ISSUE #1 JANUARY 1988

FOR THE RECORD

by Ed Bittner
Recording Secretary

A CHRISTMAS MESSAGE

T'WAS THE SIXTEENTH OF DECEMBER, when all through the meeting,
Every ear was attentive, and filled was the seating,
The coffee did perk, aromatically from the kitchen,
While cookies had members, undecided as to whichen',
The snow had not come, so Santa would be late,
The cold wind did howl, for this very important date,
Pres. Coleman did skip, the minutes preceding,
While the treasurers report, left his eyes ($$) gleaming,
The library report, presented by Zeno,
did attempt to make access, less random than Keno,
The feug in G-minor, sounded ever so sweet,
that I found myself lulled, in to a deep sleep,
The 64 column, scrolled fast on the screen,
As Chariots of Fire played, was it a dream,
When from the kitchen, there rose such a clatter,
I awoke from my slumber, to see what was the matter,
A jolly old elf, who spoke lively and quick,
It must have been Santa, a hardware man so slick,
He had in his bag, both tee shirt and tote,
The meeting then livened, a much higher note,
He drew from his sack, unbelievable sights,
Having many a chip, and a console with lights,
Saying all that he could, he stopped for a breather,
And then he announced, this simple little teaser.
THE NEW YEAR APPROACHES, AND MANY OF YOU,
BETTER PAY UP, CAUSE YOUR DUES ARE DUE !,
He turned with a smile, gathered cookies and cakes,
continued his hardware lecture, without any mistakes,
He left as he came, speaking lively and bright,
exclaiming Merry Christmas to all, and to all a good night.

Cheerfully submitted,
Scoops Bittner

DECEMBER TREASURER'S REPORT

FROM JAN TRAYERS

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*******************************************
*                                         *
* 12/15  CASH ON HAND     $ 45.00         *
*                                         *
* 12/15  LIBRARY SALES      14.00         *
*                                         *
*   "    MICROPENDIUMS      22.25         *
*                                         *
*        MEMBERSHIPS       235.00         *
*                                         *
*        DISK. ETC.        140.00         *
*          SALES                          *
*                                         *
*        RAFFLE           + 34.00         *
*                         --------        *
*        TOTAL            $490.25         *
*     COST RAFFLE PRIZE   -16.00          *
*                         --------        *
*        TOTAL             474.25         *
* 12/28  BANK DEPOSIT     -416.00         *
*                         --------        *
* 11/25  CASH ON HAND     $ 57.25         *
*******************************************
*                                         *
* 12/15  BANK BALANCE     $926.88         *
*                                         *
* 12/10  DISK PAYMENT     _ 264.00        *
*                         --------        *
*                          662.88         *
* 12/15  POSTAGE          _  50.60        *
*                         --------        *
*                          612.28         *
* 12/28  MICROPENDIUMS    -  33.00        *
*                         --------        *
*        BALANCE          $579.28         *
*                                         *
* 12/28  DEPOSIT          + 416.00        *
*                         --------        *
*        TOTAL            $995.28         *
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*******************************************
*                                         *
*  TOTAL CASH BALANCE  $1052.53           *
*                                         *
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NEXT MEETING........
JAN. 19, 1988 at the
UNITED PRESBYTERIAN
CHURCH of the COVENANT
corner of OAK and 4th
St. IRWIN, PA. at 7:00
PM.   BIG FREE DOOR
PRIZE..............

"THE CASE OF THE MISSING CARTRIDGE" or
"HOW TO PLAY THE SLOTS" by Denis A. Dann - Milwaukee 99

After reading "INSTALLING EXTENDED BASIC INSIDE YOUR CONSOLE" by John F. Willforth of West Penn 99, I proceeded to make the necessary modifications. My efforts were rewarded with a well functioning unit. Then I discovered that of course I couldn't have a cartridge in the grom port at the same time X-Basic was loaded unless I wanted a fine array of Assembly Language Codes on the screen. Furthermore, if I used a *Cartridge Expander I now had to leave one connector open in order to use the X-Basic option. Now I had a Navarone two-cartridge "Widget". With the aid of a Jeweler's file and 15 minutes time, a simple modification of the indexing switch allowed me to restore it to a three-cartridge Expander with a four position indexing switch.

1. Remove cartridges from expander.

2. Remove four (4) phillips screws from back side of Expander and and gently separate housing, noting position of components.

   Note: modifications will be made to top side of housing and white index switch slider.

3. File index switch opening an additional 1/8" towards front of housing.

4. When switch normally bottoms out at position 3, there is approximately 1/16" of clearance to the inside front edge of housing. Therefore you need only to file 1/16" off of front edge of switch slider for a total of 1/8" clearance.

5. Reassemble components and you now have a 4 position index switch with one open circuit position to facilitate the use of the internal X-Basic mode.

6. Label the switch opening (1 2 3 X).

   REMEMBER: If you see assembly language on the screen check all switch positions first.

7. In addition to the above...putting a length of double-stick tape on the foot of the Expander will provide a nice tight installation preventing movement of the Expander by accidental bumps.

Many thanks to John Willforth for a neat project; and to Navarone for a fine product.

*Cartridge Expander is a Trademark of
Navarone Industries - Sunnyvale, California
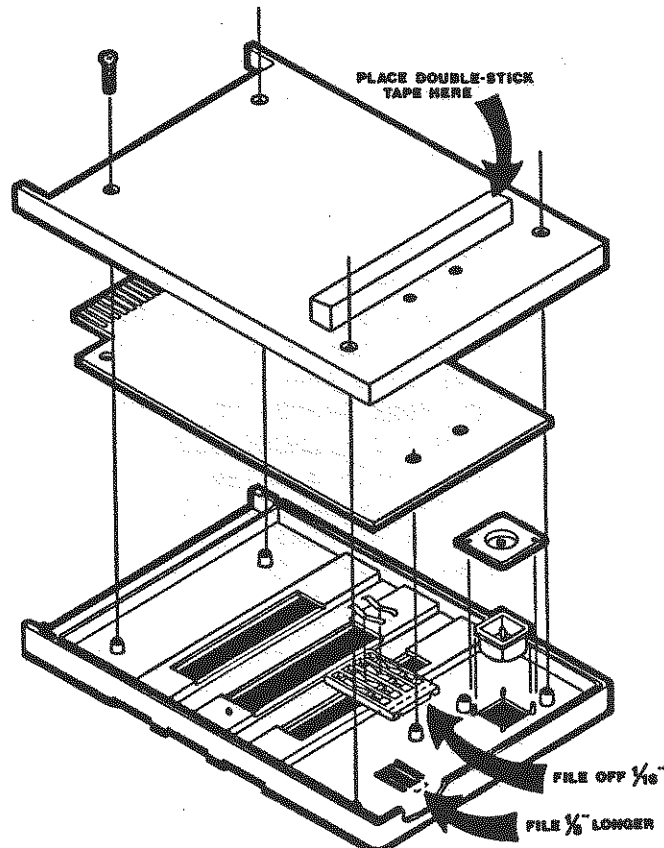
PLACE DOUBLE-STICK TAPE HERE

FILE OFF 1/16"

FILE 1/8" LONGER

"TIPS FOR BEGINNERS"

-BY FRANK N. ZIC-

Here we go together-No. 11. What I would like to cover in this article are some odd and end items that might recall some slightly forgotten facts or perhaps they will remind you of a project you might want to begin. At any rate, here they are:

**-- Awhile back I added something to my overall equipment and only now after some extensive usage, its true value comes into focus. This handy item is a small lever action cutting board. It is useful for square cutting the catalog listing of your disk after printing. Your Wife, too, will find it useful for cutting out the many food coupons that we all find so financially rewarding.

**-How many times have you read or heard something, and noted in your mind that this is a good idea; only not to act on it even though you really wanted to. Well, here is an item that perhaps you should follow up on. The new cataloging disk by our own Martin Kroll Jr. It is fast(written in Assembly language), has a search mode and even has space to enter comments behind the filenames. I use this space to mark down how a program is loaded or to give a rating to the many games that I eventually get back to playing or want to set up for my Grandson on his, looked forward to, visits.

**-Take advantage of any one of the many calender programs available to start a listing of events, such as Bowl or Super Bowl games etc.(sorry ladies), meetings, birthdays or even use it as a mini-diary.

**-Several months ago at one of our club meetings I showed an example of a calling card I made up, on clear plastic, with the TI-Writer program. Think how nice it could be customized and how economical when using one of the many font programs available. Make it on stiff colored paper for a really distinctive look.

**-Speaking of distinctive looks, why not make up your own return address labels and make them different, say with the enlarged first initial of your last name just ahead of your name and address. The large letter can be Arabic, Old English or any other type character that you like. The effect can be effective and eye catching. Should you perhaps want the particular party you are sending the letter to, to give you a call, you might include your phone number. For example:

Z Mr. <u>Mrs</u>. Frank N. Zic
818 Everglade Drive
McKeesport, Pa. 15135
(412) 751-6065

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

LET'S TALK RAM DISKS PART II
BY JOHN F. WILLFORTH (DEC. 1987)

LAST MONTH I ATTEMPTED TO PRESENT A FOUNDATION FOR US TO SPRING INTO THE SUBJECT OF RAM DISKS BY DESCRIBING WHAT THEY ARE AND WHAT FEATURES THEY GENERALLY POSSESS. THIS IS THE MONTH THAT I WILL BEGIN TALKING ABOUT SPECIFIC RAM DISKS. THE ORDER IN WHICH THEY ARE PRESENTED MONTH BY MONTH IS NOT RELATED TO MY PERSONAL PREFERENCE OR THEIR PUBLIC ACCEPTANCE.

THE HORIZON RAM DISK WAS NOT THE FIRST RAM DISK ON THE MARKET, BUT IT WAS THE FIRST WITH STATIC RAM AND LOW POWER AT THAT. THIS ENABLED THE UNITS TO SAVE THE ROS AND THE FILES IN THE EVENT OF POWER OUTAGES AND NORMAL POWER-DOWN OF THE PEB FOR LONG PERIODS OF TIME (WEEKS AND PERHAPS MONTHS) WITH THE USE OF ONLY THREE "AAA" NI-CAD BATTERIES. THE ORIGINAL CAPACITIES OF THE TWO VERSIONS AVAILABLE FROM HORIZON COMPUTER LIMITED WERE 104K (360 SECTORS) AND 192K (720 SECTORS), THE DIFFERENCE, IF YOU CALCULATE FOUR SECTORS PER EACH ONE K. OF MEMORY, IS THE MEMORY USED TO STORE THE ROS (RAMDISK OPERATING SYSTEM).

THERE WERE LARGER RAM DISKS ON THE MARKET WHEN THE HORIZON CAME OUT, BUT NONE THAT OFFERED THE SOURCE CODE OPENLY TO ANY WHO WANTED TO DEVELOP NEW APPLICATIONS FOR THIS CARD. THIS DECISION WAS A FACTOR IN MAKING THE HORIZON RAMDISK THE POPULAR UNIT THAT IT IS TODAY AS WELL AS THE TERRIFIC ENHANCEMENTS BOTH HARDWARE (MIKE BALLMAN) AND SOFTWARE (JOHN JOHNSON) WISE. MORE ON THIS SUBJECT LATER.

THE HORIZON RAM DISK (I'LL REFER TO AS HRD) WAS DESIGNED TO OPERATE WITH ALL OF THE DISK CONTROLLERS ON THE MARKET (T.I., MYARC, CORCOMP, AND PERCOM) AND WITH MOST 32K MEMORY EXPANSIONS (T.I., MYARC, FOUNDATION, BOXCAR, ETC.). THE HRD IS NOT YET ABLE TO OPERATE IN THE GENEVE (9640) ENVIRONMENT, BUT EXPECT THIS TO CHANGE SHORTLY. WITH THE UNCERTAINTY OF THIS MARKET, AND THE ADVANCES MADE EVERY DAY, THE AREAS THAT I TALK OF HERE ARE ONLY ONE MORE RUNG OF THE LADDER HIGHER TOMORROW, SINCE WE HAVE NOT YET SEEN THE APEX OF THE LIFE CYCLE OF THE TI-99/4A AND IT'S FAMILY OF PERIPHERALS.

THE HRD SUPPORTS NEARLY ALL SOFTWARE THAT CAN BE LOADED ONTO A DISK DRIVE IN THE NORMAL FASHION, FILE OR DISK COPY WITH DISK MANAGER II, DM1000, OR THE MYARC AND CORCOMP DISK MANAGERS. IF THE PROGRAM IN QUESTION HAS SOME SPECIAL TRACK/SECTOR PROTECTION YOU WILL PROBABLY HAVE TROUBLE INSTALLING IT ON THE HRD, OR FOR THAT MATTER ANY RAM DISK.

THE HRD HAS A SWITCH SELECTABLE CRU ADDRESS, WHICH ENABLES YOU TO SELECT IT'S CRU ADDRESS EASILY. THE ROS TALKED OF EARLIER, IS RAM, AND CAN THUS BE ALTERED EASILY AS THE NEED ARISES (IMPROVEMENTS TO THE OPERATING SYSTEM OR CUSTOMIZING). THE HRD HAS A COMPLETE SET OF "CALLS" AND CAN EASILY HAVE NEW CALLS WRITTEN BY THE USER. YOU DON'T NEED AN EPROM BURNER TO IMPLEMENT THEM ON THE CARD. THESE CALLS ARE SUMMONED IN BASIC OR EXTENDED BASIC. THEY INCLUDE:

1) CALL DN(N) SET DRIVE NUMBER
2) CALL WO OR WF SET/CLEAR WRITE PROT. ON THE DRIVE.
3) CALL MS(N) SETS MAX. SECTORS THE ROS WILL RECOGNIZE.
4) CALL CO OR CF TURNS CARD ON/OFF
5) DELETE "XBCALL" EXECUTED AFTER CALL INIT TO MOVE ALL THE CALL ROUTINES TO THE LOW 8K. OF EXPANSION MEMORY. CALL LINKS THEN CAN ACCESS THEM.
6) CALL EX USED WITH CALL CO/CF ALLOWS THE USER TO LINK TO THE ROS FROM BASIC.
7) CALL DM USED TO LOAD A DISK MANAGER WHEN THE DISK MANAGER FILES ARE ON THE RAMDISK.
8) CALL NF(N) ONLY USEFUL WHEN CRU BASE ISN'T <1000 TO ENABLE BASIC AND OTHER PROGRAMS TO ACCESS THE RAMDISK.
9) CALL ? USERS CAN CREATE THEIR OWN USER-DEFINED SUBROUTINES. DOCUMENTATION INCL.

THE HRD CAN BE PURCHASED AS A 192K. UNIT FULLY ASSEMBLED AND WARRANTIED FOR 90-DAYS FROM HORIZON FOR $195. OR AS A BARE BOARD W/DOCS AND SOFTWARE FOR $45. OR JUST THE BARE BOARD FOR $38. IN ANY QUANTITY. I TALKED TO RON GRISE JUST YESTERDAY 12/25/87, AND WAS TOLD THAT THE LAST UNITS HE SENT OUT WERE SET UP TO BE EASILY UPGRADED TO THE HRD+ (USES 32K. BYTE CHIPS AND CAN BE EXPANDED TO ONE-MEG.). THEY INCLUDE MENU 7.01 AS WELL AS THEIR OWN OPERATING SYSTEM. BUD MILLS SERVICES PROVIDES THE COMPLETE KIT ASSEMBLIES FOR THIS UNIT AND THE HRD+. MORE ON THE HRD+ NEXT MONTH. THERE IS JUST TOO MUCH DIFFERENT TO INCLUDE THIS MONTH. HORIZON COMPUTER, LTD P.O. BOX 554 , WALLBRIDGE, OH 43465 AND BUD MILLS SERVICES, 166 DARTMOUTH DR., TOLEDO, OH 43614.

ED. NOTE: I HAVE BEEN USING THE HRD FOR NEARLY AS LONG AS IT'S BEEN AVAILABLE, AND HAVE HAD NO PROBLEMS WITH IT, EVIDENCED BY THE FACT THAT ROS REV.'S HAVE BEEN SO SELDOM IN COMING.

A REWRITE OF THE TI-WRITER MANUAL AVAILABLE...

DICK ALTMAN, 1053 SCHRADER STREET, SAN FRANCISCO, CA 94117, (415)661-1994, HAS REWRITTEN THE TI-WRITER MANUAL INTO AN EASIER TO UNDERSTAND VERSION. IT CAN BE RUN INTERACTIVE WITH TI-WRITER (CARTRIDGE,OR DISK BASED) TO GIVE YOU DIRECT USE OF THE INSTRUCTIONS IN A REAL APPLICATION MODE. THIS IS AVAILABLE ON DISK FROM DICK AT NO CHARGE! BE SURE TO SEND SUFFICIENT TO COVER HIS COSTS IN REPRODUCTION AND MAILING OR DICK WILL QUICKLY LOOSE HIS ENTHUSIASM, I'M SURE.

ALPHACOM PRINTER HELP...

BOB BEESE OF SAN JOSE, CA HAS ROMS FOR THE ALPHACOM "42" AND "81" INTERFACES AT $19.95 + S/H ON C.O.D. ORDERS. IF YOUR ALPHACOM PRINTER DOESN'T FUNCTION OR IF YOU ARE ONE WITH THE INTERFACE FOR THE WRONG PRINTER, (THE INTERFACE FOR THE TI IS THE SAME FOR BOTH THE "42" AND THE "81" EXCEPT FOR THE ROM), THEN YOU CAN MODIFY THE INTERFACE. ALSO THE ALPHACOM "81" IS NO LONGER AVAILABLE, BUT THE "42" (40 COLUMN VERSION) IS.

I BELIEVE THAT SUPPLIES (PAPER) ARE ALSO AVAILABLE FROM HIM. BE SURE TO SPECIFY T.I. AS THE TYPE OF COMPUTER YOU ARE INTERFACING TO, SINCE THE PRINTERS WERE AVAILABLE FOR MANY TYPES, AND THERE IS NO WAY BOB COULD KNOW WHO YOU ARE AND WHAT YOU ARE USING!

ALPHACOM, 2108C BERING DR., SAN JOSE, CA, 95131, (408) 436-0801

LOOKING FOR THE MANUALS THAT CAME WITH THE CONSOLE...................................

MANY OF YOU PICKED UP THE CONSOLE YOU ARE USING NOW WITH NO MANUALS FROME SOMEONE WHO MAY HAVE NOT HAD THINGS TOGETHER. IF YOU ARE LOOKING FOR THE SET OF ORIGINAL DOCUMENTATION FOR A T.I.-99/4A CONSOLE, T.I. DEALER PARTS MAY BE ABLE TO HELP YOU.

THE "USER'S REFERENCE GUIDE" IS PART NO. 1039031-2, THE "BEGINNER'S BASIC" IS PART NO. 1039023-2, THE "TI-99/4A BASIC REFERENCE CARD" IS PART NO. 1039030-1. THE PRICES ARE NOMINAL, AND TI WILL BILL YOU IF YOU CALL AND OREDR OVER THE PHONE. THEY ARE VERY GOOD TO DEAL WITH. THE PHONE NUMBERS OF DEALER PARTS ARE (806) 741-2265/68. THE MAILING ADDRESS IS: TEXAS INSTRUMENTS INC.
ATTEN: DEALER PARTS
P.O. BOX 53
LUBBOCK, TX 79451

RAVE 99 MEMORY ENHANCEMENT SYSTEM NOW AVAILABLE......................................

RAVE HAS INTRODUCED THREE MODELS OF THEIR NEW MEMORY ENHANCEMENT CARD WHICH CAN BE CONFIGURED WITH UP TO 4 CARDS AT 544K BYTES EACH IN A PEB, TOTAL OF 2 MEG. OF BATTERY BACKED MEMORY. THE CARD HAS BEEN TESTED WITH BUT NOT LIMITED TO THE TI RS232, TI DISK CONTROLLER, MYARC DISK CONTROLLER, HORIZON RAM DISK, AND THE RAVE 99 SPEECH ADAPTER.

IT HAS SPECIAL "MEMORY MAPPING" OF ADDRESSES >4000 TO >7FFF WHICH ALLOWS AN EXTRA 16K OF MEMORY FOR ASSEMBLY PROGRAMMING FOR A TOTAL OF 48K OF TRANSPARENT USER MEMORY. TWO (2) 8K BLOCKS OF DSR'S, ONE OF THE SYSTEM SOFTWARE AND ONE FOR THE USER. THE UNIT WILL SUPPORT THE MEMORY FOR UP TO FIVE (5) DAYS WITHOUT ANY BATTERIES, AND BEYOND THE 5 DAYS PERIOD, OPTIONAL LITHIUM BATTERIES WILL SUPPORT THE UNIT FOR MONTHS.

MEMORY MANAGEMENT SOFTWARE IS SUPPLIED WHICH CONTROLS THE MEMORY BANK SWITCHING ON THE CARD, GROM SPACE ACCESS, AND LOADING OF PROGRAMS INTO THE DSR MEMORIES. SYSTEM "CALLS" FROM (X)BASIC ALLOW THE SELECTION OF THE 32K MEMORY BANK TO MAP INTO THE COM-PUTER AS WELL AS ENABLING/DISABLING THE "GROM" MEMORY SPACE (>6000 TO >7FFF). NON-DSR SPACE MAKES USE OF >4000 TO >5FFF WHEN A PERIPHERAL DEVICE SERVICE ROUTINE IS NOT MAPPED IN AND THIS SPACE WILL BE MADE AVAILABLE TO THE USER (8K).

ALL SOFTWARE THAT WAS WRITTEN TO RUN WITH TI 32K MEMORY EXPANSION WILL RUN ON THE MEMORY ENHANCEMENT SYSTEM. NEW ADVANCED SOFTWARE WHICH ALREADY TAKE ADVANTAGE OF THE ADDITIONAL MEMORY SPACE ARE: RYTE DATA'S "COMMAND DOS", R.A. GREEN'S "MACRO ASSEMBLER" AND DATABIOTIC'S "SOFTWARE SUPPORT LOADER".

THE THREE MODELS ARE: MX01/64 – 8K OF MEM. AT >6000 TO >7FFF, 8K NON-DSR, 8K SYSTEM
(203) 871-7824 DSR, 8K USER DSR, AND 32K EXPANSION MEM. AND ALL
FOR INFORMATION SOCKETING FOR UPGRADING UP TO 544K. ------ $199.95
MX01/288- SAME AS ABOVE BUT WITH 256K OF MEM. ------ $299.95
MX01/544- SAME AS ABOVE BUT WITH 512K OF MEM. ------ $399.95

TO ORDER, ADD 5% FOR SHIPPING AND HANDLING, 3% FOR VISA AND MASTER CARD, AND IF YOU A RES. OF CT, ADD 7.5%, TO RAVE 99 CO. 112 RAMBLING ROAD, VERNON, CT 06066

Let us discuss how to print out data. If you have a parallel printer you cannot use the parallel port of the RS-232 card as a default, the default output is for a serial printer at 9600 baud. Therefore the output must be modified and this is done by using a program on the Utilities disk called MODRS-232. Place the Utilities disk in drive #4 and any other formatted disk in drive #5. Turn on the p-Code card, the P-Box, and finally the console. Press "X" and at the prompt "What file?" enter "MODRS-232". At the next display enter a "P" and at the next display enter "PIO". This now allows you to use your parallel printer. This must be done each time the computer is started. (If somebody knows how to incorporate this into SYSTEM.PASCAL please write me.)

Let us now get a printout of a disk directory. Put the Filer disk in drive #4 and press "F". (To get out of the Filer and back to "main" command line press "Q".) To get a disk directory listing press either "L" (L(ist dir) or "E" (E(xtensive dir). "E" gives more information and is the main one that I use, so let us press "E". You will now see "Dir listing of?", enter "#4" (or "#5" depending on which disk drive you want a listing of) and there will be a listing on the screen. If you want a listing to the printer, at the "Dir listing of?" prompt enter the following "#4:,#6:" and the output will be to the printer. (The printer can be called "#6:" or "Printer:".)

Let us now prepare a disk so we can do Pascal programming. Put the Filer disk in #4 and an empty, formatted disk in #5. (It is assumed everything is at least DS/SD.) Call the Filer by entering "F" and then the Transfer program by entering "T". The prompt says "Transfer?", and at this point we are going to transfer files one at a time. From the listing of the Filer disk we see the following contents; System.Filer, System.Editor, System.Pascal, System.Syntax. Enter the following to transfer the first file; "#4:System.Filer,#5:$" and the first file will be transferred. You will be returned to the command line so press "T" again and transfer the second file by entering at the prompt "#4:System.Editor,#5:$". Do this for the rest of the files on this disk, then remove the Filer disk and put the Compiler disk in #4. The Compiler disk has the following files; System.Compiler, Screenops.Code, Commandio.Code, System.Library. You will be at the command line so press "T" and at the prompt enter "#4:System.Compiler,#5:$". Continue this process until all the files are transferred. Take out the Compiler disk and put the Utilities disk in #4. On a routine basis we need the MODRS232.CODE file. So press "T" to return to the transfer program and then enter "#4:MODRS232.CODE,#5:$". You will now have all the important files needed to make Pascal programs on one disk. Now back that disk up at least twice. You can also print out the directories of these disks. Also read the corresponding sections in the Filer.

(Notice in the above discussion that when we transferred the file to the second disk we used as a file name "$". When the "$" is used the original file name is used in the second case also. This saves us some typing.)

Well enough this time. More later.

NEW LISTING OF GROMS FROM TEXAS INSTRUMENTS...

    THE FOLLOWING IS A LIST OF GROM CHIPS AVAILABLE FROM DEALER PARTS AT TEXAS INSTRUMENTS IN LUBBOCK, TEXAS. IN WRITING ADDRESS YOUR LETTER TO : TEXAS INSTRUMENTS, ATTN: DEALER PARTS, P.O. BOX 53, LUBBOCK, TX 79415 OR CALL: (806) 741-2265, 2268. THEY ARE A GREAT GROUP OF PEOPLE TO DEAL WITH AND ARE VERY HELPFUL TO USERS OF THE TI-99/4A.

    THE LIST BELOW IS NOT IN ANY ORDER THAT I CAN DECIPHER, BUT IF YOU SEARCH BY THE NAME OF THE CARTRIDGE, AND LOOK AT THE CHIP(S) IN YOUR CARTRIDGE CAREFULLY, YOU SHOULD HAVE A GOOD IDEA WHAT THE PARTS WILL COST YOU. IN ORDER TO KEEP THE COST DOWN BY SHARING THE S/H YOU SHOULD CHECK WITH OTHERS IN THE GROUP TO TAKE ADVANTAGE OF MUTUALLY SHARED EXPENSES.

    THEY WILL BILL YOU, IF YOU INDICATE THAT YOU PREFER TO BE BILLED WITH THE SHIPMENT. THE TIME ALLOWED FOR PAYMENT IS 30DAYS. THEY TRUST US, SO DON'T ABUSE THIS TRUST PLEASE. I HAVE REPAIRED EXTENDED BASIC, EDITOR ASSEMBLER, SOCCER, PLATO, AND OTHER CARTRIDGES, AS WELL AS MADE SOME NEW ONES THAT COULD NOT BE EASILY ACQUIRED I.E: EDITOR ASSEMBLER, AND THE TI DIAGNOSTIC CARTRIDGE. I HAVE THE FEELING THAT EVEN THOUGH TI SENT ME THIS NEW LIST, IT IS NOT COMPLETE. IF YOU WOULD LIKE TO BE SURE, IT IS BEST TO CONTACT THEM. ONE LAST NOTE, COUNT THE GROMS IN YOUR CARTRIDGE, AND THEN SEARCH THE LIST AGAIN, FOR EXAMPLE MULTIPLAN HAS 5 GROMS, AND 3 ARE IN ONE AREA AND 2 IN ANOTHER ON THIS LIST.

JOHN F. WILLFORTH 12/87

Cartridge Name	Part Number	Price
DIAGNOSTIC	1015960-2006	5.40
DEMONSTRATION	1015960-0024	4.00
DEMONSTRATION	1015960-0025	3.60
DEMONSTRATION	1015960-0027	3.60
DEMONSTRATION	1015960-1028	3.60
EARLY LEARN FUN	1015960-1001	3.60
EARLY LEARN FUN	1015960-1002	3.60
BEGINNING GRAMMAR	1015960-1012	4.00
BEGINNING GRAMMAR	1015960-1013	3.80
BEGINNING GRAMMAR	1015960-1013	3.80
BEGINNING GRAMMAR	1015960-1014	3.80
NUMBER MAGIC	1015960-0011	3.80
VIDEO GRAPH	1015960-1019	3.80
HOME FIN. DECISION	1015960-0017	3.80
HOME FIN. DECISION	1015960-1018	3.80
HOME BUDGET	1015960-1015	3.80
HOME BUDGET	1015960-1016	3.80
VIDEO CHESS	1015960-0022	3.80
VIDEO CHESS	1015960-0023	3.80
VIDEO CHESS	1015960-1020	3.80
VIDEO CHESS	1015960-1021	3.80
FOOTBALL	1015960-2009	3.80
FOOTBALL	1015960-2010	3.80
PHYSICAL FITNESS	1015960-0008	3.80
ADD/SUBTRACT 1	1015960-0136	3.80
ADD/SUBTRACT 2	1015960-0137	3.80
ADD/SUBTRACT 2	1015960-0138	3.80
ADD/SUBTRACT 2	1015960-0139	3.60
MULTIPLICATION 1	1015960-0140	4.00
MULTIPLICATION 1	1015960-0141	3.80
MULTIPLICATION 1	1015960-0142	3.80
A-MAZE-ING	1015960-0121	3.80
ATTACK	1015960-0127	4.20
BLASTO	1015960-0152	3.80
BLKJACK/POKER	1015960-0128	3.80
SPELL/EMULATOR 2	1015960-0131	3.80
SPELL/EMULATOR 2	1015960-0132	4.20
EMULATOR 2	1015960-2129	4.20
PRESCHOOL	1015960-0029	4.20
EMULATOR 2	1015960-0130	3.60
ZEROZAP	1015960-0212	3.60
HANGMAN	1015960-0214	3.60
CONNECT 4	1015960-0213	3.60
YAHTZEE	1015960-0153	3.60
TILOGO	1015960-0168	3.60
TILOGO	1015960-0169	3.80
TILOGO	1015960-0170	3.80
TILOGO	1015960-0171	3.80
MUNCHMOBILE	1015960-5254	3.80
MUNCHMOBILE	1015960-5255	3.60
BASEBALL	1015960-5216	3.60
BASEBALL	1015960-5218	3.60
SPACE BANDIT	1015960-5231	3.60
SPACE BANDIT	1015960-5232	3.60
SEWERMANIA	1015960-5237	3.60
SEWERMANIA	1015960-5238	3.60
BIG FOOT	1015960-5221	3.80
METEOR BELT	1015960-5226	3.80
SUPERFLY	1015960-5242	3.80
SUPERFLY	1015960-5243	3.80
TERRY TURTLE	1015960-5257	3.60
TERRY TURTLE	1015960-5258	3.60
TERRY TURTLE	1015960-5259	3.60
I'M HIDING	1015960-5277	3.60
I'M HIDING	1015960-5278	3.60
HONEY HUNT	1015960-5247	3.60
HONEY HUNT	1015960-5248	3.60
HONEY HUNT	1015960-5249	3.60
SOUND TRACK	1015960-5267	3.60
MASH	1015960-0496	3.60
MASH	1015960-0497	3.60
MASH	1015960-0498	3.60

Cartridge Name	Part Number	Price
PHYSICAL FITNESS	1015960-1007	3.80
SPEECH	1015960-2032	3.80
SECURITIES ANALYSIS	1015960-0075	3.80
SECURITIES ANALYSIS	1015960-0074	3.80
SECURITIES ANALYSIS	1015960-0076	3.80
PERSON.RECORD.KEEP	1015960-0077	3.80
PERSON.RECORD.KEEP	1015960-1060	3.80
PERSON.RECORD.KEEP	1015960-1061	3.80
PERSON.RECORD.KEEP	1015960-1062	3.80
STATISTICS	1015960-1063	3.60
STATISTICS/SMJ	1015960-0064	3.60
STATISTICS	1015960-0065	3.60
STATISTICS	1015960-0066	3.80
EARLY READING	1015960-0067	3.80
EARLY READING	1015960-0068	3.80
EARLY READING	1015960-0069	3.80
EARLY READING	1015960-0070	3.80
TAX/INVEST/RCD.KEEP	1015960-0072	3.80
TAX/INVEST/RCD.KEEP	1015960-1071	3.60
TAX/INVEST/RCD.KEEP	1015960-1073	3.60
VIDEO GAMES	1015960-1092	3.60
VIDEO GAMES	1015960-1093	3.80
MUSIC MAKER	1015960-1095	3.80
MUSIC MAKER	1015960-1035	3.80
MUSIC MAKER	1015960-1036	3.80
NUTRITION	1015960-0106	3.80
NUTRITION	1015960-0107	3.80
NUTRITION	1015960-0108	3.80
NUTRITION	1015960-0116	3.80
REAL ESTATE	1015960-0117	3.80
REAL ESTATE	1015960-0118	3.80
REAL ESTATE	1015960-0119	3.80
REAL ESTATE	1015960-1120	3.80
HUNT THE WUMPUS	1015960-0102	3.60
SOCCER	1015960-0103	3.60
MIND CHALLENGER	1015960-0104	3.60
EXTENDED BASIC	1015960-0105	4.00
EXTENDED BASIC	1015960-0091	3.80
EXTENDED BASIC	1015960-0097	3.80
EXTENDED BASIC	1015960-0096	3.80
EXTENDED BASIC	1015960-0101	3.60
ADD/SUBTRACT 1	1015960-1122	3.60
ADD/SUBTRACT 1	1015960-1113	3.60
MULTIPLAN	1015960-1114	3.80
MULTIPLAN	1015960-3115	3.80
MULTIPLAN	1015960-0115	3.80
ALIGATOR MIX	1015960-0134	3.80
ALIGATOR MIX	1015960-0135	3.80
ALIEN ADDITION	1015960-0135	3.80
ALIEN ADDITION	1015960-0352	3.80
DEMOLITION DIVISION	1015960-0353	3.80
DRAGON MIX	1015960-0298	3.60
DRAGON MIX	1015960-0299	3.60
MINUS MISSION	1015960-0332	3.80
MINUS MISSION	1015960-0333	3.80
METEOR MULTIPLY	1015960-0301	3.60
METEOR MULTIPLY	1015960-0345	3.60
PLATO INTERPRETER	1015960-0346	3.60
PLATO INTERPRETER	1015960-0303	3.60
PLATO INTERPRETER	1015960-0304	3.60
PLATO INTERPRETER	1015960-0347	3.60
MOON MINE	1015960-0348	3.60
MOON MINE	1015960-0405	3.60
MOON MINE	1015960-0406	3.60
MOON MINE	1015960-0407	3.60
MOON MINE	1015960-0408	3.60
LOGO/SNG/ELF/HOP	1015960-0326	3.60
MUNCHMOBILE	1015960-5253	3.60

SCHEMATICS AND MANUALS

Part No.	Description	Price
1041336	RAM EXPANSION	2.50
1040378	DISK CONTROLLER	2.50
1037105	RS-232 INTERFACE	2.50
1039330	MEMORY EXPANSION	2.50
1039314	PROJECT 360 CARD	2.50
1039437	INTER DIGRAM P-BOX	2.50
1039304	POWER SUPPLY	2.50
1039363	INTERCON. ADAPTER	2.50
1039340	DISK CONT. CARD	2.50
1039308	RS-232 INF. CARD	2.50
1039317	P-CODE PCB	2.50
1049716-1	CONSOLE MAN. 99/4A	10.00
1049717-1	CONS./PEB MAN.	15.00
1039311	INTER ADAPTOR EX BX	2.50

Software / Module Listing

Part No.	Description	Price
1015960-0385	READING TRAIL	3.80
1015960-0386	READING TRAIL	3.80
1015960-0387	READING TRAIL	3.80
1015960-0389	READING POWER	3.80
1015960-0390	READING POWER	3.80
1015960-0391	READING POWER	3.80
1015960-0392	READING POWER	3.80
1015960-0393	READING WONDER	3.80
1015960-0394	READING WONDER	3.80
1015960-0395	READING WONDER	3.80
1015960-0396	READING WONDER	3.80
1015960-0397	READING WONDER	3.80
1015960-0398	READING WONDER	3.80
1015960-0268	MATH GAMES-A	4.20
1015960-0270	MATH GAMES-A	4.20
1015960-0271	MATH GAMES-A	4.20
1015960-0272	MATH GAMES-B	4.20
1015960-0273	MATH GAMES-B	4.20
1015960-0274	MATH GAMES-B	4.20
1015960-0275	MATH ACTIVITIES	4.20
1015960-0264	MATH ACTIVITIES	4.20
1015960-0265	MATH ACTIVITIES	4.20
1015960-0266	MATH ACTIVITIES	3.80
1015960-0267	MATH ACTIVITIES	3.80
1015960-0404	MATH GAMES 4	3.80
1015960-0262	MATH GAMES 6	3.80
1015960-0263	MATH GAMES 6	3.60
1015960-0234	DISK MANAGER 2	3.60
1015960-0235	DISK MANAGER 2	3.80
1015960-0280	MILLKEN/ADDITION	3.60
1015960-0278	MILLKEN/COMMON	3.60
1015960-0282	MILLKEN/MULTIPLY	3.60
1015960-0286	MILLKEN/FRACTION	3.80
1015960-0287	MILLKEN/FRACTION	3.80
1015960-0288	MILLKEN/DECIMAL	3.60
1015960-0290	MILLKEN/PERCENT	3.80
1015960-0284	MILLKEN/ARITH.LAWS	3.80
1015960-0276	MILLKEN/MANAGER	4.20
1015960-0255	LOGOII	3.60
1015960-0256	LOGOII	3.60
1015960-0257	LOGOII	3.60
1015960-0261	CHISHOLM TRAIL	3.80
1015960-0295	PARSEC	3.80
1015960-0296	PARSEC	3.80
1015960-0297	PARSEC	3.80
1015960-0349	MULTIPLAN	3.60
1015960-0350	MULTIPLAN	3.80
1015960-0351	MULTIPLAN	3.80
1015960-0206	ATTENDANCE RECORD	4.00
1015960-0208	ATTENDANCE RECORD	4.00
1015960-0210	ATTENDANCE RECORD	4.00
1015960-0163	CLASS DATA	4.00
1015960-0164	CLASS DATA	4.00
1015960-0165	CLASS DATA	4.20
1015960-0166	CLASS DATA	4.20
1015960-0167	CLASS DATA	4.20
1015960-0143	SCHOOL MAILER	4.00
1015960-0144	SCHOOL MAILER	4.00
1015960-0145	SCHOOL MAILER	4.00
1015960-0146	SCHOOL MAILER	4.00
1015960-0194	PAYROLL ASSIST.	4.20
1015960-0195	PAYROLL ASSIST.	4.00
1015960-0196	PAYROLL ASSIST.	4.00
1015960-0197	PAYROLL ASSIST.	4.00
1015960-0198	PAYROLL ASSIST.	4.00
1015960-0177	PROPERTY MGR.	4.00
1015960-0178	PROPERTY MGR.	4.00
1015960-0179	A. ACCOUNTING	4.00
1015960-0148	A. ACCOUNTING	4.00
1015960-0149	A. ACCOUNTING	4.00
1015960-0490	STAR TREK	3.60
1015960-0491	STAR TREK	3.80
1015960-5284	BUCK ROGERS	3.80
1015960-5285	BUCK ROGERS	3.80
1015960-5296	CONGOBONGO	3.60
1015960-5297	CONGOBONGO	3.60
1015960-5219	BURGERTIME	3.60
1015960-5220	BURGERTIME	3.80
1015960-0327	READING RAINBOW	4.00
1015960-0328	READING RAINBOW	4.00
1015960-0329	READING RAINBOW	4.00
1015960-0330	READING RAINBOW	4.00
1015960-0331	READING RAINBOW	4.00
1015960-0379	READING CHEERS	4.00
1015960-0380	READING CHEERS	4.00
1015960-0381	READING CHEERS	4.00
1015960-0382	READING CHEERS	4.00
1015960-0383	READING CHEERS	3.80
1015960-0374	READING ADVENTURE	3.80
1015960-0375	READING ADVENTURE	3.80
1015960-0376	READING ADVENTURE	3.80
1015960-0377	READING ADVENTURE	3.80
1015960-0378	READING ADVENTURE	3.60
1015960-0384	READING TRAIL	3.80
1015960-0306	READING RALLY	3.80
1015960-0307	READING RALLY	3.80
1015960-0308	READING RALLY	3.80
1015960-0309	READING RALLY	3.60
1015960-0236	DIVISION 1	3.60
1015960-0237	DIVISION 1	3.60
1015960-0238	DIVISION 1	3.60
1015960-0239	DIVISION 1	3.60
1015960-0319	NUMBERS 1	3.60
1015960-0320	NUMBERS 1	3.60
1015960-0321	NUMBERS 1	3.60
1015960-0322	NUMBERS 1	3.60
1015960-0323	NUMBERS 2	3.60
1015960-0325	NUMBERS 2	3.60
1015960-0188	TOMBSTONE CITY	3.60
1015960-0211	INVADERS	3.60
1015960-0205	CARWARS	3.80
1015960-1204	EDITOR ASSEMBLER	3.80
1015960-0341	ALPINER	3.80
1015960-0342	ALPINER	4.00
1015960-0343	ALPINER	4.00
1015960-0344	ALPINER	4.00
1015960-0215	MINI MEMORY	3.80
1015960-0154	ADVENTURE	3.80
1015960-0229	TUNNEL OF DOOM	3.60
1015960-0230	TUNNEL OF DOOM	3.60
1015960-0231	TUNNEL OF DOOM	3.80
1015960-0232	TUNNEL OF DOOM	3.80
1015960-0233	TUNNEL OF DOOM	3.60
1015960-0189	READING FUN 2	3.80
1015960-0190	READING FUN 2	3.60
1015960-0191	READING FUN 2	3.60
1015960-0192	READING FUN 2	3.60
1015960-0193	READING FUN 2	3.60
1015960-0111	PERSONAL REPORT GEN.	4.00
1015960-0112	PERSONAL REPORT GEN.	4.00
1015960-0314	READING ON	3.80
1015960-0315	READING ON	3.60
1015960-0316	READING ON	3.60
1015960-0317	READING ON	3.60
1015960-0318	READING ON	3.60
1015960-0216	READING ROUNDUP	3.80
1015960-0217	READING ROUNDUP	3.60
1015960-0218	READING ROUNDUP	3.60
1015960-0219	READING ROUNDUP	3.80
1015960-0220	READING ROUNDUP	3.80
1015960-0305	READING RALLY	3.80
1015960-0222	SPELLING 3	3.80
1015960-0223	SPELLING 3	3.80
1015960-0224	SPELLING 3	3.80
1015960-0225	SPELLING 4	3.80
1015960-0226	SPELLING 5	3.80
1015960-0227	SPELLING 6	3.80
1015960-0258	TOUCH TYPING	3.80
1015960-0259	TOUCH TYPING	3.80
1015960-0260	TOUCH TYPING	3.80
1015960-0247	READING FLIGHT	3.80
1015960-0248	READING FLIGHT	3.80
1015960-0249	READING FLIGHT	3.80
1015960-0250	READING FLIGHT	3.80
1015960-0251	READING FLIGHT	3.80
1015960-0252	MATH GAMES 2	3.80
1015960-0253	MATH GAMES 2	3.80
1015960-0409	MATH GAMES 3	3.80
1015960-0410	MATH GAMES 3	3.80
1015960-0411	MATH GAMES 3	3.80
1015960-0412	MATH GAMES 3	3.80
1015960-0413	MATH GAMES 4	3.80
1015960-0401	MATH GAMES 4	3.80
1015960-0402	MATH GAMES 4	3.80
1015960-0403	MATH GAMES 4	3.80
1015960-5281	TREASURE ISLE	3.60
1015960-5282	TREASURE ISLE	3.60
1015960-5283	TREASURE ISLE	3.60
1015960-5234	WORD INVASION	3.60
1015960-0445	FACEMAKER	3.60
1015960-0446	FACEMAKER	3.60
1015960-5224	STORY MACHINE	3.60
1015960-5225	STORY MACHINE	3.60
1015960-5286	WORD RADAR	3.60
1015960-5287	PIRATE'S ISLE	3.60
1015960-5288	PIRATE'S ISLE	3.60
1015960-5289	PIRATE'S ISLE	3.60
1015960-5290	PIRATE'S ISLE	3.60
1015960-5244	DEMON ATTACK	3.60
1015960-5245	DEMON ATTACK	3.60
1015960-5246	DEMON ATTACK	3.80
1015960-5310	MICROSURGEON	3.80
1015960-5311	MICROSURGEON	3.80
1015960-5321	FATHOM	3.60
1015960-5322	FATHOM	3.80
1015960-5223	MOONSWEEPER	3.60
1015960-5228	MOONSWEEPER	3.60

LOOKING FOR SOMEONE WITH AN ALPHACOM/42 INTERFACE.................................
    I'M LOOKING TO BORROW AN ALPHACOM/42 (40 COLUMN) INTERFACE TO TROUBLESHOOT A PROBLEM FOR A MEMBER OF THE WEST PENN 99'ERS. I'M TRYING TO ISOLATE A PROBLEM TO THE PRINTER OR TO THE INTERFACE. CONTACT ME AT: (412) 527-6656, OR WRITE: JOHN F. WILLFORTH, R.D. #1 BOX 73A, JEANNETTE, PA 15644. I'LL REIMBURSE YOU FOR YOUR EXPENSES. THANK YOU.

LOOKING FOR A TE-II CARTRIDGE AND A WIGET.................................
    CONTACT PAUL BROCK AT : (412) 478-2754, OR WRITE: PAUL BROCK, 1707 LUXEMBURG MANOR N. APOLLO, PA 15673

****

A NOTE FROM THE CLUB LIBRARIAN,   *Eric Zend*

                            ERIC ZEND

I WOULD LIKE TO SAY A WORD OR TWO ABOUT OUR NEW LIBRARY. FIRST OFF, IT IS NOW BASED ON THE FLORIDA GROUP'S LIBRARY.   WE ARE GOING TO HAVE THE SAME CATEGORIES (WITH A FEW ADDITIONS) AND ALSO THE SAME NUMBERING SYSTEM. OUR LIBRARY WILL HAVE ALL THE SAME PROGRAMS THAT THE FLORIDA GROUP SENT US, BUT WE WILL NOW ADD OUR OWN PROGRAMS TO IT. THE FLORIDA CATEGORIES ARE LISTED BELOW.

1000-1799 GAME PROGRAMS
2000-2499 PERSONAL AND UTILITY PROGRAMS
3000-3999 GRAPHIC AND DEMONSTRATION PROGRAMS
4000-4999 EDUCATION PROGRAMS
5000-5999 BUSINESS PROGRAMS
6000-6999 MUSIC PROGRAMS

WEST PENN'S ADDITIONAL CATETGORIES:

        FAIRWARE PROGRAMS   EXAMPLE: RAPID SCROLL,TI-SINGS.
        FREEWARE PROGRAMS   EXAMPLE: FORTH,DM1000,TI-WRITER UPDATE.
        NEW RELEASES
1800-1999 ADVENTURE PROGRAMS

UNFORTUNATELY ONLY THE ADVENTURE GAMES WILL BE ABLE TO HAVE THE SAME NUMBERING SYSTEM AS THE FLORIDA LIBRARY. THIS IS BECAUSE LARGER SOFTWARE PACKAGES MAY CONSIST OF MANY PROGRAMS THAT CALL ONE-ANOTHER, AND TO DO THIS THE SOFTWARE WOULD HAVE TO BE RE-WRITTEN.

AT THE NOVEMBER MEETING SOMEONE PASSED OUT A FLOPPY DISK LABELED "WEST PENN 99ERS WP1201LIST SSSD". I WOULD LIKE TO URGE EVERYONE TO LOAD TI-WRITER AND TAKE A LOOK AT THESE FILES. THIS IS OUR CATALOG WHICH WE ARE WORKING FROM. YOU CAN USE THE FILE "CONTROLD" OR "CONTROLS" THRU THE FORMATTER AND HAVE IT PRINT YOU A CATALOG. AS THE CATALOG IS UPDATED AN EXCHANGE DISK WILL ALSO BE AVAILABLE TO KEEP EVERYONE ABREAST OF THE NEW SOFTWARE AVAILABLE. PRESENTLY THE ONLY ADDITION HAS BEEN A LIST OF CARTRIDGES THE CLUB HAS AVAILABLE TO LOAN.

LAST BUT NOT LEAST THE ENTIRE FLORIDA LIBRARY HAS BEEN COPIED AND WILL BE AVAILABLE AT THE JANUARY MEETING.

****

```
30000 ! BY JIM GALLAGHER OF
THE NORTHERN NEVADA 99'ERS.
30010 CALL CLEAR :: CALL CHA
R(100,"030102")! CONVERT HEX
 TO DECIMAL
30020 DISPLAY AT(10,1):"HEX"
," DECIMAL"
30030 ACCEPT AT(12,1)VALIDAT
E(DIGIT,"ABCDEF")SIZE(-8):H$
 :: IF H$="" THEN 30030
30040 SUM=0 :: L=LEN(H$)
30050 FOR J=1 TO L
30060 H=ASC(SEG$(H$,L+1-J,1)
)
30070 IF (H<58)*(H>47)THEN H
=H-48 ELSE H=H-55 ! CONVERT
ASCII TO DECIMAL 0 THRU
15
30080 SUM=SUM+H*16^(J-1)! C
ONVERT DECIMAL DIGITS TO DEC
IMAL NUMBER
30090 NEXT J
30100 DISPLAY AT(12,14):USIN
G "###########":SUM :: N,R=0
 :: D=LEN(STR$(SUM))
30110 D=D-3 :: IF (D>0)*(N<3
)THEN R=R+1 :: N=N+1 :: GOTO
 30110
30120 DISPLAY AT(13,13):RPT$
("   ",3-R);RPT$("  d",R)::
CALL HCHAR(17,14,32,10)
30130 IF (SUM>2^16)THEN 3015
0 ELSE IF SUM>2^15 THEN SUM1
=SUM-2^16 ELSE SUM1=SUM
30140 DISPLAY AT(16,14):"MEM
ORY LOC":,SUM1
30150 GOTO 30030
```

FOR SALE XTRA "TI STUFF"

```
1  TI-99/4  Original  TI  Console  w/Equation  cal $100.00 1
1  TI-99/4a Console  1981 black/silver used e/c  40.00
1  TI-99/4a Console  1981 black/silver NEW       65.00
           (both  have  latest  stack  pole  k/b  & new p/s)
1  Gram  Kraker  80k w/disk&book              150.00 or best
ast books  almost  every  one  every published (ask I have)
98  ast carts  for  the  machine  (ask me)
1  WIDGET  mdl  1                              10.00 or best
1  GEMINI  10X  printer e/c                   100.00 or best
6  Stack pole keyboards (black)                5.00 ea.
1  TI Modem coupler                           15.00
1  TI SSDD Disk Drive(p-box dirve)NEW         15.00
```

Its house cleaning time and the wife says this #$%& has to
go so if any body is interested leave msg for John Wilforth
and we'll make a deal you wouldn't believe!!!!!!!
If John is told he'll be able to contact me or call me at
1(919) 375-6560 thats North Carolina folks the name is
George McCormick the otherway to get in touch with me is to
leave E-MAIL to G.McCormick on the Genie Info Network.
Thanx hope someone can use this stuff!!!!!!!!

Dear West Penn Member,
   If you come to The Meeting This month (January) I'll give you an even chance to take a C.R.T. home with you. It is a Data Generel 6053 CRT with 80 column × 24 line Display and operates on EIA or 20MA. Has a detached keyboard. Every one who comes get a chance! No charge. See you The 19th.
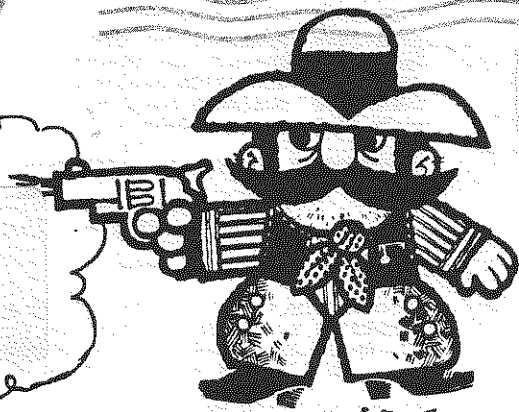   John Willforth

THE W E S T P E N N 9 9 ' E R S

% John F. Willforth
   R.D. # 1 BOX 73A
   JEANNETTE,   PA
                15644

CHECK THE MEETING DATE!!!!!
THIS COMMING TUESDAY JAN 19
7:00 PM COME EARLY!!
DON'T MISS IT!

PITTSBURGH, PA
JAN 10
PM
1988

USA
22
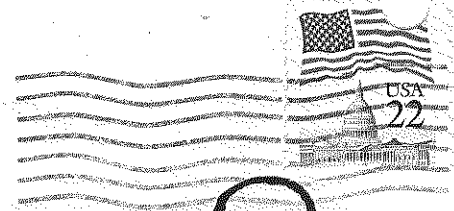
MICKEY SCHMITT
196 BROADWAY AVE.
LOWER BURRELL PA 15068

DUES ARE DUE!