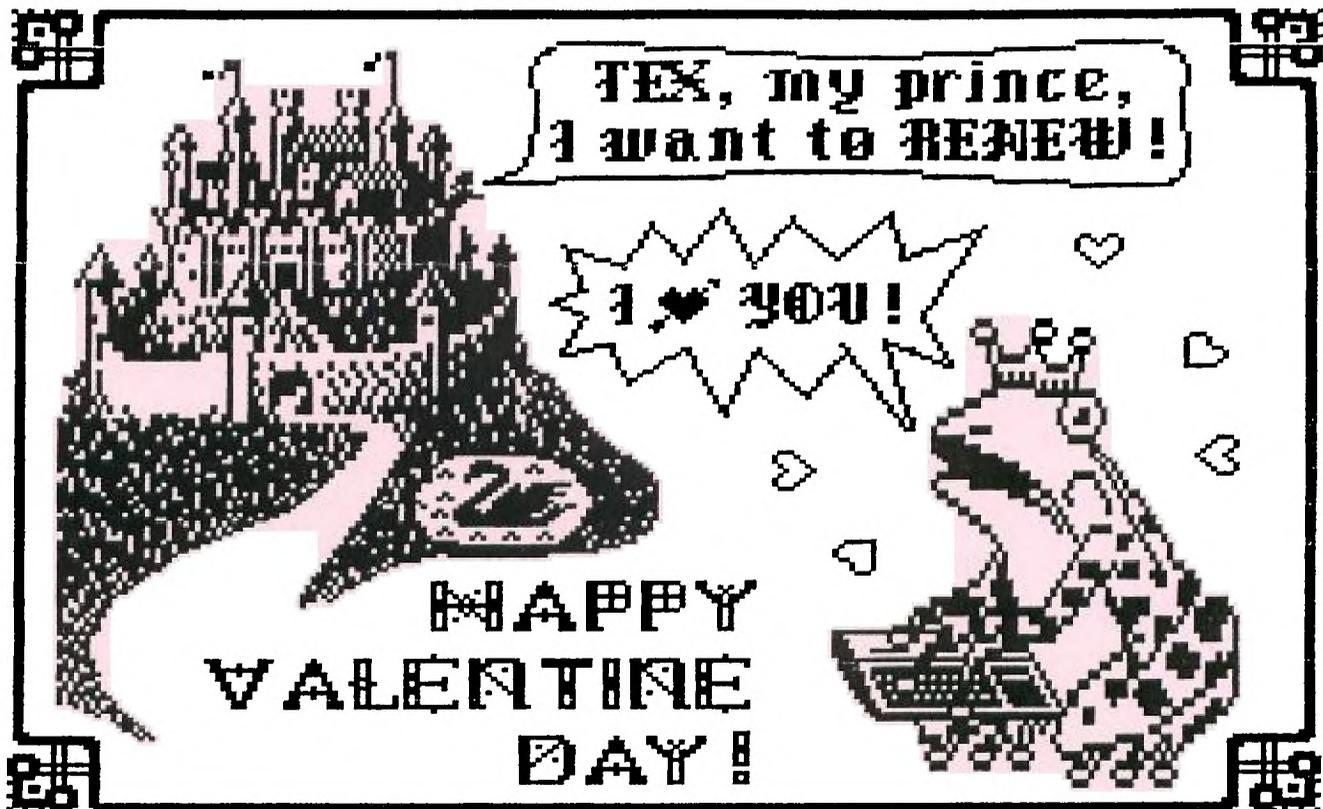




The Ottawa T.I.99/4A Users' Group



Volume 10, Number 2 ... FEBRUARY 1991



DON'T FORGET THE MEETING -- February 5 1991  
and Remember to Return your Exchange Newsletters...

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

## COMING EVENTS

February Meeting:           5 Feb 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.

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

April Meeting:               2 Apr 1991                   Merivale High School  
                              7:30 PM

Newsletter Deadline:       15 Jan 1991                 (17 Feb. if Uploaded to BBS!)

### EDITOR'S NOTES by Philip Harris

The first thing to say about this issue is that if you haven't paid your 1991 Membership Dues (still cheap at \$25), then this will be the last issue you receive. We will continue to print a few extra copies of the Newsletter (just in case you are late with your renewal so we can ensure that you don't miss any copies), but this will only last until April. Then production will have to be limited to the numbers required.

Good news! As of this issue, we are going to try and re-establish contacts with some of the various TI clubs around the world again. As you know we consciously dropped sending Newsletters to all of the clubs, since it was getting to be too expensive, plus we were not always getting responses "of kind" back from these clubs. We did manage to remain in contact with a few clubs which either paid a membership due to get the newsletter or remained in contact through club members privately. This issue will be sent to approx 20 clubs with a letter asking them to let us know if they still exist and if they would like to start to exchange letters. We have taken this action, since the step to drop the other clubs was not a popular one with them and we quickly lost a source of important Newsletter and club material/contacts. We will try to re-build our club listing over the next couple of months. The fact that we've reduced the cost of the Newsletter to a more reasonable cost is also a contributing factor (although the new postal hikes plus the GST are going to hurt!).

Last month after receiving Lucy's archived Newsletters article, I discovered a peculiar phenomenon while de-archiving the files. Her archived file contained the cover picture for the Newsletter and the XBasic column for which she is renowned for. I set out to de-archive the file to a disk and half way through the process I got a Disk Full message and the de-archiving aborted. I deleted some old files off of the disk and noted which file had de-archived (it was the XBasic column). Since it appeared I had the XBasic file I just de-archived the Graphx cover picture to complete the process. Anyway, I used TI-Writer to print out her XBasic column and glancing at the last paragraph that started "Tex now has all the information it needs to ...". Having read this I thought that that was the entire file printed out. Later (after Lucy received her Newsletter copy) I found out that during the de-archiving error that only part of the text file had de-archived. Despite the file being incomplete it loaded well into TI-Writer (of course a Program file would have crashed if Run, but maybe it could still have been Loaded into memory with only the last program lines missing). Just food for thought next time you are de-archiving a file. Needless to say the "missing text" is printed for you this month.

**THE PRESIDENT'S TWO CENTS WORTH**  
by Paul Meadows

I would like to reiterate what our editor has written about membership renewal. The Club needs your support, for without it we are not a club and therefore we cannot function and provide the service to our members. This support comes in many forms and not just your membership dues. Certainly, like everything these days, it does cost money to run the Club, especially this Newsletter, but we also need your time and energy to attend and contribute to meetings, etc.

It is the etc that I'm addressing my Two Cents towards. This April we would like to hold the sixth Annual Ottawa TIFEST, but in order to do so we MUST have your input and support. Enclosed in this Newsletter is an article written by Bill Gard regarding the FEST. If you can contribute, please let us know now (either by phone, mail, or at the monthly meetings).

**OTTAWA TI FEST-1991:**  
by Bill Gard

This years FEST is in the preliminary planning stages. In order to assist in this planning it is important to know what sort of attendance we can expect in April. Letters were written to vendors, suppliers, and other Users' Groups, of these fourteen letters were sent to the USA, while eight were mailed here in Canada. To date we have received affirmative replies from RAVE 99 (for the 27th April), KAWARTHA 99er's (representing Canadian Distributor for Comprodine and Great Lakes software: either 20th or 27th), and Texaments who are willing to consider selling software on a consignment basis.

We have had also had replies from Harrison Software, Channel 99 Hamilton UG, The Boston Computer Society, T J Software. These organizations will not be attending this year.

We are still waiting replies from the following:

COMPANIES: a. Northern Family Computer Co.;  
b. Oasis Pensive Abucators;  
c. Asgard Software;  
d. Bud Mills Services;  
e. Genial TRAVELER Diskazine;  
f. JP Software;  
g. MS Express Software;  
h. MYARC Inc.;

USER'S GROUPS:

j. 9T9 UG (Toronto);  
k. Chicago TI UG;  
l. CIM 99 (Montreal);  
m. Sudbury 99er's UG; and  
n. Oshawa TI 99 4A UG;

For the subscribers of this Newsletter it is requested that you contact me via mail or telephone to indicate whether or not you will attend. Please indicate if Saturday 20th, 27th or both dates in April are preferred. For those in the Ottawa area, I would like you to consider being a part of the Organization and Planning Committee, as well as volunteering to assist during the day of the FEST. In order to make the event a success depends on the input and participation from Club members in particular.

I can be contacted at (613) 523-9396(H) or (819) 994-8720(W) or :

c/o 3489 Paul Anka Drive  
Ottawa, Ontario  
K1V 9K6  
Canada

Once again it is intended to hold the FEST at the Merivale High School in Ottawa. Let me hear from you so we can gauge the interest and volunteer participation that we can expect at the 6th annual TI FEST.

F A S T F O R F O R G E T T I N G  
Lucie Dorais

Since this month we print the last part of the tutorial for last month's LISTCOL program, I will keep my next biggie (a graphic program!) for March. So, if you want it, **RENEW NOW!**

In the meantime, to keep your fingers and brain busy, I offer you a very useful program: COLORMIX. It is a very intuitive way to find the best color combination, not only for text screens, but also to create some more colors by mixing them into some pre-defined characters (yes, Tex can do romantic pastels!).

After the instructions, the screen will present you an example of text and of some "pastel" characters, with a display of the fifteen colors on the right. To mix them, just move the cursor on a color and press ENTER, then another color and ENTER (the previous foreground color becomes the background one), until you get what you want. At all time, the numeric values of the two colors are shown at the bottom, so you don't even have to know if the color is light, medium or dark. When you quit, you will get the character definitions for the six "pastel" characters.

```

100 REM ** COLORMIX ** L. Dorais, Ottawa UG, May 1984/Jan. 1991
110 !
120 CALL CLEAR :: CALL SCREEN(2) :: CALL COLOR(3,16,2,4,16,2,13,16,2,14,16,2)
    :: CALL MAGNIFY(2)
130 CALL CHARPAT(69,C$,84,T$,88,P$) :: CALL CHAR(130,T$,131,C$,132,P$,133,"")
140 GOTO 150 :: B,F,K,R,S :: CALL CHAR :: CALL HCHAR :: CALL VCHAR :: CALL
    KEY :: CALL SOUND :: CALL SPRITE :: CALL LOCATE :: !@P-
150 T$=CHR$(130)&CHR$(131)&CHR$(132)&CHR$(130)&CHR$(133) :: T$=RPT$(T$,50)
160 CALL CHAR(136,"55AA55AA55AA55AAAAAAAAAAAAAAAAAAAAFF00FF00FF00FF00CCCCCCCC
    CCCCCC" 140,"FFFF0000FFFF0000CCCC3333CCCC3333")
170 P$=RPT$(CHR$(136),28) :: FOR X=1 TO 6 :: P$=P$&RPT$(CHR$(135+X),28) ::
    NEXT X
180 C$=RPT$("F",16) :: CALL CHAR(64,C$,134,C$,135,"",34,"FF8181FFFFFF")
190 CALL HCHAR(21,1,64,160) :: CALL VCHAR(1,27,64,192)
200 FOR X=3 TO 16 :: CALL SPRITE(#X,64,X,12*X-24,230) :: NEXT X :: CALL
    SPRITE(#2,34,16,5,230)
210 ! ** instructions **
220 DISPLAY AT(3,9):"COLOR MIX": : : " To mix two colors" :: CALL
    HCHAR(4,11,45,9)
230 DISPLAY AT(8,2):"- MOVE the * CURSOR": " on the chosen color":
    " with E/X, then"
240 DISPLAY AT(11,1):" press [ENTER]": : : " - Q to QUIT" :: R=122 :: CALL
    SPRITE(#1,42,2,R,231)
250 DISPLAY AT(19,2):"press [ENTER] to START" :: GOSUB 370 :: CALL SCREEN(15)
260 CALL KEY(0,K,S) :: IF S=0 OR K<>13 THEN 260
270 ! ** color mix screen **
280 B=2 :: CALL SCREEN(2) :: DISPLAY AT(2,1):T$:SEG$(T$,1,56):RPT$("@",28):P$
    :: GOSUB 370
290 CALL KEY(0,K,S) :: IF S=0 THEN 290 :: IF K=13 THEN 330 :: IF K=81 THEN 380
300 IF K=88 THEN R=R+12 :: IF R>170 THEN R=2 :: GOTO 320 ELSE 320 ! cursor up
310 IF K=69 THEN R=R-12 :: IF R<0 THEN R=170 ! cursor down
320 CALL LOCATE(#1,R,231) :: GOTO 290
330 F=INT(R/12+2) :: CALL SOUND(200,660,2) ! color chosen with <enter>
340 CALL COLOR(13,F,B,14,F,B) :: C$=CHR$(134)&"@"&STR$(F)&"@"&STR$(B)&"@"
    &CHR$(135)&"@"
350 DISPLAY AT(23,8)SIZE(LEN(C$)):C$ :: B=F :: GOTO 290
360 CALL VCHAR(1,27,64,96) :: RETURN
370 !#F+ ** end **
380 CALL CLEAR :: CALL SCREEN(8) :: PRINT " CHARDEF": : : : : FOR X=136 TO 14
390 CALL CHARPAT(X,C$) :: PRINT " "&CHR$(X)&" "&C$: : : : : NEXT X ::
    PRINT : : : : END

```

Since part of the screen will be black, we must color the digits and the display characters in white on black; we use big sprites to display the colors (this way we use only one character, and can keep all our color sets for text, etc.). In line 130, we redefine some set 13 characters to spell "TEXT", then we pre-scan the program; note that the pre-scan is put on again in line 370, not because it is requested, but to take advantage of the numerous CALLs in the last two lines of the program. The TEXT string T\$, with a total length of 250 char., is built in line 150, then we redefine the pastel characters in set 14. Line 170 builds the PASTEL string P\$: two rows of char. 136, the most "pastel"

one (one row built outside the loop, one inside), then one row of each other char. Line 180 redefines many characters as filled squares, and char. 34 will be used as a black marker on white to point to the color "black".

The screen is then built: by CALL HCHARing "@" 160 times at row 21, we fill five rows (32x5), four at the bottom (21-24) and one at the top, with only one statement! We then CALL VCHAR some more "@"s at the right, to offset our color sprites. Those are put on screen in line 200, then the "black" marker (char. 34). The instructions are then DISPLAYed on screen, and we GOSUB 370 to redo our black background (erased by the DISPLAY) for the colored sprites. The SCREEN is finally CALLED as grey (15), so the instructions can be read, and the cursor, sprite #1 (char. 42, the asterisk) is put in place, with R as its starting pixelrow.

In line 280, B, the variable for the background color, is set to black (we need to start somewhere!), then the screen is again made black. The TEXT string (11 rows high) and the PASTEL strings are displayed, separated by a black line {"@"s). Now you can mix your colors! Note how compact are the IF statements; if you press an unwanted key, no problem, in line 320 the cursor will simply be re-LOCATED at same row R, and Tex will go back to the CALL KEY in line 290. If you press E (69) or X (88), the sprite cursor moves by increments of twelve pixelrows, with top to bottom wrap-around (lines 300-320). If you press ENTER you go to line 330, where the foreground color F is calculated according to the pixelrow R of the cursor: if it is on the sixth color, therefore on pixel row 60 (formula  $12 * X - 24$  in line 200, where here X would mean sprite #7), the color will be  $\text{INT}(60/12+2)=7$ , dark red (it is the sixth color on screen because the first one, black, has a value of 2). Tex beeps to accept your choice, sets 13-14 are recolored, and the bottom screen gives you the two color values (C\$ in lines 340-350). The variable B (background color) takes the value of F (foreground), ready for the next change of color.

When you press Q to quit (ASCII 81), you go to lines 380-390: the screen is colored pale blue, the six pastel characters are CALL CHARPATED and then printed on screen. When the program ends, you will have all your time to study them and write down their definitions. Be extra careful with the colons when you type those two lines: the statement [ PRINT " CHARDEF": : : ] is understood by Tex as print "CHARDEF": on one line, then print two more empty lines. Same thing in line 390: [ PRINT : : : : END ] will be understood as: print three empty lines, then, after the :: separator, end the program.

**Editor's Note:** Here is the installment from Lucy's last month's XBasic program that did not get printed.

Tex now has all the information it needs to calculate the best arrangement on the page, and it will display it in a new "info screen": the list filename FM\$ with its CTR total lines, and the new list TO\$ (or printer name). A line below the graphic will tell you what Tex thinks is the best number of COLUMNS, total LINES and PAGES for your new list (line 370). Then some more useful information is displayed (lines 380-390); line 400 just puts a "<" besides the variables that you can then modify (Width-of-Space between columns, Left Margin and, if you want the new list on printer, Printer-Width).

We now GOSUB 650 to calculate the best arrangement. Follow me... CW is the total Column Width, i.e. Width-of-Word plus Width-of-Space; NC is the Number of Columns, calculated by dividing the Printer-Width, less Left Margin, by the column width CW. The Right Margin is then calculated (the right column CW will already include some spaces after the words, so we subtract them). The Total-Line is simple: take the total of data lines in your first list, CTR, and divide it by the number of columns, with some adjustment. Then the PAGE number is simply the total printed lines, TL, divided by 60, our default total lines per page.

Line 410 DISPLAYs the resulting values on screen: Width-of-Space, Left Margin, Right Margin and Printer Width are all displayed in column 25, with the user-def. sub CALL D. Number of COLUMNS, Total Lines and PAGES are all displayed on row 9, and we use CALL E. Finally, Tex builds the graphic on the screen. Again, follow me with a GOSUB 670...

To compare each intended printed line with the string XX\$, we must first build an A\$ string of 0s and 1s to represent it; it will have 80 or 132 characters, depending on our choice of printer width; disk file width is always 80. Lines 670-680 is simply code to erase a larger graphic (for 132 char.) before we build a slimmer one (for 80 char.). If no need to do that, Tex goes to line 690, where our Width-of-Word is represented by 1s and the Width-of-Space by 0s; the Left Margin (all 0s) is added in front and each column repeated for our Number of Columns NC; finally, the right margin is added. The S variable used in this portion of the program holds the previous Printer Width, useful when we go through line 670 to refresh the width of the screen graphic..

We now need to analyze our long string to compare it with XX\$. If the Printer Width is 80, we read by segments of four until we reach position Y=77 (if PW=132, then Y=129). K is to calculate the column to display our characters on screen (if PW=132, we start in column 1; if PW=80, we start in column 7: see the CALL VCHAR in line 720). The IF in line 710 is because if we get a result of 17 for the position, finding the segment "1011" in XX\$, that would mean to display character 119+17, i.e. 136; but, in line 160, we have redefined it to be a magenta line used to enhance our display screen, so we will use character 131 (119+12) instead. Line 720 CALL VCHARs our characters on the screen (we will see three lines of our proposed list). If the reading position is below 129 (always if our Printer Width is only 80), we can put everything on one line; the last character for a 132-wide line will be displayed at the right of row 9, preceded by a "+" sign (ASCII 43).

With our graphic on screen, we can now modify the Width-of-Space, the Left Margin and, if we print to a printer, the Printer Width (lines 430-460). The calculations are displayed, and the graphic will be refreshed accordingly when we GO back TO 410.

Finally, we print the new list; SP\$ and LM\$ are simply the space between columns and the left margin translated into strings for easier handling. At this stage, you can give a T\$ title to your printed list; Tex will also print the page number in the form "page 3/4 of TITLE". Line 510 opens the file with the corresponding width (DISPLAY VARIABLE 80, default, or 132); if we are in 132 mode, CHR\$(15) will put your printer into condensed (compressed) mode. Each page PP is now processed and printed, which takes a while... have a coffee now!

Line 540 prints the information on top of your new list: title and page number are printed in double-width, put on with CHR\$(14), put off with CHR\$(20). We now reuse variable S to hold the total lines per page (60 if total lines of new list is higher than 60, or the total TL if it is smaller); Tex needs that info to know when to stop reading the old list and print the page! The variable C here simply counts the LINPUTed lines of your old list so you can keep track of what is happening. Each page is held in the I\$ array, so when we build column 1 (Y=1), we need to erase the previous data (if we print more than one page). We then LINPUT a line of data from our old list FM\$; again, we close the file if we encounter a line of control characters (TABs), or the End-Of-File (EOF); otherwise, we need to "pad" each data line with spaces: K will tell us how many spaces for each line (Maximum Width-of-Word WW less actual length of our linputed line); the result is then added at the end of the I\$(X) string. This is done for the Number of Columns NC multiplied by the total lines per page S (FOR-NEXT Y and X, lines 560 and 590). When the page is built in memory, Tex will print it in one loop (line 600). When a page is done, Tex prints a form feed, CHR\$(12). If we still have data to print, i.e. if TL>60, then we decrement that total by 60 and we GOTO 530 to do the next page. Otherwise, we close the file; if our printer width was 132, we reset the printer to normal (ESC "@" ) before closing it.

UNDER THE PALM TREE...  
by Lucie Dorais

When was it when you last read about some exciting new stuff for our Tex? If you don't read MICROpendium, you haven't, unless you are also, or alternatively, reading Barry Traver column in COMPUTEK MONTHLY. When COMPUTER SHOPPER shamelessly abandoned us, Barry didn't, and the Monthly, same size and format as the other one, has openly welcomed Barry and our opinion, as it has all the other so-called "Classic" Computers.

In the January 1991 issue, the featured company is Canadian-based OASIS PENSIVE ABACUTORS, or OPA, owned and operated (as sole programmer and developer?) by Torontonian Gary Bowser (with an "s", not a "z", Jane!). Gary has been a member of the Ottawa Group for a while, and has made the trip to our Fest more than once. Not only is he Canadian, but his products are making big waves. Here are some of them, as I copy from Barry's article, as unfortunately I don't own any of them myself yet. One reason being that I am one of the few PEB-less people left in this world, but I might look for one after I read that article!

RAMBO, not the muscle man, but his cousin the Random Access Memory Bank Operator, has been around for a while; it is an upgrade for the Horizon Ramdisk, that allows you to use the HRD for both RD space and program space (by bank-switching); if you also have OPA's new ROS 8.14 for the HRD, the bank-switching is easy to program.

But, that is nothing besides the next item: you might want the 9938 video chip capabilities, but do not want to invest in a Geneve, or cannot get a DIJIT card because you don't have a PEB (my problem), or cannot get the Mechatronic 80-column device; or you can, but they are too expensive. Now read that: Gary offers you not the 9938, but the fastest 9958 chip, which he calls TIM (TI-IMAGE-MAKER), with a full 192K of video mem on board, for only \$150 US!!! And where do you put the beauty? Right inside the console, to replace the present video chip, so no PEB, no daisy device! The only drawback is that to see the improvement you will need an RGB monitor, but apparently those who have tried TIM and splurged for a new monitor are more than happy with the results. You have to install it yourself, but apparently it is easy (if you know how to solder, which I don't, but then I am only a woman...). Also included: some software and full docs, including a new GIF viewer... Nudies for the men, the tiger for Jane and me. All the present programs that use the 90-column capabilities of TI, as FUNNELWEB, TELCO, and Asgard's new paint program YAPP, which can use only 80 columns, are all reported to work very well with TIM.

TIM alone would put OPA on the map, but this is just the tip of an iceberg. The article also mentions that Gary Bowser is working on all kind of hardware that will do things that were never done before: a Speech package (\$40 US) that comes on 10 disks plus a tutorial book, which allows Tex to speak (and sing?) like never before. GIZMO is an 8-slot module expander, sort of a big widget, BUT you can take advantage of more than one cartridge at the same time! Run an XB program, store your data in the Minimemory! Also in the talks, and hopefully in the works: a Z-80 emulator, a digitizer, and more. Software side, OPA markets Gary's own programs TASS (a TI-Artist Slide Show) and DISKODEX, a disk-organizing program that can read the comments you have put in with John Birdwell's DISKU manager. (Sad to say, John left us a few weeks ago after a long illness; he will be missed.).

For more information, write to Gary: Oasis Pensive Abacutors, 432 Jarvis Street, Suite 502, Toronto, Ont., Canada, M4Y 2H3, or phone him at (416)960-0925 or (416)960-1425, 8 a.m. to 11 p.m. Eastern time, or call his BBS at (416)921-2731, 1200/2400, 24 hrs. As to his presence to our TI-FEST this year (end of April), Gary has not yet confirmed his presence, but we cross our fingers.

Other useful addresses: MICROpendium, P.O. Box 1343, Round Rock, TX 78680 (rates: \$25 US, \$32.50 US for Canadians). Vulcan's COMPUTER MONTHLY: P.O. Box 7062, Atlanta, GA 30357-0062.  
ASGARD SOFTWARE: P.O. Box 10306, Rockville, MD 20850.

### 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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**NEW MEMBERS \$25.00**  
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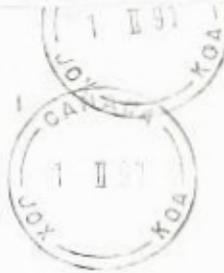
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Please make cheque payable to the Ottawa TI-99/4A Users' Group and send it, along with this form, to the address shown on the cover page -- or better still, bring both to a meeting.

Did You Renew or Is this  
Your Last Issue?

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