WEST PENN 99 ERS

VOLUME 1 NUMBER 11 OCTOBER 1997

Funnelweb's DISKREVIEW

by John Bulakowski

-From Nutmeg TI-99er's

Version 4.2 of Funnelweb has a useful utility program called DISKREVIEW. It is a combination disk directory,file review,and program loader. With this program you can:

* Call up/print a directory of a disk in any drive
* Protect/unprotect files
* Delete/rename/view files
* Load and run any E/A or EX-Basic language programes

The last feature is particularly nify because you don't have to know anything about program structure that you are tring to run. All you do is place the cursor next to the program that has been listed by the directory feature, press R(for run), Press FCTN 6(proc'd), and then a number(usually 1 to 3 in the case of assembly programs) of what the DISKREVIEW suggest as appropriate. That's all. The selected program will then load and run. No more guesses as to tring E/A #1,2,oor 3. No more wondering what an "object"file is, or its name. I have gotten into the habit of running most of my programs through DISKREVIEW. It's also quick to load and run, which makes a real competitor to other XB loaders. This, by the way, leads me to the only problem that I have found to date using this.

It appears that this program 'seeds' the randomize statement in EB programs with the same number each time the EB program is loaded and run. To give a practical example of what this means to the user, letl's run an XB program that would generate a random sequence of five, one digit numbers. The following is such a program:

```
1 OPEN #1:"PIO" :: RANDOMIZE :: FOR I=1 TO 5 :: NUM=INT(RND*9) :: PRINT #1:NUMB, :: NEXT I :: CLOSE #1::END
```

If this program was loaded and run through DISKREVIEW it produces the following sequence on my computer: 3,5,1,8,4. If it were loaded and run again through DISKREVIEW, the same exact sequence of numbers would be generated in lieu of the desired effect, namely a different set of numbers. By following this through, any XB program that utilizes a random number generator will always start the same each time it is loaded and run through DISKREVIEW. In the case, say, of a card game, this dooms one into playing the same hands every time. There are a couple of ways out of this problum. One is to alter the DISKREVIEW program.

CONTINUED

PAGE 4

WEST PENN 99'ERS CLUB INFO

Next Meeting Date: October 21, 1997

Meeting Location: Penns Woods Civic Association

Just off Route 30

N. Huntingdon, Pa

Time of Meeting: 7: P.M.

GENERAL ITINERARY OF OUR CLUB'S MEETING

6:45 P.M.	Doors Open
7:00 P.M.	Genrral Meeting
7:45 P.M.	Demos and New Info
8:45 P.M.	Questions and Answers
9:30 P.M.	One on One Help
10:00 P.M.	Socializing
10:00 P.M.	Doors Close

MEETING HIGHLIGHTS FOR THIS MONTH

CARTRIDGE DEMO'S.....Demo by Paul Brock

PARSEC.....Demo by Paul Brock

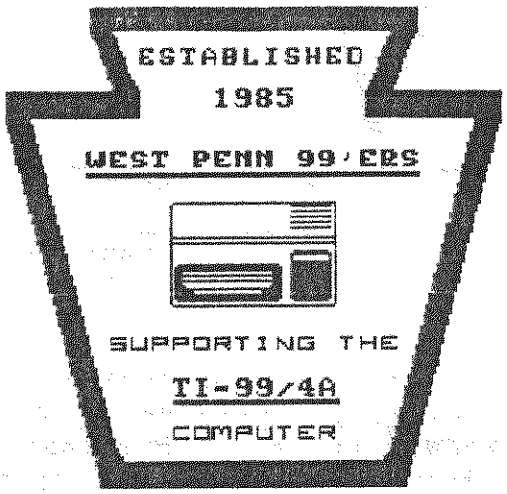
BEYOND PARSEC.....Demo by Paul Brock

Help with C 99.....Demo Norm Rokke

Open Intrest.....Demo by Anyone

LIST OF WEST PENN OFFICERS FOR 1997

President:	Paul Brock	412-478-2754
Vice-President:	Norm Rokke	614-264-6442
Treasurer:	Ed Mandich	412-824-5566
Recording Secretary:	Paul Brock	412-478-2754
Corresponding Secretary:	Paul Brock	412-478-2754
Librarian:	Mickey Cendroski	412-265-5201
Newsletter Editor:	Paul Brock	412-478-2754
Assistant Editor:	Paul Brock	412-478-2754



The West Penn 99'ers Users Group is a Non-Profit organization, dedicated to encouraging the continued use of the TI-99/4A home computer.

Our Membership Fee is:

* $15.00 per year for an INDIVIDUAL / FAMILY membership.
* $10.00 per year for a NEWSLETTER ONLY membership

Those having Full memberships are entitled to the many extra benefits our club has to offer.

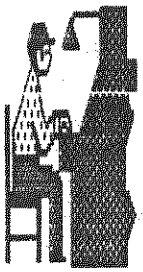
Some of those benefits are:

* Getting to meet some of the nicest people.
* Demos of the latest TI-99/4A software.
* Free copying of our West Penn 99'ers Disk Library.
* Up date of T.I. news,Local,National,International.
* One on one help / Problem solving.
* Participation in our Module Lending Library.
* Participation in our Video Lending Library.
* Ribbon re-inking- for just $1.00 per ribbon.
* Various Computer supplies - at a substantial savings.
* Ability to trade or sell computer equiptment,or electronics.
* Help on getting equiptment fixed.

We meet the third Tuesday of each month at the PENNS WOODS CIVIC ASSOCIATION in North Huntingdon,PA. at 7:00 P.M.

If you can't make it to our meetings...at least become a Newsletter member - and enjoy our NEWSLETTER FORMAT- done entirely on a TI-99/4A computer.

SEE PAGE 10 FOR OUR WEST PENN MEMBURSHIP APPLICATION.



FOR THE RECORD BY PAUL BROCK

SEPTEMBER MINUTES

Eight members attented the Sept.meeting.Our long lost former treasurer, Lynn Gardner.Art fineally got her away from the net (internet) long enough to attend the meeting.

Mickey spoke of her Geni-ology she is working on. She is still romping around the cemetaries (a cool place to have a picnic). Ed was proud to show off his evelope that designed with MAX/RLE program.He also did a demo on the TI. Ed sent me the minutes of the September meeting, in the envelope with MAX/RLE picture and infrmaton of how he found an old PUG newsletter tel-ling how to put the pict. on an envelope.

If any one has discovered something that was fun and want to shair it with the rest of us, we may learn a little more and have fun doing what comes natural.

Next meeting is in October Happy Holloween!
I hope for a big turn out on the 21st., and remember keep an eye out for thoes Warlocks and witces.

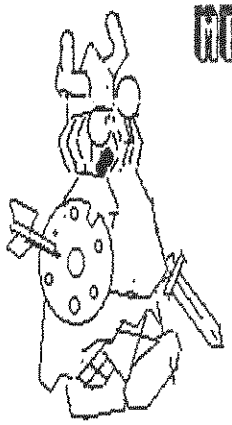
Untill then my QUILL has run out of ink!

WORKING THINGS OUT

I missed the Sept. meeting, my wife was in the hospital and I had too many things that had to be done and no time. I waited for the last minute, thinking that I may make the meeting. I gave Ed a call and explanded the details, and asked him to ask someone to take the min I got the min. from Ed in the mail. Thanks Ed.

MINUTES FOR 9-16-97

Vice President Norman Rokke presided the meeting on or about 7:30 pm.. It started off by showing the three T-shirts he purched for the up-comming raffel in Oct. According to Ed they look pretty nice. Each one has a different logo on them.



MESSAGE FROM THE PRESIDENT

Well the leaves are changing, and it is getting colder. Before long the frost will be on the pumpkin. This is my eleventh edition of WP 99'ers news. I must apologize for not getting the Newsletter out on time for September. I have been rushing around to many medical facilities and I just run out of time. I Know - no excuse. I wish to thank those that sent in articals, I really needed them.

The purpose of this newsletter is to get information to all our members. It is brrought to you through the efforts of the officers and the members. Every member is encouraged to submit articals. Maybe just jot down your thoughts about improving the membership. I will publish your opinions good or bad.

I recived the tapes from the Lima Show. I will try to review them befor the meeting. If I watch them I will mention them as Meeting Highlights for the month. I had already composed page 2 when I recived the tapes. Therefore I will tell you all about them.(hopfully)!

I want to get this Newsletter out before Holloween not like thelast one. I have been rushing to get every thing done and I see that I make a lot of mastakes. I I will try a little harder. Last month I got the draft to the prnt shop late and the printer cosed early.

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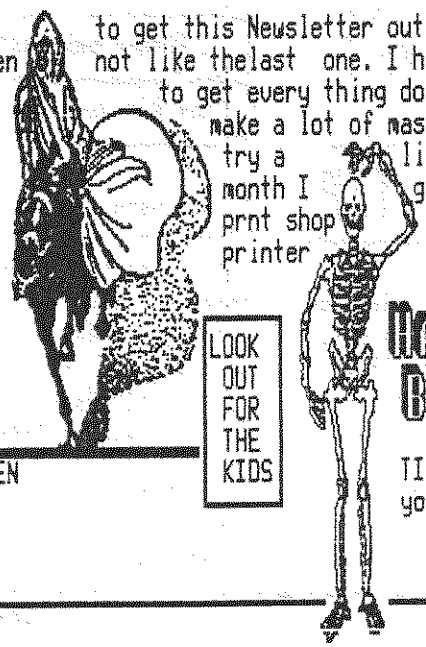
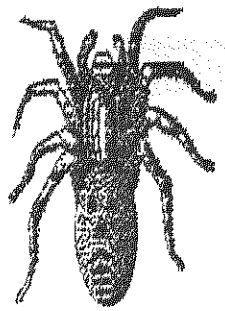
P
Y
HOLLOWEEN



HAPPY BIRTHDAY

TI'er where ever you are!

FUNNELWEB CONTINUED FROM PAGE 1:



I'm not smart enough to do that. The other is to clear (FCTN 4) the XB program from running, once it has been loaded through DISKREVIEW and then type in RUN (and press ENTER). this will clear the 'seed' number out and permit the program to run as advertised. For programs and finding that perhaps the resulting game (or whatever) is always producing the same resalts, it may not be the fault of the XB program. Try the above suggestions and see what happens.

Not with standing the the above, DIISKREVIEW is a fine program. I recommend that if you haven't been using it, please do. You will be pleased with the results.

HORIZON TIP:

Now that I have my Horizon Ram Disk (HRD) up to full CAPACITY 1.024 Meg it is a real problem when things apparently CRASH! Here is a tip I read somewhere, I just can't remember where.

If your HRD locks up and access even the physical drives. DSK!, then uou seem to be stuck to load anything. The system will seem to work but the Disk controller and HRD light (LEDS) will be on. Turning the console and PBOX off and on doesn't seem to work. This is what to do. Use the E/A module. Turn the PBOX and the console off. Then turn the CONSOLE ON FRIST! Thats right, FRST. Thn turn te PBOX ON WHILE HOLDING DOWN THE SHIFT KEY. Select option 5 from E/A and load DSK! CFG to configure your system. Strangely enough the disk access reappears.The RAM disk directories are still intact as well and their contents are still there. Next RELOAD the ROS you usually use. DO NOT throw out the existing information. Exit CFG and everything will be fine. It saves having to dissassemble the HRD from the P-BOX. aand doing other awful things. It works for me.....Tom ???

24K of DATA STORAGE
Author unknown
From ROM Newslet. 2/91

If you need to work with quite a bit ol data or would like to change programs but save the data after you press call QUIT, then you can set up the 24K of High-Memory in the PEB as a single data file called "EXPMEM2". You open this file just as you would any file with one exception - you must precede the OPEN statement with a CALL LOAD to location -24574 as follows:

For INT/VAR files - 24
For DIS/VAR files - 16
For INT/FIX files - 8
For DIS/FIX files - 0

Here is an example:

If you want to open an expansion memory for D/V 80 files,this is what you do.

```
100 CALL INIT
110 CALL LOAD(-24574,-16)
120 OPEN #1:"EXEPMEM2",
RELATIVE,UPDATE,VARIABLE
80
```

Then continue as you normally would.

If you want to store both data and assembly language routines at the same time, do this:

```
100 CALL INIT
110 CALL LOAD(-24574,-16)
120 OPEN #1:"EXPMEM2"
   (Not sure if this is a
    misprint-EXEPMEM2)
130 CALL LOAD("DSK1.ASSM1
")
140 CALL LOAD("DSK1.ASSM2
")
150 CALL LINK("START")
160 REM CONTINUE REST OF
PROGRAM
```

In the above example, the 24K of high memory was saved for use as a DATA file (D/V80 format). Then the assembly routines were loaded. The computer will look for the best place to put the routines and will adjust the pointer accordingly. After the routines are loaded, a link statement starts the frist routine and off we go.

If that's not enough for you, you can also use the min-memory for 4K more of assembly routine storage! Now that's 16K of program space, 12K for assembly routines.

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HUMOR

Two friends were discussing the importance of positive thinking. Bill was enthusiastically telling Jim about the benefits of a healthy mental attitude and mentioned a phrase that had once impressed him: "Remember,Jim,we become what we think about the most." "Good grief!" Jim suddenly blurted out. "I'm going to turn into a TI computer!"

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Quote: When your ship comes in, make sure you are willing to unload it.

When you put your best foward, the other one had better be good enough to stand on.

Three children plus one TI equals a fight.

I called the Pepsi Co Co. I was asked what computer I was using I replyed "A TI" and their computer Put my TI on hold!

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TIP OF THE MONTH

HOW TO RECOVER MEMORY IN TI BASIC/EXTENDED BASIC WITH DISK DRIVE ATTACHED

The TI operating system automatically sets aside memory to serve three concurrent open files. A minimum of 534 bytes of memory are taken up by general expansion overhead plus 518 more bytes for each of the three files opened by default, or a total of just about 2K. If you know that you will have only one file open, key in the following DIRECT COMMAND: CALL FILES(1) (Press ENTER) NEW (Press ENTER). This sequence will recover 1K of precious memory. Please note that this sequence can be keyed in as a command only and cannot be used as a program statement.

Don't forget the NEW or results will be unpredictable. This procedure can be used with both TI Basic or Extended Basic. With TI Basic and attached disk this is more essential than ever since TI Basic will only address 16K and you can ill afford to lose much of that.

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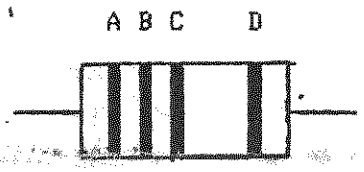
YOU DON'T HAVE TO BE A TECHIE TO BE INQUISITIVE
Reprinted from the Kawartha Kronicle

Have you ever looked at the insides of your console, or your TV or VCR for that matter, and wondered what the colored on the resistors mean? Resistors? the little cylinders with wires st... out of each end. Here's a quick look at the codes, not intended to be complete, but maybe enough to satisfy your curiosity.

Each resistor has at least three colored bands at one end (A,B and C in the figure below). These are used to identify the value of the resistor. A fourth band is sometimes used to indicate wattage rating. At the other end, you will usually see another band (D) colored gold or silver, indicating manufacturing tolerances.



Black	0	Green	5
Brown	1	Blue	6
Red	2	Violet	7
Orange	3	Gray	8
Yellow	4	White	9

Gold identifies a 5% tolerance.
Silver indicates 10% tolerance.

Band A color gives the value of the first figure, band B that of the second, while band C tells how many zeros follow B. For example, if A is brown, B orange, and C red, the value of the resistor is 1300 ohms or 1.3k ohms.; a 27k (27000) ohms resistor would be coded red, violet and orange.

Dick Bulmer

TALES OF A POWER SUPPLY, PART II
by Tony Lewis 12/90

Having just read the "Tales of a Power Supply" article in the December 1990 issue of the West Penn 99'ers newsletter, and having a little free time, I decided to put my two cents in concerning upgrades to the Pbox power supply.

As you may recall, my friend Al Beard told you how to convert your original Pbox power supply system to use a modern PC type switching power supply. Basically, the original Pbox power supply system used **linear** voltage regulators to generate the power for the +8, +16, and -16V lines in the Pbox. A linear voltage regulator takes input voltages that are much higher than what you'd like to see come out the other side, and (without going into too much technical detail) converts the excess voltage to heat. Linear regulators have efficiencies of 40-60% depending on how they are made. In other words, up to 60% of the electrical energy that goes into the linear regulator gets converted to heat, and not electricity. Hence the need for a cooling fan in the Pbox, and heat sinks on the better designed cards (some TI and third party cards used the metal clamshell as heat sinks for the regulators). Why use such inefficient regulators? Because they are cheap, and they only need one part (the regulator itself) to work. That saves space on the Pbox card.

Switching regulators, on the other hand, have higher efficiencies, around 80% or more, which translates to less heat. They do cost more than linear regulators, and usually require extra parts like resistors, inductors and capacitors. But with high conversion efficiencies, they don't produce the heat that linear regulators do. The PC type power supply that Al bought was of the switching type.

Now, the original concept of the Pbox was to provide the raw high voltages for each card, as well as the regulated +5 and +12V needed by the (one) floppy drive (remember, this is the early 19805). While the floppy drive got regulated power, the cards had to have their own voltage regulators to get the right voltages they needed. The advantage to this is that if one card experienced electrical problems, then the rest of the system was unaffected, and you could tell which one went bad because its light was out. And the regulator just had to keep up with the fluctuating power demands of the card it was on; the main power supply voltages was set high enough to account for the system fluctuations of all the cards operating at one time.

The fly in the ointment was pointed out by Al in his article: the raw power put out by the Pbox power supply is much higher than 8V and 16V and -16V. And the greater the difference between the input voltage versus the output voltage that a linear regulator has to maintain, the greater the heat that the regulator has to try to lose. The third party cards that do not have the metal clamshell enclosure, or any other heat sinks, can suffer from localized heat buildup when the card is in operation, which can lead to the brown areas mentioned by Al.

In Al's article, he basically told us how to convert the Pbox power supply system to a PC-type power system whereby the main power supply has all of the responsibility for voltage regulation. The PC power supply outputs the +5, +12 and -12V to the disk drives and the peripheral cards, and it alone must maintain the voltage levels within the ±5% most devices need. To convert the peripheral cards, you simply jumper the input line to the existing linear regulators on the card to the output line, effectively bypassing the linear voltage regulator, and eliminating local heat buildup.

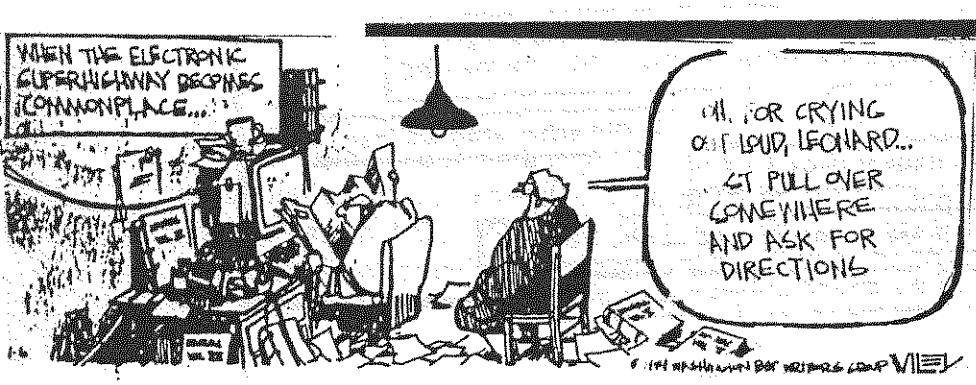
I'd like to add just a few extra considerations into the concept that the reader may want to think about before implementing the power supply conversion mentioned in Al's article:

1) With the modification as per the original article, the main power supply is the only source of regulation. If your power supply is undersized, then the voltages may go outside their specified ranges when a heavy load (such as a hard drive or the Geneve) operates. And digital electronics do not like their voltages to go outside a tolerance of ±5% of the specified input voltages. So do not try to save a few bucks and get a power supply rated below 150 watts. If you have a maxed out system like Al Beard, then a 200 watt power supply is required.

2) BE EXTRA CAREFUL IN INSERTING AND REMOVING PERIPHERAL CARDS. Turn the power off and take a walk around the block for 10 minutes or more. TI unfortunately put the +16V and -16V lines right next to some signal lines in the Pbox, as well as ground lines. With the modified power system, one short to one card is a short to all cards, which is not very desirable. Likewise a power short in a card in operation can have damaging effects on the whole system.

As an alternative, I'd like to present how I modified my Pbox power supply. I also have a switching power supply, but mine is feeding only the disk drive system. For the Pbox, I went in and replaced the linear voltage regulators. I put in true -16V and +16V, 1 amp regulators with extra capacitors for the higher voltage lines. For the 8V line, I used a LM338K adjustable regulator, capable of producing up to 5 amps (talk about overkill!), with a large heat sink. This system has the advantage of separate power supplies, such that operation of the disk drives can not possibly affect the peripheral cards. However, if I ever do it again, I'll probably just gut the Pbox power supply out and replace it with an external switching power system. That will give you the best of all worlds. The heat problem will still exist on the peripheral cards, but the with the raw input voltage at a true 8V, instead of 12V or higher, the heat buildup is negligible. Please be careful in any work you do with power supplies, and have a friend double check your work before turning the power on.

–WP♦



MEMO:

Next month I have an artical by James W. Wiegand. The title is LET'S ADD A FOURTH DRIVE. this artical is worth waiting for!!!

Jim is planning a three month VACATION! GET YOUR QUESTIONS READY FOR THE MEETING.

WEST PENN 99ER'S NEWS

COULD THIS BE YOU?

Once upon a time, there were four people; their names were Everybody. Somebody, Nobody and Anybody. Whenever there was a job to be done. Everybody was sure that Somebody would do it. Anybody could have done it, but Nobody did it.

When Nobody did it, Everybody got angry because it was Everybody's job. Everybody thought that Somebody would do it, but Nobody realized that Nobody would do it.

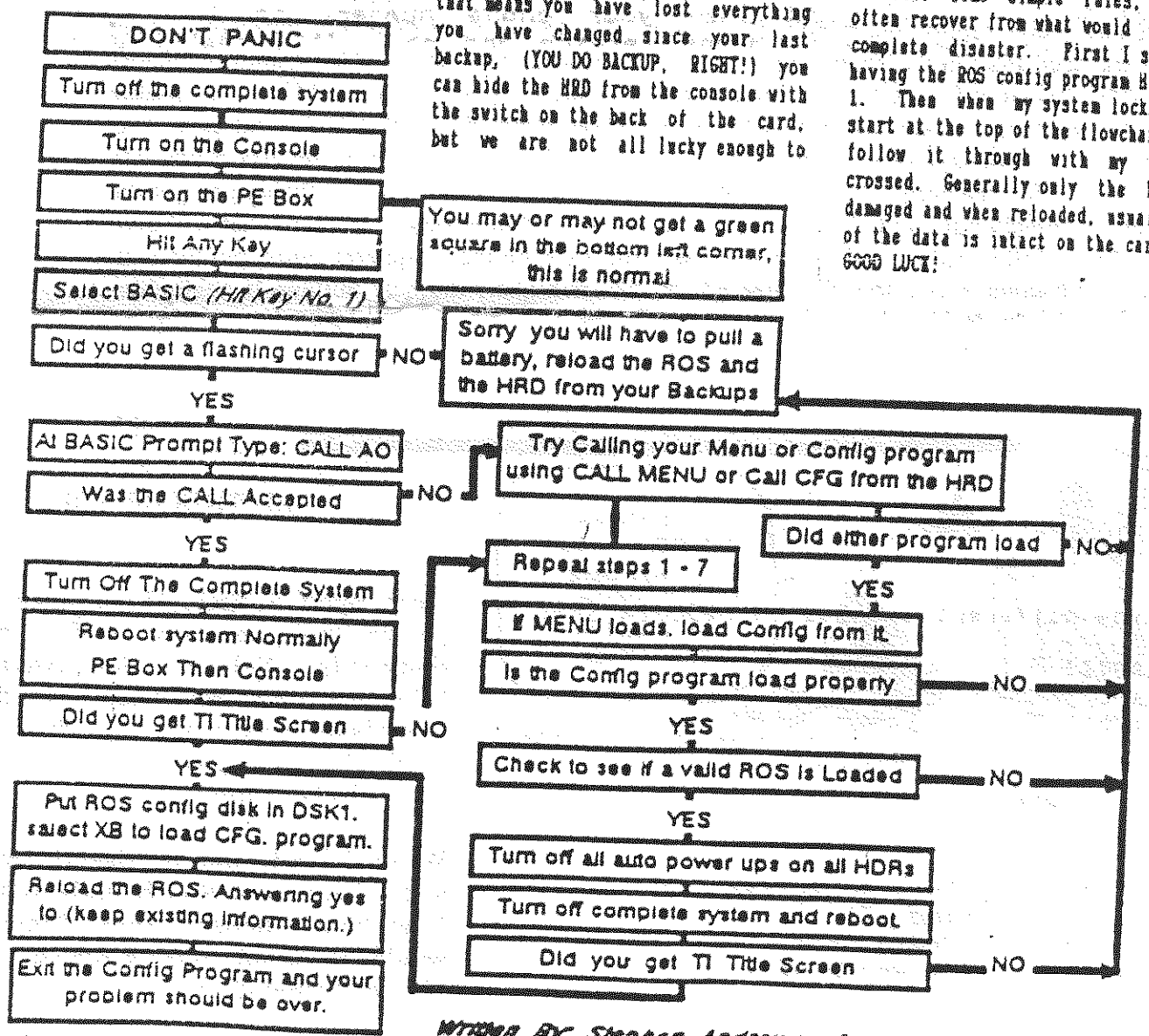
So consequently Everybody blamed Somebody when Nobody did what Anybody could have done in the first place.

(From Milwaukee HOCUS, Nov. '92)

Horizon RAM Disk Lockups

(Don't dump that data yet!)

Certain coincidences this morning have made me decide to write an article, or sort of a quick reference guide for users of Horizon Ram Disks (HRD) of all types. This morning started with a call from our newsletter editor asking questions about a new HRD test program from OPA and problems he was having with one of his HRDs. We discussed the problem, determined that it was most likely the hardware and decided on a course of action. We said our goodbyes and I went to my system to work on something only to find that my own system would not boot. This is where the real story begins. Anyone with a HRD, with any of the new Ram Operating Systems (ROS) installed in memory, as opposed to some of the Eproms that are available has had this problem. (Come on be honest.) At this point you have a lot of options. You can shut everything off and walk away, but that will not solve anything. You can put the batteries on your HRD(s) and start over, but that means you have lost everything you have changed since your last backup, (YOU DO BACKUP, RIGHT!) you can hide the HRD from the console with the switch on the back of the card, but we are not all lucky enough to have that option because of the old cards which do not have the switch. You could take out the card, put it in the closet and you will never have the problem again. (No, No, that just wouldn't do). These are all options, but not very good ones so let's discuss the alternatives. I am the club librarian and when trying out many new programs, or reviewing older ones, I often have conflicts with the ROS on my cards that make the system appear to be messed up. If however, I remember some simple rules, I can often recover from what would seem a complete disaster. First I start by having the ROS config program HRD No. 1. Then when my system locks up, I start at the top of the flowchart and follow it through with my fingers crossed. Generally only the ROS is damaged and when reloaded, usually all of the data is intact on the cards. GOOD LUCK!



Written By: Stephen Andrews of the North Bay 99ers

GEN-TRI

A review
By Gary Kuehn

TERMINAL EMULATOR

Perhaps the strongest part of the three part program being reviewed here is the Terminal Emulator. I could say a dream come true in its power and ease of use and to package it up with a great disk manager and a word processor is a work of art.

After selecting from the main menu you are presented with a screen to set all your defaults. Although the program will work well as set, you may want to change one or two. No problem, a keypress and the change can be made. Set your baud rate and perhaps your duplex setting then enter and you are in the terminal ready to dial out. In this program ATZ is used for an attention signal and then your phone number, don't forget the ATDT for the type of phone service and go. It's really easy and not hard to learn.

Up and downloading, and other activities may require reading the manual but don't worry or fret as the directions are written well and not hard to understand.

The function keys are as follows:

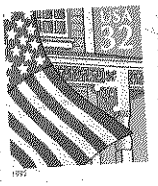
F1 Macro screen
F2 Clears the buffer
F3 Force buffer to disk
F4 auto dialer
F5 File transfer screen
F6 Start a file transfer
F7 A little help screen
F8 Invoke the review-buffer screen
F9 Exit terminal mode
F10 Toggle buffer open/closed

The different transfer protocols are:

ASCII
XMODEM
1KXMODEM
CISB+
YMODEM

Thease are the basic things that need to be learned to use the program but are not the end of the program. There is so much to it that it's impossible to revue all the features here. If you own a Geneve then my advice is to "try it, you'll like it"

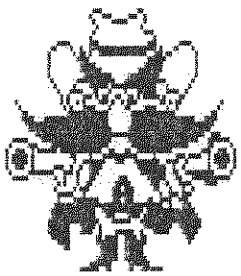
WEST PENN 99'ERS
C/O Paul A. Brock
P.O. BOX 222
North Apollo PA 15673-9999



Newsletter Editors

Please note new address
and up date your mailing list

FIRST CLASS MAIL



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100 PINE STREET
RUSSELLTON, PA 15076
USA

FIRST CLASS MAIL

15076>1322 01

This newsletter was composed in it s intrety
using a TEXAS INSTRUMENTS TI-99/4A computer

NEXT

MEETING OCTOBER 21st. 7:00 PM

WP MEMBERSHIP APPLICATION

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Address_____
City_____ State_____ Zip_____

Please check one

☐ Newsletter membership
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$10.00 Per year

☐ Full membership
Library privilages
$15.00 Per year

Complete and return to

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