

TACOMA 99ERS USERS GROUP NEWSLETTER

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ISSUE 11

TOCOMO E NOUSÓ



FROM THE LIBRARY DESK

I'm starting something a little new at this next meeting. We are getting in lots of new programs and it's hard, and not too practical, to produce enough partial pages to keep everybody up to date. So I'm going to produce several "UPDATE SHEETS" and have them available at each meeting along with the catalog. This will allow everyone to keep themselves aware of the newest programs.

For the benefit of our new and old members: I'll re-state the club rules on obtaining programs from the library. All programs and printed materials belong to the club. You may obtain copies of the programs on "LOANER" disks or cassettes. These, and their contents, remain the property of our club.

Several members have asked about geting credit for "club time" by typing in programs. I've been asked "Which ones?". My answer is pick out the programs that YOU would like. Please mark any club books with the word "copied" so someone else won't duplicate your efforts. Pease include your source in a REM statement at the beginning of the program.

I definitely want a description and/or your comments on how it works. You can hand write it or if you're in a kindly mood, put it on the disk and include it. If you include it on the disk, please put it in DV 80 format. I use tab settings 000, 010 and 035 for the catalog. Let me know what section you think it belongs in such as 4000 etc.

DON'T FORGET! You have until the end of November to take advantage of the 1/2 price on all programs, due to getting your dues paid early. I opened my big mouth and you're taking advantage of the offer! Great! It's a good way to add to your personal library, AND keep me out of mischief!

BITS and BYTES of INFO

Thanks to CALL SOUNDS of Central Westchester U.G. for this item.

How to LIST a program to a printer in 28 columns to match the screen listing:

In the immediate mode enter:

OPEN 6: "PIO" PRINT 6:CHR\$(27);CHR\$(81);CHR\$(28) LIST "PIO"

(If you wanted a 40 column listing, make the last number 40 instead of 28.)

From the *MUSKEGON*ara UG comes a tip for speeding up your XBASIC programs. They suggest entering a CALL LOAD (-31878, N) where N is the number of sprites used from 0 to 28. Don't forget CALL INIT before the CALL load. Try it.

From the JACKSONVILLE U.G.in ARIZONA comes this tip from Ralph Devine. Many of us use BASIC and Xbasic in a truly unstructured way. We build the program as we go using RES to open up lines,etc. Our program LISTs in line No. order and "looks" structured. It seems that inside our 99/4A marvel our jumbled line order is preserved and time is lost looking for the next line to execute. Solution! Save the file using the XB MERGE option. Sure it is slow, but it is saving the program in sequential line order in MEMORY IMAGE format. Type NEW then reload using MERGE, then SAVE as a program. This can make an appreciable difference in execution time. Give it a try!

From <TI TALK> comes a memory saver. If you add the following statement to your BASIC or EXTENDED BASIC program, you will save 2 bytes every time you use the numeral "1": line #1@=1 then in place of 1 type the symbol "@". A little confusing but if memory is a problem, every little bit helps.

At the end of your EXTENDED BASIC program, you can CALL INIT::CALL LOAD(-31962,255) and your console will search for a program called "load" on drive 1. If such a program is not there, you will get a cursor on the XBASIC screen.

The NORTHWEST OHIO UG offered this TI TIP. To avoid a Buffer Full notice in the TI-WRITER, you should save the files and then use the SD command to see the file size. Since the Buffer is full at 92 sectors, you can see right where you are.

From the UPPER PINELLAS 99'er GROUP comes a Multiplan Tip: Once you start scrolling, you can release the FCTN or CTRL key and just keep the ARROW key depressed. Try it!

Letter from the President

Well, we made it through the Seattle TI Faire last month, and the only bad part of the whole thing is that we have a whole year to wait until the next one!

Personally, I think the most exciting thing to come out of the fair was Craig Millers announcement about his corroboration with the hitherto un-named company (large) to make some type of hardware device to allow us to run MS-DOS software on our TI's! To me, that is exciting news to think that within 3-4 months we can run any of the some 10,000 or so programs that are written for the MS-DOS compatible machines! That is one product I would like to get my hands on.

The whole Faire experience was delightful! It was really great meeting some of the people that go with the names that we have all heard throughout the TI community. I especially enjoyed talking with Cheryl Whitelaw, otherwise known as Regena of Compute fame. Since her programs that were in Compute were some of the first that I (along with a lot of you other people) were able to find in a national publication to type into my trusty TI. It really brought back memories of those first couple of years when I would faithfully look forward to each issue of Compute to come out so that I would have a new game program to type in for the kids to play. That is the way I learned Basic, by typing in and then debugging my errors. How many of you did the same thing? I was sorry to hear that Compute will no longer carry any programs for the TI. Cheryl says that she will continue on as editor of the Basic page. I personally think that they couldn't have found a better person to fill the job.

Regena also released her non-published programs as Fairware, which you can find in our library, along with her other earlier mentioned programs.

I also enjoyed meeting Scott Darling, the Sysop of Genie, and a fellow Bell System employee. Also, there was Randy Ainsworth, who writes Randy's Rag, which also can be found on Genie. Excuse the two references to Genie, but at \$5.00 an hour for 1200 baud, it is a big bargain, and besides, I think it is a very good source (pardon the pun) of information for our poor orphan.

Well, this is really getting to be longer than I had intended, but there are so many things I can say about the Faire.

I'm sorry that I can't mention all of the people I met at the Faire, but space doesn't permit it.

I would like to thank Barbara Wiederhold of Queen Anne Computers for her organizing of the Faire. It was great!

Till next month.....

Wally Dubberly

(Editor's Note: I just received my October 1986 issue of MICROpendium and it saids that Regena will be writing a BASIC column for MICROpendium starting with the January 1987 issue.)

EDUCATION

Once again the class on Extended Basic is being offered. Classes will be the Saturdays following a club meeting, at 4 PM, in the computer room at the pool. Registration will be anytime before the start of the first class. Prospective students are cautioned that this is not a class in beginning programming, this is a class in the advanced features available with Extended Basic. In order to ensure serious students there will be a \$30 sign up fee, in advance, non-refundable. Half of the fee goes to the club treasury. Just to be sure that the major features of Extended Basic are understood, there will be homework assignments. If you would like to learn more about this powerful programming language contact Tom Fenton prior to the first class November 8th. If you have any questions about the value of the class, ask some of the previous students; Bob Haun, Jim Smith, or Ron Pruitt.

If you would be interested in a beginning programming class, please contact Tom Fenton. If enough people need it, we could plan a class for next year.



W O E M S

by Walt Howe

(Excerpted from the August 1986 newsletter of the Boston Computer Society TI-99/44 User Group)

WORMS have made their unwelcome appearance for the TI-99/4A for the first time. If you don't know what a worm is in software lingo, it is a program that pretends to (egitimacy. but when run; it sets out to destroy all disks and memory in reach, and perhaps even more. One that has appeared for the TI is carrying a name something like SUPER COPIER. When this one is run, it will try to erase all disks in all drives, and run the drives as abnormally and noisily as possible. Any time you use a new program from a questionable source (such as æ bulletin board where the uploads may not be checked out) for the first time, make sure all your disks have write protect tabs on. And checking out once may not be enough. Some of the most ingenious of these fiendish things will work normally for the first few tries, but are secret/v counting the times they are used. When they reach a preset number the worm activates.

Another type, not so harmful in itself, seems to run normally, but when you are using the computer not necessarily on the wormy program still - a speck on the screen (a pixel) will turn black. Then another will turn black, then another, and so on. Progressively, the entire screen turns black making whatever you were working 17(83 invisible. Not too serious, unless you lose a couple of hours in the process. These things have been around for a few years in the IBM and Apple world, but now we can say that TI has been privileged, too. Don't say I didn't warn you!

MEETINGS ARE THE 1st and 3rd THURSDAYS South End Pool Building -- 402 E. 56th Street -- Tacoma, WA



First off, I obtained a new version of P-Term from Scott Darling at the Seattle TI Faire, and I like the new changes. It has been released as Fairware.

To start, set your transmission parameters:

Printer? Enter will give you PIO. Baud rate? 2 for 1200 (the only way to fly), or enter for 300.

Parity? Here is one of the items you can play with, depending on the BBS or other computer you are calling. With Genie, N for none seems to be the best.

RS232 port? Enter will give you 1 which is the most common one, unless you have your serial printer plugged into 1, then you would have your modem in 2.

Number of stop bits? Enter will give you 1 which is what you want unless you are sending at either 110 or 9600 baud.

Number of data bits? Enter will give you 8 which you must have to download XMODEM files. Some boards require 7 for text transfer (which the old version of P-term also did on Genie). I believe the new version strips the 8th bit when not needed. Don't quote me on that one.

The above requirements are for CPM Modem protocol used for file transfers. TEII (God forbid) and TI bulletin boards use 7 data bits and even parity. If one particular parity and data bit setting gives you garble, try another combination.

The next thing you will want to set is local echo. What this means is that what you type is put on your screen by your terminal, not by the other computer, which is what happens when you call up some of BBS's and you operate at full duplex. Genie only works at half duplex and that means you need local echo (FCTN E).

When you first sign on to Genie, they will ask you some questions about your terminal. One of the things is how many columns does it support? Here you will want to answer 80. Next, they will ask you how many columns does your screen display. If you don't have a printer, or don't want to print out what you download, then answer 40. If you do want to print it out, like for the library listing, then you would want to set the screen display at 80. Don't ask me why, it doesn't seem right, but that's the way it worked for me. This will put the information that you save to disk in 80 column format so that when you print it you won't have half a page of blank paper. (At least that is the problem I had in the Roundtable discussions I printed, until I reset my terminal to 80,80.)

The next thing they will ask you is your number of lines per page. (or screen.) This could be either 24 as usual if you are mainly going to read most of the stuff off line, or 12 so that it will just fill the screen if you are downloading a lot of text. Personally, I use 24 because a lot of their text is menus that are only 40 columns anyway, and usually don't take more than 24 lines anyway.

When you want to read something that is about to scroll off the screen, just send a break character. Control 5 stops it and control Q starts it again. These are the standard stop and start characters, but you can change them to something else if you want to. This is also known as X-OFF and X-ON protocol.

If you just let the download buffer fill to its capacity, then you will have about a 110 sector file that will prove to be too big for TI Writer, and you will have to load partial files to read them, so I generally save my buffer about every 50 to 60 sectors (just judge it the best you can).

If you come to a menu where you know you want to save something, you can reset the download buffer by doing a control 5. This will erase anything you have already downloaded, so if you want it, do a control 6 and save it to disk first.

A good example of this would be when you come to the library and want to download a program, it will ask you what number. Type in the number you want, and hit enter and immediately hit CNTL 5. Genie will then send you a description



PLATO SOFTWARE----

(High Quality Education Software for Grades K-12) I an interested in making contact with other members of our users group that share my interest in the PLATO Series of software. Contact WALT TODD - 615 No. C Street - Tacoma, WA 98403 - (206) 572-8716.

CLUB JACKETS ----

They are still available at the original price of \$18.90 and \$32.07. Call Frank Ashburn at 582-8886. (leave a message)

DUES ARE DUE---

See RON PREWITT, our Treasurer. Individuals are \$15.00 per year and Families are \$20.00 per year. You will not receive the next issue of the Newsletter unless they are paid by December 1st.

USING GENIE WITH P-TERM

(Continued)

of the program and ask you if you want to skip it (hit enter), download it (D), or list it (L). At this point you can hit CNTL 6 and give it a file name (DSKn.XXX), and you will have a good program description for your files. I always use Wnnn for a file name, where W stands for Write-up, and nnn is the program number. If you give it a file name of the program that you are downloading, when it asks you for a file name when it is ready to download the program, you might forget and give it the same filename and you will write over the description. Its just a way that works for me.

After you save the program description, your screen will go blank except for the cursor in the top left hand corner (home position). At this point, enter D for download (if that is what you want to do).

One of the first programs that you will want to download will be #414, ARCHIVER 1.2. This is a very neat program by Barry Traver. It allows you to either Pak (put a group of files together into one long file so that with those programs that require more that one file to run, you will be sure to get all the files downloaded together.) The other option is to Unpak, which does just what it sounds like. You will need this program to make use of most of the other 500+ programs that are on Genie. One of them is even P-term, version 2.5!

If you choose to download an X-MODEM file, Genie will tell you when the program is ready and for you to start your file transfer. You can do this by entering a FCTN X. Then it will ask you if you want to send or receive. Let's say that you want to receive. Enter 2 to the prompt. It will ask you for the Disk drive number. Enter 1 or 2. Next it will ask for a filename. Remember, just the 10 character maximum name for a file name, don't include DSKn.

When the file transfer is complete, you will be asked to hit return (enter). At this point your download buffer is empty and you will be asked if you want to do another. If yes, then type in the number, reset buffer, and do it all over again.

That should be enough to get you started. After all, a lot of the fun with a service such as this, is to explore and have fun.

See you on the boards!

Written by Wally Dubberly.

CALL LOADS ****** In order to use these LDADS and PEEKS you must have the ED/ASSM. X-BASIC 0r MINI-MEMORY Modules and 32K Memory Expansion. One of the most active areas of RAM in the T199/4a is the CPU RAW PAD Area found at >8300 to >83FF (-32000 to -27745). This area handles the exchange between the TMS9900 code and the avstical **GPL** language. It makes sense then that a number nf important functions like. system quit and restart. keyboard and joystick scanning, screen updating, interupt timing, and random number generating is all available through the use of CALL LOADS and PEEKS to this area. Here's a few CALL LOADS that illustrate the importance of the activty in the CPU PAD. YOU'LL NEVER QUIT AGAIN! How many times have you been up all night keying in the 450-line graphics and music demo and, at line 449 accidentally hit FCTN = rather than SHIFT = ? There goes your program!! System shutdown!! Below are two CALL LOADS that allow you to prevent such disasters. They LOAD a value into >83C2 which is the area for the interupt +routine. To disable the QUIT function: CALL LOAD(-31806.16) To re-enable QUIT: CALL LOAD (-31806.0) THE DISAPPEARING DISK DRIVE If you need to load a large TI-BASIC program, you are told sometimes to DISCONNECT (!) your disk drive in order to free up extra memory. Here's some CALL LOADS that LOAD a value into >8370 which holds the highest available

VDP RAM address. Thus, it accomplishes the same end without forcing you to "decapitate" your TI99! To make the drives "disappear": CALL LDAD(-31888,63) To make them "re-appear": CALL LOAD(-31888,55) X-BASIC WARM START Here's a handy CALL LOAD that causes the system to "restart" X-BASIC. This LOAD causes the computer to search drive one for a proram called "LOAD" and execute it. If no program is found, it boots X-BASIC. CALL LOAD (-31962.255) A FITTING END This final sequence causes the system to return to the Title Screen, the same as if you hit FCTN = [QUIT]. This involves PEEKing at an address in the console RON to find the jump vector for the interupt routine and loading it into the CPU address (>8304) that contains the "user-defined interuot value." CALL PEEK(2.A.B) CALL LOAD(-31804,A,B) **DNE LINERS** ------Here's four DEF routines that cut on the down "number-crunching" often found in programs. The first is a DEF statement that rounds any number to specified decimal the place. The second DEF automatically converts natural L065 to anv specified base. The third DEF will only work in X-BASIC as it uses the MAX and MIN functions to find the highest. lowest and middle number in a set of three. The final DEF is a handy routine that converts joystick input to integers from 1-9 for faster processing in gaae programs. FLEXIBLE ROUNDING

This DEF will round a number (X) to the number of places (left or right of the decimal point) specified in the value R. If R is a negative number. then X is rounded to the LEFT of the decimal place the number of places indicated by R. If R is a positive number, rounding is to the RIGHT. DEF ROUND=INT((((10 R)*X)+. 5))/(10 R)For example, if X=1101 and R=-2 then the result would be 1100. If X=10.4567 and R=+3 then the result would be 10.457. EASY CONVERSION This DEF statement simplifies the calculation of LOS conversions. Below. are two of the most common conversions: MISSING PIECE? The middle value of three variables (X,Y,Z) use the following three lines of code: DEF MX=HAX(HAX(X,Y),Z) DEF MD=HAX(MAX(MIN(X,Y),MIN(Y,Z), HIN(X,Z)) DEF MN=MIN(MIN(X,Y),Z) X,Y and Z are exchanged into HX (highest). MD (middle), and MN (lowest). HANDY JOYSTICK DECODER This last DEF is for а decoder. jovstick such that, no matter which position is selected on the joystick, it will evaluate to an integer between 1 and 9. you can then use that integer in a GDTO or GOSUB branch to the appropriate part of the program. Decoding is as follows: N=8 * NE=9 N#=7

W=4	OFF=5		E=6
S₩=i		SE=3	
	S=2		

Here's the DEF statement: DEF JSTK=((X+3+Y)/4)+5Here's how it would work in a program: CALL JOYST(1,X,Y) ON JSTK 605UB 1000.2000.300 0,4000,5000,5000,7000,8000, 9000 Below is a program that uses all of the DEFS Since the mentioned above. the MAX, HID, HIN DEF uses statements MAX and MIN. this program can only run in EXTENDED BASIC. 200 REM ********************** 210 REM DEF PROGRAM 220 REM 230 REH ************ 240 REM *HOUSEKEEPING* 250 REM ************* 260 REM 270 DEF MX=MAX(MAX(X.Y).Z) 280 DEF HD=HAX(HAX(MIN(X,Y), MIN(Y,Z), MIN(X,Z)) 290 DEF MN=MIN(MIN(X,Y),Z) 300 REM 310 DEF JSTK=((X+3+Y)/4)+5320 REM 330 DEF ROUND=INT((((10^R) *X $+.5)/(10^{R})$ 340 REM 350 DEF TABC=(29-LEN(M\$))/2 360 REM 370 FOR L=1 TO 9 380 READ H\$ 390 A\$(L)=M\$ 400 NEXT L 410 REM 420 DATA SOUTHWEST, SOUTH, SOU THEAST, WEST, NO RESPONSE 430 DATA EAST, NORTHWEET, NORT H.NORTHEAST 440 REM 450 REM ************** 460 REN +MAIN MENU SCREEN+ 470 REM *************** 480 REM 490 REM 500 CALL CLEAR 510 FOR X=1 TO 5 520 READ M\$ 530 PRINT TAB(TABC);M\$: : 540 NEXT X 550 PRINT : : : : : 540 FOR X=1 TO 500 570 NEXT X 580 DATA DEF STATEMENT, DEMO ND.2,SUBFILE99,8/1/84, 590 REN

600 REM ************ 610 REM #ROUNDING DEMO# 620 REM ************ 630 REM **540 CALL CLEAR 650 PRINT "FLEXIBLE ROUNDING** *: *----* 660 PRINT : : : *X=VALUE TO B E ROUNDED": : 670 PRINT "R=# OF PLACES TO ROUND TO": : 580 PRINT "A NEGATIVE VALUE (-3)":"ROUNDS TO THE #RIGHT# OF" 590 PRINT "THE DECIMAL PLACE 1 8 700 REM 710 PRINT : : : 720 INPUT "ENTER X:":X

730 INPUT "ENTER R:":R 740 PRINT :ROUND: : 750 INPUT "R TO REPEAT, (CR) TO 60 ON: ":R\$ 760 IF R\$="R" THEN 710 770 REM 780 REM ***************** 790 REM *MIN/MAX/MID DEMO* 800 REM **************** 810 REM 820 CALL CLEAR 830 PRINT "MAX/MID/MIN FUNCT IONS": "-----••••• 840 PRINT "X,Y & Z = ANY THR EE VALUES": : 850 PRINT "THEY WILL BE RETU RNED IN": : "MX-MAX, MD-MID & MN-MIN."

860 PRINT : : : 970 INPUT "ENTER X, Y, Z: ": X, Y ,I 880 PRINT "MAX:";MX:"MID:";M D: "MIN: "; MN: : : 890 REM 900 INPUT "R TO REPEAT, (CR) TO GO ON: ":R\$ 910 IF RS="R" THEN 860 920 REM 930 REN ************** 940 REM #JOYST CALC DEMO# 950 REM ************** 960 REM 970 PRINT : : : JOYSTICK CAL CULATOR": "--------*: : : : 980 PRINT "CONVERTS JOYST VA LUES X, Y": : "TO AN INTEGER

FROM 1-9." 990 PRINT : : "USE JOYSTICK # 1": : : 1000 INPUT "HIT ANY KEY TO B EGIN: ":R\$ 1010 CALL JOYST(1,X,Y) 1020 PRINT A\$(JSTK) 1030 GOTO 1010 1040 REM 1050 END

HAPPY COMPUTING Ron Prewitt P.S. The following is an example of an RLE picture file printed using GRAPHX.



TACOMA 99ers TI Users Group

P.O. Box 42383 Tacoma, Wa. 98442

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Dues: Single = \$15 Family = \$20

MEMBERSHIP APPLICATION DATA

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EQUIPMENT SOFTWARE DATA

Please indicate below the equipment and software you have available; regardless of use.
Peripheral Expansion Box (Note- STandard or MIcro)
Memory Expansion (Note- 32K, 128K, 512K)
RS232 Modem (Baud Rate?) Speech Synthesizer
Disk System (Indicate number, S/D sided, S/D density)
Printer (Dot Matrix or Letter Quality)
Display (Type? Color/BW - TV/Monitor)
Extended Basic Editor/Assembler MiniMemory TI Writer
TI Multiplan Terminal Emulator Speech Editor
Personal Record Keeping Report Generator Statistics
Please indicate below the higher level languages you have available.
Forth C Machine Language LOGO Pascal
Please indicate below the major uses of your computer.
EntertainmentEducationBusinessHobby
ProfessionalHousehold ManagementComputer Literacy
Other (Explain):
Please indicate on the other side any areas you would like to learn more about.

MEETINGS ARE 1st and 3rd 3rd THURS. - 8 p.m.

TACOMA 99ERS P.C. 80% 42383 1.acoma, WA 98442



H I H I FEBRUARY 8 F 5 MARCH I H I E B 3 4 5 6 7 10 11 12 13 14 17 18 19 20 21 24 25 26 27 28 ۵ E 8 NOTE: PLEASE FILL OUT AND RETURN THE 2 3 9 10 16 17 23 24 30 31 MEMBERSHIP APPLICATION DATA FORM ON THE REVERSE SIDE OF THIS SHEET WHEN PAYING BIWIE 5 YOUR DUES SO WE CAN UPDATE OUR DATA FILES. WHEN MAILING IN YOUR DUES PLEASE INCLUDE THIS FORM. IF YOU HAVE ALREADY B I W I E S B U I W I E B SENT IN YOUR DUES THIS YEAR PLEASE SEND . 6 7 8 9 10 11 13 14 15 16 17 18 20 21 22 23 24 25 3 4 5 6 7 6 10 11 12 13 14 15 14 15 20 21 21 24 25 26 27 26 29 THIS IN NOW SO WE CAN GET THIS DATA FILE UPDATED. THE LIBRARIAN WILL ALSO BE SEPTENDER I W I E B S U I W I E B USING THIS LIST AND WE WILL NEED THE 2 3 4 5 9 10 11 12 16 17 18 19 30 24 25 26 CONFIGURATION YOU HAVE WHEN YOU USE THE LIBRARY, IT WILL ALSO HELP US TO PLAN
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I< PROGRAMS OF INTEREST FOR THE MEETINGS. B I H I E 5 1 2 3 4 5 6 7 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

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