OSHAWA TI 99/4A COMPUTER USERS GROUP

OSHTI

FEB '92

J O I N OSHTI FOR 1992

I hope that this will NOT be your last newsletter !

However, if you have received a newsletter for some time and have NOT sent in your renewal for 1992, then we will have to discontinue sending you one, UNTIL we receive your cheque for renewal or instructions otherwise.

We have not raised the cost of the membership for 1992. The reason is NOT that we don't need it, but that we realize that your expenses during the recession (or is it a depression) may be increasing faster than your increase in pay.

What do you get for your membership $15 per family is :

> a monthly newsletter
> access to our TAPE and DISK libraries of programmes
> access to the 15 other NEWSLETTERS we exchange with
> a monthly meeting
> a family picnic (July)

Obviously, the newsletter 'speaks' for itself. You either find it interesting and useful or (gulp) not. I hope that you will find it useful and interesting. If you don't, then maybe you could suggest what kind of thing that you would want to find in it.

What happens at a monthly may be a question that a lot of non-attendees may ask. The answer is not always the same.

However, most meetings are social as well as business and utility oriented. We always have LOTS of COFFEE and something to munch on...TIM BITS (not the same as OPA'S TIM). Usually there is a demonstration of some specialized programme (eg.FUNNELWEB, MULTIPLAN, or some other piece of software). There is also a demonstration of the DISK of the MONTH.

Finally, we get to the disk copying session and that's where members make copies of the DISK of the MONTH or other club disks.

JOIN US !

At some special meetings we may feature a guest who has some special hardware or software to demonstrate and sell. Gary Bowser has been at the last two October meetings to demonstrate his goodies from O.P.A. Phil Townsend from KAWARTHA has demonstrated the COMPRODINE software at other meetings.

FEB 1992 INDEX:

The club also offers each member the opportunity to help others. A USER GROUP is a HELPING GROUP. We can help each other with computer related problems or just problems in general. Here is how YOU CAN HELP.

> GET on the EXECUTIVE (Chair,Vice Chair,Treas etc)

> GIVE of your TIME to help with our DISPLAYS at the PICKERING FLEAMARKET in April or in BOWMANVILLE at the Nov. COMPUTER FAIR.

> WRITE ARTICLES for this newsletter.

> COME OUT to the monthly meetings

> SHARE your knowledge and questions

MEMBERSHIP and RENEWAL costs are on PAGE 10.

JAN OSHTI MEETING

The January OSHTI meeting was well attended, even though we had it on Thursday rather than on Wednesday night. In fact I was surprised that we drank 35 cups of coffee and finished off our usual TIM-bits and Christmas fruit cake.

The meeting featured a look at the video tape sent from the LIMA group. We saw some examples of excellent programming by Jim Peterson with his unique way of displaying titles and clearing the screen. His Russian and Mongolian alphabets were interesting examples of what redefining characters can do.

We also saw the TI advertizing ads from the early 1980's and the BILL COSBY commercials.

We saw an interesting MUSIC module called MUSIC MAKER SDA. It looks like MUSIC MAKER but allows for the COMPILING of the music via MERGE format in XBASIC, ASSEMBLY, and GPL. This module would have been excellent if it was produced in enough quantities. Alas it was not.

Finally, we saw how to configure the USER LIST on FUNNELWEB. Although we only saw a bit of this, it will make for some interesting demonstrations at a meeting.

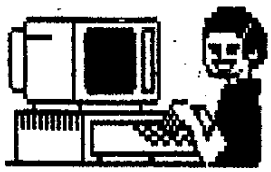
Tom demonstrated his new Chemistry programme on the PERIODIC TABLE. It still is under-develop(ed) ment(?).

The disk of the month was a series of games for joystick and keyboard using XBASIC. Some will test your skill and others your co-ordination.

I especially enjoyed Keith's joke about the two snails.

"There were 2 snails going down the path, Charlie and Sam. Along came a turtle and squashed poor Charlie to rat... A little later Harry was passing Sam going the other way. He said,'Where's Charlie'. Sam replied,'He's back up the path all squashed to rat...' Harry said, 'How'd it happen ?' Sam replied, 'I don't know, it all happened so fast!'"

And you thought you were slow, eh?



$ PART 4 $

STRINGS !

This month's lesson is on STRINGS. No ! not the type you tie around your finger, but the kind that you use in computer programmes.

I'm not sure of the derivation of this term, but I suppose that it simply means a list of ASCII characters. This could be a name or a series of numbers or some other characters. Since the computer handles STRINGS differently than it handles numbers, they are identified by different VARIABLES.

Here are some examples of STRINGS as VARIABLES.

```
1 NAME$ = "HARRY/SALLY"
2 A$="Y"
3 CN$="123"
4 D$(1)="31 Elm St."
5 E$=CHR$(27)

400 READ EL$
1001 DATA Hydrogen

700 ACCEPT AT (1,1):X$
```

The $ sign after the variable symbols identifies the variable as a string of ASCII characters as opposed to a number. As you can see from the above examples, strings can be ASSIGNED a value from within the programme as in the first 5 examples, or the can be READ in via DATA statements. If this is the case then the STRING is NOT stored in dynamic memory(32K expansion or in the stack area). The last example shows how you can INPUT a string using ACCEPT AT. The value of X$ does NOT actually get stored within the programme; it is stored in dynamic RAM and uses up more space. Although you might not worry about where the actual string is stored, it can make your programme run slower and take up more space if it is a dynamic string (as in the later example).

What can we do with strings that we can't do with numbers ? For one thing, we can enter more characters. With numeric variables you are limited to numbers. Strings can be BOTH numeric and non-numeric. They, in theory, can have any value between 0 and 255.

When I first started to write programmes I soon found out that I didn't have to use numeric variables . In fact, it was better to use strings than not. The advantages of numeric variables is that they take up less dynamic ram when stored than strings.

Now that we have a string variable what can we do with it ? The following FUNCTIONS are used ONLY for strings.

```
> LEN(A$)
> VAL(A$)
> STR$(A)
> ASC(A$)
> &
> SEG$(A$,1,1)
> CHR$(A)
> POS( )
> RPT$( )
```

LEN

LEN(A$) gives us the LENgth of the string. For example, the length of the string in line 1 (LEN(NAME$))is 11. In line 2 LEN(A$) gives 1. It is possible to get a LEN(X$) in line 700 above of 0(zero) by pressing ENTER at the accept at statement. You can also assign a string (a null string) of length 0 by the following. A$="". You can also accomplish the same thing by the following two

lines.

```
600 READ A$,Z$
610 DATA SAM,,
```

Z$ will be a NULL or zero length string.

On a lot of computers, COMMODORE in particular, you can't assign a null string so easily. In fact, COMMODORE BASIC will crash with null strings during INPUT.

Who said TI BASIC wasn't powerful ?

VAL

VAL(A$) returns the NUMERIC VALUE of a string.

If you did VAL(NAME$) in line 1. The value returned is the value 72. This is the ASCII value of the 'H' in HARRY/SALLY.

If you took the VAL(CN$) from line 3, then you would get 123, the actual value. This means that we could use strings for numbers very easily.

The REVERSE of the VAL(A$) is the STR$(A) function. Here we make a STRING of the NUMERIC DATA A. If A=-23 then STR$(A) is "-23", with length 3 and value of -23. If A = 23 the STR$(A) would be " 23" with length 3 and value of 23. When you use the STR$() function, the SIGN is included.

ASC(A$) returns the ASCII value of the first character in the string. In line 1, ASC(NAME$) returns 72. In line 3 ASC(CN$) returns 49. This is useful for trapping the first key pressed during a string input.

&

The & symbol CONCATENATES or JOINS two strings. For example, if you said:

```
410 Z$= NAME$&CN$
```

Then Z$ would be "HARRY/SALLY123"

Concatenation is an important function, useful for joining strings. The reverse of this function is the SEG$() function.

SEGS

SEG$() is the MOST IMPORTANT and USEFUL of all of the string functions. It REPLACES the functions RIGHT$(), LEFT$() and MID$() in other BASICS (eg. COMMODORE and APPLE). You have to remind yourself from time to time that MICROSOFT wrote ALL of these basics. That's why they are so similar. On the other hand, TI BASIC and XBASIC in particular were written AFTER APPLE's and COMMODORE's BASICs. Maybe that's why XBASIC is so powerful.

SEG$() main uses is in TAKING PARTS of existing strings.

For example. If we said :

```
330 X$ = SEG$(NAMES$,1,5)
340 Y$ = SEG$(NAME$,7,5)
```

Then X$="HARRY" and Y$="SALLY"

The first number in the SEG$() means the character you wish to start at. The second number is the LENGTH of the characters that you wish to go. In the above cases they just happen to be BOTH 5. They can be any length that works. For example, you could NOT say, SEG$(NAME$,7,6) since LEN(NAME$)=12 and this SEG$ implies a length of at least 12.

CHR$

CHR$() is quite important in assigning strings which have ASCII values which can't be placed on the screen ie. Those below 32 and those above 128.

Our example in line 5, assigns the value 27 to E$. This is the ESCAPE character used on most printers.

CHR$() can be used for any character for use on the TI. Just be careful, since some of these characters can't be DISPLAYed on the screen.

POS

TI BASIC was one of the first BASICs to come out with a SEARCH function - POS( )

For example:

```
450 X$ = "MARY HAD A
LITTLE LAMB"
460 X = POS(X$,"LITTLE",1)
```

The value of X will be 12. This is the START of the STRING "LITTLE" in the string X$. The number 1 in the POS() function tells the search to start at the 1st character of the string X$. You don't have to start at the first character if you suspect a search string is farther along.

This funtion is very powerful and can even be used to count words in a sentence. See p.145 in the XBASIC handbook for more details about counting words.

RPTS

Lastly, we have RPT$(). This function is useful when we need to make a string from the repitition of similar characters. For example, if we wanted to print 7 boxes to represent the days of the week, we should do it by printing a horizontal line (TOP$) then a series of vertical lines (BAR$) separated by three spaces and then repeated 7 times and then print another horizontal line (BOT$) with dashes.

We could accomplish this with the use of the RPT$ function.

```
600 TOP$ = RPT$("_",28)
610 BARS$= RPT$("|  ",7)&"|"
620 BOT$ = RPT$("-",28)
630 PRINT TOP$
640 PRINT BARS$
650 PRINT BARS$
660 PRINT BARS$
670 PRINT BOT$
```

This would look like this:

```
----------------------------
|   |   |   |   |   |   |   |
|   |   |   |   |   |   |   |
|   |   |   |   |   |   |   |
----------------------------
```

Well I guess we have covered a lot in this session. STRINGS are a very important part of TI BASIC and XBASIC. A knowledge of how they are used is extremely important whether you write small or large programmes or simply want to change several other ones.

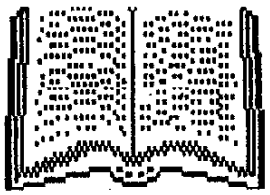
Tom Jakabfy Feb.1992

OSHTI MEMBERSHIPS NOW DUE

OSHTI MEMBERSHIPS

MAKE CHEQUES PAYABLE TO
OSHAWA TI HOME COMPUTER
USERS' GROUP
MAIL IN or PAY AT MEETING

TI HISTORY PART 3 1984



- Home Computer Compendium becomes MICROpendium.

- Corcomp releases the 9900 and 99000 expansion systems. A DS/DD disk controller card is offered.

- Charles Ehninger, creator of Futura Software, is profiled in the National 99er Users Group newsletter.

- Myarc releases MPES expansion system with DS/DD disk controller card.

- SunWare, a Lubbock, Texas firm, offers cartridge making service to programmers of 99/4A applications.

- TI establishes 800-TI-CARES phone line.

- Assembly language DEBUGGER program is released to the public domain.

- HOMEWORK HELPER released by Navarone.

- Phil Barnes releases 99CALC, the first XB spreadsheet available for the TI-99. The program is advertised in the June issue of Computers and Electronics, on page 117.

- "32 Basic Programs for the TI-99/4A" book by Dilithium Press debuts.

- "The TI-99/4A Idea Book" book by David Ahl debuts in Creative Computing.

- JOYPRINT, a printer interface that is designed to work out of the joystick port, is released by Model Masters.

- Impending publication of the Super 99 Monthly magazine is announced by editor Richard Mitchell.

- Article appears in Popular Computing that derides TI and its non-standard 16 bit chip, citing the failure of the TI-99/4A as an example.

- QUICK COPYER is released by Quality 99 Software.

- TINY LOGO released for the 99/4A.

- WILD WOODS game program by JW Software debuts.

- Super Extended Basic utility by Jim Hollender debuts.

- The first spelling checker ever written for TI-Writer debuts from Omaha, Nebraska author Thomas Kirk of Dragonslayer-American Software.

- CorComp files for bankruptcy protection under Chapter 11.

- ST.NICK and SCHNOZ-OLA game cartridges are released by FunWare.

- Richard Mitchell begins publishing the "Super 99 Monthly" from Sulphur, Louisiana.

- GRAM KRACKER prototype announced by Millers Graphics.

- The Wycove Forth language is released by Tim McEchearn, a Canadian author of computer programmers.

- Myarc releases the MPES/50 expansion System with 32K memory, RS232/PIO ports and a SS/DD disk drive and controller. Retail price is $595. An MPES/50-RPM is also offered for cassette only owners. The -RPM model lacks the disk drive and controller.

- Tarik Asani of StarSoft releases three new assembly language programs for the 99/4A; Microkey, for defining keyboard macros, Nibbler, a disk copier program, and Unprotector, a program to unprotect Extended Basic programs while they are in memory.

- Microcomputers Software, 34 Maple Ave., Armonk, Ny. 10504 914-273-6480 releases Tiny Logo on cassette. The program uses only console memory.

- Cheryl Whitelaw, (Aka REGENA) profile appears in the National 99er newsletter out of Bakersfield, Ca.

- "XB Home Applications"

book by Christopher Flynn is released by Compute! Books.

- Mikel Labs releases an RS232 standalone unit for the 99/4A.

- Infocom releases SEASTALKER adventure game.

- "33 Programs for the TI-99/4A" book by Brian Flynn released by Compute! Books.

- "Innermost Secrets of the TI-99/4A" book by Computer Shopper columnist Randy Holcomb is released for $5.95.

- Compute!'s "TI Collection Volume 1" is released by Compute! Books.

- TI receives the "Warped Disk" award from Popular Computing for its decision to orphan the 99/4A.

1985

- INTELPRO released a French version of their COMPANION word processor.

- ADVANCED DIAGNOSTICS is released by Craig Miller.

- Navarone Industries releases its PAINT 'N PRINT program.

- CHARACTER SETS and GRAPHIC DESIGNS is released by David Rose.

- Great Lakes Software, Howell, Michigan announce the release of JOYPAINT 99, a graphics drawing program to compete with TI-ARTIST and the Australian produced GRAPHX.

- Nutmeg 99ers in Waterbury, Connecticut are formed with David Gallegher as the person to contact for membership.

- Harold Simmons, 9818-49th Avenue, in College Park, Md. 20740-1432, starts an all TI-99/4A museum.

- Millers Graphics releases EXPLORER.

- Navarone Industries releases Console Writer word processor in a module.

- Mark Sumner, CSI Design Group, who is later to become the first TI99/4A Sysop on GEnie, releases "WINDOWS" for the TI Home Computer. The program is actually written by Ken Dibble.

- FUNNEL WRITER 2.1 arrives in the U.S., introducing the Australian programmers Tony and Will McGovern to the American TI-99/4A Community.

- Myarc announces XB II for use with its new Ram Disk.

- Navarone Industries announces its ill-fated HYWAY (Have it Your Way) program.

- TI-99/4A Users Association of Canada is formed with Jane LaFlamme as contact person for membership interest.

- Steve Lawless, author of MASSCOPY, has a new program available; 128-WRITER. It stores the TIW editor and formatter in bank 3 of the FOUNDATION 128K card.

- CorComp releases TRIPLE TECH CARD for PE Box that contains 64K printer buffer, time and date clock and ability to put speech synthesizer chip into the expansion box.

- Monty Schmidt releases "TECHIE" BBS.

- PERSONAL AUDITOR version 1.0 released by PRK DataBasics Grand Junction, Colo.

- ASGARD LIGHT PEN by Bob Emmel debuts.

- Barry Traver's GENIAL TRAVELER disk debuts.

- Thomas Weithofer releases PILOT 99.

- John Taylor releases CHECKBOOK/BUDGET MANAGER program.

- Barry Traver joins CompuServe as Sysop on the TI Forum.

- Myarc's Lou Phillips announces that the 256K 99/4A compatible computer will be demonstrated at the Chicago TI Faire.

....to be continued.....

From the MANNERS club...

A SYSTEM SEARCH PROGRAM (XB)

by Ed Hall

What was the name of that program? Seems like it had SEARCH in the name, but that wasn't the whole name. Well, let's see... FIND would work if I knew the whole name, and which hard drive or floppy I wanted to search. Maybe if I had that SYStem SEARCH program I wrote... THAT'S IT!

And here it is so others can use it too. This program is for those who have multiple subdirectories and drives. It is set up to search for partial names so you can find all occurrences of substrings within filenames.

In order to "customize" it for your system, set up the first data line so it contains the basic drives of your system. In the listing I show floppies 1 through 4 and RAMDISK 5 as well as hard drives 1 and 2. If one of these drives is empty the error routine will skip it, however this will be slow. Alternately a disk can be placed in the drive. Once running all subdirectories are picked up and placed in the array so that each will be checked. The subdirectories are checked by level. This may seem strange at first since the first level of each drive is checked before the second level is started, which causes the program to skip back and forth between the hard drives.

When the program is run it prompts for a search string. All filenames available to the system are searched for an occurrence of the search string within them. If a match is found, the path and filename information is displayed on the screen.

PROGRAM LISTING:

```
100 DIM DEVICE$(200):: A,B=0
110 INPUT "SEARCH STRING? ":SR$
120 A=A+1 :: READ DEVICE$(A) :: IF DEVICE$(A)<>"END" THEN 120
130 ON ERROR 130
140 B=B+1 :: IF DEVICE$(B)="END" THEN 230
150 OPEN #1:DEVICE$(B),INTERNAL,INPUT ,FIXED
160 INPUT #1:B$,D,E,F
170 INPUT #1:B$,D,E,F
180 IF B$="" THEN 220
190 IF ABS(D)=6 THEN GOSUB 260
200 IF POS(B$,SR$,1)>0 THEN PRINT DEVICE$(B),B$;:: IF ABS(D)=6 THEN
PRINT TAB(25);"<D>" ELSE PRINT " "
210 GOTO 170
220 CLOSE #1 :: GOTO 130
230 END
240 DATA DSK1.,DSK2.,DSK3.,DSK4.,DSK5.,WDS1.,WDS2.
250 DATA END
260 DEVICE$(A+1)=DEVICE$(A)
270 DEVICE$(A)=DEVICE$(B)&B$&"."
280 A=A+1
290 RETURN
```

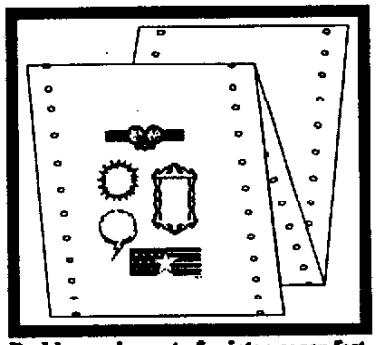
IMPORTANT INFORMATION

SPECIAL REPORT

BY: PAUL A. BROCK

This is a column for those that don't get the Computer Monthly. There is an article written by Barry A. Traver that I haven't seen anywhere else, there is some good information in this article. I thought that I might pass some of that information on to the readers of the WEST PENN 99'ers. the following information comes from Barry's column in the June 1991 issue, called TI-99ers in the '90s. I am coping it and hope that I don't make any typing errors.

In addition to commercial programs published by Asgard, Page Pro 99 has received fairware support as well. Let me mention a few products and addresses. Ed Johnson (399 S. Lexington Ave.,St Paul, MN. 55105) has released TIPS2PP (converts tips pictures to Page Pro 99 format) and Page Pro Font Editor(creates new Page Pro Fonts. Paul Scheidemantle (2762 Lovington,Troy,MI 48083) has made available a Page Pro Picture Cataloger (creates a catalog of Page Pro Pictures). Bill Gaskill has come out with a Page Pro Editor/formatter (helpful, according to Chris Bobbitt, in generating text for newsletters) And Chris Bobbitt himself has released Medical Clipart."an extensive collection...useful for physicians and students." (incidentally, this information on fairware products comes from a helpful "Page Pro Productivity Chart produced by Chris.)



Paul is running out of printer paper fast with his big interest in graphics!

I haven't seen the actual program yet, but I understand that Joe Delekto's Screen Preview Program is now available (including disk and 12 page manual) from Asgard for $12.95 plus $2.50 shipping. from the description it sounds a bit like Harry Wihelm's Paper Saver program (in that it allows you to see on the screen in miniature what your formatted printout will look like), but Asgard's Screen Preview sounds more powerful (in that Asgard's program actually allows you to make changes in the text while running the program).

Screen Preview is a replacement for the TI-Writer formatter (it supports most but not all TI-Writer formatter commands) and runs from the TI-Writer Utility option (or any equivalent). Here's how Asgard describes the program: "This program... will format your text file, with embedded TI-Writer formatter commands, to the screen in a miniature format,... You can view an entire page at a glance, checking margins, page breaks and other formatting. if you see an error, you can point to the line that needs correction and change the text on the fly. Finally, when the page is done to your satisfaction,press a key and it's printed on your printer, and you can move on to the next."

According to Asgard, Screen Preview not only works with standard floppy disks, but "is also compatible with hard drive systems and most RAM disks." If (like many people) you use your computer mostly for word processing, you could find this product to be very helpful. I plan on giving it a try myself. <END>

The following are my comments...

Most of this information was explained at the meeting, but I missed it somewhere! Maybe someone else missed the information, then this will be of some help. Since the beginning I have been using Asgard's products, After I got my printer I went crazy. You might say that I am a graphic freak. I got a pile of pictures. I am having a lot of problems with my equipment, but thanks to the WEST PENN U.G. I am getting them worked out.

R2D2&TI2 MADE IN USA

-WP♦

NEXT

OSHTI MEETING

WED. FEB 19TH

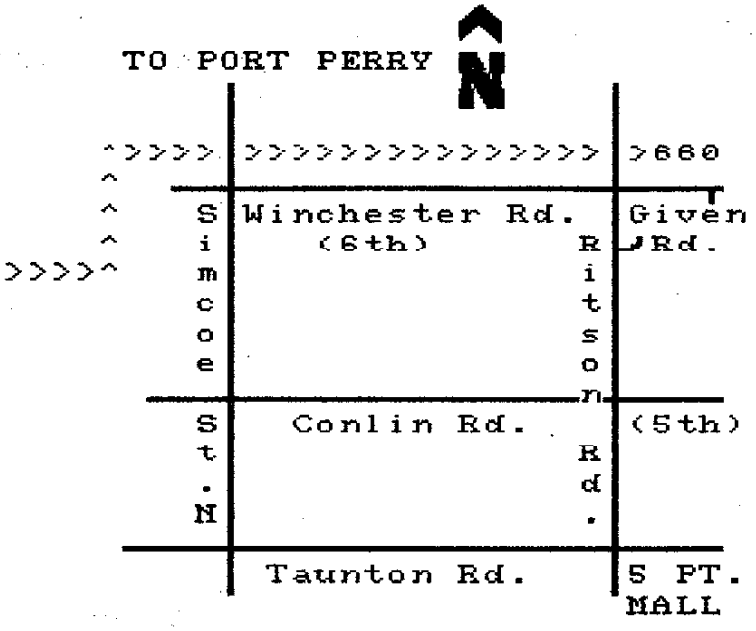
AT TOM'S
See map >>> >>>>^

FUNNELWEB 4.4

> HOW TO CONFIGURE FUNNELWEB 4.0

& D.O.M. MAR 25

NEXT MEETING



- O - S - H - A - W - A -

OSHAWA TEXAS INSTRUMENTS HOME COMPUTER USERS' GROUP

CHAIRMAN: RAY BLODGETT (579-1767)

VICE CHAIRMAN: JOHN EASTHAM (728-9994)

TREASURER: KEITH WYARD-SCOTT (723-5758)

LIBRARY/SEC.: DOUG BURLEIGH (579-5109)

NEWSLETTER EDITOR: TOM JAKABFY (725-7298)

MEMBER-AT-LARGE: ----------

MEETING TIMES:

The OSHAWA TI USERS' GROUP (OSHTI) meets between the hours of 7:30 and 10:30 pm

Location to be named in the newsletter.

MEMBERSHIP FEES:

The OSHTI membership is $15 per family per year.
Members receive ten(10) newsletters per year.(Jan.-Jun. Sep.-Dec.).
Members also have the use of the club library (CASSETTE + DISK).
VISITORS to club meetings are WELCOME.
Copying charges for disks-of-the-Month are $1(your disk) or $2(our disk).

MAILING ADDRESS:

Tom Jakabfy
660 Given Rd.
OSHAWA,Ont.
L1H 8L7

The OSHTI Users' Group is a Non-profit organization dedicated to encouraging the continued use of the TI/994A for education, entertainment and data management. The club also supports the MYARC 9640 or GENEVE(TI compatible) computer.

OSHTI