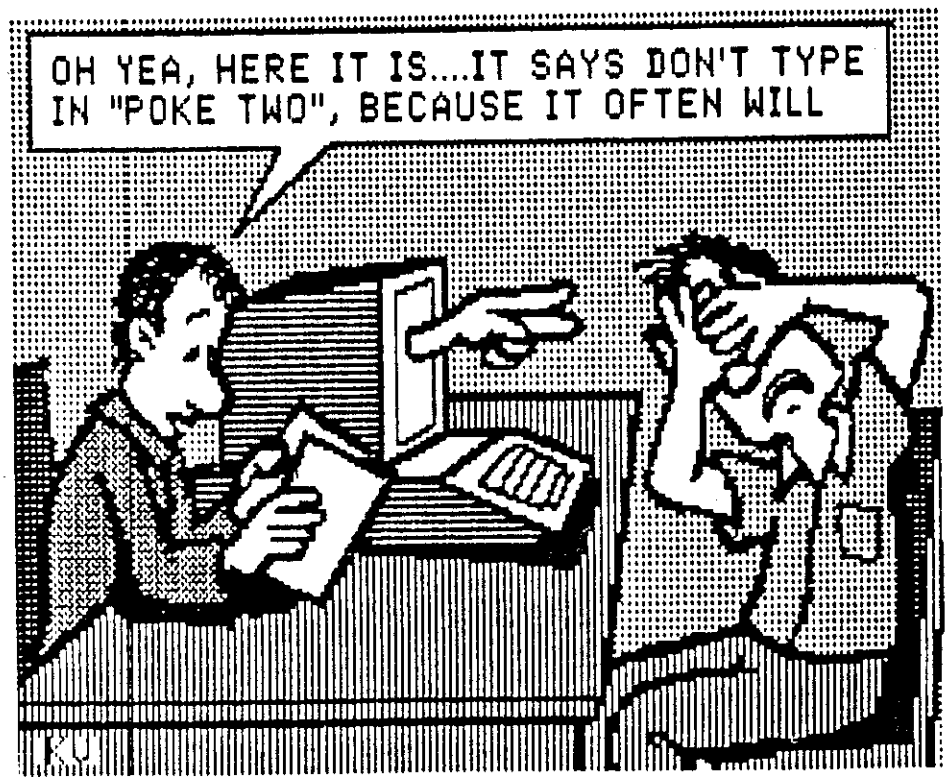
Newsletter Nine-T-Nine

JANUARY 1991 ISSUE
MEMBERSHIP RENEWALS THIS MONTH!

Texas Instruments
USERS GROUP
TORONTO

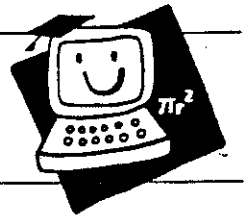


FROM:
9T9 USERS GROUP
15 KERSDALE AVE.
TORONTO, ONT., M6M-1C9
CANADA

To:

January 1991 Issue
Membership Renewals This Month!

Computers for Kids



A COMMUNITY PARTNERSHIP IN EDUCATION

Save the UPCs from Vachon cakes and flakys and help your local elementary school acquire computers, printers and software.

FOR MORE INFORMATION: See details in selected grocery stores, contact your local elementary school or call Computers for Kids at 1-416-581-1730.

WE'RE HERE FOR YOU THROUGHOUT THE YEAR. YOUR BUSINESS PRINTING & COPY PROFESSIONALS.

ZIPPY PRINT

1991

JANUARY

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

FEBRUARY

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

MARCH

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

APRIL

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

MAY

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

JUNE

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

SEPTEMBER

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

Circled are the 9T9 Meeting Dates for 1991

OCTOBER

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

NOVEMBER

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

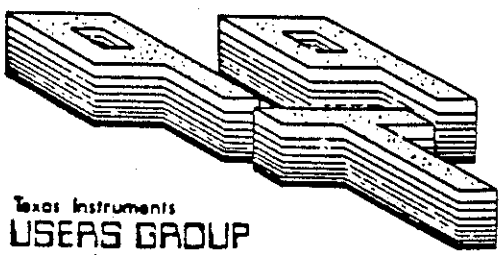
DECEMBER

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

ZIPPY PRINT

2372A Yonge Street
Toronto, Ontario M4P 2E6
Tel.: (416) 440-1792
Fax: (416) 440-1794

121 King St. West
Toronto, Ontario M5H 3T9
Tel.: (416) 367-1050
Fax: (416) 367-3275



Texas Instruments
USERS GROUP
TORONTO

Newswsletter Nine-T-Nine

9T9 USERS GROUP EXECUTIVE COMMITTEE
PRESIDENT Steve Mickelson (657-1494)
VICE-PRESIDENT Neil Allen (255-8606)
SECRETARY/MEMBERSHIPS Randy Rossetto (469-3468)
TREASURER/OFFICER AT LARGE Cecil Chin (671-2052)

LIBRARY DIRECTORS
Gary Bowser (960-0925)
Andy Parkinson (275-4427)
Steve Findlay (416) 727-6807

NEWSLETTER EDITOR
Steve Mickelson (657-1494)

MEMBERSHIP FEE'S
FULL MEMBERSHIP ..... $30.00 / year
NEWSLETTER SUBSCRIPTION ..... $20.00 / year
DISK OF THE MONTH subscription add .. $30.00 / year
(Delphi memberships add $3.00 for credit card fees)

All memberships are household memberships. A newsletter subscription is only for those who do not wish to attend meeting but wish to receive our newsletter and have access to our library. You are welcome to visit one of our general meetings before joining the group. If you wish more information contact either our president, in writing, at the club address on the front cover or phone him.

The meetings are usually held on the last wednesday of each month (exceptions are December's meeting date, usually mid-month and the months of July and August, when there are no meetings. Consult this issue of Newsletter 9T9 for the date and time of the next meeting. Meetings are usually held in the lecture room main, at Canada Remote Systems, 1331 Crestlawn Dr., Unit D, Mississauga (Eglinton Ave./Dixie Road Area), from 7:30 - 10:30 PM. Meeting dates for 1991:

January 30 - February 27 - March 27 - April 24 - May 29 - June 26 - September 25 - October 30 - November 27 - December 11 - All meetings are on a Wednesday

BBS
The 9T9 Users Group supports the Toronto BBS. The TI Tower BBS #(416) 921-2731, 300/1200/2400 BPS, 24 hrs. Sysop, Gary Bowser.

MAILING ADDRESS
9T9 Users Group 15 Kersdale Ave., Toronto, M6M-1C9, Canada

COMMERCIAL ADVERTISING
Any business wishing to reach our membership may advertise in our newsletter. The rates are as follows: (width by height):
FULL PAGE (7" x 10") $30.00
HALF PAGE (7" x 5") $15.00
QUARTER PAGE (7" x 2 1/2") $ 7.50
Please have your ad's camera ready and paid for in advance. For more information contact the editor. Don't forget, that any member wishing to place ads, may do so free of charge as long as they are not involved in a commercial enterprise.

NEWSLETTER ARTICLES
Members are encouraged to contribute to the newsletter in the form of articles, mini programs, helpful tips, hardware modifications, jokes, cartoons and questions. Any article may be submitted in any form by mail or modem. We welcome the reprinting of any article appearing in this newsletter providing credit is given to the author and 9T9. If more information is required, call the editor. The names 9T9, Nine-T-Nine, Newsletter 9T9, 9T9 Users Group, and Nine-T-Nine Users Group are copyright (c) 1982,1983,1984,1985,1986,1987,1988,1989,1990,1991, by the 9T9 Users Group of Toronto, Canada, all rights reserved.

DISCLAIMER
Opinions expressed in this newsletter are those of the writers and are not necessarily those of the 9T9 USERS' GROUP. 9T9 cannot assume liability for errors or omissions in articles, programs or advertisements. Any hardware modification or project is presented for informational purposes and the author, newsletter editor, staff and/or 9T9 Users Group cannot be held liable for any damage to the user's equipment. All such projects are done at your own risk!

TIDBITS #45

-By Steve Mickelson, President 9T9 Users Group
Compuserve 76545,1255; Delphi SMICKELSON; GEnie S.MICKELSON

Renewal/Election Time

Another year has passed and it's time to remind members to renew memberships and to prepare for elections of your 1991 Executive. With the advent of a new year, we see that the TI is still well supported, including a number of new products, including a MIDI music interface, new hard/floppie disk controller, new expansion boxes, and a number of new software releases.

The most important news from our last meeting is that our user group meetings will now take place on the last Wednesday of the month, at Canada Remote Systems. The next meeting will be January 30. C.R.S. now has a new meeting hall facilities, so our meetings won't be as cozy as the last couple of meetings, which were in very cramped quarters. Also, thanks to all those in charge of newsletter exchanges, who have noted the club's new mailing address.

Double Vision?

It was pointed out to me, last meeting, that the Extended BASIC program listing, in last month's Newsletter 9T9 was printed twice. Funny thing was that I was so engrossed in cutting and pasting the December's issue,(in the wee hours of the morning, I'd like to add), that I ended up doing another listing and lay-out not realizing that I had already included the listing in my artwork! I guess that's one of the occupational hazards of trying to juggle back to back meetings and newsletters within a couple of weeks, holding down a job and preparing for the Christmas holidays. It's amazing Mr. Murphy hasn't arrived to "Lay Down the Law", any sooner!

Ontario Computer Fairs

Because of our limited budget, the 9T9 Users Group passed this fall, in paying for a table at the last Computer Fest '90, which was held at the Arts & Crafts Building at the CNE. The table originally offered at $150.00 was offered at a reduced $75.00. Still too steep a price for a non-profit organization with limited funds. Unfortunately, attending such Fests almost always resulted in two or three club memberships.

Since we did not have a table at any TI Fest last year, the usual membership or two we lose each year, was not replaced.

It was with great pleasure that I received a phone call from Mr.Jim Creighton, of Ontario Computer Fairs. Mr. Creighton told me that his organization sponsored local computer Fairs around Ontario and that, in addition to the fifty or so commercial vendors, our Users Group, if accepted, would be provided a table, with electrical power connection gratis! Mr. Creighton recognized the importance of computer users groups to the computer community and therefore had hoped we could participate in the next fair, on January 27, 1991, at the St.Lawrence North Market, 92 Front St. East,(at Jarvis St.). A check with those executive I could get a hold of approved acceptance of the offer. When I called Mr.Creighton back, he asked if they could place an ad in the newsletter, namely a $1.00-off coupon to pass on to our members,(see last page of this issue).

It seems that there are a couple of other fairs in the Toronto vicinity, that our club may represent, I will inform you here if we do. The Oshawa TI Users Group participated in one such Fair in Bowmanville, which was covered in a local Oshawa newspaper. I agrred with Mr.Creighton's philosophy that fairs being held in Bowmanville and Burlington would be territories covered by the Oshawa and Hamilton users groups, respectively. However, fairs in Brampton and Newmarket, would be of interest to our group, as they would fall within areas already serviced by the 9T9 Users Group.

Although no fair is planned this year in Ottawa, North Bay, or Sudbury, I mentioned that there are TI groups there, which might be interested participating in a fair. Apparently consideration is being given to expanding in 1992. Perhaps this may be a solution to the reduced resources of the Ottawa Users Group, which I understand has shrunk considerably since Ottawa had discontinued exchanging newsletters with other users groups. Perhaps all the clubs in Ontario should consider uniting resources and arranging to have a TI fest within one of these fests. I have not brought this idea to our executive or members, as we have yet to have a meeting.

However, Mr. Creighton was receptive to such an idea, as long as commercial TI vendors paid for tables. The logistics of planning such a fair are complex and involved, but I feel such a fest is worthy of discussion.

MEETING DATES FOR 1991:

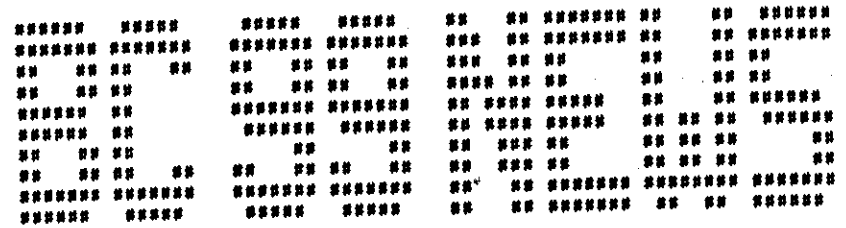
JANUARY 30 - FEBRUARY 27 - MARCH 27 - APRIL 24 - MAY 29 - JUNE 26 - SEPTEMBER 25 - OCTOBER 30 - NOVEMBER 27 - DECEMBER 11

PLEASE NOTE - ALL MEETINGS ARE ON A WEDNESDAY.

GTO - PAGE 3

TI System For Sale

1 TI Console with 32K Internal memory upgrade
1 Peripheral Expansion Box - Includes the following:
  -TI Disk Controller card
  -RS-232 Card
  -3 Disk Drives
1 Extended BASIC cartridge
1 "Hunt the Wumpus" cartridge game — TORONTO —
+ Lots of books
>>>>>>>>> Contact Glen Hamel at 849-1489 <<<<<<<<<<



B.C. 99ER USERS' GROUP

November 1990

Mail to 216 10th ave., New Westminster,
British Columbia, Canada, V3L 2B2

TI WRITER TUTORIAL

TEXT EDITOR CONTROL FUNCTIONS for TI-WRITER, BA-WRITER and FUNNELWEB

by Jim Miller

MENU AND CONTROLS

The first thing we have to do is make a couple of assumptions as to which of the 3 above versions of our TI WORD PROCESSOR we are going to use.

For the sake of conformity only I suggest that we use BA-WRITER and go on from there.

IF YOU DO NOT HAVE BA-WRITER GET A COPY NOW.....

Don't forget "FUNNEL-WEB" is a bit DIFFERENT in the way it reacts to some keys. While the changes are MINOR, they do differ from some of the SPECIAL COMMANDS in the original version of TI-WRITER.

Now we all have a copy of the program, our TI-99/4A, key board, expansion system and at least 1 disk drive and extended basic cartridge

(of course a monitor wise guy) all turned on and ready to go.....

A) Insert disk: press #2 for X/B

Whirrrr, Whirr goes the disk and the program loads and on the monitor the "TITLE SCREEN" pops up and you are asked to "PRESS ENTER TO CONTINUE".

You press enter and the "MAIN OPTION SCREEN" shows on the screen.

YOU HAVE 3 OPTIONS.....

1) FOR TEXT EDITOR

2) FORMATTER

3) UTILITY

For this session we will forget OPTION 2 and 3. (FORMATTER & UTILITY). We will deal with these separately during future discussions.

We will concern ourselves only with option #1 TEXT EDITOR.

Now, press #1 and.....

The "MAIN MENU" is replaced with the "EDITING MENU".

NOW...THIS IS WHERE IT ALL BEGINS and your first real decision is to be made.

You could, at this time, go directly into the "EDIT" mode and start typing any text but, as the defaults are right now your screen would allow only 33 columns or 33 combinations of characters or 33 spaces in which to put letters or numerals, or symbols, spaces, punctuation marks or what have you before all your text would move or "WINDOW" 15 columns to the left.

"WINDOW #2" displays the last 19 columns of your text and the next blank 16 columns. Typing 15 more characters would fill "WINDOW #2" and when the 16th letter was typed "WINDOW #2" would be replaced with "WINDOW #3" and the last 21 columns would be available for text.

When the first line is filled the whole operation is repeated and repeated as you continue to type.

Since the TI-99/4A splits the normal 80 column screen into 3 separate "WINDOWS" it is a bit confusing to some to follow what has been written and not to be able to see the text all at one time.

This problem can be circumvented by setting the "TABS" as I have done to type this discussion. If your text is going to be a long one it will of course be made even longer by limiting the width of the screen to 33 columns and increasing the number of lines by approximately a factor of 3.

SCREEN AND TAB CONTROLS

With TI-WRITER loaded and in the EDIT mode of TEXT EDITOR when I type

and reach line 34 then the text moves left and most of it disapears off the screen. This feature is called WINDOWING.

NOTICE all the text moves with the SCREEN AND "WINDOWS" AND AGAIN WHEN I HIT column 50. so as I typed, window #1 changed to WINDOW #2 and WINDOW #2 changed to WINDOW #3 which changed into WINDOW #1. The 3 WINDOWS follow each other around and around with WINDOW #2 and WINDOW #3 overlapping each other and the end of WINDOW #3 attached to the beginning of WINDOW #1.

Now to read your text and change from WINDOW to WINDOW there are 2 options. #1 is to move the cursor by use of the "ARROW" keys (S & D) which are activated by pressing and holding either (ctrl or fctn) keys down and pressing which ever arrow key points in the direction you want to move the cursor.

ORRRRrrrrr

METHOD #2, the fast way, by holding down the (fctn) key and pressing key (5). This moves the cursor one (1) full window with each pressing of the key. Try it and see how it works..

Now you can set the "TABS" at any place you want and it's very simple to do.

PRESS (FCTN+9) or (CTRL+C) TO GET BACK TO THE "EDIT MENU" THEN PRESS 'T' FOR TAB AND THE 'T' SHOWS TO THE LEFT OF THE BLINKING CURSOR, THEN PRESS <ENTER>.

Now the "EDIT MENU" line should have gone away and been replaced by a BLINKING CURSOR over a large letter 'L' on the far left of a line of dots and the numerals 1,2,3,4, etc separated by 9 dots or periods. This line is the ""TAB"" line and is used to set margins both left (L) and right (R) and other selected "TAB" points (T) you may desire.

REMEMBER.... YOU MUST SET BOTH LEFT (L) AND RIGHT (R) MARGINS TO SOME VALUE.

Let's set the tabs to give us single screen viewing of 33 columns with a 5 space indentation of each paragraph..... OK .....

We want to leave the left (L) margin at column #1..... sooo .... press (L) which moves the cursor 1 column to the right and then press the <space bar> 5 times..... then ..... press (I). This sets the indentation at column #6, 5 spaces in from the left, which is what we wanted and then press the (space bar) to move the cursor to column #33 where we press (R) for right margin set.

The last move is to press the <enter> key once more and that sets the defaults with the LEFT MARGIN at col #1, INDENTS the first line of each paragraph 5 columns and finally sets the RIGHT MARGIN at column 33.

Lo and behold it's just like we set it for. It's taken us a while to get this far but it's the first step in getting the TI-Writer to do what you want it to do and when you want it to do it.

NOW TO MAKE A NEW OR DIFFERENT SET UP YOU MUST GET BACK TO THE "EDIT

MENU". TO DO THIS PRESS <fctn+9/escape) or (ctrl+C).

Press 'T' for "TABS" and make the desired changes in the margin and tab settings. ~~ NOTE ~~ DO NOT, repeat, DO NOT FORGET TO SET THE (R) RIGHT MARGIN, TO IT'S NEW VALUE OR NOTHING WILL CHANGE. JUST DELETING THE (R) BY REPLACING IT WITH A PERIOD (.) WILL NOT ALTER THE PREVIOUS SETTING.

Any number of (T), tab points may be set and then accessed by pressing (fctn+7) or (ctrl+L) while typing your text.

THE CONTROL STRIP

The TI-Writer quick reference card is the handiest source for special TEXT EDITOR control functions.

Most special functions have dual activators using either the FCTN or CTRL keys in combination with the numeral keys or letter keys.

The TI-Writer "CONTROL STRIP" is a quick reference that sets on the console just above the number keys. In case you don't have yours, lost it, or never had one a replacement is easily made using a strip of hard manilla file folder paper.

It is well worth your time to become familiar with the various combinations of "ctrl and fctn" and number and letter keys. You will find some easier to use, or reach to activate than others.

Use what ever is easiest for you.

Lets talk about the "CONTROL STRIP".

Reading the top line from left to right we have, OOPS! , REFORMAT , SCREEN COLOR , ETC, ETC, and at the far right is a RED dot. This RED dot means the "CTRL" key is to be held down while the NUMBER KEY corresponding to the command on the top line is pressed to activate the desired command.

The same applies to the bottom line except that the "GREY" Dot indicates the "FCTN" key to be used to activate the number keys associated with the commands on the lower line of the "CONTROL STRIP".

Most of the commands on the CONTROL STRIP are and do just what they say and need no added explanation as to their function. But there are a couple are worth talking about.

1. OOPS! <ctrl+1> recovers what you deleted and didn't really want to, PROVIDED, you have not pressed <ENTER> or some other combination FCTN,CTRL key.

2. INS CHAR <fctn+2> lets you insert text, words, and or characters at any place you desire. When the combination <ctrl+2> is pressed all text just to the RIGHT of the solid blinking cursor and below it is split out to allow for the insertion of whatever. CAUTION DON'T FORGET THE SPACES NEEDED.

3. REFORMAT <ctrl+2> resets all that was moved aside by the INS CHAR command and leaves the cursor at the place where the insertion was

completed.

4. LINE #'s <fctn+0> toggles the line number column on the left on or off as desired. This will allow a few more columns for text in WINDOW #1. They can be turned on and off as desired or to check. It's up to you.

5. WORD WRAP <CTRL+0> when the cursor is SOLID, word wrap is in operation (ON). When it's a VERTICAL HOLLOW RECTANGLE word wrap is (OFF).

What is WORD WRAP ? Well when it's < ON > and the end of a line is reached the word either fits on the line or is carried over to the start of the next line. All of the above paragraphs have been typed with WORD WRAP < ON >.

When WORD WRAP iS (OFF) and the right margin limit is reached it is necessary to press <ENTER> to continue to the next line. The following paragraph will be typed with WORD WRAP < OFF >.

WORD WRAP is now off and as the ty ping goes on and the end of a line is reached if the word continues i t is split at that letter and cont inued on the next line when <ENTER > is pressed. It's a hard way to get right margin justification and it prints funny too. (notice the extra spacing and gaps in some words of the printed paragraph)

TRICKS AND TRAPS

In this session we will cover some of the TEXT EDITOR Menu command modes, CTRL &, FCTN + key combinations, some special key applications and/or tricks.

Lets start with the specials and/or tricks to be used to fool the 99/4A and TI-WRITER into doing what we want it to do.

Our "QUICK REFERENCE CARD", the QRC, dosen't say anything about how to print a & , the `and sign', in our text or a @ , the `at sign' either.

Used alone in the text the `&' will cause the next word to be UNDERSCORED or for that matter all of the following characters until a space is reached. Use of the `@' will cause OVERSTRIKING until a open space is reached.

The TRICK is to type the signs twice and the FORMATTER will then print them as a single character.

NOTE

This MAY not be true for ALL versions of FUNNEL/WEB. The double @ and the double & may or may not produce the desired symbol. This variation has been corrected in the later versions.

Used alone in text the `and sign' , ` &' will cause the word following it to be UNDERSCORED; and it will continue to underscore until a blank space is noted. If you want a series of words UNDERSCORED you must fill the blank spaces between the words with the `CARET sign' , "(shift+6)"

The above holds true for the use of the `at sign', the `@' sign. The use of the @ sign causes `OVERSTRIKING' or emphasized style printing.

The use of the `CARET', (the little vertically pointing arrow or arrow head) is for it to act as a FILLER. This FILLER is needed to make the FORMATTER assume that there are no open spaces between the series of words we want to either UNDERLINE or OVERSTRIKE.

NOTE

To get a single `at sign', `@' or a single `and sign', `&' to print the trick is to type them TWICE in a row (right next ot each other). This results in a single sign being printed by the FORMATTER.

The "FORMAT COMMANDS" will be the subject of special attention and will be covered in a separate instruction session.

There are other special application commands and tricks which we will take up at a later session and time.

TEXT EDITOR

Let's go over a few of the TEXT EDITOR COMMANDS for editing, maintaining, storing and manipulating of our text as a file.

When we load our version of TI-WRITER one of our first options was for "EDITOR". The next menu we saw was for the "TEXT EDITOR COMMAND MODE".

To see this MENU press <fctn+9> then <fctn+5> to WINDOW across, then <E+enter> to return to this point in the file.

Across the top we see from left to right:

Edit,Tabs,Files,Lines,SearcH, RecoverEdit, or Quit

We have already discussed "Tabs" and their use and functions. Before we can "Edit" anything we have to either get an old file , (one we have saved before) or create a new file.

Since we have gotten this far in the lesson plan it is obvious that you know how to load or get an old file by use of the "LF" (load file) command.

In reality the "LF" command is seen when the "FILES" sub-menu is activated by pressing <F then ENTER> from the main EDITOR COMMAND MENU. Go to this editor menu now and press (F then ENTER) to see the complete "Files Menu".

In actual practice any command in any of the TEXT EDITOR MENUS can be activated from any of the MENUS at any time. This is one of the better features of TI-WRITER.

From the "FILES" menu you can:

LoadF,SaveF,PrintF,DeleteF,PURGE or ShowDirectory

LF, SF, PF, DF do the obvious.

Purge erases the buffer not the file from disk.

ShowDirectory, SD will ask you to "Enter Disk Number". This means type the Drive number, 1, 2, 3 etc. for the Drive where the disk is located that you want the directroy from.

The "Lines" menu ask:
Move,Copy,Delete,or Show Lines

The format for entering the data or line numbers is pretty much standard. Type the line number/numbers or the line/lines to be moved then a SPACE then the line number after which the block is to be inserted or moved to.

Copy copies; Delete deletes and Show shows only those lines asked for.

SearcH (NOTICE THE CAPITOL S&H) menu ask:

FindString, ReplaceString

That's FS & RS make your choice, type in what you are looking for or want to replace throughout the text and go for it.

RecoverEdit < RE > recovers text after it has been purged except for the first line.

Quit < Q > ask if you have saved or want to save your work, if you want to purge the buffer and if you want to quit. If you have not saved your work do so before you PURGE and/or QUIT.

Our TI-WRITER "COMMAND STRIP" that is in place above the key board on the console lists the commands that are associated with the combined use of the "CTRL & FCTN" keys in conjunction with the "NUMBER" keys.

There are times when the use of the "CTRL & FCTN" keys in combination with a "LETTER" key would be easier to reach and use.

The following table list the COMMAND and the CTRL/FCTN/LETTER key combination required to activate the command.

COMMAND	CTRL+?	FCTN+?
cursor right	" D	" D
" left	" S	" S
" up	" E	" S
" down	" X	" X
next word	7 or W	
next paragraph	4 or J	
delete Char.Rt	F	1
delete to EOL	K	
delete line	N	3
roll screen up	B	6
" " down	A	4
new paragraph/ carriage retrn	8 or M	
tab left	T	
tab right	I	7
escape/menu	C	9

There are other combinations but if the above can be mastered they will go a long way in making the TI-WRITER more meaningful and functional for your use.

'DOT' (.) COMMANDS

This section deals with the TEXT FORMATTER and will ALSO discuss the PRINT FILE command from the TEXT EDITOR section.

The "PrintF" command from the Text Editor menu us basically a quick and dirty process to dump a file to your printer.

Essentially it's a "what you see is what you get" type of print out. It's good for proof reading and context and content review.

The "PrintF" command dumps to the printer the contents of the text buffer including all FORMAT commands, control characters and the like.

Now a few special commands for use with the "PrintF" command.

You want line numbers printed with your text ????

type a 'L' and a space before the devicename. ie.==> L PIO

Delete the control characters ???

type a 'C' and a space before the devicename. ie.==> C PIO

You like "Fixed 80 Format" ????

type a 'F' and a space before the devicename. ie.==> F PIO

To stop printing at any time just Press <FCTN+4>. Press <ENTER> to return to the menu.

That about covers the operation of the "PrintF" command.

To get to the real meat of the PRINT COMMANDS and the function of the 'Text Formatter' we have to deal with the 'DOT' commands.

These commands give the body of our text the format and shape we want it to have. They can be used to set up the shape of a form letter or business letter and saved to file for future use.

If a text is constructed using the formatter commands and printed by using the "PrintF" EDITOR command the text will be printed with the "DOT" commands shown as they are placed. HOWEVER printing the text though the "FORMATTER" will produce a text as directed by the "dot" commands and they will not appear in the final text.

NOW on to the ACTUAL COMMANDS.

These commands are not difficult to use BUT there are some rules that govern their use and these rules MUST be followed exactly. Failure to comply with the format of the "DOT" command and thier assigned conventions will raise havoc with the FORMATTER and it's ability to print your document.

OK.... HERE'S THE RULES.....

The "FORMATTER/DOT COMMANDS" MUST be on a SEPARATE LINE that is a line with NO TEXT to the left or right of the command/commands.

The first character on a 'DOT' command line must be a PERIOD (.)

followed immediately by two (2) CAPITOL letters that identify the command, a SPACE is not required in all cases but may be used for clarity of the command; then a number (n) to denote the number of lines effected by the command and last but not least the command/series of commands must be followed by a CARRIAGE RETURN symbol. (the wee little (cr) symbol.

ie.==> .AD (this means adjust)

If the command requires numeral to complete the command a space is inserted after the command CAPITOL LETTERS, then the number. This space is optional.

ie.==> .LM 5 (left margin set 5 spaces right)

You can have more than one (1) formatter command, "dot" command on a given line: HOWEVER, they MUST be separated by a semi-colon, (;), or else big problems will result.

ie.==> .AD;LM 5;RM 65;FI;PL 50

(notice the period (.), spaces and semi-colons in the above command line), and DONT forget the 'CARRIAGE RETURN' to end the line.

The above convention holds true in all cases EXCEPT for the OVERSTRIKE, UNDERLINE, REQUIRED SPACE AND ALTERNATE INPUT command that is the...

(@), (&), (caret) and (*n*)

The following three (3) symbols can be used anyplace in the text for special accenting of words, pharses, or form constructin etc. A "CARRIAGE RETURN" is not needed after the symbol.

@ THE 'at' SYMBOL is for OVERSTRIKE.

& THE 'apersand' SYMBOL is for UNDERLINE.

THE 'caret' SYMBOL is for REQUIRED SPACE.

(*N*) is used in and with the MAIL MERGE option that will be delt with separately.

If you use the "at" '@' sign (shift+2), all the characters to the right

of the symbol will be OVERSTRUCK until a open or blank space is reached.

If you want more than one character or word OVERSTRUCK you MUST fill the space between the words or character with the "caret" sign (shift+6).

The same convention hold true for and when the "apersand" '&' sign is used to UNDERLINE words, characters or what have you.

AGAIN THE TRICK....

IF you want to print a "at", '@' or "apersand", '&' sign you just type in two (2) of them, that is use the symbol twice.

ie.==> & or @ and only one (1) will be printed and nothing overstruck or underlined.

The "caret" plays no major role in TI-WRITER other than being used as a "filler".

Refer to page 99 in your TI-WRITER instruction book for more information on this subject.

The QRC (quick reference card) is very good with it's coverage of the "dot" commands.

NOW TO USE AND DEFINE THE "DOT" COMMANDS.

.AD right margin justification MUST be used with FI (fill)

.FI packs as many words as it can on one line without exceeding the right margin. When used with (AD) the words are automatically spaced to fit on the line.

.CE centers the line

.CE n centers the next (n) number of lines.

.LS n skips (n) number of lines

CAUTION ** Be careful with the "indent" commands below.

.IN n indents (n) columns from column 1 to the right.

.IN+n ditto but adds (n) columns to preset left margin value.

.IN-n "outdents" to the right of the left margin value.

.LM and .RM left / right margins.

BOTH of these commands can be followed by the optional (space) then an (n) so that you can specify the number of columns in from the left you want the "LEFT MARGIN" and the "RIGHT MARGIN" to be set at.

The value of (n) in both cases is the number of columns to the right starting at column #1 on the left.

EXAMPLE:

.LM 10;RM 55

The left margin is set at column 10 and the right margin is set at column 55.

The number of columns available for character placement is the difference obtained by subtracting (.LM 10 from .RM 55) which is 45 columns.

If you want more width then the (n) value for the "left margin" must be decreased or the (n) value of the "right margin" must be increased or both must be changed to allow more columns to become available for character placement.

If you like you can use a (+) sign before the (n) value for the right margin which will be the "ABSOLUTE" value for (n).

EXAMPLE:

.LM 5;RM+55

The (n) value of (RM n) is now absolute and is added to the (n) value of the left margin. The right margin is now set at column #60 to the right of column #1, this setting leaves 55 columns available for text character placement.

IN effect the (+) sign makes the (n) values "ABSOLUTE" and they become addative in relation to left margin (n) values.

There are other "FORMATTER COMMANDS" available for use and are explained in the TI-WRITER instruction book or on the QRC. The ones above are the most often used.

File merging can be done with and through the use of the Formatter, foot notes added, line centering, line spacing, page breaks and others. With these options any text can be custom tailored to fit any desired format.

Don't forget that pressing (CTRL+0) toggles 'WORD WRAP' off and on.

HOW TO USE "MAIL/MERGE"

This section will review the MAIL MERGE option and the FORMATTER.

We will also discuss some of the applications and usage for the this option.

MAIL-MERGE is a program that allows you to utilize a FORM letter and PERSONALIZE it with a persons name, address and what ever else you may want to add.

You can write the so called Xmas letter saying the same thing to all your friends with the added feature of putting in the a specific persons name or names at the right place.

This feature lets you get away from a Xeroxed letter to all the

relatives and friends that you know hate to get.

You can also print address labels with the MAIL-MERGE feature and that will take the drugery out of addressing all those Xmas cards and that is a blessing.

The first thing you need is a list of names and addresses to whom you are going to send your annual Xmas letter or family yearly activity oneupmanship letter.

This list is called by TI-WRITER a, 'VALUE FILE' .

This "VALUE FILE" has a specific format that must be followed exactly or things get all messed up. (believe me !)

The "VALUE FILE" consists of a numbered list of items (in what ever order you want) but must start with a numeral, a space, the data and finally a carriage return, (the little cr).

ie.

```
1 John Smith
2 123 His Street
3 His Town
4 His State
5 His zip code
6 John
*
1 Mr & Mrs John Smith
2 123 Their Street
3 Their Town
4 Their State
5 Their zip code
6 John & Mary
7 John
8 Mary
9 John Jr.
10 Patty
*
1 (next) and on and on
```

You can have as many as 99 variables in your list.

Now once you have your "VALUE FILE" complete it must be saved to disk under a specific filename such as "XMASLIST".

NOW THIS IS IMPORTANT..!!!!...

Your form letter must have at the top or first line, PERFERABLE ALL BY ITSELF, the "MAIL-MERGE" command which is a "DOT COMMAND".

HERE IT IS ===> .ML f

Now the "f" is the file name under which you saved you "VALUE FILE".

Next you can have to compose the "FORM LETTER", and it looks like this;

.ML XMASLIST

n (n=1)
n (n=2)
n,*n* *n* (n=3,n=4 n=5)

Dear *n* (n=6)

BLAW BLAW BLAW BLAW etc. etc.

OK, so now you have the form letter composed stored on disk as "XMAS89LTR". NOW, to get to the MAIL-MERGE option you have to get to the "MAIN MENU" and select option #2 (formatter), you press (ENTER), type the correct letter FILENAME, press <ENTER> then at the MAIL-MERGE Y/N option press "Y" then press <ENTER>, select the number of copies you want to print, press <ENTER> again and away we go. WEEEEeeeeeee !!!!

In our first letter John Smith's name, address etc. is inserted for the numbers 1,2,3,4,5 & 6 where the *n* notation is used.

This will print out as below:

John Smith
123 His Street
His Town, State Zip

Dear John

BLAW BLAW BLAW BLAW etc. etc.

Going back to our second illustration of data we can insert *n* (where "n" is any number 1 thru 9) any place we want and the corresponding data will be printed where specified.

Now remember this...Whenever you use MAIL-MERGE the computer will start at the beginning of each of the "VALUE FILES" and plow right through the list starting at item #1 and going to the end. With this in mind, remember to plan ahead before using the MAIL-MERGE option.

It's best to do a little testing first BEFORE you take off and try a big long list, have problems and end up totally frustrated.

There are ways that you can edit your "VALUE FILE" to start up again at any given point. One method is to delete all of those names used, resave the remaining values under another file name and continue printing.

Another option would be to move a block of data temporarly and continue.

There are probably other means to arrive at the same end and feel free to use any procedure that does the job for you.

ANOTHER MAIL-MERGE OPTION
There are two other methods of utilizing the MAIL-MERGE feature.

1. The "DEFINE PROMPT" command.
ie.==> .DP n:t

2. Without the "DEFINE PROMPT".

WITH "DEFINE PROMPT" command.

When the "DEFINE PROMPT" command is used the first line " .ML f " command is NOT used. ALSO the prompt for "USE MAILING LIST ?" is a "N" response for NO.

The DEFINE PROMPT command .DP n:t is inserted where data is needed or required. "n" is for the data line number and the "t" is for the "PROMPT TEXT".

WITHOUT "DEFINE PROMPT" command.

If the .DP command is not used and the computer comes to a *n* command it stops and ask,

"ENTER DATA FOR VARIABLE *n*"

Trying to remember where you are in and with your variables is a messy operation so this option is not recommended.

The only way to become proficient with 'MAIL-MERGE' is to use it. You will make mistakes but that's part of the learning curve that everyone must go thru when using this feature of TI-WRITER.

TRANSLITERATION COMMANDS

This section will review the TL or TRANSLITERATE option and it's use with the EDITOR and the FORMATTER.

You can find the TL command explained on page 107 of your TI-WRITER Manual. TI devotes Four paragraphs to it. If you can understand them and use this with your printer manual you can make your printer do everthing it's manual says it can do-and you can do it with no more than three key strokes, sometimes only one.

You can also have one special character print your name, address, or anything else up to about 25 characters in length. YES, you to can make your printer sing, tap dance and chew bubble gum at the same time.

For this discussion I am going to use the Star Gemini-10X manual. I am choosing this printer because it is a common printer and I have a manual for it. If you have a printer that is not a G-10X take heart I will try to make the process clear enough so you can use the magic too.

The TRANSLITERATE COMMAND

From the book: This command assigns one or more ASCII character values to another ASCII character value.

Sounds simple doesn't it. Well it is.

FIRST YOU NEED TO KNOW what a ASCII character value is. Take note of these two special pages in your TI-WRITER manual these pages will get plenty of use as we talk about .TL commands.

The MAGIC Pages are ››› 145 and 146 ‹‹‹. If you will look them up you

will see a column named "ASCII CODE" on them. THESE are the CODE numbers that represent the alphabet, puncuation marks, and SPECIAL CHARACTERS to TI-Writer.

We will start with page 145. There are four columns. The first two columns (ASCII CODES and CHARACTER) cover the "SPACE" through capital N.

The second two columns cover capital O through DEL. These code numbers are the numbers your computer stores in memory and represent a specific letter of the alphabet or a given other character, such as a period at the end of a sentence.

You will notice that the SPACE starts with ASCII CODE number 32 and DEL is ASCII CODE 127. Where did 0 through 31 go???? Turn to page 146 and there they are with a title of "ASCII CODES FOR SPECIAL CHARACTER MODE" at the top of the page.

The ASCII CODES FOR SPECIAL CHARACTER MODE has five columns on it. These numbers represent a list of special code numbers you can use while typing your document on the EDITOR portion of the TI-WRITER. (you won't be using the actual numbers but their assigned symbols)

The first column is the ASCII Codes numbers.

The second column is the FUNCTION ACRONYM. This is an accepted shorthand for the third column which is the FUNCTION of the ASCII Code.

When ASCII Code was first devised it was decided there needed to be a way to not only show characters but to control devices that the characters went to. These could be from printers, to modems, to card punchers, or something else a computer was controlling. This set of Special Characters is where we will do the most changing with the Transliterate command.

You will find that some of these special character/symbols won't need to be changed and can be used just the way they are.

The fourth column is the KEY PRESS sequence you need, to get the Special Character. But don't press it yet there is more to know.

The fifth column is the SCREEN DISPLAY. This shows you what you will see on your screen when you are typing and using SPECIAL SYMBOLS in your document while in the TEXT EDITOR mode of TI-WRITER.

Okay, now you should be wondering how you can make these Special Characters appear in your document. This is where PAGE 98 comes in handy. It explains what it is and how it works.

Basically what it does is let you put the ASCII Character Codes in your text and sends these codes to your printer via the FORMATTER.

Lets say you wanted to send a Horizonal Tab Code to your printer so you could line up some columns you were printing. You would first hold the 'CTRL' Key down and while holding it press the "0" Key.

This puts the computer in the "SPECIAL CHARACTER MODE" and at the same time the cursor will physicaly change shape. It will go from a

blinking vertical rectangle box like shape to a blinking underscore line one character long.

This change of 'cursor' is a visual notice that you have left the conventional text editor mode and entered the SPECIAL CHARACTER MODE. Now you are in the Special Character MODE.

The next thing to do is press the key that will put the correct special code into your text to carry out the special command you want to occur. This is where page 146 comes into play.

The special code for 'Horizontal Tab' is ASCII Code 9. To get that code you have to hold the SHIFT KEY down and press "I". At this time a small "9" with a "dot" above it will appear in your text. Once this is done you want to return to the Text Editor Mode and continue typing.

To get back, you press the 'CTRL' Key and press "U". Your cursor will change back to a verticaly blinking rectangle and you are ready to start typing again.

Oh wow, that sure sounds just great but how do I remember all those key presses and codes? I don't want to dig my TI-WRITER Manual out every time I want to do somthing special with my printer.

Don't worry I am going to show you a way to make it easy to remember. I will also go through this again later, so hang in there.

Why has he been talking about all these other things when this is an article on the TRANSLITERATE Command ?

Well it's pretty simple, you needed the background explanation so that you can more easily understand and appreciate what we are going to do next.

THE GREAT .TL COMMAND

Okay, here is where the fun starts. The first thing you need to do is turn to page 146 in your TI-WRITER Manual and get your PRINTER Manual out. As I said before I am going to use the STAR G-10X Manual. Mine is the preliminary manual so if you have the real one or a different printer you will need to find the section that is called FUNCTIONAL CONTROL CODES or FUNCTION CODES.

Once you have found this section you will see a description of the form they use to describe the CODE, PURPOSE, FORMAT, and REMARKS. Your manual may use different names for these but you should be able to tell what is what by the descriptions and what they say.

The CODE shows the functional control codes. These are the numbers etc that you will be using to access the various controls that causes your printer to change from one font to another and to perform the various commands that you tell it to do.

For example let's say you want to change to ITALIC print. On page 36 in my manual the CODE for italic print is "ESC" "4". First you look under PURPOSE for "Select the italic ASCII character set". Above it you will see "CODE: ESC 4". Okay, so now you know what you need to send your printer to make it change to italic print.

However, things are not always as easy as they seem. If you send "ESC 4" to your printer it will print "ESC 4". What you need to send is a character (27) and a character (52). Hold it ! You are cornfuzzzzsing me again.

Easy now, look below 'PURPOSE' and you will see a heading called 'FORMAT'. After it you will see "CHR$ (27) CHR$ (52)". Where did they get these numbers ?

Let's go back to to Page 146 in your TI-WRITER Manual. Look down the column under ASCII Code until you see the number 27. Now, in the next column (FUNCTION ACRONYM) you will see "ESC". In the third column (FUNCTION) you will see "Escape". So ESC is shorthand for Escape which is represented by the ASCII character number "27".

Got an inkling about the system now ?

The same follows for "4". The ASCII Code for "4" is "52" found on Page 145. In some printer manuals these numbers may be listed under CODE as "decimal ASCII". It is like that in my NX-15 Manual.

Another good thing to remember is the Escape Code is exactcy that an Excape Command. It tells the printer that the next character, or group of characters, they see are going to change what they are doing, have been doing and or how they have been doing it.

Finallllllly we have arrived, we are here, this is it the BIG .TL COMMAND.

On page 107 OF THE TI-WRITER manual it says that the format for the "TL" Command is as follows:

.TL n1:n2,...nz

The period (.) in the TL command tells the FORMATTER that this line is a COMMAND line and NOT to print it to the paper. The 'TL' tells the FORMATTER that a 'transliteration command' is coming and the NUMBERS following it tell the FORMATTER what the command is to do.

The first number (n1) is the code for the operation/procedure you want to stop using or to change from. The colon (:) is the REQUIRED separater. The next numbers (n2) through (nz) are the code or codes for the new operation/procedure you want the printer to start using.

For example let's say we want to put a one letter command in our document that changes the print style from standard print to italic print. Then we want to change back to standard print with another one letter command.

The best place for these TL Commands are in the first few lines of your document. Being in the first lines, the Formatter can use them throughout the document whenever it needs them.

You actually could put them anywhere in the text, and sometimes you will find a need for them in other spots, but for now lets keep them at the beginning.

Now from the printer manual we know that the Code numbers for changing

to italics are (27,52). We also need to know what the Code is for changing back to standard print.

Looking it up we find that it would be character "27" and character "53". If you don't follow how I came up with these numbers review how I came up with the numbers to change to italics. This is a very important part of what we are doing .

The next thing to do is pick which characters you want to use to do this task. You can pick any character you want from 0 to 127. I am going to use characters 21 and 22 for reasons I will explain later. Character "21" will change my printer to STANDARD Print. Character "22" will change my printer to ITALIC Print. The first two lines of your document will look like:

.TL 21:27,53
.TL 22:27,52

Notice there is a comma between the "27" and the "53". That is a necessary separator so the FORMATTER knows these are two different numbers. The same as the colon is a separater between the character you are changing from and the characters you are changing it to.

Now while you are in the Editor typing your document all you need to do to change to Italic Print is hold the Control Key down and press "U". Then hold the Shift Key down and press "V". You will see a small "6" appear in your text with a small slash above it. To return to normal typing hold the Control Key down and press "U". After you get to a point you no longer want the print to be Italic you can change it back by getting into the Special Character Mode (CTRL U). Hold the SHIFT Key down and press "U". At this time you will see a small "5" appear in your text with a small slash above it. Then exit the Special Character Mode (CRTL U) and you are ready to continue typing the text you want in the Standard Edit Mode.

The best thing about .TL commands is that they can be used at any time and any place in or throughout the text. In effect this allows you to do any style printing your printer is capable of at any desired place in the Text. You will find this a nice way to emphasize or otherwise make words stand out and also adds a little spice to your writing.

This is great! Now I can change print styles but I would like to do many more things. For example changing from PICA (80 char. per line) to ELITE (96) or CONDENSED (136). >>>GET OUT A SHEET OF PAPER.<<< Go through your Printer Manual and write down the commands you would like to use. Also next to them write down the codes to access them. Some commands will have more than one code. If you find ones like this write both codes by the command. By this time you have spent an hour or two with your printer manual.

Now it is time to get out the TI-WRITER Manual again and turn to page 146. Compare the codes by your printer commands to the ASCII Codes for Special Character Mode. You will find that there are quite a few that you can use without changing anything. In my case I found codes 0 through 15, 17 through 20, and code 27 were fine the way they were. But I still had a few commands I wanted to use that were not available

to me.

I did not have any codes that crossed to codes 16 or 21 through 31. OH BOY I CAN CHANGE THESE NOW.... I went down through my list of wanted commands and assigned a ASCII number from the Special Character Mode to them. Darn, I still ended up with two commands I wanted to use. These were Underline and Cancel Underline. What to do. What to do.

The Transliterate Command doesn't care what character it changes so I turned to page 145. I looked through the characters and decided on the left and right square brakets. I thought they would show up nicely in the text and didn't use them anyway. FOUR YEARS, 10 HOURS, and 54 MINUTES after I started this project I had my CODES and what they went to. This is a list of what they are:

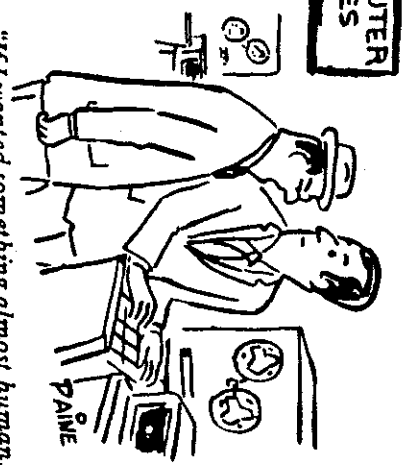
```
.TL 16:27,66,2
.TL 21:27,53
.TL 22:27,52
.TL 23:27,71
.TL 24:27,72
.TL 25:27,69
.TL 26:27,70
.TL 28:27,83,0
.TL 29:27,83,1
.TL 30:27,84
.TL 31:27,64
.TL 91:27,45,1
```

For some strange reason I felt I didn't want to do this every time I went to write a new document. I needed a way to put these at the begining of my document without typing them in every time. I also wanted to be able to remember what I needed to type in order to get my desired command. I decided to make a master file named G-10X. This is what my file ended up looking like:

```
.CO GEMINI-10X PRINTER COMANDS
.CO Press CTRL U to get into SPECIAL
.CO CHARACTER MODE
.CO SHIFT 2 = CHR$(0) = NULL
.CO A = CHR$(1) **** B = CHR$(2)
.CO C = CHR$(3) **** D = CHR$(4)
.CO E = CHR$(5) **** F = CHR$(6)
.CO G = CHR$(7) **** H = BACK SPACE
.CO I = HOZ TAB **** J = LINE FEED
.CO K = VERT TAB *** L = TOP OF FORM
.CO M = PRINT HEAD HOME
.CO N = ENLARGED PRINT
.CO O = CONDENSED 136 PRINT
.CO P = ELITE 96 PRINT
.CO Q = ON LINE *** R = PICA 80 PRINT
.CO S = OFF LINE ** T = NORMAL PRINT
.CO U = STANDARD STYLE PRINT
.CO V = ITALIC PRINT
.CO W = DOUBLE STRIKE
.CO X = CANCEL DOUBLE STRIKE
.CO Y = EMPHASIZED PRINT
.CO Z = CANCEL EMPHASIZED PRINT
```



```
.CO FCTN Z = SUPERSCRIPT
.CO FCTN T = SUBSCRIPT
.CO SHIFT 6 = CANCEL SUP/SUBSCRPIT
.CO FCTN U = INITIALIZE PRINTER
.CO FCTN R = ESCAPE
.CO * END OF SPECIAL CHARACTER MODE *
.CO FCTN R = UNDERLINE
.CO FCTN T = CANCEL UNDERLINE
.TL 16:27,66,2
.TL 21:27,53
.TL 22:27,52
.TL 23:27,71
.TL 24:27,72
.TL 25:27,69
.TL 26:27,70
.TL 28:27,83,0
.TL 29:27,83,1
.TL 30:27,84
.TL 31:27,64
.TL 91:27,45,1
.TL 93:27,45,0
.CO END OF SPECIAL FUNCTION SECTION
```



The .CO Command is like the REM Command in basic. It lets you put comment lines in your text. They won't show up in the document when you print it with the FORMATTER section of TI-WRITER. They will show up when you print the document using the PRINT FILE section of the EDITOR.

This type of format for your TL Commands will give you all the power your printer has and a way to remember what you need to do to access that power. Another way to remember what command is what is to print out a nicely layed out list and tape it to your computer. I use both methods and have found the list on my computer is the one I use the most.

As you can see all you really need is your list of commands. Once you have your TL Commands in the document the computer will do all the work for you. You don't need the .CO Commands so you can leave them out if you want. I just like to have them for a safety net in case I loose my list. If you're rich and have more than one printer it lets you know which printer the document should be printed on also.

The only thing left is getting your G-10X file at the beginning of your document. There are two ways to do this.

One is to load it before you start your document, from a separate .TL COMMAND file. The other is to load it into your document later using the 'Merge File' procedure.

Both have a VERY GREAT danger. When you go to save the document by entering SF in the command line. It will come up with "DSK1.G-10X" as the SAVE TO FILE. If you press enter it will write your document to your G-10X file. Not Good!!!

There is an easy way around this. All you have to do is PROTECT your G-10X file. After you make it, and save it to disk, use a disk editor to change the protection. Now whenever you make that mistake TI-WRITER

will give you an error message and won't distroy your hard work. Then you just type in the correct document file name and save it.

If you load the G-10X file when you first start your document all you have to remember is to change the file name when you save it. If you have a document you have already typed in and want to add it you need to add it in.

This is not as hard as you may think. First you get to the command line on the EDITOR. If your typing the document all you need to do is hold the FCTN Key down and press "9". At this point you type in LF and press ENTER.

On the top of the screen you will see a message that says:

LOAD FILE, enter filename:

On the line where you cursor is blinking at you type in:

0 DSK1.G-10X

This Load File format will insert the new file to be loaded. It starts at the line number you tell it to. In this case zero (0) is where we want it to start. You will not loose any text. It just shifts it down to accommadate the new information. REMEMBER change the 'filename' back to your document name before you save it back to disk!!!

Well there it is: The GREAT TL COMMAND. I am sure there will be more questions on how to use it and set it up.

ODDS AND ENDS ABOUT TI-WRITER

About the TI-WRITER and it's FORMATTER Menu.

1. Don't forget the .LF after the printer call code.

2. If you have a multi page document and only want page 2 and 5 printed then, when the Formatter menu ask for NUMBER OF PAGES (A) just enter 2,5 and press ENTER and only page #2 and #5 will be printed.

A REMINDER....to the above, IF you have ADDED lines to the pages you may have to revise several pages to allow for the additional volume.

If you want to START printing at page 3 and go to the END of the document you must enter 3,4,5,6,7..... to the last page.

While we are talking about TI-WRITER here are a couple of other reminders.

1. To get a PAGE BREAK press (CTRL+9). You also get an automatic 'CARRIAGE RETURN' with the page break.

2. To toggle WORD WRAP off and on press (CTRL+0). The WORD WRAP mode is signified by a blinking open rectangular cursor.

3. The AMPERSAND (&) and line centering.

The use of a 'double' ampersand, (&) will cause the FORMATTER to do

funny things in printing your text. If you must 'center' a line with amperands in imbedded it's best to reset the left margin with a 'dot' command, (.LM+n), and go from there.

NOTICE ABOVE PARAGRAPH AND PRINTING

P.S. Don't forget to return to the original 'left Margin' when you are done.

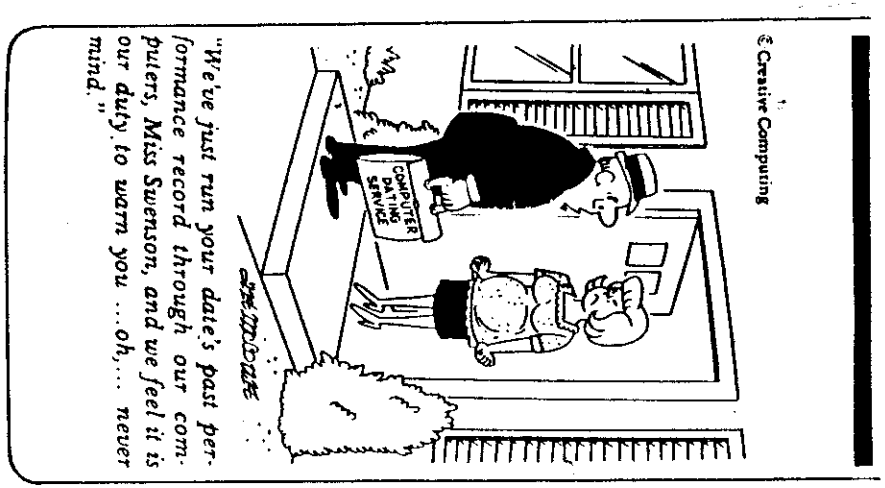
Since I do not use the (&) or the (@) signs for double striking or underlining in my TI-WRITER text I don't know just what effect the (@) sign has on the FORMATTER in conjunction with line centering. I do use the (&) sign at times and have had difficulties with it in combination with the (.CE), centering command.

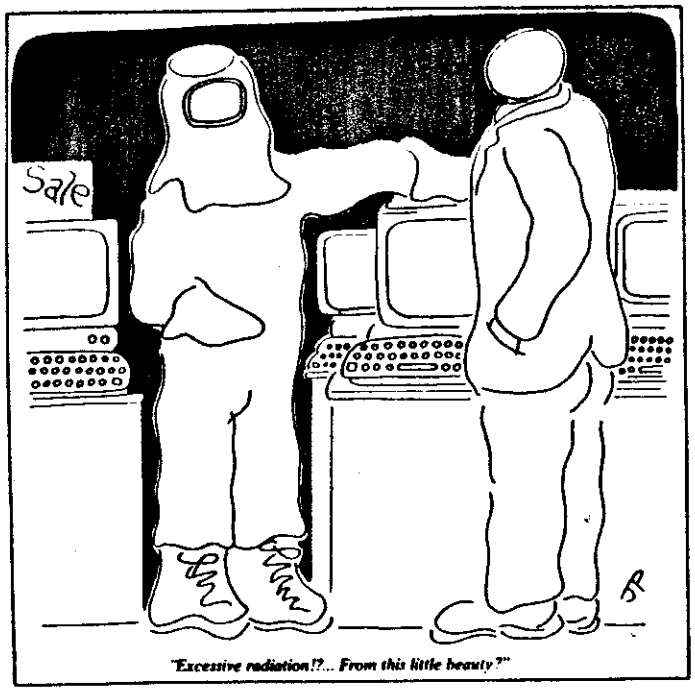
==========

TI BASE HELP

Just a couple of small bits of information about the new TI Base program.
After you have entered a command to execute some thing you have wanted and you have discovered that you made a mistake and got an error message, you do not have to type the whole thing over again. Just type FNCT 4 and the line will reappear.
All command messages are at your finger tips just by holding down the control key and the first letter of the command you would like. If there is more than one command with the same letter just hit the letter again.
The last version of TI BASE would display SUM value on the screen even if you had talk off, but the new version has to have talk on to see the Sum value.

==========





"Excessive radiation!?... From this little beauty?"

VDTs

Physical and reproductive concerns, and how to control them.

by DENE CORLESS

The advent of the computer age has brought with it a host of employer and worker concerns. The advantages of speed and accuracy that computers bring to our everyday workload are sometimes offset with concerns about users' physical and psychological health.

Estimates indicate that there are 40,000,000 video display terminal users in North America. And as this number continues to increase each year, more and more employers come to realize the ease with which computers can be integrated into the workplace, and the efficiency they provide. Employers and workers must join together to ensure that VDTs are effective from both a productivity and health and safety point of view. That means achieving an understanding of the perceived hazards of VDTs, and then committing to eliminate those hazards in the workplace. Outlined below are some of the common concerns expressed about VDT use.

REPRODUCTIVE HAZARDS

A significant proportion of enquiries about VDT hazards stem from concerns about reproductive hazards. This concern is a response to the supposed incidence of "clusters" of miscarriage and congenital malformations, and still births among offspring of female operators, compounded by misinformation about the relevance of clusters and the need for prevention.

Although increased risk of miscarriage as a result of VDT use cannot be categorically discounted, its potential must be understood. This in turn requires an explanation of the role of clusters as a statistical phenomena.

Simply put, a cluster is an excess occurrence of an adverse event in a small number of people, over a short period of time (usually one to two years), in a limited geographical location (typically, one workplace). Identification of a cluster does not, of itself, mean a problem exists; rather, it signals the presence of a statistical anomaly, one that may warrant investigation to determine whether or not a problem exists. Any interpretation of the significance of clusters must begin with the recognition that a cluster is simply an unsubstantiated popular observation, and not a scientific finding.

Those who feel pregnancy-related clusters in VDT operators are significant pinpoint low frequency electromagnetic radiation as the cause. However, standards with regard to ionising radiation, as well as ultraviolet and infared radiation, have been available for some time, and there is consensus among researchers that the exposures that exist are not the cause of any potential increased risk.

Miscarriages are estimated to be the outcome of at least 15 percent of confirmed pregnancies and may be as high as 50 percent of unconfirmed pregnancies. Unconfirmed pregnancy is highly dependent on the "recall bias" of the subject. Depending on perception of their situation, women may perceive an experience as a late or early menstrual period, or a miscarriage. This perception becomes a real problem when evaluating data based on recall of miscarriage experience over the past two years or even over six months.

Since malformations in live births occur about 2 to 4 percent of the time, then given the number of computers in use by fertile women in North America, in the number of work places that might experience these random "normal" events, clusters could be naturally present in some work places.

However, if sufficient data are collected, a correlation between excess VDT radiation and reproductive hazards may be ascertainable. Thus, a look at the available research data is necessary to determine whether this correlation has been made:

Retrospective Case Control Analysis of Miscarriage: For the purposes of this type of study, a female VDT operator is matched with a woman who is not an operator. They are then surveyed to evaluate the difference in their experience with miscarriage. Many of these studies have design flaws, the foremost one being the weakness of subject recall bias. Because of this some studies found no difference, while others perceived increased risk for operators.

Prospective Cohort Studies: A group of physicians in New York are conducting a prospective cohort study to determine the correlation between exposure to computers and negative pregnancy outcome or disease. This study will compare VDT operators to those who do not have any exposure to the machines. The two groups are similar in key characteristics such as age and smoking habits. The researchers at Mount Sinai School of Medicine expect conclusive results will likely be available in the mid-1990s.

Laboratory Study: Over the years, extensive cell tissue and animal studies have been carried out to determine negative effects of VDT radiation. In late 1988, the University of Toronto carried out a laboratory study wherein mice were exposed in the 20 kHz range consistent with operator exposure. Three levels of intensity were compared to a control group of unexposed mice, the lowest level being consistent with typical operator exposure. Study results indicated no significant increased reproductive risk at any exposure level. Conversely, a similar study conducted in Europe about the same time found a small but increased risk. Clearly, this debate is a long way from over.

Although it is too early in the research cycle to draw conclusions, if VDT operators are in fact at elevated risk for miscarriage or any other form of reproductive hazard, the cause is unknown. In the face of all the evidence — or lack thereof — there are still extremes of perspective on the issue of VDT-related pregnancy problems.

Noting that no one has yet conclusively demonstrated a mechanism by which magnetic fields could affect pregnancy, Ulf Bergqvist, of the Swedish National Institute of Occupational Health sums up the predicament: "We can never prove there is no effect and, so far, we have failed to show there is an effect."

The need exists to keep the cluster documentation in mind, but not to be swayed by unsubstantiated claims of increased risk or optimistic claims of no risk. This situation is likely to persist for some time, as conclusive research to attain clear-cut conclusions will take time. In a nutshell, the jury is still out!

CONCERNS IN THE WORKPLACE

In contrast to reproductive hazards, much is known about the full range of potential hazards, risks and risk-reduction alternatives associated with environmental concerns of VDTs. There are three area worthy of consideration: physical stress (including static posture and repetitive keying, and vision demands); environmental stress (such as electrostatic and electromagnetic fields); and psycho-social stress.

Physical Stress: Adverse health effects associated with static posture and repetitive keying are common among VDT operators. Unfortunately, some of these effects can be non-visible, cumulative, chronic and, once established, highly resistant to treatment. Typical sites of pain, tension, or discomfort include neck, shoulder, wrists, upper and lower back, eye strain, and frequent headaches of varying severity. If unchecked, these symptoms can degenerate into more serious concerns.

The contribution these conditions make to operator fatigue and loss of productivity is enormous. In a survey conducted by one of the province's highly computerized employers, some 43 percent of their VDT operators experienced high levels of fatigue at the end of the working day, 31 percent experienced moderate levels, and 26 percent experienced low levels.

More recently, the Canadian Standards Association has developed an extensive office ergonomic standard (CSA Z412) addressing conditions known to contribute to these problems. There are no legis-

9T9 - PAGE 15

lative requirements regarding office equipment or furniture, however the following guidelines should be followed for workers using VDT terminals to reduce the risk of repetitive strain injuries and to combat fatigue.

- The screen should be located so that the top is slightly below the line of sight of an operator seated comfortably looking straight ahead. Viewing the screen in this position promotes a well-balanced head and neck posture that minimizes fatigue in upper back neck and shoulder muscles.

- The keyboard should be located slightly above elbow height to accommodate a straight or slightly flexed wrist. This is the wrist's position of strength and is known to minimize risk of carpel tunnel syndrome associated with repetitive tasks such as keyboard work.

- The seat pan behind the knees should slope back slightly, and should be shallow enough that it does not touch the back of the knees. Avoiding pressure on the back of the knees promotes better circulation in the feet and lower legs.

- For the same reason, feet should rest comfortably on the floor or a foot stool, without lifting the heels. The chair height should be adjusted so the knee and hip angles are at 90 degrees.

- The operator's chair should offer firm support for the low back with light support for the mid back. Higher-backed chairs offer more support for a backward lean posture. This posture should not be confused with the often- observed slouch which lacks support for the low back. In the absence of back support, this position should not be maintained for long periods; but like the backward lean it relieves fatigue in the low back support muscles.

A regular change of posture is effective in relieving fatigue in tired support muscles.

- Chair arms and keyboard wrist supports are really a matter of operator preference. However, if chair arms are provided, they should not be used as a substitute for keyboard wrist support. Resting on the arms while keying promotes a forward slouch and results in extending the neck and head back as a counter balance and in order to view the screen. It also causes the operator to sit in a viewing position that requires the eyes to open wider.

Under no circumstances should chair arms interfere with an operator's ability to bring the chair up to a comfortable position before the keyboard. Some chairs can be provided with detachable or swing-away arms. This may be a good alternative when two operators with different preferences use the same work station.

Visual Concerns: Eye problems among VDT operators are also quite common. In another survey conducted by one of Ontario's largest computerized employers, 50 percent of its employees experienced more than a moderate level of eye strain, while 54 percent had focusing difficulty. Time spent at the keyboard on a daily basis was a critical factor with regard to discomfort levels of VDT operators. These figures also indicated that of those word processing operators who spend less than 10 percent of their time on computer terminals, 18 percent had eye strain (similar to other clerical operators). However, 49 percent of those spending more than half of their time on computers had eye strain more than 25 percent of the time.

More than "moderate discomfort" and "eye strain more than 25 percent of the time" clearly make a substantial contribution to operator fatigue and the associated errors. Unfortunately, the typical modern office environment has twice as much general lighting as necessary, which contributes to the glare and reflection that obscures screen images. At the same time, task specific lighting is often under-utilized. The IAPA publication Lighting in Industry (S00884) is a general discussion of lighting that will help identify problems, solutions and additional resources. Specific tips include: image flicker and drift should not be visible; character size should be a minimum of 3 mm; and characters should be evaluated for the proper degree of distinguishability. A viewing distance of between 37 and 74 cm is suitable for most individuals.

The need for corrective eye wear for the operator must also be explored. Concrete evidence with regard to reduced vision is inconclusive, however in view of the prevalence of eye strain among operators, their specific job demands, and preferred viewing distances, all operators should see a vision care specialist regularly.

Finally, although the most effective treatment for glare and reflection is control of the light source and reflecting surfaces, screen treatment may also be necessary. Specific treatments include micromesh or polarizing filters, tube shields, and spray-on coating.

OPERATOR SELF-CARE

Work station improvements will have little effect if VDT operators themselves do not "work smart". This means that workers must maintain a regimen throughout the day of taking short breaks to prevent excessive fatigue.

Eye care: The optimal frequency and duration of mini-rests will vary with the individual and the type of work performed. Time away from the VDT allows the eyes to focus on other objects. Resting the eye muscles should include such actions as "cupping" the eyes behind the curved palms of your hands, lightly massaging the muscles around the eyes with a gentle circular motion, or focusing the eyes on a point 20 or 30 feet away. Never rub the eyes to relieve fatigue; in the long run, such a gesture offers little relief if excessive fatigue has set in.

Neck, shoulder, upper back and arm stretch: To be effective, a stretch should be done slowly. Neck stretches include reaching for the ceiling with the top of your head while turning it slowly side to side several times. Slow shoulder rolls forward several times and backward several times are good stretches for the upper back and chest muscles.

Low back relief: Stand up and move away from the seated posture of the work station at least every two hours.

Developing these work habits can take deliberate and frequent practice, but the benefits will soon be noticeable. Supervisors that teach and encourage these or similar measures are contributing to the team effort.

Psycho-Social Stress: Physical stress isn't the only contributing factor of fatigue and low job satisfaction for VDT operators. Data entry operators are at the highest risk of suffering from psycho-social stress — the incidence of anxiety, depression or physical illness due to job stress. The monotony of operating a VDT, coupled with demands for accuracy, speed and volume may serve to aggravate the situation.

Coping with psycho-social stress involves organizational changes and job redesign. Since many VDT operator's are ill-equipped to handle work-related problem solving, their supervisors should be at the forefront of these efforts. By providing social support, ensuring a reasonable work load, and paying less attention to speed, the effects of psycho-social stress can be greatly reduced.

Finally, planned progressive improvements — which take advantage of operator input — will be less disruptive and more lasting than any sudden changes that they may be unprepared to cope with. (The IAPA's booklet *Stress and the Workplace* could help your organization develop an effective approach to preventing and controlling workplace stress.)

Electrostatic Fields: The VDT screen surface carries a positive charge ranging from 0 V to 12000 V, averaging 2250 Volts. Operators may also carry a charge ranging from a negative 2000 V to a positive 4000 V. The difference in screen and operator voltages results in an electrostatic field developing between the operator and the screen. Evidence that such voltages exist is present when dust is attracted to, rather than settling on, the screen. (Difficulty in clearing the dust from the screen is also an indication of attraction rather than settlement.) Less apparent dust is also attracted to a charged operator and may cause skin irritation.

The strength of electrostatic fields can be drastically reduced by raising room humidity and avoiding carpets, furnishing and clothing that carry a charge.

Low Frequency Electromagnetic Fields: These pulsed electric and magnetic fields originate from the flyback transformer and deflection coils located within the Video display terminal. Their field strengths deteriorate rapidly until at a distance 40 cm in front of the screen background levels of exposure are present. To achieve similar reduction of exposure at the sides and back of the monitor would entail moving one meter away. The Canadian Centre for Occupational Health and Safety puts exposure levels at the typical operator position as 0.1 to 1 amperes per meter for magnetic fields, and under 10 V/m at 30cm for electrical fields.

To avoid receiving elevated electromagnetic exposure, operators should avoid sitting within one meter of the sides and backs of any operating monitor, particularly when turning it on. Lead aprons — developed for use during x-rays — were thought at one time to be effective barriers against the electromagnetic frequencies found around the VDT. Research has proven that this is not so; moreover, in the case of pregnancy, the weight of a lead apron could pose a risk to the fetus.

Older VDT models tend to have higher electro-magnetic emissions, and there is variance even among models in the new market, so it would be wise to obtain technical data when selecting new equipment. In general, colour monitors and larger screens require more power and therefore have somewhat higher emissions. A few monitor models have incorporated fairly expensive shielding, and the new flat screen liquid crystal displays and electroluminescent displays do not have a flyback transformer or deflection coils, nor do the plasma, gas discharge displays, but they too are relatively expensive.

Dene Corless is an occupational health specialist with the IAPA's Research and Development department.

LEGISLATIVE DEVELOPMENTS

In Ontario, a private members bill (Bill 121) was submitted to the Ontario Legislature in late March. Entitled An Act For The Protection of Video Display Terminal Operators, it addresses radiation concerns, work station requirements, and computer equipment regulations. This bill was previously submitted in June 1988, at which time it failed to go further than first reading. The future of Bill 121 is presently unknown.

9T9 - PAGE 16

Feedback

Tribute paid to John Birdwell

It is always sad to hear when someone we are close to has passed away, be it family, friend or someone in the TI community. Many times, they aren't recognized for their achievements until it is too late.

In our midst, we have a programmer suffering from liver cancer. The prospects do not look good for his recovery. He has devoted almost all his time to his family now. Many people have wondered why this individual has disappeared from the TI/Geneve scene, and it wasn't until a week after seeing him at the Chicago Faire that I realized he had problems. He was keeping the illness to himself, but via a friend I learned. A year ago, he was a happy, healthy man; today he is a man 50 pounds thinner and several operations older.

Liver transplant is not possible. His time is running short. I doubt we will ever see updates in software from him again. He is well known for his work, and has a major piece of fairware in existence. Many people have never paid their fairware portion, though they routinely use his program.

The program is Disk Utilities, the author is John Birdwell. For those who now want to ante up their fairware contribution, John's *new* address is 1310 Kent Court, Wheaton, IL 60187.

Our local user group routinely takes in donations for fairware authors. This month, we have selected John Birdwell as our recipient. We regret it is under these circumstances, but it is about time John is recognized for his contributions.

John's other major contribution has been the work with the Myarc Disk Manager V for the Myarc HFDC (quite a bit of MDM5 was by Mike Dodd). John was planning on doing the streamer support for the Myarc HFDC, but that won't come to be by him. John was also working on Disk-One. Its status is uncertain, but it is doubtful it will be completed.

John's future is not certain. What is certain is that the higher the morale of the individual, the healthier the individual is, and the longer the individual can be productive. Prayers are acceptable, the more the merrier. When I last spoke with John, he commented, "It won't be 30 days, I don't know if it will be two months or six months. The doctors said the weekly treatments were starting to hold the cancer. I have hope."

I have only met John two or three times, but conversed through mail/messages quite a bit. John has helped me out on quite a few problems over the past couple of years. He was always willing to give. Now it is time to repay John for what he has done for us. Many times we have wished we could have said something before it was too late. It is not too late now. Speak (and user groups act) to show your appreciation. You have the opportunity now.

John, I would like to personally say thank you for providing us Disk Utilities and those other utilities that have straightened out my problems, and I am sure those of others, from time to time. It was very much appreciated. I hope you will be blessed with the cancer going into recession and with a flow of gratitude demonstrated by the TI community. You *deserve* it.

Beery Miller
Memphis, Tennessee

(Miller received permission from Birdwell to discuss his medical condition publicly before submitting this. — Ed.)

9T9 MEMBERSHIP RENEWALS ELECTIONS THIS MONTH!

```
READ 20138
20138 29-DEC 03:32 General Information
     John Birdwell
     From: DONJONES      To: ALL

In case the bad news has not yet come here, John Birdwell, a member of the
Chicago Users' Group, a fine programmer, and an even finer person, passed away
Thursday, the day before yesterday.  Services are planned for Sunday in Wheaton,

Illinois.  I thought that everyone should know this.  Don Jones

FORUM>Reply, Add, Read, "?" or Exit>
20357 6-JAN 13:35  General Information
     RE: John Birdwell (Re: Msg 20207)
     From: SMICKELSON    To: D24 (NR)

I deeply regret his passing, the TI Community was richer for his contributions
and certainly poorer with his passing. He will be missed.
```

ONTARIO COMPUTER FAIR

Over 50 exhibits offering
savings and selection in
computers, software, peripherals,
word processors, games,
training, and related products.

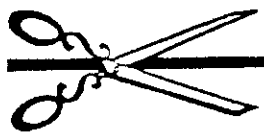
Admission $4.00

Sun. Jan. 27 - 11 a.m. to 4 p.m.

St. Lawrence North Market
92 Front St. East

Only a few minutes walk from
subway, Union Station, and
hundreds of free parking spots.

For more information call 535-3761



Clip

ONTARIO COMPUTER FAIR

Sunday, January 27 - 11 a.m. to 4 p.m.

Downtown Toronto
St. Lawrence North Market
92 Front St. East

$1 OFF REGULAR ADMISSION

NOT VALID WITH ANY OTHER COUPON