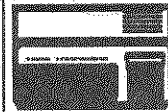# West Penn 99'ers

Supporting the TI-99/4A Home Computer

Established 1985

ISSUE #76 **December 1991**

FOR THE RECORD
by: Frank Zic

The November meeting started at 7:15 PM. The first order of business, as usual, was Mickey giving thanks. Thanks was given to Rob and Joe Ekl for their efforts in making the TI insignia "T" shirts available. They really look nice in the many different colors. Thanks also went to Ric Kepler who would later Give us a very special demo, more on this later. Next Mickey ("THE PEPSI KID") announced that after the meeting we would be having our annual Pizza night. Next a new member was introduced - Dan Crenner. We all welcome you to the club. It must be a personal satisfaction to John Wilforth to know the club he founded is still so nicely active. Success depends on so many doing a lot of things to keep it a growing activity, help individually when called upon. Drinks for the evening included; coffee, tea, hot chocolate, bouillon and various soft drinks. The club inventory was made and found to be in good order.

Next the election of officers was held. New officers for 1992 are; Pres. Mickey Schmitt, VP Norm Rokke, Treas. Lynn Gardner, Rec. Sec. Frank Zic, Corres. Sec Paul Brock, Libr. Bob Sadusky and Editor Chris Pratt. Next month, join our club flyers will be made available for each person to post in their own neighborhoods. Mickey said a reprint of cassette articles will be maintained. Not nearly enough time was spent on Rob && Joe's latest portable TI unit. In part it has a 200 watt power supply, Gram Kracker, 20 Meg hard drive and much more. This all topped off with parallel PC and TI console inputs. Fellows, this one looks like the ultimate. Again a very nice piece of work. They gave thanks to John Willforth for his assistance. Mickey really likes the Micropendium and suggests checking articles in the Oct.91 issue on pages 28, 31, 32, 33, 35 and 36. A favorable report was given on the Chicago Faire by the 1/2 dozen members that attended. Many pamphlets from the Faire were passed around including Asgard's three booklets; Utilities, Business and Entertainment. Next year's faires include; Fest-West/ Phoenix Feb. 15&&16 and Northeast-Boston April 4,1992. A BBS report was given by Sysop Gary Taylor. At a future meeting, "Mail Room" will discussed. Four nice prizes were given in the monthly raffle.

The next part of the evening deserves a separate paragraph. Our evening was capped off by two special events; Pizza night and Medi-Master. Yes, folks, while we enjoyed some very tasty Pizza we were entertained by Ric Kepler who demoed the awesome sound of the TI's musical capabilities. Also Ric was kind enough to add his great accompaniment on the guitar. Very, very nicely done, Ric. All this in stereo too. But really, Ric, where did you get that antiquated amplifier? If in my last ten years of attending TI club meetings I had to pick ONE that I would not have wanted to miss, it had to be this one. It made me proud to be an active part of the TI community.

A lot of extra TI equipment was available for sale such as Mini-Memory $15, DSDD full height disk drives $25, 20 Meg. 3 1/2" hard drive $125 and on and on. ribbons was extra heavy. Art said you can bring in extra ribbons and leave them with him until the next meeting. Well I guess that about covers it for now.

May the good 4's be with you.

WEST PENN 99'ERS CLUB INFORMATION

NEXT MEETING DATE

DECEMBER 17, 1991
7:00 P.M.

MEETING LOCATION

PENNS WOODS
CIVIC ASSOCIATION

JUST OFF ROUTE 30
N. HUNTINGDON, PA

LIST OF WEST PENN OFFICERS FOR 1991

PRESIDENT:	Mickey	412-335-0163
VICE PRESIDENT:	John	412-527-6656
TREASURER:	Lynn	412-835-4304
RECORDING SEC:	Frank	412-751-6065
CORRESPONDING SEC:	Mike	614-282-5627
LIBRARIAN:	Bob	412-863-5672
NEWSLETTER EDITOR:	Chris	703-415-3964

GENERAL ITINERARY OF THE CLUB'S MEETING

6:45 P.M.	DOORS OPEN
7:00 P.M.	GENERAL MEETING
7:45 P.M.	DEMOS & NEW INFO
8:45 P.M.	ASSEMBLY FORUM
8:45 P.M.	HARDWARE CLASS
11:00 P.M.	DOORS CLOSE

MEETING HIGHLIGHTS FOR THIS MONTH

* LATEST T.I. NEWS AND SOFTWARE DISCOUNTS

* SOUND F/X(PACKAGE) - DEMO BY MIKE SEALY

* SURPRISE DEMO - FROM ONE OF OUR MEMBERS

* "NEW SOFTWARE" FROM MS EXPRESS SOFTWARE

* "ON-LINE GRAPEVINE" DISK #6 BY VONRICKY

* "BEST BUYS '91" (HARDWARE AND SOFTWARE)

RENEW YOUR MEMBERSHIP DUES!

$15.00 PER YEAR FOR INDIVIDUAL / FAMILY
$10.00 PER YEAR FOR ONLY OUR NEWSLETTER

CONTENTS FOR THIS ISSUE...

From the Editor...

That's right, this is my largest issue to date! 14 whopping pages...consider it a gift for the holiday season.

Jerry Coffey, well known on Delphi and to the members of MANNERS, has become a distributer for JP Software. You can purchase JP Software and T&J Software (Tom Freeman) titles directly from him at: Coffey Software, 9119 Tetterton AVE, Vienna, VA 22182. This is good news to all TI'ers as before now it was very difficult to have orders filled by JP Software directly and they are wonderful programs.

The CONNI User Group has got the national clearinghouse up and running for those who has sighed up for it. Phone # (614) 263-3412 or use PCP or STAR LINK for access. The National Clearinghouse is a BBS access to world-wide newsletters and articles for your User group's newsletter. If interested please contact Irwin Hott of the CONNI User Group at the above BBS number.

MS Express Software, P.O. BOX 498, RICHMOND, OH, 43944 is now selling Oliver's Twist for $7.95 + $1.00 S/H.

That's it from me for this month...I've gone 96 hours on only 8 hours of sleep. That's what college is all about I guess! Thank you Mickey for making this month's issue so smooth. I actually just had to do my job this month...instead of extra. [a bit of cynicism].

Season's Greetings to all. CDP
--WP♦

KEEPING UP WITH CASSETTES

BY MICKEY SCHMITT

NUMBER 6

This month's article comes to us via an article that was written by Jack Sughrue for Asgard Publishing.

A very special thanks to both Jack Sughrue and Chris Bobbitt of Asgard Publishing for giving me permission to print this cassette article in my KEEPING UP WITH CASSETTES series.

Please offer your support to all those mentioned in Jack's article. Write to Jack Sughrue and Chris Bobbitt of Asgard Publishing, thanking them for permission to print this article, order a copy of the "Cassette Master" disk from the M.U.N.C.H. user group, order a copy of the TI-PD 1205.1 "Cassette Utilities" disk from Jim Peterson, and please show your support by making a Fairware donation to those Fairware authors who gave the TI community a goldmine when they wrote all of these "unbelievable" cassette utilities!

JACK'S JOTTINGS
by Jack Sughrue P. O. Box 459 East Douglas, MA 01516
Copyright 1990 Jack Sughrue and Asgard Publishing

CASSETTES: THE NEW PERIPHERAL!

Actually, as bizarre as it may seem, cassettes could be the new peripheral for many of us who dreamed of a second or third system and simply could not afford it. Or it could be the eye-opening wondermachine for people just beginning to compute. And for those "Computer in Schools" systems that Jim Horn is working so hard to provide, the cassette just may be the salvation of the whole TI community. What? That's right. The salvation.

We are becoming an old community (by computer standards) and are not attracting any new budding geniuses to the fold (with exceptions in the Asgard and Comprodine stables, where 14-year-old whizzes still exist). But on the whole, the TI community is eroding. Now - not next year or next decade (which will be the 21st Century) - we need to attract young enthusiasts into our fold. We can't do it by high-tech exclusion. We have to get back to our fun-to-program roots. TI is still the easiest computer around to program with all those built-in subroutines (NUM, RES, CALL SOUND, CALL COLOR, etc.). And it's still lots of fun. But the youngsters (of all ages) don't know this.

If we get computers from the closets and onto the desks at home and also into the schools, we're going to have a new generation of programmers and users and developers and artists for our powerful machine.

One way of beginning such a recruitment is by getting Mickey Schmitt's latest book and changing your (and your group's) lifestyle.

Let's reexamine the basic system: console, TV, cassette, XB - and possibly 32K boxcar

[or cart or built-in]; in short, the basic system needed for LOGO (which is a whole other article some day).

Mickey's book is GETTING THE MOST FROM YOUR CASSETTE SYSTEM and is a totally rewritten and wonderfully expanded version of her original articles of the same name that appeared in the West Penn (where she is president) newsletter and reprinted all over the country.

Mickey's book is needed for a full understanding of these notes and of the distribution files on the disks and tapes discussed.

First, let me touch on the programs and other files she digs deeply into in her book (which is an excellent tutorial and cassette manual, also) and I have on a M.U.N.C.H. library disk in my machine. The files for use with Clyde Colledge's FASTLOAD are USER-NOTE, CASINSTFIL (instructions), and *LOAD. MISSPACMAN (from the disk) should be used as a testload program for this loader or even some large XB file like PAR-FORE. [Yes! Yes! Yes! These can all be cassette operated. And many more, too, as you'll see from the other items discussed below].

Files related to Joseph Bartle's CSI*FINDEX are that file, FINDEXNOTE, and some short XB programs to try it out from the disk I have in front of me: LUCKYSEVEN, BEETHOVEN, TEN-UP, 4LTTRWORDS, SNAKELADDR, and ROCKY/FARM (speech).

CASSLOAD (for LOADing from XB), CASSTRANS, and CSLOAD (LOADing from E/A), are all by Will McGovern for his perfect assembly program transfer from disk to cassette. Either loader program will run. This program makes your cassette system (with 32K and XB or E/A), into a "complete and silent system" in many ways. Load any PROGRAM image file (E/A) from disk: MUNCHMAN, HENHOUSE, YAHTZEE, ZERO-ZAP, PARSEC, etc. Run it on your cassette!

BOXLABEL, CATALOGER, and DATAFILER are all by Mickey Schmitt directly from her book (GETTING THE MOST FROM YOUR CASSETTE SYSTEM / $9.95 + 2.50 shipping and handling from her at 196 Broadway Avenue, Lower Burrell, PA 15068) which also contains all the directions, manuals, and tutorials for all of the cassette operating files mentioned here. The book is ESSENTIAL in order to operate these programs successfully. It also contains lots and lots more. And it is a masterpiece which should be in EVERY user group library, at least, and individual libraries at best. For user groups purchasing this book, Mickey is granting permission to xerox copies for all MEMBERS of the purchasing group at no additional charge or donation. This can be a great membership fundraiser for many struggling groups.

Get this book while it is still available. It may change your TI life the way it has changed mine.

But first:

Change Instruction #3 on Page 47 of Mickey's book to "(or DSK1.CASSLOAD)."

Follow that with "TYPE: RUN" before doing Instruction #4.

Hit SHIFT/E to abort any LOAD or SAVE operations of your cassette.

To SAVE one program on two cassette recorders simultaneously you must have that dual cable that most of us own. SAVE your program on CS1, but press the RECORD buttons on both recorders at the

same time. Perfect duo. (For other ingenious uses of this dual cable, see the last part of this article about Eric-Paul Rebel's two programs: CASSETTE BACKUP and CASSETTE BUILDER.

I'd recommend purchasing some 10-minute cassette tapes from a computer store or Radio Shack and do the following:

OLD CASSLOAD into console memory and then SAVE it eight times, one right after the other, on each side of one 10-minute tape. That way you'll be able to use CASSLOAD repeatedly without having to put it before EACH program on all of your E/A tapes. This could be a royal pain, although there are also some real advantages if you do this, as you'll see. Once you have this master loader tape just pop it in, RUN it, and it'll automatically get set to READ your CS1 program (like PARSEC or OTHELLO or HENHOUSE or whatever). CASSLOAD takes about 33 seconds to load each time you LOAD a new E/A program and works flawlessly and effortlessly and will load anything in the given format (which makes this transfer/load set more valuable than FASTLOAD, though the latter, when it works with the right programs, LOADS the files in half the time INCLUDING giant XB programs like PAR-FORE or Gene Hitz's great CRIBBAGE game). For a normal large E/A LOAD (say YAHTZEE or MUNCHMAN) it takes about 2.5 minutes. Things like RABBIT TRAIL or AMBULANCE DRIVER take about a minute less.

CASSLOAD seems to have a much wider margin of acceptance of the tape data feed, also, than FASTLOAD. Both programs are ingenious.

So's CS1*FINDEX. Charles Good's excellent (and wildly enthusiastic) review of Joseph E. Bartle's super program (Pages 32 to 41) leaves out a couple tutorial things.

First, get another of those 10-minute tapes. OLD CS1*FINDEX and SAVE it on Side 1 just as is. This will be your working LOADer and will be used over and over. If you have a disk drive you can load this program repeatedly with ease and speed when you create your amazing new high-speed cassettes. Or you can put the program in Mini-Memory or a Supercart and do the same, if you don't have a disk drive. Or you can just use your basic system. It'll just take a bit longer but will be worth it. You should also SAVE it as the first program on each FINDEX tape you make, but in the slightly modified form mentioned below.

Second, when you load the program it gives you the option of "SEARCH A LOCATION?" It's always "Y" when you are first LOADing up a tape (of 10 programs on each side of a 60-minute standard cassette). It'll ask which number to locate. Type 1 (later 2 and 3 etcetera, up to 10). This also lets you avoid a menu when you want to RUN a program later. Then rewind right to the beginning of the tape (as you'll be required to do for EACH of the ten programs), so put it right in the rewind state as you get ready to LOAD FINDEX again and again.

Third, it will tell you to put your tape recorder in FAST FORWARD mode at the beep. As it comes into the location to dump the program the screen colors change. At the STOP beep you're there. The program will BREAK to let you RUN a program at that location or (OLD and) SAVE a program at that location or just CONtinue.

Fourth, OLD your BASIC or XB program and SAVE it. Then REWIND the tape, reload CS1*FINDEX and SEARCH location #2. And so on up to 10, if you wish.

Now OLD CS1*FINDEX again and change line 1770 (or 2300 on Mickey's book version) from BREAK to RUN "CS1" and save it to the beginning of Side 2 of your CS1*FINDEX tape. This will be your automatic LOADer of all CS1*FINDEX tapes from then on. (When it breaks at 1770 just press ENTER and follow the directions for auto RUN).

If you pressed "N" at the opening location search, you will get an ingenious menu, one which you create (including a place for 10 remarks which can also be used for listing the programs on Side 2 of your tape). This menu lets you NEW (create a menu), SEARCH (by pressing a number as shown on your menu), CHANGE (anything at any time on your menu, as I have done with a couple tapes already - a very nice feature), PRINT (to screen or printer, which is a GREAT feature for cassettes!!!), or, of course, DONE (quit).

Once you use CS1*FINDEX just once, you will see how easy it is. It sounds much more complicated than it is. But a month from now you load CS1*FINDEX and go directly to "ROMEO" which is #9 on your long, filled tape in FAST FORWARD, semi-auto load and ENJOY cassettes.

But that's just the beginning! You can ***COMBINE!!!*** CS1*FINDEX with McGovern's and Colledge's loaders to give you just about any kind of E/A, B, or XB combo you can think of! And if you use a 90-minute cassette instead of a 60, you can put humongous programs like VIDEO CHESS or PAR-FORE or PERSONAL RECORD KEEPING onto the tapes and 1) have them SEARCH at FAST FORWARD speed 2) have them LOAD at that point with a semi-auto RUN command built in (this is where you'll need to put each special loader before the designated E/A or huge XB files) 3) run your favorite programs in quiet joy.

PLEASE NOTE THAT THE ABOVE VALUABLE PROGRAMS ARE FAIRWARE AND THE AUTHORS (Bartle, Colledge, and McGovern), DESERVE A DECENT DONATION IF YOU FIND THESE PROGRAMS USEFUL (as you undoubtedly will).

Mickey's Public Domain label, catalog, and datafile programs, also listed for typing from her book, will give you an added dimension to your new-found or rediscovered tape adventuring, too.

What's happened in my computer life since Mickey's valuable book has come out is that I have put a second system next to my first. The second consists of a tape recorder, 32K sidecar (though an internal chip might be cheaper), an XB cartridge, and an old BW television.

It's perfect. It's silent. It's cool. Now I can load and play all my favorite games, work with some of my favorite utilities (including wordprocessing), rediscover some of the true oldies but goodies, and even get back into some XB programming which I've more or less ignored for quite some time.

If you have an extra console and an old TV, as almost all of us do at this time, you can have that dreamed-of second system (providing you haven't chucked out your tape recorder or your old tapes - but new tapes are of better quality and a lot less expensive than they were just a couple years ago). This means that for those long tasks (printing out docs, converting graphics, whatever) that are necessary on your bulky, noisy disk system, can be done WHILE you are enjoying your very inexpensive second TI system in a brand new way!

For teachers, of course, this system can be a godsend. Load, as I do, the program up

before class and have it ready and willing to perform the best XB and E/A things TI has to offer. (I'd suggest capping the "quit" key in some home-made way, just so you won't have to begin the longer LOADing from the easy-to-quit files from cassette). Anyway, Get Mickey's limited-quantity book, GETTING THE MOST FROM YOUR CASSETTE SYSTEM, and start getting the most from YOUR cassette system.

A diskful of ALL the files mentioned above and many more (including a cassette menu maker) can be had for only $3.00 shipping and handling fee from M.U.N.C.H., 560 Lincoln Street, P. O. Box 7193, Worcester, MA 01605-7193. Ask for the library's "CASSETTE MASTER" disk.

Now there are many other peachy-keen cassette delights out there in the TI PD/FAIRWARE world, some of which are not yet included in any addenda to Mickey's book. The biggest, best, most unusual one that I've come across is TI-PD 1205.1 "CASSETTE UTILITES".

On this disk, Eric-Paul Rebel wrote two great programs for cassette: CASSETTE BACKUP and CASSETTE BUILDER. The first program requires two cassettes and the dual cable that so many people used to wonder about. You just LOAD/RUN "BACKUP" from tape or disk, put your original tape in CS1 and blank in CS2 and it will copy your entire tape exactly without you touching the keys again. It'll copy more than just computer programs, too. BUILDER is even more ingenious. It lets you dump a diskful of program files from disk to cassette (to two cassettes at the same time, if you want to). No more LOAD into console and SAVE onto cassette again and again and again endlessly. This is all done automatically and alphabetically (so if you want an order, just rename your files by putting a "1," "2," or "3" before the

order you wish - or a lower ASCII code like an asterisk, percent sign, whatever).

Also on this disk of cassette goodies is a thing called DISCO-SHOW by Tony Brouwer. This I love and use it with demos to introduce new materials. You put regular music (jazz, rock, classical) on your computer tape recorder and colorful designs on the screen will dance to those exact sounds. Pause and the designs freeze; unpause and they're on their way again. Weird and fun!

Another cassette program on this disk is CASSETTE PORT CONTROLLER by Peter Walker, which lets you turn on and off your cassette recorder DURING A RUNNING XB PROGRAM! This means that you can put any REAL speech or music on tape to accompany perfectly any XB program. This is really incredible because a programmer with a creative turn of mind (or a user) can make the most remarkable things blend within this program (which could be ENTIRELY tape based).

Peter Hoddie has also written a CS1 program called CS1 ON/OFF which does exactly what it says. It turns on and off your cassette whenever and wherever you want through a series of CALL LINKs in XB.

All these great programs on a single SSSD disk can be ordered from Jim Peterson's TIGERCUB, 156 Collingwood Avenue, Columbus, OH 43213 for only $3.00 shipping and handling fee. Throw in an extra $1.00 and ask for his extraordinary PD/FAIRWARE catalog. It is the most complete collection in the world of the best stuff ever written for the TI.

Rediscover your TI and share that discovery with a new user!

—WP◆

Who's Obsolete Now?
An essay by Chris Bobbitt
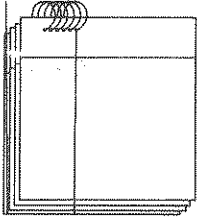
The concept of obsolescence in computers itself is controversial - by some definitions every computer in production is obsolete the moment it's introduced. To most people a computer is obsolete the moment it's discontinued or the manufacturer or its competitors introduce more capable models. However, in technological terms the only difference between computers produced in 1975 and 1991 is speed and memory.

Speed, is surprisingly a highly relative concept - even the fastest computer in the world does nothing while waiting for the user to press a button. The speed a computer actually processes information is often more dependent on the efficiency of its software then the base speed of the electronics. Virtually all computer software today, even operating systems, is written in relatively inefficient and slow high-level languages. The inherent inefficiency of this drives computer manufacturers to continually increase the speed and memory of each succeeding generation. As the amount of memory and basic speed of each generation increases the pressure on software designers to produce small and quick code is correspondingly reduced.

Hence we have a continual cycle where new machines are designed to run the software of today faster, and soon have to be replaced to run the software of tomorrow, which functionally does little that couldn't be done with the previous generation of software.

This perverse equation encourages software manufacturers to constantly increase the complexity of their software - the last major revision of WordPerfect, for instance, added hundreds of features, of which the vast majority were only of interest to a tiny handful of users. The average user of this software will simply note that the program is slower after upgrading, and funds permitting will soon purchase a more powerful computer simply to do what they did with the previous version. Some users will eschew upgrading, at least until the manufacturer ceases supporting that version.

This continual cycle of "manufactured obsolescence" is currently the major source of income for many computer product manufacturers. This is distinguished from "planned obsolescence" in that the product itself doesn't cease to function (as a car or washing machine would), but instead becomes merely superceeded by a new model.

Instead of computers becoming simpler to use, increasing their capacity seems to result in them becoming more difficult. Whole careers are now being built on learning and explaining the intricacies of a single computer program. If this trend continues in the future people will collect salaries by becoming experts on the operation of a specific function of a program.

The needs of the average user have become irrelevent to the majority of computer manufacturers.

If you view "obsolescence" this way, the fact that the TI-99/4A was discontinued was probably the greatest thing that could have happened to it. Because the limitations of the machine are for the most part accepted programmers and hardware designers are encouraged to find ways to work around the limitations, and do more with less. The software for the TI-99/4A is for the most part hundreds of times more efficient then comparable software for other machines - both in terms of data storage and software implementation. For this reason, it still meets the needs of the vast majority of its users - both now and most likely in the near future.

—WP ◆

"TI EXPLOITS #2"
by Ed Hall
From MANNERS

In "TI EXPLOITS #1" I commented about several steps I had taken toward making a portable console for use with amateur radio equipment. In this article I will be addressing more steps in the same direction. The advancements I have made now include the addition of a 32K RAM chip, disk drive controller with a 3.5 inch drive and an RS232 with both serial and parallel ports all inside the console. The console doesn't appear quite the same, of course, but is actually less than 1 inch thicker with all the additions. Unfortunately I have some disappointing news for any who may wish to follow in my path. The power supply I have installed in this console is no longer available from Radio Shack, the RS232 I used may not be available any more and 32K chip prices have risen drastically. These items are still around though in flea markets and hamfests.

Let's start in first with the 32K chip installation. I had heard that John Willforth had been adding memory to several devices to include speech synthesizers, drive controllers and consoles. He supplied me with some documents which included a diode matrix scheme by Joe Spiegel to allow the use of a single chip. This is needed to overcome the problem of the 32K being broken into two separate blocks of memory. With the information I received and a little of my own design, I devised a method of installing a single 32K chip on top of one of the ROMs inside the console. The data lines are run to several feedthrough points on the board and most of the address lines connect straight to the ROM chip. I have written a detailed article on this 32K modification and it has appeared in some newsletters.

After getting the memory in the console I decided that I had to have disk storage available since I needed to be able to save messages in my amateur radio work. I started with a stand-a-lone style setup using a Percom controller and three Oki 1/3 height 5.25 inch drives but I didn't have good luck with them due to overheating. So I took the Percom board and mounted it inside the console flat against the bottom and removed all the power supply components from it. (The Percom is set up to receive around 18 volts AC with center tap.) Since I had the required DC voltages already in the console, I ran them straight to the controller and straight to a 3.5 inch drive. I then mounted the drive in the left side of the console with the disk opening to the left edge in front of and a little lower than the joystick port. The controller is mounted so that the I/O connector is directly below the console I/O connector and the external drive connection is on the same side but toward the front of the console. This allows the connection of two external disk drives as drives 2 and 3. The Percom controller is only capable of 40 track single density but that still gives me 720 sectors of non-volatile storage.

Next for my radio work I had been using a BOXCAR stand-a-lone RS232 plugged into the side of the console to provide communications with my amateur equipment. I took off the case and the connector and rewired the PC board and mounted it in the console with the parallel and serial connectors both available through the back of the console. I rewired the power so it was also supplied by the internal DC voltages and it was set to run.

With all these additions the console still runs off of 12 volts DC but because of the drive it requires a source capable of instantaneous draws of up to 2.5 amps. I have been able to run it from lesser supplies if I provide a battery pack in line to buffer the 12 volts during disk access.

Let me go ahead and give a list here of all the additions mentioned in both TI Exploit files. These are the additions to the console so far:

1. Alpha lock diode.
2. 12 volt DC capable console supply.
3. Supercart with dual banks of RAM.
4. 32K chip installation.
5. 3.5 inch drive with controller.
6. RS232 with serial/parallel ports.

You may be wondering now "What next?". I'm wondering that myself. I am working on a 4 bank supercart circuit to install permanently in the console, but that is constantly being put off in favor of doing other things. I would also like to put a small RAMDISK inside but again I'm procrastinating.

If anyone would like to contact me in regards to anything I can be reached through the Mid-Atlantic Ninety-NinERS computer user group (MANNERS) or via Bob and Bill's Bulletin Board in Clinton, Maryland at (301) 292-1482, PC Pursuit #(202) 292-1482. My user number is 50.

--WP ◆

Best Buys 1991

As promised here are *your* best buys for computer hardware and software. Unfortunately only one user, our president, contributed. I gave everyone a month to contact me and many ways to do it...what does that say? TISK TISK TISK.

-- 12-01-91 - 07:00:00 *--*

No. 7979 * User Group Discussions *
On: 11/26/91 4:20pm
By: MICKEY SCHMITT 10 (LOWER BURRELL PA)
To: CHRISTOPHER PRATT 40 (Arlington VA)
Sb: BEST BUYS 1991

Chris, almost forgot to submit my votes for "Best Buys of 1991". I vote for Artist Cataloger, from Comprodine, TI-Sort from Texaments, and Backsteine, also from Comprodine. We demoed all of these produts at our West Penn meetings, (among others), and I was really impressed by them. So much so, that I have purchased both TI-Sort, and Artist Cataloger, and when funds permit, would love to purchase Backsteine. TI-Sort saved me literally hours, perhaps even an entire day, sorting my TI-Base data bases. Artist Cataloger is a product that should be owned by all who have any amount of TI-Artist Instances or Fonts. As for Backsteine, it is pure fun on the TI! I am sure there have been other good programs, and even some good hardware, but those three items really stand out in my mind.

--WP ◆

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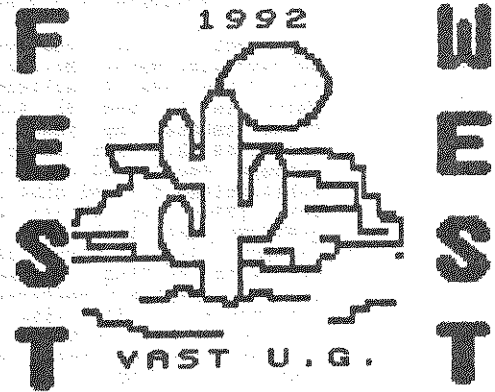You could have been here!

TI FEST WEST 1992

HOSTED BY:
VAST - Valley of the Sun TI Computer User Group
c/o FEST WEST '92 COMMITTEE
4316 W. Altadena, Glendale, AZ 85304

DATE/TIME:
Saturday, February 15, 1992 – 9 a.m. to 5 p.m.
Sunday, February 16, 1992 – 9 a.m. to 3 p.m.

LOCATION:
Days Inn – Phoenix/Camelback
502 W. Camelback Road
Phoenix, AZ 85013
(602) 264-9290 or 1-800-688-2021

FEST WEST '92, THE BEST YOU CAN GET!! FEST WEST has been one of the major faires for the TI-99/4A and the Myarc GENEVE 9640. We think this year's FEST will follow the successes in quality and size of the previous ones hosted by the Los Angeles User Group, Southern Nevada User Group, Southern California Computer Group, Southwest Ninety-Niners User Group, and last year, the User Group of Orange County in association with the Pomona Valley User Group. The FEST will be held in Phoenix, the capitol of Arizona. Many museums and the revitalized Downtown Phoenix are only a short bus ride away. The Phoenix Zoo, 123 acres of mammals, reptiles and birds, and the Desert Botanical Gardens at Papago Park are a little farther away, but worth the visit.

The large ballroom at Days Inn (the Arizona and Sedona Rooms) will be used for exhibit space. The Speaker's Presentations will be held in The Cactus Room. User Groups and vendors are invited to display and sell their wares. Many electrical outlets will be provided. Each table is only $20.00 and each table reservation includes 2 admission tickets that are good for both days.

The Guest Room rate of $54.00 is very good at this time of year in Phoenix. The $54.00 is for 1 to 4 people so bring the family and the _swimming suits_ for a long weekend vacation. Don't forget the warm weather clothing for the evening.

These rates are for FEST WEST and available only at the phone numbers indicated above. The FEST WEST '92 Committee has guaranteed a number of rooms in a block. This will be near the Hospitality Suite. To enjoy all the TI'ers, make reservations early and indicate it is for FEST WEST.

As the FEST nears, the time to get your reservations in is NOW. Booths will be assigned on a first reserved, first assigned basis. Making reservations early will not only give you one of the best locations in the room, but will also give the Committee additional _advertising_ information. There is nothing like *FREE* advertising and people _DO_ want to know who will be here.

FEST WEST has always been successful at providing a good place for TI/MYARC Vendors to come. Attendance has always been good and sales high. With the FEST in Phoenix, we expect no less. Some tables have already been reserved, but many are still available.

Something new for FEST WEST '92 will be a "Vendor's Forum," an open meeting for Software/Hardware developers to put their ideas on the table for discussion. This meeting will be on Saturday evening and conducted by Don O'Neil. We expect *Good Things* for the TI and Geneve Computers.

There will be door prizes and a raffle. Raffle tickets cost $1.00 or 11 for $10.00. The grand prize will be a Star NX1020 Color Printer. Now someone will be able to make those greeting cards with seven colors! Other prizes will be available and the FEST WEST '92 Committee is still looking for additional prizes. It would be greatly appreciated if you have someting that can be donated for this purpose.

COME, TI/Myarc Vendors, and take advantage of this Western Region gathering to present and sell your wares to the TI community "that just keeps going."

12.5 VOLT CONVERSION FOR
MECHATRONICS EPROMER

Back in June I received my Mechatronics Eprom Burner. Reading the directions I noticed that it burns in 21 and 25 volt eproms. Going through my junk box I found some 2764 12.5 volt eproms. Looking through Jameco and other electronics publications I found that most 8K and 16K (2764 or 27128) eproms are designed for 12.5 volt burn in voltage. 21 volt eproms are avalible but harder to find. I then decided to see how the Mechatronics Epromer got it's 21 and 25 volts and if I could add a 12.5 volt circuit.

The epromer uses a 7805 voltage regulator to produce the 21 and 25 volts. The 7805 is a 5 volt regulator but can be used as variable regulator by controlling it's ground leg. With the ground (center) leg at 20.4 volts it outputs 25.5 volts , with it at 16.2 volts it outputs 21.2 volts. It does this through a series of Ziner Diodes. An 11 , 4.7 and 4.3 volt diode are used with a lead between the 4.7 and 4.3 to change the voltage. By grounding this lead you get 21 volts , by pulling it up to 5 volts you get 25 volts. This lead is software controled. By trial and error I found that disconnecting the ground lead and applying a 7.5 voltage I got 12.7 volts output. Experamenting with ziner diodes I found a 8.2 volt ziner gave me 13.2 and by adding a LED and 1800 ohm resistor in series with the diode I get 12.7 volts output.

The last trick was adding a switch with the center lead to the regulator and the outer leads ,one to the original diodes and the other to the diode LED combination. I used a miniture SPDT switch and a LED (same size as the ones on the board) mounted in front between the ZIPS socket and the power plug. Any convenient location will do.

Testing went fine, when in 12.5 volt mode the LED is lit, it dosent matter what you tell the software you are in 12.5 volt mode. Flip the switch you are in 21 or 25 volt mode.

I'm including some drawings with this article to show locations and where I cut the trace, also locations where I added my components.

Any questions please contact;

Jack Zawedluk
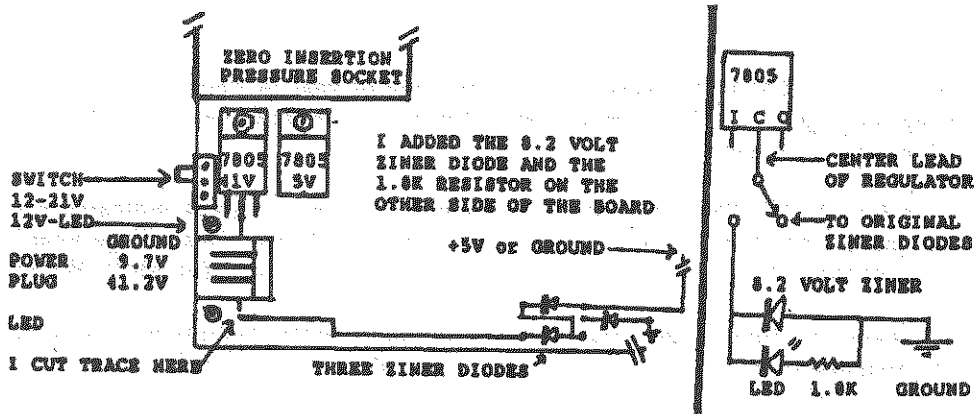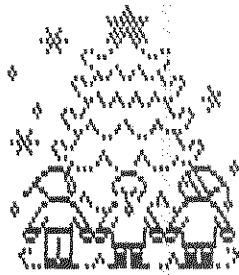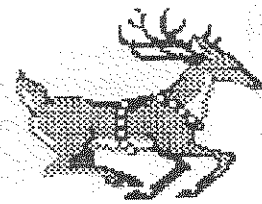719 N 12 th.st.
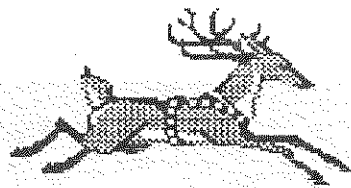Allentown, PA 18102
215-821-1043

NOTICE

PARTS

ONE EACH

8.2 VOLT ZINER DIODE
1.8K 1/4 WATT RESISTOR
LED
SPDT SWITCH
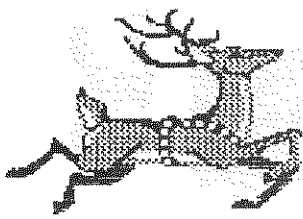
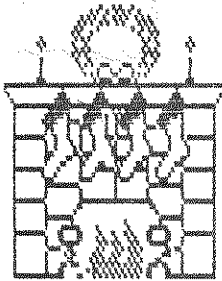# MERRY
CHRISTMAS
TO ALL 99'ERS

December is the month of fridget weather and snowy skys. Which brings us to the the night of the WEST PENN'S last meeting of another wounderful yeay. There is many thangs to be thankful for, one is that WEST PENN is still going strong. I hope that we can prosper and have lots of PEPSI.

Everyone will be starting a new year with hope of new members and a lot of new software and hardware. With Mickey as president I would think that every thing will be back to the normal running of high class computing tech! I would like to say that the gift of Christmas this year is the officers that we have to maintain and run the best computer club in the world.

Christmas comes but once a year, Let us all be of great spirits and joy when the new year comes. I hope that everyone gets everything that they wanted for XMAS. (Lots of software in their stockings). As with so many new software comming out it is hard to make up ones mind ing about why the software to purches. This is know we write articals and reviews. I to that I can't spell or know where thing put a punctuation mark. The amazing the is, that no one minds as long as idea is there.

MERRY
CHRISTMAS

and a
HAPPY NEW
YEAR
1992

IF YOU HAVE
SOMETHING TO
SAY PUT IT ON
PAPER & SEND
IT TO CHRIS!
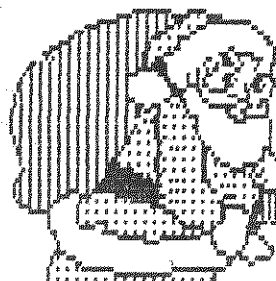
PAGE
PRO
PAUL
Made in U.S.A.

DECEMBER

		Tuesday * 17th				

**The West Penn meeting is on the 17th of this month.
Mark your calendar!**

WEST PENN 99'ERS

Ralph J. Vasko
One Virginia Dr
Donora, PA 15033

Address Correction Requested

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