

KAWARTHA KRONICLE

PETERBOROUGH, ONT.



The monthly newsletter of
The Kawartha 99'ers

* I Love My TI! *

c/o G. Daniels
R.R. #5 Peterborough
Ont. Canada K9J 6X6

Vol. 13 No. 7

Dec. 1995

AT OUR NOVEMBER 13TH MEETING
(by Dick Bulmer)

- There were four members present.
- Treasurer Ed Colbran was absent due to illness. We missed his monthly state-of-the-bank-account message.
- John Acheson was unable to attend due to illness.
- Phil Townsend was unable to attend. He was elsewhere conducting a workshop to educate educators about computers.

Under the heading of old business:

- Dick Bulmer announced receipt of Term-80 from Jeff Brown. Also received was a demo disk, a copy of which will be in the club library and available to our members.
- Dick reported that he had sent a letter to Chief McAlpine thanking him for allowing us use of the meeting room in the police station.
- Glen Daniels reported that he had e-mailed to John Van Weelie a list of the thirteen groups with which we exchange newsletters.

With no further old business to discuss:

- Glen informed us that he had uploaded to the Kawartha Computer Club's BBS, a copy of a slick label-maker programme (slicked by Tom Jakabfy).
- Dick said that Bruce Harrison's Instance Editor programme has also been uploaded to the KCC-BBS.
- Keith Trotter was thanked for photocopying the October newsletter.
- Keith will keep the Hayes modem while we look around for a replacement for the defunct 13.5V.AC 700mA transformer.

Lindsay Brown, who happens to have some knowledge of the Peterborough Public Library, very kindly explained some of the reasoning underlying the relocation of reference material stored in the library but belonging to the Kawartha Branch of the Ontario Genealogical Society.

- Dick has a copy of Gary Cox' list of sources for TI parts/pieces.
- Glen showed evidence of his technical expertise by booting up the club system complete with working HRD1000 so we could take a look at the Term-00 demo. We looked at it ... and finally decided to review the manual another time, or two. Maybe take a copy to the Nov. 22nd OSHTI meeting where Tom Jakabfy will no doubt have it running in short order.
- Glen again offered to host our Dec. 13 meeting at his home. Acceptance was unanimous. And we'll invite the members of the Oshawa TI Users Group to join us.

Meeting adjourned!

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DON'T FORGET!
Our CHRISTMAS meeting on
Wednesday, December 13th

at
GLEN DANIEL'S HOME

KAWARTHA 99ers USER GROUP

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For Users Of The Texas Instrument 99/4A Home Computer
C/O Glen Daniels RR#5
Peterborough, Ont.
Canada K9J 6X6

PRESIDENT	Dick Bulmer	705 799 6111
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TAPE LIBRARIAN	John Acheson	705 743 7751
MODULES LIBRARIAN	John Acheson	705 743 7751
PRINT LIBRARIAN	Dick Bulmer	705 799 6111
NEWSLETTER LIBRARIAN	Dick Bulmer	705 799 6111
NEWSLETTER TEAM	Dick Bulmer	705 799 6111
	Ed Colbran	705 292 8228
	Glen Daniels	705 740 0153
	Phil Townsend	705 745 3757

Meetings are generally held on the SECOND Wednesday of each month (Sept. to June) at the PETERBOROUGH POLICE DEPT. meeting room located at the intersection of Water St. and McDonnell St.

Room is open at 7:00 P.M. Meeting starts PROMPTLY at 7:15 P.M.

Membership fees are collected on an annual basis at the annual meeting. Fees are \$24.00 per annum. New members joining part way though the year are charged the rate of \$2.00 per month for the balance of the club's fiscal year. The group's annual meeting is held in March at which time elections for the group's executive is held. Memberships can only be held in an adult's name, though interested children / teens are welcome and encouraged to take part in club meetings and activities. Out of town members are most WELCOME.

The opinions expressed in this newsletter are those of the authors and are not necessarily of the KAWARTHA 99ers USER GROUP.

Advertisements and contributing articles for this newsletter may be given to the newsletter staff or sent to the group's mailing address. Articles may be submitted in print, disk or electronic format.

The KAWARTHA 99ers would like to thank those groups who exchange information and newsletters regarding the TEXAS INSTRUMENT HOME COMPUTER with us. We endeavour to recognize and credit original authors and sources of articles of information which we reprint or make available to our membership.

The KAWARTHA 99ers USER GROUP is a non-profit group that welcomes any individuals who have an interest in the TEXAS INSTRUMENT HOME COMPUTER.

LIBRARY CHATTER

BY GLEN DANIELS

MERRY CHRISTMAS TO ALL!

On Wed. Dec. 13th, we are going to have a CHRISTMAS PARTY at my place. If the weather is too bad, like a blizzard or something to stop the driving, we will hold it the next night. Keep your fingers crossed.

Your wife or a friend are invited too. We would like everyone to bring some kind of a goody to munch on. Your favorite munchy! We will supply TEA and COFFEE and soft drinks. We have invited the Oshawa club to join us for this joyous get-together, and hope they are able to make it too. We asked Tom of the Oshawa club to come up with a little demo of something, I hope he can!!!

Now that the winter is here (AND YOU SHOULD KNOW IT BY THE PILES OF SNOW) we should be making use of the TI section on the Kawartha Computer Club's BBS, which they so kindly put on for us, I am going to upload more programs to it, so check it out every so often, and see what is there. I am going to upload the DEMO of TERMS0 from Jeffrey Brown, and if you like the look of it you can order the full copy from Jeff. We need young programmers like him to carry on with more programs for the TI, to keep it alive. While on the subject of programmers, HAVE YOU SENT A THANK YOU NOTE TO BRUCE HARRISON for the good work he has been doing for the TI?? I don't know if he can get on to the Fido Net, Tiecho. We could leave a message on there for him. Does anyone know about that?

After the New Year, the meetings of the Kawartha 99'ers will be held at my place. We couldn't see the point of transporting all the club's equipment to the police station and setting it up for the few people that turned out to the meetings. Also, if anyone from the OSHI club wants to join us, it is a lot closer for them to come here.

Hope to see a good turn out at the CHRISTMAS MEETING!!! Please let me know if you are coming, if you can, so we can have enough seating, etc.

In addition to the face page, there are 24 pages in the manual you will have after printing the @DOCS file.

On page 11, about 10 lines from the bottom, you are informed that "Term 80 should be run off a RAMdisk for this reason." No problem, I thought, I'll just assign one of my several RAMdisk partitions to TERM 80. Well, not quite no problem. The archived files @CONFIG and @MAINPRG expand to 790 sectors and I had partitioned my RAMdisk to match my 720 sector floppy disks for convenience when and if I get around to adopting a back-up routine. So the RAMdisk had to be reconfigured.

This is not a "Plug @ Play" program. Do follow author Jeff Brown's advice and read the manual first. Then read it again as you install and configure it, or you'll wish you had.

I found the default black background with white foreground quite difficult to read on my Commodore 1084 monitor. Though I tried to reverse the colour selection and the change registered on the configuration screen, it seems that it only affects the screen when you successfully connect with a BBS. I'm going to check this feature out with Jeff. But yes, I did link up to a local BBS, the Kawartha Computer Club and downloaded a file. And with black letters on white background, I found it considerably more legible.

A few things I've learned so far: it's best to turn on your modem before loading the program; watch the screen when selecting the path for the program; and when making a FCIN-NUM or CTRL-NUM selection, e.g. FCIN-2 for directory or CTRL-0 to clear the screen, you may have to press the keys a few times. (While the latter could be a keyboard fault in my system, it doesn't show up at other times.)

So far, I have just scratched the surface. I'm not sure I could repeat my download accomplishment in one pass. But I'll make a few notes as I go and as I said, contact Jeff.

If and when I get sorted out, I'll expand upon this article. Or, there is always the possibility of finding a nice comprehensive write-up in another newsletter that would just nicely fit ours.

A FUNNY THING HAPPENED?
(by John Acheson)

A funny thing happened on the way to the BBS. I know this sounds like a bad joke, but it was far from it.

It all started when one of our members informed us that a local computer club would put a TI area on their BBS. This is great, I thought, I can now use a modem with my TI. Then lets see ... first a local BBS, then look out here I come INTERNET.

The first task seemed simple enough - get a modem. But it must be a stand alone! You mean an internal one won't work? As they say, all things come to those who wait. And sure enough, a nearby club member had a modem for sale, real reasonable. Oh happy day, I am all set! Now why is that modem just sitting there? Why is it not communicating? What do you mean I need a program to run it? Oh, I see, it must be told what to do. And this was to become the greatest bug of my modeming escapade.

I was lucky enough to have one of our members loan me a copy of a program to run the modem. Now, lets see, insert disk in drive 1, call up Extended Basic and awaaay we go. What happened? Nothing came up! No problem, I'll just call up the person who gave me the program.

Many attempts later, still no go. Well, maybe this program is bugged and the person will take back this copy and give me a new one, protested from disk, rather than from their RAMcard. Home I come from work and there, just waiting for me, is the new copy. Well here we go again. Lets see now, load program, aha, a title screen. Now why did it stop there? Again back on the phone and again many attempts with no success. Maybe I can sell the modem and get my money back. But first, one more try, this time using the kids system for a change. What is this? Working as promised!

(continued next column)

Okay, now lets see ... what was the difference? Well, after I changed all the cards except the controller card and switched the consoles as well, the only thing I found was that the problem seemed to be in the PE box. Now what is different I do not know, but one works and one doesn't.

So now you can see why I made the opening comment I did. I am on line, but 40 column is a pain. Did I see on the BBS that someone has written an 80 column program?

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MORE TIPS AND TRIX

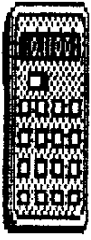
by Andy Prueh
Lima UC

Thanks Lima

Have you ever been editing a line and accidentally erased it by pressing PCIN 3? The old advice was to type PCIN P ("") and then press enter. You get an error then get your line back. There is an easier way to do this. Besides using any of the keys that when used alone on a line will generate an error, you can simply press PCIN 4 then retype the line number you accidentally erased and press the up or down arrow key.

And it's a similar thing with OLD CS1. You do NOT have to press Shift E. Just press E. I think the reason people were worried about losing a program is that the old 99/4 usually would lock up the system when an error in cassette loading occurred. This bug was fixed in the 4A. In fact, when loading, you see a "menu" of R)ead, C)heck, or E)xit. These apply whenever you have the option of pressing ENTER. Try it. Type OLD CS1 and instead of pressing ENTER when it asks you to, press C. Then go through the usual procedure. Instead of "** READING" you see "** CHECKING."

Thanks to CSHTI - Nov/95



TI-92 not an average calculator

Meet your new computer lab.

Just when you least expect it TEXAS INSTRUMENTS makes an announcement. This one was in my Ontario Teachers' magazine and I reproduced it in photoreduced form to the right.

You know, when you look at the TI-92, you can see that it really isn't a calculator anymore. It has a QWERTY keyboard and a track ball in the upper right hand corner. Notice that it has F1 to F8 keys and a number pad to boot. The 'pull-down' menus remind us of a Windows environment. This is really a little computer. I will be contacting TI through the 800-TI-CARES line to find out more information on this little gem.

As you may recall, last year I did a series of articles on the TI-85. This was the current high end graphic calculator; now the TI-92 is the latest in the graphics calculator field.

Although the TI-92 is larger than the TI-85 it is still small at 20 cm by 12 cm or 8" by 4 5/8". The 'chicklet' keyboard is reminiscent of the original membrane keyboard on the TI-99/4 (sans A).

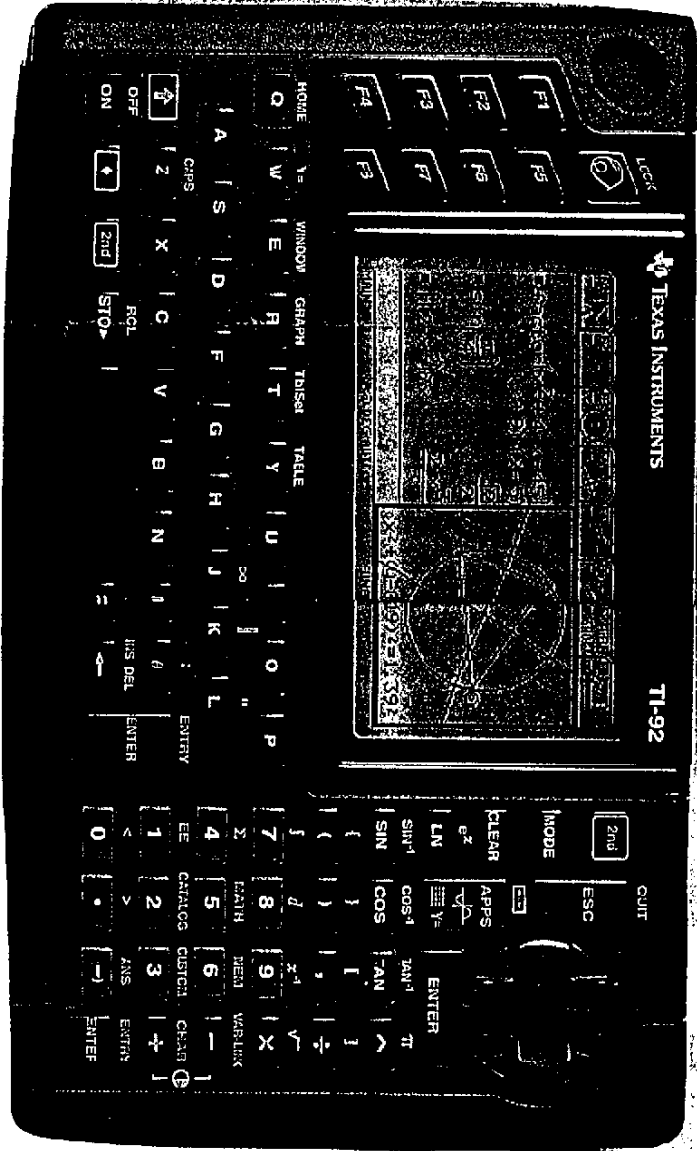
It looks like TEXAS INSTRUMENTS is aiming this at the science/math market. Notice, that you can get TEN of these for the price of one computer. Sounds like we're into the \$250 range to me. It sure was a good add in our magazine; it took up two pages side to side.

I guess TI is still in there fighting for a part of the Graphics calculator market, along with CASIO and SHARP.

There is no indication in the ad that there is a built-in programming language, but I'll bet there is a PASCAL-type language similar to that found in the TI-85. And what about word processing? If they put a QWERTY keyboard in, well, doesn't it sound like you'd be able to type text too.

I would imagine that there is also a computer interface which can be purchased separately. And I'll bet that it goes to a PC or Mac as did the TI-85.

If it is compatible with the TI-82, this indicates that it has the ability to tie in with a series of Lab Sensors which I know are available. These sensors enable the calculator to measure temperature, pH, light intensity and time. I know that the price is really competitive if one buys the interface and sensors. The probos (sensors) that I use now hook up into a PC, but they are really 'clunky' and require a lot of space and set-up time. I can see that Texas Instruments has a really good product here, just as they had with the TI-99/4A. The question is will they market it right this time.



More next time.
Tom

for this article from their June 1995 newsletter.

GRAPHICS PRINTING

by Ron Warfield

After all the playing with ART type programs, and printing of the pictures we created, I decided to examine the graphics printing from xbasic.

I wrote three programs to show how the printer works.

To create a graphic to print, we have to draw what we want on graph paper. Since we are printing in 8 pin mode, we need graph paper 8 lines high.

Row Code

8	128	when this dot is full the number is 128
7	64	when this dot is full the number is 64
6	32	when this dot is full the number is 32
5	16	when this dot is full the number is 16
4	8	when this dot is full the number is 8
3	4	when this dot is full the number is 4
2	2	when this dot is full the number is 2
1	1	when this dot is full the number is 1

Now when you draw your graphic onto the graph paper all you need to do is add up the numbers vertically. eg. if the first column is all full the value will be 255.

When you use single density graphics the dots on your graph paper have to be inside the vertical lines. If you use double density mode you can have dots on the vertical lines. This chart is only an example of how the graphic is defined and is not the same graphic we use in the program.

			X	X	X	128				XX		X
			X	X	X	64				XX	XX	XX
			X			32				XX		XX
			x			16				XX		
			X			8				XX		
			X			4				XX		
			X			2				XX		
			X			1				XX		

SINGLE DENSITY

DOUBLE DENSITY

Add up each column for these values.

1 2 3 8 16 32 64 128 64 128 64 128 is the first graphic and
 1 1 2 2 4 4 8 8 16 16 32 32 64 64 128 128 64 64 32 32 64 64 128 is the
 second graphic.

Lines 140, 141, 142, 143, 183, 184, 185 and 186 all define the graphic.

The first program prints in single density.

```

100 CALL CLEAR
      clears screen +
110 OPEN #1:"PIO.LF.CR"
      opens printer and cancels linefeeds and carriage return
120 PRINT #1:CHR$(27)&"3"&CHR$(24)
      sets printer to 24/216th inch line spacing
121 PRINT #1:CHR$(27)&"K"&CHR$(224)&CHR$(1)
      sets single density graphics with 1 block and 224 dots
130 FOR I=1 TO 24
      reads the graphic definition 24 times
140 PRINT #1:CHR$(1)&CHR$(2)&CHR$(4)&CHR$(8)&CHR$(16)
      character definition
141 PRINT #1:CHR$(32)&CHR$(64)&CHR$(128)&CHR$(64)&CHR$(128)
      character definition
142 PRINT #1:CHR$(64)&CHR$(128)&CHR$(64)&CHR$(128)&CHR$(64)
      character definition
143 PRINT #1:CHR$(32)&CHR$(16)&CHR$(8)&CHR$(4)&CHR$(2)
      character definition
170 NEXT I
      tells program to read again until 24 is read
180 PRINT #1:CHR$(13)&CHR$(10)
      tells printer to do a CR and a LF
181 PRINT #1:CHR$(27)&"K"&CHR$(224)&CHR$(1)
      repeat of above only for bottom half
182 FOR I=1 TO 24
183 PRINT #1:CHR$(128)&CHR$(64)&CHR$(32)&CHR$(16)&CHR$(8)
184 PRINT #1:CHR$(4)&CHR$(2)&CHR$(1)&CHR$(2)&CHR$(1)
185 PRINT #1:CHR$(2)&CHR$(1)&CHR$(2)&CHR$(1)&CHR$(2)
186 PRINT #1:CHR$(4)&CHR$(8)&CHR$(16)&CHR$(32)&CHR$(64)
187 NEXT I
189 PRINT #1:CHR$(13)&CHR$(10)
190 CLOSE #1
      closes printer

```

The second program prints double density.

This is the same as the first program except, to fill the same amount of space we need to double the graphics read. So line 130 and 182 are doubled. Also lines 121 and 181 are altered to print more columns. Remember that graphics are printed in blocks of 256 columns. In the first program we printed in single mode so the columns or dots per row is 480, so 20 characters times 24 times read equals 480. Now the formula is print 1 block of 256 and 224 is left over which adds up to 480. See lines 121 and 181 above.

Below in line 121 and 181 we set double density and print 3 blocks of 256 and 192 dots left over to add up to 960 dots.

Single density is 480 dots while double density is 960 dots.

You have to make sure the numbers and the columns are the same or the printer locks up or prints garbage.

```

100 CALL CLEAR
110 OPEN #1:"PIO.LF.CR"
120 PRINT #1:CHR$(27)&"3"&CHR$(24)
121 PRINT #1:CHR$(27)&"L"&CHR$(192)&CHR$(3)

```

British Columbia 99er Users' Group Newsletter

```
130 FOR I=1 TO 48
140 PRINT #1:CHR$(1)&CHR$(2)&CHR$(4)&CHR$(8)&CHR$(16)
141 PRINT #1:CHR$(32)&CHR$(64)&CHR$(128)&CHR$(64)&CHR$(128)
142 PRINT #1:CHR$(64)&CHR$(128)&CHR$(64)&CHR$(128)&CHR$(64)
143 PRINT #1:CHR$(32)&CHR$(16)&CHR$(8)&CHR$(4)&CHR$(2)
170 NEXT I
180 PRINT #1:CHR$(13)&CHR$(10)
181 PRINT #1:CHR$(27)&"L"&CHR$(192)&CHR$(3)
182 FOR I=1 TO 48
183 PRINT #1:CHR$(128)&CHR$(64)&CHR$(32)&CHR$(16)&CHR$(8)
184 PRINT #1:CHR$(4)&CHR$(2)&CHR$(1)&CHR$(2)&CHR$(1)
185 PRINT #1:CHR$(2)&CHR$(1)&CHR$(2)&CHR$(1)&CHR$(2)
186 PRINT #1:CHR$(4)&CHR$(8)&CHR$(16)&CHR$(32)&CHR$(64)
187 NEXT I
189 PRINT #1:CHR$(13)&CHR$(10)
190 CLOSE #1
```

The third program prints my name in double density

```
100 CALL CLEAR
110 OPEN #1:"PIO.LF.CR"
120 PRINT #1:CHR$(27)&"3"&CHR$(26)
121 PRINT #1:CHR$(27)&"L"&CHR$(74)&CHR$(1)
130 FOR I=1 TO 10
140 PRINT #1:CHR$(255)&CHR$(129)&CHR$(129)&CHR$(129)&CHR$(129)
&CHR$(129)&CHR$(129)&CHR$(66)&CHR$(60)&CHR$(0)&CHR$(0)
141 PRINT #1:CHR$(127)&CHR$(128)&CHR$(128)&CHR$(128)&CHR$(128)
&CHR$(128)&CHR$(128)&CHR$(128)&CHR$(127)&CHR$(0)&CHR$(0)
142 PRINT #1:CHR$(255)&CHR$(64)&CHR$(56)&CHR$(4)&CHR$(3)&CHR$(0)
&CHR$(0)&CHR$(0)&CHR$(255)&CHR$(0)&CHR$(0)
170 NEXT I
180 PRINT #1:CHR$(13)&CHR$(10)
181 PRINT #1:CHR$(27)&"L"&CHR$(74)&CHR$(1)
182 FOR I=1 TO 10
183 PRINT #1:CHR$(255)&CHR$(0)&CHR$(0)&CHR$(192)&CHR$(48)&CHR$(12)
&CHR$(2)&CHR$(1)&CHR$(1)&CHR$(0)&CHR$(0)
184 PRINT #1:CHR$(254)&CHR$(1)&CHR$(1)&CHR$(1)&CHR$(1)&CHR$(1)
&CHR$(1)&CHR$(1)&CHR$(254)&CHR$(0)&CHR$(0)
185 PRINT #1:CHR$(255)&CHR$(0)&CHR$(0)&CHR$(0)&CHR$(192)&CHR$(32)
&CHR$(28)&CHR$(2)&CHR$(255)&CHR$(0)&CHR$(0)
187 NEXT I
189 PRINT #1:CHR$(13)&CHR$(10)
190 CLOSE #1
```

This is basically the same program except the graphic definition is 33 columns wide and spells my name. We read the codes 10 times so printing is 1-256 and 74 left over. $256 + 74 = 330$, see lines 121 and 181.

All these programs print two rows for the graphics, so you can play with the line spacing in line 120 to separate the two rows. After playing with these programs you will be able to experiment with printer codes in your graphic programs to see if you can get rid of those white or dark lines on your pictures. HINT... Play with the line spacing.