FEBRUARY 1996

OSHAWA TI 99/4A COMPUTER USERS GROUP

OSHTI

'IRON' FLOPPIES

I guess Dick thought that I would be able to fix the badly damaged disk that he got from Bruce Harrison. He was right.

The disk was badly indented with what looked like a large coin; a loonie. The plastic surrounding the disk was bent and the disk inside was also bent. Glen said that he could read the first 5 or 6 files and that was it.

First I removed the disk from the plastic by cutting the little tabs on the diskette on two sides and carefully removing the actual DISK. I could see that is was badly scored. I first tried to flatten the disk by placing it in a disk sleeve; yes I have lots of spare ones sitting around. I gave it two days under a heavy book. It still looked bad.

Somewhere, I had read in a newsletter that damaged disks should be warmed with an iron and the surface would revert back to its former self. So I tried. I set my steam iron (without water) to its low setting for 'permapress'. I then placed the damaged disk in a sleeve and ran the iron over it until I was satisfied that there was an improvement. I didn't get all of the dent out, but I had a lot of it out.

Next I slipped the ironed diskette into a new plastic sleeve; I had to remove a good disk from its plastic sleeve. I then did a catalog and low and behold, it read properly. All the files seemed to be there.

I did a file back-up to a new diskette and tried out the program. IT WORKED !

Another case of file recovery, but it was a lot more mechanical that using a disk utility program. It's amazing that data can take such abuse and still come out fine.

Tom.

HELP NEEDED

I don't know what kind of shape I will be in for the next month. I will have some minor surgery to remove a 'ganglon' from my right wrist. This will mean that I will have a 1/2 cast on for a couple of weeks and my ability to type will be severally curtailed.

If the MARCH newsletter is to get out, we will need ARTICLES TYPED BY YOU.

You can send E-mail ASCII files to me (tomjaka@village.ca) or mail me a disk with some files on it or BRING it over and have a cup of coffee.

It can be IBM or TI as long as the IBM diskette is formatted to 760K only!

Don't let us go a month without a newsletter.

H E L P O U T ! Noone will be critical of your writing!

Thanks in advance.

Tom.

FEB. INDEX

FAIRS & FLEAS

The DURHAM AMATEUR RADIO HAMFEST or FleamarKet will be held Sat. Apr. 13th from 9 am to 2 pm at the METRO EAST CONVENTION CENTRE (Brock Rd. in Pickering).

A few years ago when this event was held at the Pickering High School, we would have a table to show off our Club. Since it has been at the Metro East convention centre we have not done this. For one thing, the cost of a table is much higher and we found that it was very crowded and the aisles hard to pass without Knocking or bumping into someone.

You can still attend this event and get a good bargain or two on hardware for Ham radios, computers and you-name-it. You do have to Know what you are prepared to spend though. Everything isn't a bargain.

ONTARIO COMPUTER FAIRS

Ontario Computer Faire is again in Whitby at SOCCER CITY. The date and time is : Sunday March 31 from 11 am till 4 pm. We will be setting up a booth and members of our club will get a FREE pass (officially now).

This faire is usually one with a lot of other clubs displaying their wares and a cross-section of retail and wholesale dealers. Prices are usually a little better than you can get in most retail outlets.

This one is worth attending and of course, please HELP OUT !

LAST MEETING

The January OSHTI meeting was rescheduled to Thursday from Wed. for fear of travelling difficulties. As it turned out, there was probably just as much difficulty for Thursday than for Wed.; oh well, what can you do ?

The meeting was a Kalidescope of items. There were 4 computer screens to look at. I set up a micro system and had two monitors show the output. I thinks it gave a better impression than looking at one screen all night. Visibility was high.

TI EMULATORS ON PCs

The 2 IBM emulators of the TI were shown on a TI TravelMate WINSLC laptop computer. This is a 486 25 MegHz computer with a VGA monitor.

The latest version of the PC99 release 3 was demoed and the speed noted. There are two version in my release. One is the 'slim-line' version with few bells and whistles and the other is the complete version which operates quite a bit slower.

We compare the speed of the 'fast' version and noted that it was a little slower than an actual 99/4A. However, the screen clarity is much better.

With the PC99 emulator, written and compiled in the 'C' programming language, the emulation is excellent. You can SAVE files to up to 4 disk drives (which are on your hard drive). Saving is 'noise-less' because the files go to an emulated DSK on your hard drive. These DSK's are transferable to an IBM formatted disk and can be read in from the PC dos when you want to change disks. To get a TI disk transmitted to the IBM, you can do it via hard wiring from TI RS232 to the IBM RS232 and using the supplied software to do it. Or you can use PC TRANSFER. I have only done the former so I can't speak about the use of PC TRANSFER.

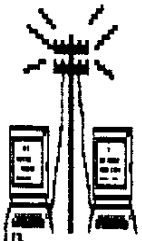
So, the bottom line is that you can translate every disk of TI to a format that would read from PC99. Each MODULE for the TI also can be purchased from C.A.D.D. Electronics and is in software as well.

The second emulator shown was from M.Schwartz. It runs faster than the PC99; about the same speed as the TI 99/4A. However, the version that I have is only a demo version. There are several modules supplied, Extended Basic, Hunt the Wumpus, TI DEMONSTRATION.

The DSK support for this emulator seems to be absent in the demo version. Glen and Dick said that they had a later version which had more modules but they said that they didn't Know if you could save files or transfer from the TI to this emulator.

Next we saw some GAMES that can be played on the TI-85 graphics calculator - XWING and PONG.

Although they are NOT FANCY games, it demonstrates that there are people out there writing programs for the TI-85. In fact, the XWING program was downloaded from the INTERNET from Sweden and picked up by a student of mine. I used my TI-85 to IBM software and LINK to translate the INTERNET file into useable TI-85 software. An this is what I learned.



SENDING FILES

When you want to send files over the Internet, you can do so with ASCII files quite easily. However, if you want to send PROGRAM files directly, you can't. The reason for this is that program files are in BINARY; ie. 1's and 0's. If you wanted to do this then a miss of a 1 or 0 would result in a messed up program. Thus, the invention of the UUe interface. UUe allows the program to be changed (CODED) to ASCII for transmission purposes. However, the receiver must then DECODE the UUe file to use it. My LINK programs for the TI-85 have such programs and they decode really fast and well. That how I got the XMING program up and running on my TI-85. I also read something that gives me the impression that there is a UUe coder/decoder available for the TI 99/4A.

I also found out that Texas Instruments in Lubbock Texas has established a database of programs for the TI-85 for educators and non-educators. You can phone in and upload or download UUe files for use on the TI-85. I think this shows that TI is still doing a good job supporting their users.

At the January meeting, I officially released the latest version of the SEARCH! program. It's version 4.00 and supports 9 drives (1-9). It also has WINDOWS for TI support thanks to John Bull's utility. For more info on how to use WINDOWS on the TI, see the Jan. 96 OSHTI newsletter. I also included WIN10 on the D.O.M. This is the 10 window version of Windows. Current version only allow 6 windows.

There were a few comments about the fact that I am working on a NEWER version of SEARCH!. Let me make it perfectly clear, I am not another Bill Gates. Version 5 will have SCSI support as opposed to just floppy and ram disk support.
I will revise the version 4.00 for people who want DSK A to Z support.

Dick reported that Bruce Harrison has been working on yet another program which prints out WORD SEARCHES up to 25 rows by 25 columns. That's the GOOD NEWS, the BAD NEWS is that the disk sent to Dick was damaged and he could only read a few files. It looks like someone tried to stamp a loonie through the envelope.

Doug let us know that the next Whitby Computer Faire will be at the end of March and that all members would get FREE admission. Doug will also get us the date for the Pickering New Flea Market which should be sometime in early April. Doug has kindly taken over the Treasurer's job after the death of Keith.

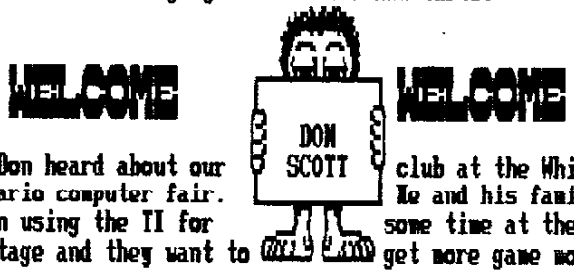
EQUIPMENT FOR SALE

I have a good supply of BRAND NEW TI consoles and TI joysticks at very reasonable prices. There are a few new SPEECH SYNTHESIZERS and a couple of PE BOXES with cards. So, if you'd like a back-up keyboard (CPU etc) and some better joysticks; these are NEW....see Tom.

We also have a lot of cartridges and assorted goodies. JUST ASK if you are in need of something. HELP is close at hand.

The Jan. D.O.M. also has two nice utilities. One is a SCREEN SAVER program which has nice colors and graphics and the other is DEFRAGmenter which will duplicate a disk so that all of the files are ALPHABETICALLY and PHYSICALLY arranged on a disk. Just make sure that the (TARGET) new disk is formatted the same way as the old one is.

As usual we had lots of coffee and goodies. Thanks Kawartha for bringing the muffins and tarts.



Don heard about our club at the Whitby Ontario computer fair. He and his family have been using the TI for some time at their cottage and they want to get more game modules.

Don also has an AMIGA system and is a friend of Dick Hornaman, who was on the executive of OSHTI a few years ago.

We welcome Don to our meeting and hope that he will join us in the future.

TI STILL CARES

In January '96 I received a letter from TEXAS INSTRUMENTS of Lubbock Texas. In the letter, they wanted to know the status of our user group. Apparently they are still keeping a tab on us and want to know what equipment that we are keeping up on.

I sent them the status report and the January newsletter to show that we are still a viable group.

It's nice to know that TI CARES.

SEARCH 5.0

PRINT CODES

This is an update on the WINDOWS program utility written by John Bull.

When I was updating my latest version of SEARCH!, I found that I would need MORE than the 6 Windows that John's utility would provide. I phone John in Tennessee and asked him how to do it. We exchanged internet addresses and he said that he would be in touch.

I tried rewriting the WINDOWS utility through the source code but did not have any luck. Then came a message on the internet from John. He had rewritten the code and solved the problem. I tried it out and it works beautifully.

Here are the changes to the source code for those who have it. If you don't have the program or demos, they are available from user groups (like ours) or from Charles Good; ask for library disk 1061B.

```
**  Windows for TI - "WINTI/S"
**  Ten windows, each 512 bytes
**  and independent
*****************************************************
**  John M. Bull
**  409 Blue Valley Lane
**  Knoxville TN 37922
**  Changes to the six window version

16        BSS  >80  Delete - unnecessary!

26  BFDX  DATA >0000,>0200,>0400,>0600,>0800  Buffer
                                              index
                                              table
27        DATA >0A00,>0C00,>0E00,>1000,>1200  continued
**  Space for location & size of 10 windows
29  ROW   BSS  20    Top Row
30  COL   BSS  20    Left Column
31  NL    BSS  20  Number of lines inside frame
32  LEN   BSS  20  Line length inside frame
33  IPLFT BSS  20  10 Window screen locations
**
*****************************************************
35  BUFF  BSS  5120  Window content buffer

66        AI   3,20   Offset for next argument
```

That last line eluded me for a couple of hours!
John Bull

It's really wonderful having helpful people like this in the TI community.

Please support our programmers.

One thing that remains a mystery to a lot of us is the commands which enable a printer to change from ordinary print to condensed (small) to expanded (double width) to NLQ (near letter quality).

Thanks to the work of Mickey Cendrowski of the West Penn User group, the commands for a lot of different printers are getting published.

Mickey has started a reference sheet which shows the different command sequences for a variety of printers. Up till now, I have never seen a CROSS REFERENCE of codes, only ones for this printer or that one. Mickey shows a wide variety of these codes for 24 different printers. Unfortunately, not all of the printer codes are complete, but there is an awful lot of material there to satisfy a lot of people.

Of course, when we buy second hand printers, we seldom get the original printer manual, so we would need these codes. I know, because the last few printers that I bought had no manual.

Mickey is asking for help on the GAPS in her list. These include the OKIDATA 180, OKidata Micro 181 and 320, SeiKosha SP-1000AP, and STAR NX-15 If you can provide the printer manual for any of these then let me know and I will pass the info onto Mickey.

I have the info for the Epson LX-800 and Star NX-1000 to pass on already.

By the way, if you need information about YOUR printer and don't have a manual then I have the copy of Mickey's newsletter for you to find yours.

The following PRINTERS already are complete.

CANON BJ-100,200,200e,200ex,230

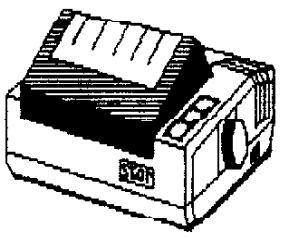
EPSON FX-80,MX-80

GEMINI 10-x,SG-10

OKIDATA

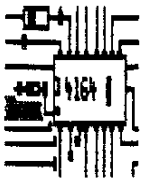
PANASONIC KX-P1091,KX-P1123

SEIKOSHA SP-1000AS,1200AS



Thanks to Mickey for starting this large task.
Tom.

SCSI UPDATE



In writing the program SEARCH! version 4.0 I discovered that it was relatively EASY to access the SCSI hard drive and its subdirectories.

Of course, the program SEARCH! MUST be run on a GENEVE using EXTENDED BASIC. But with the advent (seems we are past it,ha,ha) of the ROM chip for the TI 99/4A, then this will eventually run on a TI 99/4A with a SCSI drive or two.

The Key to accessing any storage device like a disk drive is to open a file like this:

```
OPEN #1:"DSK1.",INPUT,RELATIVE,INTERNAL
```

You then read the FIRST RECORD using:

```
INPUT #1:NA$,D,E,SI
```

NA$= name of the Volume (disk name or volume name)
SI= available sectors
E-SI=free sectors

To get the FILE/or DIRECTORY names you then do another input till you come up with a NULL file name.

```
INPUT #1:R$,D,E,SI
```

R$= name of FILE or DIRECTORY
D= type of file ; D is negative if the file is PROTECTED.
E= the file sector size
SI= the size of the record eg. in a D/V type file then SI could be 80 for a text file.

How do you open a directory of the SCSI hard drive ?

The answer was very simple. Just use the SCSI designation !

```
OPEN #1:"SCSI.",INPUT,RELATIVE,INTERNAL
```

When you do a listing using the input statements, you get the same things as a normal floppy directory, and you get the DIRECTORY names where they are present.

How to detect DIRECTORIES was my next problem.

It didn't take me long to do it. I simply noted that the VALUE of D for a directory entry was 6!

If a directory name is "WORK" then you would open this directory as follows:

```
OPEN #1:"SCSI.WORK.",INPUT,RELATIVE,INTERNAL
```

Then you do your inputs and find that the files are listed as with a floppy.

If that directory had another directory, then you would add the name of it to the end of the previous one.

```
OPEN #1:"SCSI.WORK.NEXT.",INPUT,RELATIVE,INTERNAL
```

The key to all of this is to use the "." on the end. Don't forget it else your program will probably crash.

So there it is. Access to a SCSI directory from Extended Basic, and I assume from regular basic is quite simple and follows the already established command structure.

As they say, the SCSI is UPWARDLY COMPATIBLE.

Tom

P.S. Although I have NOT tried this, I assume that if you have a disk drive labelled A, then this could be assessed using:

```
OPEN #1:"DSKA.",INPUT,RELATIVE,INTERNAL
```

Also a word of NOTE ! Be sure to CLOSE all of your files before turning off your system.

You can do it after a 'crash' from the command line by typing: CLOSE #1.

JAVA ◊ 'COFFEE'

In the December newsletter I reproduced an article concerning the development of a DOS system which would support ALL types of computer format. Well, it seems that there is something that does support all computers.

It is the programming language called JAVA.

Some of you may think that this is a COFFEE, which is was named after. But it really developed from a programming language called OAK.

OAK is a language that programmers use to program things like microwaves, VCRs and other gadgets that we don't think need programming.

OAK was developed buy SUN MICROSYSTEMS and has been available free for some time. When SUN went to try and copyright the system they found that the word OAK would be too difficult to try to copyright, so they used the word JAVA (aka COFFEE).

What is of importance is the fact that they made it available on INTERNET free of charge. Now this is the part that I'm not sure of; whether you program on INTERNET or at home and then upload it to INTERNET to run. I think

that you probably type it in at home and then use INTERNET to RUN the software.

Although this doesn't sound that exciting, it is a breakthrough. You can now use ANY COMPUTER to RUN a program written in JAVA. It does NOT matter if it is a TI an APPLE or an IBM, the software will run on the INTERNET. Herein lies the power of JAVA.

You don't have to worry about compatibility, the JAVA INTERNET server will run your program. It will also be the source of a tremendous lot of data.

The source of my information was an article in the Jan.22,1996 TIME magazine.

Although JAVA is more important to programmers at the moment, in the future it could mold the way computers are used by everyone (according to the article). Remember what MICROSOFT has done with software and it's WINDOWS and MDOS systems.

In fact, MICROSOFT has missed the boat on this piece of software, SUN has the advantage.

JAVA has gone through many revisions and is the antithesis of the best programming for the past 25 years. It is an "OBJECT ORIENTED language which forces programmers to write small, self-contained units that can be slotted into one another like Lego blocks."

The programming is also HACKER and IDIOT PROOF(although nothing is MORON PROOF!) so that virus's will not be able to exist in its "highly encripted" format.

SUN released JAVA on INTERNET and it is "leaking out through the cracks, as they knew it would." It is basically FREE and SUN is NOT making anything off the release of JAVA.

What SUN hopes to do is to make money on the increased traffic on INTERNET and on INTRANET (the collection of networks between BIG corporations like IBM, GM etc.). Apparently, most of the servers on INTERNET are SUN systems and an increase in servers would benefit SUN.

JAVA runs slower than most languages, but that's nothing new to people using a TI. The libraries that will support JAVA are also still being written so some streamlining will be done to help programmers.

None of this is a certainty, JAVA may not pan out, but at least it won't cost an arm and a leg to get it and see for yourself.

As an addendum to the article, there was talk of the $500 computer that would contain only a keyboard, a microprocessor, some RAM memory, a communications link and not much else. The INTERNET would act as the storage for most of the data that people might access. Although this would give more people access to the INTERNET, SUN said that the cost of the computer would be between $500 and $1000,-US. Sounds like we already have this.

MULTIPLAN...

MULTIPRINT

One of the things that annoys me is having to set my printer for CONDENSED print when using MULTIPLAN. You have to do this by usually pressing buttons on the printer. The problem is, I have several printers and the keypresses are different.

Today (Feb.10.96) I was browsing through a MICROpendium flyer from 1985. In it there was an article from the Mid-South User group by Walt Maes. Although the procedure seems a little long, it is relatively EASY and solves the problem that I originally had. Here is how to do it.

Enter MULTIPLAN as usual. Goto ROW 1 Col 1 (default position).

Press A for Alpha and enter the letters ABC into this cell. Press enter.

Press T for Transfer files and then O for Options. Select Symbolic and press enter.

Press S to Save and call the file PCOD (for condensed print).

Quit Multiplan.

Go into DISKU (vsn 4.21) and select FILE EDITOR. Use the Name PCOD for file name and the disk drive number.

You will see the letters ABC near the top (press CTRL A for ASCII). Put the cursor over top of the A and then press CTRL H for HEX. The A will now read 41.

Type in CF 1B 47 over the ABC positions. This is the printer codes which turn on condensed print on most Epson and Star and compatible printers.

Write this back to the disk using CTRL W and then enter over the destinations of the sector. This will write it back to the correct place of this file.

Now that we have the CODES for condensed print, we must go back to MULTIPLAN and load in the file PCOD and RESAVE as a regular MULTIPLAN file. Here is how to do it.

In MULTIPLAN, load in the file PCOD using Transfer and then LOAD.

You should see some control characters in the first cell. It will no longer be ABC. The letter G will be at the end.

Now, go back to TRANSFER and select OPTIONS and choose NORMAL.

Now save this file as PCOD again.

Now if you load one of your spread sheets you can use the printer code by simply doing an eXternal Copy.(Before you do this, place your cursor near the top of your spreadsheet so that your printer will be turned on at the start.)Type the name of the file at the prompts. Use CTRL A and then type in R1C1. Press CTRL A again to get the location of the copy command, it should be where your cursor already is. Press CTRL A again and at the prompt for LINKFILE select No and press ENTER.

You should now see the control character and G in the cell that you copied from.

There is no reason why you cannot have more control codes to add to you spread sheet. For example, you could have EXPAN for expanded print and NLQ for Near Letter Quality print. These codes would have to be looked up(SEE ARTICLE on PRINT CODES).

I would like to add one variation to the above procedure. In your newly 'normal' saved PCOD file, use the NAME instruction to call R1C1 = COMD. This way you don't have to remember the name of your cell especially when you might have 3 or 4 of more in the PCOD file.

I will try to demonstrate this at the next meeting and have a file on the DOW called PCOD so that you can use the printer codes.

Tom

NEWS BITS

Just resently, I have heard that there is a new version of the Schwartz TI-IBM emulator on the market. Apparently the latest version has provision for hardwiring to a TI and downloading files or disks to the IBM.
This month, it was reported in MICROpendium, that a cable could be constructed and such a feat accomplished.

SCSI SUPPORT

Progress is being made on version 5 of the SEARCH program. It has SCSI support and operates from regular extended basic on the GENEVE. When the ROM chip is finished for the TI 99/4A, then this program should also work on it. Since the 'calls' to SCSI and a MYARC HFDC are similar, I can see no reason why this program will not work with a MYARC HFDC.

LIFT OFF AT KAWARTHA 99ERS

SURFIN' THE INTERNET

The Kawartha group had a meeting on VALENTINES day....how romantic can you get ?

The meeting was hosted by Phil Towsend at his home and featured "HOW TO USE INTERNET".

Unfortunately, no one from our group was able to attend. I am sure that it was very informative and no doubt Phill remembered to PLUG in his phone jack and keep the kids stayed off the phone.

Hope to get to your next meeting.

M.U.G. CONFERENCE

May 25th is FAST approaching. This is the date for the MUG (Multi Users' Group) Conference which will be held this year in Cleveland.

This is a Saturday conference and will no doubt rival the LIMA group's efforts. I know it will give Charlie a break from the event for a year.

I anticipate going to this event and maybe even squeezing in a baseball game, if time permits.

MARK the DATE on your calendar. It should be another great TI FAIRE. If you haven't been to one then, you should treat yourself and even family to this event.

It's not just computers, it's people !

BLAME IT ON SIBERIA!

Speaking of May, "When will this winter end ?". No doubt the ground hog has seen his/her shadow this year.

Few people in the North East part of the US and for that matter, all parts of Canada, will say that it has been an average winter.

Cold from November till March seems to be the order of the day.

Canada is NOT to blame ! It's the SIBERIAN PIPELINE !

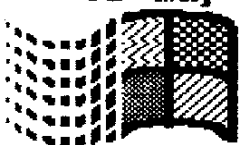
NEXT

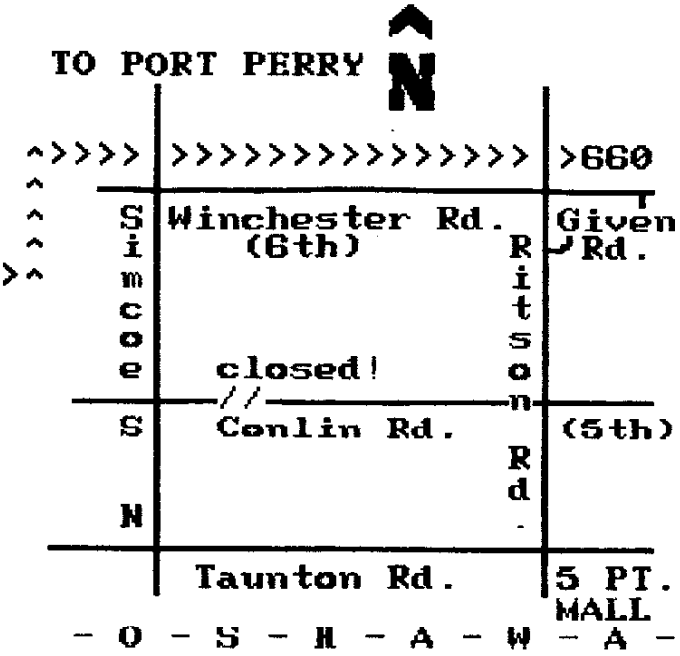
OSHTI MEETING

WED. FEB. 28

MULTI PRINT AND SEARCH! 5.0 WITH 10 10 WINDOWS

AT TOM'S
See map >>>





OSHAWA TEXAS INSTRUMENTS HOME COMPUTER USERS' GROUP

CHAIR:	RAY BLODGETT (579-1767)
TREASURER:	DOUG BURLEIGH (579-5109)
LIBRARY/SEC.:	DOUG BURLEIGH (579-5109)
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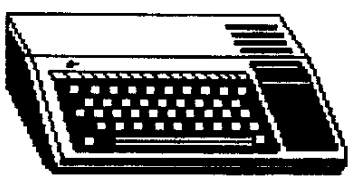
This newsletter was produced on a TI-99/4A using FUNNEL-5.21, PAGE PRO, and PAGE PRO COMPOSER. Occasionally news articles are photocopied.

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.

OSHTI



THANKS FOR YOUR MEMBERSHIP!

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)

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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.