the idea that if you have a parallel printer it will run faster than a serial printer. NOT SO... The speed is only relative to the printer you own. For example, having a printer rated at 120 characters per second (cps), and asking it to print at a 2400 BAUD RATE or 240 cps, won't make it go any faster. The computer will wait for your lame printer to catch up. Most all printers will run at any of the common BAUD RATE default values you give it, provided that the DIP switches on the printer are set for the same BAUD RATE. If you do have a serial printer it may be as fast as the next guys.

The most difficult thing for me when getting started with a serial printer was figuring out the correct software switch combonation options needed to make it work.

OPTION #1 BAUD RATE = 110, 300, 1200, 2400, 4800 or 9600 you can take your pick.(Printer DIP switches must be set for the same value)

OPTION #2 DATA BITS = 8 for a printer, 7 for everything else.

PARITY =(0)dd,(E)ven,(N)one. This is the only default that you may have to try by error.

For example : RS232.BA=2400.DA=8.PA=N

To make your serial cable, you need the following parts that can be purchased at your lacal RADIO SHACK store:

2 - SOLDERLESS RS232 D-SUB FEMALE CONNECTOR #276-1565

RS232 RIBBON CABLE 25 CONDUCTORS #278-77

All the parts will cost you a about $12 dollars.

To build this cable for your printer is extremely simple.

Building A Serial Cable

1. Slide one connector onto the ribbon and squeeze together.
2. Slide the other connector onto the ribbon with it facing the same identical direction as the other connector and tap together. This is a so called "straight thru" cable connection. It couldn't be any easier.

Building a serial cable for a modem is a different story.

1. Same as previous step 1.
2. Note that the ribbon connector makes the ribbon wire numbers different in the order that they are counted. Example :

1--2--3--4--5--6--7--8--9-10-11-12-13
-14-15-16-17-18-19-20-21-22-23-24-25-

Cut free the group of wires 2-15-3. These are stuck together in a row. Now twist them so that they get inserted in the reverse order into the connector.
3. Separate the 11th wire counting from the edge of the ribbon (wire #6).
4. Separate the 14th wire counting from the edge of the ribbon (wire #20).
5. Cross over the wires #6 and #20 and insert them into each others location into the connector.
6. Carefully tap the connector closed.

Not all of the wires need to be ckecked for continuity. There are only a few that carry the signal to the peripheral device.

PIN NO. FUNTION/DESCRIPTION
25 to 25 Pin "D" Connector

01 to 01 Protective Ground
03 to 02 Input Serial Data Port 1
02 to 03 Output Serial Data Port 1
05 to 05 Clear to Send Port 1
20 to 06 Data Set Ready Output
07 to 07 Logic or Signal Ground
08 to 08 Data Carrier Detect Output Port 1
08 to 12 Data Carrier Detect Output Port 2
05 to 13 Clear to Send Port 2
03 to 14 Input Serial Data Port 2
02 to 16 Output Serial Data Port 2
06 to 19 Data Terminal Ready Port 2
06 to 20 Data Terminal Ready Port 1

In short, the connections for a Port 1 cable, are straight thru except for pins 2 3 and pins 6 20. The connections for a Port 2 are again the same but pins 16 14 and pins 6 19.

Good luck with your cable making. CORSON WYMAN

MUNCH OFFICERS AND NUMBERS (all in 617 area)

President	Wm. Corson Wyman	839-4134
Vice President	Hector Beaudreau	
Secretary	Al Cecchini	
Treasurer	Jim Cox	869-2704
Editor	Jack Sughrue	476-7630
Hardware Chair	~~~~~	
Programs Chair	~~~~~	
Adv Prog. Chair	Dan Rogers	248-5502
Club Reviewer	Jack Sughrue	
Library	Al Lisa Cecchini	
Software Library	Don Mason	754-6630
	Hector Beaudreau	
Mail Messages	Wm. Corson Wyman	

LIBRARY NOTICE

PLEASE RETURN ANY ITEMS BORROWED FROM OUR LIBRARY. We are still missing a considerable number of books, tapes, disks, and so on belonging to <u>YOUR CLUB</u>. Do a little cleaning around your computer area (or any places you'd be apt to set things aside.) If you locate any library materials (or if you'd like to donate any you no longer use) please come with them to the next meeting. We don't care how long you've had them out. There is no fine. But it would be <u>fine</u> if other members could have a chance to borrow these things.

ADVERTISING RATES:

Double Page	(10.5" by 8")	$25.00	per insertion
Full Page	(5" by 8")	$13.00	per insertion
Half Page	(5" by 4")	$ 7.00	per insertion
Quarter Page	(5" by 2" or		
	(2.5" by 4")	$ 5.00	per insertion

Classified (non-commercial) ads are FREE for MUNCH members.

----RAFFLE----

This month we will have a choice of either a ten pack of OMNI diskettes donated by OMNI Resources in Millbury or a new keyboard replacement for you 99/4A.

The raffle is open to all who attend. The drawing will be held just prior to the business meeting. Remember:
YOU MUST BE PRESENT TO WIN

MAY SALE!

Your big chance to sell any used consoles, P/Boxes, cards, tape recorders, interface cables, ANYTHING related to your computer system. Also bring any <u>original</u> tapes, cartridges, disks, texts, or other soft/textware. Be prepared to buy a lot and sell a lot. Please come with prices marked on the items. Call Jack Sughrue to let him know what you will be selling.

M.U.N.C.H.
P.O. Box 7193
560 LINCOLN STREET
WORCESTER, MA. 01605

FIRST CLASS

✛✛✛✛✛✛✛✛✛✛✛✛✛✛
IMPORTANT NOTICE
✛✛✛✛✛✛✛✛✛✛✛✛✛✛

APRIL meeting will be on April 21st, 1987 *(IT'S SPRING!)*
at University of Massachusetts Medical Center
(Come to the VISITORS entrance and follow the signs for MUNCH...)