

KAWARTHA KRONICLE

PETERBOROUGH, ONT.



The monthly newsletter of
The Kawartha 99'ers

* COMPUTERS IN SCHOOLS *

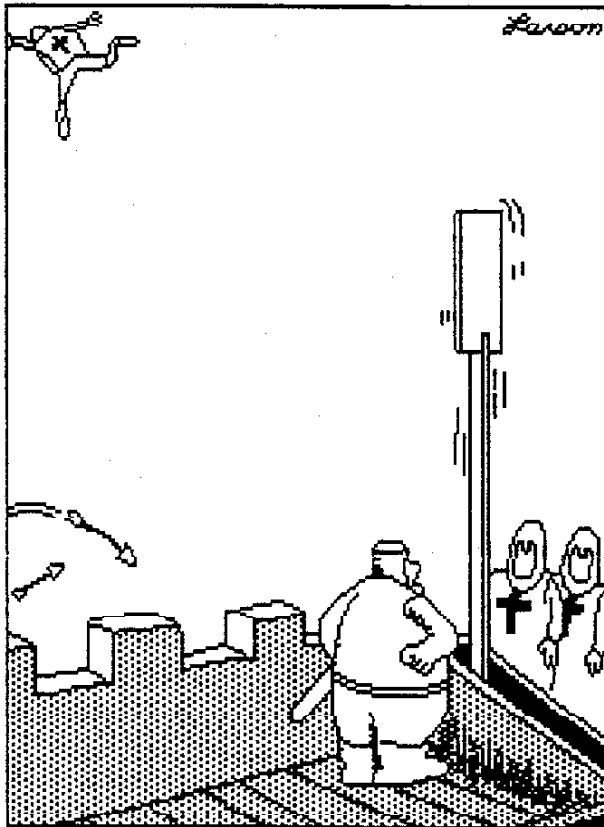
224 Woodward Ave
Peterborough, Ont
Canada K9L 1J7

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BEGINNINGS

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"I told you guys to slow down and take it easy or something like this would happen."

(Sounds like Glen and Dick modifying their computers!)

A new school year begins, a new TI season starts ... a number of changes have occurred in our local computing community. You will immediately notice that our previous editor, John Baal is no longer steering the Kawartha Kronicle. John and his better half have officially retired and are now long distance Kawartha 99 U.G. members. We wish them well in their new lifestyles! We also will be expecting some interesting articles from John as he travels around North America during the next six months. Perhaps this will be the time when we begin to really become involved with telecommunications.

The good ship "Kronicle" is now in the hands of a new crew, and is being mastered by committee. Pat McGillen, Dick Bulmer and myself will be compiling the information and preparing the newsletters in the months to come. We will need help from our compatriots and look forward, fools that we are, to the articles which other members will produce and submit. Please don't disappoint us! HINT.

As the new school year begins the kids are not the only ones who can benefit from further education. The older generations can also experience the excitement of acquiring new skills and knowledge and continue to make new friends through the computer community. Welcome back!

Phil Townsend

MID-SUMMER NEWS!
Glen Daniels gets Dick
Bulmer's 16/32 speedup
modification running.
Attend the SEPT. 9th
meeting for more info.



KAWARTHA 99ers USER GROUP

FOR USERS OF THE TEXAS INSTRUMENT 99/4A HOME COMPUTER
224 WOODWARD AVE.
PETERBOROUGH, ONT.
CANADA K9L 1J7

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VICE PRESIDENTS	GLEN DANIELS/STEVE WRIGHT	705 741 4876
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TAPE LIBRARIANS	JOHN ACHESON	705 743 7751
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NEWSLETTER TEAM	DICK BULMER	705 799 6111
	PAT MCGILLEN	705 742 8374
	PHIL TOWNSEND	705 745 3757

Meetings are 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. & McDonnell St. Meetings begin at 7:00 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 through 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 on the second Wednesday in March at which time elections for the group's executive is held. Memberships can only be held in an adult's name. Out of town members are most welcome.

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

Advertisements and contributing articles for this newsletter may be given to the newsletter editor or sent to the group's mailing address.

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 who welcomes any individuals who have an interest in the **TEXAS INSTRUMENT HOME COMPUTER**.

Multiplan

In the last issue we looked at identifying the working drive, and getting ready to start a file. Lets set up a record for monthly expenses, and we'll use a few more options available to us. Lets call our file, "BUDGET/92". After calling up the spread sheet, put a formatted disk in drive 2, and identify drive 2 using the "TRANS." option. With the cell (row1,column1) highlighted, anything we type will be inserted in that cell. Type "A", and alpha will appear. Now type "BUDGET/92", and press enter. This will be put in the highlighted cell. You will notice the cell is not wide enough to accept this label, so lets make it wider. Type "F" for format, and look at this menu. Type "D" for default, and then "W", for width. You will see that the cell is 8 characters wide. Lets change it to 10, by simply typing 10. Now press enter, and you will see the entire label appear in that cell. You will also find that all the cells are now 10 characters wide. Using the arrow keys (down), move to row 3, column 1. Type in "INCOME". Remember, "A", and then "INCOME". Press enter. Move to row 5, column 1, and using the same technique, type in an expense you normally incur every month, EG. "HYDRO". This time, instead of hitting enter, use the down arrow to move to the next cell below. You will see "HYDRO" was inserted in that cell and you are ready to insert the next label. Type "GROCERIES", and again hit the down arrow. You can insert as many labels as you like using this technique, and save a lot of time. Once you have all your labels listed, move to row2, column2, using the arrow keys, and insert "JAN". Move across to row2,column3 and insert "FEB", and so on until you have the twelve months listed in row 2. When you have typed in "DEC", hit enter, and then "CTRL1".

This function, "CTRL1", takes you home, or back to the start of the sheet, "R1,C1". You can always get back to the start from anywhere on the sheet by hitting "CTRL1".

Now lets save this, by typing "T", and then "S". Now type in "BUDGET/92" and hit enter. The file is saved to disk under that file name. To check to see if it was saved, type "T", then "L" for load, and then an arrow key. The file will be listed on the screen, and to bring it back, simply highlight it by using the down arrow key and then hit enter. This is how we will retrieve the file for entering more data. Next month we'll do just that, and I'll show you how to insert formulas for totalling your monthly expenses. See you then!

Pat McGillen

IS  THERE

?? ANYONE OUT THERE ??

* who has, or knows of, a list of do-it-yourself TI-99/4A upgrades including their instructions/parts sources?

Please contact
Dick Bulmer
c/o the Kawartha Chronicle

SEPTEMBER							OCTOBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
			1	2	3	4					1	2	3
6	7	8	9	10	11	12	4	5	6	7	8	9	10
13	14	15	16	17	18	19	11	12	13	14	15	16	17
20	21	22	23	24	25	26	18	19	20	21	22	23	24
27	28	29	30				25	26	27	28	29	30	31

NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7				1	2	3	4
8	9	10	11	12	13	14	6	7	8	9	10	11	12
15	16	17	18	19	20	21	13	14	15	16	17	18	19
22	23	24	25	26	27	28	20	21	22	23	24	25	26
29	30						27	28	29	30			

XB MISCELLANY #12

By Earl Raguse

FILES, FILES, FILES and STILL MORE FILES

When I was a young boy, my father was a blacksmith and a farrier (that's a \$25 word for a blacksmith horseshoer). Then a FILE was either a Mill File (smooth) or a Double Cut Bastard (fairly course). There was also the "file" that my father used to finish trim the horse's hoofs, called a "Horse Rasp". It had a very coarse side, and the other side was a little rougher than the D C Bastard. I used it for shaping wood. In school, we had fire drills, where I learned what "Single File" meant. Later, I found out that the administrators kept "files" on the students. When I grew old enough to get a job, found out there were "Payroll Files"

That was my education on files until I went to UCI, circa 1970, and learned some computer programming in Fortran and BASIC. Then I discovered that just about everything having to do with the computer required a "file". If you wrote a program, that was a "Program File", and many computer programs wrote and read "Data Files". Now I find that our 99/4A is pretty much like those computers, only better.

Program and data files are what I shall talk about this time. What I say here is a compilation of what I have read in many newsletters, and from personal experience with the TI 99/4A, not the least of which were the XB and E/A Manuals. hereinafter, EXTENDED BASIC and ASSEMBLY LANGUAGE will be just XB and A/L. BASIC will mean TI-BASIC unless otherwise noted. A partial list of some newsletters which have published good file info are: the UGOC ROM, LA 99ers Topics, Long Island 99er, St Louis Computer Bridge, Greater Akron 99er, Columbus's Spirit of 99, Cleveland Area UG newsletter, Birmingham BUG etc, etc, etc.

I suppose "program" files, as the disk cataloggers call them, are the most common, for the 99/4A they can be in many forms and languages. In BASIC and XB they are largely distinguished by the size. 45 sectors is the largest BASIC file that can be loaded. XB size can

reach about 50 sectors, after that they become INT/VAR 254 files, requiring expansion memory. Most BASIC programs will run in XB unless character sets 15 and 16 are used. When you try to run such a file in XB you will probably crash with a "BAD VALUE IN in xxx".

Programs written with XB, using the rules of BASIC will run in BASIC, but a normal XB program will often crash with a "FOR NEXT NESTING in xxx" etc. If you list the program you may see a lot of gibberish, because BASIC cannot interpret a double colon correctly, or the DISPLAY and ACCEPT, commands among other things.

Program files may be identified by their size as follows:

<33 Sectors: Try in order, BASIC, XB, A/L

33 Sectors:

Probably an assembly language program, especially if there is another file with the same name, but the last letter is the next letter of the alphabet. Try to RUN it using the E/A cartridge LOAD and RUN Option.

34 Sectors:

These are probably GRAM-U-LATOR or GRAM KRACKER files. They will end in numbers from 1-7. You need a GRAM device to run them.

>34 Sectors: First try it in BASIC or XB, it may be necessary to free up memory with CALL FILES NEW OLD DSK1.Name RUN. This could also be a FORTHSAVE file, and can only be run with the Forth kernel, see DIS/FIX 80 below.

52 Sectors:

Tunnels of Doom files usually use this format.

54 Sectors:

Scott Adams Adventure series uses this format.

Other Program Files that won't RUN: Likely a data file for another

program, don't erase it, you might find that some other program won't run without them.

File parameters other than length are Internal (INT), Display (DIS), Fixed (FIX), and Variable (VAR). The latter has a record length associated with it.

Program Files of major interest are as follows.

INT/VAR 254 ...

These are XB programs, you must have the memory expansion installed. They are executed with RUN "DSKx.Name". Good programmers place a file named LOAD on the disk, and when XB is selected, it automatically runs and hopefully executes a DIRECTORY or MENU program for you to select what is to be run.

DIS/VAR 163 ...

Most likely an XB MERGE format program. This is used for both programs and subprograms. They may be loaded with MERGE "DSKx.FileName". They may be loaded into empty memory, (ie after NEW) or with a program already in memory. If any of the line numbers in the merge file are the same as those already in memory, they will overwrite memory lines. A merged subprogram will not RUN, it must be CALLED from within a running XB program.

DIS/FIX 80 ...

These are assembly language programs which can be RUN with the E/A cart, MiniMem, FW etc. One of these is Forth, which will automatically start running when loaded with DSK1.FORTH. When asked for the filename, enter DSKx.Name and press ENTER. Sometimes they will load and start running, like Forth, but more likely you will be asked for a file name again, enter the additional files, if any, else just press ENTER. Next you will be asked for Program Name. If you have no other info, try START, BEGIN, FIRST, RUN, GAME, or even LOAD. Else use the FW loader, it will suggest names it reads in the file. If all else

fails, one can use a sector editor to read some of the names in the last couple of sectors of the file. Personally, I believe that if the programmer makes you go to all this trouble, "to heck with it."

There are three forms of assembly language programs, TAGGED OBJECT, COMPRESSED TAGGED OBJECT, AND MEMORY IMAGE.

TAGGED OBJECT files are stored in DIS/FIX 80. They are in HEX. They are loaded and run as above. Can be loaded via XB or (TI-BASIC using the E/A or MM modules) using CALL LOAD statements.

COMPRESSED TAGGED OBJECT files are like the above, except that they it can not be loaded from XB. Both forms are produced from the same E/A source code.

MEMORY IMAGE files are the most compact of the assembler programs, and can be stored and loaded from cassettes. They are loaded from disk with E/A option 5 or TIW option 3. They are fast loading and auto-starting. There is a size restriction of 2400 bytes, but larger programs can be loaded as multiple files. The loader looks for files whose last character is one greater than the previous. For example GAME, GAMF, GAMG.

DIS/FIX 128 ...

These are probably Forth screens which must be loaded and compiled with Forth. Do not confuse with Archived files. These files are identified as SYS-SCRNS. One executes a loaded and compiled Forth program by entering the key word. Most probably the last word defined on the last screen loaded. Good Forth programs will prompt you, and you should not even need to know that it is written in Forth. Some Forth disks will load from XB like any other auto-loading XB disk with a LOAD program. That concludes the list of program files in the normal sense. I will continue with the various forms of data files.

BITS & PIECES

THE LATEST SCORE AND MORE!

At the June meeting, we discussed the progress of the five members who attempted the 16/32 speed-up modification. Those who were there will recall that three of the five reported success and were impressed with the difference the mod makes - vive la! Bob Tisdale and I were still hoping for something akin to a miracle so we too could be impressed when using our TIs.

Our next progress report will be at the September 16th meeting. Will Bob and I report success? Come on out to the meeting and get the success score straight from the horses' mouths.

Here's more about my Horizon 3000 RAMdisk. It's now [July 1] looking good. Recall that at one of our spring meetings, I mentioned having a problem setting it up. I phoned Bud Mills Services and at Bud's suggestion sent it to him to be checked out.

Well, Bud found and corrected some problems then toted it to Lima where he gave it to Phil Townsend who also attended the Lima fair. Phil very kindly brought it back to Peterborough along with all the goodies he had acquired. Talk about cooperation and service!

To begin, it seemed OK. Then it seemed to develop a case of forgetfulness. I wasn't too concerned at first. Shucks, I have a touch of the same problem myself, every half hour or so. I hadn't heard of electronic device Alzheimers, but when it began to forget more often than I, it was obviously time to arrange some more electronics doctoring.

As luck would have it, Glen Daniels and I had made plans to visit Toronto and check out the "buys" at a couple of surplus electronics stores. So, I called Gary Bowser of OPA and asked him if he would mind doing a quick check of my HORIZON 3000. If it checked out, he might give me a refresher on RAMdisk Course 101 to get me running. No problem! Gary said to drop by on our way to the surplus shops. We did and I left the HORIZON with him.

When Glen and I returned about five hours later, Gary was just completing some tests to be sure the card was working right. It seems there was a cracked solder joint that could have been caused during transportation or (perish the thought) even when I was installing the card. Whatever the cause, Gary found the fault and fixed it. While I have not found time to finish partitioning and really put it through its paces, HORIZON 3000 has worked flawlessly the few times I have fired it up.

I don't know how long it took Gary to find and mend the fault, I do know that Glen and I picked his brains for about an hour and he didn't appear to mind one bit

Oh, the cost for all this? My sincere expression of gratitude and a firm handshake. Gary said he fully supports the HORIZON RAMdisks and was pleased to be able to help anyone in the TI community.

Did I hear a few IBM/MAC/ETC entrepreneurs rolling over in their, um, lairs?

Dick Bulmer

3 1/2 INCH DISK DRIVES ON THE TI99/4A
BY FRANK AYLSTOCK

The 5.25" (360k) drives are becoming another orphan, like our TI. The disk controllers do not know if you have 3.5" or 5.25" drives. The only thing they know is what your input is, and the only control you have is the number of tracks per sector, number of sides and density. The TI disk controller will handle double sided but only single density. The Corcomp controller will handle double sided and double density. The Myarc card with the QUAD CHIP installed will handle disk drives up to 720k. The 5.25" quad density drives are another orphan but you can use 3.5" disk drives. The 3.5" drives can be up to 1.44meg this means that you will have 2880 sectors or the equivalent of 8 SS/SD floppy disks. The only drawback to the 3.5" drive is that all the programs you receive come on 5.25" floppy disks. However you can set up your system so that you have at least one 5.25" disk drive and the others 3.5" drives. The HFDC by Myarc will also accept up to quad density disks.

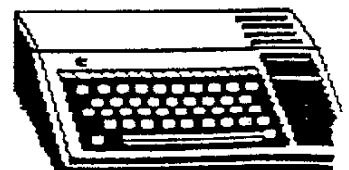
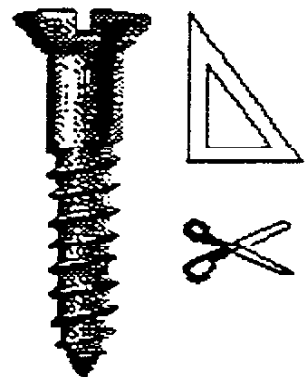
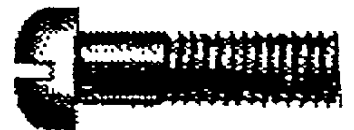
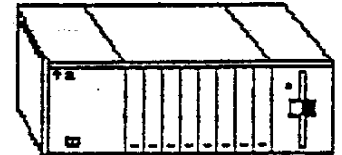
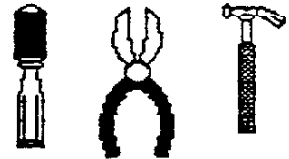
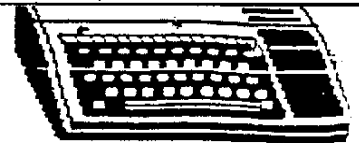
I would recommend that you switch over to the 3.5" drives as they are a superior form of storage for the following reasons.

- 1) The disks are enclosed in a shell/cover which hold them rigid and will not allow the disk to get bent. You can even write on the disk directly without harming the data.
- 2) They contain their own sliding reusable "write protect tab". By merely moving the tab up or down the disk can be protected.
- 3) The size is a large consideration as they require a lot less space to store or transport them.
- 4) They contain a sliding door which protects the storage medium at all times. This door opens and closes automatically when the disk is inserted or removed from the drive.
- 5) The size also helps to read and write data faster than the 5.25" floppy disk drives.
- 6) The disks are coated with superior oxide which is less vulnerable to data loss.
- 7) They are considered more reliable than 5.25" disks especially important when dealing with quad density disks.
- 8) The drives take less current during the reading and writing process. In fact some of the 3.5" drives use only the 5 volts.

Last but not least is the price. Around this area (Los Angeles) the drives can be purchased for as little as \$50.00 and there is no conversion or other hardware changes to be made and they will replace the existing drives with very little labor.

Look into these drives!

The above was reprinted from the BREA USERS GROUP



CONSOLE-ING THE ORPHAN

The Newest TI!

by Phil Townsend

The continuation of new products in the computer field is not news, but when it involves the Texas Instruments it catches my attention. At the moment TI is manufacturing and marketing a product called the Organizer model 6600. This pocket sized computer has 64K of RAM and contains a calendar, memo pad, schedule maker, world time database, calculator, metric / imperial and monetary convertor. It can search any one or all modes for whatever information you ask for. Your inputs can be erased and the memory can be reformatted. Passwords can be entered so that access to your information can be controlled. All of this and it runs on 2 triple A batteries with a lithium battery backup so that when you have to change the battery you wont lose your information. Now comes the real kicker, a separate connector can be purchased (an "UpLink" kit) which enables you to send your information to any other computer.

TI is advertising the Organizer through the UpLink to be DOS compatible, however the Apple Canada technical staff assure me that the Macintosh will also be able to take the uploaded data as well with the correct cabling. Guess what, so can the TI 99/4A because the output is ASCII and the UpLink is standard RS232! With the correct cabling, all of these connections can be made. Should there be anyone out there who has already accomplished any of this connectivity I would appreciate hearing from you.

Oh, I almost forgot, the cost of the "Organizer 6600" is \$149.00 Canadian and the UpLink kit is \$100.00 Canadian. While I was in Lima at the MUG Faire, I saw this organizer in Radio Shack with a Tandy logo on it for about \$139.00 U.S.

Videos ...

Several new videos are available now through the Kawartha 99'ers regarding our favourite Orphan. The Kawartha/OSHTI Konnection now can boast of a jointly produced video of interviews and views of and with the vendors at the Lima MUG computer conference. Much

information is available in this tape of what is currently available for the TI and where it can be located. Also the Lima tapes will be available for the 1992 conference. These tapes take up about 15 hours. The taping of Charles Good demoing the newly rewritten Editor for Funnelweb created by Tony McGovern is well worth watching.

Tom Jakabfy of the OSHTI group has produced a how-to video of installing the 32K fast Ram upgrade to the TI console. The quality is excellent. Congratulations Tom on a job well done!

Tools of the Trade

Computers are terrific tools, as are paints and brushes, chisels, cameras and other such paraphernalia particularly in the realm of education. These tools are only productive when the user has the freedom to explore, a working knowledge of the application and the expertise derived from practise. If electronic tools are not provided in the quantity necessary for our children to utilize frequently and regularly then the tool cannot be effectively utilized for individual expression. Should you have the ability, knowledge and resources of computers to share with a teacher and his/her students then by all means do it. However, just dumping some hardware / software onto a teacher will not ensure any improvement in education, the key is in the training of the educators along with the students. In the teaching profession we encourage life long learning.

Teachers must also make sure that they are a part of the learning process so that the new technologies may be utilized effectively. Whether it is a wordprocessor, database, spreadsheet, paint or page layout program most teachers need help in learning how these new tools can impact upon our children's program and their future. If you can be of service in helping the educational community learn about the tools of this Century jump in and join this exciting endeavour. Your contributions of time and experience will help to improve our students skills for the 21st Century.

Keep on "Consoie-ing the Orphan",
Phil Townsend