OSHTI

# JUNE OSHTI MEETING:

The June OshTI meeting was hosted by Guy. Thanks for the excellent donuts and coffee and air conditioning.

We viewed one of the LIMA video tapes which featured Mike Wright showing off some of the hardware that TI developed but never released for the TI-99/4A. One of these was a video card for the P-BOX which allowed for interaction between the computer and VCR.

Another item was the TI-99/2 which was a 'small' computer which was to be used to compete with the SINCLAIR -80 and 81. The 99/2 was a FASTER computer than the 4/A since it had NO GPL(graphics programming language) to slow it down. It also had the 9905 chip which made it run much faster. Alas, this computer was never really released by TI.

Mike's comments were quite pointed and sarcastic, but nevertheless quite humorous. At one point he refers to Bill Cosby as the downfall of the 99/4A. He says that he and his family are not allowed to watch the COSBY show for this reason.

Mike spends a lot of his time looking for and buying unique items for the TI computer (4A and 2). He has produced quite a catalog of hard and software for the TI. It is available from him for a fee to cover the costs of photocopying and mailing. The address is on the video tape, I believe.

## LIMA VIDEO TAPES

This was just one of the many programmes on the VIDEO tapes from the LIMA Faire on May 18 of 1991. The tapes are available for loan from the club. The titles are as follows:

*TAPE #1:*

*Mike Sealy/Mickey Schmidt*
*+ Mike Roakke:*
*-software from MS EXPRESS*

*Eunice Spooner + Chris Bedard: -Oakland Computer Club*
*an*

*elementary computer user group.*

*Irwin Hott: -current status of the newsletter clearing house BBS*

MUG Conference meeting of user group executive officers.

Mike Wright:
-bits and pieces of the 99/4A history and the 99/2 computer

Gary Bowser:
-Hardware products from OPA (TIM)

Beery Miller:
-Software for the GENEVE 9640

TAPE #2:

Charles Good:
-Demonstates FUNNELWEB 4.32

Bruce Harrison:
-Demonstrates the GOLF SCORE ANALYZER and the Harrison Word Processor and MUSIC disks

Barry Traver:
-demonstrate how to incorporate machine language links into TI-Ibasic programs

Chris Bobbitt: ASGARD
-Demonstrates Screen Preview. LINK. CLASSIC CHECKERS. Line EDITOR and others.

Don O'Neal:
-talks about the NEWEST Hardware release - the 99105 CPU chip board to replace the 9900 in the console.

BUD MILLS: Horizon
-Bud demos the Horizon products : Ramdisks, Gram Boards and MEMEX expansion for the Geneve.

Barry Traver:
-Talks about the GENIE network and his GENIAL TRAVELER diskozine.

TAPE #3

Joe Ross:
-demonstates C-shell 99
a GRAPHICAL INTERFACE

Chris Bobbitt:ASGARD

-demo's BANNER PRO

E.M.Smith:Knoxville
-demo of the NEWSLETTER editor programme

Mike Maksimik:Crystal Software
-Mike is interviewed regarding his new MIDI interface and software programmed for the TI.

Candide Video of Vendors and displays at the LIMA MUG Conference.

## JUNE D.O.M

The June OSHTI Disk of the Month featured the BEST of the QB-99ers group which was picked up at LIMA.

There were 16 excellent little games and Utilities on ONE disk. . One was the classic HANGMAN, another a WALK THRU the MINE FIELDS, and several CODE makers and breakers. There is even a ittle utility to add up your numbers and print them to screen or printer. It'helped me get my bills straight.

Don't forget to be present for the Fall OSHTI meetings. See ya then.
Tom

## OSHTI PICNIC

The 2nd annual OSHTI picnic was held on July 7 at Tom's pond. It was a great success and the weather cooperated this year.

New-comers Ed and Liz Conlin and children and Bob and Fran Young and children were able to attend their 1st picnic this year.

Thanks to all the ladies for their contributions of salads, cheeze trays, and hors'deuve. I don't think there is any salad bar around to compare. The bar-b-Q featured hot dogs and burgers; and there wasn't any fire to speak of.

The kids all seemed to enjoy themselves from the youngest- Laura, to the oldest (?). They were seen engaged in various forms of sport from badminton to baseball to billiards(how could they want to play inside on such nice day ?).

The older children (grown-ups) enjoyed some canoeing, some horse shoes and a lot of small talk. What was the score in the wives vs hubbies horse shoe game ? And who was the most dangeous thrower of shoes ?

Don has joined Tom in the accident-prone list. Don was a little late arriving after having some sailing trouble with his boat. I guess it calls for a little fiber-glass filler.

I hope everyone had a good time. We enjoyed hosting the event. And look forward to next year's picnic.

Tom and Nancy

## MULTIPLAN
## 80 COULUMNS

Well, I thought it would be nice to have an 80 column MULTIPLAN for the TI 99/4A and VOILA... we have one. In fact it has been available for at least 3 years.

It was originally provided for use on the MECHATRONICS 80 column card and it had at least one bug, BUT IT WORKS on TIM as well !

Thanks to D.O'Neil, a member of DELPHI for his assistance. D.O'Neil answered my query on DELPHI within 3 days. Not only that, but he/she also uploaded it to DELPHI and I was able to download it and test it out.

Well it was a great feeling to see MULTIPLAN in 80 columns on the TI 99/4A (not a GENEVE). It also has been upgraded from the original TI MULTIPLAN in several nice ways.

>1. All KEYS REPEAT. This was not the case originally.

>2. The cursor moves across the screen MUCH FASTER than the original. This makes entering and editing much faster.

>3. The DIRECTORY of what's on a disk prints across the screen in 4 columns of names. This is similar to what you get on Apple and IBM screens using Multiplan. Obviously, you can get a lot of filenames on the screen and select it by using the cursor and inverse video select. This is a very nice feature.

Now, for the bad parts.

x=1.The PRINT routine does NOT WORK even if you have a freshly loaded spread sheet. If you do any manipulations with the sheet, the printer will act erratically.

x-2. There is some screen garbage when loading a disk directory. It DOES NOT affect performance in any way. After you return to the spread sheet from a directory, all but the left-most and right-most characters are cleared off.

x=3. The calculation time is SLOWER than the ART GREEN version of Multiplan 4.02. It took 1 min and 25 seconds to do the same calculation that Art's did in 42 seconds. When I compared the calculation time between the 80 column Multiplan and TI's Multiplan the time was the same.

You can load the 80-column Multiplan from Horizon Ram disk with NO SPECIAL LOADER. As long as you have the CALL AO on and the horizon is in the first disk on the system and called TIMP, then there is NO problem. It can also access any drive(up to 9 is all I tested) whether RAM DISK or FLOPPY.

All in all, I would say that there is NO CONTEST if you are trying to choose between the a 40 column MULTIPLAN and an 80 column on.... the 80 will win hands down. You have a much wider screen and you can see more cells. You can also avoid the print problem by reloading the spread sheet or by printing it out on the 40 column one.

I will be contacting Art Green in Ottawa to see if he

is interested in putting his version on 80 columns or fixing the bugs in the Mechetronic version.

It just goes to show you that the TI community is very helpful in getting you answers to your questions... and FAST too !
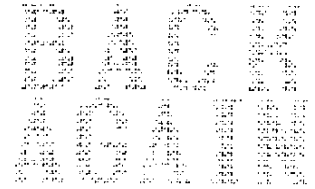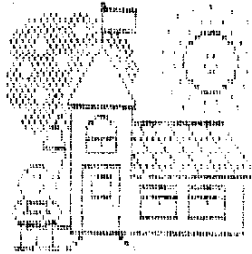
## PROGRAMMING IN c99

What language should you persue to write programmes in ? Most of us are familiar with BASIC or EXTENDED BASIC but there are other languages to use on the TI and all have there uses and reasons for being. You can even COMBINE some of the languages.

Here is a brief list of some of the more popular languages and their advantages.

-)TI BASIC................
most people have some knowledge of it.
-)TI EXTENDED BASIC.......
allows you to use speech, sprites and multi commands per line, access 32K, faster operation.
-)9900 ASSEMBLY LANGUAGE...
much, much faster operation and access to all parts of the machine.
-)c99 Language............
portable to other machines, currently used by commercial programmers
-)PASCAL..................
Used by most universities as an introductory structured language.
-)LOGO....................
structured, logical and easy to work with. Excellent for young kids.
-)FORTH...................
Structured, great for accessing the hardware parts of the computer.
-)FORTRAN.................
Good for scientific and mathematical work.

The above list is NOT all INCLUSIVE. There are OTHER LANGUAGES out there for the TI. These include 'G', 'MODULA 2', 'LISP', and 'PILOT'.

After using BASIC, most people would prefer EXTENDED BASIC (XBasic) for the multi command lines and the access to speech and sprites. There are a lot of other good reasons for using XBasic, one being that you can access the 32K of memory for Assembly routines, and the asssembly routines are lightning fast !

I personally find XBasic easy to work with - and there are speveral helpful utilities (EZ KEYS and The Missing Link and XXBASIC by Barry Traver) to help you write truly excellent programmes.

The reason for using the following LANGUAGES is mainly to take advantage of their speed because each can be COMPILED into assembly language.

TI 9900 Assembly Language is one I have also tried out for the added SPEED. It does FLY but you must learn a whole new set of commands and operate on a much more precise level. Fortunately 9900 Assembly Language is much more powerful and EASIER than something like the 6502 chip on the C-64 or Apple II. Believe me when I say this cuz I know from experience here.

However, assembly language is a TWO STEP course. You write the SOURCE code and have it assembled into OBJECT code which is runnable. And there is option 3 and option 5 code which can be run by certain LOADERS, but that's another story.

Right now I am trying to decide on whether to pursue c99 or TURBO-PASCAL. From my observations, the c99 language seems to be the more popular option. There is some confusion with the PASCAL language. There is a UCSD PASCAL(University of California at San Diego) version and the TURBO-PASC language which came from Germany. The former needs a CARD in te PBox while the later (Turbo) does not. It seems to me that the latter is better. However, the portability of PASCAL is another reason for using it. I don't know which of the two above is better in that respect, but I suspect that UCSD is more portable.

The c99 language seems to be the way to go for several reasons. &First, it is more POPULAR. &Second, it is more PORTABLE form one machine to the next. &Third, it is well documented in MICROpendium for beginners to learn on. &Forth ( a Freudian slip), it is being used for some new and interesting software...

An added feature to learning c99 is he fact that it could be useful to someone who programmes on another machine or for that matter for a living... writing software.

Over the next few newsletters, I will give you an idea how each can be used to do the same thing. It will be obvious to even the beginner that BASIC or XBASIC are still the easiest ones to use. As I said, XBasic is still my preference, since you can imbed assembly routines into it quite easily when you need the speed.

Tom Jakabfy July 13,1991

# NEW NEWSLETTER FORMAT !

If you have received this newsletter before, you will obviously notice that there has been a big change.

This is the result of using Art Gibson's fine programme **NEWSLETTER PRINTER**. It actually consists of several programmes and an environment for running them.

Basically. Art (from the K-TOWN User Group in Tennessee) has devised a **NEW FORMATTER** for dv 80 files (those that TI-WRITER and FUNNELWEB etc. produce.) The new formatter allows you to do *EVERYTHING* in your dv 80 file that you could in TI-WRITER and clone type programmes AND THEN SOME.

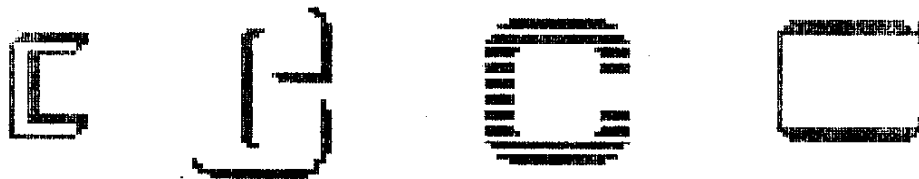For example. all of the GRAPHICS are called from the file and make use of the TI-ARTIST INSTANCES (pictures).

The programme is versatile and allows for either 2 column or 1 column (like this) print; in either PICA or CONDENSED PRINT MODE.

There are also some NEW FORMAT commands which improve on some of the ones that TI thought would be available. Art has even left 3 commands available that can be used defined by the end-user. This is how I got the tiltles in DOUBLE height print.

There are several other newsletters done using Art's programmes and they can be individualized to suit the user group needs.

There is also a PAGE VIEWER programme in the package. This allows the editor to PREVIEW what each page will look like. It also shows you how many pages there will be.

I thought that I would experiment with this package this month to see if it would increase the speed of production.

## PROGRAMMING IN c99

As I mentioned earlier, I wanted to learn to write programmes in the c99 language this summer. Remember that c99 is a subset of the big C language. This means that it is syntactically correct but lacks some of the commands or functions of big C.

I first wanted to read as much as I could about c99 using MICROpendium. There are a goodly number of rticles for those wanting to start out in c99 by Charles Kirkwood starting in August of 1987.

The articles start off very basic...write your name to the screen. However, they are excellently written and each programme is well documented. It is easy to start off BUT the biggest effort is in getting the first programme written and compiled, assembled and run.

If you are familiar with writing a basic programme, then you realize that all you have to do is to write it using line numbers to the screen of your TV or monitor and then RUN it, and it executes right then. This is the main difficulty to get over with the c or C language. It takes much longer to get your TYPED in PROGRAMME on the SCREEN to become a RUNnable programme. Here are the steps for doing this:

You MUST have the c99 disk from CLINT PULLEY which is in our library. This has all the programmes and DOCUMENTATION to get started. I will assume it is in drive #1.

1. Type your programme written in c99 using a text editor like FUNNELWEB program EDITOR or the editor in the EDITOR/ASSEMBLER programme.

2. SAVE this programme to DISK call it DSK1.NAME/S ( the '/S' stands for SOURCE code.

3. Using any OPTION 5 loader(Funnelweb loader (#3) RUN) run the programme DSK1.C99C (the c99 compiler)

Save your programme as DSK1.NAME/C ( the '/C' stands for COMPILED.

Hopefully there will be NO ERRORS and you cn go to step 4. If there are errors, note them and return to STEP 1 to correct them.

4. Run the ASSEMBLER (TI or FUNNELWEB). The SOURCE FILE will be DSK1.NAME/C and the OBJECT FILE will be DSK1.NAME/O step 1 and correct the initial source code.

(P.S. I haven't had this happen yet!)

5. Using any OPTION 3 loader(Funnelweb loader (#4) LOAD and RUN) : Then lad and run the following.

DSK1.NAME/O <enter>
DSK1.CSUP <enter>
'null' <enter> (use Function 3 when using Funnelweb) for the PROGRAMME NAME use START and press enter.

Every time you wish to RUN the programme you can go through STEP 5. But there is a way to produce E/A option 5 RUNnable programmes in STEP 5 above, but I will leave that till another day.

You can see why I was a little leery of writing a c99 programme.

The main (no pun intended) problems are:
> Knowing the SYNTAX (words to enable the programme).
and
> the drudgery of the 5 steps.

What are the REWARDS of programming in c99 ?

> FAST running programmes
> Knowledge of the C (and c99) Language which is transferrable to other computers.
> Learning something NEW.

Here is a simple c99 programme that allows you to enter two letters (capitals) on the screen and it tells you which comes first.

```
int a,b; main() { puts("TYPE TWO CAPITAL LETTERS");
putchar(10); a=getchar(); b=getchar(); putchar(10);
if(a<b) { a=putchar(a); puts(" comes before ");
b=putchar(b); } else if (a>b) { b=putchar(b); puts(" comes
before "); a=putchar(a); } else { puts(" both are ");
a=putchar(a); } }
```

Be careful for common errors :
> leaving off ;
> closing "
> use the correct kind and number of ( and )

Don't be afraid to make mistakes; I made lots on my first few programmes.

Notice that c99 needs NO LINE numbers. No doubt the general lay-out of the above programme may scare you, but after a while c99 is just as easy to write in as BASIC.

Practice makes perfetc ! ha,ha.

Tom Aug. 23,91

## MORE c99 SUPPORT

There is a nicely done NEWSLETTER on DISK or DISCOZINE for short which contains articles, source code and programmes on the 'C' language( c99) and 9900 (our TI CPU) assembly language. The name of this is TMS CLIPBOARD. If you are interested in learning about c99 ('C') and/or Assembly Language (9900), then this is an excellent source.

There are articles for the novice and ones for the more advanced. They have a question and answer section so that you can send in your questions for answering. Here is an excerpt from Vol.1.3 of there newsletter:

TMS 9900 Clipboard Subscription Info:
=== ==== ========= ============ =====

---------------------------------------------
First issue: (Sampler issue)
(Volume 1.1)

Free - You supply diskette (One SS/SD)
and postage. No extra charge.

---------------------------------------------
Single issues:
(Subscription benefits non-applicable)

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American dream.

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One more. and last important
announcement. We are looking for
feedback. If you have any questions,
comments, criticisms, gripes, or qualms
or anything else, please feel free to
let us know. We are also adding a
Question and Answer section to our
publication. If you have any questions,  either
hardware, software, or even
underwear, please feel send them to
the editor (Joe Delekto) at the above
address. If we can answer it
(we hope), we will publish the
question. and the clearest possible
answer, so that others may partake in
the transmission of knowledge.

Thank you,
The Editors
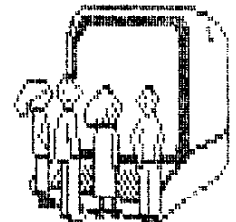


## MAIL STRIKE ?

The MAIL STRIKE in CANADA may affect the Sept.
newsletter arrivals. Hopefully, this will NOT be the case
but you never know. For those who normally receive this
by mail and can't make it to the meeting, I apologize.

## COMPUTER FAIR

James Creighton contacted me during the summer and
gave us the opportunity to enter the Bowmanville 'ONTARIO
COMPUTER FAIR'. The date is Sunday Nov.3rd at the
Bowmanville Recreation Centre on Highway 2.
James will allow us the use of two tables with power
for FREE ! He made me an offer I couldn't refuse.

James will allow us the use of two tables with power for FREE ! He made me an offer I couldn't refuse.

All we need now is some of our members to be there to talk to people and answer questions. If last year is a good indicator, you will have ample time to make the rounds and purchase a thing or two. Who knows, maybe you'll get your picture and name in the paper again. As long as you're not on AMERICA'S MOST WANTED, then you have nothing to worry about.

Those that do help out to man (woman) the booth, will also get in FREE!

James sent me 100 dollar-off-admission coupons for us to distribute.

Please help in this event.

## FUNNELWEB 4.40 !

Wouldn't you know it. Just when I became familiar with FUNNELWEB 4.31, out comes FUNNELWEB 4.40 !

Charles Good from the LIMA group sent these out in mid August groups along with their group's newsletter. I assume this went out to all newsletter exchange groups.

There was also a letter from Tony McGovern (the author of Funnelweb). It makes for some interesting reading. Tony relates a few things that indicate that we may soon be seeing the end of improvements to Funnelweb. Tony did not take kindly to some of the 'off-handed' comments made on some of the LIMA video tapes and wanted to set the record straight on several things. I will try to give you an idea of what he says; the full text is in the LIMA Sept. 91 newsletter.

Tony has a bone to pick over comments made by Chris Bobbitt of ASGARD Software and by Gary Bowser of OPA. Chris said, "I hear complaints all the time from Funnelweb and TIPS users, that they are always a few versions behind because they are updated so frequently."

Tony points out that Funnelweb is FAIREWARE and NOT COMEERCIAL software. Commercial software is not without bugs and only updated when it is commercially expedient. Tony passes on improvements and bug-removal versions as soon as he can. I think we can all appreciate the extra effort here. Can you imagine a commercial product doing this ?

Secondly, Tony takes offence to a remake made by Gary Bowser about RAMBO (a product of OPA): "We gave one to ... Tony Mcgovern. Tony has never plugged it into his Horizon Ramdisk. He just opened up the manual, read it, put it back in the box."

Tony points out that he is NOT a digital hardware-person and his says about his eye-sight for doing fine work ; " The gap between my eye-sight and micro-electronics is widening rapidly from both sides, especially mine,". What is really annoying is the fact that Tony has no where to put RAMBO without a lot of extra effort. He doesn't have the $ to buy a new HRD 3000 to try out the RAMBO, so there it sits. But as he mentions, it is not discarded. Apparently the cost of Static Ram chips is still quite high in Australia.

Things that would have been useful for him have also been slow in coming. The access to the original source code to TI-WRITER (EDITOR and FORMATTER ) would have made life a lot easier for Tony in writing Funnelweb.

Tony mentions that the 'never-released' 128K Ram expansion by Texas Instruments had the type of memory mapping that would have made memory expansion more feasible.

He mentions the great contibution of DIJIT in sending him an AVPC 80 column board. However, they di not send him upgrades or fixes until he contacted another third party. The development of an 80 column Funnelweb would not have occured with out this contribution.

Sadly, Tony mentions that the HUNTER VALLEY UG is dibanding. Many mTI-SEP-91e drifted away to other machines but some members are still meeitng informally.

Tony's plans for the future include a REST from Funnelweb for a while, "mental fatigue is setting in ". He has done some experimenting with the graphics capability of the 9938 video chip.

Tony's final last few lines are:

"I don't want to think about the complete Editor rewrite again just yet - maybe it will never happen. There would be nothing like the TI Assembler source code to get the juices flowing again, but even that will be too late soon. New hardware is in the same catagory. To us here the 99105 board is just a fleeting image on videotape, and the prospect of a hard disk controller that actually works properly is still no more than claims on an advertizing flyer."

Maybe the hardware manufacturers could get one of their new pieces of hardware out to Tony like DIJIT did. This would help him develop some new software and make more people want to buy the hardware. IT WORKS BOTH WAYS.

I know that I would never have bought an OPA TIM if there was no word processor like Funnelweb.

Tom.
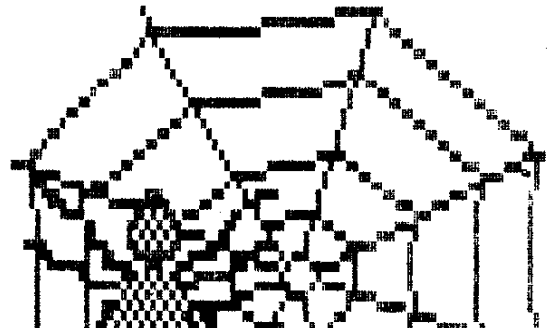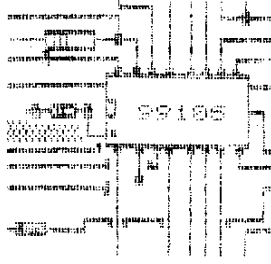
# THE ACCELERATOR!!!

Don O'Neil of California has produced an upgrade for the main TI processor- the TMS 9900. The great BIG chip with 64 lines that controlles our TI 99/4A for all these years CAN BE replaced. This new device called the 99000 ACCELERATOR or 99105 ACCELERATOR is available now from Bud Mills Services ( of Horizon Ram Disk fame) in the US and from OPA (Gary Bowser of OPA ), but is NOT CHEAP - $250.00 plus shipping and handling and Provincial and Federal Taxes.

Here is an except from MICROpendium July 1991.

"The Card, priced at $250, dramatically increases the power of the TI. The standard TI uses a 9900 chip with a clock speed of 3.3 Megahertz. The 99105 upgrade operates at a clock speed of 12 Mhz. The upgrade is installed in the TI console and requires no soldering. According to the designer, Don O'Neil, the 99105 accelerator increases the speed of the TI by a factor of 5. This improvement increases to a 10-fold gain in speed when used with a 16-bit RAM card tat fits in the PEBOX (ED.NOTE :yet to be developed).

According to O'Neil, the accelerator is invisible to the TI system.

The PEBOX RAM interface card is expected to be available in late October or early November. This card is priced at $90 and will serve as a functional replacement for the TI PEB cable (ED.NOTE the big black fire-hose). It features battery backed static RAM DSRs(Device Service Routines) for easy upgrading, a smaller, 1 1/2" cable connection between the PEBox and the TI console, uses a 16-bit data bus, has 8 SIMM(Single In-line Memory Module) slots for up to 8 megabytes of RAM expansion, 32K static RAM with 0-wait state operation built-in (this replaces existing in-console 32K RAM expansions) and 1 "processor direct slot" for future use.

According to another part of MICROpendium the accelerator and PEBox interface card will allow for the EMULATION of OTHER computers. A CP/M emulation has already been written and it works at about the same speed in the TI as in other machines.

The accelerator is capatible with TIM but there might be software problems becasue of the added speed and the way in which the software was written (we are talking about compiled software here not XBASIC or BASIC).

There is also a new XBASIC being developed for use with the accelerator. This XBASIC would add many more commands to the XBASIC language.

"Gary Bowser is working on a few programmes to utilize the 9938 and 9958 (VDP chip in TIM) better, one of which is a Z80 emulator. This will allow us to port over COLECOVISION, SEGA And SEGA GENESIS games and programmes to the TI with the 9938.58 and accelerator...I am anticipating a new XB, which will have a compiler for it,(will) be a (good) route to go since BASIC is widely used.

Does this sound like PIE in the SKY ? Well a year ago TIM sounded the same way.

I guess we will just have to wait and see !

# BATCH IT

A few years ago I bought a programme called "BATCH-IT!" from ASGARD. The manual was thin and trying to use the programmes to do what I wanted was difficult. It sounded like a gret invention but after a few tries I gave up. Actually I was beginning to think that the name of this programme was correct ! It is BAT CH-IT !

Well when version 2.0 of BATCH-IT! came out I was not going out to buy a new version; they had made 'so many' improvements on it that they said you needed to buy the whole thing again. ASGARD eventually did offer an upgrade. When they did, I upgraded to version 2.0.

I have to admit that a lot of work was done on the programme, especially in the documentation and in some of the commands. But it is still a learning experience to use it, and make it do what you want it to do.

The impetus for using BATCH-IT! really came from c99 programming. As I outlined in a previous article, running c99 programme is a 5 step job. What my BATCH programme does is run the c99 compiler and transfer back to Funnelweb where the TI assembly can be performed. Eventually, my BATCH programme will run the assembler as well. This last step is not available yet since I do NOT

have an E/A 5 assembler file.

The final step in making a RUNnable c99 file is beyond the capability of BATCH-IT! because you MUST use E/A 3 (load and run) files. BATCH-IT! only runs E/A files.

IF you have BATCH-IT! enter the code as outlined below. I have printer it out with line numbers to be able to explain it better.

When I went through the manual I made a bad mistake right off the bat; I thought that the BATCH programme I was writing was to be called DSK1.99BOOT. This is NOT the CASE !

The file below MUST be called something else; I called it RUNC, for RUN c99Compiler. The file "DSKx.C99BOOT" is supplied by ASGARD. It basically allows you to run a PATCHed E/A 5 file.

My BATCH file contains the names of where the actual needed files are:

-> C99BOOT (provided with BATCH-IT!)

-> C99C(and C99D, C99E) ( C.Pulley disk vn. 4.0)

-> FW (funnelweb and associated assembler, editors etc.) -> var/S (var=variable name) a source dv80 c99 file

Where you keep these files is important since it will go faster when most of them are on Ram disk.

The good news is that this programme should work on any system. Mine is configured as follows.
-> RAVE keyboard
-> Horizon Ram disks ROS 8.14
-> TI Image Maker (TIM)
-> MYARC Controller (FDC only)

The input file name is added WITHOUT the /S to speed up even the INPUTted file name process. All my source files for c99 are called ____/S.

The c99 outputted file name is called ____/O.

When I get to the TI assembler I use ____/O as source and ____/C as object file. The final programme is called ___ with no '/' or letter. This is my way of doing things, you can modify it to suit your needs.

The reason that I load FunnelWeb back in at the end is to ensure that I don't end up with a crashed system.

When you want to do more than one c99 assembly you can do it but you have to type in the SOURCE and OBJECT file names from scratch. The programme does NOT take you back to the 'THERE' label in line 20.

Here is a BLOW by BLOW of the lines.

LINE 1-3 re comments

LINE 4 DEFINEs the variable C99BOOT are on disk 7 called

C99BOOT. I put 25 as the variable length since that is what the booklet showed. But you could use 12 as a minimum.

LINE 5 DEFINEs the variable C99C. I put the files C99C, C99D and C99E on disk 7 as well. You MUST have all three but need only refer to the 1ST one (the loader links them automatically).

LINE 6 DEFINEs a variable yet to be input. I called this FNAME (file name). It is inputted in line 23.

LINE 7 DEFINEs the slash (/) for use with the file name.

LINE 8 DEFINEs the 'S' for use of the source file name

LINE 9 DEFINEs the 'O' for use of the object file name.

LINE 10 DEFINEs the NO output /N/

LINE 11 DEFINEs the FunnelWeb file boot file name.

Lines with * first are COMMENT lines.

LINE 13 LOADs the C99BOOT file as defined in line 4.

LINE 14 RUNs the C99BOOT file. You get a message on line 0 on the screen (Yes, the first screen line is called 0 and the first position or column is 0).

LINE 15 LOADs the c99 compiler as defined in line 5.

LINE 16 are the PATCHes given in the ASGARD software. These PATCHes only works for version 4.0 of the c99 compiler. This is the latest as far as I know.

LINE 20s LABELled 'THERE'. It really does NOT work but I include it to see what I had in mind.

LINE 21 CLEARs the entire screen.

LINE 22 PRINTs a message to remind you NOT to put in the /S. Remember that the first screen line and position is (0,0TI-SEP-91)lows for INPUT of the 'bare' filename.

LINE 24 RUNs the c99 compiler.

LINE 26 ENTERs the response N for 'Include c/text' file response asked by the c99 compiler.

LINE 28 ENTERS the response N for 'Inline push code' response asked by the c99 compiler.

LINE 29 is blank. This has no effect on the programme.

LINE 32 KEYs in the FNAME as just inputted in line 23, but with NO enter key pressed.

LINE 33 adds the '/' to the end of the FNAME

LINE 36 adds the 'S' to the end of FNAME/ and presses ENTER to get it to be added into the programme.

LINE 40 KEYs in the 'bare' FNAME.

LINE 41 adds a '/' to FNAME.

LINE 44 adds an 'O' to FNAME/ and presses enter as required by the programme.

LINE 47 is important. It allows the c99 compiler to bo its processing until you get the last line prompt: "c99 exit". I found out that this line was 22,0 by counting and eventually getting it right. The c99 programme askes you if you wish to RERUN the compiler or NOT.

LINE 50 is the start of the a LOOP to test for the answer to the compiler.

LINE 51 detects "Y" ascii 89, and should send the process back to 'THERE' line 20. But it does not. Instead, the c99 compiler restarts and you have to type in the new file names from scratch. I am working on a way around this.

LINE 52 detects the "N" ascii 78 response. It sends us to the label EXIT.

LINE 53 sends us back to the label LOOP to test for the Y or N again.

LINE 54 is a label called EXIT.

LINE 56 LOADs the Funnelweb BOOT programme as DEFINEd in line 11.

LINE 57 RUNS the Funnelweb boot programme.

LINE 59 the END name is ALWAYS required for correct assembly.

Type in the above programme using an EDITOR like
Funnelweb or TI-WRITER -make sure that you use the HOLLOW
cursor (we don't want carriage returns or line feeds
etc.). Save the file use PF(rather than SF) and call it
'DSKx.C99/S'. Actually you can use SF if you are using
the program editor or Funnelweb.

In addition to the above programme you have to RUN the
BATCH-IT! 'COMPILER'. This is an E/A 5 programme which
you load from any E/A 5 loader. At the prompt answer the
SOURCE FILE name as the above name. Call the compiled
file (BATCH file): DSKx.RUNC.

Now you have to INSTALL the BATCH programme to run the
compiled file above. The BATCH programme is an E/A 5 file
which loads into >7000 or superspace on you SUPER CART.
Alternately you could use MINIMEM in MOST cases. For some
reason, MINIMEM will NOT work with this programme. At
least that's what it says in the BATCH-IT! documentation.

All you have to do now is enter the BATCH file name:
eg. DSKx.RUNC and away you go. At the prompt enter the
'bare' file name DSKx.____ (no/S). And away you go. If
the c99 detects errors, you can continue or exit to
FunnelWeb.

One word of caution. You will get c99 compilation
errors if you use an #include dskx.conv;c (or some other
file) in your c99 source file.

As far as I know, this is the only article written on
BATCH-IT! except for reviews. I hope it helps de-mystify
the BATCH-IT! programme. I think that BATCH-IT! will help
someone who does NOT have a RAM DISK. However, I think 2
disk-drives would be needed for most applications.

Tom Jakabfy
Aug. 31,1991


```
0001 *Batch file to RUN c99 assembler and TI assembler
0002 * TJ Aug 1991
0003 *
0004 DEFINE C99BOOT,25,"DSK7.C99BOOT"
0005 DEFINE C99C,25,"DSK7.C99C"
0006 DEFINE FNAME,25
0007 DEFINE SL,1,"/"
0008 DEFINE S,1,"S"
0009 DEFINE O,1,"O"
0010 DEFINE NO,1,"N"
0011 DEFINE FW,7,"DSK5.FW"
0012 *
0013 LOAD C99BOOT
0014 RUN
0015 LOAD C99C
0016 PATCH >A04A,>1001
0017 *
0018 *
0019 *INPUT FILE NAME
0020 THERE
0021 CLEAR
0022 PRINT 0,0,"ENTER 'bare' DSKx.FILENAME"
0023 INPUT 2,0,FNAME
0024 RUN
0025 * ANSWER NO TO 1st c ASSEM PROMPT
0026 ENTER NO
0027 * ANSWER NO TO 2nd c ASSEM PROMPT
0028 ENTER NO
0029
0030 *
0031 * KEY IN 'bare' FILE NAME
0032 KEY FNAME
0033 *KEY IN '/'
0034 KEY SL
0035 *KEY AND ENTER 'S'
0036 ENTER S
0037 *
0038 *
0039 *KEY IN 'bare' FILE NAME
0040 KEY FNAME
0041 *KEY IN '/'
0042 KEY SL
0043 *KEY IN 'O' AND ENTER
0044 ENTER O
0045 *
0046 * wait till processing is finished
0047 WAIT 22,0,"c99 exit"
0048 *
0049 *GET Y KEY AND SEND BACK TO THERE
0050 LOOP
0051 ONKEY 89,THERE
0052 ONKEY 78,EXIT
0053 GOTO LOOP
0054 EXIT
0055 *
0056 LOAD FW
0057 RUN
0058 *
0059 END
```

## COMMENTS ON NEWSLETTER EDITOR

Using Art Gibson's NEWSLETTER EDITOR has proved to be a real experience. When you use something for the first time, there are bound to be problems. One of them was insidious. the changing of my printer to PICA proved to be different from that supplied by the GEMINI 10X printer file. Although my printer is a STAR MICRONICS like the older GEMINI. it has several different commands. One of them is the change to PICA command, ESC 80 turned out to be my command.

Another thing that proved to be a problem was the CHAINING of files together; I never did get it to work.

Also, I found that any problems with the .GR command caused an ERROR message to read, "CANNOT OPEN FILE". For example, I put .GR 1,0,1 thinking that it would print Graphic #1 at the left and right hand side of the page... it didn't.

I also found that printing out 3-4 pages was not always a good idea. Sometimes graphics were spread from 1 page to the next. The .BP command (start a new page) always gernerated an EXTRA page when used near the bottom of the page.

Don't forget the little note on the demo disk. Before changing from single line to 2 column and vice versa, put a c/r(blank line with carriage return). This seemed to solve most problems. However, I did get one extra line printed AFTER a graphic when I wanted it before.

Don't let me get you wrong, the programme is one hell of a nice piece of work, but it needs a little more user-friendliness. It is FAIREWARE and I have made a donation. I will probably pay more when the next version comes out.

I really did think that it was going to SPEED UP the process of producing the newsletter....maybe next time.

## OSHTI MEETINGS FOR '91-'92

Again we are faced with another year of mothly meeting. I hope that you will enjoy them. To do that you MUST COME OUT to them. Then CONTRIBUTE your IDEAS. QUESTIONS and COMMENTS to the meeting. The meetings are for the members. that includes. yours truly.

The first question is WHEN. What DAY OF THE WEEK and WEEK of the MONTH will the meeting be held on ? We finished off the '90 91 year in June with MONDAY meetings ! We used the third week and sometimes the fourth.

Therefore, for SEPT. I have selected :

## MONDAY Sept.16th
## Tom's Place(see map p.12)

I hope to have more info regarding the NEW ACCELERATOR. No,I didn't buy one ! yet.

Also of interest will be some of the new features of FUNNELWEB vsn 4.40. Although, most improvements are in the 80 column mode, there are improvements in several areas for the standard TI 40 column mode.

Anyone interested in c99 ? XBASIC ? assembly ? programming ?

Anyone interested in APPLICATIONS ? MULTIPLAN ? T.I.P.S. ? FUNNELWEB ?

What TOPICS should we discuss ?

Don't Forget the NOVEMBER COMPUTER FAIRE IN BOWMANVILLE !

Can you HOST a MEETING during the year ?

There is Lots to do in 1991-92, and lots of ways to use our orphaned computer !

Tom

```
          NEXT
OshTI meeting
 MON.SEP.16th

  AT TOM'S     See map >>>

*** FUNNELWEB USN.4.40   ***

*** MULTIPLAN in 80 COL.***
  ✳         ┌─────────────┐   ✳
            │   99105 TI  │
  ✳         │ ACCELERATOR │   ✳
            └─────────────┘
***** OSHTI D.O.M.   ******
```

Map:
```
                         TO PORT PERRY  N^

         >>>> >>>>>>>>>>>>>>> >660
         S Winchester Rd.    Given
         i   (6th)        R  Rd.
         m               i
         c               t
         o               s
         e               o
                         n
         S  Conlin Rd.   R  (6th)
         t              d
         .
         N
            Taunton Rd.    5 PT.
                           MALL

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

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OSHAWA TEXAS INSTRUMENTS HOME
   COMPUTER USERS' GROUP

   CHAIRMAN:        RAY BLODGETT
                    (579-1767)

   VICE CHAIRMAN:JOHN EASTHAM
                    (728-3994)

   TREASURER:       GUY LAFONTAINE
                    (576-5910)

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

   NEWSLETTER       TOM JAKABFY
     EDITOR:        (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.

OshTI

MEMBERSHIP FEES:

The OSHTI membership is $15
per family per year.
Members receive ten(10) news-
letters 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.