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The Newsletter Staff wishes to thank our new contributers this month!!! In an effort to include all of this material things seem to have gotten alittle crowded even with added pages. PLEASE continue to submit material and we will work on the crowding.. THANKS !!! ED. Business Meeting

At 7:30 PM Vice President John Doon called the meeting to order.

The Minutes of the last meeting were not read and in the absence of the treasurer no report was made. John Doon spoke about the three disks that were available for copying at the Video Connection that will be available as of 8/27/84.

Peter Blackford reported on the Newsletter and requested that members submit articles to the newsletter by Sept.5th. Pat Anderson will be coordinating the advertisements for the newsletter. Software Commettee

Jack Sughrue discussed the necessity to continue corresponding to the companies and urge them to continue developing programs for the T.I. Two programs he spoke of were Howard W. Sam's programs and Toni Fabbri's animation, sound and graphics for the T.I.

Al cecchini (library Chairman) did not bring the materials into the meeting because of the low attendance at the last meeting. He requested that the members bring in literature or programs to share with the group.

A motion was made and seconded to allocate sixty dollars to purchase books for the library. It was suggested that Jack and Al coordinate the selection and purchase of this material. New Business

No consoles were available for the meeting so Norman Abare volunteered to take over as coordinator for consoles. His telephone number is 1-297-2100.

The business meeting adjourned at 7:45 PM.

Brian O'Brian demonstrated the Super sketch. Anyone intersted in purchasing this program can get in touch with Brian. It is possible to get it at a reduced rate if twelve are ordered. (If Brian is successful there will be some available at the Sept. Meeting. There is a big demand for this item so let's wish him luck . ed.note.)

Activities for the evening included general discussion about disks and drives and programs.

Respectfully submitted, V.Foster-Erlandson

#### AGENDA for September 18, 1984

- 7:00 7:30 Open Demonstrations New Member Registration Software Exchange (members only)
- 7:30 8:00 Business Meeting: Approval of Minutes Treasurers Report Committee Reports Old Business New Business Announcements 8:00 - 9:00 Special Interest Group Meetings
- and Open Demonstrations and Discussion

How about bringing something to our September Meeting ! Cartoons, short articals, programs or comments whould all be welcome additions to OUR Newsletter ! Typed copy 5 inches wide or less would be welcome or we will type it if necessary... Thanks ed. Please give anything for the Newsletter to any of the staff or drop it off at the Video Connection before the deadline.

## NEWSLETTER STAFF

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#### COLOR MONITOR REVIEW

By Bruce Willard

If you are like a lot of people, you started out with a black and white television set attached to your computer console. As time passed, the black and white TV either quit working or you decided to upgrade your monitor. Let's assume for a minute that you wanted to go to a color set. Why? Well, maybe you are into programming with color graphics, or maybe you just like color better. Whatever the reason, you now must decide which monitor or color TV to buy.

If you choose a color television, your graphics won't be as clear. The reason for this is that the signal from the computer must be transformed into a usable signal for the television. That is what that little box (video modulator) does that comes with the console.

The way to get better, more defined graphics is to purchase a color "monitor". This will receive the computer's signal without transforming it with that "little box".

Now, which one do you buy? There are basically two types of color monitors. One will work with any personal computer that outputs a "standard composite signal" (like the TI 99/4A) and the other works on personal computers which output an RGB signal. Just remember that with the TI 99/4A you need a monitor that accepts the composite signal.

What about the different brands? What about the different size screens? Don't worry. I have done comparison shopping. I found that the TI and the AMDEK color monitors were the most reasonable. I think the TI monitors would be scarce. However, the AMDEK monitors are in abundance.

The TI had a 10 inch screen. The AMDEK has a 13 inch. The 10 inch is a little more difficult to read because of the small print. The 13 inch is easier to read, but you must sit a little farther away from the screen to appreciate it. The resolution (the number of horizontal and vertical lines on the screen) on the TI is 192 by 256. Electronically the AMDEK is better, 260 by 300. One might think that the AMDEK display would be better. It isn't. Looking at the two of them side by side I could see no difference. The reason is the 13 inch screen of the AMDEK. Having a larger screen means having larger spaces between scanning lines. So the larger screen and the higher resolution seems to cancel out. Personnally, I feel that the AMDEK color monitor is better than

Personnally, I feel that the AMDEK color monitor is better than the TI for both operation and cost. How it will fare under a lot of use I don't know. Only time will tell.

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TI has given the group four disks which are now available to the membership. They are: Fourth Source Code Parts A&B, enhancements for TI Writer and Multiplan, and the Advanced Assembley Language Debugger. These and all group disks, are available for copying at the Video Connection. The hours for copying are Monday, Tuesday, Thursday and Friday from 2:00P.M. to 8:00 P.M., and Saturday from 2:00 to 6:30P.M.

Club member Roy Balfour has a stand alone RS232 for sale for \$100. If you are interested see me at the Video Connection.

I would like to remind members who have dues due this month to either bring their renewals to the September meeting or mail them to the group address. Please use the coupon at the back of this newsletter.

Nonmembers are reminded that subscriptions to this newsletter are available at \$12.00 for a 1 year subscription. Please use the coupon at the back when sending an order.

## ARXERIISING.RAIES:::::::

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 <b>4</b> ")	\$10.00 • •

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

#### LIBRARY NOTICE

Please return all borrowed materials to the MUNCH library at each meeting. This will give other members a chance to enjoy our collection of "textware" as much as you have !! THANK YOU !! by Tony Falco

From time to time M.U.N.C.H. members have expressed an interest in educational uses for the computer. This is the first in a series of programs whose purpose is to "give a pre-school child a head start."

The color, speech, sound, and graphics capabilities of the 99/44 can serve as a motivational device for developing learning experiences for very young children. Children as young as eighteen months and as old as six years can profit from a program like this one.

At this age parents should be careful not to "push." Educational programs for the very young should be viewed as electronic toys. One would not force a two year old to play with blocks. So why force him into counting or reading.

This Extended Basic program is an off-shoot of the prototype for my "NUMBER - NIBBLER" program which was in the October, 1983 issue of 99°er HMC. Unlike that program this one is shore and can be typed quite buickly. It can easily be translated into console BASIC, and speech, though

helpful, is optional.

If you have no young children, make a copy and give it to a friend or relative who does. Who knows ? You might give some child the "head start" needed to develop a healthy attitude toward learning.

90 !####LEARNING TO COUNT### ########by Tony Falco####### 100 CALL CLEAR :: A\$="COUNT FFOM 1 TO ?" :: B\$=" ENTER ( 1 TO 9)->" 110 DIEPLAY AT(10,2):A\$: :B\$ : : : :" HOW MANY TIMES?": : : :" SPEECH ? Y" 120 ACCEPT AT(12,19) VALIDATE (DIGIT):N :: ACCÉPT AT(16.19 )VALIDATE(DIGIT) T 130 ACCEPT AT(20,11)SIZE(-1) VALIDATE("YN"):SP\$ :: RANDOM IZE :: CALL SCREEN(16) 140 M=2^(1/12):: FOR W=1 TO T :: J=INT(N#RND)+1 :: S=17-J :: CALL CLEAR 150 FOR R=1 TO J :: CALL COL DR(14,R+2,R+2):: CALL VCHAR( 11,S,136,3):: S=S+2 160 CALL SDUND(-100,440\*M^R, 0,888\*M^R,0,330\*M^R,9):: NEX TR 170 CALL KEY(0, X, Y):: IF Y=0 THEN 170

180 IF X=J+48 THEN 190 ELSE CALL SOUND(250,131,2):: 50T0 170 190 FOR I=1 TO & :: READ D,V ,U :: CALL SOUND(150\*D,V,2,U +2,2):: NEXT I 200 DATA 1,262,262,1,349,349 ,1,440,440,1,523,523,5,349,4 40,9,523,440 210 S=17-J :: FOR R=1 TO J : : CALL VCHAR(14,S,R+48):: S= S+2 220 CALL SOUND(-200,349\*M^(2 tR),0,700\*M^(2\*R),0,523\*M^R, 2) 230 IF SP\$="Y" THEN CALL SAY (STR\$(R)) 240 NEXT R :: CALL CLEAR :: DISPLAY AT(12,7): "THAT'S RIG HT'!!!" 250 FOR D=1 TO 300 :: NEXT D :: RESTORE :: NEXT W :: END

### MORE ON PRO-MOD

# A powerful seven-in-one menu driven utility program for programmers. Saves immense amounts of time. "Progmod" permits: 1. Insert multiple commands, lines, blanks, remarks, etc.

- Insert multiple commanus, lines, Ulainae, Louis, 2.
  Delete remarks, commands, lines, etc.
  Change variable names, text.
  Extract routines, text, commands from large programs for use in creating other programs.
- 6. Dissect an extended basic program using multiple statement in
- 7.
- one line convert to single line basic format. Eliminate that occasional "sero" line number without changing or resequencing program.

The regular price for this powerful program will be \$49,00 but for the next two weeks Technologies Support Group of Spencer will offer the program to MUNCH members for \$39.00. See their add in the centerfold of this newsletter. Other programs available are described below..... MULTI-FILE

A general purpose data base program which reates dual cross communicating files, i.e., a main index case file crossed to multiple records/transaction type file. Three levels of access security. Depending on requirements, base price \$74.00

#### CHARTIT

A high resolution base graph generator accenting up to 25 numeric values. Displays in one to four colors, scales and labeled with screen dump to graphics printer command routine.

Enhanced Version 3.0 MULTI-SCRT

Sorts numerics, miscellaneous data items, mail list entry with se-lected mail list output. Sort by zip, ref. 8, name, strip top and/or bottom line, will handle any combination of 2-5 lines of address and/or data, type direct and use like typewriter. Review, delete, edit, "OPPS!" feature, - menu driven.

Enhanced Version 4.0 AUTO-TYPE

Permitting a full string of input data up to 225 characters without stopping. Stop printer - one of three ways to change, edit text prior to next print line, cancel, insert, delete, move text, reformat, disk file management, duplicate lines, delete groups of text, disk files, full control code output to peripheral devices, parallel or serial output menu with over 40 directives and error messages. Past users of TI writer give it twice the rating.

SKETCHIT Version 3.0

Additional routine permitting user defined graphic symbols, save to disk file, and command routine permitting the use of an optional screen dump. This is a very popular program for all ages and professions. See original catalog description.

Additional programs soon to be released!

- Lottery analysis in development for three years. Based on hysterisis effect - unveils what statistical analysis fails to do.
- Hemory dump in Hex, ASCII, address contents, character value, etc. . A programmer's aide.



## **TECHNOLOGIES SUPPORT GROUP, INC.**

Kingsbury Road, Box 222, Spencer, MA 01562

# WINNERS! FOR THE TI-99/4A

## \* LOTTERY HYSTERESIS \*

NOW AVAILABLE AFTER THREE YEARS OF DEVELOPMENT. A UNIQUE METHOD TO FINGERPRINT THE NUMBER GENERATOR. A DISCOVERY NOT UNVEILED BY CONVENTIONAL ANALYSIS. A POWERFUL PREDICTION TOOL FOR THE SERIOUS PLAYER.

# \* PRO-MOD \*

## A PROGRAMMERS DELIGHT.

HOURS OF PROGRAMMING, DEBUGGING, ALTERING REDUCED TO MINUTES. A NATURAL COMPANION FOR THE SST COMPILER. INSERT/DELETE LINES. REM'S, COMMANDS, TEXT, ETC. EXTRACT ROUTINE PROGRAM SEGMENTS FOR USE ELSEWHERE. GLOBAL SEARCH, LOCATE OR CHANGE OF VARIABLES OR TEXT. CONVERT X-BAS PROG. TO BASIC SINGLE LINE FORMAT. CREATE MULTIPLE BLANK LINES, DELETE THAT "ZERO" LINE # CREATE A 300 LINE KERNAL PROGRAM IN A FEW MINUTES. superb reference guides, but this is the first to attempt an encyclopedic concept (and succeed'). The 300+ pages of the Sams' guide are filled solid with every conceivable BASIC programming item for the TI. Want to know about constants. Bam' Index. Page 17. CONSTANTS. Defines it. Examples it. Expands on the original definition with a short (concise, succinct, careful) explanation.

How about something as mundane as LIST? Well, there is LIST (line number) and LIST (device) and LIST (start-end) and LIST (with device values) and so on. And what you can and can't do with LIST and what specifically you are doing wrong when the computer tells you BAD LINE NUMBER or CAN'T DO THAT OF INCORRECT STATEMENT OF BAD ARGUMENT or whatever. This book tells you what error messages mean specifically for the particular command or statement that is creating the error message. And why it is creating it. And how to correct Then it will give you mini programs or subprograms showing the it. correct process at work. This is an invaluable tool (a profound tool kit!) for beginner or expert at BASIC programming. It is unlike any other reference guide I own or have read. It is complete. It is (The index is excellent.) It is lucid. It is very easy to access. Carol Ann Casciato and Donald J. Horsfall, the authors, intelligent. have done an immense service to us 99 freaks.

This book is to our wonderful TIs what cookbooks are to cooks. The hundreds (literally) of tiny program examples help to make sense out of an irrational world.

Isn't this better than wine, woman, and song? (Or at least one of the above?)

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NO-NO OF THE MONTH -----> If you should suddenly discover yourself confronted by (with & at) THE BEST OF TI99/4A CARTRIDGES by Thomas Blackadar (SYBEX Inc., 2344 Sixth Street, Berkely, CA 94710 -\$9.95) quickly slip your ten-dollar bill back into your pocket and look around for the Sams' books.

If you belong to a user group (as all of you dear readers do) or subscribe to HOME COMPUTER MAGAZINE or have owned and operated your great little machine for over six months or have even talked to other owners, this book isn't worth a dime to you. It purports to rate the best of the cartridges (Some of the best aren't even listed though the book was published in 1984 and the cartridges I have in mind were out last year.) but the descriptions and ratings of the cartridges are, at best, poor; at worst, horribly inacurate, vague, or incomplete.

It rates the graphics on TI INVADERS (which are not nearly as good as the original arcade game) as Very Good, while rating Munch Man's graphics (which are at least a hundred times better than Pac Man's) as Fair. (It also rated Video Chess's graphics (which are perfect) as Good and rated the game itself as weak, though it was and is still the best computer chess game out. (Have you tried the Atari?) Even the graphics created by the Extended Basic cartridge (to which only two pages are devoted) are rated as only Very Good (not Excellent).

My feeling is that the author is one of those Apple/Atari/TRSB0 people who condescended to write a TI book for his company. He certainly doen't seem to know an awful lot about either the TI or the cartridges he rates.

Don't waste your money.

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The COMPUTER SENSE CENTER is looking for part time help to work flexible hours...Call Nancy at 366-4644.....

The EXPANSION SYSTEM has Provisions for installing 2 slimline disk drives or 1 full height drive and it contains the Powerfull SYSTEM motherboard. The following items that expand the Power and versatility of your 99/4A computer are included on the motherboard.

1. 32K of Expansion RAM memory which will allow you to run TI Writer, TI LOGO or LOGO II, TI Multiplan, TI FOrth and Assembly language programs as well as larger and more Powerful Extended Basic Programs.

2. A Double Sided - Double Density disk controller. This controller will control up to 4 disk drives and they can be acessed as either DSK or dsk (upper or lower case). With 2 slimline Double Sided Double Density disk drives mounted in the box you will have 720K of on line rapid access disk storage. The tests show that this new disk drive controller loads Programs 2 - 4 times faster than the TI disk controller. The DSR ROM will contain the necessary support for loading "Load to Run" type Assembly language programs without the Editor / Assembler command module. This same ROM will also add CALL PEKEV for accessing VDP RAM and they can be used as commands or Program statements.

3. An RS232 interface with 2 serial outPuts and 1 Parallel outPut. The serial outPuts are TI comPatible and the Parallel is a true Centronics outPut. This allows you to hook up Printers. Potters and modems to your comPuter.

4. SPecially designed Power supply that will Power 2 slimline disk drives and the SYSTEM motherboard.

5. The FLEX cable interface for hooking all this Pwer uP to your computer The cable is a small flexible round one (not a fire hose) that Plugs into the side of your comuter via a small L type connector. this connector directs the sable toward the back of the computer instead of straight out to the side.

The EXPANSION SYSTEM, which is about half the size of TI's box, has some illuminated graphics and the Power switch on the front Panel. The graphics return information on the Flex cable interface, 32K RAM, RS232, Disk controller, disk side 1, disk side 2, the disk Index mark and the OPtion slots.

The disk controller will control just about any 5 1/4 inch disk drive from full height single sided - single density to double sided -double desity slimlines. Their are Provisions in the disk controller section of the motherboard to set up the head seeking time (track to track) to match some of the faster (more expensive) disk drives out there. The disk manager Pro gram is supplied on disk with the box. This is a completely new Program with some very nice enhancements added to it!

DON MASON



# THE OPEN BOOK YOUR TI BOOKSTORE

If we don't have the book you're looking for, we'll be happy to order it.

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  500 Boston Post Rd.
  Marlboro, MA 485-9963 (opposite the cinemas)

Hours: Monday-Saturday 9-9, Sunday 9-5

by Jack Sughrue

This month's two reviews are a bit different from reviews I've done in the past in that both the Software and Textware Reviews begin with exactly the same two sentences. They are both about the same company: Howard W. Sams & Co., Inc.(4300 W. 62nd ST., P.D. Box 7092, Indianapolis, Indiana 46206).

Sams is one of the three publishers who've continued to put out extraordinary books for the T.I. (The other two are Datatmost and Compute!)

Some of you may have recalled the high praise I showered on ENTERTAINMENT GAMES IN TI BASIC AND EXTENDED BASIC in a past review and TI-99/4A: 24 BASIC PROGRAMS in yet an earlier column. Both of these exceptional Sams' books have caused a lot of comment by members who've purchased them as a result of the reviews. All the comments have been unusually positive. Both those books were purchased with the taped versions of the programs (see this month's SOFTWARE REVIEW) and immediately became well-used, valuable editions to the TI system.

Well, Sams now has a couple welcome additions to these editions: THE TOOL KIT SERIES:TI-99/4A EDITION and the extraordinary TI-99/4A BASIC REFERENCE MANUAL. The TOOL KIT is \$8.95; REFERENCE is \$17.95. Dave Dusthimer and Ted Buchholz are the authors of TOOL KIT. The series has been out some time for other computers, and I've had

some opportunities to work with them. And liked them.

So, when the TI version came out I was first in line with inflated U.S. currency. A well-spent \$8.95.

Loaded with programs and subprograms that are usable, fun, and very easy to understand, TODL KIT is the ideal book for someone who really wants to learn to use the TI but is wary of the technical and mathematical. After all, you don't have to have an engineering degree to enjoy the electronic wizardry of a television set or a stereo, so why can't one just enjoy the computer with the same uninhibited flair of enjoying an electric typewriter? Why not, indeed!

This book swings wide that portal; lets you enter the magic world of computering armed with your own wit and wisdom, your own desires and dreams, your own secrets and strategies. In short, the TOOL KIT is just that: a kit that lets you manipulate, experiment, learn, grow, enhance. And have fun while doing it (not to mention adding some fine things to your personal program library).

The book is well-written and illustrated and has an extremely easy-to-read, attractive layout. The authors (and illustrator) show the humorous and serious sides of their work in every one of the logical, building-block chapters (which include Color, Sound, Graphic, Animation, and Calculating Subroutines; Educational Programs; Game Programs (traditional & arcade); and some fine reference sections (which I feel should be a part of all computer-specific books).

A definite Yes-Yes! (As opposed to a No-No: that comes at the end of this review.)

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Bang! Zap! Xwixltlb! gSmqqfc! Fireworks and flash are the main ingredients in most computer-specific books in the marketplace this morning. Fortunately, by this afternoon there was TI-99/4A BASIC REFERENCE MANUAL (which is \$17.95, if you recall). Compute's REFERENCE GUIDE by Regena and Datamosts ELEMENTARY TI are both

DEADLINE FOR OCTOBER NEWSLETTER IS SEPTEMBER 26TH

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#### FORTH ASSEMBLER SOURCE CODE

These two disks contain the portion of TI Forth written in assembler. The disk contents is as follows:

Part 1 (ASMSRC) is the dictionary entry for the 250 or so primitives that are present when Forth is booted. This is loaded into memory at >A000.

Part 2 (DRIVER) is the code for the I/O system and support for Forth. It contains the disk and screen I/O, the allocation of user variable space, the stacks etc. Because it is more efficient to rearrange memory from the way that it defaults in the Editor/Assembler, this section also includes (in the UTIL\* files) those portions of the E/A utilities that Forth requires and assembles them to different addresses. A small portion of code is also placed into the console RAM at >8300 for speed reasons.

Also on part 2 is a program called BOOT. After Forth is loaded using ASMSRC and DRIVER, Forth can (after loading the file words) save an image of itself to the VDP RAM and write this image to disk as a program file. BOOT Is used to read this image and to reconstruct the forth system from the image. When booting the Forth system in the normal manner, the file FORTH is the object code of BOOT and the file FORTHSAVE is the memory image of the system. Note that if the size of the system changes, BOOT will have to have some addresses modified to work correctly.

#### SOFTWARE REVIEW #7

#### by Jack Sughrue

This month's two reviews are a bit different from reviews I've done in the past in that both the Software and Textware Reviews begin with exactly the same two sentences. They are both about the same company: Howard W. Sams & Co., Inc. (4300 W. 62nd ST., P.D. Box 7092, Indianapolis, Indiana 46206).

Sams puts out some super programs in book form and in book/tape form and in tape form. If you want any of their products you can usually get it in any these formats (except, of course, their REFERENCE GUIDE and their TOOL KIT.) (See Textware Review in this issue of MUNCH to learn about these two fine books.) The Sams' book/tape packs are rather interesting. Nobody else is doing anything quite like it for the TI or (as far as I know) any of the lesser machines. A laminated binder that looks very much like a book cover surrounds the book/tape combo. Once the tape is taken out of its protectively-sealed pocket it can be placed in a hard inner slot for perfect carrying and protection. The book slips out of a little cover sleeve for easy reading. This packet is an excellent way to store these marvelous combinations. They stand out on any bookshelf (as Sams' black-on-white format for all their texts do).

If this company just reproduced trouble-free tapes of the exact programs printed in the books, that would be more than most companies do. But Sams goes further. The price of their taped programs is less than any other company. ANY OTHER COMPANY! But the quality is also better than most. And And And And - get this. The tapes contain a secret ingredient: Enhancements! (EXAMPLE: The book/tape combo in question today is ENTERTAINMENT GAMES IN TI BASIC AND EXTENDED BASIC [\$15.95 for book and tape and vinyl binder] which contains 9 BASIC and 11 Extended programs on Side 1.) These are reproductions of the book programs (which, by the way, are not all games - so the title is a little misleading) and are excellent follow-alongs, as the book is a superb section-by-section, line-by-line tutorial. Even still, it is not a beginning beginner's book. Most of the programs are so complex the reader would have to have some knowledge of BASIC to understand the tutorials (but none at all to enjoy the programs on tape).

Anyway, that's Side 1 and it contains all 20 programs: S\*A\*M (Surface-to-Air-Missiles)(a shoot-em-up), Gold Bag (you try to get more bags of gold than a friend does), Arrow Zap (a very-similar-to Zero Zap program), Cosmic Guns (just that), Typing Skill (horrible title for an excellent, fast-paced, learn-while-you-enjoy type game), Spelling Test (yes), Address Inventory (a very professional, useful program in two parts), Word Search (another two-parter that searches out the answers to hidden-word puzzles), and Skeet Shoot (shoot down the clay pigeons). Those are the BASIC programs, all extremely well-designed. But, as the old giveaway shows on 50's TV used to claim, "The best is yet to come."

The extended programs (although most of the programs above can be run in extended) include some spectaculars: Biorhythm (you'll throw away all your other biorhythm programs after you use this one / you can even keep your family charts permanently on the program), Destroyer Phoenix (space adventure / nice graphics), Gunner (similar to the arcade cross-cannons game), Space Battle (two-person fastie), Auto Sprite Definition (a superb utility for you programmers out there), Killer Crab Attack (I have to practice this underwater activity a little bit / it's awfully fast), Home Bound (why did the chicken, the frog, the rabbit, etc. cross the road? / another answer / well done), Dungeon (an all-text dungeon adventure that is philosophically meaningful [meaning get out while the getting's good but always pick on some pitiful monster half your size / I found this fun), Help (imagine what this is like), Black Tunnel (without a doubt the fastest get-your-vehicle-through-the-narrow I have ever enjoyed failing at / don't give up), Meteor Rescue (I'm not so hot at this one either / people depend on you to be saved / but getting there!).

That series of programs should satisfy the most jaded palate. Thre's something for everyone.

But!

Yes, there is more. Following each one of the programs in the book there are recommendations for enhancements or improvements in the program. You guessed it. Side 2 of this wonderful tape contains all these enhancements for the 20 programs! (This is the main reason why I would recommend the purchase of the book with the tape, so that you can screen-list or print out the listings and see the changes and learn how they were done AND still enjoy both versions by having them already done on the tape.)

I'll be regularly reviewing the upcoming SAMS combo packs (and books) as they are released. Up to this point I'd highly recommend any or all of the ones I have already purchased and used from Sams: TOOL KIT SERIES, REFERENCE GUIDE (books), 24 BASIC PROGRAMS and ENTERTAINMENT GAMES (combo packs). You'll be glad you spent the money. (At local bookstores or from Sams directly...)

NO-NO OF THE MONTH - T.I.'s cartridge THE ATTACK. It's still available from mail-orders and now-and-then in stores. And it has now gone down as low as \$10.00. Wait'll it goes down to a quarter. Then buy it and take it apart to see how those funny-little cartridges are made. THE ATTACK is slow and B-O-R-I-N-G (with all letters capitalized). I bought it a while back, sight unseen of course, and was "playing" it the other night. I fell asleep during the first screen and woke up on the next level.

I'd rather go to sleep on an ant hill.

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Next load in -BSAVE and -EDITOR or -64SUPPORT, you have now loaded most of Forth's vocabulary so you can easily become familiar with it. After you learn more about Forth you may want to be more selective on what is auto-booted in.

Now what we are going to do is to set up Forth to automatically boot in all of the menu options that you would like in a binary fast loading fashion. Type in

#### 1 TASK 51 BSAVE

(NOTE: ' is an apostrophe - FCTN 0 ) and press enter. This will save everything between HERE and TASK in the dictionary as a binary image on the disk, starting with screen 51. Odds are that it will write over screens 51 through 64 or more but it won't matter because they are saved in the binary image. If you load the entire vocahulary except -TRACE there will be approximately 3900 bytes free for your use.

Now that you have executed BSAVE you will need to modify SCREEN 3, the auto-bood SCREEN. Since you already have the editor loaded you can just type in SMPTY-BUFPERS and then type in 3 EDIT. When we saved the vocabulary with BSAVE we eliminated the need for much of what is on SCREEN 3. After you have modified your SCREEN 3 to match the one listed below press FCTN 9 (BACK) and then type in FLUSH. You have just completed setting up Forth to rapidly load your menu selections and to match your printer output. To test it out just type in COLD and press ENTER and Forth will rapidly boot the vocabulary that you BSAVEd.

#### NEWSLETTER SUBSCRIPTIONS ARE NOW AVAILABLE !

In response to requests from many people who live outside the Worcester area, we now offer subscriptions to this newsletter. The rate will be \$12.00 for twelve issues. If you order a subscription before 9-30-84, you will recieve all available back issues at no charge.

To subscribe, use the order form on the back page for membership renewals and write NEWSLETTER SUBSCRIPTION on the bottom, NOTE: To set up for your disk drive types just delete the ( from the beginning of the line(s) that describe your drive(s). If you have a single sided and double sided drive they will have to be configured as single sided. If look at APPENDIX F in your Forth manual you will notice that many of the selections we loaded also loaded other selections. On SCREEN 3 we also added 2 new words to Forth, FREE returns the available memory for your program and PAGE clears the screen and homes the cursor to the upper left hand corner.

0 (WELCOME SCREEN ) BASE->R HEX 10 SYSTEM (Clears Screen ) 1 0 0 GOTOXY ." Loading. TI Forth "CR 10 83C2 C! (QUIT off) 2 DECIMAL 51 BLOAD 16 SYSTEM HEMU 3

4 ) VDPHDE /	( Tells Forth you're in TEXT Mode )
5 0 DISK10 '	( Allows EDIT/COPY on all SCREENS )
6	
7 ( 180 DISK_HI !	( Setaup for 2 Single Sided Drives )
8	
9 ( 180 D)SK_SIZE ±	Set up for Double Sided Drive(s) )
10 ( 360 OISK_HI !	Set up for 2 Double Sided Drives )
41 .	
12 : FREE SPE HERE ;	
13 : PAGE 0 0 GOTOXY CLS	; ( Clears Screen & Homes Cursor )
14	

#### 15 R->8ASE

If you have a hard time reading the white letters on the blue background you can change them to the Extended Basic colors by including the following commands on any of the blank lines on SCREEN 3. 23 7 WWTR

and the screen will change to cyan with black letters. Next month we will start looking at programming in Forth. Until then have fun and read the manual and "Starting Forth" by Leo Brodie.



"Big deal. Fire gives light and heat."



Dear 99er Users Group:

Many groups have requested the source code to TI-FORTH. Here it is! It's on two diskettes, and the attached instruction sheet should provide you with the instructions you will need.

I have also enclosed a diskette with some enhancements that were made to TI-WRITER and Multiplan. Multiplan has been speeded-up a little, plus you will now have auto-repeat when moving the curser around the screen. Simply replace these files on your Multiplan System diskette with these files on the enclosed diskette:

> MPBASE MPCHAR MPDATA MPINTR OVERLAY

TI-WRITER has been enhanced to provide true lower case letters, eliminate the form feed while using the Formatter, and provide for a printer default while using the Formatter. You will need to add the CHARAI file to your system diskette and replace the EDITA1 and EDITA2 files with those on the diskette. For the printer defaults in the Formatter, to get "RS232.BA=1200.LF" replace the FORMA1 and FORMA2 files. The other default is "RS232.BA=4800.LF" and replace the FORMA1 and FORMA2 files with the FORMA4800A and FORMA800B file, while keeping the file names FORMA1 and FORMA2 respectively.

This will be the last letter you will be receiving from me, for next month I will be transferred to Dallas to begin working for TI's Information Systems and Services Group. I have enjoyed your newsletter, personal letters and phone calls. I wish you all continued happiness working with your TI-99/4A.

Very truly yours,

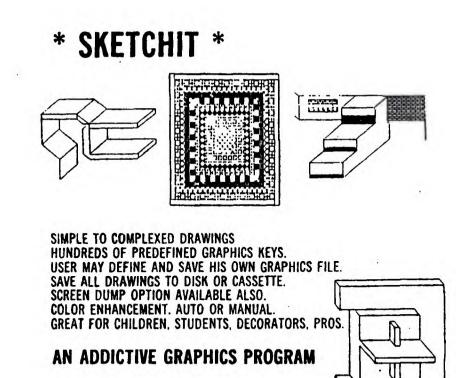
• `

);/\_: #

William H. Barniea Manager Home Computer Software

WHB/pr

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## **OTHER PROGRAMS**

\* AUTO-TYPE: WORD PROCESSOR

1. ...

- MULTI-SORT: MAILING LIST, SOFT ANY WAY. EDIT. DELETE, ADD.
- \* MULTI-FILE: A GENERAL PURPOSE MINI DATA BASE.
- \* MORSE CODE: FOR THE HAM. LEARN CODE WITH PLEASURE NOT PAIN.
- MATH II: SOLVE, DISPLAY, STORE, & PRINT. OVER 40 FUNCTIONS.
- . CHART-IT: BAR GRAPH UP TO 25 ITEMS. DISPLAY & SCREEN DUMP.
- ALSO MISC. TECH & ENGINEERING PROGRAMS.

FULL DOCUMENTATION, AND USER SUPPORT. PAST USER REFERENCES AVAILABLE UPON REQUEST. SEND MO OR CHECK - COD'S OK

# CALL 617-885-6425

#### $5^{TH}$ 1- =FORTH configuring ti forth to your system

Now that TI Forth has arrived at the User's Groups lets get started by configuring it to match your own system. I strongly recommend that you read through the ENTIRE Forth manual before you start, it could keep you out of trouble later on. TI Forth is originally configured for 1 single sided disk drive and the printer is set up as RS232.BA=9600 and it has a syntax error on the printer output screen, 72.

I am probably already too late but, BEFORE YOU DO ANYTHING WITH TI FORTH MAKE A BACKUP COPY OF THE DISK IIII The Disk Manager can be used to backup the TI Forth system diskette (only use single sided). There are a few commands that could be detrimental to your Forth diskette if you are not careful such as CLEAR, UPDATE, FLUSH, ED@ and EDIT. Forth has a 5 screen buffer, 5K, which resides at >2010 through >3423. When this buffer is full and one of the screens in the buffer has been marked as updated Forth will automatically write out to the disk, which could write over something you wanted to keep. So ALWAYS keep the write protect sticker on your original diskette and only use it to make copies of for your use.

Now that you have a backup copy lets configure it to your system. First lets load Forth by following the instructions in chapter 1 of the Forth manual. By now you should have read chapter 3 on the EDITOR so lets put it to use. After Forth boots in you will have a menu of additional vocabulary blocks listed on the screen and the cursor will be below the line that reads TI FORTH. To invoke the EDITOR you must first load the vocabulary for it. This is done by typing in -EDITOR and pressing ENTER. Forth will then go out to drive 1 and load and compile the appropriate SCREENs into memory.

After the cursor comes back you can then EDIT the various SCREENS on your <u>BACKUP</u> <u>DISITION</u> To edit a SCREEN just type in the: HTA number followed by a space and the word EDIT and then press enter. The editor will take over from there and display the SCREEN.

So now lets modify the printer section of Forth and fix the syntax error. Type in EMPTY-BUFFERS DECIMAL and press ENTER. This will clear out the buffer and set the number base for decimal numbers. Now type 72 EDIT and press ENTER. The 72nd SCREEN has the RS232 information for your printer. For a parallel printer replace RS232 and RS232.BA=9600 as indicated by the under lined PIO's in the listing below. If your printer is serial but at a different baud rate or uses .LF or .EC etc just insert or delete the appropriate characters as needed on line 4 after " RS232. The syntax error is on line 5. To fix it change PAB\_ADDR @ VDP to PAB-ADDR @ VDP. This applies to the 01NOV82 disk name version only, the TI-FORTH disk name version is OK.

6 CALTERNATE 1/0 SUPPORT FOR PIO PNTR 12JUL82 LCT) 1 U CLOAD INDEX BASE->R DECIMAL 68 R->BASE CLOAD STAT 2 0 0 0 FILE OPIO BASE-OR HEX 3 : SWCH OPTO PABS @ 10 + DUP PAB-ADDR ' 1- PAB-VBUF ' 4 SET-PAB OUTPT F-D" PIO" OPN 3 5 PAB-ADDR & VSBN I PAB-ADDR & 5 + VSBN PAB-ADDR & ALTOUT 1 ; 6 : UNSWCH 0 ALTOUT ! CLSE : 7 : PASCII ( BLOCK --- FLAG ) BLOCK O SHAP DUP 400 + SHAP φ. DO I CE 20 > + I CE DUP 20 C SWAP 7F > OR 9 IF DROP & LEAVE ENDIF LOOP ; 10 11 : TRIAD O SHAP SHCH 3 / 3 # DUP 3 + SHAP 12 DO 1 PASCII IF I+ I LIST CR ENDIF LOOP 13 -- DUP IF 3 SWAF -- 14 + 0 D0 CR LOOP 14 OF MESSAGE OC EMIT ENDIF UNSHCH ; 15 K->BASE ---> After you have made the proper changes

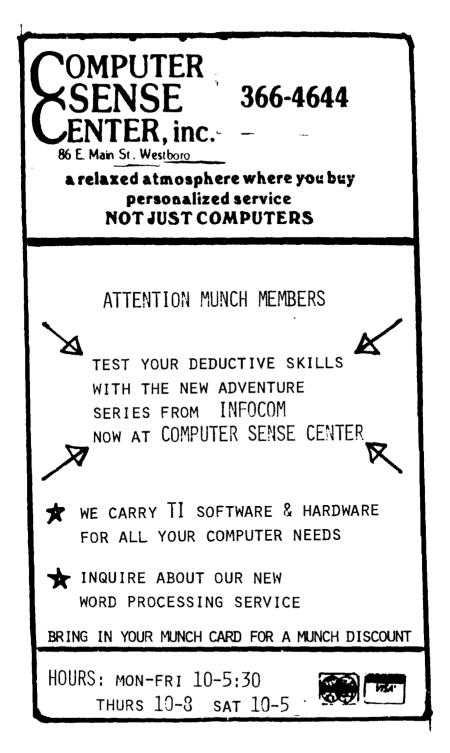
After you have made the proper changes press FCTN 9 (BACK) and you will be out of the edit mode. Then type in FLUSH and press ENTER and the changes will be written out to the disk. Now type in MENU and the original menu will come on the screen next type in : XXX ; and press ENTER. To load the printer vocabulary type in -PRINT and press ENTER.

To check your printer turn it on and then type in SWCH 72 LIST UNSWCH and press ENTER. When you do this you should get a printout of the revised SCREEN 72. SWCH tells Forth to change from screen output to printer output, 72 LIST lists out SCREEN 72 and UNSWCH changes from printer output to screen output. If it didn't work right then type in FORGET XXX and press ENTER. This erases the printer vocabulary out of memory so you can reload the new one after you

After you have the printer working right type in COLD and press ENTER. This will re-BOOT Forth and start it up with just the standard vocabulary. WARNING what we are about to do will write over part of the standard screens, you might want to make a backup copy of your disk with the new printer selection first. Before we go too far here may I suggest that you load -64SUPPORT and edit SCREEN 72 to see the difference between the 64 column editor and the standard one. You will need to decide which editor you like better since you can only have one in memory and we will be setting it up to auto-boot. Now type in COLD and press ENTER. Next you will need to decide which of the menu selections you will be using the most so we can load them into memory. I might suggest that you load the following selections for use during your introduction to TI Forth. Type in the following line and press ENTER.

#### -GRAPH -DUMP -VDPMODES -COPY

If you are going to use the ASSEMBLER portion of Forth type in -ASSEMBLER and -CRU and press ENTER. Now type in : yourname; and press ENTER. This will place your name in the dictionary below the print and edit vocabulary so you can easily FORGET these words to open up memory space hefore you load your programs. If your programs will be using the printer or the floating point routines then load in -PRINT and/or -FLOAT before you enter your name.



How would you like to draw pictures directly on your screen, automatically color in areas with 15 different colors, texture areas, draw with different width brushes, automatically connect two points with a line, etc. and then save your creation on a casette.

You can do all of the above and more with just three buttons and a pencil on a sketch pad. Moreover, you don't need any more computer equipment than your TI Console.

DO I HAVE YOUR ATTENTION? This is all done with a device called "SUPER SKETCH" made by Personal Peripherals Inc. of Irving, Texas. Some of you saw the one I had at the August meeting. (Due to lack of consoles I conldn't demonstrate it). It consists of a clip board with a movable arm and stylus. This clip board is connected by a cable to a TI plug in module. THAT'S ALL THERE IS TO IT.

There are three active buttons on the clip board, 'MENU", 'SELECT', and 'LIFT'. Fush the 'MENU" button and a menu appears on the left side of the screen with a flashing arrow. Position the arrow with the stylus opposite the color or command you want, push 'SELECT', and go to the sketch pad with the 'LIFT' button and do your thing. The 'LIFT' button also picks up your 'pencil' so you can move it without leaving a mark. If you goof there is an erase mode that erases pixel by pixel.

I plan to have one for demonstration at the September meeting, and since there was considerable interest in them at the August meeting I hope to have several available at the September meeting for those who want them at the dozen price of \$36.00 plus transportation, whatever that comes to.

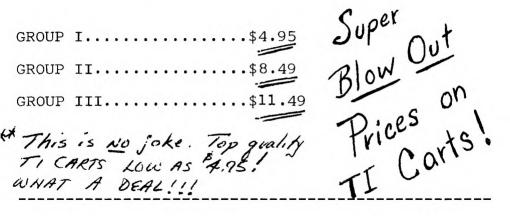
Brian O'Brien, Jr.



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ODP2!! There was an error In Lest Montr': MAMGMAN Program. Line 1280 should read: 1280 IF WORD(3)=USED THEN 1270

## THE REPLACEMENT PARTS BLUES

by Mike Gelbwasser

Did you ever try to get a replacement part for the T.I. in Worcester? Well, don't! You'll go nuts, just as I did when I tried to replace my Video Modulator. Here is a tale of my exploits:

First, I called the TI CARES hotline, 1-800-TI-CARES. They suggested department stores in the area...Sounds easy enough, I thought. So I tried Toys-R-Us, Caldors, and just about every other computer carrying store in Worcester. All that they had was the Commodore/Atari compatible adapter. "Sorry", they said. Finally I tried Video Connection and Advanced Electronics, both recommended to T.I. users. Video Connection had it, but it was out of stock and wouldn't be in until the new T.I. shipment came in. ETA (estimated time of arrival) unknown....Nearly the same with Advanced Electronics. Normally, I'd wait, but my computer had been down for 2-3 months already, and I was tired of waiting. Eventually, I bought my replacement from a company in Waltham, through their mail service, and for more than I had expected to pay.

So, I'm backing Steve, Jack, Jim and the rest of the head honchos at MUNCH on this one! We've got to write and plead with these companies to sell T.I. Merchandise. The second most owned computer in the U.S.A. shouldn't have to take a lifetime to find, especially in this area. I'm not a "MUNCHER" yet, but when I get the dough, I'm going to be!

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