TO:

TI 99ERS

GROUP

99'ER ONLINE

NEWSLETTER OF THE
EDMONTON 99'ERS COMPUTER USER'S SOCIETY

99'ER ONLINE is a monthly pulication of The Edmonton 99'ers Computer User's
Society.

Please mail all corespondence to P.O. Box 11983, Edmonton, Alberta, T5J 3L1

NEWSLETTER STAFF

EDITOR   BOB PASS

JUNE MEETING

The final meeting of the season will be Tuesday, June 12 'th at 7:30 PM. Location is in the staff dining lounge adjacent to the cafeteria of Victoria Composite High School. All members should attend as we will be conducting our election of officers and holding a very important discussion on the direction you would like to see this Users Group go in next year.

We desperately need to provide more for the novice users out there who have been badly ignored over the past months; to this end, we have initiated a question/answer period (on any computer subject at any level) and a problem corner for more extensive work in TI Basic.

Also, we are extending the library services as discussed at the May meeting to include non-copyrighted programs on tape. These tapes may be taken home for one month where you can make your own copy at your leisure. Details on how the system will work are to be ironed out at the June meeting.

At this meeting the winners of our programing contest and (hopefully) the Logo contest will be announced. Perhaps Bob Chapman would favor us with another problem to solve over the summer break?

THE EDITOR'S CORNER

Sincerest THANKS for the excellent material you fellow Key-Board-Bashers have been sending me. Without your contributions, I would be at a loss as to what to put into these pages. I am not a creative person but I can certainly recognise creative work when I see it! How about some material from some of our younger members? Perhaps a game review, a short outline of how you solved a program problem, or newspaper and magazine clippings of interest.

Again, thanks.   Bob Pass

FOR SALE

Moonbeam Software's Strike Force 99, Astromania, Cavern Quest. Also, Wizard's Dominion. All are on cassette and require X-Basic. $15 each. 459-0817.

(Advertising is available to members free of charge. Commercial space is available at $5 per 1/4 page. Members should see Bob Pass while commercial camera ready material can be sent to the P/O box).

LITTLE GEM

You are running a program which has required you to input much data and has put you through many manipulations of the key-board, tapes, and or diskettes. Then you do it! You have pressed "FCTN CLEAR" by mistake. Before you cuss out every thing that is near and dear to you and before you type in "RUN" to start over again, try typing in "CON" for continue. At worst, you will have lost some screen display but all of your keyed in data and variables will be retained and the program will execute normally with the exception of graphics displays.

IN SEARCH OF A PRINTER?

by: Thomas Island

Saturday night; everyone's gone to bed but me! I'm hunched over my terminal, my back is sore, and my eyes are bloodshot. I'm frustrated because my program doesn't work! Debugging a program while online just doesn't do it for me!

does this sound familliar to you? Debugging sessions like this are called ALL NIGHTERS. You spend most of your time staring glassy-eyed at a screen listing sections of code trying to find that elusive bug. It would be easy if you could only remember what line does what or if you could see the whole segment at once!

The answer of course is a printer; many benefits await you: 1). you'll get to dinner on time, 2). wifey won't nag you, 3). the kids will recognise you, 4). you won't be a stranger to the familly dog, and 5). you'll have something to read on the bus besides the Sun.

These are only side benefits mentioned to get your intrest. Here are the real advantages: 1). source code for debugging, 2). word processing (letters, essays, user group news-letters, etc), 3). ASCII codes for fancy printing, 4). hard copy program backup, 5). graphics.

I didn't realise these benefits until I took a long trip down COMPATIBLE LANE. I must admit that I'm a clutz when it comes to computer equipment. Everything I've bought has always been in a package; all I had to do was plug it in! Now you know where I was at. I soon discovered that printers do not come in packages ready to be plugged in --- they must also be compatible with your computer and with your vision of your needs. Some research soon revealed the following requirements:

1) PRINTER MUST BE RS232 COMPATIBLE
This means that the printer can accept serial data from a standard RS232 communications device.

OR

2) PRINTER MUST HAVE A PARALLEL INTERFACE
This means that the printer may be connected to a standard parallel communications device.

NOTE: The TI RS232 card provides two serial ports and one parallel port. Therefore you are not restricted as to choice of interface for your printer. The two types of interface derive their names from the way in which the data defining each ASCII character is transmitted to the printer. Any ASCII character can be expressed with an eight bit binary code. In serial interfaces, these bits are transmitted one bit after the other on a single pair of wires. Parallel transmission sends all eight bits at once, side by side, on eight parallel wires.

3) REASONABLE PRICE
I was ready to spend $600 (Canadian) for my printing system.

(IN SEARCH OF A PRINTER CON'T)

Thus armmed, I made may way into the market places of the vendors of computer equipment.

I priced the FX 80, MX 80, and the APPLE printers. All were in the $800 to $1150 range and this was just 8 months ago! I just couldn't get used to paying that much for a printer. I badgered a salesman into telling me his cost price. I was shocked to find his profit was $450. No way was he going to get that from me.

Time to change tactics. I checked the used market by looking through the Journal and Bargain Finder. Prices here were lower but I'd be buying an older model without a warranty. I also looked in magazines such as 99'er and Compute for mail order printers from the US. Companies like Tenex, Elec-tec, and International User's Group had printers for $100 to $200 less. However, after adding import duties, shipping, and dollar conversion there was no real saving.

But, I did learn something while looking at the dealer's demos: there are many different kinds of printers. Letter quality printers use type faces very similar to a typewriter. The so-called "Daisy Wheel" printer is this type. They are quite expensive, slow, and noisey and should be considered if you _must_ produce professional documents. Ink jet printers are new on the market and are very fast and quiet. They are, however, trouble prone due to the ink clogging in the jets.

The third type is the Dot Matrix printer which forms it's characters from several dots. Each character can be placed within a matrix of dots. The more dots in the matrix, the better the quality of the print. Some printers use a 4X7 matrix while the better ones will use a 5X9 matrix. So-called letter quality dot matrix printers although good will still not produce good copy for professional use.

I re-evaluated my requirements and found that the dot matrix type printer would be ideal for the following reasons: 1). fast program listings, 2). word processing for essays, mailing lists, and documentation with different type styles, pitch, underlining, bold face, large or compressed characters, and graphics, 3). quietness, 4). high speed 80 to 120 CPS, 5). sprocket feed fan-fold paper and on some models single sheet paper, 6). easily available maintenance, 7). three month warranty, 8). a user manual that is intended for the home computer user and frequently includes BASIC program examples of how to use the printer.

With my $600 budget, two months passed with nothing but rumors to go on. Finally it happened - the GEMINI 10X. It had all the features I needed and more and a price of $550 at HI-TECH. My search was over at last. Alas, my bank was closed and I'm not in the habit of keeping that much money in loose change around! As my Dad always said "No money, no funny!", so I went home and watched the tube while I silently wept to myself.

The next day a friend of mine pointed out an add in the Globe and Mail. The Gemini 10X was listed for $359 at Computer Junction, 2087 Dundas Street, Mississauga, Ont. Right away I got on the blower to Toronto, orderd the printer including $20 shipping and waited 10 days for the same printer HI-TECH was selling for $550! For once in my life I_GOT_A_DEAL.

Essentially the 10X is a clone of the Epson MX 80 as quoted from various dealers. It is a dot matrix printer that handles 8 1/2 X 11 sprocket paper. It works very well with my word processor (Companion). Lately I have seen the 10X in the Journal for $415 and at the Computer Connection store in West Edmonton Mall for slightly more. In the six months I've had the printer nothing has broken down and it is an endless source of entertainment.

However the bottom has fallen out of the printer market; there are fantastically low prices in the US. This is a good place to start shopping. Try Tenex, Tex-Comp, or Elec-Tek. Alternatively, check section number 43 of the Bargain Finder for used printers. This tabloid comes out every Wednesday at newstands and costs $1.

In conclusion when you search for a printer please remember that to get a good deal requires a lot of hustle, luck, and being on top of things. In my approach I new my immediate needs but was not knowledgeable about a printer's capabilities. I suggest you first question friends, make out a list of requirements, read reports on the printer and see a demo. Lastly, look in the newspaper; you'll get a good price comparison. As a final note I hope my experience has been of some help.

PEEKS AND POKES FOR THE TI99/4A

by: Ken Godbeer

CALL LOAD	EFFECT
-31748,N	N=1 Cursor and sound normal speed.
	N=100 Very fast.
-31804,0,36	Same as typing "BYE".
-31806,N	N=16 Disables FCTN QUIT.
	N=32 Disables sound.
	N=48 Disables QUIT and sound.
	N=64 Disables Sprite motion.
	N=80 Disables Sprites and QUIT.
	N=96 Disables Sprites and sound.
	N=128 Disables all three.
	N=0 Restores all three.
-31878,N	Disables N Sprites.
-31???,63,255	Disables Disk Drives.
-31???,55,215	Restores Drives if followed by RUN, NEW, or by EDITing a line.
-31962,255	Re-boots to "LOAD" program.

CALL PEEK	
-??672,A	If A=96, then speech is attached.
	If A=0, then speech is not attached.
-31808,A,B	A and B will contain two random integers between 0 and 254.
-31878,A	A=highest numbered Sprite.

LITTLE GEM

If you have TI joysticks and you have broken a handle, don't junk it! There are replacement parts available from TI. Write to:

    TI PARTS DEPT.
    P/O BOX 53,
    LUBBOCK, TEXAS
    ZIP 79408

While on the subject of TI's joysticks, if you find that the diagonals don't work or the stick is slow to respond, try opening the unit and cleaning it. At the same time, examine the printed circuit contacts on the

Mylar film printed circuit. If badly eroded, stick tiny squares of foil on using "Crazy Glue".

If you are using upto 9 IF-THEN statements to test your CALL JOYST(1,X,Y) variables, then you should try this formula:
```
100 CALL JOYST(1,X,Y)
110 Z=((X+3*Y)/4)+5
120 ON Z GOSUB ------ etc
```
This will give integer values between 1 and 9 for any joystick position. Use Z as an index to an appropriate subroutine for the joystick position.

SORTING

by: Bob Pass

Further to a question posed during the question period at last month's meeting, here is a more detailed explanation of how to sort items in a list. The following program uses a "BUBBLE SORT" routine which is probably the easiest for most people to figure out and encorporate into their own programs. This routine is fine for short lists or when there are few items out of place in the list. Next month I'll try to find space for a "SHELL SORT" which works faster on long lists or on many items out of order.

The program as written is a demo and will run as is. Lines 10-200 create a 50 item array loaded with random numbers and displays the array, lines 210-300 do the sorting, and lines 600-640 display the sorted array.

```
100 REM **BUBBLE SORT**
110 DIM A(50)
120 N=50
130 CALL CLEAR
140 REM **CHOSE, LOAD,AND PRINT RANDOM NUMBERS**
150 FOR I=1 TO N
160 RANDOMIZE
170 A(I)=INT(RND0)+1
180 PRINT A(I)
190 NEXT I
200 PRINT ::::
210 REM **SORT ROUTINE**
220 FLAG=0
230 FOR I=1 TO N-1
240 IF A(I)<=A(I+1) THEN 290
250 TEMP=A(I)
260 A(I)=A(I+1)
270 A(I+1)=TEMP
280 FLAG=1
290 NEXT I
300 IF FLAG=1 THEN 220
600 REM **PRINT SORTED ITEMS**
610 FOR I=1 TO 50
620 PRINT A(I)
630 NEXT I
640 STOP
```

THE IT WORKS:
This routine gets it's name from the way it "bubbles" out of order items up through the array untill it's correct place is found.

Line 220 sets an indicator to zero. Later, if an item is found out of order, FLAG is set to 1 to indicate the list is not yet ordered properly.

In line 230, a loop is initialized for the number of items in the list minus 1. It is important that you know exactly how many items are to be sorted to advoid a program crash by attempting to read beyond the array or to advoid sorting empty array elements if the array is not full.

Line 240 compares an item (element) in the array with the next item to test which item is numerically greater. If the next item is larger, then these two elements are ordered correctly and the next pass through the loop is executed by going to line 290.

If the next item is smaller, then a switch must occur. This is done in lines 250-270. 250 sets a temporary register to the value of the first item. Line 260 moves the value of the next item into the first and then line 270 writes the temporary register into the next item.

Since the item moved up one notch may still be out of order compared with items higher up, the indicator FLAG is written to 1 in line 280. Also there may be more items out of order further down the list so the loop continues at line 290.

Finally, in line 300, FLAG is tested. If it is zero, then the whole list was examined and nothing was out of order. But, if FLAG=1 then a switch occurred and the routine must be done again by going back to line 220.

As you can see, if the lowest numbered item was at the bottom of the array, the loop would hve to execute 50 times to get it to the top. There are better ways of sorting than this and if you are interested, look up "Never Out of Sorts" on page 16 of the July/83 issue of 99'er. Experiment with this routine and see if you can get it to sort in desending order.

If you need to sort strings, simply change the varible names to accomodate string variables; eg A(I) would become A$(I) etc. The computer will sort by comparing the ASCII code values of the first letters of each item; if equal, then the second letter is compared etc. For instance, the ASCII codes for "DISC" and "DISK" are 68-73-83-67 and 68-73-83-75 respectively. DISC would come before DISK because of the ASCII code sort would occur on the 4'th character. Strange things can happen in ASCII sorts however if any of the strings contain non-alpha characters; look at an ASCII chart and you wil see that punctuation marks and numeric characters are scattered amoung alpha characters. Also, a capital "B" would come before a small "a". The disk index prepared by your Disk Manager is sorted in this fashion. Perhaps you have noticed how things are order in that index---now you know why!

LITTLE GEM

This item was noticed in the may issue of COMPUTE! Quite a few people have commented that their consol "locks up" at times, especially when a cartridge is in the games port. According to two letters to COMPUTE! the problem is in the cartridge port connector. One writer took his console apart and cleaned the connector terminals on the port while the second person, upon opening the consol, found that the bracket suport of the connector was bent. He straightened it and cured the problem.

If you are having this problem, puchase a can of contact cleaner from any electronics shop or a bottle of isopropyl alcohol. (Make sure the solvents are pure, ie no lubricants or perfumes as in rubbing alcohol). Using a Q-Tip dipped in the solvent, clean the cartridge port connector carefully and inspect for physical damage. Check that no fuzz from yhe Q-Tip is left behind. Also clean the brush located in the port then re-assemble the consol. At this time you should also clean the connector on each of your cartridges; disassembly should not be required.

To prevent damage to the port, never use an abrasive cleaner such as the old pink eraser trick. Also, never use force to insert a cartridge! Some people have the habit of gripping the rear of the consol with their fingers and raming the cartridge home with the heel of their palm. This tends to drive the cartridge in too far resulting in bent parts as mentioned above.

ADVENTURING!

There is a class of games you can play on a computer called "adventures". These are essentially word oriented, not grapics with the associated motions, colors, and sounds. The games present a scenario and an objective to be attained. The scenes quite often evoke fantasies inhabited by strange creatures and objects which are more at home in tales of witches and goblins. Other scenes take place in space or on a deserted island. In either case, don't sell these "games" short as they require many hours to solve.

Despite the fact that the game is presented as a series of brief descriptions, you will soon find that you are not noticing the words at all! Instead, you will be experiencing somewhat the same effect of being engrossed by a good book: you will be actually "into" the scene itself as you scan the scene with your minds-eye, searching for that vital clue that will get out of this present situation. The playing of the game is thoroughly absorbing in itself and at the same time it has an educational value. Your powers of deductive reasoning can't help but be improved once you sucessfully complete one of these games. This, in turn, will have benefits in day to day problem solving situations.

The first adventure game for home computers were written on a 16K TRS-80 by young Scott Adams in 1978 who was inspired by a Dungeons and Dragons type game on a main frame computer. Professionals thought it couldn't be done on such a small machine! Adams is now thirty years old and controls "Scott Adams International" from Florida, distributing adventure game software written for all major makes of home computers.

The Scott Adams 12 adventure series games are available for the TI on tape or disk. In addition, you will also require an Adventure Command Module which includes the Pirate Island game. As the games last for hours, there is a save game feature which will let you put it away for the night so you can pick up where you left off. This feature is also handy if you are contemplating a risky action: save the game first, then proceed. If your suspicions are correct and the move was disasterous, you can reload your previous position and think about it some more!

I and my kids find these games exceedingly engrossing and they are definitely in a different league from the usuall computer games. If you have not yet tried one of these, by all means do so. Perhaps you could borrow the command module from a friend to try out before investing $40 dollars or so. Do not expect to solve one of these in an evening! You will likely spend many sessions glued to the screen and many days with a blank look on your face as you puzzle out the clues.

Here are some tips to help you get started:
1. Ignore nothing: if the the programmer took the trouble to put something into the scene, it's usually there for a reason!
2. Examine every thing: clues can be hidden any place like under rugs, inside shoes, etc. Try to find magic words or even objects in some scenarios.

3. Try the "off-beat": remember you are in a fantasy land! You may have powers you are not aware of or, conversly, there may be things which you cannot do.
4. Read the top of the screen after every command: this area describes the scene and what objects are in your possesion. Some objects are only visible for limited times.
5. If you get a command response of something like "I can't do that", then you are likely barking up the proverbial. However, if you get "I can't do that yet" then you are definately onto something but you need to have a certain something in your possesion first.
6. A map is handy: as you play the game, you will be moving about from scene to scene; up, down, north, south, and so on. You can get lost very easilly! Prepare a map on a piece of paper showing your route and what was visible or what happened in each setting.

A new adventure frome Scott Adams call "Return to Pirate Island" is now available as a separate module. This one features grapic clues rather than words. Reportedly, it is excellent.

An adventure of a different type is the Tunnels of Doom module which presents a different version of the same game each time you play. It too features grapics, save game option, and difficulty levels. It also allows multiple players.

Other suppliers of software have not be idle in this popular area. "Wizards Dominion" has you exploring a cave with a thousand rooms and ogres of varying degrees of nastiness awaiting you! There is another supplier in the market who is retailing extensive adventures for $69. One of them is a murder mystery that occupies two disks! (At this writing, I do not know the name of the game or that of the supplier. Apparently, Games Gang has them). Examine issues of 99'er for additional suppliers of adventure games.

For the do-it-yourselfers, why not write your own adventure? If you avoid graphics, the slow speed of TI consol basic is not detrimental to this type of gime. For some ideas, see the October '83 issue of ---er magazine. There are two programs you can type in as well as advice on how to structure your own program.

Considering the rotten weather we have been having lately, one of these games might be less frustrating trying to get in a game of golf between rain showers!

MY APOLOGIES!

If this letter reaches you late, I do appologise! Due to a heavy scedule in May, I found myself between that rock and a not so soft place trying to get this news letter together.

At this time, i am not sure if we will publish a July news letter or if it will come out in August. In eiter case, I will certainly get it out on time! Please watch for it as there will be many important items resulting from the June meeting and perhaps a new format.

As mentioned earlier, I appreciate any publishable articles you send me. If you have either the TI Writer or the "COMPANION" word processor, then I could use your material directly from disk! Your disk would be returned ASAP with thanks.

A HAPPY AND SAFE SUMMER TO YOU ALL
Bob Pass

MILTON BRADLEY MBX REVIEW
by Paul Helwig

After a long uncertain wait the Milton Bradley MBX Voice Recognition System and command modules have finally arrived.

The MBX System comes complete with keypad(this box also houses a speaker for speech so the T.I. speech synthesizer is unnecessary). It also has a headset with a microphone (headphones do not operate), the microphone is quite sensitive to outside noises which can interfere with the users commands. The joystick is an analog type, this joystick has 6 input channels, trigger, 3 thumb buttons, x-y stick and a twist knob on the top of the stick.

All components are of good quality and very easy to operate. The only weak link is the joystick, it responds well, but the travel is a bit too long when changing from the extreme left to the extreme right. There is about 4 inches of movement from left to right.

Before purchasing the MBX System okay it with your wife (or mother). She may get worried about you talking to your computer, and have a valid reason why you should not get one. Then you'll be in trouble for spending more time talking to your computer than you do talking to her. The MBX System retails for about $200.00 and has been known to be on sale from time to time.

Many thanks to Chuck from The Games Gang for loaning me this equipment for review.

* Note: When purchasing Milton Bradley Games all can be used with the MBX System, but do not necessarily use the voice recognition.

LOGO CONTEST WINNER

EDMONTON
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LOGO CONTEST WINNER !

As of the end of last month we have had two submissions for our club logo contest. I guess were all scientists not artists, too bad. scientists like to play games now and then.

All complaining aside, we do have a winner!! Many thanks to FRANCIS GASTON of Saskatoon, Saskatchewan for th excellent submission. One note Francis we may have to make some small changes to your logo. because the use of the TI trade mark is most likely a copyright infringement.

Good work Francis you should be proud to see your logo on all of the clubs letters, membership cards and stationary. Thanks again.

P.S. your prize is in the mail.

Paul Helwig