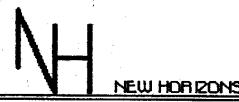
Vol. 7 No.6

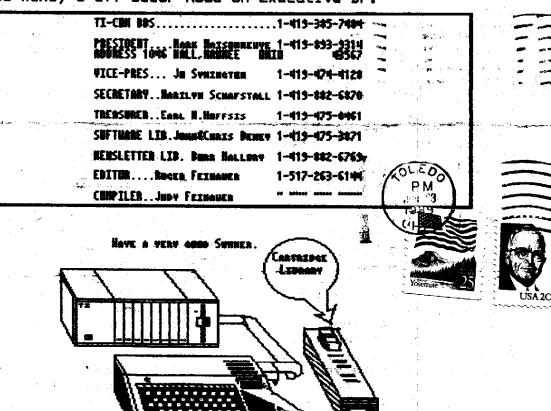
June 1989



NEWS LETTER

NORTHWEST BAID COMPUTER CLUB FOR THE TEXAS INSTRUMENTS 99/46

AND THE HYARC GENEVE 9644 PERSONAL AND HAME COMPUTER



ATTH:EARL W. HOFFSIS
W. W. GWIG 59 ERS USERS GROUP
FIRST CHORCH WATTH
5355 EXECUTIVE PARKWAY
TOLEDDO. GHIG 43606

Dallas TI Home Computer GP c/o Louis Guion PO Box 29863 Dallas, TX 75299

PRESIDENT'S CORNER •

Mark Maisonneuve

Welcome to the LAST TI newsletter for this computing season. This is also the last computer meeting for the season until September 1989. Please bring a dish for finger food as before in the past.

As the warm weather arrives I wish for everyone to enjoy their summer and make it a safe one and hope to see you no later then this fall.

Last month the Lima show was very interesting . At first it seemed like another computer show but as I looked closer at the demos and NEW SOFTWARE that was there I found that the TI still ...lives and will still continue to hold its own against/ other computers and of. thé. time exceed them...Roger Feinauer had the good sence to bring blank vido tapes to get a copy of all the DEMOs that were and will share them with the club.I picked up a program from the Ottawa group called MUSIC PRO and have found it to be very easy to use. You can make your own music or type in music from a music book , save it and then run it at any time also you can print out the sheet music after you have finished your music.

There are some nice prizes that will be given away at this meeting and we also have some nice prizes that were donated by Don Turner.OH YA Don thank you for the

revision on the drawing program.

The club disk for this month will be anounced at the meeting SEE YDU ALL THERE.eof......

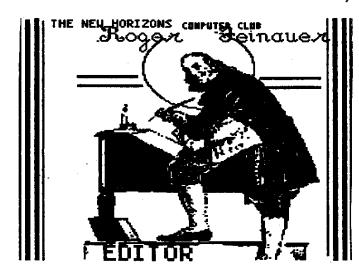
The following is an XB routine I have found useful for clearing the character sets ASCII 127 to 143.

100 QB=127 :: QE=143 :: CALL CHRSET(QB,QE)
500 SUB CHRSET(QB,QE)
510 FOR P=QB TO QE :: CALL CH AR(P,RPT\$("0",16)):: NEXT P :
: SUBEND ! by Roger Feinauer

This simple sub routine allows you to erase these characters as CALL CHARSET will only erase the first set of characters up to Ascii 127.

QB is the first character to change and QE is the last character to be changed. As you can see you can can be very selective.

MICROpendium will be at the meeting as well as the club disks. At the disk table. Support your club bring a friend or family member. We are looking for anyone who knows of any persons who may have only a cassette system, If you know anyone who may. Tell them about our club after all most of use started out with a cassette and maybe speech. And have gone different directions in explanding our systems. It is so easy to expand maybe they only need 32k. this can now be easly added to the console, for as little as \$30 or \$40. Add Extended Basic, and it would open up a whole new world to a person who maybe storing a computer in a closet.!roger ...eof....



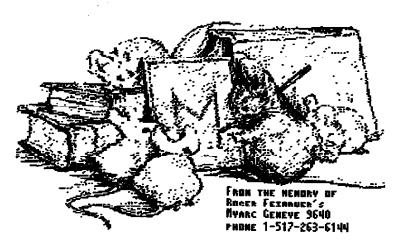
Greetings everyone for our final newsleter until September. This one is packed full with useful enough information for everyone. As everyone should know by now last month there was no meeting, but a fue of use went to the Computer Conference in Lima Ohio. At this time I want to thank the Lima Group once again for their time and effort for putting this joint club As it isn't conference. often different clubs can come togather to show and share what they have learned and developed for our orphan, that is the 99/4A. If it wasn't for the continued redevolpment of software and hardware mostly written by various clubs the TI would have been forgoten long ago.

Some of the hi lights of the conference were as follows. Barv Traver of TRAVLER contents Vol.2No.4 Bary also how to link showed XB to assembly language CALL LINK. via Cris Bobbitt: Recent and future releases from Asgard Software "No PRESS wasn't done as of yet. Mills: The Bud latest information on the Horizon Ram Disk and 512 k. ram expansion the GENEVE And a new for bank switch ramdisk 8k. that will allow the user to bank 8k. of ram in at a time. Bud had a 256k. card in his computer at his table. This means with software written for the card a program could run with the power of 256 ram. Bud said it could be configured to any size Ram Disk. He also Horizon had his P-Gram card for sell. One device that caught my eye was a box that pluged in the cartridge port, your probably thinking it's just another cartridge expander, well you would be wrong on that account. What this box does is use area of the TI called an Cartridge Library. It at one time or seems that another TI was going to allow you thru the use of device to latch sub different rotines from togather in your carts. computer. But this never came to pass untill know. What does this mean , well the device I saw enough room for 8 had carts. Lets say if Mini-Memory, Extened TE-II were Basic, and pluged in at the same time, the 4k of memory Mini-Memory could be used and the Speech Routines of TE-II all in an Exteneded Basic program. For more information Contact Gary Bowser, 432 St. Jarvis Toronto, Ontario Canada, m4y-2h3.

Their were many many more demo's and software then I have space in this article to write about. But I did bring 2 VCR tapes with me and have gotton them back a couple of days ago. Which have most of the demo's that

were given at Lima. And I will share with you at the meeting.

So please come to the June meeting as it will be jamed packed with information. !roger.



As for the Geneve I havm't very much this month except that I picked up a copy of the 9640 Furtran that runs from Mdos 1.14. For \$59.00. It is a complete package. A 257 page manual and two disks. One other note the disks are DD/SD . One disk call the boot disk and the other the library. The BOOT disk name is miss leading as each part is a separate Mdos file no menu. A program for each of the following the Editor, the Compiler, the Linker, the Fortran systems library, the Graphics Fortran library, and the Symbolic debuger.

On the other disk is called the Library/Demo disk. it cotains the math library, the Fortran librarian, and several example program sources.

The manual is very well written, and takes you through each of the source files, from source to

code to a running program that runs from Mdos.

I fill this is one of the first of two languages, the other c99 that is good enough to let a person do something out of Mdos. Funny nether came from Myarc.

If you're willing to spend some time to learn a new language you may want to try it. roger



HEALTH BULLETIN... DRUG WATCH!!

A form of tettoo called "BLUE STAR" is being sold to school children. It is a small sheet of white paper containing a blue star, the size of a pencil eraser. Each start is soaked with LSD. Each start can be removed and placed in the mouth. THE LSD CAN BE ABSORBED THROUGH THE SKIN BY HANDLING THE PAPER.

There is also brightly colored tabs resembling postage stamps that have pictures of superman, butterflies, clowns, Mickey Mouse and other Disney characters on them. These stamps are packed in a red cardboard box wrapped in foil. This is a new way of selling ACID by appealing to young children.

A young child could happen upon these and have a fatal "trip" It is also learned that little children could be given a free "tattoo" by other children who want to have some fun, or by others cultivating new customers. A red stamp called "RED PYRAMID" is also being distributed along with "MICRO DOT" which comes in various colors. Yet another kind, "WINDOW PANE" has a grid that can be cut out.

THESE ARE ALL LACED WITH DRUGS...PLEASE edvise your community and your children about these drugs. If you or your child see any of the above, DO NOT HANDLE THEM !!!! These drugs are known to react very diffely and some are laced with STRYCHNINE.

Symptoms are: hallucinations, severe vomiting, uncontrolled laughter, mood change, and change in body temperature. The victim should go to the hospital as soon as possible and call the police.

THIS IS YERY DISTURBING INFORMATION FOR THOSE OF YOU WITH SMALL CHILDREN, BUT YERY IMPORTANT FOR YOU TO KNOW.

9T9 TORONTO

Here, is the letter from the WW99ERs users group and my reply. If Jim or Gary would like to add anything to my reply, which follows the letter, please contact marc Levine, at the return address given:

3 Genevieve Lane Champaign IL 61821-7213 USA July 18, 1988

Steve Mickelson 15 Kersdale Ave. Toronto, Ontario Mam-109 Canada

Dear Steve,

I read with such interest your reports of Jim Ballantyne and his dumping of Adam cartriges and the possibility of dumping Nintendo carts. I find this very interesting and a big story in our TI community. Can you give me more information? How is it physically done? What types of software and hardware does one need or that Jim has developed to do this.

It's difficult to even ask questions before knowing what physical setup he has to do this. This would especially be so for Mintendo carts. The Mintendo, not being a "computer" does not have the typical "ports" that one would expect necessary to do this. It seems to me that if Jim came up with some type of adapter plus software to allow one to take a Nintendo cart and either run it off the TI or dump it and run it off the TI that no royalties would be needed. If, however, Jim had to dump them and modify them first it would be a different story. I'm sure he would have to pay royalties and I doubt that Nintendo would let him do it even if he offerered.

I expect I'm setting ahoad of things since from what I've heard, he has only dumped Adam carts. DK. some more basic questions. The Adam obviously used the 9918 video chip. Does the Nintendo also use the 99187 Could, theoretically, any machine that uses the 9918 have it's games addified to run on the TI? What video this does the Sega use?

I have a SK (not minimum), Hyarc 80 Track controller, 256K Horizon RAM Disk and Horizon RAM Disk 384K+. Could I run any of his dusped Adam carts on my system or would I need some other hardware item he has developed?

I would love to get some of these, however, if he does not want to pass them around, I hope spacene from your group will at least cake it to the Chicago TI Faire in November to demo all this. I live 150 miles South of Chicago and always make it to their Faire. I've met Bob Boone there a number of times.

Marc C. Levine President. WW99ERs

TI 99/4s users Group

The initial version of Jims 2-80 Simulator, is a program which will run out of Editor Assembler and will allow unaltered cartridge dumps from the Adam computer to run on the TI-99/4A. The 7-80 Simulator executes about thirty instructions for every single Adam instruction.

The Adam uses the same 9918 video chip, but the higher clock speed of the Adam, plus the fact that each action or sound must be interpreted, makes the software run very slowly, on the 4A. The Geneve's capability, at GPL speed 5, to run Tl software three times as fast, as on the 4A, allows the Adam cartridge dump to operate more closely to the way it did on the Adam.

At a recent meeting, we demonstrated a cartridge dump of Antarctic Adventure, on my Geneve. The software uses the TI or Geneve host computer for video output, joystick/keyboard access, and disk drive access, (the latter to load in the software). Even with the new 64% zero wait memory cache', the Adam software is still slower than on the Adam. But it does work.

The color table and keyscan are different on the Adam's 9918 than the 4A. and must be reinterpreted through the Z-80 Simulator software, in order to work with the ${\rm TI}$.

Three members of our club have purchased used Adams, and collectively have about eighty modules that can be dumped. Club member, Gary Bowser, has built, on a Proto Card, a card, which sits in the peripheral expansion system and will permit an Adam cartridge plugged into it and the contents dumped into the RAM on-board the card. This card acts much like the GRAM Kart.

Besides the speed problem, with Adam software, the Geneve has a memory problem, with 32K Adam cartridges, such as The Dukes Of Hazard. It seems that in order to load the Adam cartridge, the Geneve must, load into RAM, the MDOS Operating System, the GPL Interpreter, (which enables the Geneve to simulate the 99/4A); the Editor Assembler Cartridge; Jim's Z-80 Simulator; and Finally the Adam Cartridge Dump. After this as all loaded, there is not enough pageable memory to handle the larger, 32K, cartridge dumps. One solution might be to rewrite the simulator to run out of MDOS. Another would be to consider the 512K memory expansion of the 9640. The still doesn't help solve the slower execution speed of the Adam software.

The apparent solution is to build a card for the peripheral expansion system, with an advanced Z-80 CPU, (clock speed 16 MHz), with 64K of RAM on-board. This card would take the Adam cartridge dumps, and allow them to perform at regular speed or upto several times origional speed. The co/processor card would be more or less an Adam on a card. Not only does this solve the speed and memory problems, but will allow the Z-80 Simulator to run either with the Geneve or the 4A.

The card would in a package, which would include a Z-80 Assembler, so the user can run Z-80 Source Code or write his own Z-80 code. No price of this card has been announced. Also, to my knowledge, the Nintendo aspect of this project has not been persued, and probably won't, for copyright reasons.

The simulator was shown, by Jim, in Ottawa, last spring, to interested on-lookers, including Chris Bobbitt. Bobbitt expressed more than a passing interest in this project.

I don't know whether Jim or Gary will be at Chicago or, if either attend, if the Z-80 Simulator will be shown.

Sorry about the delay in answering yourquestions, Marc, I really hoped to have this issue of Newsletter 979 out long ago.

This Meeting:

I hope to have show both the HFDC and digitizer at the September and October meetings, respectively. Look foreward to the announced club software contest to be discussed.

This meeting we will, also, feature a new disk of the month and give users the opportunity to pay their fair share for the Freeware Software of the Month, see Cecil's notice below:



THE 9640 COMMUNITY OUGHTA BE ASHAMED!

28-Mar/88

There are almost 1500 Geneve's in the hands of owners now, and one of the most popular things about these machines is their graphics capability. CLOSE TO 60% OF GENEVE OWNERS HAVE PURCHASED THE MY-ART DRAWING PROGRAM!

What is the most popular graphics application besides MY-ART - undoubtably it is Paul Charlton's GIF TRANSLATOR for the Geneve. Hundreds of people with Geneves regularly decode GIF pictures from Compuserve, GEnie and the hundreds of local BBS's - of every computer. GIF pictures are regularly used in 9640 demos, by Myarc at their demos, and to the personal enjoyement of hundreds of 9640 users.

so, how many contributions has Paul received to date for undoubtably one of the most popular 9640-only applications? Less then 10.

If that is the way 9640 owners plan to support software authors - I don't think the Geneve deserves to survive, and it certainly doesn't deserve 3rd party support!

If you use the GIF decoder - PAY FOR IT! Otherwise, I'm sure the creator of much of what is the Geneve will go elsewhere.

- This notice is uploaded by an outraged Chris Bobbitt without the approval or consent of Paul Charlton.

P.S. In my conversation with Paul he mentioned that the GIF DECODER had one feature all of us missed. It has the ability to read a script file of commands created with a text editor so you have a crude sort of slide— show function with the thing. To use it, when executing the program type GIF Script_Name and the text file SCRIPT_NAME will automatically be executed.

8K DSR Card Article by John A. Johnson, Miami Users Group.

This text will explain the proposed usage of an 8k DSR card.

Up to know, a full blown TI was considered a machine with disk drive(s) and 32k memory expansion. For years the 32k memory has served us well, but with the advent of new, sophisticated software on the horizon, our computers could use a little more help. I'll tell you one way we can do that, but first, I'll describe the layout of the present 32k memory:

>2000 through >3FFF. This 8k block of memory (refered to as low memory) is used for assembly language program storage while running extended basic programs that CALL LINK to these routines. It can be used by TI Basic (with Editor Assembler installed) to also store machine language ("c", assembly, etc) routines. A pure machine language program can also be loaded into this area.

>A000 through >FFFF. This 24k block of memory is known as high memory. This is where our extended basic programs get placed. This area can also be used by II Basic to store machine language programs, just like the low memory described above. A pure machine code program normally loads here also.

And that's it! 32k of program space period.

The 9900 CPU in our consoles can access 64k of memory, either RAM, ROM, or a mixture. The present layout of the computer is as follows:

 $>\!00000$ through >1FFF. ROM in the console. Holds the operating system, part of TI Basic, Keyscan routine, etc.

>2000 through >3FFF. Low 8K memory RAM.

>4000 through >5FFF. This 8k block has no memory at all. Instead, each peripheral expansion card has a ROM (or RAM) program called a Device Service Routine (DSR) of up to 8k in size. This DSR is "paged" into this >4000 area when the card (RS232, Disk Controller, etc.) is called into service by the operating system. The CPU then runs the DSR which supervises the operation of the hardware on that particular card. Keep in mind that nothing but AIR is located here when no peripheral card is being accessed.

>6000 through >7FFF. This 8k block is where our ROM or RAM cartridges fit into the 9900's memory map. Most of our cartridges are GROM, but AtariSoIt, Extended Basic, and a few others have ROM in their cartridges. Keep in mind that when no ROM cartridge is installed, nothing is here except AIR.

>8000 through >9FFF. This area of memory only contains 256 bytes of ram. It's used as a "scratchpad", a place for the operating system to perform all it's calculations, and store keystrokes from the user, etc. All of our memory mapped devices, such as GROM and VDP memory are also accessed through this area.

>A000 through >FFFF. High memory RAM.

So you can see from the above memory map that TI wasted at least 16k of memory - 6k at the >4000 area, and another 6k at the >0000 cartridge space area. What we propose to do is create a new definition of a "full blown" 99/4a, by installing RAM in this 16k space.

Eo you say "Vait a minute, if I had RAM here how would my peripheral cards get paged in", "I could never run another ROM cartridge". Almost true, but what if we could we could "page" in our new RAM at >4000, so that it would only be there anytime a DSR was NOT selected? It would be an 8k block of memory that was FULLY usable, just like the 8k block at >2000. Well, we did! And it works! Now what if we put in another 8k RAM and mapped it into the cartridge space ONLY when ROM (or RAM) doesn't exist already? Well, we can do that too!

So now you're thinking, "big deal, another 16k, no software will use it, because no one knows I have it". A true statement, and one that holds water.

But what if a peripheral card for the P-Box were available, either as a kit, or a completed, ready to run board for a very reasonable price? And what if a whole lot of people bought, or built this kit? Couldn't software such as TI Writer, PRBASE, and DM1000 be modified to utilize the extra ram? YES IT COULD! And new software. If enough people had this super memory card, couldn't software designers target products for it, just as they do for a 32k market now? I think so.

I've built the 8K DSR RAM board, and on it is 8k used as standard, accessable ram, and another 8k ram used as a battery backed DSR. To understand the powers of having a battery backed DSR, just ask any Horizon Ramdisk owner about the versatility of his ramdisk. The card also has a real time clock, battery backed up, as with the DSR ram.

At present, I'm installing the 8k cartridge space ram, and total outlay should be approximately \$45 - \$50 complete.

Bud Mills will be carrying all the parts required to build this kit. Give him a call at 419-385-5946, or write him at:

Bud Mills Services 166 Dartmouth Drive Toledo, OH 43614 U.S.A.

John Willforth is looking into making a PC board for the project. We'll know more about this in a few weeks.

John Clulow has the documents, instructions, source code, and some programs to accompany the project.

John Clulow 345 West South Boundary Perrysburg, OH 43551 U.S.A. Telephone 419-874-8838

In the future, I hope to add another 64k of ram to the card, using it as GROM. Yes, I think it's entirely possible to have a Gram Simulator on this board also for little more than an additional \$40 or so. Ask any Gramkracker owner what versatility he has!

To sum it up, with a 32k machine we can fit an elaborite program like TI Forth in memory, but we have no more memory left to use for data. With a 48k machine, we'll have lots. If we ever expect to have a program such as the flight simulators available for other computers, we need the extra memory.

Let's upgrade!

And now a blast from the past...the following BBS message was written by Stu Olson, the author of Mass Transfer and the MXT BBS software. I feel that his statement reflects what is happening in the TI fairware world.

Message 3327 Subject: CRU ABOVE 1000 To: STU OLSON____ To: SIO OLSON From: GARY SWEERS 174 Date: 06/11/87

Stu, sorry to hear that you will not consider looking at the CRU problem with your MT. Sure seems a shame to have such a fine program and for lack of what sounds to me like a minor software change, be absolutely the finest, most universally user friendly, and COMPATIBLE term prog. going. I for one sure wish you would reconsider and at least be open minded to taking a look at what would make it work with ramcards at CRU above 1000.

P.S. I heard the Corcomp ramdisk also has the capability of changing the CRU the card is at Gary

Message 3328

Gary...I don't think I have a problem being open minded. I am really just plain tired of programming. First off, I sold my main system. The only TI I have is that which the BBS runs from. Writing or editing terminal software on a single machine makes testing the changes very difficult. Over the past two years, while constantly updating H/T, I ran 3 full systems. 2 of those provided me with immediate testing of any software change via a cable RS232 connection between those two systems. Without a doubt, M/T could be rewritten to support disk cataloging above >1000, and also file transfers. However, the disk drive is available for transfers. Can't it be used?

I've learned a lot over the two years I have been working on M/T. Many people have been very supportive. Many more have been extremely rude. I have actually TI, modem, or programming. Those typical letters come off with statements such as:

<u>I</u> would consider paying you \$10 if you would include on line text to speech my "I would consider paying you \$10 if you would include on line text to speech my TEII module has."

I don't know if you have ever heard of a IBM type faireware program called Procomm or not, but it is a very impressive TE program for those type of machines...anyway, I had one user tell me that he would like the features offered in Procomm incorporated into M.T. Well, did you know that the Procomm file set only takes over 275K bytes of ram? This guy actually told me I should write a script routine that would dial, logon, read messages, and download any new files, then logoff the bbs, anytime of the day, unattended. (yes, Procomm can do that, but it lives in a 640K machine also)......CONT.

Message 3329 Subject: continued To:

From: Stu Olson (Sysop) 1 Date: 06/11/87

Virtually every letter has a comment of some type in it. Some of them are quite complementary, many of them just about what M/T can not do. What erks me worse is that the people DO NOT READ the docs. About 40% of the "I wish M/T had" features are already in it...they are just too lazy to open the docs and read up on what is available.

In my opinion, releasing Ymodem was maybe the biggest mistake I incorporated into M.T. I have received a lot of "why did or didn't you do it this way" comments. Gee...until I wrote it, most of the TI community did not even know another protocol existed besides Xmodem and TEII. I thought it would be fairly well accepted. Now, I get about 20 complaints every couple of weeks about not being able to use Ymodem on a BBS. Gee, doesn't anyone ever do file transfers to other people any longer, or is it that they can only communicate to a BBS file?

Maybe I expected too much from the TI population overall. This much I can say, I have been lied to more times than I can count, and from people I have known for several years..."I am going to send you \$10 this weekend...the check is in the mail"...kind of stuff. I can even name users you know personally that have promised and never came through at all. I did not write M.T. so I could be rich and famous. I originally wrote it because I wanted to be able to autodial my long gone 300 baud smart modem. The first version terminal version never even had a file transfer in it. (in fact, Xmodem was not yet known to the TI computer at that time)....cont.

Message 3330 Subject: cont.

To:

From: Stu Olson (Sysop) 1 Date: 06/11/87

Getting back to users....I have had the "guilt trip" ones lay the big one on me about... "well. if you really don't care about any of us, go ahead and be that way...but if you really are a human being, then why don't you and off it goes with another suggestion.

Well, I have pretty much said my piece. I have stood behind M/T for over two years now...doing update after update. I never ONCE requested a single dollar from anyone. Everyone knows it is fairware software. What gets tiring is when users send you a letter, requesting the program for "evaluation" testing. Funny thing, they do not include a disk, mailer, postage, or any money to cover any of those expenses. Tell mc, why do I have to pay money to give my program away? If I don't respond, then I am the "jerk" who can't seem to "take care" of the users who support him. Hey folks, I am not dependent on anyone, except maybe those in my own family. I have had dozens of users who have expected me to call them long distance voice so I could explain to them something that they were too lazy to read in the docs. Hey.... Ma Bell doesn't give me FREE phone bills because I write software!

You see Gary...everything has piled up over the past 2 years, and I am simply tired of it. I am tired of the abuse, the phone calls, complaint letters, etc. I am GRATEFUL to those users who were considerate enough to realize how much of my time (away from my family) was put into this software. Would you believe my wife and I have had serious fights many times over on the amount of time I spend when I was into a new update on M/T?cont

Message 3331 Subject: cont.

There are not enough \$10 checks out there that is worth my marriage. Don't get me wrong...my wife is very understanding, but when one neglects one's spouse for weeks at a time, something has to give.

Version 4.2 was stretched over a much longer period of time than was needed. However, my marriage is going along just fine also. Now that I have sold my programming system, I will not have to worry about it any longer.

It is not that I do not care about the TI user population, for if I did not, I would not be the V.P. of the user group here in Pheonix. (remember, the job pays \$0.00) At times though, the users do forget what it is like to be the programmer. I know what it is like, and I lived with it for over two years now. All I really wish to do is just play with computers for now, not program for other people. I have found that doing that yields much more headaches than it other people. I h does satisfaction.

In closing...this message is not aimed at you. It is info for all the users who have been wondering why Stu doesn't seem to care anymore about M.T. Well, it is now out in the open...everyone knows why I am a retired programmer. As I said in my 4.2 update docs...it is time for a new programmer to try his/her hand at this trade, and just maybe, they will have better luck than I did.

In my own words..."It has been real, and it has been nice, but it has not necessarily been really nice."

catch you later.....Stu

1 !***DISK LABEL II*** A TINYGRAM BY ED MACHONIS, QB-99ERS, BAYSIDE, NY
2 OPEN #1:"PIO"
3 DISPLAY AT(3,1)ERASE ALL: "DISK NAME?":D\$:: ACCEPT AT(4,1)SIZE(-17):D\$:: DISP
LAY AT(7,1): "Continued?":C\$:: ACCEPT AT(8,1)SIZE(-17):C\$
4 DISPLAY AT(11,1): "TYPE?":T\$:: ACCEPT AT(12,1)SIZE(-28):T\$:: DISPLAY AT(15,1)
:"BEMARKS?":R\$:: ACCEPT AT(16,1)SIZE(-28):R\$:: E\$=CHR\$(27)
5 DISPLAY AT(19,1): "YOUR NAME?":N\$:: ACCEPT AT(20,1)SIZE(-28):N\$:: INPUT "BOW
MANY COPIES?":O :: FOR J=1 TO O
6 PRINT #1:E\$&"E";E\$&"G";E\$&"-1";E\$&"W1";TAB((18-LEN(D\$))/2);D\$;TAB(18);"";TAB((18-LEN(C\$))/2);C\$;TAB(18);"";TAB((18-LEN(C\$))/2);D\$;TAB(18);"";TAB((18-LEN(C\$))/2);D\$;TAB(18);"";TAB((18-LEN(C\$))/2);D\$;TAB(18);"";TAB((18-LEN(C\$))/2);D\$;TAB(18);"";TAB((18-LEN(C\$))/2);D\$;TAB(18);"";TAB((18-LEN(C\$))/2);D\$;TAB(18);"";TAB((18-LEN(C\$))/2);N\$;
7 PRINT #1:TAB(30);"";TAB(2);R\$;TAB(30);"";E\$&"-0";E\$&"4";TAB((30-LEN(N\$))/2);N\$
;E\$&"5" :: NEXT J :: GOTO 3