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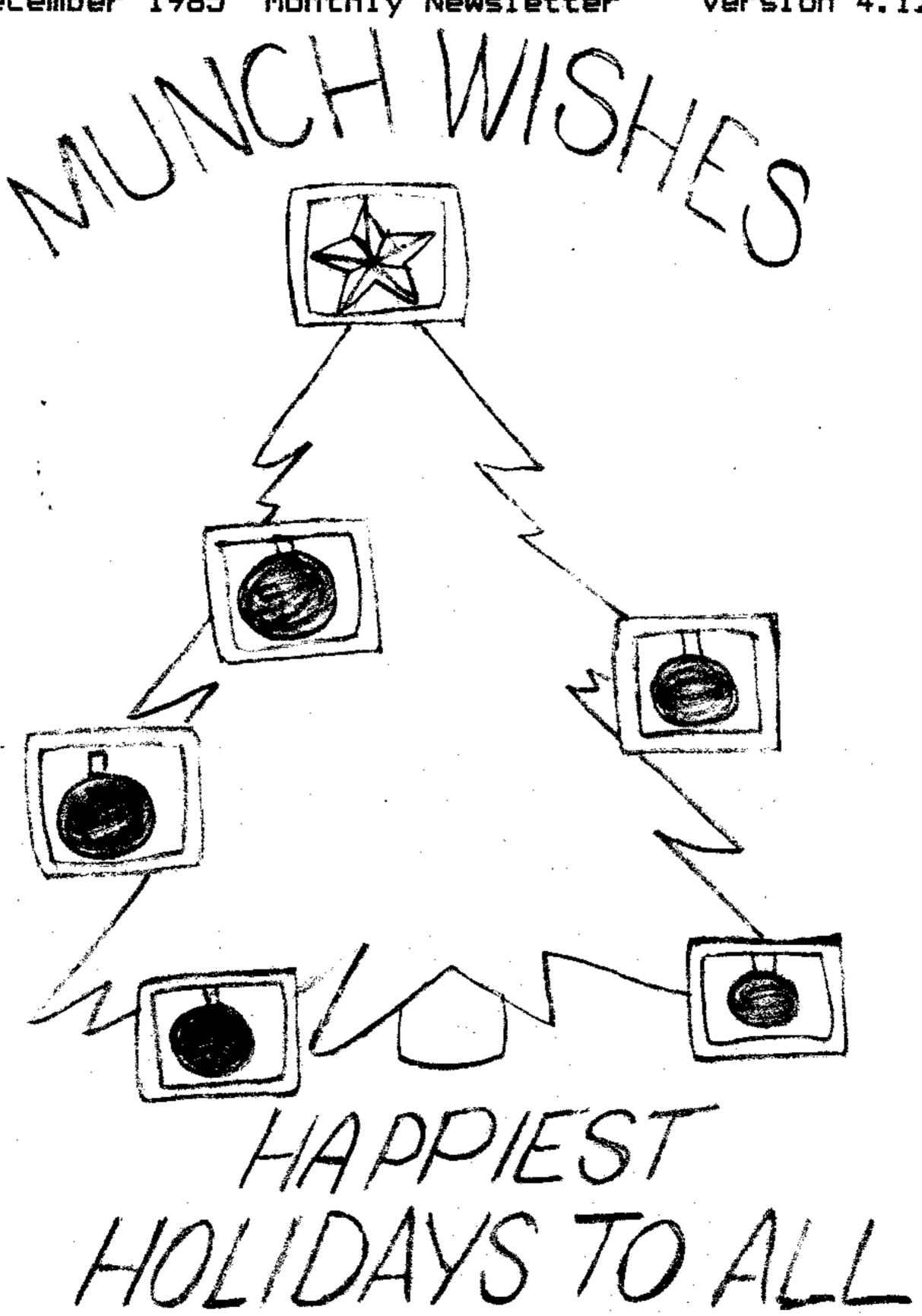
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Mass Users of the Ninety nine and Computer Hobbyist

December 1985 Monthly Newsletter Version 4.12



THE MEETING WAS CALLED TO ORDER WITH ABOUT 25 MEMBERS PRESENT. I, ON THE OTHER HAND, WASN'T UNTIL AFTER THE MEETING HAD CONCLUDED. I WILL TRY MY BEST TO INFORM YOU AS TO WHAT HAPPENED FROM SOME NOTES THAT WERE TAKEN IN MY BEHALF BY MR. JIM COX.

THE NEW OFFICERS WERE ANNOUNCED EARLY THAT MEETING. THE PREVIOUS MINUTES THAT WERE WRITTEN LAST MONTH WERE APPROVED AS NOTED. THE TREASURERS REPORT WAS AS FOLOWS:

PREVIOUS BALANCE	\$522.55
EXPENSES (POSTAGE, MONITORS)	-47.00
NEW RENEWALS	92.00
FREEWARE PURCHASES	00.00
SOFTWARE PURCHASES	00.00
RAFFLE(NOME TAKEN)	00.00
NEW BALANCE (APPROX.)	\$567.55

PRESIDENT BRUCE WILLARD ADDED A REMINDER TO ALL OF THE MEMBERS PRESENT AT THE MEETING, THE MEMBERSHIP FEE, WHICH REFERS TO EITHER RENEWING DUES OR NEW MEMBERSHIPS MUST NOW PAY 15.00 PER MEMBER OR MEMBER FAMILY. THIS IS AN INCRÉASE OF 3.00 OVER THE OLD FEE. ALSO, THE PRICE ON SOFTWARE AND MEDIUMS HAVE GONE UP. ALL CASSETTE TAPES WILL NOW BE 2.00 AND THE DISKS WILL BE 2.50 IN PRICE. THOSE OF YOU WHO MAKE YOUR OWN COPIES AT THE MEETINGS ON THE CASSETTE DUPLICATOR OR BY USING AN UNOCCUPIED COMPUTER CONSOLE WITH A DISK DRIVE SYSTEM ARE WELCOME TO. BUT CONSIDER THE PURPOSE OF SELLING THE DISKS AND TAPES. THE SMALL AMOUNT OF PROFIT MADE ON EACH DISK OR TAPE SOLD GOES TO BUILDING A STRONGER TREASURY. AND WE NEED THIS TO STAY A SUCCESSFUL GROUP. IF YOU WISH TO COPY A TAPE OR DISK AT THE MEETINGS, CONSIDER MAKING A CONTRIBUTION TO THE MUNCH GROUP ANY WAY YOU CAN. DON MASON AND HECTOR BEAUDREAU WILL HELP WITH THE TRANSFERS OF THE CLUB PROGRAMS.

THE BUSINESS MEETINGS HAVE ALWAYS TRIED TO START AT APPROXIMATELY 7:30PM WITH A DEMONSTRATION OR TWO FOLLOWING THE MEETING. THE PROBLEMS WITH THIS IS THAT TOO MANY PEOPLE HAVE BEEN UNABLE TO GET TO THE MEETINGS AT THAT TIME AND THE SOFTWARE SWAPPING AND DEMMONSTRATIONS END UP TOO LATE; ESPECIALLY FOR THE CHILDREN. SO IT WAS AGREED UPON BY THE PRESENT MEMBERS THAT THE BUSINESS PORTION OF THE MEETING WILL NOW BE CHANGED TO A LATER TIME. AT 7:00PM THE GROUP WILL GATHER ALLOWING FOR THE GROUP TO SWAP PROGRAMS AND THE DEMONSTRATIONS WILL TAKE PLACE. AT 8:00PM THE BUSINESS MEETING WILL BEGIN AND WILL END AT APPROXIMATELY 8:20PM. FOLLOWING THE MEETING, MEMBERS CAN FURTHER ENJOY DEMOS AND CAN STILL PURCHASE THE SOFTWARE.

FOLLOWING THE BUSINESS MEETING THERE WAS A DEMONSTRATION BY DAN ROGERS OF THE ADVANCED DIAGNOSTICS WHICH USES THE EDITOR ASSEMBLER CARTRIDGE AND ALSO SHOWED A PROGRAM CALLED THE EXPLORER WRITTEN BY MILLER GRAPHICS. BOTH

THE PROGRAMS ARE WRITTEN ON THE DISK. YOU ALSO CAN ALTER INFORMATION ON THE DISK IF AN UNPROTECTED PROGRAM HAS A BAD SECTOR OR BLOCK ON THE DISK. THE DISK FORMAT CAN BE CHANGED TO ACCOMMODATE ANY DRIVE. IN FACT, IF YOU WANTED TO YOU COULD HAVE A DISK INITAILIZED FOR BOTH SINGLE DENSITY ON ONE PART AND HAVE DOUBLE DENSITY ON THE OTHER. BUT YOU WOULD OF COURSE NEED TO HAVE A DOUBLE DENSITY DRIVE TO READ IT.

SOME OF THE UP AND COMING DEMONSTRATIONS WILL BE ON THE FOLLOWING TOPICS: TI-WRITER, MICROSOFT MULTIPLAN, PERSONAL RECORD KEEPING WITH THE PERSONAL REPORT GENERATOR, AND TI-ARTIST. THERE WILL ALSO BE A KIDS CORNER AT 7:00PM FOR THOSE KIDS THAT WISH TO LEARN HOW TO PROGRAM. MR. HECTOR BEAUDREAU HAS VOLUNTEERED TO RUN THIS GROUP EACH AND EVERY MEETING.

BY: CORSON WYMAN

### AGENDA for December 10, 1985

7:00 - 8:00 Open Demonstrations

New Member Registration

Software Exchange (members only)

Special Interest Group meetings

Basic Programming -- as required

Assembly Language -- by Dan Rogers

Kids Corner -- with Hector Beaudreau

Demo of BITMAC graphics program

by Bruce Willard

8:00 - 8:20 Raffle
Business Meeting:
Approval of Minutes
Treasurers Report
Committee Reports
Old Business
New Business
Announcements

8:20 - 9:30 CONTINUATION of:

Special Interest Group Meetings and Open Demonstrations and Discussion

December

Plan for January meeting:

Training on Microsoft's Multiplan by Hector Beaudreau

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#### PRESIDENT'S MESSAGE

Here it is December, with snow on the ground, and the Holidays around the corner. For those of you who will not be at the December meeting, I wish you all the happiest of Holidays, however you may celebrate them.

At the November meeting Dan Rogers gave a tremendous demonstration of Miller's Graphics Advanced Diagnostics and Explorer. I have read various reviews in newsletters from around the country. They all show one common point, Craig Miller, of Miller's Graphics, markets excellent and very useful software. I know that I will be buying some of his software and watching for future software additions.

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Please take special note of the time changes in the different segments of our monthly meetings. I hope this and the new Kids' Corner will bring more members out to future meetings. I would like to see more of the children get involved in the meetings whether it be programming, games, or software usage. The children can even write reviews on games they play or whatever they want. Wouldn't that be great having the kids show the adults a thing or two? If your child has some special talent regarding the computer, encourage him or her to share that talent with others.

I was going to write a review on a new program the group owns. It is called BITMAC, and appears to be a super graphics program. See the ad in the center of the newsletter.

I had heard grumblings earlier regarding graphics software so decided to check some of these out for the group. So far, I have checked out Navarone's PAINT 'N' PRINT, Australia's GRAPHX, and now BITMAC. Each of these are superb programs. They all have the basic characteristics of being able to quickly make circles, squares, rectangles, lines, rays, magnification for detail work, and text. Each has its own unique options that set it apart from the others. Some of these characteristics are picture parts inversions or mirror images, multiple speed cursors, different color cursor, clipboards, slide show, and many others.

I am in the process of making a chart showing the various graphics packages and their individual characteristics. This will enable you to make the proper decision on which graphics program is best suited for you and your particular needs.

I happened to find more information regarding the new Myars computer. It was in the North Eastern 99'ers Newsletter. Since finding that, Corson Wyman has been in touch with the author of that article. More on that later as things develop. See that article in this newsletter.

MUNCH is desparately in need of a Membership Chairperson. With the many colleges in the area, and all the TI-99/4A's sleeping in closets and under beds, we should be able to increase our membership, and ultimately help the owners of these computers see the power in their computers. If you think you would like to try it just give me a call at home or see me at the meeting. I would be very happy to help and guide anyone who wants to give it a try. Just think of the nice feeling you would have knowing that you helped your group grow and the new members learn. Don't just think about it. Do it!!! Contact me.

One last item. Join us at the December meeting and get in on the Pre-Holiday Raffle. Three items will go up for raffle: UP PERISCOPE, OMNI DISCs or a 12-PACK of CASSETTES, and a \$15.00 GIFT CERTIFICATE to BARBER'S CROSSING (a fine restaurant). This promises to be a great meeting.

My buffer is full. Hope to see all of you at the meeting.

----- Bruce Willard, Pres. ------

RAMBLINGS
by
Jim Cox

## IT IS MEMBERSHIP RENEWAL TIME!!!!

December is the month when most of our memberships expire. Please remember that the dues has been raised to \$15.00 this year. You can send your renewals to the address on the notice or bring them to the next meeting. Members who do not renew are dropped from our mailing list.

# HELP!!!!

Does anyone know of a surveying program for the T.I. If you do please contact me at 869-2704 or 852-8213. Thanks.

## FOR SALE!!!!!

I have a T.I. Data Terminal Model 707 for sale. It comes complete with acoustic coupler, auto index card and manuels. Looks to be brand new. Asking \$300. If interested contact me at the above telephone numbers.

### 

We had no November raffle. However, there will be a raffle at the December meeting. The raffle will include UP PERISCOPE, donated by Don and Larry Howard and at least a couple more items also. So let's get to the meeting to find out what these others are.

We will draw three tickets this month. The first one getting a choice of one of the three prizes, the second one getting a choice of the remaining two, and the last one takes what is left. All will be well worth the donation.

The raffle is open to all who attend. The drawing will be held just prior to the business meeting. Remember:

\*\*\*\* YOU MUST BE PRESENT TO WIN \*\*\*\*

Bruce Willard, Pres.

### LIBRARY NOTICE

With the increased demand for the newer TI-99/4A related books we must request book loans to be only one month. If you have any books on loan please bring them to the next meeting. If you can't make it to the next meeting please ask a friend to return the book(s). Thanks! This gives everyone a better chance to see one they haven't seen yet.

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### MUNCH OFFICERS AND NUMBERS (all in 617 area)

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President	Bruce Willard	852-3250
Vice President	Norman Abare	297-2100
Secretary	Wm. Corson Wyman	
Treasurer	Jim Cox	869-2704
Editor	Pete Blackford	892-4946
Hardware Chair		•
Programs Chair		
Adv Prog. Chair	Dan Rogers	248-5502
Club Reviewer	Jack Sughrue	476-7630
Library	Al & Lisa Cecchini	
Software Library	Don Mason	754-6630
	Hector Beaudreau	
Mail & Messages	Video Connection	852-8213

# \*

WANTED: A couple of used Pro-Stick II joy sticks.

Call Bruce Willard -- 852-3250.

### ADVERTISING RATES:

Double Page (10.5" by 8") \$50.00 per insertion full Page (5" by 8") \$25.00 per insertion Half Page (5" by 4") \$15.00 per insertion Quarter Page (5" by 2" or (2.5" by 4") \$10.00 per insertion

Classified (non-commercial) ADs are FREE for MUNCH members.

### COMPLETE TI 99/4A COMPUTER SYSTEM FOR SALE

This system complete with books, software, hardware, textware, etc. took me over four years to accuire.

I must sell the entire system to go to school. My "child" needs a 600D LOVING home!

WILL CONSIDER BEST OFFER AROUND \$ 1200.00

(A \$100.00 DEPOSIT WILL HOLD FOR CHRISTMAS.)

FOR DETAILS CALL BERNIE MILLER 429-6198 AFTER 10 PM

\*

## EDITORIAL STAFF

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Don Mason 30 Princeton St. Worcester, Ma. 01610 Bruce Willard 1 Marmion Ave. Worcester, Ma. 0160

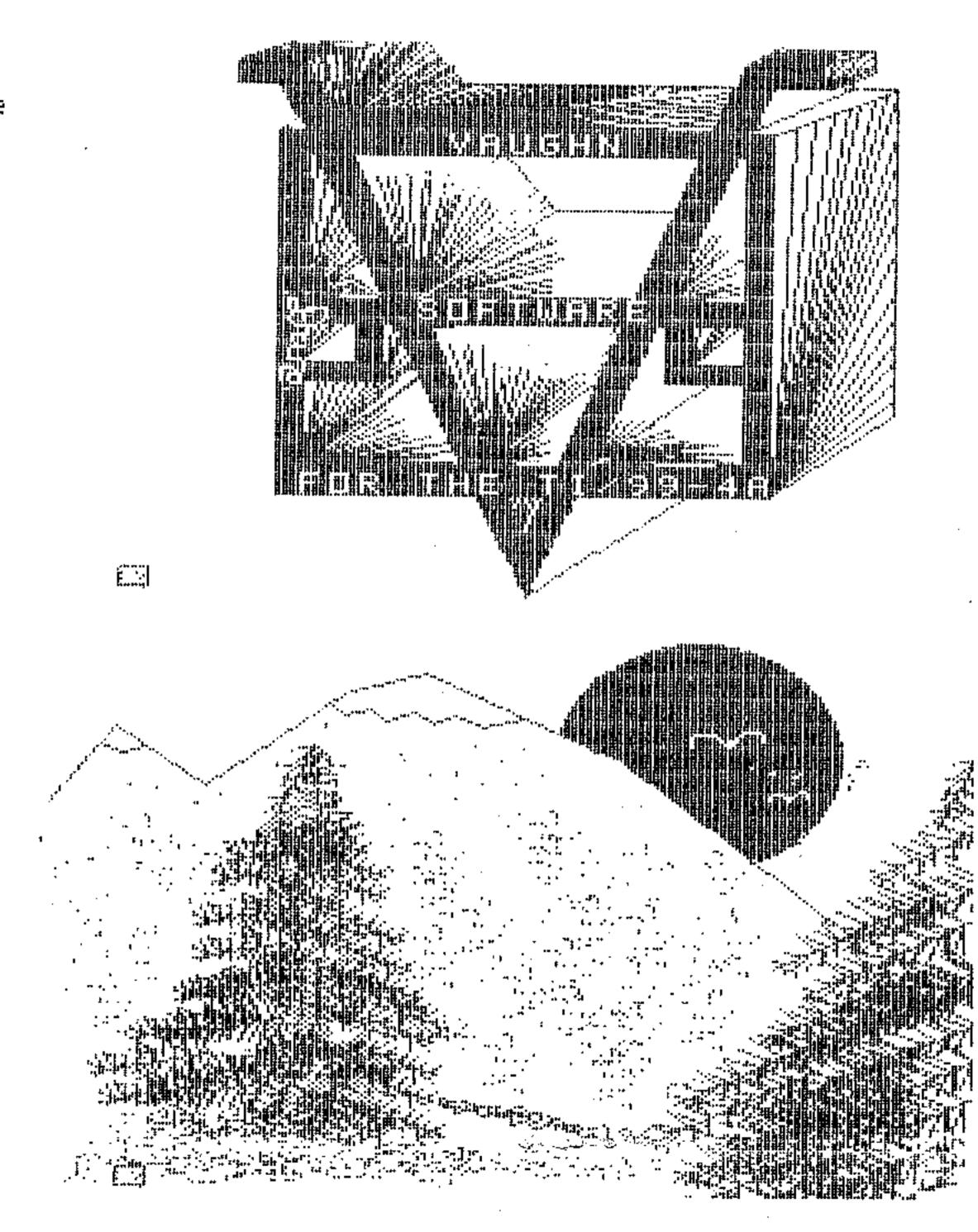
Bob Doyle 210 Sewall St. Boylston, Ma. 01505 M.U.N.C.H. c/o Vid. Con. 560 Lincoln St. Worcester, Ma. 016( 9ITMAC disk media software was designed for use with the TI-99/4A home computer. It is written in TMS9900 machine language for the utmost in speed and program function. The program provides bit precision graphics generation and editing. Some of the features are:

Line, rectangle, circle, copy section, mirror, rotate, reverse video, free hand draw, 9 brush sizes, 16 colors, bit "on" color, bit "off" color, screen color, color test area, 40 column text, text on text, text on graphics, 16 color text, upper and lower case, 4 direction bit scrolling, dump to printer (two sizes), save to disk, boolean graphics enhancement, "LIFE" graphics enhancement, second computer input, X Y vector reporting, monochrome and color monitor support, trackball support, single bit erase, single bit placement, block erase, erase colors, erase all, fill, enlarge, reduce, "slide show", "oops" function.

BITMAC is icon driven and is simple to use. Included are extensive documentation, an example coprocessor program and one year warranty.

REGUIRED EQUIPMENT: Extended basic, Mini Memory or Editor Assembler module, a display monitor, joysticks, TI-99/4A computer, memory expansion and a disk drive system. THE PROGRAM MAY NOT BE COMPATIBLE WITH SOME VERSIONS OF THE MYARC DISK CONTROLLER.

OPTIONAL EQUIPMENT: TI, Gemini or Epson printer, RS232 card, trackball, up to 5 disk drives\_(limited by the disk controller), second computer (any make) with RS232 interface and cable.

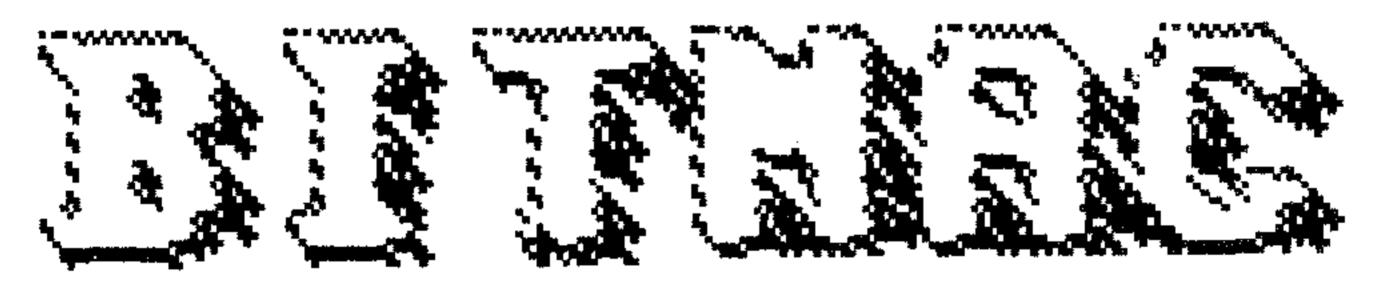


To Order: Send check or money order for \$28.95 plus \$2.00 shipping and handling to:

VAUGHN SOFTWARE 5460 Harlan #84 Arvada, CD 80002

For other inquiries please include a self addressed stamped envelope.

Also available: PRINTPACKI adds nine additional large sideways "banner" screen dumps for your BITMAC data base. Same equipment required as BITMAC, except that Extended Basic is not supported. Direct from Vaughn Software only! \$10.00 plus \$2.00 shipping and handling. Bitmapped graphics in a really BIS format! Expands printer compatibility too!



By Vaughn Software

For the



## TEXTWARE/SOFTWARE

## T.I. Reviews by Jack Sughrue

"So far in your three years of computer reviewing you have managed to ignore the most important language in existence," so chastised a teacher friend of mine recently. I knew what was coming, but I asked her to explain anyway. (I'm one of these people who thrive on maschistic guilt trips.)

"Logo," she explained.

"Yes?"

"Logo, you idiot! You never write anything about Logo in any of your reviews."

"I try not to."

"I was right. You are an idiot."

"As you say."

"Do you mean to say you are NEVER going to write about Logo?"

I saw the time had come. "Not if I can help it."

"What!"

Just exactly what was said by her after that is not suited for a family publication such as this. In a watered-down version she accused me of being against God, country, Mom, and apple pie. I was definitely a Communist and probably a child molester to boot.

Actually, hers was a conservative reaction. In some teaching circles I would probably not be alive to contrive these sentences.

Logo has become a cult. A Cult. A CULT! Logo is thought of by many educators and parents as THE ONLY CORRECT WAY. Like many religious freaks who feel their religions are THE ONLY CORRECT WAY down the path of righteousness, the Logo Loonies (as they are known by computer educators whose approach is more flexible) have no room in their hearts for teachers who wish to use the classroom computers for Computer Assisted Instruction (CAI), programming, games, adventures, word processing, data bases, testing, flashcards, spreadsheets, whatever (unless it is devised through Logo).

Don't get me wrong: I like Logo. I use it in my classroom. I play with it at home. I believe it to be a profound language. I even work in an excellent school system that has Logo only in the elementary curriculum.

There is a boat missed here by the Logo Loonies, though. They miss the boat because have chosen to be blind to all except Logo. They choose to be (and, worse, make others be) computer illiterates through training.

Now that that has been said, I will finally get around to Logo for the T.I. There are two, Logo II being more profound with many more features. But either Logo I or II is better in many ways that any of the other Logos on the market. (For one thing, the T.I. version has tile graphics which none of the others have.)

Rather than describe Logo in detail, however, I would much prefer to discuss two books about Logo which I think are good. (There are at least a half-dozen really good Logo books out which are suited for the T.I. I'm selecting these two because the kids in my fifth-grade class prefer these two over all the others.)

K-POWER which was not around too long before being sucked up by its parent magazine (the inane FAMILY COMPUTING), put out a few solo items. One of them was a book called LOGO FUN (\$5.95, Scholastic).

This is a perfect starter (beyond the manual and accompanying programs). It's simple and direct and has specifics for all the Logos on the market. This is a good chance to make comparisons.

As LOGO FUN goes through the writing and editing features of Logo, it establishes through example some excellent skills to build upon. The student who step-by-steps it can hope to come out of the book a pretty good beginning programmer in an exciting language. Logo's strength, of course, is the way it teaches logic. This book really builds on that strength. The examples are very dramatic and really appeal to the youngsters. So whether you are using this cartridge at home or in school or for the child side of your adult self, this is the probable best starter.

Once you have completed beginninghood and are ready for the Big Time run right down to your local T.I. store and buy A LITTLE BIT OF LOSO MAGIC by Donna Bearden (\$13.95 hardbound). As I don't have a T.I. store in my neighborhood I sent to PERMA-BOUND, Vandalia Road, Jacksonville, Illinois 62650 for my copy. I believe it is in paperback form (also 8X11) from the Reston Publishing Company, Reston, VA, at a much cheaper price, but my copy was to be used in a classroom and needed the hard binding.

This book is subtitled ADVENTURES FOR INTERMEDIATE PROGRAMMERS. Very apt. It is teriffic. Brad Foster's wizard and dragon illustrations delightfully enhance the text on every page. It is a gem of a book that uses Logo in far better ways than most people use it: elaborate designs with simple shapes; patterns, tessellations optical illusions; spider webs and other magnificent designs; questions, quizzes quotations; fractured fables and customized cliches; and, finally, an adventure in the Dark Forest. Those are the almost-self-explanatory chapter headings.

A BIT OF LOGO MAGIC assumes you know something about Logo, so it doesn't go into the tiny little specifics of LOGO FUN, but it does give you some excellent and very dramatic programs, which, like so many of the good Logo programs, are extremely small for what you get.

If you do any programming at all but have yet to try Logo be prepared for a few sleepless nights. Logo IS addictive. And you will be astounded at how little is needed to create very large things. To perform some of the Logo graphics tasks in BASIC, for example, would be

so long and boring your toes would drop off. And excecuting the program would be so S L O W!!! Logo takes minutes to program many things and seconds to execute. Logo is better than almost any programming language at repeat tasks.

So now that you can buy Logo II at much reduced prices (and Logo I at extremely reduced prices on the used market), I would highly recommend getting it. It's fun! It's for adults, too! And with these two books your Logo World will be wide open to you.

(Caution: though you may learn to love Logo [I did.] you must beware of the Logo Loonies. Don't fall victim to their sales pitch. There are other worlds for computer kids to grow into.)

I'm glad I finally wrote this review. Maybe the pressure will be off now, and I can go back to my classroom computers in peace (and I'll have to look into the Reston/Prentice Hall catalogs to see what other T.I. goodies they might have hidden in their warehouses).

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Reprinted from the North Eastern 99'ers Newsletter Providence, RI. (Part of article)

## MYARC UPDATE (Written by J. Peter Hoddie)

first the basic information. It is expected to be released in the first quarter of '86 and sell for \$499. The machine has an IBM keyboard complete with a slash key where the left shift key should be. There are 10 function keys but instead of being mounted on the left of the keyboard as on the IBM keyboard they are mounted across the top of the unit horizontally. There is also a numeric keypad like on the IBM, but instead of an oversized plus (+) key there is a large enter key to facilitate in numeric entry. The cartridge port has been moved to the upper left hand part of the machine above the first few function keys. It will come initially with 256K of CPU memory (expandable to a full 2 megs), 64K of VDP memory, 64K of ROM, a parallel output, and an RS232 I/O port, two internal expansion slots, and a port to hook up a mouse. The mouse Phillips mentioned was the MS (Microsoft) House which brings up the issue of IBM compatibility (more later).

The internal ROM includes 48K of library routines, 8K of GPL interpreter, and 8K (seems like a lot to me) of mouse support. When the machine powers up, 16K of RAM is used for various internal tasks so that you are left with about 240K of space for your programs. And remember that all the screen and graphics tables are kept in the 64K of VDP memory, so that you really have quite a bit of memory to work with.

If you choose to expand the RAM of the system, it will have to be done externally using 3 off board RAM expansion banks. The current Myarc memory cards such as their 128 and 512K cards will work as memory expansion cards for the new machine.  $\sim$  12  $\sim$ 

The machine is built around the TMS9995 microproccessor which is a more advanced version of the TMS9900 inside your TI-99/4A. The 9995 is 2.3 times faster than the 9900 and comparable in speed to a Motorola 68000 that drives Apple's Macintosh. According to Mack McCormack the 9995 can run as fast as 12 MHz but it looks like it will only be running at an incredable 10.7 mHz due to some techincal considerations. The 9995 uses 16 bit parallel memory on the main board which allows it to go even faster than the 9900 which was a 16 bit processor doomed to forever run on an 8 bit bus, thus working at only half speed (roughly...).

The machine will be able to run nearly all programs written for the 99/4A through a bit on the gate array which when set will make the machine look nearly identical to a 99/4A. Thus all your software is still good. Almost. Myarc says 99% compatability. The exceptions they've found are programs that use non-standard methods to scan the keyboard. This includes only two programs so far. No big deal. The reason for the problem is that the 99/4A has 4B keys and the new machine has 84 so that a different KSCAN routine obviously had to be used. The programs that don't work use their own KSCAN routine and thus will not work.

A few more comments on compatability. There will probably not be immediate support for speech. The machine can support it but there will be no port for you to plug it into the side of the machine. Myarc is planning to develop something like the Triple Tech card from CorComp to allow you to put the speech synthesizer inside the PE Box. There is worse news though for those of you with a P-Code card. McCormack said that that card is a techincal nightmare and that the increased development time and costs to allow it to work wouldn't be worth it. Besides, he added. P-Code is essentially dead as even its creator has abandoned it. Now here's the bad news for everyone. You can use your current PEB but you will have to buy a card from Myarc to be able to do it. The reason is that the flex cable and card that connect your console the your PEB doesn't have the intelligence or the connectors to allow the new machine to access the expanded memory in the PEB on a 16 bit bus or use the new PAB format (more later). However having to buy this new card isn't all bad. It won't have as bulky a cable as the Il card so you can move the console around freely and it will have a time and date function built in so that you don't need a clock card. It is an added expense hovever.

The communications chip is the same 9901 that is used in the 99/4A and runs at the same speed. The graphics chip inside the machine is perhaps the single most impressive component. Myarc is using the 9938, a chip TI developed and then abandonded (like all good things). It has 64 pins and is now being produced by the Japanese (who else?). It is fully compatable with 9918A inside the 99/4A but supports extra modes and features. Where the 9918A has 8 control registers for graphics characteristics, the 9938 has 32 which allows for an incredible amount of flexibility and power. The 9938 has two text modes. The first is identical to the text mode of the 9918A except that you can choose the foreground and background colors from a set of 512 colors instead of 16. Text mode two is 80 by 24 or 80 by 26 (which

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allows for a status line at the bottom like on the IBM) with  $6\times8$  characters and a choice of two colors from the same 512.

Multicolor mode is still there as well as grappics mode one. Graphics mode two allows definition of 768 different patterns and a choice of 16 colors from the 512. Graphics mode three is the same as mode 2 except that instead of only being able to have four sprites on a horizontal line at a time, you can have up to ten on a horizontal row. Graphics mode four is similar but has 256 x 212 resolution and graphics five can support up to 512 x 424 using interlacing but this mode can only be displayed on an RGB monitor. Graphics mode six has 512 x 212 resolution and 16 colors. Each pixel can have its color individually defined. This mode requires the full 64K of VDP memory for storing the screen. Graphics mode seven has the same resolution but uses a full byte of memory to define the color for each pixel which means that each pixel can be one of 256 colors! This mode requires additional VDP memory to be utilized and Myarc has made provisions for up to 196K of VDP RAM to be put in the console. One of the control bits on the 9938 allows for what Phillips calls "animation tricks." He says that it can do screen swapping which essentially provides for automatic animation controlled by the 9938.

The machine will support the old PAB (Peripheral Access Blocks) format in VDP memory so that, in theory, all peripherals manufactured to TI specifications will work. There is some question as to whether or not the CorComp disk controller will work but Myarc seemed to imply that it would. A new PAB format will also be supported. It will be identical to that developed for the 99/8 and will reside in CPU memory for faster speed. It will also allow for logical record lengths of up to 4096 characters instead of the 255 on the 99/4 and will have a full byte reserved for error codes which means there can be 256 error codes instead of 8 as in the old PAB format. Including support for both the new and old PAB formats is one of the major changes from TI's 99/8. TI was planning to abandon the old PAB format which would have made your PEB 100% useless. Myarc has made provisions so that you don't have to buy a whole new system.

Phillips said that the first two peripherals that would be released would be the new PEB interface (described above) and a new disk controller card that will fit in the internal expansion slot for people who don't have (and don't need) to buy the PEB. This disk controller will support quad density disks which means almost a full megabyte of storage on a single floppy. Phillips said that they already have a version of this controller working and will probably release a version of it for the 99/4A as well. After those two cards are complete Phillips says that the next thing he plans to work on is a card that will allow for IBM compatability. He commented that the reason for choosing the keyboard that they are using was so that it could be made into a PC compatable computer easily. He also said that 3.5 inch drives were a definite possibility in the not too distant future.

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The computer will come with Extended BASIC built in. But not TI Extended BASIC. Instead it will use an advanced version of Myarc's Extended BASIC II. Phillips said that XB II is very similar to GN Basic from Microsoft and is somewhere between 2 and 4 times faster then TI Extended BASIC. A complete description of XB II, which is now available for use on the 99/4A when using Myarc's 128/512K memory expansion card, will be given elsewhere as it is too long to fit here. The additions to XB II that will be included in the new computer include full mouse support, event driven control keys (which means that you can set your program to automatically branch to a certain line number when a given key is pressed), and support for the new PAB format.

Phillips has promised to release a reference manual for the machine similar to the one released by IBM for the PC. In other words, the machine will have an open architecture and no hidden secrets like II kept with GPL. This should help enormously in getting new software written and hardware built by third party companies which can fully utilize the incredible power of Myarc's new machine. Phillips has promised to release the machine and claims that Myarc has sufficient capital to allow it to bring the computer to market. He did however admit that they are expecting a "hard, up hill battle" for the first year.

When asked about other languages, Phillips said that Pascal would probably not be next but that C would be. His reasoning is that C is what is really in vogue now and it would make new software development easier.

Listening to Phillips talk about this new machine made a few things very clear. First, that Myarc really has a machine nearly ready to released. Second, that the machine is state of the art and really something that could compete in the current market. Third, that Myarc is thinking long term and has big plans. Now whether or not a small engineering company from New Jersey working with a computer developed by TI that lost TI millions, can actually succeed is another question. I think that if anyone can, Myarc will. But there is no way to find out except to wait.

A complete article along with a full description of the faire, the products, people, and talks will be completed in time for the November 20 BCS meeting. It should be well over 10 pages in length. If you want a copy come to the meeting or send \$1 to the address below.

Thanks,

J. Peter Hoddie

Boston Computer Society TI 99/4A User Group One Center Plaza Boston, MA 02018 (617)-353-7369 (author's phone)

M.C.N.C.I.

560 LINCOLN STREET

WORCESTER, MA. 01605

First Class

December meeting will be on December 10, 19 at University of Massachusetts Medical Cent (Come 6 the VISITORS entrance follow t