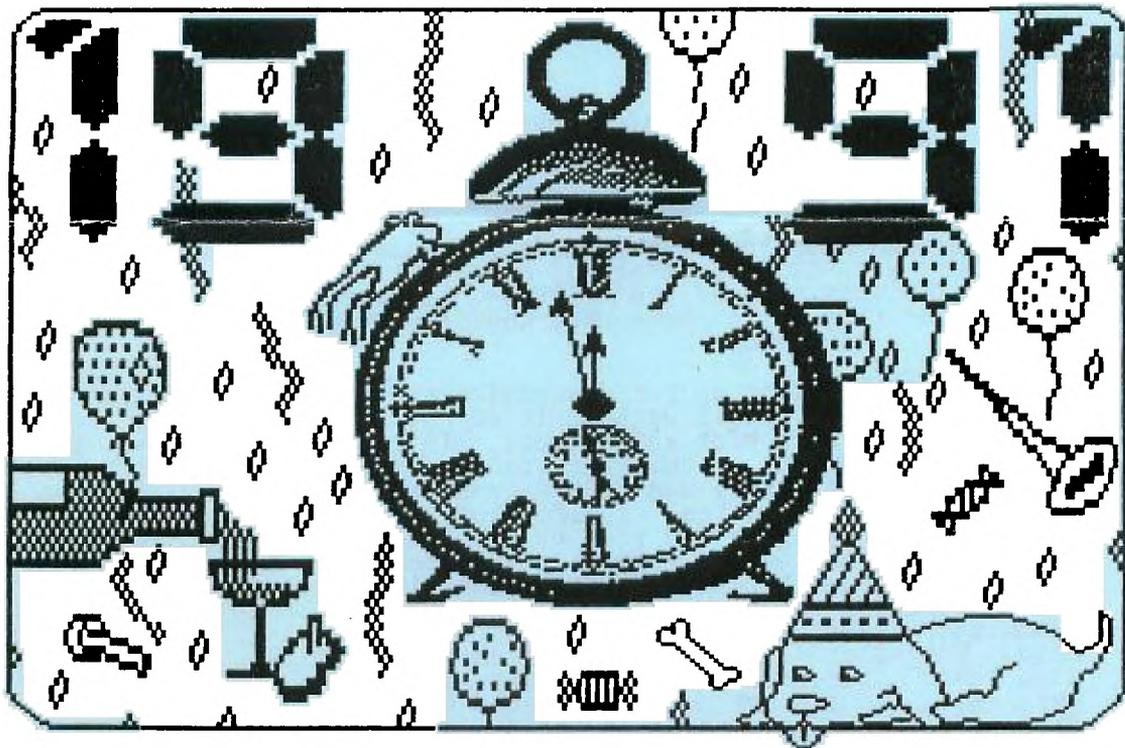




The Ottawa T.I.99/4A Users' Group



Volume 10, Number 1 ... JANUARY 1991



DON'T FORGET THE MEETING -- January 8 1991
and Remember to Return your Exchange Newsletters...

TIOUG 3489 Paul Anka Drive
Ottawa, Ontario, CANADA K1V 9K6

COMING EVENTS

January Meeting: 8 Jan 1991 Merivale High School
7:30 PM

TI-BASE Workshop: TBP (check at Bill Sponchia's home.
next club mtg No need to call if you were
and on the BBS) at the first meeting, but
if you are a newcomer, please
let Bill know so he will have
an idea of what to prepare for.

February Meeting: 5 Feb 1991 Merivale High School
7:30 PM

March Meeting: 5 Mar 1991 Merivale High School
7:30 PM

Newsletter Deadline: 17 Jan 1991 (19 Jan. if Uploaded to BBS!)

EDITOR'S NOTES

by Philip Harris

Well its almost Christmas and the goose is getting fat, etc. unfortunately the economy isn't. Last month's meeting saw some wonderful pre-Christmas shopping buys from Jane Wrigley's (Laflamme) computer goodies. Those of you at the meeting surely saw some of the better deals around (especially this side of the TI-FEST). Apparently Jane may be back for the January meeting with some more goodies to sell (so don't spend everything on those Boxing Day sales).

One of the items up for discussion at the next meeting is the Ottawa TI-FEST for 1991. Will we have it or not? It is not a case of will power, but more a case of economics and support. In previous years we have provided a dinner for our out of town "guests" and set up a hospitality suite at a local hotel/motel. Well that was fine when money was plentiful, but on a beer budget you must have beer tastes. In addition, in past years the school cafeteria and clean-up has been provided free by the school board, but this year there is talk of us having to pay for this service. Now I don't want to always be mentioning money, but it is tighter than it has been and that's the reality (that goes for the club and most of us as well). Anyway, if we drop the extra trimmings, organize a pay-as-you-meal, etc. we may be able to afford it, by using the door entrance receipts and our portion of all used equipment sales plus booth charges, to just cover our costs (based on previous year's expenses). We are asking all of those who would like to attend another FEST to drop us a line or a message on the BBS about what you think. Remember that we still wish to hear what you feel about expanding the computer membership to include "other" computers.

On the topic of other computers you'll notice that our TIOUG emblem is now part of your address label care of a scanner, PC Paint and Word Perfect 5.0 on an IBM machine, with a Digital Laser printer. Yes, I do believe in inter-relations between the TI and my IBM at work.

THE PRESIDENT'S TWO CENTS WORTH
by Paul Meadows

Well this is a busy month for us all with Christmas just around the bend. I, in addition to the festive activities, am very busy with work which has resulted in lots of travel time. We are planning a couple of demos for the January meeting including some Oldie but Goodie programs. In addition we'll continue to thrash out the open computer question and take a serious look at the TI-FEST for 1991 (we have to start planning soon, tentative dates are 20-27 April 1991 at Merivale High School again).

I would like to wish you and yours a very Merry Christmas and a prosperous New Year. I saw an appropriate saying the other day, to remember when you're busy spending your money for presents that "Jesus is the reason for the season". Have a peaceful one and say a pray for the men and women in the Canadian Forces serving in the Middle East.

OLD NEWSLETTERS-REVIEW
by William Gard

As mentioned in my previous article, one of the things I like to do with my leisure time is read "old Newsletters". One can learn some new tricks and ideas to make computing with the TI all that much more enjoyable.

To give credit where credit is due I will quote the issue and the contributor of the information. For this article I have continued to review "THE PUG PERIPHERAL". It is published by the Pittsburg Users group. I have reviewed the April 1988 to January 1990 newsletters. This is my second installment.

SEPTEMBER 88

1. GOOD OLD DAYS ARE COMING BACK: By Jack Sughure

This is refers to books and articles that were available at that time. They were as follows:

i. COMPUTER SHOPPER:

Up until about a year ago this magazine was published in 12 monthly issues, and it contained news on the TI written by Ron Albright and John Zittrain. Unfortunately, CS no longer supports articles on TI. The mailing address was P.O Box 1419 Titstville FL 32781-9988.

ii. MICROPENDIUM:

This magazine is a stalwart in the TI world. It is published monthly and cost \$20 at that time. The mailing address is P.O. Box 1343 Round Rock, TX 78680.

iii. ASGARD NEWS:

This magazine is published for \$6 for 4 quarterly issues. The editor is Chris Bobbitt. It contains lots of small helpful hints and comments on a variety of TI subjects. The address is P.O. Box 10306 Rockville MD 20850

iv. GENIAL TRAVELLER:

This magazine is published, a one year subscription to which consist of 6 disks. The editor is Barry Traver. The address is 835 Green Valley Drive, PA 19128. These can be ordered as Volume 1 and Volume 2.

v. TID BITS:

This is a bi-monthly magazine of 6 issues which costs \$8 for hardcopy or \$12 for SSSD flippies. It can be ordered from Bruce Forbes at: Route 2 Box 412, Sumerduck VA 22742. Bruce has promised to continue this magazine through at least one year's subscription.

b. HELPFUL HINT OF THE MONTH:

For TI writer or any version of Funnelweb, BA writer etc. Did you know that you can type anything you want after a carriage return ON THE SAME LINE and it won't print. This is great for text notes for screen reading. I've used it a lot, particularly when I'm writing articles or poems. It's very handy.

c. Another handy dandy is letter saving. If you write as many letters as I do (between 30 and 40 per week) its a good idea to let FUNNELWEB do the sorting and hard work for you. Just name the letter by date and name in the following way. If I write to Jim Peterson on May 17th I would SAVE the file as DSK2.517JIMPETE. Always month first (5) followed by day (17) and the name as far as it will go. So if I wrote to Jim on Nov 27 it would be 1127JIMPET, but if I wrote on April Fool's day it would be 41JIMPETER. This is handy if you write a lot of letters on the same day, as TI WRITER will sort them for cataloguing first by number then by letter. So they will be numerically AND alphabetically sorted in the catalog.

d. TIPS FOR BEGINNERS: By Frank Z. Zic

Don't forget about the quick and easy-to-use calculator that is built into our TI units. From Basic or XB, simply put in a line such as:PRINT 57+25 (Enter) or PRINT 38-16 (Enter) or PRINT 85*2 (Enter) or PRINT 95/5 (Enter). Try it and you will see how the answers come out right. Good for columns too.

2. NOVEMBER 1988:

TI-BASE:PART ONE:\$IMPACT/99\$ By Jack Scghrue

Now comes TI-Base. It too will become-without question-THE database tool for normal users to astound themselves with and or geniuses to create unlimited enhancements and templates. TI-BASE is an open ended data system that includes, in passing, text and disk management packaging for incredible convenience. Yet it also allows such freedom of personalization that is mind-boggling. The only thing I can equate it to is dBase III+ for IBM, and that sells for \$800 and comes with piles of disks and a 500 page manual. If you look in any bookstore's computer section, you will find loads of books on how to use dB III+ (or any of the earlier ones in the series). Colleges and night schools offer courses on just the use of dB III+. And here's the rub. Inscobot (P.O. Box 291610, Port Orange, FL 32027, provides THEIR masterpiece on two SSSD disks and one of those in a tutorial disk. Their manual is a mere 40 5x7 pages.

3. December 1988:

T.I. Writer (Part II)-Stan Katzman

This part will deal with headers and footers, begin a page and include file.

Let's start with headers. If we want to number a page and every page sequentially what you do is type the following at the beginning of your document .HE ^<Enter>. What this will do is number each page of a multi-page document sequentially putting the number in the upper left hand corner. If you want the number elsewhere at the top of the page type .HE ^<Enter> and the carets (required space symbols) will put the number of the page the same number of spaces to the right of the left margin as you have carets.

If you want to have a header on the top of each page that is of the same type and says something then type upper left will be the word "Hello". (Of course you could use any statement you want.) You can also "mix them up". Type .HE Hello page^<Enter>. (By the way the ^ sign here means to number sequentially.) And at the top of each page will be "Hello page 1", "Hello page 2" etc. To turn of the header just enter on a separate line .HE<Enter>.

We can also number at the bottom of the page if we want. Type at the start of your document .FO^<Enter> and the numbering will be on the bottom left hand corner. If we type .FO ^<Enter> the number will be moved to the right depending on the number of carets, just like the header. .FO Hello<Enter> will print "Hello" on the bottom left of each page.

To make the printer start a new sheet of paper you have two options in the Formatter, .BP and the "New Page" entry in the Editor (Control 9). The Ctrl 9 will work in the Editor and in the Formatter, .BP<Enter> works only in the Formatter.

The last command I want to discuss is a very powerful command, Include File. If you have a very large document too large for your computers memory, like a book, just make each chapter a separate file to disk with names like CHAP1, CHAP2, CHAP3 etc. Then make another master document that has all the formatting commands for page length, margins, headers, and each chapter listed is an Include File (.IF) command, like so:

```
.FI;AD;PL 60;LM 10;RM 79;HE ^ IF DSK2.CHAP1
.IF DSK2.CHAP1
.IF DSK2.CHAP2
```

The beauty of this is you do not have to give any formatting commands with each document, it is done with the master document which is the only file name that is entered when the file name is called for in the Formatter. The entire document will be printed out Formatted and in the sequence asked for in the master file. Is that not powerful and terrific?!!!

8K RAM MODULE WITH GAME (battery backed) Second Try.
By David Caron

This may look like a deja vu however there is a logical reason for this. The picture published with last months article was rather incorrect, making the whole article less than useless. I therefore uploaded the correct picture and asked that the article be reprinted to give some meaning the correct picture. And so here it is.

I know, its been a while since I wrote any articles but when I came up with this module I simply could not keep it to myself. The thing that makes this construction so simple and easy is the fact that you need not remove the "guts" of a game cartridge, it is possible to have both the game (or whatever) exist along with the 8K RAM memory. A simple double pole switch is all that is necessary to switch between the ram and the module itself. If you are still concerned about this very simple project (My simplest so far) keep in mind that you do not have to take apart the computer console or muck about with it in any way. (What could possibly go wrong with such a simple project as this?)

If you are wondering what one would do with such a cartridge let me remind you of Tom Bentley's and Charles Earl BATCH-IT program which would require such a module. In fact programs in the 8K RAM can add their own options to the start up menu screen so that they can be accessed. Imagine, being able to take your favorite assembly program to any console only TI-99/4A and being able to run it in the 8K RAM memory!, and now for the details...

I have installed my 8K Ram into a PARSEC module however any module with a circuit board similiar to the one in the drawing will do. One word of warning through! piggybacked chips will only fit into the forward part of the module (the part with the label on it). The back end of the module is lower in height so that it will fit into the cartridge slot. Therefore if the bottom GROM chip was piggy backed, it would not be possible to put the module back together again. MATERIALS:

The following parts are needed for the exercise:

1. One 8K RAM chip (Preferably a HM6264LP-15, or compatible type)
2. One 7474 TTL logic chip (Hex-inverter).
3. A double pole switch (like in the diagram, a switch which only turns one of two things on at once.)
4. Some fine wire
5. Two 10K resistors.

The following is only needed if you wish to add on the battery:

6. One good 3V calculator battery (get the biggest one possible which will fit into the module.
7. Two diodes.
8. Possibly a third resistor to reduce the current drain on the battery, however the 8K chip will only be getting about 2.7 volts through the one diode in series with the battery. This voltage is probably close to the minimum voltage necessary to sustain the memory. Because of this limit I do not know at this time what value should be used. Try something under 100 ohms

The chips can be found at ACTIVE ELECTRONICS on Merivale Road, the rest of the stuff can be found an any RADIO SHACK store.

PROCEDURE:

1. Remove the screw from the bottom of the module you have selected.
2. Insert a flat (standard) screwdriver into one of the slits and push the head of the screwdriver TOWARD the opposite slit.
3. Once the module is apart make sure that the board layout is similiar to the one in the diagram (diagram shows the TOP of the module circuit board. If not put the module back together and find another unimportant module (ie. cheap!)
4. Bend the pins of the two chips according to the diagram. The short pins in the diagram means that they are bent down and must be soldered to the pins on the chip they are piggybacked on. The long pins are bent outward ready to be soldered to wires.

5. Place the chips onto the board as shown in the diagram. The external chips in the diagram are exactly lined up horizontally, they only need to be shifted down vertically in the diagram to be over the chips already on the board. In other words, DO not move the external chips (the ones not apart of the module) left or right, simply shift them down.

NOTE: The 7404 chip goes onto the board BACKWARDS, so it is facing the opposite way from all the other chips.

6. Solder down the correct pins.

WARNING: Do not apply heat for more than 5 seconds to each pin.

7. Cut the connection between the second pin from the left on the circuit board and the circuit trace itself. This is shown in the diagram where it says "board line cut." This prevents the module from always being on. The wire from the middle terminal of the switch must connect to the second pin of the module connector BEFORE the cut, such that the circuit trace itself on the module board has no wires connected to it. The switch will now determine what gets the module enable signal from the module port.

8. Connect all wires as shown in the diagram

WARNING: Do not apply heat for more than 5 seconds to each pin.

9. I leave it up to you where to put the switch and the battery if you have included it. Some sort of hole will undoubtedly have to be made in the module to accommodate the switch. You may wish to do this before you solder the switch to the circuit.

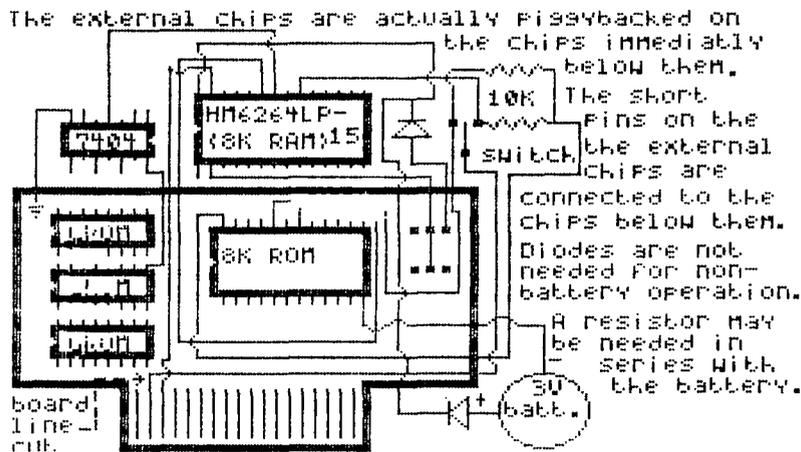
10. Plug the module into the slot as it is. (MAKE SURE NO WIRES OR CONNECTIONS GET CROSSED!)

Test it using a debugger program. (It is assumed you do not rely on TI Extended Basic or any other cartridge to boot up your system. (EX. a Ramdisk, CorComp controller, etc.)

11. If it works, put it back together and congratulate yourself, if not then check all your connections with the diagram's.

If you have any questions about this article or any of my other articles, please, do not hesitate to call me at 837-1397 and ask for Dave.

8K RAM MODULE WITH GAME




```

SIZE(-1)VALIDATE("YN")BEEP:AS :: IF AS="Y" THEN 490
440 DISPLAY AT(22,1):""::""::"" :: CALL A(13,WS) :: CALL A(15,LM) :: IF D$="D"
THEN 410
450 DISPLAY AT(24,1)BEEP:"ENTER ONLY: 80 or 132" :: CALL A(18,PW)
460 IF PW<>80 AND PW<>132 THEN 450 ELSE DISPLAY AT(24,1):"" :: GOTO 410
470 !
480 ! ** print/save new list **
490 SP$=RPT$(" ",WS) :: LM$=RPT$(" ",LM)
500 DISPLAY AT(20,1):"title:" :: ACCEPT AT(21,1):T$
510 OPEN #1:FMS,INPUT :: IF PW=80 THEN OPEN #2:TO$,OUTPUT ELSE OPEN #2:TO$,
OUTPUT,VARIABLE 132 :: PRINT #2:CHR$(15)
520 DISPLAY AT(22,1):""::"READING INPUT LINE":"PRINTING PAGE"
530 PP=PP+1 :: DISPLAY AT(24,14):PP
540 AS=LM$&"page "&CHR$(14)&STR$(PP)&"/"&STR$(PA)&CHR$(20) :: IF T$<>""
THEN AS=AS&" of "&CHR$(14)&T$
550 PRINT #2:AS:"":"" :: IF TL>60 THEN S=60 ELSE S=TL
560 FOR Y=1 TO NC :: FOR X=1 TO S :: C=C+1 :: DISPLAY AT(23,20):C :: IF Y=1
THEN I$(X)=" "
570 LINPUT #1:AS :: IF ASC(AS)>127 THEN 600
580 K=WW-LEN(AS) :: I$(X)=I$(X)&AS&RPT$(" ",K)&SP$ :: IF EOF(1)THEN 600
590 NEXT X :: NEXT Y
600 FOR X=1 TO S :: PRINT #2:LM$&I$(X) :: NEXT X
610 PRINT #2:CHR$(12) :: IF TL>60 THEN TL=TL-60 :: GOTO 530
620 IF PW=132 THEN PRINT #2:CHR$(27)&"@ " :: CLOSE #2 ELSE CLOSE #2
630 END
640 ! ** subs **
650 CW=WW+WS :: NC=INT((PW-LM)/CW) :: RM=PW-NC*CW-LM+WS :: TL=INT(CTR/NC) ::
IF TL<>CTR/NC THEN TL=TL+1
660 PA=INT(TL/60)+1 :: RETURN
670 IF S=PW OR PW=132 THEN 690 ELSE CALL HCHAR(9,30,32,2)
680 FOR X=5 TO 7 :: CALL HCHAR(X,1,32,32) :: NEXT X :: CALL VCHAR(5,6,35,3)
:: CALL VCHAR(5,27,37,3)
690 AS=RPT$("1",WW)&RPT$("0",WS) :: AS=RPT$("0",LM)&RPT$(AS,NC) ::
AS=AS&RPT$("0",FM-WS)
700 S=PW :: IF PW=80 THEN Y=77 :: K=27 ELSE Y=129 :: K=3
710 FOR X=1 TO Y STEP 4 :: PO=POS(XX$,SEG$(AS,X,4),1) :: IF PO=17 THEN PO=12
720 IF X<129 THEN CALL VCHAR(5,(K+X)/4,119+PO,3) ELSE CALL HCHAR(9,30,43) ::
CALL HCHAR(9,31,119+PO)
730 NEXT X :: RETURN
740 !
750 !@P+ ** u-d subs **
760 SUB D(R,V) :: DISPLAY AT(R,25):V :: SUBEND
770 SUB E(C,V) :: DISPLAY AT(9,C)SIZE(-3):USING "###":V :: SUBEND
780 SUB A(R,V) :: ACCEPT AT(R,26)SIZE(-3)BEEP:V :: SUBEND

```

In line 130, DIM I\$ will hold the 60 lines that will be printed on each page (you can also print to disk so that you can refine your list into TIW). Variables WS and LM are the default Width-of-Space and Left-Margin; PW is the default Printer-Width. In lines 170-190, we redefine characters 120-135 to represent all combinations of columns and spaces that correspond to our XX\$ string. By finding the position of one combination (a segment of four char.) into XX\$, we can relate it to CHR\$(119+POS), therefore "0000" will be represented on screen by char. 120 (all 0s), "0001" by char. 121, "0011" by char. 122, etc.

Before Tex can present you with a good arrangement of your list data, it needs to analyze the list itself! So the first part of the program is the setup/analyze: you first give the filename of your list to reshape, and you tell Tex right now if you want the new list on printer or on disk; of course, you must then tell Tex the name of your printer or of your new file (Tex even suggests one!). Tex will then display line 270, and you must answer another question: do you need to analyze the list (to get the total number of data lines and the maximum column width) or not? If you already know the answers to these questions, answer "N" here, and Tex will accept those two values with the CALL AS in line 290. If you need to analyze the list, Tex will open the file and read it until the end, displaying the result on screen. After it LINPUTS a line, it checks to see if the first character (ASC) is a control one, which means that it is the TAB line if you saved the file with "SF" in TIW; if it is not a control character, it gets the length of the data and puts the MAXIMUM value (previous Word-Width or new length) into WW; the CTR line counter increments by one, until Tex reaches a line of control codes or the End Of File marker.

Tex now has all the information it needs to calculate the best arrangement on the page, and it will display it in

HOTLINE NUMBERS

The executive has expressed a desire to assist all members should you have some problems or questions, want to do some library swapping or borrow a book. This will be the place to look. Listed here are the members of the executive, committee heads, and others in the group willing to help in their specialized areas. Of course, if you wish to be placed on the list, just give me a call. I know there is a lot of expertise within our Group, so I hope to add to this list. Please respect normal hours unless you specifically know that someone doesn't mind a call at 3a.m., or use the BBS to leave a message at 738-0617, 24 hours a day, 7 days a week.

- PAUL MEADOWS.....PRESIDENT.....(613) 567-3513
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