



COVER DESIGNED BY CARMEN  
 USING: A WAXPAPER DIGITALIZER  
 TI-ARTIST  
 JOYPAINT/PAL

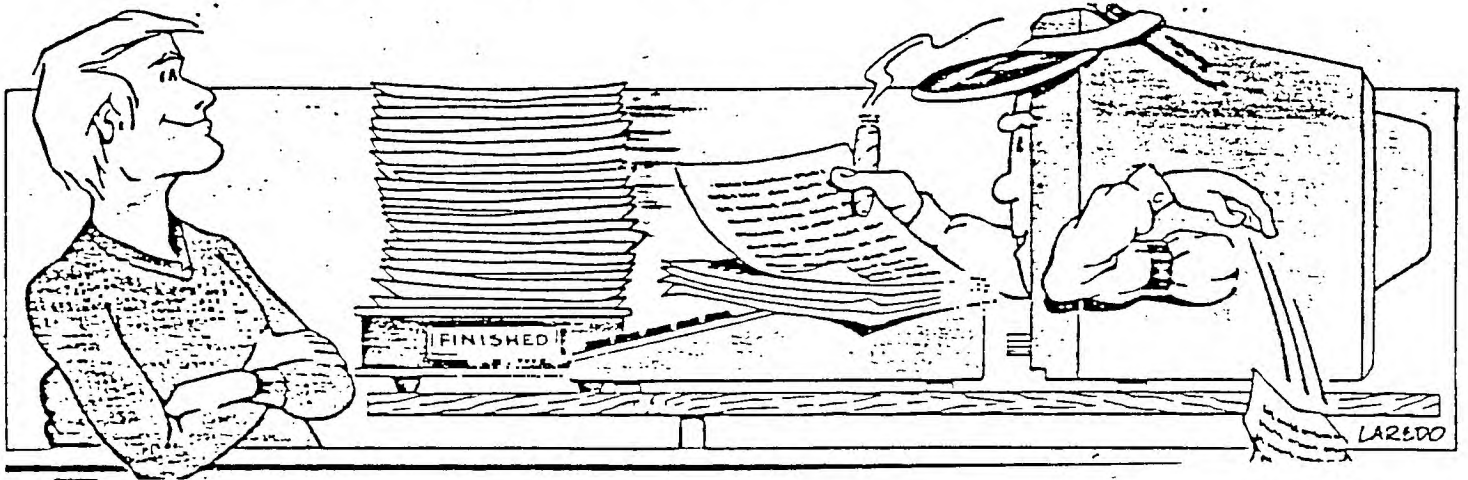
THE WOODCHUCK

Cartoonish vertical text, possibly reading 'Cartoon'.



Getcha YOU  
 THOUGHT a  
 THEETBIRD

# EDITOR BIT

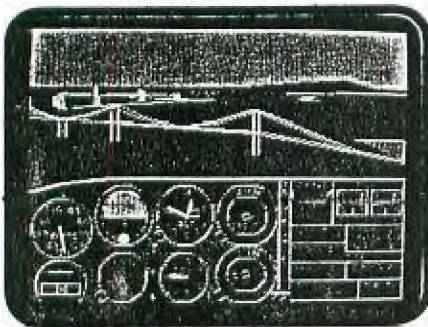


This article itself is being written on an IBM clone with the software package Newsroom Pro. I am just borrowing the system. To my working knowledge it seems that this route for our orphan to follow, would be and interesting, and an expansion, that I think TI did not think was possible, when they first came out with the TI 99/4a. I for one will give this new IBM a very thorough scrutinization and if I can swing the financial end I may take the jump.



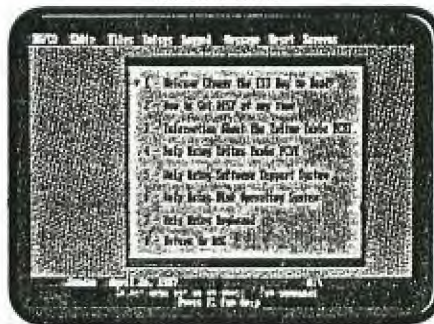
## COMPARE THE DIFFERENCE THE TURBO XT MAKES...

FLIGHT SIMULATOR



TRITON TURBO XT

MAIN MENU

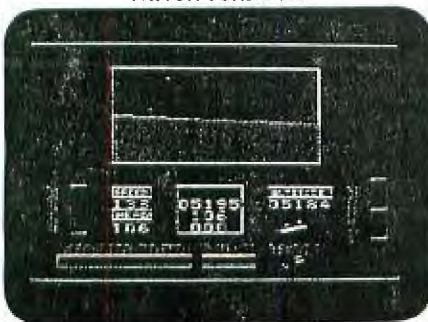


TRITON TURBO XT

WORD PROCESSING



TRITON TURBO XT (80-column format)



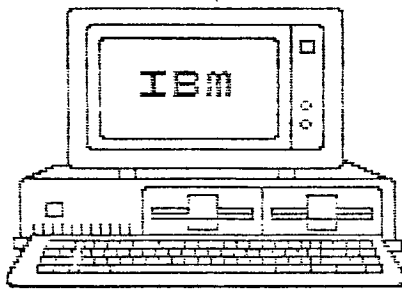
TI-99/4A



TI-99/4A



TI-99/4A (40-column format)



# JUST PLUG IT IN IT'S READY TO GO

This is the headline that triton of San Francisco, offers for the new Turbo XT IBM. Which is suppose to give our little orphan the power of the IBM.

To begin this article, I would like to say that I do not own this new system and have never worked with the system. I have, however, ran an IBM XT, and a numerous number of clones.

A little technical info would be a great way to start into this article. I will quote from the triton brochure and a news letter by the Edmonton 99 ers.

IBM compatibility comes in two parts, a turbo xt and a small bridge box that connects to the side I/O port on your 99/4a console.

The Turbo XT is an 8 mhz/4.77 mhz (switchable) mother board, power supply, XT style case, CGA color graphics card (both rgb and composite), a floppy disk controller, one half high ds/dd disk drive, parallel port and 256k of ram on the mother board. The mother board has sockets for up to 640k of ram. There are 8 expansion slots, two of which are used by the CGA card and the floppy disk controller.

The Bridge Box has inputs for 4a video, xt video in, outputs for xt keyboards and monitor out. It also contains the software for keyboard switching between 4a mode and xt mode and the software to convert the 4a key strokes into xt keystrokes. It also has a pass through so you can keep your P-box or other peripherals hooked up.

Mode switching from xt to 4a is done by pressing Fctn Ctrl Enter. The only items shared by the two systems are the 4a keyboard and your current monitor or tv.

By not sharing the disk drives it is possible to do concurrent processing on the xt. Example: go into xt mode, start up your communications software, log on to a BBS and start a down load. Now you can switch modes backsto the 4a and do whatever you would like in 4a mode while the xt is still down loading from the BBS.

The compatibility works on many different system configurations, and since the turbo xt is an IBM Clone you get full compatibility with both IBM software and IBM hardware. Which will allow you to add any IBM cards that you would like to upgrade your system with.

This system is being marketed by Triton Products Company in San Francisco, CA. They are also handling the production of the Bridge Box. The triton company offers a 30 day money back guarantee, with a three year extended warranty available. The cost runs around 499.00 us dollars, plus 19.90 us for shipping and handling. The delivery is schedule to start on march 1st and Edmonton says that they have already been running with this new and what they call major expansion to the TI. For more info on the Turbo XT an 800 number is available to anyone who wants to go the IBM route. 800-227-6900 monday to friday from 8am to 6pm and 9am to 4pm on saturday.

So much for the technical end of the can and cando as the article seems to portray. I have seen and worked with some very sophisticated IBM programs to mention a couple, Auto-cab and framework. It has power that seems to stagger the imagination. The only thing that one has to worry about is the staggering price tag that accompanies the software. They range from the meager prices that we, the user of the 4a, have grown accustom to paying, to the 1000's of dollars.

As the photos display the screens that are available to you are very impressive, especially the 80 column on your present monitor or even your tv screen.

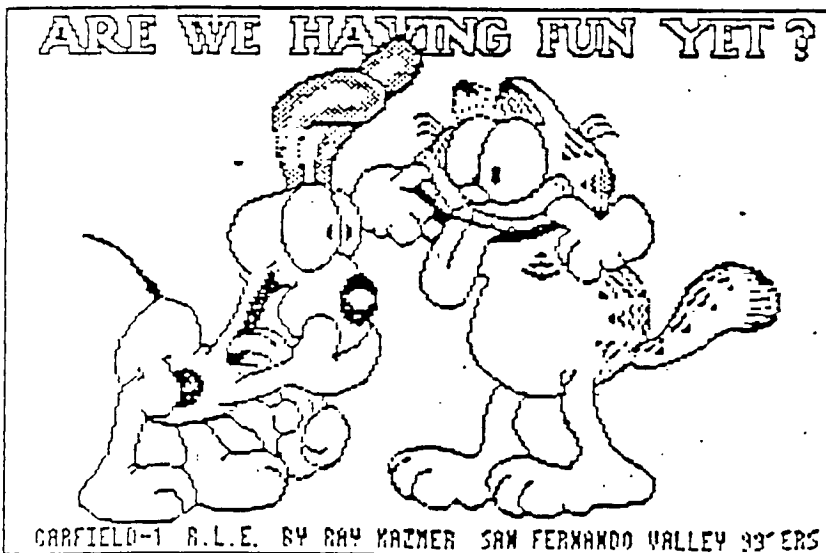
Triton is offering some software packages for the use with the turbo xt. They even have a Dis/Var file convert to MS-Dos. The thing that is especially appealing to me is the fact that we, the user, can again go into local retailers, and purchase software off the rack, so to speak.

R.L.E. and all those other bottled pictures that seem to appear on disk, ready to be printed by our TI's seem to just come out of thin air. I know someone must be creating them, and spending long hours doing so. I've tried drawing something with TI Artist and Joy Paint and have come up with an end result, that if they had not put the circles icon in TI Artist I couldn't even manage a happy face.

The real force behind the cover page of these news letters, is my wife. Who is externally more patient and is much more talented in the art of illustration than I am. However I figured that if she could draw something on paper, I might be able to copy it on to my screen as an R.L.E.

The idea was tossed around but nothing came of it. My round circle still looked like a square box. Finally I read an article by Ray Kazmer from SFV 99er, and he gave me an idea. He suggested waxpaper tracing taped to your monitor screen, then in TI-Artist draw mode place pixels underneath the tracing, to create an outline of what it was that you had traced. You require a keen eye and again, a large amount of patience to achieve and accurately outline your masterpiece. The more accurate that you can come to outlining your tracing, the less corrections you will have to make to complete your pictures.

Using the magnifier mode in TI-Artist, will allow you to put the detailed touch on your finished project. Also by using the enlarger/reducer modes of JoyPaint, you can make full page prints of post cards, or TI-Artist instances from magazine ads. Which ever way you decide to go, have fun with this very inexpensive digitizer, and if you draw a Mona Lisa, or a Last Supper, how about sharing it with your editor who will give it a number one rating and place it on the front cover of our next news letter. Mr. Kazmer also requested that if anybody digitalizes a playboy bunny that they pass on a copy for him to view. The pictures following are Ray Kazmer sketch and completed picture of Garfield.



The following are a couple of short programs dug up from the archives of news letters. These few programs are just little helpfull hint for programers to try, and for us a little inept in programming, to run and see what happens.

```
100 CALL CLEAR :: CALL INIT :: CALL
LOAD(-31788,232):: PRINT "    MULTICOLOR PATTERNS
" :: PRINT "    #####" :: PRINT : :
: : : : : : : : PRINT "    PRESS ANY KEY"
```

```
110 CALL KEY(0,K,S):: IF S=0 THEN 110 ELSE CALL
SCREEN(2)
```

```
120 CALL CLEAR :: FOR T=1 TO 7 :: FOR I=34 TO 126
:: PRINT CHR$(I);: NEXT I :: NEXT T
```

```
130 FOR I=1 TO 2 :: FOR X=1 TO 12 :: CALL
HCHAR(X,1,X+33,32):: CALL HCHAR(25-X,1,X+33,32)::
NEXT X
```

```
140 FOR X=1 TO 16 :: CALL VCHAR(1,X,X+33,24)::
CALL VCHAR(1,33-X,X+33,24):: NEXT X :: NEXT I
```

```
150 FOR D=34 TO 37 :: FOR X=1 TO 12 :: CALL
HCHAR(X,1,D,32):: CALL HCHAR(25-X,1,D,32):: NEXT X
:: NEXT D
```

```
160 CALL CLEAR :: FOR D=1 TO 25 :: CALL
HCHAR(1+INT(24*RND),1+INT(32*RND),33+INT(92*RND))::
NEXT D
```

```
170 FOR I=34 TO 126 :: CALL VCHAR(1,1,I,768)::
NEXT I :: GOTO 120
```

```
180 END
```

```
1 CALL CHAR(40,RPT$("3C42A59999A5423C",4)):: CALL CLEAR :: FOR A=1 TO
28 :: CALL MAGNIFY(A/9+1):: RANDOMIZE :: X=200*RND-99 :: CALL
SPRITE(#A,43,A/2,99,99,X,A*3-42):: NEXT A :: RUN
```

```
1 FOR I=33 TO 90 :: PRINT CHR$(I);: B$="" :: CALL CHARPAT(I,A$):: FOR
J=1 TO 16 STEP 2 :: B$=B$SEG$(A$,16-J,2):: NEXT J :: CALL CHAR(I,B$)::
NEXT I :: FOR I=1 TO 500 :: NEXT I :: RUN
```

```
1 FOR R=1 TO 5 :: FOR X=1 TO 30 :: CALL SOUND(-1000,262,X):: CALL
SOUND(-1000,197,X):: CALL SOUND(-1000,111,X):: NEXT X :: NEXT R
```

Some helpfull hint in writing one liner courtesy of Andrew and Chris Kirmse (HUG)

- Use DISPLAY AT ERASE ALL instead of CALL CLEAR:: DISPLAY AT when possible
- Always use a one-digit line number
- If you want the program to loop, use RUN instead of GOTO
- Graphics programs, especially sprites, usually turn out the best
- Try to reuse variables, such as A in the first examples is used for the sprite speed and magnify to save space.

Happy programming!!!

| MANUFACTURER | MODEL    | HIGH  | SIDE | TI   | BYTES | COMMENTS                           |
|--------------|----------|-------|------|------|-------|------------------------------------|
|              |          |       | OENS |      |       |                                    |
| ICANON       | IMDD211  | 1 1/2 | DSDD | 148  | 1360K | FULL POWER USE ONE ONLY IN PEB     |
| IC.D.C.      | 19409    |       | FULL | DSDD | 148   | 1360K FULL POWER ONE FITS IN PEB   |
| IC.D.C.      | 19428    | 1 1/2 | DSDD | 148  | 1360K | FULL POWER USE ONE ONLY IN PEB     |
| EPSON        | 1S0521   | 1 1/2 | DSDD | 148  | 1360K | 2 OK IN PEB                        |
| HITACHI      | 1HFD505B | 1 1/2 | DSDD | 148  | 1360K | 2 OK IN PEB                        |
| IMATSUSHITA  | 1JAS51   | 1 1/2 | DSDD | 148  | 1360K | FULL POWER USE ONE ONLY IN PEB     |
| IMATSUSHITA  | 1JAS512N | 1 1/2 | DSDD | 148  | 1360K | FULL POWER USE ONE ONLY IN PEB     |
| IMICROPOLIS  | 1115V    |       | FULL | DSQQ | 196   | 1720K OF NO USE WITH TI            |
| IMITSUBISHI  | 1M4851   | 1 1/2 | DSDD | 148  | 1360K | 2 OK IN PEB                        |
| IMITSUBISHI  | 1M4853   | 1 1/2 | DSQQ | 196  | 1720K | OF NO USE WITH TI                  |
| IMPI         | 1B51     |       | FULL | SSDD | 148   | 190K FULL POWER SOLD IN PEB        |
| IMPI         | 1B52     |       | FULL | DSDD | 148   | 1360K FULL POWER ONE IN PEB        |
| IMPI         | 1B501C   | 1 1/2 | DSQQ | 148  | 1360K | FULL POWER ONE IN PEB              |
| IMPI         | 1B502B   | 1 1/2 | DSDD | 148  | 1360K | FULL POWER ONE IN PEB              |
| INATIONAL    | 1JAS512N | 1 1/2 | DSDD | 148  | 1360K | FULL POWER ONE IN PEB              |
| PANASONIC    | 1JAS512N | 1 1/2 | DSDD | 148  | 1360K | FULL POWER ONE IN PEB              |
| IQUETRACK    | 1142     | 1 1/2 | DSDD | 148  | 1360K | FULL POWER ONE IN PEB              |
| IQUETRACK    | 1142LX   | 1 1/2 | DSDD | 148  | 1360K | FULL POWER ONE IN PEB              |
| IQUETRACK    | 1542     |       | FULL | DSDD | 148   | 1360K FULL POWER ONE IN PEB        |
| IREMEX       | 1RFD480  | 12/3  | DSDD | 148  | 1360K | FULL POWER ONE IN PEB              |
| ISANYO       | 1FDAS200 | 1 1/2 | DSDD | 148  | 1360K | MADE FOR IBM PCS                   |
| ISANYO       | 1SM548D  | 1 1/2 | DSDD | 148  | 1360K | 2 OK IN PEB                        |
| ISHUGART     | 1SA-400L |       | FULL | SSDD | 148   | 190K FULL POWER SOLD IN PEB        |
| ISHUGART     | 1SA-405L |       | FULL | DSDD | 148   | 1360K FULL POWER ONE IN PEB        |
| ISHUGART     | 1SA455-2 | 1 1/2 | DSDD | 148  | 1360K | 2 OK IN PEB                        |
| ISHUGART     | 1SA465   | 1 1/2 | DSQQ | 196  | 1720K | OF NO USE IN TI FOR IBM AT         |
| ISHUGART     | 1SA475   | 1 1/2 | DSQQ | 196  | 11.6M | OF NO USE IN TI FOR IBM AT         |
| ISIEMENS     | 1FDD1005 |       | FULL | SSDD | 148   | 190K SOLD IN PEB GERMAN MADE       |
| ITANDON      | 1TMS0-1  | 1 1/2 | SSDD | 148  | 190K  | ONE ONLY IN PEB FULL POWER         |
| ITANDON      | 1TMS5-1  | 1 1/2 | SSDD | 148  | 190K  | ONE ONLY IN PEB FULL POWER         |
| ITANDON      | 1TMS5-2  | 1 1/2 | DSDD | 148  | 1360K | ONE ONLY IN PEB FULL POWER         |
| ITANDON      | 1TMS5-4  | 1 1/2 | DSQQ | 196  | 1720K | OF NO USE IN TI                    |
| ITANDON      | 1TM65-2L | 1 1/2 | DSQQ | 196  | 11.6M | OF NO USE IN TI MADE FOR IBM AT    |
| ITANDON      | 1TM100-1 |       | FULL | SSDD | 148   | 1180K ONE ONLY IN PEB FULL POWER   |
| ITANDON      | 1TM100-2 |       | FULL | DSDD | 148   | 1380K ONE ONLY IN PEB FULL POWER   |
| ITANDON      | 1TM100-4 |       | FULL | DSQQ | 148   | 1720K OF NO USE IN TI MADE FOR IBM |
| ITEAC        | 1FD-55A  | 1 1/2 | SSDD | 148  | 1180K | 2 OK IN PEB                        |
| ITEAC        | 1FD-55B  | 1 1/2 | DSDD | 148  | 1360K | 2 OK IN PEB                        |
| ITEAC        | 1FD-55BU | 1 1/2 | DSDD | 148  | 1360K | OF NO USE TO TI MADE FOR IBM'S     |
| ITEAC        | 1FD-55E  | 1 1/2 | SSQQ | 196  | 1500K | OF NO USE TO TI                    |
| ITEAC        | 1FD-55F  | 1 1/2 | DSQQ | 196  | 1.1M  | OF NO USE TO TI                    |
| ITEAC        | 1FD-55GF | 1 1/2 | DSQQ | 196  | 11.2M | OF NO USE TO TI MADE FOR IBM AT    |
| ITEC         | 1FB503   | 1 1/2 | SSDD | 148  | 190K  | 2 OK IN PEB                        |
| ITOSHIBA     | 1S401    |       | FULL | SSDD | 148   | 190K ONE IN PEB FULL POWER         |
| ITOSHIBA     | 1ND-04D  | 1 1/2 | DSDD | 148  | 1360K | 2 OK IN PEB                        |
| ITOSHIBA     | 1ND-040T | 1 1/2 | DSDD | 148  | 1360K | MADE FOR IBMS                      |
| IY.E.DATA    | 1YDS80   | 1 1/2 | DSQQ | 196  | 1720K | OF NO USE TO TI                    |
| MITSUBISHI   | MT501A   | 1/2   | DSDD | 40   | 360K  | 1/2 POWER 2 OK IN PEB              |

GLEN FREDRICKS

Save this article from the Sheboygan area users group for later reference if you are in the market for a disk drive.

## SOME HELPFUL INFORMATION FOR YOUR TI-TOY

*Steve Lisonbee - SLAVE UG Salt Lake City, UT and Southwest 99ers Tucson, AZ*

The following is a collection of items that have been passed around over the last couple of years that help make life a little better for the TI user. I have collected them all together for easy reference.

Have you been on-line to a BBS when someone picks up the extension phone and leaves you with nothing but garbage? Here's an idea that might help. All you need is a switch, a long piece of 2 conductor wire, two LED's (Radio Shack #270-036 (blinking led)), two AA batteries, battery holder and a 100 OHM resistor. Run the wire from the extension phone to the computer. Solder the wire at the phone end to one of the LED's (observe polarity flat side is negative) and the wire at the computer end to the other LED with the 100 OHM resistor in series to help balance the current load. Hook the wire to the battery through the switch. The LED by the computer should have the 100 ohm resistor in series, the remote LED should be hooked directly to the battery through the switch. If the LEDs don't light reverse the battery leads. Now when you call the BBS just turn on the switch and the blinking red light will tell everybody not to pick up the phone, at least not if they know what is good for them. This comes from Steve Lisonbee of the Salt Lake City SLAVES 99er user group.

How about the old computer lock up hassle? Dirty contacts are the culprit on this one. Just about everybody cleans the external contacts, but they may still have problems. The culprit lies inside the console with the cartridge L-connector. What one needs to do is open up the console case, undo the screws (2) for the power supply, undo the screws (3) that hold the motherboard in place, disconnect the power supply and the keyboard connections and remove the motherboard (do not remove the metal shielding), and remove the cartridge connector. Looking at the male part of the connector you will notice some indentations and black corrosion on the soldered area of the contacts. Take a piece of nylon scrub pad and buff those contacts on both sides until the indentations are gone and the contacts are smooth. Also do this to the board edge connectors for the I/O port. It is a good idea to spray the female part of the cartridge connector with contact cleaner while it is out. Now reassemble everything in reverse order (be patient and careful). You will now find that hardware lockups and erratic behavior will be a thing of the past. This comes from Richard K. Stevens and was published in the March 1986 NATIONAL NINETY-NINER.

Do you find that the cursor in DM1000 is too fast for you to control easily? It can be slowed down. Put MGR1 on a newly initialized disk and then use a sector editor to do some changing. Load up sector 36, or do a string search for the string 8000A0FF. The 00A0 is what you want to change. The allowable range is 00A0 to 07D0. Try 010C. Write the changed sector back to the disk and run the program to see how it works for you. This is from Louis Guion of the NET 99ers and was published in the Oct. 1985 MICROpendium.

About those noisy P-BOX fans. Radio Shack has one (#273-242) for \$15 that is supposed to be a quite fan but I have been told that it isn't all that quite. You could also go to just about any electronics store and buy, or order, a 3 inch quite, or whisper, fan. Make sure you know what the noise level is, it should be less than 30 DB. Some companies have fans as quite as 24 DB. I repeat; BE SURE THAT YOU ARE GETTING A FAN WITH A VERY LOW NOISE LEVEL. Some people have told me that they bought a fan and found out AFTER it was installed that it was just as noisy as the original.