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FOR THE RECORD

ISSUE #8 AUG 1987

by Frank N. Zic
(Acting Secretary)

Well, our July 21st meeting was full of hot air again, oops, that didn't come out like I planned, or did it-Humm. But you know what I mean, it was really hot. Thanks to someones good foresight, we had a large portable fan that helped a lot. Another nice touch was Jan's good thinking in making cold fruit salad. It really went over big. So with a little help here and there we did get off to a good start. It should be mentioned that there were (35) club members in attendance. John informed us of an off brand product recall where the entire shipment of DSDD disk drives were sent back to Japan. The lesson we should all learn from this is stay with the name brand products. Discussion next centered around the X-10 Powerhouse from Eagle Software. This home lighting and appliance control device can be purchased for \$23 vs \$33 if bought in quantity: Hope you got your order in if you were interested. Next, Scott opened the official meeting, asking Jan for a treasurers report. She responded with a mini.-report. With all being in good order. Our last big purchase was for 700 disks which again seem to be going rather fast. A copy of the library listing was available to anyone wanting a copy.

Old business brought up the inquiry as to whether we all filled out the personal equipment survey sheet attached to the last news letter and sent it in as directed. Once again each of us doing a little can have an influence on the product development for our TI computers. Please help-send yours in today. We are still looking for a large storage cabinet. The info from the L.A. users group on possible exchange disks is still in limbo. John mentioned that heat distorted disks can often be saved by replacing the outer jacket. Since the jacket material seems to warp rather easily, the files might be saved by simply re-jacketing.

New business centered around introducing new club members; Dr. and Mrs. Heck, Mrs. Patterson and her son, Frank Foster with his son and Tom Mainier. Welcome to each of you. A lot of interest was had in ordering a TI "Hardware Manual". They should be here in 6 to 8 weeks. A dollar raffle was held for assorted reading materials. Various classes were held, including Adventure, Assembly, Hardware and TI-Writer held by yours truly. A speeded-up version of Centipede was demoed by Mickey Schmitt. Just about at the close of the meeting some friends came in all the way from Youngstown, Ohio to show us their portable carrying unit(complete with monitor). The unit weighed 45lbs.and therefore could use some miniaturization but we all agreed they did a very workmen like job, nice going and thanks for the visit. In closing, remember the old saying-"Don't complain about growing old. It is a priviledge not given to everyone". Until next time may the good 4's be with you.

Respectfully submitted,
(Where are you ED.)

JULY TREASURER'S REPORT

FROM JAN TRAYERS

```
*****
*
* 7/1  CASH BALANCE    $ 57.10  *
*
* 7/21 LIBRARY SALES    23.00  *
*
* "    MICROPENDIUMS    13.50  *
*
*      MEMBERSHIPS      60.00  *
*
*      DISK, ETC.       284.00  *
*      SALES
*
*      RAFFLE           24.00  *
*      -----
* 7/25  TOTAL           $461.60  *
*
* 7/27  BANK DEPOSIT    - 406.60  *
*      -----
*      CASH ON HAND     55.00  *
*****
*****
* 7/1  BANK BALANCE    $650.10  *
*
* 7/3  DISK PAYMENT     -203.00  *
*      -----
*      447.10  *
* 7/21 POSTAGE          - 54.00  *
*      -----
*      393.10  *
* 7/22 MICROPENDIUMS    - 15.00  *
*      -----
*      378.10  *
* 7/27  DEPOSIT         + 406.60  *
*      -----
*      BALANCE          784.70  *
*
* 7/29 MANUALS          - 340.70  *
*      -----
*      BALANCE          $444.00  *
*****
*****
*      TOTAL CASH BALANCE $499.00  *
*****
*****
```

HIGH-SCORING GAMES

GAME	SCORE	COMMENTS	DATE	NAME
ARCTURUS	14040		5-28-87	TONY MAWHINNEY III
BURBERTIME	82600	PATTERN 21	9-04-85	MICKEY SCHMITT
BURGER BUILDER	1000000	PATTERN 99 NEVER RUNS OUT OF PEPPER		ELEANOR ZIC
CENTIPEDE	301930		1-08-87	MICKEY SCHMITT
DIG DUG	262460			FRANK ZIC
DIG DUG	216740			ELEANOR ZIC
HUSTLE	WON 52	LOST 27 TIED ONCE		ELEANOR ZIC
JUMPY	131900	PATTERN 21		ELEANOR ZIC
JUNGLE JIM	10730		5-28-87	TONY MAWHINNEY III
MICRO PINBALL	1776500		5-18-87	NORM ROKKE
MICRO PINBALL	969500		6-27-87	MIKE SEALY
MIDNITE MASON	24720		6-16-87	FRANK ZIC
MIDNITE MASON	19340		6-28-87	ELEANOR ZIC
MUON PAIKOL		LEVEL K CHAMPIONSHIP		MIKE SEALY
MUNCHMAN	23200	LEVEL 7	7-23-87	MICKEY SCHMITT
PARSEC	33400	LEVEL 3	7-23-87	MICKEY SCHMITT
POLE POSITION	105290			DAVID RENNER
TI INVADERS	6561	MERELY AGGRESSIVE	7-23-87	MICKEY SCHMITT

RECENTLY, I BROKE MY PREVIOUS "HIGH-SCORE" IN MY ALL-TIME FAVORITE ARCADE GAME, WHICH MANY OF YOU KNOW IS "CENTIPEDE". HOWEVER, I FOUND OUT THAT I AM NOT THE ONLY ONE OUT THERE WHO HAS A "FAVORITE" GAME OR A "HIGH-SCORE" TO BOAST ABOUT! WITH THIS THOUGHT IN MIND, I HAVE DECIDED TO START A NEW COLUMN, IN OUR WEST PENN NEWSLETTER. IF YOU CAN "BEAT" ANY OF THE SCORES THAT ARE LISTED IN THIS COLUMN - JUST LET ME KNOW AT ANY OF THE WEST PENN MEETINGS AND I'LL PUBLISH IT IN THE NEXT NEWSLETTER. ANY ARCADE GAME FOR THE TI IS ACCEPTABLE FOR THIS COLUMN, AND YOU MAY SUBMIT YOUR HIGH-SCORES AS OFTEN AS YOU WISH. LET'S GET AS MANY PEOPLE INVOLVED IN THIS ENDEAVOR AS POSSIBLE. REMEMBER, A LITTLE "FRIENDLY" COMPETITION, MAY JUST "SPARK" SOME OF YOUR "GREAT" AND ENTHUSIASM!

I hope that the content of this months newsletter is not disappointing to you. I have been buried by my job the last couple of weeks, and have had to allow the newsletter take a backseat to some higher priorities. I hope that those of you who like "HOT" weather are now satisfied for a decade or two. We are one of the few clubs around the country, judging from newsletters that have been received, that meet all summer. As you can see in the secretaries report we are still getting great turnouts. Hope to see you there. 7

AUG. 18th, 7:00 P.M. at United Presbyterian Church of Covenant
corner of Oak and 4th Streets, Irwin, PA. For directions, call: (412)
Scott 271-6283 Jan 863-1575 Ed 864-4924 or any member.

T. I. WRITER (Part 12) Stan Katzman

The last dot command is the transliterate command (.TL _:_,__) with this command you can change any character to another character in the formatter. In order to use this command we must first discuss the ASCII character codes which are listed on page 145 of the T. I. Writer manual, plus you need to know the control codes for your printer. The control codes are given in your printer manual.

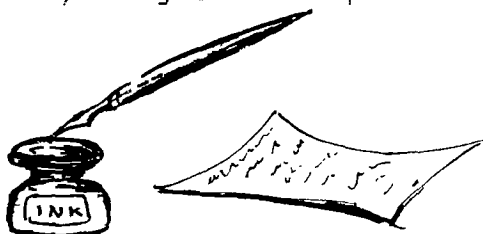
The ASCII codes are a set of standard numbers which when sent to the printer cause the printer to print a certain character. For example if your computer sent the printer the code number 65 a capitol "A" is printed. Some ASCII codes do not cause the printer to do anything, for example if number 27 is sent (this is called escape) it will be a signal to the printer to do something special.

The transliterate command works in conjunction with the ASCII codes and your printer control codes. Let's give a few examples of them. Let's say we want to make a superscript. The control code for the Epson LX-80 printer to make a superscript is 27,"S0". This is escape, capitol "S" and zero. In Basic if we send the printer the following statement Print #1:Chr\$(27);"S0", it will print all letters or numbers after this code in superscript mode, we must now turn off the superscript modes and this is done with the code 27,"T". So in Basic we could say Print #1: Chr\$(27);"T" and now everything will be printed normally in a Basic program. Well in T. I. Writer we have to tell the program first that we want to change one letter to something else (transliterate). We "tell" the program this by using a character that we will not be using in the rest of the document and then transliterate it. For example let us assume that we are not going to use the brackets([]) in our document. The left bracket ([) has the ASCII code of 91. So let us use this as a signal to transliterate it in order to make superscripts we would type at the start of our document .TL 91:27,83,48. What this says is ASCII 91 a left brace ([) to transliterate into the following, 27 code to the printer do do what follows (escape), and now 83 which is a cap S and 48 for zero. The next character the printer sees will now be printed in superscript. We now have to turn off superscript and let's use the right brace (]). We would type at the head of the document .TL 93:27,84. This transliterates thusly, ASCII 27 is escape to the printer and 84 is the cap T which tells the printer to turn off superscript (and subscript) modes. Let's see what this would look like

```
.TL 93:27,84<enter> (Changes ] to turn off superscrip).  
.TL 91:27,83,48<enter> (Changes [ to transliterate to superscript).  
In the making of a cake heat the oven to 300[O] F.....
```

You see the braces turn the zero to a superscrip and the next brace turns off the superscript. That is why we cannot use the braces anywhere else in the document.

Study your printer manual and you can make your printer do everything it is capable of using the transliterate mode.



ED NOTE: I would like to thank Stan in print for this series of articles written for the WEST PENN 99'ers. This is not the last in the series! We hope that you are learning.

"TIPS FOR BEGINNERS"

-BY FRANK N. ZIC

Here we go together-No.8. This time around let's do a Potpourri of some things you might have forgotten. Some are just little hints that might make your use of the TI just a bit more enjoyable. Try them at any rate, it couldn't hurt.

******-When removing the tape protect tab, try peeling it off from the back side first instead of the front. The overlap roll of the disk cover provides a natural opening for your fingernail. Often there is a (press-mark) at this location also, on some disks, that provides an easy starting point.

******-When you are winding the paper backwards in your printer, give a little tug to the rear, on the main paper feed. This will keep the paper taut and prevent it from jamming-up under the print head.

******-Remember that any adjustment to the paper positioning in the printer should be immediately followed by shutting off the printer and turning it back on again. This will keep your paper feed (starting point) where you want it, not only on the first page, but especially on the second and succeeding pages. Otherwise it will remember where you had it positioned and your second page will start somewhere down the page. Sound familiar?

******-Be careful of LOAD programs, they can only load the selected programs that the author put in the program listing. Anyone else adding programs to the disk, could mean that these files can only be accessed by the direct type in procedure.

******-Use only one(1) LOAD program per disk side. The auto-load feature of NO.1 disk drive can only respond to a single LOAD request.

******-To modify a LOAD program to auto-load your files, say a disk side with no LOAD program, first find a LOAD program you like and then print out the listing with the command LIST "PIO". Now look the listing over and replace the original filenames with your new filenames.

******-Anytime you copy a disk, be sure to use the same disk name on your copy as the one found on the original. Often during the running of a program the author might make reference to the original disk name and if it is not found, the program will not run.

******-When playing the TI-RUNNER game, you can advance to a higher screen number without having to play successfully through all the lower numbered screens. In other words you can go right back to the screen that you last played. To accomplish this, hold down the FCTN key and the No.3 just at the beginning of the reload. Keep holding down these two buttons until you see the screen before the one you want. Release and the cycle will stop on the next program, the one you want.

Until next time may the good 4's be with you.

PERFORM MORE RELIABLY..... by John F. Williforth

A couple of days ago, Frank Foster came to me with an interesting problem. He had only a day earlier, purchased a FASTEXT 80 printer, a special strobe inverting cable, and on putting these together with his CORCOMP RS232/PIO card, he sat in disbelief when nothing happened. He tried a regular cable that had been used on an EPSON printer, and still no printing occurred. The printer would print selftest, however.

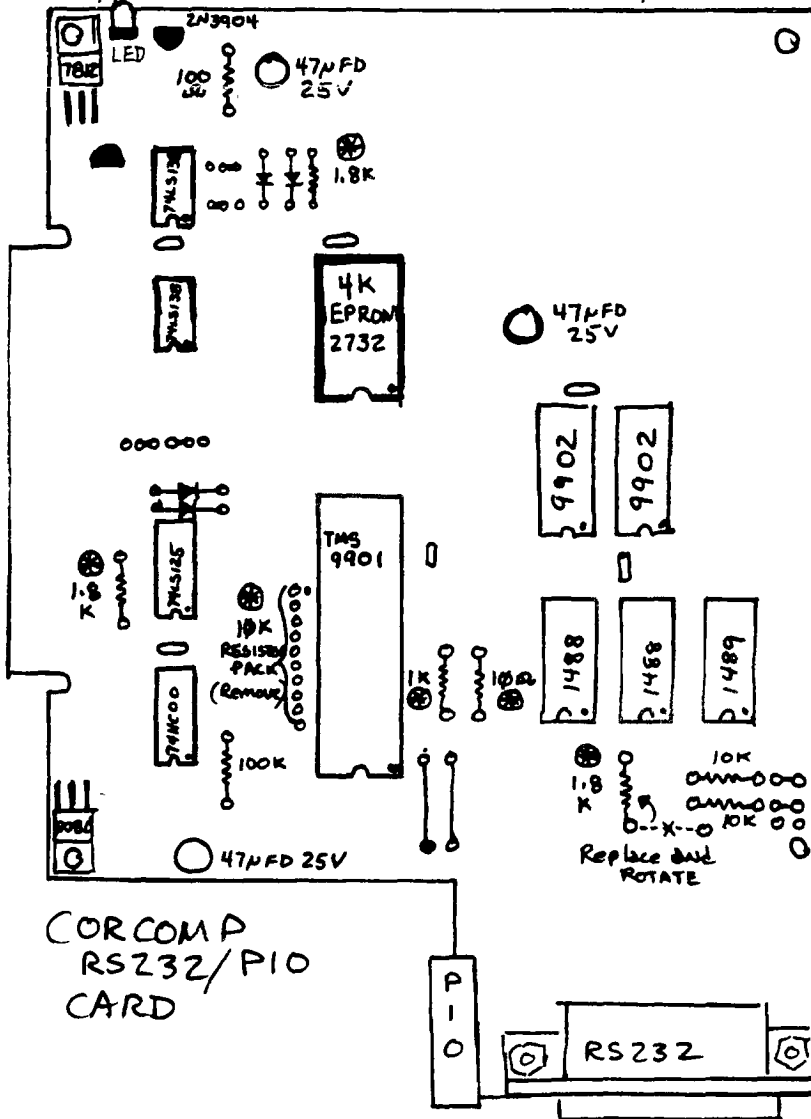
Since I use a CORCOMP card, I asked Frank to bring the printer, card, and cables over so we could have a look/see.

Frank was right his card/cable(s)/printer combination did nothing. Since I had his PIO controller already in the PEB, I hooked up my printer (an EPSON), to his card. It worked. It seemed that with the EPSON, that all the cables worked, and both his and my CORCOMP cards drove the printers. THIS WAS STRANGE.

I had heard that several years ago that the CORCOMP RS232 cards had undergone some improvements, and I couldn't find the information to verify what they were and what they were for. Well Frank left and I said I would call CORCOMP and investigate the problem. Problem was I got busy and about two weeks later Frank called, and alas there I was no further along than when he had dropped it off.

Now for the desperate part. I removed both cards from their shells, and noted that the artwork (physical board layout) was the same. His did however have physical jumpers for multiple board strapping, which mine did not. My board was the newer, and therefore had reaped the benefits of corporate cost cutting that is the plague of all good things. So now looking further, and having already verified that the ROM information was the same in his card as in mine, I started checking chip types and version types. There were some differences, and if nothing further would show up I would resort to changing the few of them that were different. I had heard of a problem in this area.

Well on closer investigation, I found a very astounding difference. The RESISTORS were so different in value, that it is hard for me to believe that the card could have worked.



I drew a sketch of the card and on it placed the main components for reference. Altogether five resistors & a resistor pack may be removed, and no apparent problems found, if they are replaced (in the case of the individual resistors) with the values indicated on the drawing. You will note that the resistor just above the RS232 connector is notated to solder into a hole that exists in a trace already. The resistor pack is a 10K pack, as are the five discrete resistors that I removed. I placed a (*) symbol at the location where you may have to remove/replace a component.

This may fix problems that you have had with this controller. I've been using mine since early 1984, and have never had trouble with it on any type printer or cable. This is not to say that there have not been some changes to the card. You should always check with CORCOMP. They will be happy to help you. I hope that this will help someone who has had strange and hard to define problems with this card.

This is my contribution for this month, You may need (5) 1.8K 1/4 W. resistors, (1) 1K 1/4 W. resistor, and (1) 10 ohm 1/4 W. resistor.

GETTING THE MOST FROM YOUR CASSETTE SYSTEM
BY MICKEY SCHMITT
NUMBER 13
UNDERSTANDING - CREATING - AND USING - CASSETTE FILES
PART II

THIS MONTH I AM CONTINUING WITH THE TOPIC OF UNDERSTANDING - CREATING - AND USING - CASSETTE FILES. MORE SPECIFICALLY, I WILL BE CONCENTRATING ON CREATING YOUR OWN SPECIFIC CASSETTE FILES - IN ORDER TO MEET YOUR OWN SPECIFIC NEEDS.

AS I STATED BEFORE IN PART I OF THIS SERIES... UNDERSTANDING - CREATING - AND USING - CASSETTE FILES IS AN AREA IN COMPUTER PROGRAMMING THAT I HAVE NOT HAD VERY MUCH EXPERIENCE WITH IN THE PAST. AT LEAST NOT ENOUGH EXPERIENCE WITH THAT I FEEL "COMFORTABLE" OR "CONFIDENT" ENOUGH TO BE WRITING THIS ARTICLE... WITH THE "HOPE AND EXPECTATION" OF PASSING ALONG SOME OF MY COMPUTER KNOWLEDGE, SO THAT OTHERS MAY LEARN FROM MY OWN EXPERIENCES. NEVER-THE-LESS, I AM GOING TO ATTEMPT TO TRY AND GIVE THIS PARTICULAR TOPIC THE ATTENTION IT SO RIGHTFULLY DESERVES. ALL I ASK IS THAT YOU BE PATIENT WITH ME... AS I WILL BE "LEARNING" ALSO OF THIS INFORMATION JUST PRIOR TO PASSING IT ALONG TO YOU.

BEFORE I BEGIN... I WOULD FIRST LIKE TO MENTION THAT MOST OF MY "MATERIAL" FOR THIS PARTICULAR SERIES WILL BE TAKEN DIRECTLY FROM THE TEXAS INSTRUMENTS USER'S REFERENCE GUIDE (BETTER KNOWN AS THE "GREEN" MANUAL).

SINCE THIS PARTICULAR MANUAL WAS INCLUDED IN THE "INSTRUCTION PACKET" WHICH YOU RECEIVED WHEN YOU PURCHASED YOUR COMPUTER... YOU SHOULD HAVE NO TROUBLE FINDING A COPY OF THIS MANUAL FLOATING AROUND SOMEWHERE. ONCE YOU HAVE LOCATED THIS MANUAL... YOU SHOULD TURN TO THE SECTION DEALING WITH "FILE PROCESSING"... MORE SPECIFICALLY... PAGES 11-118 THROUGH 11-136. PLEASE KEEP IN MIND THAT THE USER'S REFERENCE MANUAL DISCUSSES BOTH DISK FILES AND CASSETTE FILES AT THE SAME TIME, AS IT EXPLAINS EACH PART OF THE FILE PROCESSING PROCEDURE. IT IS VERY IMPORTANT THAT YOU FOLLOW THE SPECIFIC INSTRUCTIONS THAT WERE DESIGNED FOR THE CASSETTE RECORDER... AND NOT THE DISK DRIVE!

THE FIRST THING THAT WE MUST LEARN IS "HOW TO 'OPEN' UP A CASSETTE FILE". BELIEVE IT OR NOT - IT IS NOT AS DIFFICULT A PROCESS AS IT FIRST SEEMS TO BE... ALTHOUGH I MUST ADMIT... TRYING TO READ AND UNDERSTAND THE PROCESS FOR THE VERY FIRST TIME CAN BE QUITE CONFUSING. WITH THIS THOUGHT IN MIND... I HAVE TRIED TO KEEP MY EXPLANATION AS SIMPLE AS POSSIBLE!

THE "OPEN" STATEMENT PREPARES A BASIC PROGRAM TO USE DATA FILES WHICH ARE STORED ON ACCESSIBLE DEVICES, SUCH AS THE CASSETTE RECORDER. THE "OPEN" STATEMENT DOES THIS BY PROVIDING THE NECESSARY LINK BETWEEN A "FILE-NUMBER" WHICH YOU HAVE USED IN YOUR PROGRAM AND THE PARTICULAR ACCESSORY DEVICE, (IN THIS CASE A CASSETTE RECORDER), ON WHICH THE FILE IS LOCATED.

THE "OPEN" STATEMENT DESCRIBES A FILE'S CHARACTERISTICS TO THE COMPUTER SO THAT YOUR PROGRAM CAN PROCESS IT OR DELETE IT. WITH SOME ACCESSORY DEVICES THE COMPUTER WILL CHECK THAT THE FILE OR DEVICE CHARACTERISTICS MATCH THE INFORMATION SPECIFIED IN THE "OPEN" STATEMENT FOR THAT FILE. IF THEY DON'T MATCH OR THE COMPUTER CANNOT FIND OR CREATE THE FILE, THE FILE WILL NOT BE OPENED AND AN I/O (INPUT/OUTPUT) ERROR MESSAGE WILL BE PRINTED.

THE "FILE-NUMBER" AND "FILE-NAME" MUST BE INCLUDED IN THE "OPEN" STATEMENT. THE OTHER INFORMATION CAN BE INCLUDED IN ANY OF THEM OR CAN BE OMITTED, AS WELL. HOWEVER, IF YOU LEAVE OUT ANY SPECIFICATION, THE COMPUTER WILL ASSUME CERTAIN STANDARD "DEFAULTS" AND THOSE "DEFAULTS" MAY NOT BE THE CORRECT SPECIFICATION FOR YOUR PARTICULAR FILE.

NEXT MONTH I WILL CONTINUE WITH THE TOPIC OF UNDERSTANDING - CREATING - AND USING - CASSETTE FILES. MORE SPECIFICALLY I WILL BE CONTINUING WITH "HOW TO 'OPEN' UP A CASSETTE FILE"... SINCE... AS YOU CAN SEE BY THE SIZE OF THIS ARTICLE ALREADY... I AM NOW OUT OF SPACE IN THIS MONTH'S NEWSLETTER!

IN THE MEAN TIME... IF YOU NEED ANY HELP OR HAVE ANY QUESTIONS CONCERNING YOUR CASSETTE SYSTEM - JUST GIVE ME A CALL (412-335-0163) AND I'LL TRY TO HELP.

HAVE WE GOT A DEAL
FOR YOU.....

DAVE CHESS, has a very fine TI System with the following;

B/C Console
PEB
Disk Cont. (TI)
Disk Drive (TI)
32K (TI)
SPEECH SYNTHESIZER
Joysticks (TI)
Cassette Cable
MULTIPLAN
Many TI Magazines
17 - Cartridges, inc.
Adventure.

Asking .. \$250. (A STEAL)
Call 412-925-1914
(New Stanton, PA)

PAUL BROCK SR. has a Statistics module that he would like to sell or trade, and he is looking for ADVENTURE module, and tapes, and a TE-II module.

Write:

Mr. Paul Brock SR.
1707 Luxemburg Manor
N. Apollo, PA 15673

We would like to be a means for you to acquire or distribute a computer related item to the rest of the enthusiasts in the area. If you find that there is something that you do not use any longer, let someone who could receive education or enjoyment, have the opportunity to discover what you did when that item was new.

John F. Willforth
(412) 527-6656

ED NOTE: Mickey has been a very popular contributor to the WEST PENN 99'er, and has not been daunted by what many would have considered a very limited subject, the CASSETTE. She is now undertaking a very difficult phase of cassette instruction, the cassette file handling. If you are enjoying these articles, certainly you should give her feedback and all the encouragement you can. I know that I wouldn't want to deal with this subject. By the way, Frank Zic should also be commended for the shoes he has been filling for ED BITTNER, as well as the great series of "Tips for the Beginner."

ADDRESS and PHONE NUMBERS of the Officers of the WEST PENN 99'ers. as of AUG. 1987

PRESIDENT....Scott Coleman.....823 North Av. N. Braddock, PA.15104 (412) 271-6283
VICE PRES....Mickey Schmitt....196 Broadway Av. . Lower Burrell,PA.15068 (412) 335-0163
C. SECTY.....Gene Kelly.....444 Wall Av. Wall, PA.15148 (412) 829-0469
REC. SCTY....Ed Bittner.....92 Corbett Av. ... Irwin, PA.15642 (412) 864-4924
LIBRARIAN....Clyde Colledge....706 Sixth St. Verona, PA.15147 (412) 828-3042
TREASURER....Jan Trayers.....2151 Mickanin Rd. N. Huntingdon,PA.15642 (412) 863-1575
EDITOR.....John Willforth....R.D.#1 Box 73A ... Jeannette, .. PA.15644 (412) 527-6656

HOME CONTROL 99

(review by Ken Gladyszewski of Northcoast 99ers)

HOME CONTROL 99, by EAGLE SOFTWARE, is a disk-based 20K program with some assembly language routines used to interface the TI with the X-10 POWERHOUSE.

The X-10 POWERHOUSE is an energy management system that allows one to control anything in the house that runs on electricity. It does this by sending signals over normal existing house wiring to remote modules, into which lamps, etc. are plugged.

The X-10 POWERHOUSE system and CORECOMP'S HOME SENTRY INTERFACE CARTRIDGE were reviewed in MICROpendium (DEC. 86). Please see that article for more information on the X-10 POWERHOUSE system. The cartridge, as described in that article, requires only the TI console, TV and a special cable, but does not provide any additional features (files) when used with an expanded system (Disk, XBasic, Expanded memory & RS232).

(ED. Note: If you are using only a console, or would use only a console for this application, the HOME CONTROL 99 will not be for you. You will want the CORCOMP unit.)

HOME CONTROL 99 uses text exclusively to an advantage, emulating the capability of X-10's software for the IBM! The user types any number of locations and device descriptions up to the controller limit of 256 devices. In comparison, the CORCOMP unit is limited to 9 device types and 14 locations.

Using the software, the controller is programmed for up to 128 timer events. Each timer event consists of an "ON", "OFF", or "DIM" command, for up to 16 devices within a single housecode (while the CORCOMP module allows for one device per timer event).

The best feature of this program is the ability to save collection of timer events to the disk as a file. This allows you to have a file for vacation, summer, winter, etc. These can be edited, printed and downloaded to the controller.

The X-10 POWER HOUSE controller, INCLUDING the required IBM RS232 cable, can be purchased for \$19.90 + S?H from DAK INDUSTRIES, INC. as well as the the REMOTE MODULES \$9.95 each.

DAK INDUSTRIES, INC. The X-10 POWERHOUSE is Cat. # 4410, but I didn'T get the Cat. # for 8200 Remmet Av. the individule REMOTE MODULE. CALL: 1-800-DAK-0800 for more info.

Canoga Park, CA 91304 You'll need a REMOTE UNIT for each device to be controlled.

HOME CONTROL 99 is provided on a SSSD disk with documentation on hardcopy, including inst. on how to reconnect two wires in the IBM RS232 cable (pin 2,3) for use with the TI RS232. The program sells for \$10.00 and is available from:

(In Ohio)	EDU-COMP	(Outside Ohio)	EAGLE SOFTWARE
	6516 O'Henry Circle		1269 E.348th St.
	North Ridgeville, OH 44039		Eastlake, OH 44094
	(216) 327-6579		

(ED. NOTE. You should be aware that lamps are only one of the devices that can be used, swimming pool pumps, air conditioning, heating, cooking devices, and a host of other items)

Need a disk drive repaired... ISR 8104 Parkdale Dr. Austin, TX 78757 (512) 467-7085 will repair your 5 1/4" floppy drive for PC's, portables, Apples, Compatibles... for \$35.00 which includes \$10.00 for diagnosing the problem, and \$70.00 for the 8" floppy including \$20.00 for diagnosis of the problem. Average three day turnaround. Sixty day warranty.

AN OPTIMIST BELIEVES WE LIVE IN THE BEST OF ALL POSSIBLE WORLDS.

A PESSIMIST FEARS THIS IS TRUE!

WHEN THE GOING GETS TOUGH, EVERYONE LEAVES!

ATTEND the meeting this month, we may see a very interesting piece of hardware by Joe and Rob Ek1. They have been working on it for quite sometime now, It is functioning, and needs only a little finishing off! I think you will enjoy.

TEXAS INSTRUMENTS



July 10, 1987

West Penn 99'ers
c/o John Willforth
R.D. #1 Box 73A
Jeanette, PA 15644

Dear Sir:

We have received information indicating that some User Groups have notified their members that Texas Instruments sells home computer products.

Texas Instruments has not sold home computer products since April 1, 1984. Referrals for sales should be made to third-party suppliers such as Triton, (800/227-6900), and Tenex, (800/348-2778).

Please advise your members that Texas Instruments cannot sell home computer products, either new or used. We do still service TI-99/4A equipment at established service charges based on the model. Units can be sent prepaid and insured to the following address for service:

Texas Instruments Incorporated
2305 North University Avenue
Lubbock, TX 79408

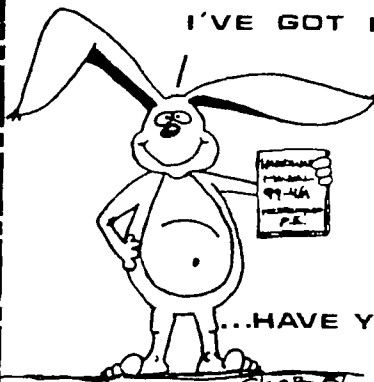
TI-99/4A owners can contact us for flat-rate service charges by writing to the letterhead address or by calling a consumer representative at 806/747-1882.

Cordially,

Lois Brock
Lois Brock
Consumer Relations

/bjc

I'VE GOT IT!..



...HAVE YOU?

**HARDWARE MANUAL
FOR THE
TI 99/4A**

IT DESCRIBES:

- CONSOLE DESIGN
- CUSTOM CHIP OPERATION
- TMS 9900 H/W ORGANIZATION
- TMS 9900 INSTRUCTION SET
- INTERFACING PITFALLS
- CONSOLE SCHEMATICS
- PEB CARD DESCRIPTION
- GROM SIMULATOR DESIGN
- EXTENDED BASIC MODULE DESCRIPTION & SCHEMATICS

WESTPENN HARDWARE SEMINAR
(INFORMATION AVAILABLE ON REQUEST)

Send \$19.95 Check or Money Order To:
(CANADA & FOREIGN SEND \$21.50 U.S. FUNDS)
(VOLUME RATES AVAILABLE... ON REQUEST)

THE BUNYARD GROUP
PO BOX 53171, LUBBOCK, TX 79453

Last month we took orders for 30 of the hardware manuals, and they came into Jan's home about a week and a half later. We will have them at both meetings (PUG & WEST PENN) in August. If you cannot make it, please send \$12. + \$1.50 for S/H to "WEST PENN 99'ERS" in care of : Jan Trayers 2151 Mickanin Rd. N. Huntingdon, PA 15642 (412) 863-1575. I'll see that it gets mailed to you. See the description upper right, of this very fine and enlightening book.

The other item above is self explanatory, and has been sent to all user's groups.

Last month I printed a picture of the new PROTO CARD for the PEB. Well this month I am going to announce prices and how to order. The card should be deliverable to most of those who order by Aug. 20th, in Mid Sept. We were fortunate to get good prices on it's manufacture from a local circuit board manufacturer.

The boards may be ordered from the COMPUTER BUG, 5075 CLAIRTON BLVD., PITTSBURGH, PA 15236, (412)882-3374. For quantity pricing, call Scott Coleman (412)271-6283, after Sept 1, 1987, or John Willforth (412)527-6656, after Aug. 20, 1987. The boards will NOT be ready for delivery earlier than SEPT. 8th, and your check will not be cashed until your order is ready for delivery. Your board will include documentation, hints, and project ideas.

1 to 4 PEB PROTO BOARDS AT \$35.00 each, 5 to 9 PEB PROTO BOARDS at \$30.00 each.	
Please send: _____	BOARD(S) @ \$35.00 each.....\$ _____
P.O. BOX _____	Ship/handling.....\$ 2.50
City/State _____	BOARD(S) @ \$30.00 each.....\$ _____
ZIP _____	Ship/handling.....\$ 3.50
Phone Number: (____) _____	PA Res. add 6% Sales tax...\$ _____
Make checks payable to "COMPUTER BUG"	Canada/Foreign orders add...\$ 1.50
(Cross off any amounts that don't apply)	(amounts payable US Funds)
	TOTAL ENCLOSED...\$ _____

PROGRAM FROM TIGERCUB SOFTWARE, ORIGINALLY BY TORTSTEN NIEMIETZ, WEST GERMANY.

100 !BY TORSTEN NIEMIETZ, MARBACHER WEG 3,D-2800 BREMEN 1, WEST GERMANY

110 FOR J=1 TO 10 :: READ T(J)

120 NEXT J :: E=330 :: A=440 :: H=494 :: C=554 :: K=659 :: F=740 :: G=831

130 DISPLAY AT(3,6)ERASE ALL:"S - O - L - O": :TAB(10);"MIT OOMPAH": :RP

T\$("=",28): : : "BY": "TORSTEN NIEMIETZ": : "mit Oompah by Tigercub"

140 DISPLAY AT(18,1):"MAKE UP YOUR SOLO WITH": "KEYS 1 TO 9 ... COME ON !!!"

150 FOR S=1 TO 2 :: CALL SOUND(200,E,3,H,3):: CALL SOUND(200,E,3,H,3)

160 CALL SOUND(200,E,3,C,3):: CALL SOUND(200,E,3,H,3):: NEXT S

170 M=E :: N=H :: O=C :: D=8 :: GOSUB 210 :: M=A :: N=K :: O=F :: D=4 :: GOSUB 2

10 :: M=E :: N=H :: O=C :: GOSUB 210 :: M=H :: N=F :: O=G :: D=2

180 GOSUB 210 :: M=A :: N=K :: O=F :: GOSUB 210 :: M=E :: N=H :: O=C :: GOSUB 21

0 :: M=H :: N=F :: O=G :: GOSUB 210

190 FOR X=10 TO 3 STEP -1 :: CALL SOUND(200,E,3,H,3,T(X),0)

200 NEXT X :: CALL SOUND(800,E,3,H,3,K,0):: GOTO 150

210 FOR X=1 TO D :: FOR Y=1 TO 2 :: GOSUB 280

220 CALL SOUND(200,M,3,N,3,T(R-48-(R=48))*9375,30,-4,0)

230 NEXT Y :: GOSUB 280

240 CALL SOUND(200,M,3,O,3,T(R-48-(R=48))*9375,30,-4,0):: GOSUB 280

250 CALL SOUND(200,M,3,O,3,T(R-48-(R=48))*9375,30,-4,0):: GOSUB 280

260 NEXT X :: RETURN

270 DATA 587,659,784,880,988,1175,1319,1568,1760,44733

280 CALL KEY(0,R,S):: IF S<>0 AND R>48 AND R<58 THEN RET . ELSE R=57 :: RETURN

BELOW IS A BASIC DEMONSTRATION OF MORE THAN 16 COLORS BY ED YORK OF CIN-DAY USERS GROUP.

100 REM COLOR BONANZA BY ED YORK

180 CALL COLOR(B,1,1)

250 CALL COLOR(D,D,C)

110 REM CIN-DAY USERS GROUP

190 CALL VCHAR(1,2*B,24+8*B,22)

260 NEXT D

120 REM TI BASIC

200 CALL VCHAR(1,2*B+1,24+8*B,22)

270 CALL KEY(0,E,F)

130 CALL CLEAR

210 NEXT B

280 IF F<1 THEN 270

140 FOR A=40 TO 136 STEP 8

220 FOR C=2 TO 14

290 GOTO 220

150 CALL CHAR(A,"55AA55AA55AA55AA")

230 CALL SCREEN(INT(16*RND)+1)

300 GOTO 220

160 NEXT A

240 FOR D=2 TO 14

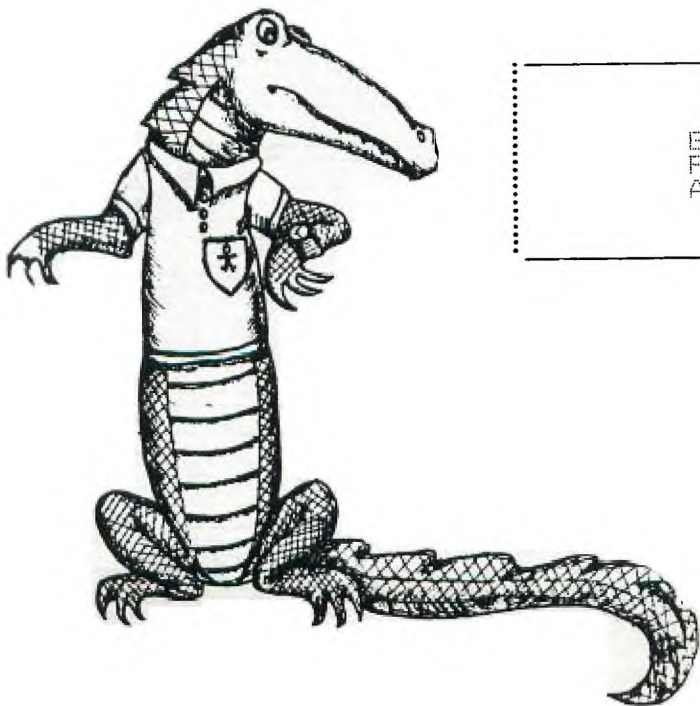
THANKS ED! JFW WEST PENN

170 FOR B=2 TO 14

99'ers

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