THE PUG PERIPHERAL

CLUB NEWS - by Gary Taylor

Last month's hardware class was well attended with most of us.
pouring over the internals of our computers for the first time. I
did not get a good count on how many consoles were enhanced with the
addition of the diode and the replacement of the resistors, but I
think it was in the neighborhood of 20 to 25 consoles.   There have
only been two calls to complain that something was wrong and one of
those was a false alarm. If you are experiencing any problems let us
know and we will try to get it corrected.

This months activities include a swap meet from 3 til 6.   We
will be setting up wherever it's convenient . So dig out all that
unused equipment you have squirreled away and put a price tag on it.
We will have markers and labels for your use.

The raffle this month will be a graphics disk and manual" called
BITMAC ver 2.0.   from DataBioTics Inc.

I will be covering the TI-writer article that appears in this
newsletter at my next demonstration class. So bring your questions
about TI-writer and we will try to answer them. I will also be
demonstrating the adventure game cartridge as well as some of the
Scott Adam adventures that are available on cassette or disk. If
there is anything else you want demo'd give me a call or leave a
message on the bbs.

I am still waiting for the new bbs program that I ordered. So,
I don't have any more to add on that subject til we get it.   The
modem that we bought was purchased from QUBIE',507 Calle San Pablo,
Camarillo, Calif. 93010.   It was a Basic Time modem model 2400E and
was purchased for $169, which included shipping. Cables are an extra
$10 and you have to specify the length(5 or 10 ft), RS232 interface,
and serial card is female. This information is provided for those
that want to buy a similar device. It is 100% Hayes compatible and
operates at 300/1200/2400 bps in sync/async modes. You can call them
at 1-800-821-4479.

I haven't seen the Disk of the Month yet but I'm sure Jim will
have some surprises for us. We have reduced the price of the DOM to
$3.

At the center of this newsletter you will find a nominating
ballot for the officers of the PUG. All the current officers have
agreed to run for re-election, but don't let that stop you from
nominating your own candidate. You can nominate yourself of course.
Please mail in your nominations or bring them to the next meeting and
give them to our Secretary. Elections will be held in March and the
March newsletter will contain a ballot with the nominees on it.   The
terms begin in April and run though March of the following year.

40 cartridges have been donated to the Pug by *RICK KEPPLER*.
Each cartridge has the appropriate documentation and it all was
delivered in a handsome carrying case.   The collection includes
educational, personal household, and game carts. A big THANK YOU to
RICK!

THE PRESIDENT'S PAGE by Gary Taylor

As promised, here is a schedule of TI computer shows.

FEBRUARY 27-28, 1988 TI FEST WEST/TI EXPO 88 will be held by Southern Nevada User's Group (SNUG)) 702-647-1062 or 702-878-3167 for info. PSA will give discounts on airfare. TI FEST will be held at the PALACE STATION HOTEL in Las Vegas, NV.

MARCH 26th, 1988 (SAT) T.I.C.O.F.F. 88 A TI-99/4A and IBM Clone PC show. Roselle Park, NJ. NV/NJ TI 99ers User Groups

APRIL 2nd, 1988 (SAT) Boston Computer Society Faire- Diamond High School - Lexington, MA. For info call 617-861-0850

April 30th, 1988 (SAT) Dallas TI Faire by the Forest LAne User's Group For more info TIBBS 214-328-4880 or write P.O. Box 743005 Dallas, Texas 75347-3005

MAY 21, 1988 (SAT) Lima, Ohio. LIMA TI Multi User Group Conference. Lima Campus of O.S.U. for info Call 419-228-7109 or write Lima Area TI-99/4A User Group, c/o Dave Szippl, 4 Poulston Place, Lima , Ohio 45805

I received a letter from the Secretary of the Wiregrass TI-99 User's Group who offers a complete collection of 99er and HCM magazines to anyone who is wants them and is willing to pay the cost of packing and shipping via UPS. You can write him at.
Roger B. Crampton
106 Harwood Place
Enterprise, Alabama
36330

I have been successful in transporting MULTIPLAN files from my pc at work to my TI at home. I am using Multiplan VER 1.04 on a Sperry IT and created a spread sheet with 35 rows and 18 columns. I saved the file in Symbolic format then uploaded it to my TI using Mass Transfer. Since the file did not have a TI header on it, Mass/transfer created a file that was DIS/FIX 128. Attempts to load the file failed initially. I then created a one cell spread sheet and saved it on my TI in Symbolic format, then looked at the files with DM-1000. The file created by the TI was INT/FIX 128. I used Disk+Aid to change bit OC from 00 to 02 of the directory entry for the file that I uploaded and VOILA! it worked. I have not tried to reverse the process, but I'm sure you will have to change that bit again before uploading to your pc. The Multiplan manual I have indicated that the file created in Symbolic format would be a ASCII file, but obviously it wasn't.

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

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#######################################################################
#     GENERAL AREAS TO CHECK WHEN CASSETTE ERROR CODES AND MESSAGES OCCUR     #
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1. MAKE SURE THAT YOUR CASSETTE RECORDER IS CONNECTED TO YOUR COMPUTER CONSOLE CORRECTLY. THE CASSETTE RECORDER INTERFACE CABLE MUST BE CONNECTED TO THE 9-PIN PLUG AT THE REAR OF THE COMPUTER CONSOLE - DON'T CONFUSE THIS PLUG WITH THE 9-PIN JOYSTICK PORT ON THE SIDE OF THE CONSOLE - THEY ARE NOT INTERCHANGABLE! WHILE YOU ARE AT IT - MAKE SURE THAT THE COLOR-CODED WIRES WHICH PLUG INTO THE CASSETTE RECORDER ARE ATTACHED CORRECTLY AS WELL. THE CASSETTE RECORDER WILL NOT OPERATE PROPERLY IF THE COLOR-CODED WIRES ARE REVERSED! THEY MUST BE "BLACK" TO THE RECORDER'S REMOTE JACK - "WHITE" TO THE RECORDER'S EARHONE JACK - AND "RED" TO THE RECORDER'S MICROPHONE JACK.

2. IF YOU ARE USING D/C CURRENT - INSTEAD OF A/C CURRENT - MAKE SURE THAT YOUR BATTERIES ARE FRESH! WEAK BATTERIES WILL CAUSE YOUR DATA TO BE DISTORTED!

3. MAKE SURE THAT YOUR CASSETTE RECORDER'S VOLUME CONTROL AND TONE SETTINGS ARE ADJUSTED PROPERLY. GENERALLY SPEAKING - A VOLUME CONTROL OF "8" AND A TONE SETTING OF "9" ARE RECOMMENDED.

4. MAKE SURE THAT YOUR CASSETTE TAPE HEAD IS CLEAN. IF YOU CAN'T REMEMBER THE LAST TIME THAT YOU CLEANED IT - THEN IT'S BEEN TOO LONG!

5. MAKE SURE THAT YOU ARE USING A "HIGH-QUALITY" CASSETTE TAPE. A CASSETTE TAPE OF "POOR-QUALITY" YIELDS "POOR-PERFORMANCE" - HEADACHES - AND TOTAL FRUSTRATION!

6. MAKE SURE THAT YOUR CASSETTE TAPE IS NOT ANY LONGER THAN A C-60 CASSETTE. (WHICH IS 30 MINUTES PER SIDE). LONGER TAPES ARE THINNER AND PROVIDE LESS FIDELITY.

7. MAKE SURE THAT YOUR CASSETTE TAPE IS IN GOOD CONDITION - THAT THE TAPE HAS NOT BEEN DAMAGED OR ACCIDENTLY ERASED. IF IN DOUBT - TRY ANOTHER TAPE!

8. 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. ALSO, MAKE SURE THAT THE CASSETTE TAPE HAS BEEN POSITIONED AT THE BEGINNING OF THE DESIRED PROGRAM.

9. MAKE SURE THAT YOUR CASSETTE TAPE WAS RECORDED WITH YOUR CASSETTE RECORDER OR AN IDENTICAL MODEL. IF THE CASSETTE TAPE WAS ORIGINALLY RECORDED USING A "DIFFERENT" TYPE OF CASSETTE RECORDER - IT IS POSSIBLE THAT THE PROGRAM WILL NOT LOAD PROPERLY. WHEN THIS OCCURS - YOU HAVE NO CHOICE BUT TO... EITHER OBTAIN ANOTHER COPY OF THE PROGRAM - USING YOUR CASSETTE RECORDER TO "SAVE" THE PROGRAM - OR "LOAD" THE PROGRAM AGAIN - THIS TIME USING THE CASSETTE RECORDER THAT HAD ORIGINALLY "SAVED" THE PROGRAM.

   NEXT MONTH'S TOPIC WILL BE UNDERSTANDING - CREATING - AND USING - CASSETTE FILES. THIS TOPIC SHOULD PROVE TO BE QUITE INTERESTING - AS I WILL BE LEARNING QUITE ALOT OF "NEW" MATERIAL MYSELF - SINCE THIS IS AN AREA THAT I HAVE NOT HAD VERY MUCH EXPERIENCE WITH IN THE PAST.
   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.

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A SPECIAL THANKS...

to Bill Krieger for donating Paint and Print to the cartridge library and to Dean ~~Krieger~~ King for donating Mini-Memory. We appreciate it!!!

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############### FOR SALE ###############
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Charley Brown has a P-Code (Pascal) card with documents and disks for $125.00.Telephone 884-6520
TI Joysticks are available at the meetings for the low price of $5.00.

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####WELCOME###WELCOME###WELCOME####
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The PUG would like to extend a warm welcome to our newest members...Tom Kachmar, John Luther, Jim Lydon and Bill Sucevic. We would also like to convey our continued welcome to Peter Armbrust, Richard Heil, Bill Herman and Jim Hickey , who have recently renewed their memberships.

FROM THE MAILBOX

MATH ONE LINERS

by Tony Falco

Many math students encounter difficulties simply because they lack experience. They say they understand a concept and quite likely they do, but they make a great number of careless errors and then begin to think they really did not understand at all. It is possible to "understand" and yet to not have skill. We acquire skill through practice. The one liners listed below provide practice at essential math skills that students in grade 7 and beyond will encounter. They provide practice at adding, subtracting, multiplying and dividing integers. (signed whole numbers.) And each one can be entered by editing the previous one. Each provides a sound when a wrong answer is supplied and each tells how many out of 10 problems were wrong. Computers can be very patient when it comes to drill.

For an uncluttered screen use CALL CLEAR :: RUN.

```
1 RANDOMIZE :: FOR N=1 TO 10
 :: PRINT :;:;:: A=INT(41*RN
D)-20 :: B=INT(41*RND)-20 ::
 DISPLAY AT(23,8):A;"+ ";B;"
=" :: ACCEPT AT(23,20):C ::
W=W-(C<>A+B):: CALL SOUND(55
0,110,-30*(C=A+B)):: NEXT N
:: PRINT W;"WRONG"
```

```
1 RANDOMIZE :: FOR N=1 TO 10
 :: PRINT :;:;:: A-INT(24*RN
D)-12 :: B=INT(24*RND)-12 ::
 DISPLAY AT(23,8):A;"X ";B;"
=" :: ACCEPT AT(23,20):C ::
W=W-(C<>A*B):: CALL SOUND(55
0,110,-30*(C=A*B)) :: NEXT N
 :: PRINT W;"WRONG"
```

```
1 RANDOMIZE :: FOR N=1 TO 10
 :: PRINT :;:;:: A=INT(41*RN
D)-20 :: B=INT(41*RND)-20 ::
 DISPLAY AT(23,8):A;"- ";B;"
=" :: ACCEPT AT(23,20):C ::
W=W-(C<>A-B):: CALL SOUND(55
0,110,-30*(C=A-B)):: NEXT N
:: PRINT W;"WRONG"
```

```
1 RANDOMIZE :: FOR N=1 TO 10
 :: B=INT(13*RND)-7 :: B=B-(B
=0) :: A=(INT(25*RND)-12)*B
 :: PRINT :"          ";A;"/";B;"
=";  :: INPUT C :: W=W-(C<>A/
B) :: CALL SOUND(550,110,-30
*(C=A/B)) :: NEXT N :: PRINT
W;"WRONG"
```

Editors note: To enter extra long program lines, use Function Redo. Enter as much as you can. The cursor will stop at the end of the 5th line. Press enter, then Fctn 8. The line will reappear, move cursor to end of line and continue typing.

PRBASE "BUGS"

1. Some TI and some Myarc disk controllers don't seem to work well with the "format data disk" utility included with the PRBase (something about having problems formatting the back side of double-sided diskettes). If you run into that problem, just initialize your data disks with your usual disk manager.

2. If you are creating a new data base, press ERASE (Fctn 3) before you enter an output device name. Otherwise you may get an I/O error when you try to print. For those who want to know why, PRBase is trying to read a default name from the disk. You can't see them, but it's those pesty "E5"s that are causing the problem the first time around.) You don't have to keep doing this - just the first time.

3. If PRBase won't go past record 22, run through the setup for configuration to make sure that PRBase knows how many sides your data disk has. (Again, it may be trying to read a default from the disk before one is put there.)

AND FROM THE CIN-DAY USER GROUP

Try PIO.CR, PIO. or Pio if you are having trouble with devices in PRBase.

COMMUNICATION NEWS
By Audrey Bucher

Last May, I wrote an article about the NORTHSTARR PITT BBS. At the time, I focused on the Health Related Topics. These message areas are no longer available at NorthStar. However since then a TI99 SIG message area has been added and we now have a file area for TI99/4A uploads and downloads.

The sysop of this board is Geoff Block and he is very helpful. He sees his board as becoming more and more of a source for those of us with orphaned machines and user groups that support them. He was very willing to open up a file section for the TI and then asked if I would be willing to co-sysop. (What could I say?) So begins a new adventure for me. How about giving NorthStar a try. The number is 412-881-1749.

Following is a list of the message areas available on the board.

POST	General Announcements and Msgs to/from Sysop
FOR-SALE	Items for sale and interesting advertisements
WANTED	Items wanted or needed
NORTHSTAR	NorthStar computer system users conference
CP/M	Whats new in CP/M Today
COMMODORE	The growing world of Commodore (c64/128, a2000, ?)
BAR	Bulletinized Adult Recreation (civil words please)
TI99.SIG	Questions,answers,meetings,etc for Pgh TI99/4A-SIG
INTRODUCING	A free version of the multiuser party lines
POLITICS	Debates on current events and issues
APPLE.SIG	Special Interest Group for the rest of Us
KAYPRO.SIG	Kaypro Users Group of Pgh
PACC	Pittsburgh Area Computer Club (meetings, msgs etc)
UNDER.16	Message area JUST for people less than 16 yrs old.
WOMEN.ONLY	Private Women's BBS conference (any topics).

Anyone interested in Health Realated Topics is free to call Geoff's other BBS...Doctor's Woc Inn at 412-881-7757.

RECAP OF MINUTES OF JANUARY MEETING

There has been a problem in getting Ryte Data to fulfill orders for newsletters which had been paid for. The matter will be pursued until issues of the Newsletter are received or a refund is received. Group will be kept informed. Ryte Data was recommended with good intentions.

We are trying to get a new BBS program which will accept 1200 baud.

Cat Lib Companion is still being data-tested. Expect it to be ready next month.

There will be a hardware swap next month from 3:00 to 6:00 P.M.

Nomination of officers will take place at the next meeting. Nominating form will be included in the next Peripheral.

Price of DOM has been reduced to $3.00.

Treasurer's Report: Total in bank as of last Board meeting = $460.45 Approx. Balance as of start of meeting = $400

New modem is being used on the BBS at 300 baud. Program will have to be changed to use a higher baud rate.

All articles in the 1987 Peripherals have been indexed and the index is available on disc from the Library on PR Base.

Pres. Taylor suggested that the PUG purchase a monitor in the price range of $170.00 to $200.00. Motion to do so was made, seconded & passed.

Pres. Taylor suggested that the PUG purchase a stand-alone RS-232 module & a modem. They then could be used with a TE-2 cartridge in the Library by members to become familiar with telecommunications. Motion was made, seconded & passed.

At Pres. Taylor's request, Mike Sealy graciously volunteered to make name tags for the PUG.

The one-dollar raffle, Analogies on tape, was won by Gene Kelly.

The following demonstrations were given: Frank Zic--PR Base. It organizes a data base & allows input of data. Also Runner--showed us some short cuts using the shift 3 key. Jim Alexander--DOM - a Utility Loader disc. John Milforth--Menu Program which can call out a program from a disc drive or Ram disc or load us a cartridge.

Meeting adjourned at 8:45 PM.

Respectfully Submitted,
Herbert H. Reich, Recording Secy.

MULTIPLAN

PART 4

AUDREY BUCHER

CHECKS FOR JANUARY 1988

CHECK #	PAID TO	DEPOSIT	FOOD	RENT	UTILITIES	INSURANCE	CHARGES	AUTO	MISC	BALANCE
	FORWARD									1000.00
1234	DUQ LIGHT				65.00					935.00
1235	WELL BANK			400.00						535.00
	DEPOSIT	845.00								1480.00
1236	STATE FARM					150.00				1270.00
1237	G EAGLE		63.25							1206.75
1238	MASTERCARD						89.72	11.00		1106.03
1239	AMOCO							28.11		1077.92
1240	BELL TEL				51.16					1026.76
1241	FOODLAND		55.30							971.46
-	DEPOSIT	300.00								1271.46
	TOTALS	1145.00	118.55	400.00	116.16	150.00	89.72	37.11	0.00	

Back to the template. By now, you have your column headings in Row 3. To make your printout look nicer, you may want to realign R3 to center the headings. F for Format, C for Cells, Type in R3,tab over to align and hit C for center. Now you can begin to enter the information from your checkbook for January. Start with the check balance at the beginning of the month. This item has no check number and it's amount is not allocated to any expense so put the ALPHA description FORWARD in R4C2 (under Paid To)and then right arrow until the cell pointer is in the Balance Column(R4C11). Type the amount and press ENTER. Next you can begin filling in checks and deposits. At R5C1 enter the first check no. for January. Let's use 1234. As soon as you press enter, you'll see we need to make an adjustment. 1234.00 has been entered. This is because of the new default format we entered which is fine for dollars and cents but not so great for check nos. So we simply change the format of the cells in column 1 to be whole numbers or integers. And while we're at it, let's change the alignment format for C1 to Left to make a neater printout. Choose F for format, then Cells. To change all the cells in Column 1, type C1 where the system says Format cells, tab to align, type L, and tab to Format code and type I for integer. Now press ENTER and watch as the system changes the check number to 1234 and moves it to the left of the column. Next move the cell pointer to R5C2 and enter the payee for ck #1234 (let's use Duquesne Light). The check for $65 was a utility expense so right arrow to the utility column (R5C6) and enter 65.

Now we want to have the system calculate the new balance and put the answer in the Balance Column in R5. Check #1234 just happened to be entirely for utilities . Some checks however may be split among 2 or more expenses. So what we really want for the balance on the row is the balance from the previous row minus the sum of

any expense on this row. Some rows will show income instead of expense so we need to enter a general formula here because the equation for the balance in row N should be the balance at N-1 plus the income in row N minus the sum of the expenses in row N. Sound confusing? Don't worry, it's harder to say than do with Multiplan. Put the cell pointer at R5C11 where the balance to be calculated belongs. Next press = to tell the system you are going to enter a formula. The first term in the formula is the balance from the row above. Use the up arrow to move the cell pointer to the above balance. You will see the expression R[-1]C in the command line. This means the cell at row minus one in the same column. Next we want to add any income from the current row. Hit + and the cell pointer pops back down to R5C11(where we started building the formula) and the formula is now R[-1]C+. Select the deposit amt. for the same row by left arrowing until the cell pointer is in the deposit column. Notice that the formula is now R[-1]C+RC[-8]. Since the deposit is in C3 and the balance is in C11, you can see why MP expresses this as Column minus 8. Now for the formulas third term. We want to subtract the sum of any expenses in the same row from the balance. Type - and the cell pointer returns to R5C11. We will use the special function called SUM to get the sum of the expenses. When you use SUM, you must tell MP what cells to add together in a FROM:TO expression. Type SUM(and then indicate the first cell to include in the sum by left arrowing until you are under the first expense which is Food in C4.Type : to show that you're ready to put in the last cell to include in the sum. Again the cell pointer pops back to R5C11. Left arrow once to select the last cell of the group of expenses to be added together. Finally type) to close the expression and then press ENTER. The finished formula is R[-1]C+RC[-8]-SUM(RC[-7]:RC[-1]). MP will calculate the balance and fill in

R5C11.
The formula applies only to R5C11 but we'd like it to be used on every row in the balance column. Since we have expressed the formula in relative terms (for example, using R-1 instead of R4, the same formula can be used for every balance. You can have as many entries as you need for the month and just copy the formula down that many rows. Let's just assume you will have 10 entries. With the cell pointer still at R5C11, invoke the Copy command by typing C, then choose the option D for down and type 9 at number of cells. Press ENTER. MP will copy the formula down 9 rows. For now, this will give you identical balances in all 10 cells because there are no income or expense entries below R5 as yet. This will change as you make more entries.
When you finish filling in the checks and deposits, the final touch is to add the totals for the income and expense columns. Label the totals line by skipping a row after the last check no. and entering TOTALS under the Paid To column. Arrow one to the right and prepare to enter a formula by typing =. Here we'll use the SUM function again. Enter SUM(and then arrow up to R5C3 for the first item to sum. Type : and then use the up arrow for the last item (R14C3). Finish your formula by typing). Check that the formula is SUM(R[-11]C:R[-2]C) and then press ENTER to see the income total appear. To total the other columns just copy the formula 7 cells to the right. C for copy, R for right and 7 for no. of cells.
Now press Function 8 and the entire sheet will be recalculated. Save your worksheet by pressing T for transfer, S for save and then enter a filename where the system says TEMP. If you have not recalculated with Function 8, MP will automatically do so before saving your spreadsheet. Next month we'll talk about printing the spreadsheet. If you have any questions, feel free to call.

LAST MONTH I TALKED ABOUT THE HORIZON RAM DISK (HRD), AND IT MAKES SENSE THAT WE CONTINUE THIS MONTH WITH THE MAJOR ENHANCEMENTS OF THIS UNIT, THE 256K (976 SECTOR) VERSION BY EDWARD A. HALLET, AND THE 1-MEG. (4088 SECTORS) VERSION BY MIKE A. BALLMANN AND MARKETED BY BUD MILLS SERVICES AS A KIT IN VARIOUS SIZES. SEE DETAILS BELOW.

THE 256K. ENHANCEMENT DESIGNED BY EDWARD A. HALLET, ADDED 64K. OF 8K STATIC RAM TO THE EXISTING DSSD HRD FROM HORIZON. THIS WAS EQUAL TO 256 SECTORS FOR A 35.5 % ADDITION. AT THE TIME THIS WAS A WELCOME IMPROVEMENT BECAUSE THE FULL BLOWN HRD WAS PRECISELY THE SAME AS THE MAJORITY OF THE DISK CONFIGURATIONS IN PEB UNITS. THIS MEANT THAT YOU COULD STORE AN ENTIRE DSSD (720K.) DISKETTE (THE MAX. FOR THE TI CONTROLLER), ON A SINGLE DSSD HRD. THIS WAS FINE AS LONG AS YOU WERE NOT USING THE HRD AS A MEDIA TO DO MULTIPLE COPIES OF A DSSD DISKETTE, OR WHEN ALL THE UTILITIES AND YOUR "PET" PROGRAMS WERE JUST TOO LARGE FOR THE HRD. THE ADDITIONAL MEMORY WAS NEARLY THE SIZE OF A STANDARD 90K. DRIVE AND THEREFORE WAS A VERY WELCOME ENHANCEMENT. SOME OF THE MORE COMMON PROGRAMS THAT WOULD OCCUPY THIS SPACE, WERE THE MENU, BY JOHN A. JOHNSON, DM-1000, AND MANY MORE, THESE WHEN ON THE HRD ENHANCED, WOULD STILL ALLOW THE SPACE TO MOVE AN ENTIRE DSSD DISKETTE TO AND FROM THE HRD AND NOT DISTURB THESE PROGRAMS.

THE INFORMATION ON THIS UPGRADE IS AVAILABLE FROM EDWARD A. HALLET, 5600 S. COUNTRY-CLUB #64, TUCSON, AZ 85706 [(602) 889-6930], OR AS A KIT W/INSTRUCTIONS FROM BUD MILLS SERVICES, 166 DARTMOUTH DRIVE, TOLEDO, OH 43614 FOR $30. (UPGRADE ONLY). BE SURE TO SEND EDWARD SOMETHING FOR HIS TROUBLE AND POSTAGE.

THE HRD, HRD ENHANCED, AND HRD+ CONSTITUTE PROBABLY THE LARGEST RANGE OF VARIOUS DISK SIZES IN THE ENTIRE MICRO-COMPUTER INDUSTRY. THERE ARE NOW "EIGHT" DIFFERENT SIZES TO CHOOSE FROM, AND IF YOU COUNT USING THE VER. 4 FROM HORIZON AND THE ROS FROM MIKE BALLMANN AND JOHN JOHNSON, THERE ARE ACTUALLY "ELEVEN" DIFFERENT SIZES. THE SMALLEST IS 90K (360 SECTORS) ALL THE WAY UP TO THE 1-MEG. HRD+, AND NEARLY EVERY USEABLE SIZE BETWEEN (180K, 250K, 360K, 512K, 800K, 800K + BOOT DISK).AS YOU MIGHT EXPECT, A SPECIAL FORMATTER IS NEEDED TO HANDLE ALL THE VARIOUS SIZES AND INITIALIZE THEM RELIABLY, AND THIS IS AVAILABLE IN THE CONFIGURE PROGRAM BY JOHN JOHNSON, WHICH ALLOWS INITIALIZING ALL OR ANY PARTS OF THE ABOVE HRDs. MORE ON THIS AND THE MENU PROGRAM AT ANOTHER TIME AND IN ANOTHER ARTICLE. THESE ARE OFFERED AS PUBLIC DOMAIN PROGRAMS.

ON 1/16/88 BUD MILLS SERVICES COMPLETED THE PURCHASE OF THE HORIZON RAM DISK FROM RON GRIES AND DAVE ROMER. I'M NOT SURE OF THEIR CURRENT ARRANGEMENTS, BUT IT WOULD APPEAR THAT ORDERS FOR THE BARE BOARD AND I RECOMMEND MOST IF NOT ALL THE PARTS, CONTACT BUD MILLS SERVICES AT THE ADDRESS ABOVE. THE 90K DRIVE KIT SELLS FOR $140. AND THE ONE MEG. KIT SELLS FOR $435. (INC. S/H). OTHERS ARE PROPORTIONATELY PRICED.

ALL HRD'S ARE CONSTRUCTED ON THE HORIZON RAM DISK BOARD USING 62256LP'S(OR EQUIV.) AS OF THIS DATE. THE 6264'S (8K CHIPS) ARE NO LONGER USED. THE COST PER KILOBYTE OF RAM HAS BEEN REDUCED, AS WELL AS THE PHYSICAL CHIP COUNT AND THUS CAPACITY OF THE BOARD IMPROVED.

THE ROS (OPERATING SYSTEM) ALLOWS A SINGLE RAM DISK AT A CRU ADDRESS (SAY >1000) TO BE DEVIDED INTO TEN LOGICAL DRIVES IF DESIRED, OR INTO AS LITTLE A ONE WITH A SIZE FROM AS LITTLE AS AROUND 30 SECTORS UP TO 4088 SECTORS ON THE 1-MEG. VERSION IF YOU CAN FIND ENOUGH LARGE FILES TO USE IT ALL. TWO OF THESE CAN BE CALLED DSKn.(1-9)AND ANY OF THE REMAINING WILL RESPOND TO DSK(NAME)., THE DISK NUMBER CAN BE CHANGED WITH A CALL FROM BASIC. THE FLEXABILITY IN THIS AREA EXCEEDS THE SPACE I CAN TAKE HERE, BUT BRIEFLY YOU CAN WRITE PROTECT DRIVES, AUTO-ON A CALL AUTOMATICALLY ON POWER-UP, TOGGLE DISKS INTO THE SECOND LOGICAL DRIVES LOCATION, EVEN FROM ANOTHER RAM DISK. YOU CAN FILL UP ANY PEB WITH THE HRD+ AND USE ALL OF THEM. THERE ARE 9 CALLS AND 15 MENU SELECTIONS AVAILABLE IN MENU VER. 7.3, WHICH WILL ADD EVEN A LOT MORE EXPANSION CAPABILITIES IN THESE AREAS.

CONSTRUCTION IS THE HARDEST PART FOR MOST PEOPLE, AFTER ALL NO MATTER WHAT ERRORS ARE MADE (OPERATOR TYPE), SOMEONE WILL BE ABLE TO ASSIST YOU ON THE PHONE, BUT IF YOU DESTROY THE BOARD, OR A COMPONENT, OR HAVE WIRED IT INCORRECTLY, VERY FEW CAN HELP A NOVICE REPAIR IT OVER THE PHONE. THE INSTRUCTIONS HAVE ALL THE INFORMATION THERE TO BUILD THE BOARD, BUT YOU MUST BE BETTER THAN AVERAGE AT FOLLOWING INSTRUCTIONS, AND AT ELECTRONICS KIT CONSTRUCTION, OR YOU BETTER FIND SOMEONE WHO IS ! IT CAN BE DONE, I DID IT THE FIRST TIME RIGHT. HEY A LITTLE LUCK CAN'T HURT EITHER. WANT A RUMOR, THE PRINT SPOOLER IS JUST A FEW WEEKS AWAY FOR THE HRD'S! WAS I WRONG ABOUT THE 1-MEG. RAM DISK?

TI-Writer Tip

My primary use for TI-Writer is making various hand-outs for my college chemistry courses. Several months ago I encountered a problem that was initially quite puzzling but turned out to be solvable. Many chemicals have names which include italicized prefixes. When these names are written or typed these prefixes must be underlined while the rest of the name is not underlined. The problem therefore was to underline just part of a word. The underline feature of the formatter (invoked by &) is very useful for underlining whole words but underlining only parts of a word requires a little more work.

There are actually three ways to solve the problem. The first involves using the underline feature of the formatter to underline the prefix. A space must be entered after the prefix to turn off underlining. A backspace, which looks like this on the screen ≈ (and is obtained by the sequence of key presses CTRL U, SHIFT H, CTRL U) returns the printhead to the proper position to resume printing and then the remainder of the word is entered. For example:

    0001 &cis ≈-2-butene
    will produce cis-2-butene.

The second method consists of backspacing and underlining after each letter to be underlined. An example of the method is:

    0002 t≈_r≈_a≈_n≈_s≈_-2-butene
    will produce trans-2-butene.

The third method involves underlining and then backspacing and printing the letter to be underlined. For example:

    0003 _≈t_≈r_≈a_≈n_≈s-2-butene
    will produce trans-2-butene.

All of the methods are compatible with the .AD and .CE commands of the formatter. Lines with partially underlined words are properly right justified and centered.

All three of these methods can be used with condensed character printing also. None of them work with printing of enlarged characters. The problem is that the underlining is done in a separate pass after the complete line of text has been printed. Printing of enlarged characters is in force for only one line. When the line has been completed the printer reverts to printing of normal characters. Therefore any underlining would be done using normal size underline characters and the spacing is also not correct.

I overcame this problem by setting the line spacing to one. If your printer lets you set a line spacing of zero that would be ideal but the TI 99/4 Impact Printer (and I would assume the Epson printers also) require a minimum value of 1 for line spacing. Having set the line spacing I print the enlarged text line and then below it I print a line that contains the underline character in the proper places. For example:

    0001 .TL 123:27,14
    0002 .TL 125:27,20
    0003 .TL 124:27,65,1
    0004 !
    0005 {p-bromo-t-butylbenzene}
    0006 {_^^^^^^_}
    0007 .TL 124:27,65,12
    0008 !
    will produce

p-bromo-t-butylbenzene

"TIPS FOR BEGINNERS"

-BY FRANK N. ZIC

Here we go together-No.9. How many times I've heard, " I wish I had a good Data Base program to keep my personal or house inventory records up-to-date". Sound familiar? Well, perhaps the following explaination of a system I developed will help you with your problem as it has done with mine. I have it fully developed for my purpose but the nice thing about it is that it can easily be modified to suit your own individual needs. A little background first. There are a number of Data Base programs available such as: Acorn 99, Data Base 1, Name-It, TI's Personal Record Keeping, P R Base and Turbo-Dataman. Many of these I've tried and found lacking in one way or another, such as: capacity, speed, organization, instructions or some other characteristic. Well, I simply used something that most of us already have and may have over-looked. It is the TI-Writer. I have used it for so many things that surely it's uses are nearly infinite. Here is a partial listing of some of the things for which I have used TI-Writer: (1) Wills, (2) Obituaries,(3) Calling Cards,(4) Writing Letters,(5) Addressing Envelopes,(6) Postal Labels,(7) VCR Labels (all kinds of labels),(8) Recipies,(9) Photo Albums,(10) Personal Diary and many other uses. Then too let's not forget its use in writing this article. To this list can be added the object of this article, which I call "My Electronic Notebook". I demonstrated some of these new technics at the August West Penn 99'er meeting. I will have some modified hard copies as examples of some of the projects I mentioned above. Before I get into the details of this article I would like to take this opportunity to thank a very good friend of mine, Jerry Petrulak, who has been a true computer buddy and given unselfishly of his vast knowledge. While I developed the TI-Writer method of note keeping for my own needs, Jerry prefers the PR Base for his inventory records.

I'm afraid that space limitations will cut short a detailed explaination of my project, but with a detail of one of the catagories, (S/3 Services) shown below, you will get the idea. Remember that all of the marvelous features of TI-Writer are available to you for up-dating, rearranging and printing out. On a single DSSD disk I loaded just the Editor of TI-Writer, the main INDEX and all of the data files. There are still over 500 sectors available for storage. Now that's what I call room. Note each filename is called up with a three (3) key filename. Give it a try and modify it to your own needs. Now if Audrey can print the main INDEX on the facing page, we'll be all set. THe phone No's below are all active. May the good 4's be with you.

S/3 Services	(cont.)
S/3/1 Auto repairs 271 1310	: S/3/6 Hauling 751 0862
Auto body 751 9309	: Hauling/Soil 672 6470
S/3/2 Clocks Pick-up 863 1535	: Hauling,top soil,stones,excv.
S/3/3 EEL Svc"Cole"Heating/Plumbing :	793 6943
823 8240 Turtle Creek	: S/3/7 Home Baking 751 0475
EEL Svc "Bill" 243 5579	: " cleaning 829 1417 Marianne
S/3/4 Grass cut Ray Baldis	: S/3/8 Organ tuning 364 1038
call 751 8243 or 9309	: S/3/9 Plastering 751 9343
S/3/5 Gen repairs Paul 751 6931	: Plastering 30yrs 824 8089
Gen. Lawn,paint,paper hang'n	: S/3/10 Sewing mach. 30yrs Sears exp.
John 351 5467	: 751 8765 or 372 1967
Landscaping "Chris"795 5484	: S/3/11 Soil #85/Load 372 0380
Cement work 824 0513	: Slag #8.50/T David 793 5050
" 30yrs 373 3017	: Soil/Walls 461 9014,462 9973
" Pete 731 7811	: S/3/12 Upholstering 527 2106
Trees Tim Dworic 751 6563	: "Back's" Free est./Del.
" 672 0400	:

~~~CORRECTION~~~

In Frank Zic's article last month, on page 7, please correct the last paragraph to read "hold down the FCTN key and the number 5 at the beginning of the reload."

FROM THE LIBRARIAN. . .

At the January meeting, you wonderful members bought over eighy disks from the library. It is support like that which will keep the librarian busy, and shows us that we do have what the local TI community wants! As the commercial says, thanks for your support!

One of the big sellers last month was PR BASE, a Shareware two disk set. Remember that the disk MUST be renamed PRBASE, or it will not work. To rename the disk, DO NOT initialize it, because that will erase the information. The DV80 file on the second disk of the PRBASE set is 357 sectors. Anyone who has tried to load this file into TIWRITER knows that it is too big. Peter Armbrust called me and suggested a way to get a printout of the file. What you need to do is load part of the file. Specific instructions on this are in the TIWRITER manual on page 135. Peter said that he had the most success loading about 450 lines at a time, and dumping them to the printer, then calling for the next lines with LF (load file) 451 900 DSK1. PRB:DOC (ENTER).

There is another disk in the library that must be renamed before it will work: PROFFX2012 must be renamed RECORDS/+ or it will not work. RECORDS/+ is a menu driven data base which allows for the printing of reports as well as lists and labels. This program can handle 10 "books" of information with 200 pages per book.

This month no-one handed me a bunch of disks to put in the library, so the additions this month will be the December Disk of the Month, which was a great graphics and Christmas song presentation auto-loading out of Extended Basic, and also new will be whatever I can pull out of the aproximately 100 or so disks that are here waiting for me to check them out! Also at the February meeting there will be a few more copies of the January Disk of the Month, a utilities disk that was SOLD OUT!

I hope to have the catalogue updated at this meeting, and those will be available for sale as hard copies or on disk for sale for $1.00, or trade for a blank disk. Keep in mind that the NEW IMPROVED catalogue will be coming (notice there's no date given for this item!). This catalogue will be created with the new catalogue companion. I so far have no volunteers to help with the project, and I'd LOVE to get a bunch of people working on it with me! All the programs in the entire library will have to be run and cataloged. HELP PLEASE! Especially if you want to see the thing before the year 2000!!!

One new thing that will appear at the February meeting will be a BUG special disk. I will be going through both the library and my other disks and finding programs that do not work. I will put these on disks and bring some to each meeting. Anyone who would like to try their hand at debugging can have a copy and report back to me if they can fix the program. Since I obviously cannot go through the whole library in one month, it may take awhile until I find all the "buggy" programs. If you have a disk where a program does not work, please let me know. Maybe it was a bad copy, and we can replace it. Or maybe a debugger can fix it for us!

See you at the meeting!!!!

CONTINUED

INDEX (Modify to your needs)

A   A/1 Addresses
    A/2 Appliance Repair
B   B/1 Bank vault
    B/2 Banking
    B/3 Birth Dates
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   *G/2 Garbage pick-up
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    H/2 Hotels
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   *M/3 Membersips
    M/4 Misc Info
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R *R/1 Retirement Groups
    R/2 Rose & Mark
S   S/1 Sattellite
    S/2 Serial No's
    S/3 Services (Details opposite)
    S/4 Social Sec.
   *S/5 Subscriptions
T *T/1 Taxes & Quaterly
    T/2 Telephone No's
    T/3 Tours
    T/4 Travel
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   *U/2 UPS
    U/3 USX
V
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    W/2 Weimers
X---Y---Z

NOTE: * Check these items often.

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[][][][][][][][][SCHEDULE OF EVENTS][][][][][][][][]

3-4:30 TI Writer, Questions & Demos with Gary..Rm. 401

4:30-6 Hardware Class with John Wilforth.......Rm. 475

3:00-6 Hardware and Software Swap.............Rm. ???

6:00-? General Meeting

[][][][][][][][][SEE YOU THERE [][][][][][][][][][]

Pittsburgh User's Group
P.O. Box 8043
Pittsburgh, Pa   15216

CONTENTS

PLEASE CHECK RETURN ADDRESS!

DALLAS TI HOME COMP. GROUP
P.O. Box 29863
Dallas TX 75229

DATED MATERIAL
DELIVER BY
FEBRUARY 12TH