

WEST PENN

99ERS NEWS

VOLUME 2 NUMBER 14

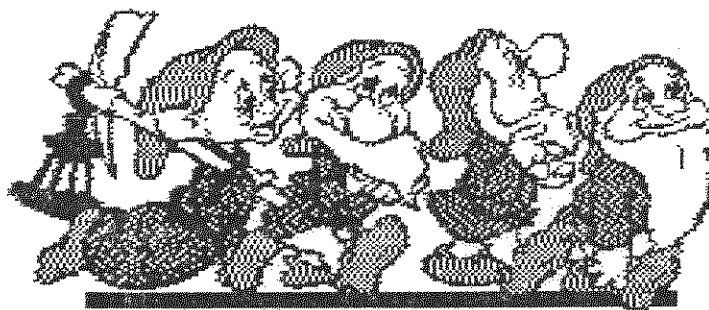
JANUARY 1998

CALENDAR WORRIES??

See page 6

HAPPY NEW YEAR 1998

BACK TO
WORK!!



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Special note from the Pres.

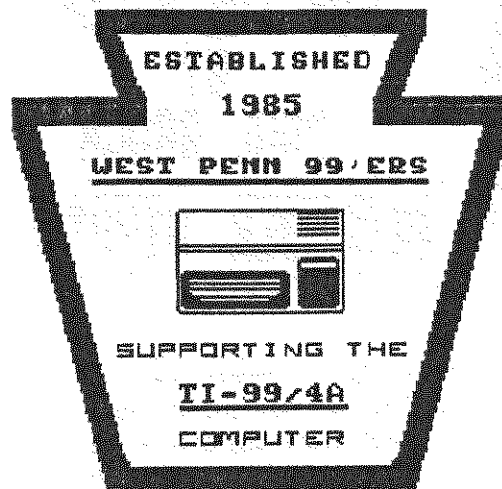
Happy Valentines day!

Come on out to the meeting

Paul

WEST PENN 99'ERS CLUB INFO

Next Meeting Date: January 19, 1998
 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. General 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

Casino Solitaire.....Demo by Paul Brock
 Computer War.....Demo by Paul Brock
 River Rescue.....Demo by J. Wiegand
 Address & Envelope Base.....Demo by Paul Brock
 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:	Jim Wiegand	304-738-2110
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 equipment, or electronics.
- * Help on getting equipment 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

DECEMBER MINUTES



I must be in trouble again. I arrived late and the Dec. meeting was well on it's way. Although there was only a few were present we still managed to have a form. We continued with the meeting and old business. Nothing new was added to the minutes.

Report from the Treasurer is still looking good. We did discuss the problem of declining membership. Some possible ways to make our funds more profitable. We (members attending) are looking forward to more in put.

There was mentioned that Charles Good no longer will be producing a Newsletter, could stay in touch with the club by e-mail. Those with the capabilities can work this out.

I had some problem with my notes, so I have to rely on my memory. Norm gave a report on the Chiago show. In his report he mentioned the people that were there and the software they were working on and the new hardware that was on display.

There wasn't any equipment present, that ment that there wasn't any disk copying being done. No demo's. We had discussed the possibility of three different T-shirts for the raffle prizes. We confrimed that we need more participation to help pay for the T-shirts. Norm brought some disks and we did raffel a few for the evening, eveyone was a winner!

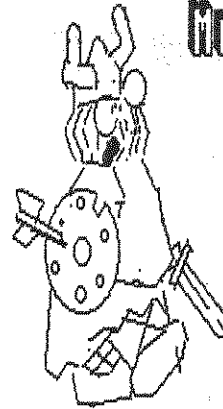
Christmas Disk filled with Christmas music sent by Bruce Harrison, was passed out as our gifts.

Slogan: THE BEST THING TO APPRECIATE
IS YOUR TI IN 98.



Untill then my
QUILL has run out
of ink!

See you on the 19th of JAN.



MESSAGE FROM THE

PRESIDENT

EDITOR

There is a large interest in the IBM and the internet. As the result I will put some articles that are associated with the TI. More and more TI'ers are using the Internet, and have websites. Some of the clubs that have closed up, have joined the Net to stay in touch. If one can still enjoy their TI's and keep on using them. By means of communication we can keep informed and still stay with progress. I sat back and watched an IBM user on his computer. There was a mouse, a printer, a fax, a box to take pictures and a scanner. As the person sat in front of the monitor, and just moved the mouse to different programs on the screen. I thought to myself, where dose the learning come in? Just point and cleck!! With the TI one had to stop and think of what he was doing. Just remember, at one time it must have been fun, or you would not be reading this!!!

I am in hopes of getting better news as time goes on. Jim Weigand will be bringing in a 3 1/2 in drive in to show a demo, on how to install one with your 5 1/4 in drives. Don't forget to bring your notebooks and pens. It should be noted that Jim has some interesting projects on the fire. Norm Rokke has a new project he is working on. Mickey is still working with the mouse, and other programs.

A humorous Story:

I was driving my six-year-old grandson, Nichlus home from school, when we passed a race track. The boy never having seen one, asked what it was. "It's a place where people go to race dogs," I replied. After a long contemplative pause, Nichlus said, "I bet the dogs win."

HAPPY BIRTHDAY! TI'er where ever you are!

SAVING AND LOADING DIRECTLY BETWEEN TI FUNNELWEB AND IBM COMPATIBLE PCs

by Charles Good, Lima Ohio User Group (TI)

Using the Funnelweb editor, you can use LF and SF to LoadFiles and SaveFiles directly to and from a hard drive or floppy disk on an IBM compatible PC. You can use the IBM's hard drive to store all your important text files! This can sometimes be done at very fast transfer rates comparable to saving and loading text using a 99/4A disk, and you don't need a modem on either the TI or IBM.

What you do need is an IBM and TI computer cabled together between the TI's serial port and an IBM com port, usually COM2. You can't use store-bought serial cable for this because the TI serial port is not quite standard. I had L.L.Conner make my cable. You may be able to make your

own. The needed pin connections for such a cable are these:

- TI..IBM
- 1----1
- 2----2
- 3----3
- 6---20
- 7----7
- 20---6

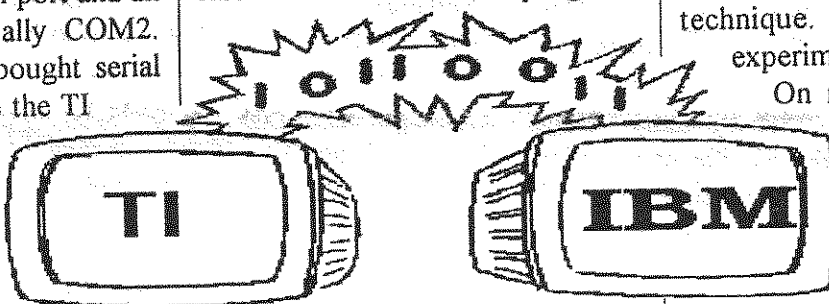
TO SAVE TEXT FROM FUNNELWEB TO THE IBM

On the IBM, start Windows and go to the Accessories window. Activate the Terminal program.

Click on "Settings." Then click on "Terminal Preferences" and make sure CR does not generate CR/LF (if the box has an X in it, click on the box to turn off the X) and that you are in 80 columns. Accept these settings by clicking on "OK."

Click on "Settings" again and then click on "Communications." Select either 19200 or 9600 baud, odd parity, 7 data bits and the proper COM port. Then click on "OK." I haven't figured out how to save 8 bit characters (Funnelweb's extended IBM graphics set) directly to an IBM using this technique. You may want to experiment with the baud rate.

On my Geneve, I can use the baud rate of 19200 without losing any characters at the IBM end or causing an error message at the Geneve.



Incredible!



Incredible! There are still some of our members that have not yet paid their yearly dues . . .

WEST PENN

On my 99/4A system, I can only use 9600. On both systems, I have a TI RS232 card. Cable length and the peculiarities of your system may dictate that you use a slower baud rate. When using 19200 to save text, the speed of the save is at least as fast as saving to TI floppy disks.

Click on "Transfers" and then click on "Receive Text File." Select or create a file name, drive letter and directory. Then click on

(Continued on page

Funnelweb continued....

"OK." If asked, say you want to override the existing log file. Now you are ready to receive text from Funnelweb.

Write your document or LF a document into Funnelweb editor. First set up the IBM terminal program as described above. Then enter SF from Funnelweb's command line. Use "RS232.BA=19200" (or BA=9600 on the 99/4A system) as the SaveFile name. Yes, I know the TI's RS232 isn't supposed to be able to handle a baud rate of 19200, but on my Geneve, it works for me! You need to specify the same baud rate in Window's Terminal and Funnelweb's SF file name. Once you enter the SF file name, your text will flow out of Funnelweb and across the serial cable into your IBM. You will see the text appear on the IBM screen.

When the IBM cursor stops displaying more text, move the IBM mouse pointer to click on "Stop." Your Funnelweb text has been saved to an IBM disk as an 80-column ASCII text file with no control characters and no tab markings.

TO LOAD TEXT FROM AN IBM INTO FUNNELWEB

First, load the Funnelweb editor. If you are using a Geneve, load the Funnelweb editor from GPL (you can use speed 5) rather than using EXEC. When using EXEC v2.11 on the Geneve, I

can't break out of the RS232 loading process although I seem to remember that I could with an earlier version of EXEC. From Funnelweb's command line, type LF and specify "RS232.BA=600" as the file name. Press enter and Funnelweb will appear to lock up as it waits for text to flow in from the RS232. You can't use baud rates faster than 600 for LoadFile even though you can use much faster baud rates to save files.

Now set up the Windows Terminal program. Click on "Settings," then on "Communications." Click on 600 baud, 7 bit, Odd parity, the proper COM port and then click on "OK." Now click on "Transfers" and then click on "Send Text File." Select the file name and drive of the text file you are loading into Funnelweb and click on "OK." At this point, text will start flowing into Funnelweb and you will see line numbers increment at the right of the Funnelweb v5.x command line.

When text stops flowing across the IBM screen and when Funnelweb's line numbers stop incrementing on Funnelweb's command line, this means all the text is now in the TI's text buffer. Press FCTN-4 (the Break key) and the <enter> key to display the text on the TI's screen. It is this FCTN-4 keypress that fails when I load Funnelweb into my Geneve using EXEC instead of GPL.

Scientists can't tell you what time it is, only how to measure it. There are two important questions you can ask about time. You can ask what it is, and you can ask how to measure it. The first question is in the domains of philosophers, mystics, and others who like dealing with insoluble problems. Physicists only deal with how to measure time.

St. Augustine in his "CONFESSIONS", said, "What is time? If no one asks me, I know what it is. If I wish to explain what it is to him who asks me, I do not know". That is probably as good a definition as you're likely to get.

In order to measure time, you must have a regularly recurring phenomenon in nature. The standard technique is to find something that happens regularly, and then define the unit of time in terms of the reappearance and recurrence of the phenomenon. For example, one unit of time is the "day" - the time between two successive sunrises. All systems for measuring time depend, ultimately, on the recurring phenomenon that is chosen to define the basic standard.

Throughout most of human history the passage of time has been measured in terms of the day (which is related to the time that it takes the earth to turn once on its axis) and the year (the time it takes the earth to go once in its orbit around the sun).

The Egyptians defined the hour to be one twelfth of the time between sunrise and sunset. This meant that for the Egyptians the length of the hour was different from one day to the next, and was not the same during the day as it was at night.

The first exercise in the measurement of time was the production of the calendar. When human beings began to develop agriculture, it became necessary for them to mark important events like the planting time for particular crops. In other words, they had to have a calendar. The calendar really is a clock that "ticks" once a year and therefore keeps track of where the earth is in its orbit around the sun. It is this position that determines the seasons.



The basic problem in constructing a calendar is that the number of days in a year is not an even number. The following calendars represent successive approximations to the true length of the year.

EGYPTIAN CALENDAR

This calendar consists of twelve months of thirty days each, followed by a five day party. The problem with the Egyptian calendar arose from the fact that there are approximately 365 1/4 days in a year not 365. This meant that the calendar would "slip" a quarter day every year. These slippages build up, and, if you had followed things blindly, would eventually have led to a situation where you had the Egyptian equivalent of snow in "August".

Our modern New Years Eve parties trace their way back to the Egyptian end-of-year bash. It was a time that didn't really belong in the year, hence a time when nothing really counted. Anything went. We may have a more modern calendar these days, but we seem to have managed to retain the truly important part of this old one.

JULIAN CALENDAR

The calendar introduced by Julius Caesar tried to bring some order into time keeping in the Roman Empire. It solved the problem of the extra quarter day by introducing the leap year. Every four years the year is one day longer, and this makes up for most of the slippage that appeared in the Egyptian calendar. It didn't catch all of it, though, because the year is 11 minutes and 14 seconds shorter than 365 1/4 days. These errors started to accumulate (they amount to 7 days every 1000 years) until they began to mess up the observance of Easter. This led to the ...

GREGORIAN CALENDAR

The Gregorian calendar was introduced by Pope Gregory in 1582 to deal with the accumulated slippage in the Julian calendar. It works by dropping leap years when they fall on centennials except when the centennial is divisible by four. Thus, 2000 will retain its leap year while 1700, 1800, and 1900 did not. The Gregorian calendar is the one we use today and the one with which you are familiar.

Russia didn't adopt the Gregorian

calendar until after the revolution. Thus, for several centuries, there were two calendars operating in Europe - the Gregorian in most of the West, the Julian in the East. This explains you often see dates in Russian history given twice - one in modern (Gregorian) terms, the other in "old style" (Julian) terms.

46 B. C. was the longest year on record, 1582 the shortest. When Julius Caesar introduced his calendar in 46 B. C., he added two extra months to the year as well as 23 extra days to February to make up for the accumulated slippage in the Egyptian calendar. Thus, 46 B. C. was 455 days long, the longest year on record. Similarly, when Pope Gregory introduced his calendar in 1582, he decreed that the day Oct 5 would be Oct 15, making it the shortest year on record.

The rotation of the earth is actually a very poor standard. If you look at the rotation closely enough, it is quite unsteady. The gravitational pull of the moon and the planets, the effects of the tides, earthquakes, and even the motion of the winds cause the rotation to slow down and speed up erratically. These changes aren't huge - they're on the order of milliseconds per day, but if you define the second to be a particular fraction of the length of a day (which is the way it used to be done) the second will change from one year to the next.

The second is now defined in terms of the motion of an electron in an atom. In 1967, the International Commission on Weights and Measures redefined the second in terms of the time it takes an electron to spin on its own axis inside an atom of cesium. This is the standard that is used today. The so-called atomic clock can measure the length of a second to an accuracy of thirteen decimal places.

We now keep our calendars accurate by inserting a leap second into the year. Here's how it works: There are a number of clocks at various national laboratories around the world. When a majority of the clocks agree that the rotation of the earth has gotten out of line by half a second, a "leap second" is inserted into a chosen day at midnight. This is done every few years, most recently on Dec 31, 1990.

The most accurate clock is the hydrogen maser. Although the cesium-based atomic

clock is the best time standard at the present time, another regular motion, the movement of an electron in a hydrogen molecule, can produce a clock that is significantly more accurate. The cesium is accurate to thirteen decimal places, the hydrogen to fifteen. Unfortunately, maser clock is stable for less than a second, so it can't be used as a long term time standard.

The longest time that anyone has ever tried to measure is the lifetime of the proton - more than 10^{33} years. The longest time that anyone has actually measured is the lifetime of the universe - about 16 billion years.

The shortest that has been measured (indirectly) is the decay of some elementary particles, 10^{-24} seconds. The shortest time that can be measured directly are bursts of light in special lasers, 10^{-15} seconds.

the nanosecond is the relevant time scale for fast electronic systems. Light travels about one foot in a nanosecond, or a billionth of a second, and signals in an electronic circuit can't travel any faster. This means that a computer that is much bigger than a few feet across will not be able to move signals from one side of its body to another in times less than a nanosecond. This is considered to be a fundamental limitation on the possible speed of computers.

The time it takes a neuron to fire in your nervous system is about a millisecond, whereas the fastest switch in modern computers can close in a picosecond. The fact that your brain can do many things (such as process visual information) faster than even the largest computer has to do with the superiority of the design of the circuits rather than with the speed of the individual components.

The names attached to various short times are:

Name	Time
millisecond	.001 sec (thousandth)
microsecond	.000001 sec (millionth)
nanosecond	.000000001 sec (billionth)
picosecond	.000000000001 sec (trillionth)
femtosecond	.000000000000001 sec (million billionth)

by Bruce Forbes

Anyone who has ever written an article for publication knows how hard it can be to put your thoughts on paper in order for them to be informative to the reader. All those members that have taken the time to make contributions to the newsletter should be congratulated for a job well done. There are several of us which have had experiences that would be helpful to other members if we would just take the time to put them in writing. I realize that we do share our experiences verbally, but somehow most of the things we hear seem to get filed away in some deep, dark corner of our brains, seldom to ever surface again. One example comes to my mind;----- at one of our 1985 meetings someone told us that a few of the printers on the market had a tendency to put out high spikes on their Acknowledge, Strobe and Busy signals. These spikes could cause some type of problems. However there was a remedy for it but I couldn't remember what it was.

During the course of last year I burned out 2 MYARC RS232 cards. The problem leading up to the eventual burn out of the cards was frustrating and lead me to believe that MYARC might have been manufacturing inferior equipment. I even told them so when I sent the card back for repairs the second time. Their silence and the lack of knowledge on behalf of my local supplier left me bewildered as to what was causing my problems. About the first of January, 1986, I finally located my problem. I was talking with a technician about modifying a second RS232 card so I could run two of them in my PE box (more on this at a later date). During the course of our conversation he described, in painful details, the problems I had been having. It seems that the Panasonic line of printers happen to be one of those printers that put out high spikes. Eventually these spikes will burn out the RS232 card. Your printer might skew a line, drop a letter or word and even print garbage (sometimes). Eventually the printer will shut down. The next time you try to use it everything may/may not work fine. These problems might span a week or months before blowing the RS232 interface. It seems there is a simple modification to the RS232 card that will protect it from these spikes and eliminate the printer problems. I will attempt to describe this modification in order for you to protect your MYARC RS232 interface card.

You will need the following:

- (1) needle nose pliers
- (2) wire cutters
- (3) small screwdriver
- (4) solder
- (5) low wattage soldering iron
- (6) a sharp object such as a X-ACTO Knife or a razor blade
- (7) one 100 OHM, one/quarter watt resistor

EDITORS NOTE: IT IS SUSPECTED THAT THIS ARTICLE FIRST APPEARED IN THE MANNERS NEWSLETTER. I HOPE THAT THIS INFORMATION IS CORRECT.

CONTINUED ON PAGE 9

Proceed by pulling the RS232 interface card out of the PE box, follow all the safety precautions as described with your equipment. Before you proceed any further remember that static electricity can damage some semiconductor devices. Drain off any electrostatic charge from your body by touching a known earth ground. Make sure that your work area is free from any static electricity. As an added protection wear a discharge wrist strap device. Now locate the four plastic tabs at the bottom (card edge side) of your RS232, (see figure 1). Gently press in each of the four tabs while carefully prying the two halves apart. Once you have the card open remove the circuit board and place it on your work surface, component side down. The card edge should be away from you with the plug side to your right, (see figure 2). Locate the boomerang shaped foil track in the lower right corner of the card, (see (A) figure 2). With your sharp object scrape a path through the foil track to cut the continuity between points B & C, (see figure 2). Your last step is to solder the one/quarter watt, 100 OHM resistor between points B & C, (see figure 3), turn the card over and cut the excess wire from the resistor. Now reassemble your card and the modification is complete.

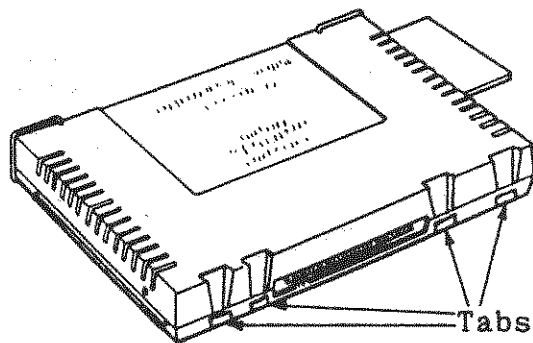


Figure 1

Please be aware that this modification is tailored to the MYARC RS232 card only. If you have a card by any other manufacture you should contact a "reliable" technician that is familiar with that brand of card. Of course the modification to your card probably will void any warranty left on your card. This is a proven, workable modification and will not interfere with the interface or any peripheral that you might want to hook up to it.

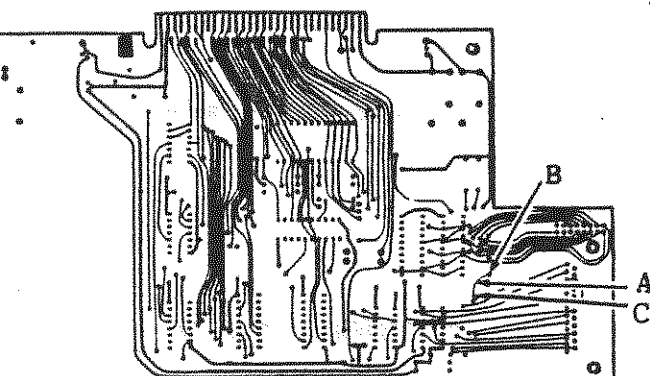


Figure 2

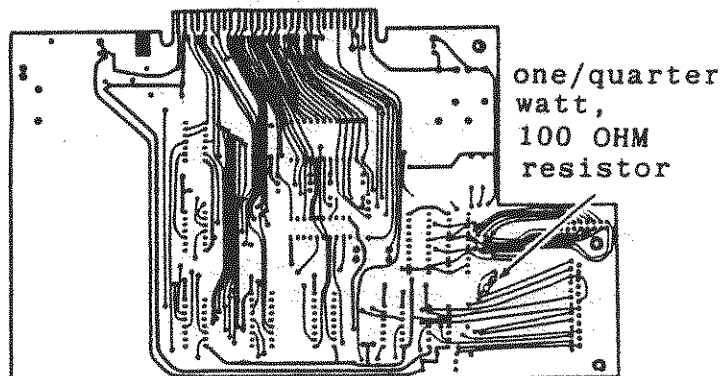
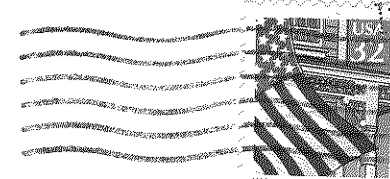
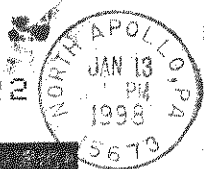


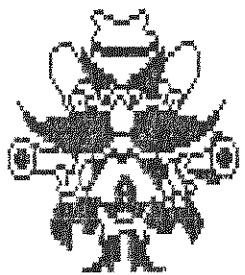
Figure 3

WEST PENN 99'ERS
C/O Paul A. Brock
P.O. BOX 222
North Apollo PA 15673-0222



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

15076X1322 01

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

NEXT
MEETING JAN. 19th . 7:00 PM

WP MEMBERSHIP APPLICATION

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Please check one

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