WEST PENN 99ER'S

ISSUE #2 FEBRUARY 1987

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FOR THE RECORD

by Ed Bittner
Recording Secretary

I arrived late for the January meeting of the West Penn 99er's, however I did get there before the Grand Po-Ba. The room was full of hot air as J. Willforth had taken over with many miscellaneous items of interest. Topics covered by John included several cassette data base and word processing, also a ram disk utility, an excerpt on cleaning your disk drive heads, and a joystick ($16.00) guaranteed for 40 billion accesses (I leave it to John to count them).

Scott arrived late with Geneve . Scott announced the unbelievable price of $61.00 for TOSHIBA DSDD disk drive, available to the club in lots of 12 (see Scott). The club will order and reserve a micropendium for you if advance payment is made ($1). The club now has a semi-complete system with P-Box, disk drive and memory just added for $115.00. Scott asked for and received permission to buy 1000 disks to be sold at 40 cents a piece. Also it was decided to donate $40.00 to the church and persue the possibility of getting a storage cabinet for club property.

Gene has extended the programming contest through March, (see inside for details) and Editor John will go forth to press by the first of the month so get your articles in top him early. Mickey Schmitt distributed a sheet to survey the needs and wants of our members. Please turn it in at the next meeting. Clyde reported that 2 diagnostic disks from TI have been added to the library and a TI multiplan update as well.

As we waited for Geneve, John Willforth demoed Generic and FORTI, a quadraphonic sound generater with audio outputs directly to a stereo receiver. Clyde demonstrated his cassette loader. A raffle was held with 3 prizes, including two subscriptions to Ryte Data and 10 disk

Ramblingly submitted,
Scoops Bittner

Motion of the month.(Need I say by whom.!.!)

I make a motion that Ken be appointed to seek to be a chairman of a committee to designate a new line or a new ammendment for the constitution to be brought up next month for a disposition, for a first level disposition according to the bylaws dealing with the possible disposition of inventory or of these items that belong to the club in the event that the club would be a-a-a-a,(wind him up a little bit more(laughter)),,did you get that!!

JANUARY TREASURERS' REPORT

BALANCE CARRIED	$54.00	BANK BALANCE	$254.28
RECEIVED 1/20/87			
Dues collected	$230.00	Check for postage	-44.00
Library sales	36.00		210.28
Micropendium sales	3.00		
Sale of disks, etc.	174.50		
Raffle	34.00		
Pop sales	5.50		
add Balance carried	54.00	Check for Organ fund	-40.00
Total	$537.00	Bank Balance	$170.28
Paid for Pop	- 3.00		
Cash Balance	$534.00		

As you can see, we are in pretty good shape right now. I will be making a bank deposit soon, but thought holding off might catch a few more stray dollars to deposit. Along with the donation to the organ fund of the church, I added a little note from the club, thanking them for letting us use their rooms. I'm sure John has already done that, but thought another thank you surely wouldn't hurt. The day after our meeting I ordered 1000 more disks. When I inquired about the $.25 a disk price that Clyde had talked about, she said if I read her the ad, she would give us that price. So with some fast work with the fingers by me, Clyde's mom, and Clyde we got $40.00 off the price! Isn't that great?! I don't know about the rest of you, but, to me, every extra dollar that goes into the club account can mean more equipment we can purchase --- hardware, software and whatever else our "operators" can come up with. We are doing pretty good so far, and I think the prices we charge are good. Where else could you get disks for 40 cents and a disk or tape full of programs for $2.00?? Add to that all the nice people who go out of their way to help you with any problems you have, and a great place to meet and you couldn't do better than that! Like Stan and his T.I. Writer class. It was a very informative class and I am certainly looking forward to the next one. (I already have a new problem for you to solve, guys!). One more thing-- I would not have been able to make it to this class without Mickey. She took over selling the disks and did a great job --- THANKS ALOT MICKEY! (everything balanced fine, too -- see!!). Oh yes, for the sake of the curious -- our Goodie Fund made $20 this time! So I can get more cups, cremora and whatever else we need. Thanks everyone. See you next month.

Jan Trayers, Treasurer

NEXT MEETING.....

The NEXT MEETING of the WEST PENN 99'ERS will be on FEBRUARY 17th, at the UNITED PRESBYTERIAN CHURCH OF THE COVENANT, corner of OAK and 4th streets in IRWIN, PA.

We will have, the LIBRARY functions beginning at 6:45, and the "NORMAL" business meeting at 7:00, followed by demonstrations, and questions, and we will have the ASSEMBLY, and T.I. WRITER SIGS, following the demos, at about 8:30 PM.

We will make another attempt at demonstrating a GENEVE, and we will have a demo of the RAVE keyboard. I'm building a light pen, and if I get it done, and time permits, (if anyone permits) I will demonstrate it for those who have not seen one.

I hope to see you ALL there, even if you can't be there at 7:00, come at whatever time you can. WE WERE THERE TILL 11:30 last month.

John F. Willforth.....(412) 527-6656

T. I. Writer (Part 7) Stan Katzman

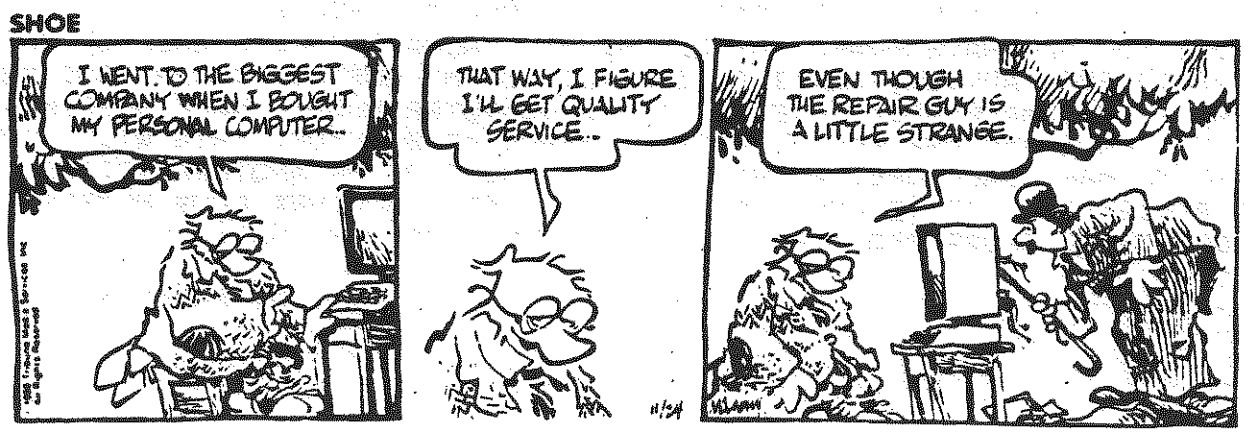
Well now let's discuss "A Moving Experience" (T. I. Writer Manual, page 36). Move (M) is a command that allows one to move blocks of text from one place in the document to another.

This command uses the line numbers also so it might be more convenient if there is a printed copy of the document with the line numbers printed also. (This was discussed earlier; L PIO).

This is kind of a complicated process so let's start. First isolate the block of text you want to move. You do this by placing the cursor at the start of the text you want to move and then enter "Ins Char" (Fctn 2) and split the line, then do the same for the end of the text. Now place the cursor where you want the text to be moved and enter "Ins Char" again. Now go to Command Mode and enter L. At this point you will see "Move, Copy, Delete or Show lines:", now enter M. At this point you will see "MOVE start line, stop line, after line:". Now you enter the line number of the start of the block of material you want to move, a space, the line number at the end of the text you want to move, a space, and the line number where you want the text block moved to. (If you remember these were defined by the "Ins Char" markers.) Now reformat the text accordingly and you have moved the text to where you wanted to. There is a minor catch to this and that is you cannot have a real full text buffer because this movement of text uses some memory while things are being moved.

This does not complete all the possible things that you can do in the Editor but I think that they are the most important. If we can master these (when we need them) then I feel that the rest can be picked up just by reading the T. I. Writer manual. This I feel is a good word processing program and to the best of my knowledge the only thing I would change in the Edit mode is to add a permanent display at the top or bottom of the screen showing the margin scale and their settings.

This is a fairly short session. The next time we will start talking about the Text Formatter.



"TIPS FOR BEGINNERS"

HERE WE GO TOGETHER-NO.2. SINCE THESE ARTICLES ARE WRITTEN TO HELP THE BEGINNING TI-USER,I WOULD LIKE TO SAY THAT ANY ARTICLE THAT YOU MAY THINK IS NOT CLEARLY WRITTEN OR THAT YOU ARE HAVING DIFFICULTY UNDERSTANDING OF PERHAPS YOU JUST WANT TO ADD-TO OR DISCUSS FURTHER. FEEL FREE TO DO SO WITH ME AT THE MEETINGS OR GIVE ME A CALL AT 751-6065. I ALSO USE THE PUG BBS BOARD AT 824-6779. I FEEL THAT I HAVE GAINED SO MUCH IN SO SHORT A TIME AND HAVE SOMETHING LASTING TO ENJOY DURING MY EARLY RETIREMENT. THAT I WANT TO GIVE SOME BACK BY HELPING THE NEW USER MEMBERS. IF YOU WANT TO SEE UP CLOSE WHAT A DISK DRIVE SYSTEM CAN DO FOR YOU BEFORE INVESTING IN ONE GIVE ME A CALL. WE'LL MAKE ARRANGEMENTS. NOW LET'S GET ON TO MORE INFORMATION.

(1) BUYING THE RIGHT JOYSTICK IS A MORE IMPORTANT TASK THAN YOU MIGHT FIRST IMAGINE. THE TENDENCY IS TO BUY THE FIRST ONE YOU SEE THAT IS ON SALE. THIS IS A MISTAKE AS YOU WILL END UP WITH A GRAVE-YARD OF BROKEN OR IMPROPERLY WORKING UNITS,AS I DID. IF YOU WANT YOUR STICKS TO STAND UP TO SOME SERIOUS USAGE AND HAVE GOOD RESPONSE. THEN HERE ARE TWO I HAVE COME UP WITH BY USING TRIAL AND ERROR. THE BEST, I THINK, IS THE "500XJ EPXY" (REQUIRES A "Y" ADAPTER). THE STICK COSTS $14.95. THE SECOND SELECTION I LIKE, AND NOT FAR BEHIND IS "THE POWER-STICK"(STRAIGHT PLUG-IN).THIS UNIT IS VERY SMALL(FITS IN THE PALM OF YOUR HAND)AND HAS A LEFT AND RIGHT FIRING BUTTON. IT IS VERY DURABLE AND WORKS WELL TOO. BUT SOMETIMES IT IS TOO SENSITIVE. BY THE WAY THIS IS A GOOD BUY FOR $10.00 SINCE YOU GET TWO(2) JOYSTICKS AND DO NOT NEED THE "Y"ADAPTER. BOTH TYPES OF STICKS CAN BE PURCHASED AT CHUCK'S "COMPUTER BUG". TRY TO REMEMBER WHEN USING JOY STICKS TO ALWAYS RELEASE THE ALPHA LOCK KEY BEFORE BEGINNING PLAY SO THAT YOU WILL HAVE UPWARD MOVEMENT(IT'S SO NICE TO GET OF TO A GOOD START THE FIRST TIME). SOMETIMES THE JOYSTICK WON'T RESPOND AT ALL. THIS MIGHT BE BECAUSE YOU ARE USING THE #2 STICK. SO ANOTHER GOOD IDEA IS TO MARK THE TOP OF THE STICKS #1 AND #2 WITH MASKING TAPE. SOME GAMES WILL WORK ONLY WITH THE #1 STICK. TRY BOTH STICKS ALTERNATELY ON EACH GAME. YOU'LL RUN ACROSS ONE WHERE ONLY ONE OF THE STICKS RESPONDS(MARK THIS ONE.#1). NOW BY USING THE #1 STICK REGULARLY YOU WILL BECOME ACCUSTOM TO ITS FEEL AND HAVE BETTER GAME CONSISTENCY.

(2) WHEN OBTAINING ANY DISK FROM A FRIEND ASK FOR LOADING INSTRUCTIONS AND ANY DOCUMENTATION. THE "DOCS" MAY COME SEPARATELY OR BE INCLUDED ON THE DISK. REMEMBER IF THEY ARE ON THE DISK YOU WILL NEED TI-WRITER AND A PRINTER TO OBTAIN A HARD COPY. SOMETIMES IT IS INDEED VERY DIFFICULT TO OPERATE A PROGRAM WITHOUT THESE INSTRUCTIONS. THEY CAN BE AS IMPORTANT AS THE DISK ITSELF(A STRONG CASE IN POINT IS THE TI-WRITER PROGRAM ITSELF). IF YOU HAVE A DISK DRIVE AND PRINTER THE TI-WRITER IS A MUST. IT IS ONE OF THE BEST PROGRAMS FOR CREATIVE WORK AVAILABLE. IT IS NOW AVAILABLE ON DISK AS WELL AS MODULE. IF YOU ACT QUICKLY YOU CAN OBTAIN A COPY OF THE LARGE, WELL WRITTEN INSTRUCTION MANUAL TI-WRITER(BOOK ONLY), FROM TEXAS INSTRUMENTS BY CALLING(1-800 842-2737). IT'S A CLOSE OUT SPECIAL AT ONLY $3.00 PLUS SHIPPING. HURRY. AT THIS PRICE I RECOMMEND BUYING IT NOW TO PUT AWAY EVEN IF YOU ARE STILL USING CASSETTES. YOU WILL ALWAYS BE ABLE TO GET YOUR MONEY BACK ON THIS ONE BY RESALE.

(3)I AM SURE YOU ALL HAVE HEARD THE OLD ADAGE. "ALWAYS MAKE A BACK-UP COPY". THIS IS INDEED GOOD ADVICE. BUT I DO IT ONLY FOR MY MOST IMPORTANT AND MOST USED DISKS. IF YOU MAKE GOOD FRIENDS WITH A COMPUTER BUDDY. MAKE SURE WHAT PROGRAMS THEY HAVE AND USE EACH OTHERS PROGRAMS AS BACK-UP. THIS WILL SAVE YOU FROM HAVING TO MANY BACK-UPS. WE HAVE ALL AT ONE TIME OR ANOTHER ACCIDENTALLY WIPED-OUT A DISK AND HAD TO LOOK AROUND FOR IT FROM ANOTHER CLUB MEMBER. THAT'S ANOTHER GOOD THING CLUBS PROVIDE.A SOURCE OF INFORMATION. UNTIL NEXT MONTH GOOD 4'S.

-BY FRANK N. ZIC

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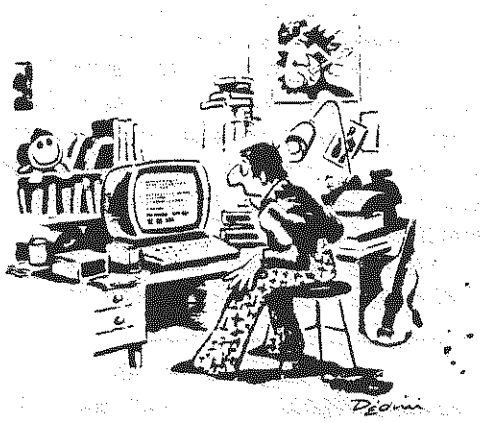
100 REM  NAME AND ADDRESS FILE
110 REM  PATTIE ALLEN 5/85
120 REM MODIFIED TO PRINT              FILES ON PRINTER            FOR LISTS AND LA
BELS          By John  Willforth
130 DIM N$(25),STA$(25),CST$(25),ZIP$(25),P$(25),C$(25)
140 CALL CLEAR
150 CALL SCREEN(11)
160 PRINT "PRESS": :"1 to LOAD DATA":"2 to ADD DATA or START FILE":"3 to EDIT DA
TA":
170 PRINT "4 to DISPLAY list":"5 to DISPLAY code":"6 to PRINT label/list/code":"
7 to SAVE DATA"
180 PRINT "8 to END PROGRAM"
190 CALL KEY(0,K,S)
200 IF (K<49)+(K>56)THEN 190
210 CALL CLEAR
220 ON K-48 GOTO 230,310,580,1030,1600,1780,1190,1290
230 PRINT "LOADING DATA"
240 OPEN #1:"CS1",INPUT ,INTERNAL,FIXED 128
250 INPUT #1:N
260 FOR I=1 TO N
270 INPUT #1:N$(I),STA$(I),CST$(I),ZIP$(I),P$(I),C$(I)
280 NEXT I
290 CLOSE #1
300 GOTO 140
310 PRINT "ADDING DATA"
320 IF N<25 THEN 360
330 PRINT "SORRY THIS PROGRAM IS FOR":"ONLY 25 NAMES":"PROCESS ANY KEY"
340 CALL KEY(0,K,S)
350 IF S=1 THEN 140 ELSE 340
360 PRINT "ENTER 'E' TO EXIT"
370 INPUT "LAST NAME: ":LN$
380 IF LN$="E" THEN 140
390 INPUT "FIRST NAME: ":FN$
400 INPUT "STREET ADDRESS: ":SA$
410 INPUT "CITY: ":CI$
420 INPUT "STATE: ":ST$
430 INPUT "ZIPCODE:":Z$
440 INPUT "PHONE: ":PI$
450 INPUT "CODE: ":CI$
460 INPUT "IS THIS INFORMATION CORRECT? Y/N":AN$
470 IF AN$="Y" THEN 490
480 GOTO 370
490 N=N+1
500 N$(N)=LN$&", "&FN$
510 STA$(N)=SA$
520 CST$(N)=CI$&", "&ST$
530 ZIP$(N)=Z$
540 P$(N)=PI$
550 C$(N)=CI$
560 SORT=2
570 GOTO 320
580 PRINT "EDITING DATA": :
590 PRINT "PRESS":"1 TO DELETE A NAME":"2 TO CHANGE INFORMATION":"3 TO RETURN TO
 MENU"
600 CALL KEY(0,K,S)
610 IF (K<49)+(K>51)THEN 600
620 IF K=51 THEN 140
630 INPUT "WHAT NAME DO YOU WANT TO    EDIT? ENTER LAST NAME: ":LN$
640 INPUT "ENTER FIRST NAME: ":FN$
650 EDN$=LN$&", "&FN$
660 FOR T=1 TO N
670 IF EDN$=N$(T)THEN 710
680 NEXT T
690 INPUT "NAME NOT FOUND. PRESS 1 TO TRY AGAIN,2 TO RETURN TO MENU":AN$
700 IF AN$="1" THEN 630 ELSE 140
710 IF K=50 THEN 830
720 FOR I=T TO N-1
730 N$(I)=N$(I+1)
740 STA$(I)=STA$(I+1)
750 CST$(I)=CST$(I+1)
760 ZIP$(I)=ZIP$(I+1)
770 P$(I)=P$(I+1)
780 C$(I)=C$(I+1)
790 NEXT I
800 N=N-1
810 CALL CLEAR
820 GOTO 580
830 PRINT "ENTER NEW INFORMATION"
840 INPUT "LAST NAME: ":LN$
850 INPUT "FIRST NAME: ":FN$
860 INPUT "STREET ADDRESS: ":SA$
870 INPUT "CITY: ":CI$
880 INPUT "STATE: ":ST$
890 INPUT "ZIP CODE: ":Z$
900 INPUT "PHONE: ":PI$
910 INPUT "CODE: ":CI$
920 INPUT "IS THIS INFORMATION CORRECT? Y/N":AN$
930 IF AN$="Y" THEN 950
940 GOTO 830
950 N$(T)=LN$&", "&FN$
960 STA$(T)=SA$
970 CST$(T)=CI$&", "&ST$
980 ZIP$(T)=Z$
990 P$(T)=PI$
1000 C$(T)=CI$
1010 SORT=2
1020 GOTO 590
1030 PRINT "DISPLAY LIST"
1040 IF SORT=1 THEN 1060
1050 GOSUB 1340
1060 PRINT "PRESS ANY KEY TO PAUSE;":"PRESS ANY KEY TO RESUME."
1070 FOR I=1 TO N
1080 PRINT N$(I):STA$(I):CST$(I):ZIP$(I):P$(I):C$(I)
1090 FOR T=1 TO 100
1100 NEXT T
1110 CALL KEY(0,K,S)
1120 IF S=0 THEN 1150
1130 CALL KEY(0,K,S)
1140 IF S<1 THEN 1130
1150 NEXT I
1160 PRINT "END OF LIST,PRESS ANY KEY TO RETURN TO MENU."
1170 CALL KEY(0,K,S)
1180 IF S=1 THEN 140 ELSE 1170
1190 PRINT "SAVING DATA"
1200 IF SORT=1 THEN 1220
1210 GOSUB 1340
1220 OPEN #2:"CS1",OUTPUT,INTERNAL,FIXED 128
1230 PRINT #2:N
1240 FOR I=1 TO N
1250 PRINT #2:N$(I),STA$(I),CST$(I),ZIP$(I),P$(I),C$(I)
1260 NEXT I
1270 CLOSE #2
1280 GOTO 140
1290 CALL SCREEN(7)
1300 PRINT "ANY DATA NOT SAVED WILL BE": : :"              LOST": : : :
1310 INPUT "PRESS 1 TO END PROGRAM, ANY OTHER KEY TO RETURN TO MENU":X$
1320 IF X$<>"1" THEN 140
1330 END
1340 FL=0
1350 FOR I=1 TO (N-1)
1360 IF N$(I)<=N$(I+1)THEN 1560
1370 H$=N$(I)
1380 H1$=STA$(I)
1390 H2$=CST$(I)
1400 H3$=ZIP$(I)
1410 H4$=P$(I)
1420 H5$=C$(I)
1430 N$(I)=N$(I+1)
1440 STA$(I)=STA$(I+1)
1450 CST$(I)=CST$(I+1)
1460 ZIP$(I)=ZIP$(I+1)
1470 P$(I)=P$(I+1)
1480 C$(I)=C$(I+1)
1490 N$(I+1)=H$
1500 STA$(I+1)=H1$
1510 CST$(I+1)=H2$
1520 ZIP$(I+1)=H3$
1530 P$(I+1)=H4$
1540 C$(I+1)=H5$
1550 FL=1
1560 NEXT I
1570 IF FL=1 THEN 1340
1580 SORT=1
1590 RETURN
1600 PRINT "LIST BY CODE"
1610 INPUT "WHAT CATEGORY DO YOU WANT   PRINTED? INPUT CODE: ":CODE$
1620 PRINT "PRESS ANY KEY TO PAUSE; ANY KEY TO RESUME."
1630 FOR I=1 TO N
1640 IF C$(I)=CODE$ THEN 1700
1650 NEXT I
1660 PRINT "END OF LIST.  PRESS ANY KEY TO RETURN TO MENU."
1670 CALL KEY(0,K,S)
1680 IF S=0 THEN 1670
1690 GOTO 140
1700 PRINT N$(I):STA$(I):CST$(I):ZIP$(I):P$(I):C$(I)
1710 FOR T=1 TO 100
1720 NEXT T
1730 CALL KEY(0,K,S)
1740 IF S=0 THEN 1650
1750 CALL KEY(0,K,S)
1760 IF S<1 THEN 1750
1770 GOTO 1650
1780 REM  PRINT ROUTINE.
1790 ESCAPE$=CHR$(27)
1800 EXP$=ESCAPE$&CHR$(14)
1810 COM$=ESCAPE$&CHR$(15)
1820 NOR$=ESCAPE$&CHR$(18)
1830 PI$=ESCAPE$&CHR$(27)&"G"
1840 PIC$=PI$&COM$&EXP$
1850 CALL CLEAR
1860 OPEN #1:"PIO"
1870 GOSUB 2140
1880 INPUT "LAbels or LIsts?":LOL$
1890 IF LOL$="LA" THEN 2000
1900 IF SORT=1 THEN 1920
1910 GOSUB 1340
1920 FOR I=1 TO N
1930 PRINT #1:TAB(1);TYP$;N$(I);TAB(26);TYP$;STA$(I);TAB(46);TYP$;CST$(I);TAB(64
);TYP$;ZIP$(I);TAB(71);TYP$;P$(I);TAB(79);TYP$;C$(I)
1940 PRINT #1:""
1950 CALL KEY(0,K,S)
1960 IF S=0 THEN 1980
1970 IF S<1 THEN 1950
1980 NEXT I
1990 GOTO 2270
2000 INPUT "Start printing in col.#? ?":COL
2010 INPUT "Lines between labels   ?":LBL
2020 IF SORT=1 THEN 2040
2030 GOSUB 1340
2040 FOR I=1 TO N   "
2050 PRINT #1:TAB(COL);TYP$;N$(I):TAB(COL);TYP$;STA$(I):TAB(COL);TYP$;CST$(I):TA
B(COL+14);TYP$;ZIP$(I)
2060 FOR SPACE=1 TO LBL STEP 1
2070 PRINT #1:""
2080 NEXT SPACE
2090 CALL KEY(0,K,S)
2100 IF S=0 THEN 2120
2110 IF S<1 THEN 2090
2120 NEXT I
2130 GOTO 2270
2140 INPUT "Print type,(N)ormal (P)ica  (C)ompressed (E)longated ?":NECP$
2150 IF NECP$="N" THEN 2190
2160 IF NECP$="E" THEN 2210
2170 IF NECP$="C" THEN 2230
2180 IF NECP$="P" THEN 2250
2190 TYP$=NOR$
2200 GOTO 2260
2210 TYP$=EXP$
2220 GOTO 2260
2230 TYP$=COM$
2240 GOTO 2260
2250 TYP$=PIC$
2260 RETURN
2270 CALL CLEAR
2280 PRINT #1:ESCAPE$
2290 CLOSE #1
2300 GOTO 160
```



"You have just accessed the Big Dynamo-Data computer in Chicago. Your number has been turned over to our Enforcer Department. Exit immediately or you'll be the victim of a humongous power surge that will make our day."

"RAVE" KEYBOARD .....

Read this review, and come to the next WP99 meeting.

RAVE KEYBOARD ENHANCEMENT
MODEL 99/84

The new RAVE keyboard enhancement package for the TI99/4A, consists of: an IBM/AT/XT, 84 key, type keyboard, and a interface card that when installed replaces the TI keyboard. The interface card allows hookup of the new keyboard, via a standard 5 pin DIN connector which supplies power to the keyboard and transfers data from it. The interface also creates the TI logic for the computer and provides circuitry for installing an optional ($4.95) load interrupt/reset function, for performing these task from the new keyboard. A second recommended option is a cover ($4.00) for the opening left after removing the old keyboard.

The new keyboard is very easy to use, because all (FCNT) keys, except (FCNT + =(QUIT)), are single key entries. All of the old keyboard keys are available and function exactly the same, although the location and/or label may differ. For example the (FCNT) key is labeled (ALT) and is located lower left, yet works just the same.

The best asset of the new keyboard is the availibilty of single key functions. The direction keys, plus key, minus key, and backspace key are all one key entries. For TI-WRITER/MULTIPLAN type software there are single keys for: Home, Window, Page up/down, Tab/Tab back, Insert, and Delete. Also availabel is a number pad with a number lock and second enter key close by.

The ALPHA LOCK key, labeled CAPS LOCK, is located in much the same place and is lighted when in use and get this, it has no effect on joystick operations. For programing functions, the double quote (") is moved into an unshifted posistion with Caps Lock on, very nice. When using Caps Lock the lower case is still available using the shift key.

Adjustable tilt for comfort and a pleasing appearance add a "Big System" look. According to Martha, my spouse and the typist in the house, "The keys have nice spacing and a good layout." With my one finger typing I have noticed little differance, except a lack of need to shift keys so often.

Another item to note, the keyboard allows addressing two new keys (One in basic) with CTRL + F9, CTRL + F10, refered to by RAVE as missing keys one and two. They are defined by user programs and accessed via a "call key" subprogram.

Aside from the two "missing keys" and the optional interrupt/reset function, the only thing the new keyboard does, that the old one can't, is lay in your lap. I must admitt however, it makes doing it a lot more fun.

RAVE CO. 23 FLORENCE RD., BLOOMFIELD CT. 06002, ofers two models. This review is of the 99/84 (cost: $149.95 + s/h + options). The other model is the 99/101, which looks like an IBM AT/XT enhanced keyboard and is reported to have more single key functions. It was reviewed in the DEC.86 issue ofMICROpendium.

If you have any questions I will be glad to try and answer them. Call (412) 262-1172, and ask for Willis.

ATTENTION ANYONE INTERESTED IN A RAVE KEYBOARD, WE MAY HAVE INTERESTING NEWS FOR YOU AT THE MEETING ON SPECIAL PRICING!

CONTEST CONTINUATION.....

Gene Kelly has agreed to continue the first annual programming contest of the WP99'ERS until the MARCH meeting. Below, I've re-printed the rules for anyone who can't fin their original copy. Please take advantage of the extension.

THE FIRST ANNUAL WEST PENN 99'ERS USER GROUP PROGRAMMING CONTEST

Open to all members, including the budding young hackers amoung us, you may submit any program that you have written. You may enter more than once but to keep it simple use a separate disk for each entry.

"OFFICIAL RULES AND REQUIREMENTS"

1) Catagories are GAMES (text and arcade), EDUCATIONAL, and UTILITIES.
2) Program must be written after 09-15-86 (sorry Chuck, no Starguard).
3) Program may be written in any language and may reside on cassette or disk in SSSD or DSSD format (yes Mickey, I still have a cassette on my system.)
4) Include source code if using a compiled or assembeled language. It is hard to tell what the program format runs under sometimes. Document any use of a copyrighted or public domain subroutine in the program title screen and in the documentation.
5) Include docs on disk in TI-WRITER or E/A editor format if they are necessary to operate program.
6) Label each submission with NAME, ADDRESS, AGE, LANGUAGE, OPTIONAL EQUIPMENT.
7) Contest will run until the MARCH 87 meeting and the winners will be announced at the APRIL, 87 meeting.
8) Submissions may be given to me at the meetings or mailed to me at:

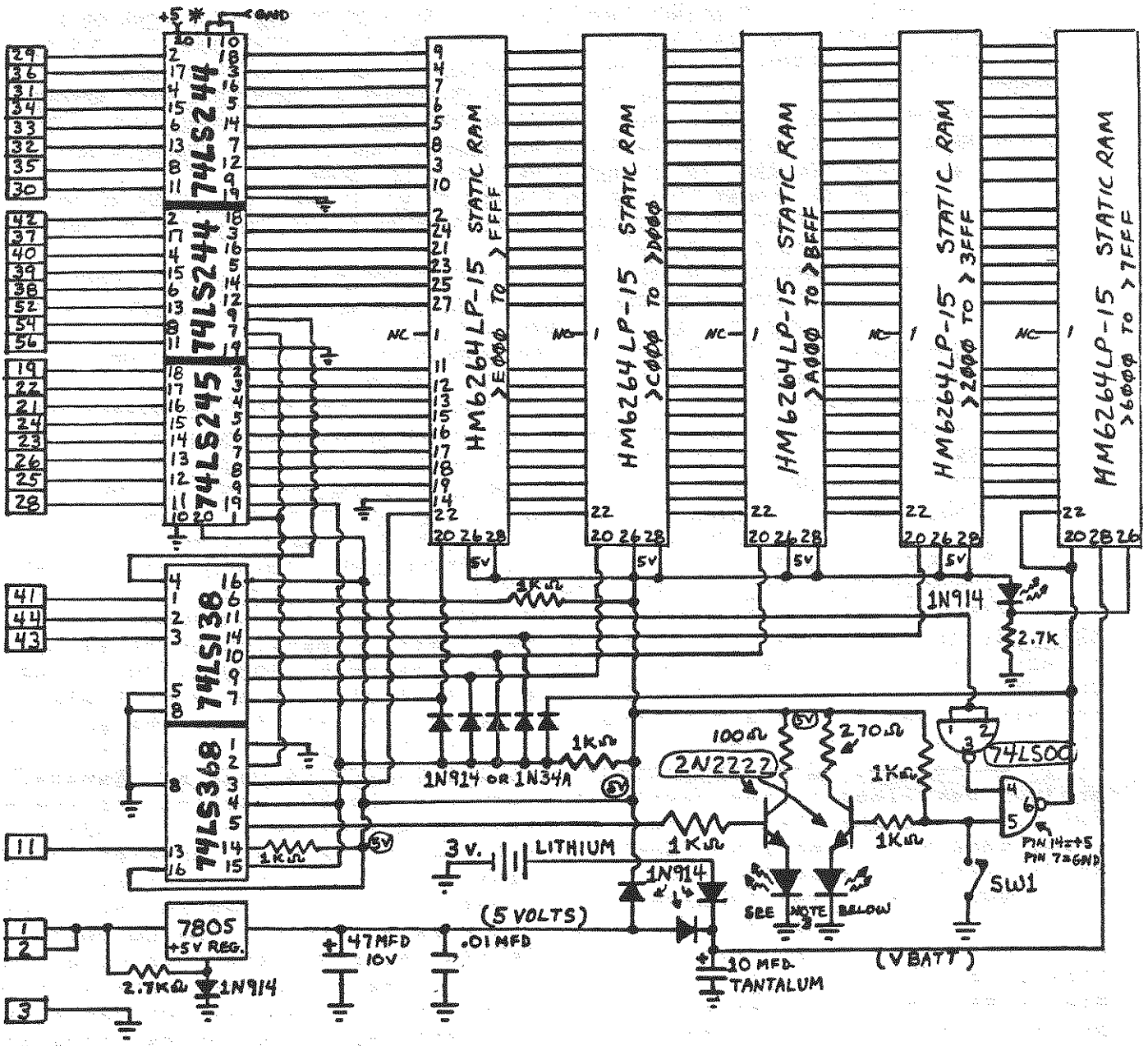
GENE KELLY
444 WALL AVE.
WALL, PA 15148

If mailed, please mark the outer envelope with:
MAGNETIC MEDIA—HANDLE WITH CARE
My mailman doesn't know the difference between a floppy disk and my AT&T bill.
9) Entries will be judged on origionality, ease of use, usefulness, attention holding, and quality of code (ie. no untrapped errors, speed of execution, etc), and use of 994/A facilities (ie. graphics, speech, etc.)
10) Prizes to be announced as soon as I can arrange for them. We may have a use for that "Tombstone City" cartridge, yet!
11) Programs will become the West Penn 99'ers property when submitted and the winning entries will be made available to the members on a "Best of WP99UG" disk.

Floppies and cassettes will be returned at the APR. 87 meeting. With over 800 disks, I don't need any more for a while. Anyone have a free hard drive??? Enter often and who knows, we may have another "Disk Manager 1000" type project when this is over.

Just in case you are worried, I will not enter myself in the contest. Maybe you all can pursuade Clyde to refrain from entering also. Till next time, HAPPY HACKING!

EXPANSION BOX 32K WITH 8K MODULE RAM



* BOTH 74LS244'S MUST HAVE +5 AND GND. ON THESE PINS

PARTS LIST:

BASIC 32K MEMORY CARD;

- 4 - 6264LP-15 STATIC RAM CHIPS
- 1 - 74LS138 CHIP
- 2 - 74LS244 CHIPS
- 1 - 74LS245 CHIP
- 1 - 74LS368 CHIP
- 1 - 7805 +5 V. REG.
- 1 - 2N2222 NPN TRANSISTOR
- 1 - LED (ONLY IF NO 8K OPTION)
- 4 - 1N914 OR 1N34A DIODES (SEE NOTE 1 TO RIGHT)
- 2 - 1N914 DIODES
- 4 - 1K 1/4 W. RESISTORS
- 1 - 2.7K 1/4 W. RESISTOR
- 1 - 100 OHM 1/4 W. RES.
- 1 - 47 MFD. 10V. ELECT.
- 1 - .01 MFD. DISC OR MONOLYTHIC
- 1 - LEAD EDGE CONNECTOR (T.I. PART# L2111121-30) 30/60 CONTACT.
- 1 - APPROPRIATE CIRCUIT CARD FOR BOARD ASSEMBLY
- MISC SOCKETS, WIRE, SOLDER EQUIP.

8K OPTION;

- 1 - 6264LP-15 STATIC RAM CHIP
- 1 - 74LS00 CHIP
- 1 - SPST TOGGLE SWITCH
- 1 - 3V. LITHIUM BATTERY AND HOLDER
- 1 - LED (IF 3 LEAD 2 COLOR LED) OR
- 2 - LED'S (INSTEAD OF ITEM ABOVE)
- 1 - 2N2222 NPN TRANSISTOR
- 1 - 2.7K 1/4 W. RESISTOR
- 1 - 1N914 OR 1N34A DIODE (SEE NOTE 1 TO RIGHT)
- 3 - 1N914 DIODES
- 2 - 1K 1/4 W. RESISTORS
- 1 - 270 OHM 1/4 W. RESISTOR
- 1 - 10 MFD. 10V. TANTALUM CAP.

PLEASE BE CAREFUL ASSEMBLING!

SEE TEXT ON OTHER SIDE.

EXPANSION BOX 32K WITH 8K MODULE RAM

NOTES:

1) I HAD GOOD LUCK USING 1N914 DIODES FOR THE 32K LOGIC. GERMANIUM DIODES MAY BE USED FOR MORE ASSURANCE THAT A "LOW" LEVEL CAN BE DETECTED 1N34A'S SHOULD BE USED AS THE DECODE DIODES TO PIN 20 OF THE RAM (UP TO 5 DIODES), NOT IN THE +5 V. OR VBATT CIRCUIT.

2) IT IS A GOOD IDEA TO PUT A .1 MFD BYPASS CAP. ACROSS EACH +5 V. PIN OF EACH CHIP TO GROUND. (NOT NECESSARY)

3) I USED A THREE LEAD, TWO COLOR LED INSTEAD OF TWO SEPARATE LED'S. ASSUMING THE RED LED'S ANNODE IS CONNECTED TO THE MAIN 32K SECTION, THE FOLLOWING COLORS WILL BE SEEN IN THE PEB INDICATOR WINDOW:

RED --- 32K BEING ACCESSED
GREEN - 8K MODULE MEMORY BEING ACCESSED
AMBER - 8K MODULE MEMORY ENABLED AND 32K BEING ACCESSED

4) THE CIRCUIT SHOWS BATTERY BACKUP FOR THE 8K MODULE MEMORY "ONLY". PIN 28 OF THE REST OF THE MEMORY CHIPS COULD BE CONNECTED TO VBATT IF YOU DESIRE, WHICH WOULD THEN SUPPORT THE 32K DURING POWER FAIL (OR TURNING OFF THE MACHINE), BUT UNLESS YOUR AN EXTRAORDINARY PROGRAMMER, YOU WILL NOT BE ABLE TO TAKE ADVANTAGE OF THIS FEATURE.

5) SWITCH SW1 DISABLES 8K, SO MODULES WITH ROM (OR MINI-MEM) WILL STILL FUNCTION.

6) LINES RUNNING STRAIGHT THROUGH THE 6264'S ARE CONNECTED TO THE SAME PINS ON ALL CHIPS. WATCH PIN 22!

EXPANSION BOX 32K WITH 8K MODULE RAM

EDITORS NOTE:

IN AN EFFORT TO CONTINUE PRESENTING THE READERS OF THE WEST PENN 99'ERS WITH A WIDE VARIETY OF HARDWARE ARTICLES, I'VE INCLUDED A VERY GOOD ARTICLE BY JOE SPIEGEL PAST PRESIDENT AND HARDWARE ENTHUSIAST OF THE "AIRPORT AREA COMPUTER CLUB". HE HAS TAKEN THE IDEA OF DO-IT-YOURSELF MEMORIES A STEP BEYOND ANY I'VE SHOWN HERE IN THESE PAGE, ANSWERING THE DESIRES OF SEVERAL, WHO HAVE ASKED ME IF THEY COULD BUILD THEIR OWN 32K MEMORY CARD FOR THE EXPANSION BOX.

WELL HERE YOU ARE, AND HE HAS GIVEN YOU A LOT MORE:

* 8K OF MEMORY THAT IS ACCESSABLE BY E/A USERS.(W/BATTERY SUPPORT)
* 32K OF MEMORY THAT CAN ALSO BE BATTERY SUPPORTED IF YOU FIGURE OUT HOW THIS CAN BE USED.
* AN INTERFACE BOARD FOR THE PEB THAT COULD ALSO HAVE SUCH FEATURES AS A CLOCK, A SPEECH SYNTHESIZER, ETC, ADDED IF YOU ALLOW ENOUGH ROOM WHEN YOU ASSEMBLE THIS INITIAL PROJECT.

I'M REALLY PLEASED TO HAVE ANOTHER HARDWARE HACKER SO CLOSE TO HELP TO CONTRIBUTE TO THIS AREA OF THE T.I. COMMUNITY SUPPORT.

********** JOHN F. WILLFORTH (412) 527-6656, WP99'ERS **********

* I RECOMMEND HIGHLY THAT YOU REMOVE ANY "UNNEEDED BOARDS" FROM YOUR PEB, BEFORE YOU PLUG ANY OTHER BOARD OF UNKNOWN CAPABILITIES INTO AN OTHERWISE USEABLE PEB! THIS REQUEST SHOULD ALSO INCLUDE THE DISK CONT. CARD. I WOULD ALSO LIKE TO STATE FOR ALL WHO ATTEMPT THIS PROJECT, THAT YOU DO SO AT YOUR OWN RISK, NOT AND I REPEAT, "NOT" AT THE RE- SPONSIBILITY OF EITHER JOE, MYSELF, OR EITHER USER'S GROUP OR ANY REPRESENTATIVE THEIR-OF, AND THERE-UNDER, OR WHITHER-TO-FORE! *

****

32K+ for the PEB: Most people with Peripheral Expansion boxes already have a 32K card, or one of the large memory cards by FOUNDATION, MYARC, or CORCOMP. For those people, like myself, that like to play with electronics and either don't have a 32K card, or want to get rid of the power hungry DRAM, here is a project for you. I got the idea for the card from an article in the R/D Computing Newsletter by Ryte Data of Canada. Th project described in the newsletter was only the 8K portion of the card built. I thought that it was a waste of a slot to only include 8K, so I added some more memory and some extra buffer chips and created the card I am describing. I would like to point out to anyone that read the Ryte Data newsletter. The 74LS368 chip is not correctly wired in their article, thus the 8K card they describe will not work properly. The curcuit diagram of my card that is included in this newsletter shows the correct wiring for that chip. I called it the 32K+ card because it not only contains 32K of Static RAM, but also has an additional 8K in the module ROM/RAM area that makes it into a "Supercart" type accessory. Thus you can have all the benifit of a Supercart without modifying your E/A module. In fact, with a CorComp controller card (or possibly the MYARC disk manager), you can load the module space without the E/A module if you have a program that can stand alone. The 8K portion is battery backed so that if you load a program like the Supercart menu that I discussed a couple of months ago, the program will remain even after the PEB is turned off. There is a switch that is wired into the card to allow the 8K to be disabled while using other modules that have ROM or RAM in them. Even with the 8K disabled, the memory is still retained. The total cost of the card is about $40.00. I realize that a used 32K card can be found for less money, but it uses DRAM which consumes much more power and does not contain the extra 8K. A version of this card could be built into the console or Speech Synthesizer for about $25.00. but there is then the disadvantage of your system not being interchangable with other peoples' systems. The internal modifications also cause problems if the console has to be repaired; you have to remove any modifications before sending it out. I can supply you sources and prices for the parts required.

Joe Spiegel

GETTING THE MOST FROM YOUR CASSETTE SYSTEM
BY MICKEY SCHMITT
NUMBER 9
UNDERSTANDING CASSETTE ERROR CODES AND MESSAGES
PART I

UNDERSTANDING CASSETTE ERROR CODES AND MESSAGES IS NOT QUITE AS DIFFICULT AS IT MAY SEEM. UNFORTUNATELY, TRYING TO FIND A LIST OF THE ERROR CODES AND MESSAGES THAT DEAL SPECIFICALLY WITH THE CASSETTE RECORDER HAS BEEN A DIFFICULT TASK! IN DOING MY RESEARCH FOR THIS PARTICULAR ARTICLE, I HAVE HAD TO COMBINE MANY DIFFERENT SOURCES OF INFORMATION - IN ORDER TO BE AS INFORMATIVE AND AS COMPLETE AS POSSIBLE.

BASICALLY, CASSETTE ERROR CODES AND MESSAGES CAN OCCUR DURING ONE OF TWO DIFFERENT TYPES OF COMMANDS. MORE SPECIFICALLY, I AM REFERRING TO THE "LOADING" (OLD CS1) PROCEDURE AND THE "SAVING" (SAVE CS1) PROCEDURE.

THIS MONTH I WILL BE EXAMINING THE ERROR CODES AND MESSAGES THAT CAN OCCUR DURING THE "LOADING" (OLD CS1) PROCEDURE.

WHEN THE COMPUTER FINISHES LOADING THE DATA, IT TELLS YOU WHETHER OR NOT IT READ THE DATA PROPERLY. IF THE DATA WERE READ CORRECTLY, YOU WOULD SEE THE FOLLOWING MESSAGE APPEAR ON YOUR MONITOR OR TV SCREEN:

* DATA OK
* PRESS CASSETTE STOP CS1
  THEN PRESS ENTER

IF, HOWEVER, THE COMPUTER DID NOT SUCCESSFULLY READ YOUR PROGRAM INTO MEMORY, AN ERROR OCCURS AND THE COMPUTER PRINTS ONE OF THE FOLLOWING ERROR MESSAGES:

* ERROR - NO DATA FOUND
  PRESS R TO READ CS1
  PRESS C TO CHECK
  PRESS E TO EXIT

* ERROR DETECTED IN DATA
  PRESS R TO READ CS1
  PRESS C TO CHECK
  PRESS E TO EXIT

WHEN THIS OCCURS - YOU HAVE A CHOICE OF USING ONE OF THE FOLLOWING THREE OPTIONS: NOTE, HOWEVER, THAT THE SINGLE-LETTER RESPONSES (R - C - E) THAT YOU TYPE IN AT THIS TIME MUST BE IN UPPER-CASE CHARACTERS!

1. PRESS R TO REPEAT THE READING PROCEDURE. HOWEVER, BEFORE REPEATING THIS PROCEDURE, CHECK TO MAKE SURE THAT YOU HAVE PUT THE CASSETTE TAPE IN CORRECTLY - THAT IT IS THE CORRECT CASSETTE TAPE AND THAT IT HAS BEEN PLACED IN THE CASSETTE RECORDER WITH THE CORRECT SIDE FACING UP. THEN FOLLOW THE DIRECTIONS AS THEY APPEAR ON YOUR MONITOR OR TV SCREEN.
2. PRESS C TO CHECK THE DATA YOU HAVE READ INTO MEMORY. AT THIS POINT YOU MAY WISH TO ADJUST YOUR CASSETTE RECORDER'S VOLUME CONTROL AND TONE SETTING. THEN FOLLOW THE DIRECTIONS AS THEY APPEAR ON YOUR MONITOR OR TV SCREEN.
3. PRESS E TO EXIT FROM THE LOADING PROCEDURE. AT THIS TIME ANOTHER ERROR MESSAGE IS DISPLAYED, INDICATING THAT THE COMPUTER DID NOT PROPERLY READ YOUR PROGRAM INTO MEMORY

   * WARNING:
     CHECK PROGRAM IN MEMORY
   * I/O ERROR 56

IF I/O ERROR 56 APPEARS, SOMETHING DEFINITELY WENT WRONG. BUT DON'T PANIC! GENERALLY SPEAKING, WHEN THE ERROR MESSAGE "ERROR - NO DATA FOUND" OCCURS - THE COMPUTER DID NOT RECOGNIZE THE CASSETTE RECORDER AT ALL DURING THE "OLD CS1" ROUTINE. ON THE OTHER HAND - WHEN THE ERROR MESSAGE "ERROR DETECTED IN DATA" OCCURS - THE COMPUTER RECOGNIZED ONLY PART OF THE DATA THAT THE CASSETTE RECORDER WAS SENDING TO THE COMPUTER. WHEN THIS HAPPENS, RECHECK YOUR CASSETTE RECORDER'S VOLUME CONTROL AND TONE SETTING. THEN RECHECK YOUR CASSETTE CABLE. MAKE SURE THAT BOTH ENDS OF THE CABLE ARE ATTACHED TO THE COMPUTER AND TO THE CASSETTE RECORDER. WHILE YOU ARE AT IT - MAKE SURE THAT THE COLOR-CODED WIRES LEADING TO THE CASSETTE RECORDER ARE CONNECTED CORRECTLY. THE CASSETTE RECORDER WILL NOT OPERATE PROPERLY IF THE COLOR-CODED WIRES ARE REVERSED!

NEXT MONTH I WILL CONTINUE WITH THE TOPIC OF UNDERSTANDING CASSETTE ERROR CODES AND MESSAGES. MORE SPECIFICALLY, I WILL BE EXAMINING THE ERROR CODES AND MESSAGES THAT CAN OCCUR DURING THE "SAVING" (SAVE CS1) PROCEDURE.

IF YOU NEED ANY HELP UNDERSTANDING THE CASSETTE ERROR CODES AND MESSAGES OR ARE EXPERIENCING CASSETTE ERRORS - JUST GIVE ME A CALL (412-335-0163) AND I'LL TRY TO HELP.

MICKEY SCHMITT

BLACK TI CONSOLE, Joysticks, Cassette cables, Adventure cart.$60....412 744-2255

1986 FEDERAL TAX FORMS TEMPLATES for Multi-Plan. Jim Sleeth P.O. BOX 20723
EL CAJON, CA 92021

CHANGE PRINTER CHARACTERISTICS WITH DM1000..... (from AKRON U.G.) ..for CATALOGING.

* At the FIRST screen, Type(FCTN 3)
* Enter PIO and control codes. EX; 27 15 * (this will cause EPSON to print in a condensed mode)
* Save back to disk. (menue driven)

LIST OF AVAILABLE FAIRWARE DISKS
FROM THE WEST PENN 99'ERS LIBRARY

C99_DOC	MANUAL FOR THE TINY C COMPILER
C99_COMPIL	TINY C COMPILER
CATLIB*V13	MARTY KROLL'S ASSEMBLY LANGUAGE DISK CATALOGER
DM1000V3.5	DISK MANAGER PROGRAM
FNLWR_DOC	MANUAL FOR FUNLWRITER
FNLWR3/3-E	FUNLWRITER - ASSEMBLY WITHOUT THE E/A MODULE
NEATLIST	EXTENDED BASIC LISTING UTILITY
RAGASM_A	MACRO ASSEMBLER PART I
RAGASM_B	MACRO ASSEMBLER PART II
SCREENDUMP	ASSEMBLY SCREENDUMP WITH SOURCECODE
TI99_OPOLY	GAME OF MONOPOLY
TI_SINGS_1	SINGING FROM THE SPEECH SYNTHESIZER

********** N O T E **********

THE WEST PENN 99'ERS REMIND YOU THAT IF YOU ARE USING A FAIRWARE PROGRAM YOU SHOULD SEND THE AUTHOR A CONTRIBUTION. IF WE DO NOT SUPPORT THE AUTHORS OF THESE PROGRAMS, THE SUPPLY OF REASONABLY PRICED SOFTWARE WILL END.

LIST OF AVAILABLE PUBLIC DOMAIN DISKS
FROM THE WEST PENN 99'ERS LIBRARY

01NOV82	FORTH - USES E/A MODULE
JPGRAPHICS	FORTH GRAPHICS DEMO DOUBLE SIDED
NEW	TI_WRITER & MULTIPLAN UPDATES
TEST	SYSTEM DIAGNOSTICS -
TESTSYSTEM	SYSTEM DIAGNOSTICS
TI_FORTH	FORTH - USES EXTENDED BASIC MODULE

THE FOLOWING ARE ALSO AVAILABLE ON CASSETTE. A DETAILED LIST WILL BE AVAILABLE AT THE MEETING.

1001-1012	VARIOUS GAMES
1013-1023	VARIOUS GAMES
1024-1033	VARIOUS GAMES
1034-1045	VARIOUS GAMES
1046-1058	VARIOUS GAMES
1059-1075	VARIOUS GAMES
1076-1092	VARIOUS GAMES
1092-1103	VARIOUS GAMES

- CLYDE COLLEDGE -

FRACTURED FILES.....

I have not left myself much space in this newsletter to do any rambling. I'm taking what little space is left to tell you about what I believe to be the most important three things that have happened to/for the TI user in recent months and days.(aside from the many amazing things those software people are doing EVERY DAY) I'm refering to HARDWARE. They are:

* The GENEVE, a totally powerful addition and beyond that a step on another plateau!
* The TRITON XT, which will be a different experience for TI users
* The RAVE 99 keyboard, (what you say), yes this will be a very influential new aspect for T.I. users, maintaining the TRUE TI atmosphere, and perhaps adding SUBSTANTIALLY to the ease of use.

There are many more hardware items, many that I've not seen or heard of, but isn't it a wonderful problem to have? We sometimes get a little down because we hear of some WRITER, or some hardware producer, or someone withdrawing their software from the market or no longer supporting the TI-99/4A, but isn't there ALWAYS SOMEONE who will come along and produce a NEW product, and most times, this new product is more advanced, and amazing than the last?

These last few months have convinced me even more that the TI-99/4A that my wife bought for me over four years ago, and that I wondered if she shouldn't have gotten me an ATARI 800 or the COMODORE 64 instead, wasn't the better for long term advantage in investment in a learning tool, a games machine, a production machine, which is even more supported today than the day it was made. I have NOT thought of how I can liquidate the TI equipment to get another machine. With what's on the HORIZON, I don't think I'll have to for quite a while!

John F. Willforth

GENEVE

Yes, Virginia, there really is a Geneve. And it does work. Unfortunately, only a few of our members can claim first-hand knowledge of that fact despite having one at our last meeting. Lest you judge them too harshly, let me relate how I spent my morning today. I received a magtape from the National Bureau of Standards and my computer wouldn't read it because it wasn't standard. (I'm not kidding.) The moral is that even the most respected scientific organizations can have a bad day, so give Lou Phillips & Co. a break.

Because the limited number of demo computers available do not always get returned promptly, to get a computer to us they had to ship a prototype at the last minute. I was lucky to get the video cable made in time for the meeting. The keyboard had some loose wires, and by the time we got desperate enough to hack off the connector and stick the loose wires into the keyboard socket, the voltage regulator chips had overheated and gone on strike. After talking to Lou the next day and identifying the problem, I got another keyboard and added some heat sinks to the regulators and the computer ran fine for hours. (The production version has one more voltage regulator chip and they all come with heat sinks, so this shouldn't be a common problem.) Finally convinced that it worked I had a demonstration at my house the Saturday after the meeting and some of our club members got to see it in action.

I was very impressed. There were two demos that drew rectangles at random and showed the speed (reportedly faster than the Amiga) and color range (512 colors) of the 9938 display processor. Myarc's Extended BASIC has some new graphics modes (32, 40, or 80 columns) and many new commands (CALL DRAW, CALL CIRCLE, CALL FILL). You could write your own version of TI Artist in this BASIC if you wanted. One of the demos, as a matter of fact, read in and displayed TI Artist bit-mapped pictures from BASIC. I was also able to run some existing BASIC and assembly programs with no changes. The operating system was DOS version 0.0 (i.e. the first attempt) and didn't disguise itself perfectly as a 99/4A. This is not all bad, because when I tried the SIZE command it said there was 20K program space, 20K variable space, and 20K string space. Programs that deal with a lot of data could be speeded up tremendously on this computer, since larger arrays can mean fewer disk operations.

How would you like to be able to edit your BASIC programs in 80 columns? If you use a lot of long lines you'll really appreciate it. An 80-column word-processing editor (commonly known as TI-Writer up till now) was part of the operating system. There were a couple of text files that described the Fulgent Business System software. It sounded good, but that's not my field of interest so I didn't pay a lot of attention.

My main interest was how do you get this thing to play games? I couldn't find out how to get it to execute GPL files from my Gram Kracker module library, but I plan to. I also didn't have a mouse to try the mouse demo. I saw this demo in Chicago in November and it's very impressive.

My overall impression was that this machine has incredible potential. I am much more interested in getting more use out of the equipment and software I've got than in getting some PC clone. I don't want to give up on all the manuals, magazines, newsletters, and hours of experience I've got for the TI. On the other hand, I'm not quite ready to run out and spend $400+. Maybe if I saw one that was working perfectly...

Speaking of Geneve demos, we're going to have one at our February 17th meeting. It should have the latest version of the software, a mouse, and a non-prototype computer that doesn't require modification. It should have all the demos I saw already plus anything else I can talk them out of. You'll love it.

SCOTT COLEMAN

QUAD-DENSITY CHIP FOR YOUR T.I. CONTROLLER FROM RYTE DATA.

For $45.00 you can order a prom set to install in your original T.I. controller card, to enable handling double-sided, double or QUAD density drives. You may also mix and match drives on a system. CONTACT RYTE DATA. See inside back page.

CREATIVE FILING SYSTEM

VERSION 5.0

MARK BECK

166 DELAWARE CIRCLE, JACKSONVILLE, AR 72076

DECEMBER 23, 1986

WEST PENNSYLVANIA 99'ERS
RD 1, BOX 73A
JEANNETTE, PA 15644

DEAR WEST PENNSYLVANIA 99'ERS:

My name is Mark Beck and I am the author of the CREATIVE FILING SYSTEM. The reason I am writing the WEST PENNSYLVANIA 99'ERS is to inform you that version 5.0 is now available. Substantial improvements to the program and manual have been made with ideas and suggestions from questionnaires sent to all CFS users included. The CFS is growing and will continue to grow with the help of the WEST PENNSYLVANIA 99'ERS.

The CREATIVE FILING SYSTEM is a database filing system that is extremely versatile and user friendly. It is a very powerful program that has features other database programs don't provide. The following programs are included with the CREATIVE FILING SYSTEM:

CREATIVE FILING SYSTEM:

- Extremely user friendly and crash proof.
- Compatible with MYARC and HORIZON's ram disks.
- Utilizes 1 to 3 disk drives, single or double sided, and any density.
- Create up to 1424, 8 line records(16 fields), in DS/DD.
- Store multiple files on disk.
- Has a global change option.
- Has a GRAPH option for graphing numeric data.
- Print GRAPH data to disk or printer(printout can be merged with TI-Writer.)
- Sort on one or two fields.
- Create sub-files on user defined criteria.
- Utilizes FOUNDATION's 128K card.
- Has a TURBO search option.
- Has a 34 page manual with troubleshooting guide.

CFS UTILITY:

- Print mailing labels 1 to 4 across using special printer fonts.
- Create custom printer default values for each file.
- Use special printer characters for full control of ANY printer.
- Convert files to DISPLAY/VARIABLE 80 format so files can be used with TI-Writer.
- Create TI-Writer VALUE FILES.

CFS REPORT GENERATOR:

- Print columnar reports with automatic column spacing.
- Perform mathematical operations on numeric fields.
- Print horizontal and vertical column totals.
- Select fields for PRIORITY printing. (Print fields only when changes occur in a field's data.)
- Create custom headings.

CFS CATALOGER:

- Create disk catalog files.
- Files created are used in other CFS programs.
- Merge any number of files together.

CFS FORMATTER:

- Print fields with text in ANY format.
- Create business forms, post cards, and memos in ANY format.
- Use special printer fonts on individual fields.
- Create custom printer default values for each file.
- Perform mathematical operations on numeric fields.

The following are minimum system requirements:

- EXPANSION BOX.
- 1 DISK DRIVE.
- 32K MEMORY.
- EXTENDED BASIC.

Optional equipment includes:

- ADDITIONAL DISK DRIVES.
- MYARC OR HORIZON'S RAM DISK.
- PRINTER.
- FOUNDATION'S 128K CARD.
- RS232 CARD.

To obtain a copy of version 5.0 of the CREATIVE FILING SYSTEM, send:

1) 1 disk mailer with return postage,
2) 3 SS/SD disks or 2 DS/SD disks, and
3) $10.00 to:

MARK BECK
166 DELAWARE CIRCLE
JACKSONVILLE, AR 72076

If the WEST PENNSYLVANIA 99'ERS is interested in purchasing the right to sell the CREATIVE FILING SYSTEM as a fund raiser please write for further details.

Sincerely,

Mark Beck

MARK BECK
Vice-President
Jacksonville Users Group

R/D COMPUTING

Technical Newsletter

with Bill Gronos on assembly!

We have a vision. Our vision is one of continued TI 99/4A support. We're dedicated to the power of the machine. From the novice to the experienced computer user; for management, home, education, entertainment or advanced applications our publication "R/D COMPUTING" is for you. TI never revealed all the important inner workings of the 99/4A. We bring you this vital information every month.

A major feature of R/D COMPUTING is the regular "upgrade projects." These electronic construction projects are designed to give the 99/4A owners more features and improvements. For example, it is possible to increase the speed of your computer with a very simple part and switch. Each month we present new circuits, diagrams and projects for your computer.

From the moment your new subscription arrives at your home, you will have access to critical technical information that makes your computer more valuable, powerful and versatile.

We believe that the TI 99/4A deserves new products, innovative hardware, software, information and a dedicated technical publication. This is what makes a computer "viable" in the fast paced microcomputer industry. Now that the 99/4A has been 'opened up,' all the secret information is available. You can have all these benefits and more each month. SUBSCRIBE NOW!

$14/year - back issues 3 - 15 available

THANK YOU! Our business has grown 300% this year. To show our appreciation we are **giving away** hundreds of dollars in TI products to 99/4A owners or users groups. To enter drawing, (no purchase necessary) send your name and address on a postcard to Ryte Data. For **subscribers** to R/D Computing we are giving away XBII plus, 32k memories, GPL Assembler package, etc. **Enter your subscription today!**

Prices listed in U.S. funds.

New catalogue available.

BASIC Compiler V1.1

New Basic Compiler that is finally easy to use! Supports virtually all Basic and Extended Basic commands in existing programs. Simply load and compile programs from a menu driven directory on your screen. No extensive re-writing, variable declarations or conversions are required. Compiler produces code-list in one pass containing all variable addresses and jump list. Package includes Extended Basic Loader, Floating Point Loader, Integer Loader, Disk Menu program and DSR program for the Compiler support. This Compiler cannot unravel DEF statements and stops on the END statement—no SUB's allowed. TRACE, BREAK, ON ERROR, CALL LOAD and CALL LINK may produce execution errors. Requires 32k, disk. Price: $20.00 plus $2 shipping (US funds).

Ryte Data (705) 457-2774

MILLENNIUM COMPUTERS
210 MOUNTAIN STREET,
HALIBURTON, ONTARIO K0M 1S0
TELEX 06-986766 TOR. ATTN: RYTE DA

The May/86 Issue of MICROPENDIUM, carries this program, by JOHN HAMILTON, of Des Moines,IOWA. The program is much like the "BOING"..... demo shown on the AMIGA and is written in T.I.EXTENDED BASIC in only "EIGHT LINES"!!!!!

```
120 CALL CLEAR :: CALL SCREEN(2):: CALL COLOR(12,16,15):: CALL MAGNIFY(4):: RM,C
M=6 :: RP,CP=80 :: SP=128 :: IP=4
130 G$="FF818181818181FF" :: B$="030F1F3F7F7FFFFFFFFF7F7F3F1F0F03C0F0F8FCFEFEFFF
FFFFFFEFEFCF8F0C0"
140 S1$="000010300F0F0FFF0F070700F0F0F03C0F0F0F00E0E0F0FF0F0F0F00C080000" :: S2
$="000C1C3C4343C3C33C3C3C3C0303030300303933CC2C2C3C33C3C3C3CC0C0C0C0"
150 S3$="030F0F0F7070F0F00F0F0F0F3010000000000080CF0F0F0F00F0F0E0EF0F0F0C0" :: S4
$="030303033C3C3C3CC3C343433C1C0C00C0C0C0C03C3C3C3CC3C3C2C23C383000"
160 CALL CHAR(123,G$,124,B$,SP,S1$,132,S2$,136,S3$,140,S4$):: CALL VCHAR(1,3,123
,672):: CALL SPRITE(#1,SP,7,RP,CP,RM,CM,#2,124,16,RP,CP,RM,CM)
170 CALL POSITION(#1,RP,CP):: IF CP>20 AND CP<206 THEN IF RP>4 AND RP<158 THEN G
OTO 190 ELSE RM=-RM ELSE CM=-CM :: IP=-IP
180 CALL MOTION(#1,RM,CM,#2,RM,CM):: CALL SOUND(-50,110,0,131,0,175,0,-8,0)
190 SP=SP+IP+IP*4*(SP=128 AND IP=-4 OR SP=140 AND IP=4):: CALL PATTERN(#1,SP)::
GOTO 170
```

1987 WEST PENN 99'ERS

If your name is NOT here, and you have paid your 1987 dues before JANUARY 31, 1987, please contact Jan Trayers, or John Willforth.

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