MAD HUG

MINNESOTA AND DAKOTA
HOME USER GROUP

GRAND FORKS, ND

MEETINGS AT THE G.F PUBLIC LIBRARY

AUG., **1988**

MONTHLY MEETINGS

Minnesota And Dakota Home Users Group meets every second Tuesday in the upstairs meeting rooms and every fourth Tuesday in the Electronic Room of the Grand Forks Public Library. Yearly dues are $12.00. Members can use the group's hardware and software by presenting the library reference librarian with your membership card and asking for the keys to the MADHUG files. Anyone interested in the TI-99/4A is welcome to attend.

MINUTES, JULY 12, 1988

Meeting was called to order in the Electronics Room at 7:30 pm by the Secretary. Six members attended.

Ken Roed corrected the minutes of the June meeting. He had not purchased the two programs, "Give It the Boot" and "Here It Is". These programs were sent gratis to him by Ms. Charlice S. Althar, Software Librarian, of the Dallas TI Home Computer Group. The minutes were then approved as corrected.

Rich Jurgens then (1) listed the Users Groups that have been added to our Newsletter exchange mailing, (2) reported that the FCC has scrapped its plan to charge for computer access to telephone systems, (3) read letters from individual TI Users who are seeking sources of programs, (4) presented the offer of the Chicago TI-User Group for us to join its library exchange program, (5) circulated letters from individuals having TI-99/4A hardware and software for sale, and (6) reviewed (a) the free offer of TI BASE by INSCEBOT, INC. if one of our members would demonstate it to the Group and (b) a special group purchase price for this data base program.

It was moved by Ken Roed and seconded by Ken Johnson that the Group purchase all of the software and hardware offered for sale by Steve Fillen--for raffle prizes or for resale to our members. Motion passed.

Letters will be written to the individuals requesting sources of programs. Memberships will be offered and will provide access to our library. Methods of providing such library access were discussed; copies of disks have been sent on loan by mail in the past to our out-of-town/state members. Cont. on back cover (page 6)

SUMMER REFLECTIONS by Ken Johnson
Our meetings have been spotty this summer. Sometimes only a hand full of people show up. With work conflicts and vacation, I have missed a few myself. One of the benefits of this has been an opportunity to read many other group's newsletters at home. If you are like me, you seldom get around to reading them at the Library. There is a lot to be learned from them.

One thing I like is that different groups discover new programs months apart. This gives us an chance to pick up the latest information when we missed it the first time. And also because, as Dennis can tell you, repetition reinforces learning a great deal. If you have been away a while, you can look forward to some interesting program reviews when things go into full swing this fall.

Rick is still going through the learning curve on his new "computer"; so his 99/4A has been very quiet this summer. When you see him remember to encourage him to warm it up this winter. His efforts for MADHUG have been very important these last two years. I have been trying to learn three computer systems besides using "the computer" at home. The 99/4A is still the easiest to use and the software development is still booming.

INSCEBOT INC. offered to send us a new data base program to demonstrate. The letter got to me quite a while after it was sent, but I agreed to take them up on their offer. When and if it gets here I will bring it to the next meeting or SIG to demonstrate. A really versatile data base program would make my system complete. The two existing data base systems I have used are very good, but not too user friendly.

There isn't space to reprint it all here but Ryte Data Volume 2-1987 has two very interesting articles for you to read. One is about the TI 99/4A HARDWARE MANUAL by The Bunyard Group. The author Michael Bunyard, PE is said to have been a system engineer on the 99/4A home computer. Ryte Data recommends it for anyone owning a TI 99/4A. Maybe MADHUG should buy a group copy so we can see if it is for everyone to buy.

The other is an article about the Myarc computer called THE 9640 DECISION by John A. Johnson of the Miami Users Group. I find this article interesting because the newsletters are really getting to show a strong preference for changing over to the GENEVE all over the country. It seems this move can give you a powerful computer without giving up the time you invested in learning to use the 99/4A. John can make a pretty good case for the investment of $450, although this doesn't include the cost of a new monitor if you decide to go 80 columns on screen. I will let you read the article and the editor's comments about it without trying to influence your thinking. I'm going to wait a while longer, but the better keyboard and the increased speed sound enticing. Who is going to be the trend setter in our group?

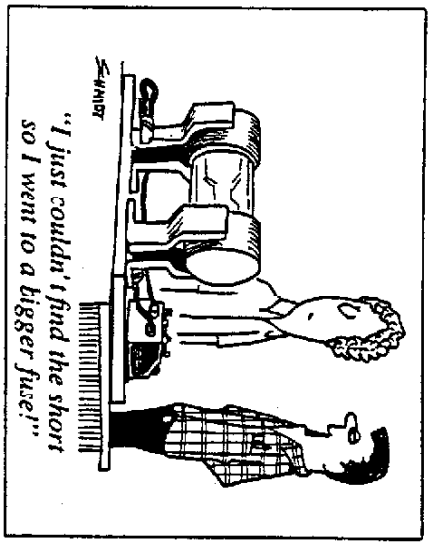
If you are interested in mixing text and graphics look at the May West Jax 99er News for articles about The Printer's Apprentice and the Picasso Publisher. TPA is harder to use, but the results are well worth while. I have the Picasso which they say is easy to use, but the results are not as good. I can't say until I get it to work. I will bring it in to a meeting or SIG so one of you wizards can show me how.

Sure hope to see you all this fall. Come on out and see what you have been missing. If you have anything to share, let us know. OUR ORPHAN THRIVES!

JOY PAINT '99 REVIEW cont.
Earlier I promised a more in-depth review of this program. The more I see of it the better I like it. Lee Thomas showed us a pistol at a SIG that he drew using this program. The trick as he learned is using the FATPIXELS option on the pull down window. This allows us to draw a dot at a time in any position. Free hand drawing, circles, and squares will give us most of the shapes we need. FATPIXELS will then allow us to fill in any other shapes. The shading options in the program really add to the detail of his pistol. If you have ever been frustrated by the difficulty of TI Artist, this program will show you a whole new dimension in user friendly drawing.
The main screen contains the ICON menu. These are selected by placing the cursor over the ICON desired and pushing the fire button. The ICONS are pencil, eraser, paint brush, air brush, fill, lines, boxes, rectangles, circles, ovals, and text. These only work when the fire button is held down. The arrows in the ICON menu move the window over to other portions of the drawing area. The patterns on the bottom of the screen can be selected instead of the black default by placing the cursor over the desired one and pushing the fire button. These same patterns are used by the air brush. The effect is like a mist of paint. Before leaving the main menu, we need to look to the top of the screen at the words FILE, EXTRA, and UNDO. UNDO deletes the very last operation performed. FILE and EXTRA give you the pull down menu. Going to this menu has no effect on what you have placed on the screen.
Use the joystick to select any item on this menu, push the fire button, and instructions will appear on the main screen in most cases. MOVE is a powerful tool in this menu. Drawing circles is easy, but getting them in the right place requires MOVE. Put the cursor over MOVE, push the fire button, and read the instructions which appear on the main screen. Go to one corner of the area to be moved, push the fire button, move to the next corner right or left, then expand the box over the area you desire to move, push the fire button, and now you can move the square anywhere on the screen. When you have it where you want it, push the fire button again. When you are close to the top; draw your first line under an object and expand up over the object to select the area to be moved. This prevents accidentally going back to the pull down menu.
CUT and PASTE are two very usefull options. They allow you to cut out part of one drawing and PASTE it where you would like it in another. They also allow you to use fonts on one disk to make your fancy words on another.
MAGNIFY is an option that can be used in many ways. It could be used to enlarge the fancy words or names you made with the CUT and PASTE options. It can be used to enlarge a small image you made with the FATPIXELS option. It can be used over and over to enlarge the same object, but there is a limit to 10,000 pixels. This will show up when you enlarge an object untill part of it disappears. COPY does just what it says and is also limited to 10,000 pixels.
COLOR changes your screen color combinations as you watch. SAVE allows you to save the current drawing area. LOAD allows you to retrieve your drawing or any image saved in the correct format on disk. And PRINT does just that. Now you know everything there is to know about this program so try it and enjoy.

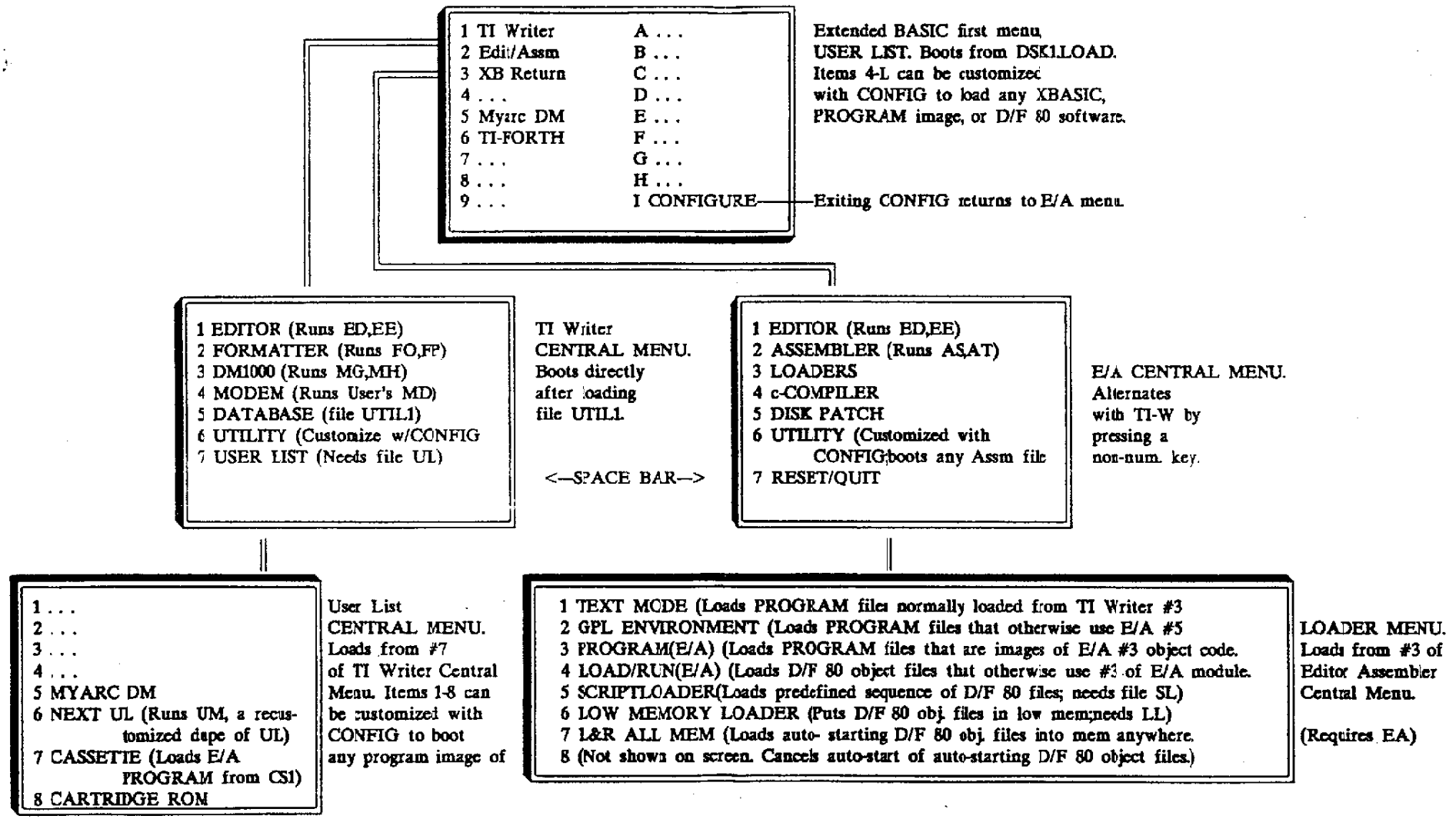
TEST REPORT
DESK TOP PUBLISHER - BY DataBioTics Inc.
For MADHUG by LEE THOMAS

This is a cartridge program currently available thru Triton Products Co. at $59.95. It was used to produce this report.
It loads very quickly and the documentation was easy to understand, tho the quality of the actual booklet left something to be desired. It is a Xerox type copy that was difficult to read in places due to poor print quality. A separate sheet provided several corrections and addendums.
The program is in two major parts, 1st the PICTURE MAKER. This is similar to some other TI art programs. It permits you to draw art using arrow keys or joystick and provides most of the functions found in Joy Paint. You may also produce text in the Picture Maker, (see title box accompanying this article) complete with control over both height and width of characters. There is an easy frame maker to enclose the graphics if you wish.
My major complaint with the program is that you are limited to one graphic per page and it measures no larger than about 1 by 2-1/2 inches, like the accompanying title. You may place the graphic anywhere on the page, even between two columns of text. Another serious fault of this program is that you MUST create your own art. I have tried to load graphics from other programs, but with no success. Realizing that the graphics must be small I even tried to load some very small ones from label programs, etc. Perhaps someone wiser than I?
The second portion of the program is the WORD MAKER. You may write in 1, 2, or 3 columns by a simple menu selection. You may also select word wrap if you wish. The screen shows 5 lines of text as you type away, a block shows your selected picture position by row and column, another indicates if word wrap is activated, still another tells you what text style you have chosen. (The screen shows only normal type but your printer will be commanded to produce a choice of normal, italics, underlined, bold or emphasised print. Condensed print is not available.)
My printer is a TI 99/4 (actually an Epson Mx-80) which can only, of the choices available, produce normal print. Printers for this Desk Top Publisher must be Epson or Epson compatible.
Yet another block on the screen shows your chosen format of 1, 2, or 3 columns, the position you have chosen for the graphic and a cursor which shows your relative position on the page. This is separate from the actual text shown in the 5 lines at the top of the screen which also has it's own cursor.
This program works well and is easy to use, but very limited as to graphics. Multiple row text is certainly a breeze. You may save your work on disk or cassette, but graphics and text must be separate files.
I am somewhat concerned about the illustration on the cover of the documents (which is also re-produced in Triton's catalog). It depicts a full page size graphic followed by a large bar graph and an additional small graphic with text rolling up from a printer. As there is no way graphics of this type can be produced with this program, I feel that this is very mis-leading and may fall within the realm of false advertising. LDT



FUNNELWEB 4.0 MENU FLOW CHART

FCTN-7 (AID) from any of these menus gives a disk directory.



Reformatted by Robert Simms from versions printed in the Lima, Ohio Users Group newsletter.

FUNNELWEB 4.0 CONFIGURE PROGRAM FLOW CHART

1 Continue Normally *(Use the first time CONFIG is run)*
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

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 certain drives for TIW and E/A central menu files. Esp. useful with RAMdisks or multiple floppy drives.

Fixed drive # (TIW) DSK_
(Enter single digit drive number)
Fixed drive # (Ed/As) DSK_
(Enter single digit drive number. This This is the SECONDARY DRIVE number.)

Utility drive default? DSK?.UTIL1
(Enter single digit number for default to be displayed when LF/SF is first used in the Editor.)

Editor printer device *(PIO, etc.)*
Format printer device *(PIO.LF, .CR, etc.)*
Workfile Name Default *(If you enter something here, the name will appear after DSKx. the first time LF or SF is used in Editor after booting FWb. If no name is entered, you may exit FWb, reboot later and usually find the last file name still in the mailbox.)*

Edit Utility Choice #6
Edit Opt #6 filename *(Type in screen display name of an assembly language PROG user file you want to be able to boot from a central menu. Then enter a two character name for this file. Repeat process for the other central menu. These files must be on the same disk as the other files accessed by the displayed TIW or Ed/Assm 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 can be cycled through by pressing zero from most FWb menus. Edit the color combinations or press ENTER to cycle through all ten.*
1 Cycle Colors *(Press 1 repeatedly to see them)*
2 Select Again *(Re-edit colors just entered)*
3 Original Set *(Re-select colors on orig. FWb disk)*
4 Next Screen *(to continue)*

(Options): Do you wish to edit the central menu screen UL before saving UTIL1? (Y/N) No
Y-You get a display of screen and file data for the first 8 items in the central menu User List. Press N(ext) and B(ack) to cycle through these 8 items. Pres E(dit) to enter or change data of the displayed UL item. Editing screen prompts are identical to those shown below for XB User List editing beginning with Edit file name for loader. When finished with all editing, press S(ave).

Save Data to DSKx.UL *(Enter a drive number. If CONFIGuring more than one User List, change UL to UM, UN, etc. If you wish to CONFIGure more user lists, answer Y to option to again edit central menu UL. Otherwise, enter N to continue.*

Do you wish to edit the XB LOAD program UList before saving UTIL1? (Y/N)
Yes: *No*
(Follow screen prompt and load LOAD. You then see the XB User first menu with cursor on choice 4.
Choices 4 through 1 must be cycled through before leaving XB UL configuring routine. Type in desired menu display for each item, then ENTER. Or repeatedly press ENTER for defaults listed.
Not finished with Cycle.....Finished with cycle

1 XBasic Program (For XBasic user file)
2 Assembly Loaders *(For assembly user file)*
3 Return to XBasic *(Causes this XB UL item, when pressed, to return immediately to XBasic, as does UL item 3. After editing this item, you are returned to the XB first menu UL display to edit next UL item.)*
4 Leave Unaltered *(Returns to the XB first menu UL to edit the next UL item.*

1 Memory Image Program *(Assembly language file that lists as PROGRAM in a disk directory)*
2 Tagged Object Code *(A single D/F80 assembly file)*
3 Script Load File *(A sequence of D/F80 files)*

1 No special conditions *(Usually chosen)*
2 Load low memory first
3 Autostart - E/A LFMH
4 Intercept autostart

Select FWb File Name *(Press 1 or 2 for the correct name of the reboot file. FWb originally comes configured as UTIL1.)*
1 Util1
2 RELOAD

Save File to Drive #? *(Select a single digit and/or press ENTER)*
Press 1 to save configuration *(You may redo your configuration by pressing 2 or 3, or return to FWb with 4.)*
Configuration saved *(At this point, program returns to the first CONFIG menu at the top of the flow chart.)*

Revised by Robert Simms, 4/1/88

1 Text Mode (TIW) *(Usually loads from 3 of TIW module)*
2 GFL Environment *(Usual choice for E/A5 files)*
3 E/A Program file

Boot tracking off? (Y/N) *(Y-prevents the boot drive number from overwriting the drive number specified as part of the filename.)*
Secondary Disk? (Y/N) *(This is the drive specified near the beginning of CONFIG for the E/A central menu if boot tracking was turned off. 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 (the secondary drive) will be displayed.*

Have you ever wanted to do this but didn't know how?

THE PRINTER'S APPRENTICE

Part 3 By

Rick Felzien
West Jax 99'ers

This is pretty neat, or so I think.

Before we get into how to do this page with the Printer's Apprentice, I would like to run through how I set up the Artist fonts to do the rotated and upside down printing.

The method that I used was to save the script font(font 19), and the small font(font 44) as slide files in Artist. You may have to use as many as three slide files to save a font as there are only so many slides available in a file. Doing this will allow you to rotate the slides as desired and print them to the screen.

This is a tedious process, but I feel that the results are well worth the effort. I have given our librarian the slide files for the fonts for access by all.

The first thing that we need to do is set all this up for TPA to be able to process. First we set up our header with Artist and save it as a screen or picture. For best results when setting up files for TPA and processing them, is to use a blank initialixed disk.

Now that this is done, you are through with Artist. Before going into TPA, let's create our text file with TI-Writer. We must set our right margin to allow for the fact that the TPA package processes only 40 col. files. I find 38 a convenient setting as this allows for a margin in the center of the page. You must also allow for the height and width of any graphics that you intend to use. For example, in my mailbox column I only use 46 rows in the text that will be below the picture. This comes out very necely. If there is no picture, then 56 rows is a good number to use.

The Printers Apprentice is a very powerful

One important note at this point is that you should save your text files with PF(prinfile) and in fixed format, as TPA uses fixed format files. This is done by selecting PF and then typing F DSK2.Filename.

After loading the TPA files, select the picture editor to convert the picture saved from Artist to fixed format. Select CTRL(8) for Load/Save menu. Next F for filename and dype the name of the picture being sure to include (_P), then L for Load. This should load your picture. Now select P for Printer options and set the defaults. for filename use a new name and add (_X) so that you can readily tell that it is an external file. Then set the density and style, this is a matter of choice according to the font and size that you want to use for your text. If at any time you want a hard copy, use PIO.CR for the filename. Be sure to select P or G for your printer. To save your file to disk use DSK2.Filename_X and use E for External and this will write the file to disk. To get a hard copy use G for Go.

Be sure to set the marker at the upper left of the portion of the picture and the cursor at the lower right corner before trying to save the picture.

After loading the formatter select V for variables and enter the defaults for your printer and so on. I use G for my Gemini and for density I use D and 200 for width on the text files.

package for printing a very nice page.

I usually save my text files as TXT1 TXT2 etc. The reason will become clear as we go along.

After setting up variables and setting whether you want auto-hyphen, you can now select your files. You should also copy the font that you want to use to the blank disk. At the bottom of the screen you will see:

```
E Printer  PIO.CR
B Txtfile  DSK1.TEXT
  Fntfile  DSK1.TYPER
```

Hit E and Printer will become:

```
P Extrnfile DSK1.EXTERNFILE
```

Change to DSK2.TEXT and change DSK1.TEXT to DSK2.TXT1 and Fntfile to DSK2. Fontfile name according to the font you want to use. Now hit G for Go and the formatter will crteate a new disk file for use with the scheduler.

It should be noted at this point that the formatter has a Jotter which is a text editor for typing in text files using 40 col. format and saves the files in the format compatable with the scheduler. A note here that the B selection will allow you to print what is in the buffer, such as a text file created by the Jotter.

Now that we have our picture and text files set up, we can load the Scheduler and prepare for printing our page.

The Scheduler is the program of the TPA set that is used to actually set up your page as to where each pic. or file is actually printed.

Upon loading the Scheduler you will see the following:

```
Go ModifyS ReadS WriteS ClearS
Directory eXit
```

These are pretty well self explanatory. ClearS clears the schedule in the buffer and WriteS writes your file to the disk etc.

Upon selecting M for ModifyS the following will be on the screen:

```
1 Filename:

  Row:    0  0
  Col:    0  0
 *Reps:   0

  Please Key Choice

  Edit Up Down Insert Active
  Print Size Blockmove Zap eXit
```

Here again the menu is self-explanitory. Print prints your schedule and Zap clears it from the buffer.

First enter E for Edit and the cursor will be below Filename. Enter the name of your picture. When you hit enter the cursor will move to the row for Row. These defaults set the starting row and column for your file. The *Reps: is the number of times you want your file to be printed on the page. Go prints what you have scheduled to the printer for a check of whether you set the right parameters.

Down and Up set us the the next or previous record. After setting up all the files we can save our schedule and run it at will.

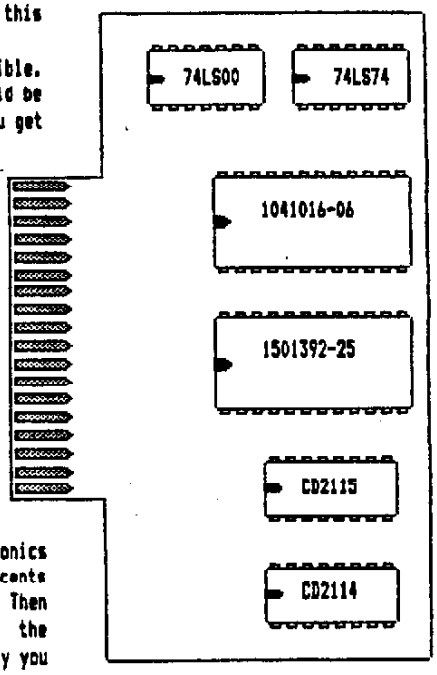
As you can see the TPA program set is not as hard to use as one might think upon looking at the documentation that is furnished.

Marty's Mind Dump — NorthCoast 99er's 4/10/88

HARDWARE TIPS

The Extended Basic Cartidges If you have an Extended Basic Cartridge that has gone bad for some reason, this info may help. I killed my Ex Basic recently. While soldering some new "pieces parts" on my console main board, I crossed some wires. "I'm always in a hurry." When I turned the power on I already had the Ex Basic in the Grom Port. "Mistake!!!." I fed some current directly back into the Cartridge and zapped it. After a sEvere anxiety attack, and real depression, I thought, "HEy, this is the beginning of another project." Well, the project has been about two months in the making and I'm ready to let you all know the results. Extended Basic Cartridges are fixable and the parts may not cost a lot, depending on how bad you crashed it and if you can solder. One other consideration is this. If you have to replace all the chips in the cartridge it will cost around thirty dollars. You can probably pick up a used cartridge for around twenty. Since I'm out to put some mileage on my new soldering iron these things never bothered me. So, lets go. NOTE: You're doing this at your own risk. If you have any problems arising from this article, I don't want to hear about it.

Try to open the cartridge as neatly as possible. You can glue it back together later, but it would be better if the original snaps worked. When you get the PC board out you'll see eight chips. There are two piggyback chips at one end of the board you won't see unless you have to unsolder them. The next thing to do is check the PC board and every solder joint to make sure that all the connections are good. If you find a cracked line or a poorly soldered leg on one of the chips, repairing it may solve all your problems. If we haven't accidently found the problem so far, we'll move on to the heavier stuff. There should be a 74LS00 and a 74LS74 at one end of the board. If you are lucky, replacing these will put you back in business. Just de-solder them, pick up two new ones at your local electronics supply, (they should cost less than fifty cents each), and solder the new chips back in. Then without bothering with the cartridge case, plug the board back into the console and see how lucky you are. In my case this was no help at all. The next step in this project is to replace the two large chips on the board. These are ROM chips and appear to be quick to fail in any adverse situation (static charge, etc.). The chip closest to the 74LS74 is listed as ROM,EXT.BASIC part number 1041016-0006, and the one next to it is ROM,EXT.BASIC part number 1501392-0025. Their prices are $6.80 and $5.60 respectively. These parts and others can be ordered from TI by calling (806)741-2265 or (806)741-2268. These are not toll free numbers. Replacing these two chips fixed my problem, and after doing a small amount of investigation, plus analyzing my own situation, it is my uneducated guess that replacing these four chips will fix the cartridge in at least 80% of the cases. I put a substantial charge of current back through the cartridge and did not hurt the piggyback GROM chips at the other end of the board. So, replace the two large ROM chips and see if the cartridge works. I really hope it worked because we are now passing into the area where it would have been cheaper to pick up a good used Ex-Basic for $20.00. If it still doesn't work, it's time to replace the GROMS. They are available from TI at the same phone number and they sell for $3.60 each. The way they are tied together if one has been damaged they are probably all damaged. Toward the ROM, the top GROM is 2115, this is TI GROM,EXT.BASIC 1015960-3115. The one it is piggybacked over is 2122 (TI GROM,EXT.BASIC 1015960-1122). The top GROM next to it is 2114 (TI GROM,EXT.BASIC 1015960-1114), and the chip it is piggybacking is 2113 (TI GROM,EXT.BASIC 1015960-1113). If you are replacing the GROM chips, I recommend you do them all at once. If you try to add in one new chip at a time to isolate the problem, the soldering and desoldering could damage your new chips and you'll never find the problem. The resistor, and capacitors you see scattered around the printed circuit board will practically never fail, so don't worry about replacing that stuff. Here are some tips for electronic work. Use a low power soldering iron (15 Watt). Hold chips or a PC Board by the edges, like a photograph. Try to not put your fingerprints all over the circuits or chip legs. Do not wear clothing that has caused you to get a static shock from the refrigerator door in the past. There is a notch or mark at one end of a chip to designate pin one, or the chip direction. Be sure you do not put a chip in backwards. Whenever you remove chips from a PC board use a vacuum type desoldering tool to remove all the solder from around the chip legs. "There have been times when I desoldered a leg, resoldered it, and then desoldered it again, in order to get a clean desolder job." Use long-nose pliers to wiggle and loosen every chip leg. If the legs are not all free and you pry the chip off the board, you will damage the board. The chip should be loose enough to almost pick it off with your fingers. When soldering any electronic part, do not heat the part with your iron, and feed in the solder, this will over heat the chips. You should keep your iron clean. Hold the iron in one hand and the solder roll in the other, with the item to be soldered on the table in front of you. Putting the end of the solder roll against the hot iron, accumulate a very small drop of molten solder on the end of the iron (don't do this directly over your project, place the iron against the part to be soldered for one or two seconds or until you see the molten solder flow around the wires or parts to be soldered. Do not hold the iron against the parts you are soldering any longer than necessary, and do not reheat a chip leg over and over. If you must replace the piggyback GROM chips, squeeze the legs of the top chip together until they fit tightly over the bottom chip, and then solder the chips together first. At that point solder the pair of chips to the board.



Have fun. Marty.