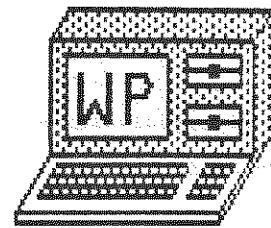


WEST PENN 99'ERS



ISSUE #5 MAY 1987

FOR THE RECORD

by Ed Bittner
Recording Secretary

The April meeting of the West Penn Ninety Niners was called to order promptly by President Scott Coleman at 7:00. With agenda in hand, (as a result of last months zing ??), Scott proceeded with the ? regular order of business and asked for the recording secretary's report, to which he was referred (in a courteous manner) to the West Penn 99'ers Newsletter of April 1987, issue #4. Seriously, however, Ed Bittner, did comment on the lack of errors and the total accuracy of the report and hoped that his absence at next (May) meeting, would not go unnoticed. (Check that forced double negative).

The Treasurers report lighted up the President's eyes with the anticipation of that reflected in a six year olds smile when presented with a truckload of candy Easter Bunnies. Immediately, the librarians report was circumvented and discussion of a New system, a New cabinet, a New store, and more Diskettes for club use. Bothered now with the anticipation of a deficit (obviously Scott's not a politician) the dust settled and further actions for procurement of new club property remained at the talking stage. We will, however, have diskettes available at the May meeting.

Joe Ekl has been named a committee of one to study the necessity of a membership drive and how we can become more visible. There are probably still many "Closet TI's" out there. A brief discussion on a picnic, perhaps in conjunction with PUG, was discussed although no money was to be put in support of it until we had a better feeling of how many of our group would attend.

Frank Zic (I think the spellings correct) told of his success with "FLIPPIES" (not a cross between a hippie and a yippie) and how to make them. Discussion of Keyboards and the interfacing thereof followed. Several prizes were raffled and group discussions on TI Writer (Stan K.), Hardware (John W.) and Adventures (TI style of course, Micky S.) followed the main meeting.

Reassuringly submitted,

Scoops Bittner

PS. I will continue to bring the NEWSLETTER library. This library is a collection of newsletters from around the country, exclusively from TI users groups. These newsletters are available to you the club member to borrow, copy, and return at the next meeting. There is LOTS of good information in them. See me at the JUNE meeting. Its easy to borrow them.





TREASURER'S REPORT

BY JAH TRAYERS



COMING UP!

THE **MAY MEETING**
WILL BE ON THE **19th**

AT THE
**UNITED PRESBYTERIAN
CHURCH OF THE
COVENANT**
AT **7:00 P.M., IRWIN**

WE HOPE THAT SIGS CAN BE
CONDUCTED AFTER THE MAIN
BUSINESS MEETING (8:30),
UNTIL.....
IF YOU NEED DIRECTIONS,
CALL ONE OF THE PEOPLE
WHOSE PHONE NUMBERS ARE
LISTED ELSEWHERE IN THIS
NEWSLETTER.

AS ALWAYS, THERE WILL BE
DISKETTES FOR SALE AT A
VERY REASONABLE PRICE OF
\$10. FOR 25. IF YOU CAN
NOT MAKE IT TO THE MEET-
ING, AGAIN CALL ONE OF
THE OFFICERS TO ORDER.

I CAN SEE AS EVIDENCED
BY THE ENHANCED REPORT
OF THE TREASURER, THAT
A NEW PIECE OF SOFTWARE
IS NOT GOING TO WASTE.
LET'S ASK HER ABOUT IT !

APRIL, 1987

*****		*****	
* CASH BALANCE	*	* BANK BALANCE	*
*****		*****	
4/1 BALANCE CARRIED	\$135.10	4/1 ACCOUNT BALANCE	\$1072.50
4/21 RAFFLE	28.00	4/21 MICROPENDIUMS	- 18.75

DISK SALES	67.25		\$1053.75
MEMBERSHIPS (2)	30.00	RAFFLE PRIZED	- 38.00

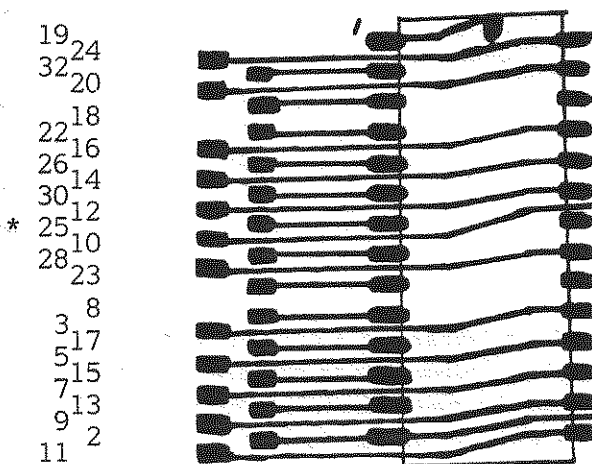
LIBRARY SALES	59.00		1015.75
	-----	POSTAGE	- 54.26

TOTAL	\$334.85		961.49
*****		*****	
4/24 DEPOSIT	- 250.50	4/24 DEPOSIT	+ 250.50
	-----		-----
CASH ON HAND	84.35	BALANCE	\$1211.99
		4/26 1000 DISKS & POWER STRIPS	- 348.45

		BALANCE	\$ 863.54
*****		*****	
TOTAL ASSETS			
\$ 947.89			
*****		*****	

* IMPORTANT TECHNICAL CORRECTION TO SINGLE CHIP ARTICLE, April 1987 Issue *

I'm sorry but even though I try to be very accurate in any technical article that I put in the West Penn 99'er, every once in awhile, one slips through. The article and schematic are correct, as well as the etch layout for the board. The problem is in the numbering on the left side of the component layout that indicates which pin will connect to the circuit card. The numbers for the GROM connector are wrong.



The numbers shown to the left are correct and can be used as a reliable reference when you are connecting the circuit card up to the GROM conn. *You should also note that the pin labeled as 25 will only go to the GROM conn. pin 25, if you intend on using the transistor inverter circuit Joe Spiegel included onboard for DBIN. You may eliminate the inverter circuit by not including the resistor attached to (C)ollector and the resistor attached to the (B)ase of the transistor as well as the transistor itself. You must then include a wire from the point (C)ollector of the transistor to the pin(s) 9 or 10 of U508 on the CPU board. The circuit does work using the rest of the information in the article.

John F. Willforth WP99'er

LM 6
RM 70
F1
IN +5
AD

CE

OPTICAL ROTATION EXPERIMENT

In this experiment we will determine the optical rotation of two substances. One of these substances will be studied in different concentrations to determine the effect of concentration on optical rotation. The second substance will be studied in different solvents and different concentrations to see the effect of solvent and concentration on its optical rotation.

In our first experiment we will study the effect of concentration versus the optical rotation. Accurately weigh out three samples of sucrose (table sugar) in order to make three 100 ml solutions. The first solution will be approximately 0.2 M, the second solution will be approximately 0.4 M and the third solution will be approximately 0.8 M. For our second experiment we will use camphor in different solvents and concentration as a subject of a polarimetry study in order to study the effect of solvent and concentration versus optical rotation. In the case of camphor, accurately weigh out six (6) samples with the following approximate molarities, two at 0.2 M, two at 0.4 M and two at 0.8 M. Again weigh out enough camphor to make 100 ml of each solution. Three of the samples (0.2M, 0.4M and 0.8M) will be dissolved in acetone and three of the samples (0.2M, 0.4M and 0.8M) will be dissolved in 95% ethanol.

Place each solution (made from the sucrose and the camphor) in a dry polarimeter tube (dry the tube between readings) and take its optical rotation in the polarimeter. (Your instructor will show you how to use the polarimeter.) Record the concentration and the optical rotation (Be sure to include the sign of the rotation, (+) for dextrorotatory and (-) for levorotory.) in your notebooks. When you have finished be sure to wash the polarimeter tube thoroughly, including the screw caps and threads on the ends of the tube.

For this experiment we want to do three things 1) compute the specific rotation of each solution, 2) make a plot of optical rotation vs. concentration and 3) make a plot of specific rotation vs. concentration.

The formula for computing specific rotation is

$$\alpha = (a) / lc$$

where

α = observed rotation (degrees of arc)
 (a) = specific rotation (deg ml/dm g)
 l = length of cell (decimeters)
 c = concentration (g/ml)

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EDITORS NOTE: THIS IS PAGE 2 AND 3 OF THE ARTICLE BY STAN KATZMAN THAT WAS PRINTED IN LAST MONTHS (APRIL) ISSUE OF THE WEST PENN 99ER. THERE WAS NOT ENOUGH ROOM TO PRINT THE ENTIRE ARTICLE LAST MONTH. I HOPE THAT THIS DID NOT CAUSE YOU ANY INCONVENIENCE. ASK ME AT THE MEETING AND I'LL TELL THE TRUTH TO YOU. IT'S TOO EMBARRASSING TO PRINT HERE. BY THE WAY, STAN IS WORKING ON PASCAL NOW!

GETTING THE MOST FROM YOUR CASSETTE SYSTEM
BY MICKEY SCHMITT
NUMBER 12
UNDERSTANDING - CREATING - AND USING - CASSETTE FILES
PART I

THIS MONTH'S ARTICLE HAS BEEN AN EXTREMELY HARD ARTICLE FOR ME TO WRITE FOR A NUMBER OF REASONS:

FIRST, THIS IS AN AREA 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 OWN COMPUTER KNOWLEDGE, SO THAT OTHERS MAY LEARN FROM MY OWN EXPERIENCES!

SECOND, THIS IS AN AREA THAT VERY SELDOM POPS UP DURING ANY OF THE VARIOUS DISCUSSIONS THAT TAKE PLACE AT ANY OF THE CLUB MEETINGS. I ASSUME THAT EITHER THE IDEA OF DATA FILES MUST BE A TERRIBLY BORING SUBJECT OR... NO ONE WANTS TO ADMIT THAT THEY REALLY DON'T UNDERSTAND DATA FILES EITHER!

THIRD, AND POSSIBLY THE FUNNIEST OF ALL REASONS... I HAVE FOUND OUT THAT MANY OF THE SO-CALLED "INSTRUCTION MANUALS" THAT TALK ABOUT DATA FILES, ASSUME THAT YOU ALREADY KNOW ALL THERE IS TO KNOW ABOUT DATA FILES, FROM SOME OTHER "SOURCE" OF INFORMATION. PERSONALLY, THAT MAKES ABOUT AS MUCH SENSE TO ME AS LOOKING A WORD UP IN THE DICTIONARY 'CAUSE YOU DON'T KNOW HOW TO SPELL IT!

FOURTH, AND I MUST ADMIT, THE MOST TRUTHFUL OF ALL REASONS... NOTHING SCARES ME MORE ABOUT THE T.I. THAN THOSE TWO VERY HAUNTING WORDS... "FILE PROCESSING". FOR SOME REASON I WOULD RATHER HAVE TO LISTEN TO THE SOUND OF CHALK "SQUEAKING" ON A BLACKBOARD FOR AN ENTIRE DAY THAN TO HAVE TO DEAL WITH THE THOUGHTS OF HAVING TO WRITE THIS PARTICULAR ARTICLE!

NEVER-THE-LESS, I AM GOING TO TRY AND FACE THIS FEAR OF MINE BY GIVING THIS TOPIC THE ATTENTION IT DESERVES!

AS MOST FELLOW T.I. USERS WILL AGREE... WITH JUST THE USE OF A MONITOR OR A TELEVISION SCREEN... THE T.I. PERSONAL HOME COMPUTER IS ONE OF THE MOST IMPRESSIVE... POWERFUL... AND VERSATILE HOME COMPUTERS EVER TO BE BUILT FOR YOUR MONEY. NOT ONLY HAS THIS PARTICULAR "FACT" BEEN RECOGNIZED BY OTHER COMPUTER MANUFACTURERS, BUT IT CONTINUES TO STAND THE "TEST OF TIME"... EVEN THOUGH TEXAS INSTRUMENTS STOPPED MARKETING THE T.I. 99/4A PERSONAL HOME COMPUTER BACK IN 1983!

HOWEVER, AS I'M SURE THAT MOST FELLOW T.I. USERS WILL ALSO AGREE... THE T.I. PERSONAL HOME COMPUTER CAN BE GREATLY EXPANDED IN THAT POWER AND VERSATILITY THROUGH THE USE OF ADDITIONAL ACCESSORY DEVICES, SUCH AS THE CASSETTE RECORDER.

UNTIL NOW, WE HAVE ONLY ACKNOWLEDGED THE CASSETTE RECORDER AS AN ACCESSORY DEVICE THROUGH WHICH WE HAVE THE ABILITY TO "SAVE" AND "LOAD" PROGRAMS... AND ALTHOUGH THIS MAY BE THE CASSETTE RECORDER'S PRIMARY PURPOSE, WE MUST NOT FAIL TO ACKNOWLEDGE THE CASSETTE RECORDER'S ABILITY TO "SAVE" AND "LOAD" DATA FILES AS WELL!

WITH THIS THOUGHT IN MIND... I HAVE DECIDED TO EXAMINE AND EXPLAIN THE DIFFERENCES BETWEEN "PROGRAMS" AND "DATA FILES", SO THAT WE MAY ALL HAVE A FIRM BASIS ON WHICH TO BUILD OUR KNOWLEDGE OF OUR COMPUTER SYSTEM.

FIRST, LET US EXAMINE THE COMPUTER DEFINITION OF A "PROGRAM":

A "PROGRAM" IS A SET OF STATEMENTS WHICH TELL THE COMPUTER HOW TO PERFORM AND COMPLETE A SPECIFIC TASK. EACH STATEMENT MUST BEGIN WITH A LINE NUMBER AND WILL BE EXECUTED BY THE COMPUTER IN A SEQUENTIAL ORDER, BEGINNING WITH THE SMALLEST LINE NUMBER AND CONTINUING UNTIL ALL THE LINE NUMBERS HAVE BEEN EXECUTED.

NOW, LET US EXAMINE THE COMPUTER DEFINITION OF A "DATA FILE":

A "DATA FILE" IS A COLLECTION OF RELATED DATA RECORDS WHICH ARE PROCESSED OR PRODUCED BY THE COMPUTER. A "DATA FILE" MUST BE USED IN CONJUNCTION WITH A "PROGRAM" THAT HAS BEEN SPECIFICALLY DESIGNED TO ACCEPT THAT PARTICULAR "DATA FILE". A "DATA FILE" IS USELESS BY ITSELF, AS IT WILL NOT "LOAD" INTO THE COMPUTER'S MEMORY.

IN OTHER WORDS... A "PROGRAM" CAN "RUN" WITHOUT A "DATA FILE" - BUT A "DATA FILE" CANNOT "RUN" WITHOUT A "PROGRAM"!

NEXT MONTH I WILL CONTINUE 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.

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.

GETTING ON LINE: AN INTRODUCTION TO TELECOMMUNICATIONS
Part Three: Software Packages - Setting Configuration Parameters
By, Fred and Amy Mackey

Continuing from last month.... There is one more thing you need before you can transfer data between computers - the software or "telecommunications program" designed especially for your computer. This program directs your computer how to use the modem and how to transfer information between the two computers. For the TI-99/4A most telecommunications programs will require 32K memory and either the Editor Assembler or Extended Basic cartridge.

Any two computers using compatible programs can communicate. Compatibility occurs by setting the "configuration parameters" of your telecommunications program to match that of the computer you are calling, or the "host" computer. When you run your telecommunications program, it will ask you to set most or all of the following. (Some programs will automatically set them for you - called "default" - and you will be given the option to change them according to your needs.)

1. Baud Rate - 110, 300, 600, 1200
This is the number of bits per second that can be sent or received. This number is what your modem can handle, the most common being 300 baud.

2. Parity - Odd, Even, None
This is the means for detecting errors which might occur during data transmission. The computer checks to see if the total number of binary 1s (or 0s) for each character is odd or even. This number must be set the same as the host computer. When you logon to the host computer, this and other configuration information will appear on the title screen.

3. Serial Port of Modem - 1 or 2
This number specifies which "port" or plug of the RS232 the modem is connected to.

4. Data Bit - 7 or 8
This is the number of data bits you are going to send for each character. This is set the same as the host computer. (XModem file transfers use 8 data bits, an TEII uses 7.)

5. Printer Device Name - PIO or RS232
This is the peripheral device name of the printer you are using. (You do not necessarily need a printer to run a telecommunications package.)

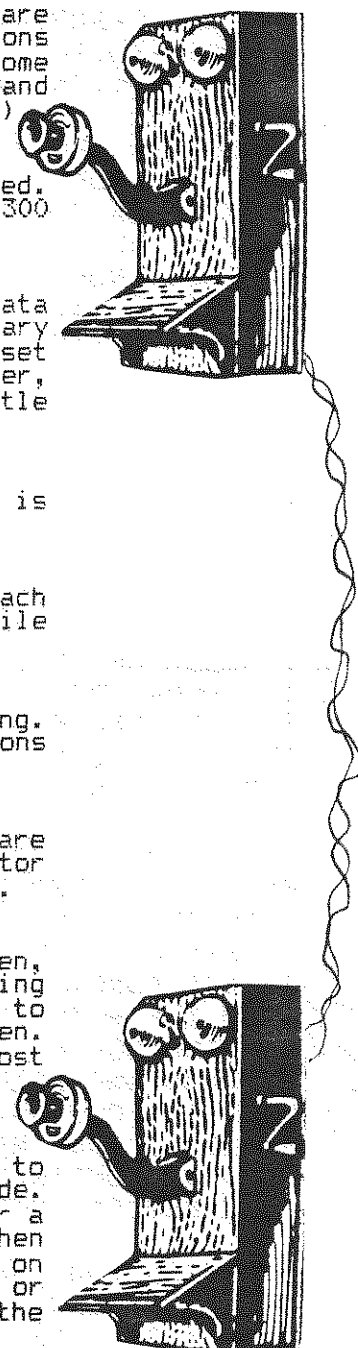
6. Screen Width - 40 or 80
The screen width used with the TI is 40. However, some software packages will let you use a lesser number to compensate for a monitor or television that "loses" the picture on the left and right margins.

7. Duplex - Full or Half
This controls how characters you type will appear on your screen, and is set according to the host computer. A Full duplex setting causes anything you type to be sent to the host computer, but not to your monitor. The host simultaneously sends it back to your screen. Half Duplex causes whatever you type in to be sent to the host computer, but also displays it on your monitor.

LET'S TALK!!! Now that your program is running, set your modem to originate mode, since the host computer will be set on answer mode. Next, dial the number. When the host computer answers, you will hear a high pitched noise. If you are using an acoustic modem, now is when you place the telephone receiver into the modem coupler. Depending on the host computer, you may need to press <enter> or <ctrl c>, or perhaps do nothing at all to receive the data transmission from the host computer.

But if you're not talking, and you have a problem, like garbage on the screen, more than likely the you set the wrong configuration parameters in your telecommunications program.

- * If you can read most of what is being sent, but it is not on the correct lines, try changing the number of data bits.
- * If the screen displays nothing, try changing the parity.
- * If you see the host's input, but nothing happens when you type, your duplex is wrong.
- * And if all else fails, call Red.



"TIPS FOR BEGINNERS"

-BY FRANK N. ZIC

HERE WE GO TOGETHER-5. THE FOLLOWING COMMENTS ARE JUST RANDOM NOTES THAT I HOPE YOU WILL FIND USEFUL IN SOME WAY. IT IS HARD TO GET ON TRACK AGAIN AFTER TWO SUNSHINE, FLOWER FILLED WEEKS IN HAWAII.

BE CAREFUL WHEN LOADING GAMES THAT CAN BE LOADED OUT OF XB OR E/A. CHOOSE EDITOR ASSEMBLER NO. 5(RUN) AS THIS SEEMS TO PROVIDE ALL THE GAME FUNCTIONS AND SCORING, WHILE LOADING IN EXTENDED BASIC DOES NOT. EXAMPLES: (A) DIGDUG - A TWO PART GAME LISTING WITH TWO (33) SECTOR PARTS, IN PROGRAM MODE. WHILE THIS GAME CAN BE LOADED AND PLAYED IN XB, IT DOES NOT KEEP A RECORD OF THE HIGH SCORE ACHIEVED. SOMETHING NICE TO HAVE WHEN TWO OR MORE PEOPLE ARE PLAYING. (B) CANNONBALL BLITZ - CAN BE LOADED OUT OF XB, BUT HERE THE SITUATION IS EVEN WORSE (YOU CAN NOT WIN). YES, THAT'S RIGHT YOU CAN NOT WIN THE GAME EVEN IF YOU STAY ALIVE, AS I DID, HOPPING THE CANNON BALLS ON THE 4TH LEVEL UNTIL THE TIMER RAN OUT. THE GAME JUST CONTINUES WITH YOU NOT ABLE TO REACH THE 6TH(FLAG) LEVEL. WHAT IS MISSING IS A YELLOW BALLOON WITH AN UMBRELLA HANDLE ON IT THAT LIFTS YOU UP FROM THE 5TH TO THE 6TH LEVEL. THEN AT LEAST TWO(2) OTHER GAME SCREENS ARE PRESENTED FOR YOUR SKILLS AND ENJOYMENT. I HAVEN'T TRIED THE THIRD LEVEL LONG ENOUGH TO WIN IT YET. PERHAPS THERE IS STILL A FOURTH GAME SCREEN, I WONDER. LET ME KNOW.

DID YOU KNOW YOU CAN EASILY MAKE YOUR OWN CUSTOM LABELS WITH THE FONT FILENAME(CHAR2)? THE LETTERS ARE 3/8TH OF AN INCH HIGH AND ARE OF THE HOLLOW TYPE. THEY CAN BE COLORED-IN SO THEY ARE EASIER TO LOCATE IN YOUR BOX. SINCE THE (CHAR2 F) FILE ACCEPTS ONLY SEVEN(7) LETTERS, IF YOU NEED MORE YOU MUST RUN THE FILE TWICE AND PLACE THE SECOND PART IN THE CORRECT SPOT NEXT TO THE FIRST PRINTOUT. HOPE YOU HAVE FUN TYPING THESE LABELS.

SOME NIGHT WHILE YOU ARE COMFORTABLY SEATED AT YOUR COMPUTER WRITING A LETTER, ON WITH A "BBS", OR PLAYING YOUR FAVORITE GAME, (MINE IS MIDNIGHT MASON) AND SUDDENLY YOUR CONSOLE GOES BLACK, DON'T DISPAIRE. IT MAY ONLY BE THE FUSE BLEW-OUT IN YOUR POWER-PAC CORD. IT IS LOCATED IN THE LONG, THIN, GREEN, RECTANGULAR HOLDER LOCATED JUST INCHES AWAY FROM THE POWER PLUG. IF YOU HAVE A SPARE CORD, SWITCH THE SUSPECT UNIT OUT AND YOU MIGHT BE ON YOUR WAY IN MINUTES. IF YOU ARE STUCK WITHOUT A SPARE AND REALLY WANT TO GO ON WITH YOUR COMPUTING, SIMPLY UNPLUG THE CORD AND CUT OUT THE FUSE HOLDER. NOW, PROVIDING YOU KNOW HOW TO DO IT SAFELY, YOU MAY SPLICE AND INSULATE THE WIRES STRAIGHT THROUGH. NOW YOU CAN CONTINUE USING YOUR TEMPORARY REPAIR. IF IT WOULD MAKE YOU FEEL BETTER, YOU MAY PURCHASE A PLUG-IN LINE FUSE.

IF YOU ARE ONE OF THE MOD GROUP THAT IS FORTUNATE ENOUGH TO HAVE THE (32K) ENCLOSED IN YOUR CONSOLE, IT MIGHT BE A GOOD IDEA TO REMOVE YOUR (32K) CARD FROM YOUR "P-BOX". THIS WILL ELIMINATE PRIORITY RIGHTS BETWEEN THE TWO (32K) UNITS DURING CERTAIN OPERATIONS. THIS CAN ELIMINATE SOME NEEDLESS MALFUNCTIONING. THIS WAY TOO, YOU NOW HAVE A SPARE (32K) CARD OR YOU CAN SELL THE CARD IF YOU LIKE.

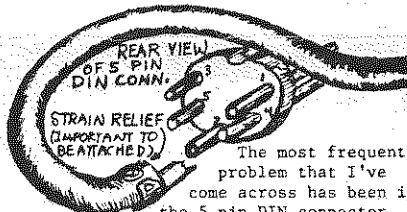
INCREMENT, INITIALIZE AND FORMAT ARE ALL INTERCHANGEABLE WORDS. UNTIL NEXT TIME MAY THE GOOD 4'S BE WITH YOU.

WANTED

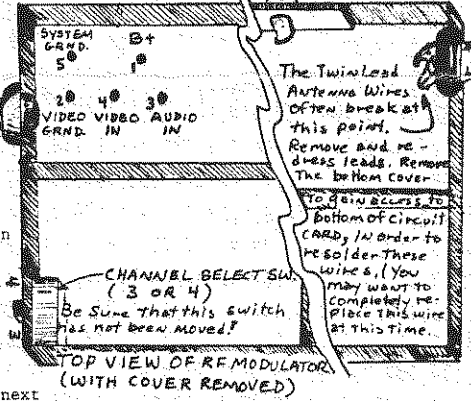
PRES: SCOTT COLEMAN 412 271-6283
 V.PRES: MICKEY SCHMITT 412 335-0163
 C.SECTY: GENE KELLY 412 829-0469
 REC.SECTY: ED BITTNER 412 864-4924
 LIBRARIAN: CLYDE COLLEDGE 412 828-3042
 TREASURER: JAN TRAYERS 412 863-1575
 EDITOR: JOHN WILLFORTH 412 527-6656

NOT ALL YOU WANTED TO KNOW ABOUT THE R.F. MODULATOR.....
 By JOHN F. WILLFORTH WEST PENN 99'ERS APRIL 1986

I've been repairing a lot of T.I. Consoles over the last several months, and each month I've tried to share some of the more common problems that I've come across with the rest of the T.I. membership. I've made a rough drawing of the R.F. MODULATOR, in order to provide a picture of what I've found, and what can be done about it.



The most frequent problem that I've come across has been in the 5 pin DIN connector, and takes the video and audio signal to the R.F. MODULATOR itself. The wires BREAK at the point where they are soldered to the 5 pins in the connector. The rubber "BOOT" covering the connector can be slid back the cable to expose the problem. The next most common problem is the TWIN LEAD wires breaking off at the point where they are attached to the circuit card. (soldered) If more than one wire has broken inside the "BOOT" covering of the DIN connector, you won't have any way to know where to attach them, unless you have a chart. That is why I've made this drawing. If you take the cover off the R.F. MODULATOR (TOP), you can see the 5 wires coming from the cable, and going to the circuit card. Note the small labels masked on the card, "B+" and a "1" near it, for example. This will not only give you the name and function for the wire, but the PIN NUMBER that the wire goes to at the connector (DIN) on the computer end. How CONVENIENT! With this at your disposal you should be able to make the right connections. I'm not going to take any more space at this time to tell you "HOW" to solder. The second problem requires you to either dress the existing antenna leads, or actually replace the leads completely. The availability of these MODULATORS is decreasing steadily, and if you can repair minor problems by yourself, you will be better off, and less inconvenienced. GOOD LUCK!



TERRIFIC PRICE ON PRINTERS !!!!!!!!!!!

THE DAVID WEIS STORE IN GREENSBURG HAS 10 FASTEXT-80 PRINTERS IN STOCK FOR \$79.90 EACH COMPLETE, NEW ! I'VE BEEN RECEIVING SOME ARTICLES ON THESE PRINTERS DEALING WITH HOW TO HANDLE THE GRAPHICS PRINTING CAPABILITIES WITH ASSEMBLY UTILITIES. THEY USE REGULAR (PLAIN) PAPER, NOT THERMAL, AND A RIBBON CASSETTE. I UNDERSTAND FROM ONE WHO HAS USED ONE FOR QUITE AWHILE, THAT THEY ARE VERY RELIABLE. IF YOU NEED HELP ON THIS LET ME KNOW AND I'LL HELP YOU GET THE FACTS ON IT. John F. Willforth

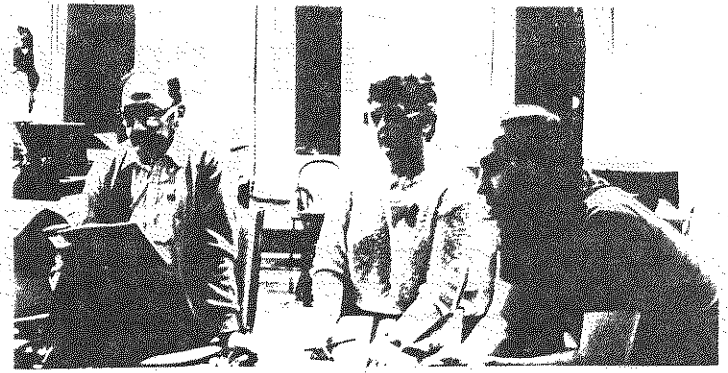
THE CLUB IS INTERESTED IN FINDING OUT WHAT TYPE OF HARDWARE? SOFTWARE YOU AS MEMBERS ARE INTERESTED IN

PURCHASING IN SOME TYPE OF BULK FASHION, SO THAT WE COLLECTIVELY MIGHT REAP THE BENIFITS OF A BULK PURCHASE DISCOUNT, OR SPECIAL ONETIME "DEALS". I WAS TO INCLUDE A CHART THAT YOU MAY FILL OUT AND RETURN. THIS WOULD BE FINE, BUT WOULD BE LIMITED TO MY IMAGINATION. SO SINCE MOST OF YOU ARE ADULTS, YOU CAN TAKE A FEW MINUTES AND WRITE DOWN SOME OF THE THINGS THAT YOU MIGHT WANT OR LIKE (PLEASE STICK TO COMPUTER RELATED ITEMS), AND EITHER SEND THE LIST TO ME OR TURN IT IN AT THE MAY MEETING. AN EXAMPLE: SCOTT BOUGHT ONE DOZEN SURGE PROTECTING POWER BARS, AND WILL HAVE THEM AT THE MEETING FOR UNDER \$9. EACH. WE HAVE BEEN BUYING DISKS FOR NEARLY A YEAR NOW, AND HAVE BEEN PASSING THE SAVINGS ON TO YOU, AS WELL AS SUPPLIMENTING THE TREASURY. FAN-FOLD PAPER MIGHT BE ANOTHER ITEM, RIBBONS. FEEL FREE TO REPEAT THESE ON YOUR LIST.

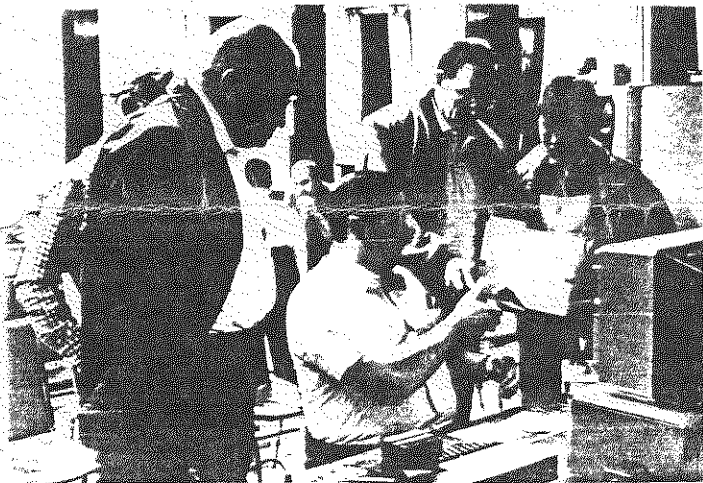
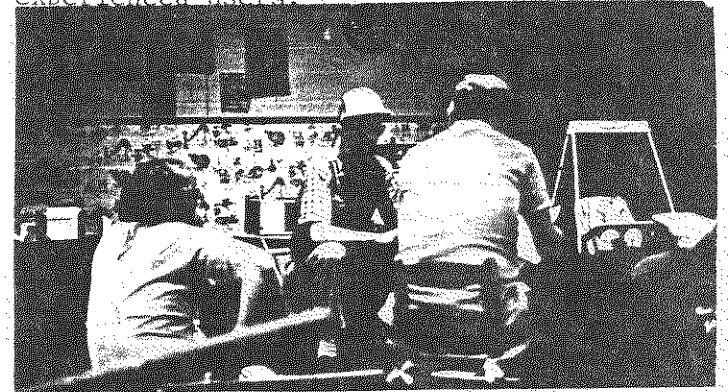
HIGH-SCORING GAMES

GAME	SCORE	COMMENTS	DATE	NAME
BURGETIME	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
MICRO PINBALL	842000			MIKE SEALY
MICRO PINBALL	229200		4-13-87	SCOTT COLEMAN
MIDNITE MASON	21860			FRANK ZIC
MIDNITE MASON	17790			ELEANOR ZIC
MOON PATROL		LEVEL K CHAMPIONSHIP		MIKE SEALY
MUNCHMAN	17160	LEVEL 5	3-14-87	MICKEY SCHMITT
PARSEC	22500	LEVEL 2	3-10-87	MICKEY SCHMITT
SOLE POSITION	105200			DAVID RENNER
TI INVADERS	6298	MERELY AGGRESSIVE	3-22-87	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 AS IT 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 UNDERLYING INTEREST AND ENTHUSIASM!



This group of three pictures represent the T.I. Writer SIG which is being taught by STAN KATZMAN, seated with the knowledgeable look in the picture to the left of this text. The T.I. Writer SIG has been one of the most well received and helpful for the novice or experienced users.



GENE KELLY teaches the ASSEMBLY SIG, with the occasional assistance of CLYDE COLLEDGE. Gene has a very fluid knowledgeable delivery. I see that some of the class is at recess.

The large person seated in the pictures above and below are yours truly (John W.), receiving instructions from West Penn'ers.



You GREAT POOH BAAH on the right of the above photo is conducting a high level discussion ?



Two stalwarts AMY MACKEY and MICKEY SCHMITT with the clubs library. If you are looking to see JAN (we can't do without her) TRAYERS, top photo right.



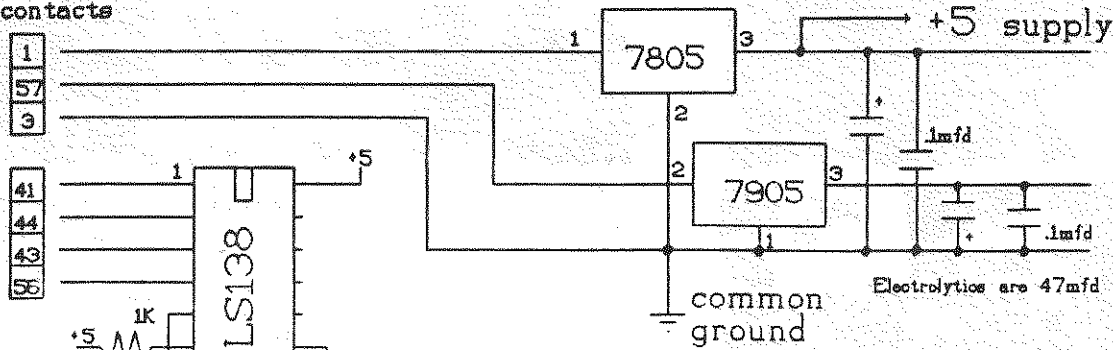
THESE PHOTOS WERE TAKEN AT THE FEBRUARY WP99'ER MEETING BY OUR SECRETARY, ED (scoops) BITTNER, WHO FOR OBVIOUS REASONS DOES NOT APPEAR IN ANY OF THEM!

PEB SPEECH INTERFACE

by Joe Spiegel

PEB bus contacts

Speech Syn. contacts



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All +5 and ground lines go to the +5 supply and common ground shown above.

Parts list:

QTY:	DESCRIPTION:
1	7805 +5 v. REGULATOR
1	7905 -5 v. REGULATOR
2	74LS138 3 to 8 DECODER
1	74LS367 HEX TRI-STATE BUFFER
1	74LS245 CATAL TRI-STATE TRANSCEIVER
1	74LS00 QUAD NAND
2	1N914/34 DIODES
2	.1 MFD. CAPACITOR
2	47 MFD. CAPACITOR
2	1K OHM RESISTORS
1	2.2K OHM RESISTOR

NOW THE HARD PART. THE BOARD FOR THE PEB, IS NOT AN OFF THE SHELF ITEM. YOU CAN BUILD ONE WITH THE FOLLOWING PARTS (ONE THAT WILL ALMOST FIT). YOU MUST GET:

- 1 30/60 LEAD-EDGE CONNECTOR (T.I. PART #, L2111121-30) (DIGI-KEY PART # L8-30)
- 1 25/50 LEAD-EDGE CONNECTOR (MUST BE MODIFIED TO 22/44 PIN CONFIG.) (DIGI-KEY PART # L8-25)
- 1 GRID BOARD (MUST BE SLIGHTLY MODIFIED AND IS NOT LARGE ENOUGH TO REACH BOTH CARD GIUDES) RADIO SHACK PART # 276-147

DIGI-KEY CORPORATION, P.O. BOX 677, THIEF RIVER FALLS, MN., 56701

NOTE: 74LS245 is shown in mirror image for clarity

WITH ALL THE GRAPHICS PROGRAMS AND THE WORD PROCESSORS AVAILABLE (?), I THOUGHT THIS ONE PAGE (WAS TWO), ARTICLE WAS JUST WHAT YOU WHO ARE LOOKING INTO BLENDING GRAPHICS AND TEXT COULD USE. I WOULD LIKE TO THANK THE BLUEGRASS COMPUTER SOCIETY, AND DON MACCLELLAN FOR THIS BEAUTIFULLY DONE GRAPHICS/TEXT PRESENTATION.

GRAPHICS COMPATABILITY

by Don MacClellan

BLUEGRASS 99 COMPUTER SOCIETY, INC.
The multitude of graphics programs available for use with the TI-99/4A computer and their compatibility with word processing programs has prompted a request for some description of the available programs. This will be an attempt to clarify compatibility among most of the later programs. The diagram on the right does not cover everything available, but does cover all of the programs which have been sold through the Society or which are available in the Society library. This discussion is not an attempt to provide a tutorial or review of such a multitude of software, only to give you a perspective and hint of what might suit your needs.

TI-WRITER is the only prudent choice for a word processing program for those having 2DK & Disk drive. There are no others which come close to providing the features and versatility. 'Companion' is probably the logical alternate if WRITER were not so available. All versions currently available (and there are several) still use TI's WRITER program files. The best and least costly is FINNEVER's version which in addition to freeing E/A & WRITER from their respective modules, includes -C, DISKO, FORTH, FASTERN, and your choice of any others in a disk-based program which really begins to shine when installed on a Rembit. Almost all of the programs which we will discuss will be used either with Text from TI-WRITER or through TI-WRITER.

The CSGD Series of graphics programs written by Dave Rose has been more widely accepted by our members and is shown at the top of the diagram. It is compatible with both Promwriter and Epson-Gemini printers but you must purchase the correct version for your printer. The Keyboard or the Joystick may be used in any of the Editors. The Message printing program is common to CSGD-1, II, & III.

CSGD-1 contains the EDITOR programs for creating your own (1) Character Sets, (2) 5x5 Graphics, and (3) Pictures. The Editors, primarily the Character Editor, have undergone 4 revisions by including the most recent which was in response to suggestions by our members. Provisions are also made to jockey graphics around to convert between alternate printer types.

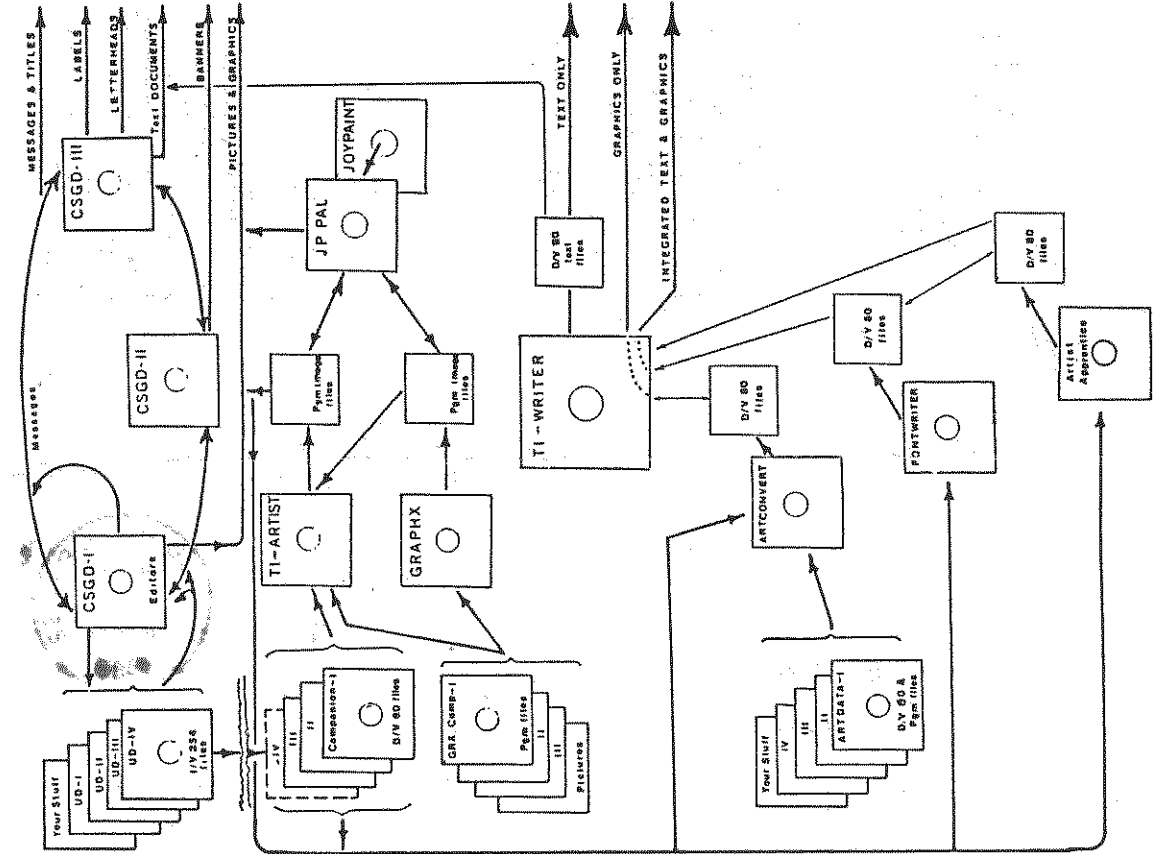
CSGD-III is basically a banner program which prints the message sideways and 8 lines magnified. It also contains the Graphic Editor but not the other editors. It has gone through three revisions including the latest which now allows printing lower case in the Banner mode.

CSGD-III is primarily a Label program which produces multi-width labels in 3 heights. It also contains the Message program and a 'easier to operate' Letterhead program. ALL OF THE FILES CREATED IN CSGD ARE 1/4 254 and are not compatible with TI-WRITER. The Decaprinter is compatible with WRITER and will produce 1 or 2 column text using a choice of 4 type fonts and DV 88 files through the Promwriter. It will not presently handle fonts of greater height than 1 row.

The CSGD programs are supported by a multitude of graphics, pictures, and over 180 fonts written by Dave Rose and contributors who use and enjoy his programs. Three of our members have contributed Character Fonts. These have been issued as US(1), US(2), US(3), US(4) will be available at the meeting !!!

TI-ARTIST is an extremely versatile drawing program written by a talented young man, Chris Faherty, which many of the Society members have purchased. It allows creating, loading and modifying, size changes and many other features using the Keyboard or a combination of the keyboard and joystick.

SOME POPULAR GRAPHICS PROGRAMS



NONE OF THE PROGRAMS DESCRIBED IN THIS DISCUSSION CAN BE LEARNED READING THE MANUAL. You must use them and make your mistakes; it helps you to remember. TI-ARTIST is in its second revision which now includes Promwriter as well as Epson-Gemini versions. The 2.81 Rembit configured version is also now available.

The only Files that were available with ARTIST were ART-EXTRAS however, Dave Rose has converted his 1/4 254 files to DV 88 files which can be loaded as 'Instances' and they have been released as the COMPANION I-III series. IV should follow soon since U04 has now been released. In addition, TI-ARTIST allows the loading of GRAPHIX files, so that a rather large base of graphics is available to use and modify or create your own.

GRAPHIX is a program with quite a few similarities to ARTIST; was written in Australia and introduced in the USA in 1984. It allows use of the Joystick ONLY, and is not compatible with any but the Epson printer. It is a quite versatile drawing board in the hands of an experienced user.

The support graphics available consist of GRAPHIX COMPANION-I thru III and GRAPHIX PICTURES. They are all well done though I personally have not purchased the program because of the printer limitation and my distaste for the joystick. The availability of additional graphics is made possible through TI-ARTIST which will load and save to the Image (PDU) format. Several of our members prefer to do their creative work with GRAPHIX and use ARTIST only as a transport.

JOYPAINT & JP PAL are Graphics Drawing Boards well spoken of by their owners. I am not aware of any Society members who own this 'Joystick' only Program. It does have options which allow loading from and saving to ARTIST &/or GRAPHIX filetypes. It is currently only compatible with the EPSON printer.

ARTCONVERT is a Program which we purchased in Chicago that converts TI-ARTIST files to TI-WRITER files. It is supported by 4 disettes of files; ARTDATA-1 thru IV. This permits anyone with TI-WRITER to have the ability to print graphics. It will also merge and print two graphics, but there are no provisions to include text in the graphic file to complete a document.

One unique feature of ARTCONVERT allows the user to convert one row high TI-ARTIST fonts for use thru TI-WRITER. This would allow conversion of all of Rose's 1 row high fonts in Companion I-III to be used though they contain only 78 of 96 Typewriter keys if you do not have the COMPANION series. Compatible with Promwriter and Epson-Gemini.

PONTWRITER by Peter Hoddie is really the first graphics program which is compatible with TI-ARTIST and TI-WRITER. With this program you can create your own type fonts, revise TI-ARTIST and CSGD fonts and use TI-ARTIST Instances mixed in printed documents even on the same line.

Although I bought it in Chicago based on Asgard's assurance that it would work on the Promwriter, the second paragraph of the documentation states that it strictly for Epson-Gemini owners. In a late note Hoddie added a brief text to the disette which told of the location of the printer codes and I think it can easily be made to work with the better printers. The resources for this program are as broad as all of the ARTIST files plus all of those I have indicated earlier which can be converted through ARTIST.

ARTIST APPLICATOR is similar in several ways to FONTWRITER. It allows use of TI-ARTIST type files, fonts and graphics to produce files which are printed according to a 'Scheduler'. It is limited in being compatible only with the EPSON printer.

VDP

1 VDF UTILITY 2 by John Behrke, Chicago, USA
 2 Enables you to run a TI BASIC program in XB even if Char Sets 15 16
 have been used.
 3 To use: 1. SELECT XB 2. IF REQUIRED, use CALL FILES(1) and NEW
 4 LOAD TI BASIC PROGRAM 4. MERGE THIS PROGRAM INTO IT. 5. Off you go...all
 the CALL LOADS take a little
 5 while to work!
 6 THIS NEXT LINE IS VITAL:
 7 CALL VDFUTIL2
 8 TI BASIC PROGRAM FITS IN HERE:
 9
 10

```

32714 SUB VDFUTIL2
32715 CALL CLEAR : CALL INIT : CALL LOAD(8196,63,232)
32716 CALL LOAD(16360,86,79,75,69,82,
32,38,12,80,79,75,69,86,32,37,164,80,69,75,86,32,37,36)
32717 CALL LOAD(9491,100)
32718 CALL LOAD(9508,2,224,37,20,3,
0,0,0,2,0,0,100,200,0,37,18,4,192,2,1,0,1,4,3,2,32,12,4,32)
32719 CALL LOAD(9536,32,24,18,184,
192,32,131,74,2,1,37,0,208,160,131,18,9,130,2,34,255,255,4,32,32,44)
32720 CALL LOAD(9562,4,197,209,34,36,
255,9,132,19,21,4,195,60,224,37,18,200,5,13,1,76,200,5,131,78,200,5)
32721 CALL LOAD(9588,131,80,2,5,64,0,
161,68,2,131,0,1,17,6,2,5,65,0,161,67,6,196,200,4,131,76)
32722 CALL LOAD(9614,200,5,131,74,4,192,
192,66,5,129,4,37,254)
32723 CALL LOAD(9636,2,224,37,20,
3,0,0,4,192,2,1,0,1,200,1,37,18,4,32,32,12,4,32,32,24,18,184)
32724 CALL LOAD(9664,200,32,131,74,37,0,184,32,131,18,37,19,2,3,0,2)
32725 CALL LOAD(9680,4,192,192,67,4,
32,32,12,4,32,32,24,18,184,216,224,131,75,37,0,5,131,136,3)
32726 CALL LOAD(9704,37,18,22,242,192,
32,37,0,2,1,37,2,192,131,2,34,255,254,4,32,32,36)
32727 CALL LOAD(9726,4,192,216,0,131,124,2,224,131,224,4,96,0,112)
32728 CALL LOAD(9740,3,0,0,0,4,192,2,1,0,1,4,32,32,12,200,32,131,
74,37,18,2,1,0,2,4,32,32,12,4,32)
32729 CALL LOAD(9770,32,24,18,184,192,
32,131,74,208,32,37,19,4,32,32,48,4,91)
32730 CALL LOAD(8194,39,104)
32731 SUBEND
32732 SUB CHAR(A,B): L=LEN(A$)
32733 A$=A$RPT(10,18-L) 32734 FOR I=1 TO 16 STEP 2
32735 A1$=SEG$(A$,I,1)
32736 A2$=SEG$(A$,I+1,1)
32737 IF A1$<:" THEN A1=VAL(A1$) ELSE A1=(ASC(A1$)-55)
32738 IF A2$<:" THEN A1=A1+VAL(A2$) ELSE A1=A1+ASC(A2$)-55
32739 CALL LINK("POKEV",767+88A+(I+1)/2,A1) 32740 NEXT I
32741 SUBEND
32742 SUB COLOR(A,B,C)
32743 CALL LINK("POKEV",2063+A,(B-1)+C-1) 32744 SUBEND
32745 END

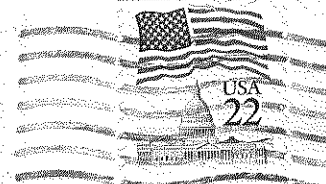
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The WEST PENN 99'ERS

% John F. Willforth
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 15644

MAY 1987 ISSUE



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