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* by JACK SUGHRUE, Box 459, East Douglas, MA 01516 *

#8

Declining membership in the TI world is definitely a real problem which has some interesting and real solutions.

The old guard is getting tired and its members no longer want to (or are too tired to) be presidents and newsletter editors and workshop demonstrators and librarians and bulletin board downloaders and whatever. They can't be blamed for this. Nobody can continue to operate well forever, particularly in what seems an unappreciative atmosphere.

Almost every newsletter I read has the same common problems: basically, too few doing too much for too long. This is true in LA and in Boston and in Canada and England and Australia. Large changes are taking place within groups, in many cases with very bad vibes coming across strongly in the newsletter pleadings. Over and over we see such things as "This club is dying." and "If the members who never contribute don't start doing something soon..." followed by serious threats.

Realistically, a group without a newsletter is a corpse that hasn't yet been identified as such. There are exceptions, of course, but a club without a newsletter is a body without a brain. So, first things first, keep a newsletter going. This is also the biggest (or only) contact with the outside world through exchanges.

Next, a regular monthly meeting YEAR ROUND is essential. Without a place to gather (even if it comes to homes, as a last resort) there can be no club. A club implies a community, a spirit of friendship and commonality, a gathering. Business and pleasure must be mingled here and can only be done by meeting.

Those are the two big things. Even if your group has only three members, but you put out a newsletter and you meet regularly, you can still have a viable, worthwhile user group. Nutmeg 99ers of Connecticut and the Lima User Group of Ohio are two fine examples of Teriffic Tinies. But, believe me, there are many, many more, and they are more common than the large, flourishing groups.

There are some other things to consider, too, of course.

Is it worth complaining constantly in print and at meetings that too many are not doing their fair share. Most of the people who sit on their hands and don't take leadership roles are not capable and know it. Not everybody is a leader. Not everybody is outgoing and comfortable performing in public. There are lots of insecure (though maybe talented) people who just cannot put themselves on the line. It has nothing to do with laziness or meanness or unwillingness or lack of responsibility. Some of these people come to every meeting; all continue to pay their dues.

And, in truth, everybody in the group has, when allowed and encouraged by the leadership, probably contributed in some continuous, if not significant ways.

My own group - M.U.N.C.H. of Worcester, Mass. - is typical, I think, of most. We went from over 200 members to about 15 (5 or 6 of whom were active) to about 40 (a dozen of whom are active in one way or another). There are officers, of course. Our Treasurer (Jim Cox) was one of the

founders and has continued to man that post and perform lots of others (including membership and newsletter editor at the present). Without him there'd be no club. Every club has a Jim Cox, someone with incredible dedication and common sense. All the rest of us have done different things: officers, editors, workshop demonstrators. Some have brought in friends; some have written programs; some have catalogued our libraries; some have repaired equipment; some have lugged in equipment or materials; some have helped with sales and fundraising and faires. All have paid their dues; most come to meetings, take part in raffles, appear interested in demos and workshops. All enjoy the company of fellow TIers, which has to be the most important aspect of a group.

A lot of us lead some incredibly busy lives. One member flies all over the country and never knows when he'll be able to make a meeting. When he comes, though, he brings enthusiasm and knowledge which he so generously shares. Our chief BBSer who provides the club with many of the library and Disk of the Month goodies misses most meetings because of courses he's taking toward a degree. His sharing doesn't stop, though, as the boards, phones, and mail demonstrate. Then there are illnesses or family matters or all the other obstructions of life in this complex age. But we're still linked by newsletter, library, and common desire to keep a good thing going and growing.

So our M.U.N.C.H. group is a success, as are lots of other groups who don't realize they are.

If you still have an operating group; if you still put out a newsletter, share materials, meet regularly, enjoy some of the friends you've made through TI - then you have a successful group. The workload may not be equitable, but no situation in life ever is.

For what it's worth, here are a few suggestions to get members reinvolved, revitalized: At the next club meeting find out the following:

- 1) What kinds of newsletter does the club want (type-in programs, latest hard/software, reviews, club news, graphics, whatever)

- 2) If everyone would be willing to contribute something to a raffle (blank disks, tapes, cables, non TI stuff even)

- 3) If all members would dig through old disks and tapes and locate at least THREE programs they like (or liked back in the old days) to add to a giant club D.O.M. (games, utilities, kids' programs, LOGO stuff, tutorial text files, whatever)

- 4) And maybe demo at least ONE????

- 5) Hold a NOVICE NIGHT! This would be to introduce beginners, older kids, and definitely long-time TIers to the fun of writing in BASIC (or XB). I know there are thousands of TI users who became comfortable with their machines and have used them successfully for years and are now ready to learn to program or would take a refresher. All the old newsletters contain GREAT little tutorials, type-in programs, etc. Just what the doctor orders for a new boost in attitude. Maybe this would be a continuing thing with EVERYBODY who wants to getting involved in research, xeroxing, demoing, tutoring, whatever. But mostly sharing and helping. There are more of us amateurs out there (probably 1000 to 1) than wizards.

In order to get reformed we need to remember the three Rs: Review, Rethink, Rekindle!

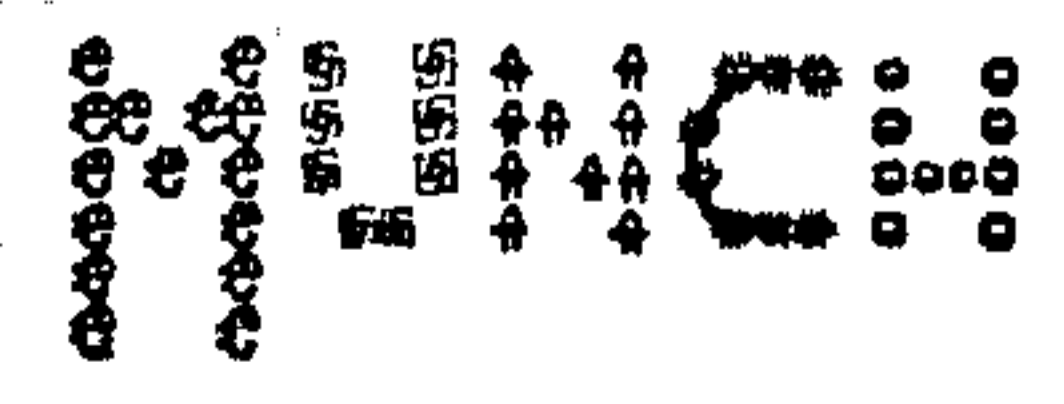
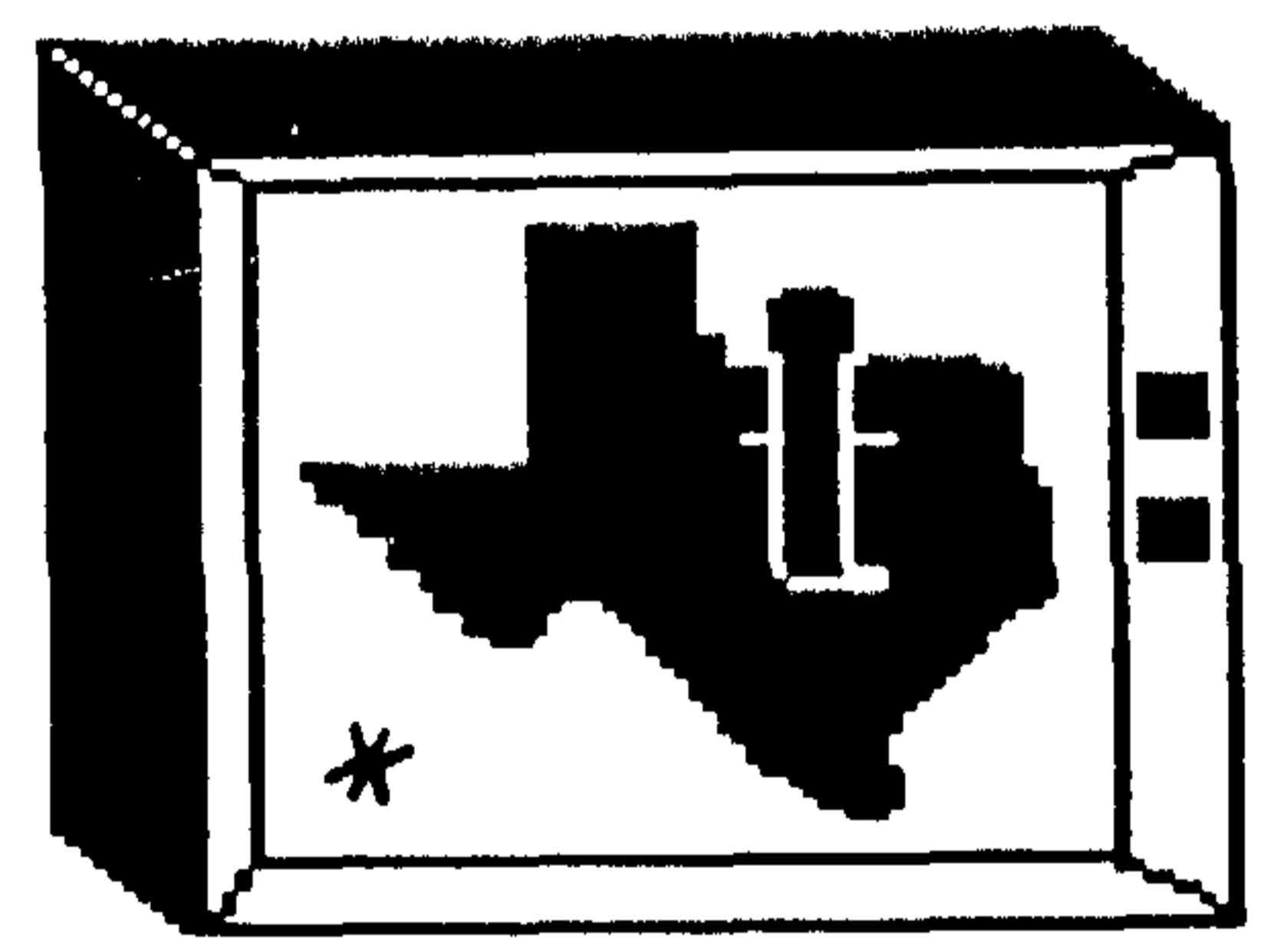
(If you use NBN-AGB/99 please put me on your exchange list.)

LINE	COL	COL	COL
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16			
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PAGE PRO TO PHOTO2

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LOAD PAGE PRO AND YOUR PAGE.
CLIP AS SHOWN ABOVE. LINE 1 COL. 1 TO LINE 1, COL. 32 TO LINE 16. SAVE AS FILE/A
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WHEN YOU HAVE ALL EIGHT PICTURES CLIPPED, QUIT PAGE PRO AND LOAD PIX PRO. CONVERT THEM TO TI-ARTIST PICTURES. NOW THEY ARE READY FOR PHOTO.

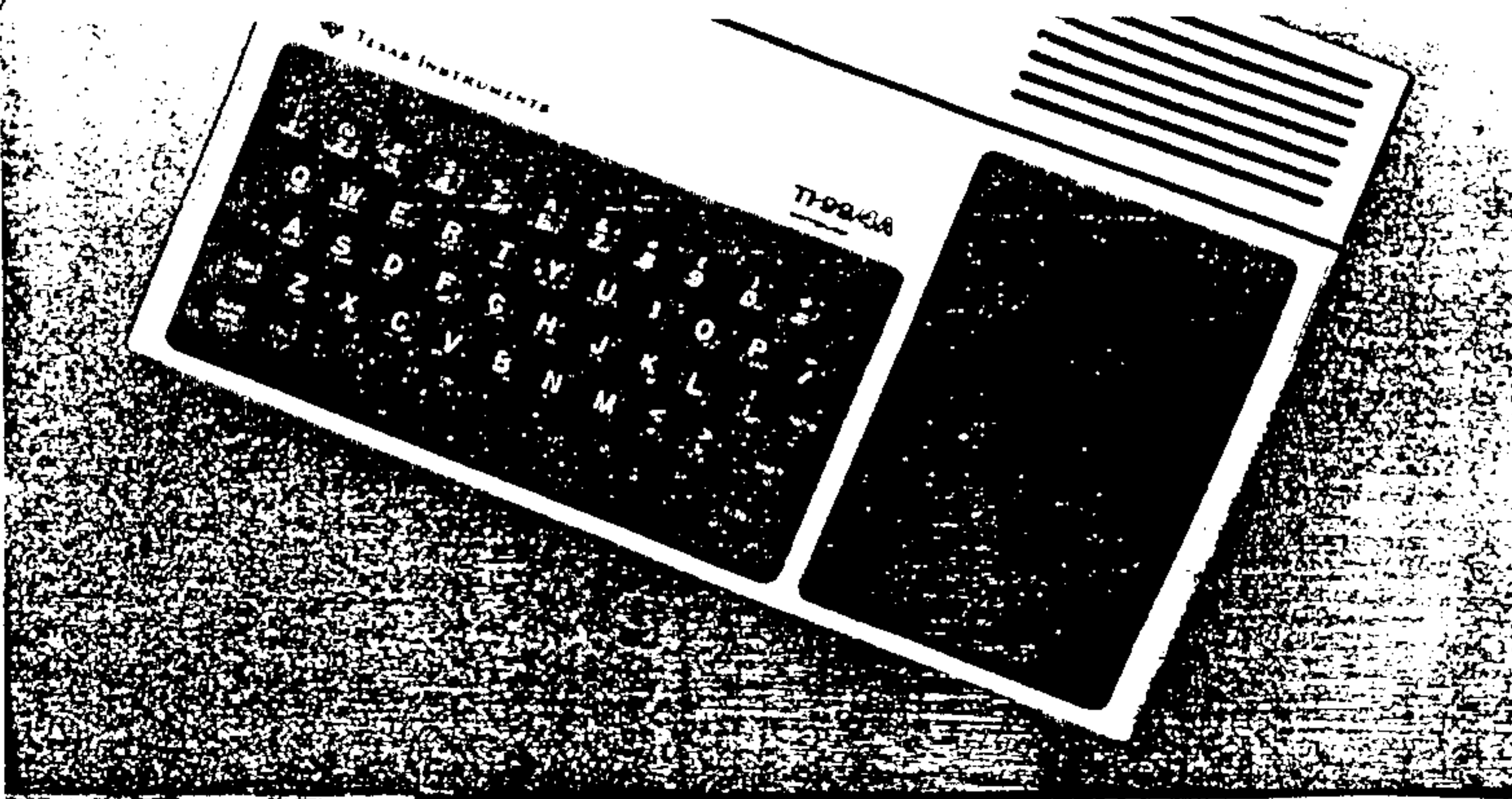


THIS IS A CORRECTION.

KNOW YOUR T199/4A

Submitted by Guy Myers

No. 1



T199/4A

PRICE

Usually £99

SIZE

390x260x70 mm

WEIGHT

1.8 Kg (4lbs)

CLOCK SPEED

1MHz

MEMORY

26 Kbytes ROM, 16K user RAM, 8K graphics RAM. There are an extra 256 bytes of 'scratchpad' RAM not normally available to the user. These are used for the internal registers of the 9900, most CPUs have them built in

VIDEO DISPLAY

Character display of 24 rows of 32 columns. There are 16 colours which can be used as foreground and background colours. No user graphics are available on the basic machine but individual 8x8 character cells can be defined with a sequence of 16 characters

INTERFACES

Cassette, joystick, video (not TV), a cartridge slot and a connector for the expansion bus

LANGUAGES SUPPLIED

BASIC

OTHER LANGUAGES

Extended BASIC, TI LOGO, UCSD (University of California at San Diego) PASCAL, TI FORTH, and Assembler

COMES WITH

Power supply adaptor, TV adaptor, cassette connector and manuals

KEYBOARD

Typewriter-style with 48 moving keys, including control and function keys. The numeric keys double as function keys, depending on the added software cartridges

DOCUMENTATION

There is one main manual with an addendum for the UK market, which describes how to connect up the computer and how to use the 'solid state command modules'. This introduction is very short and has many diagrams but no photographs. There is a detailed list of commands available in the BASIC, a section giving some example programs, and a short glossary at the end of the manual

T199/4A Keyboard

The keyboard is of a higher standard than on most home computers, though some users have commented that the 'bounce' on each key is too stiff. The number of keys is also rather limited, presumably to make room for the cartridge slot on the right-hand side. Most of the keys, therefore, double up — pressing 'CTRL' and 'E' will achieve the cursor-up function. The 'FCTN' key turns the top row into user-definable keys, and it is possible to insert a strip of plastic above this row, on which labels can be written

In terms of design and construction, Texas Instruments' T199/4A is one of the most professional home computers.

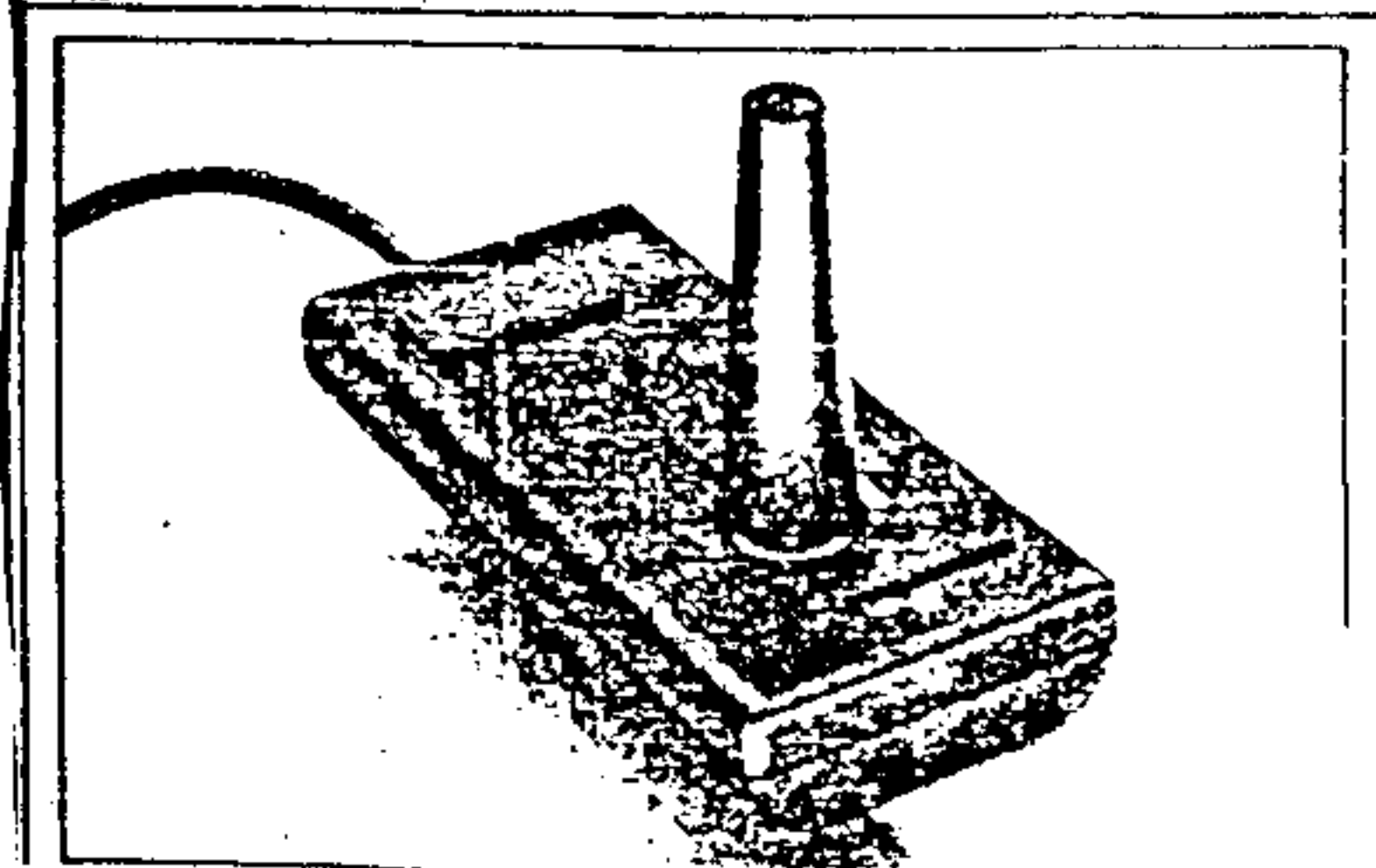
It uses a 16-bit microprocessor, the TMX9900, designed and made by Texas Instruments, who make semiconductors, calculators, microprocessors and minicomputers. TMS9900 was one of the first 16-bit Chips.

The T199/4A has a 48-key keyboard, which by the general standards of home computer keyboards is very good to type on. There is a space to the right of it that receives software cartridges, which Texas refer to as 'solid state software'. A similar connector on the right-hand edge of the case permits hardware expansion. The expansion modules, which

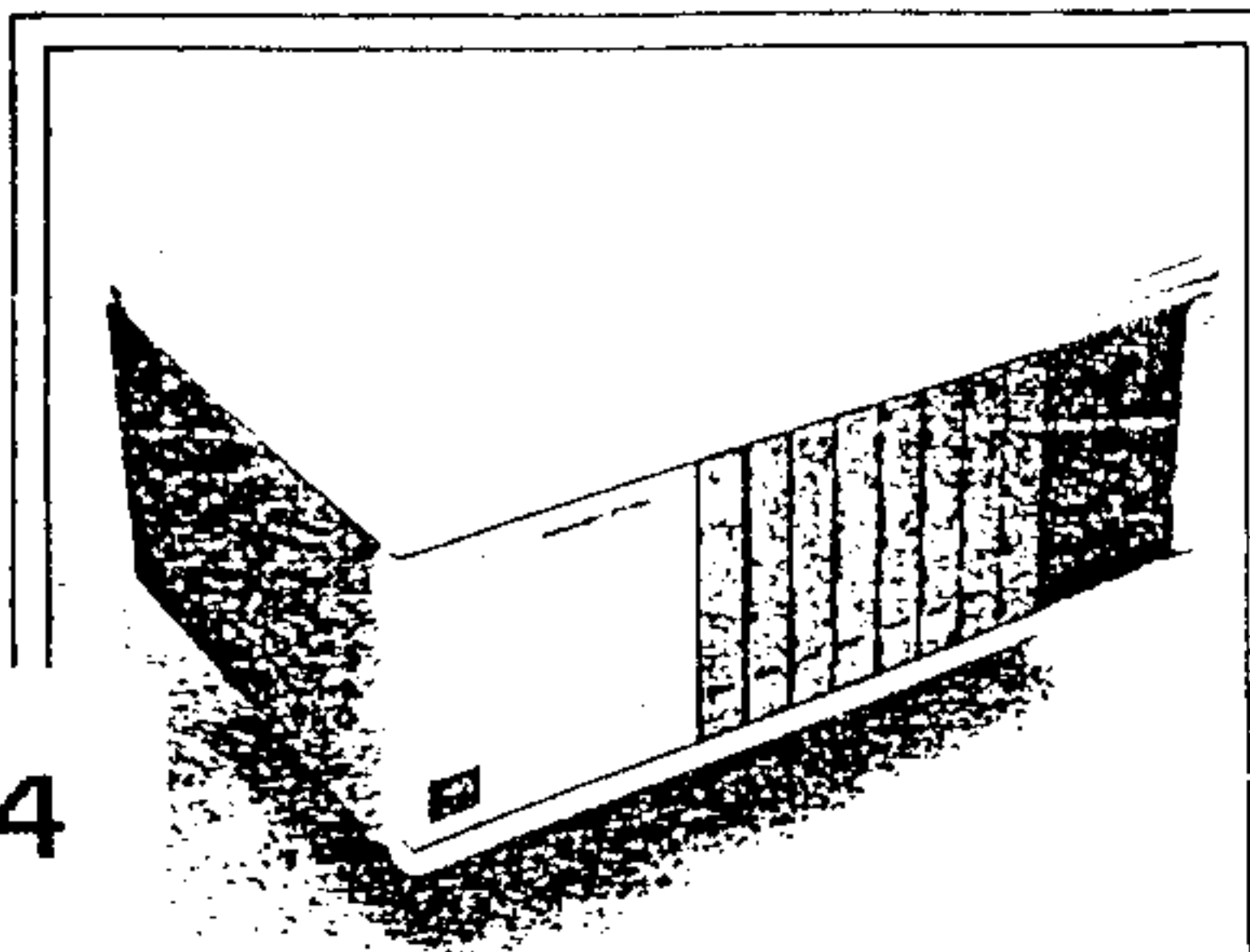
are large plastic boxes, contain disk drive controllers, memory expansion and a serial (RS232) interface and are connected via an expansion box, a unit which is essential if you wish to extend the machine.

The screen display is in 16 colours with high-resolution graphics, and there is also a sound generator capable of producing three independent notes or 'voices' at once.

The computer is designed for new users to computing, BASIC being the resident language and LOGO the most popular add-on language. In America it is used a lot in schools, and it competes with the Apple II for the position of top-selling educational micro in most States.



The Joystick



4

Peripheral Expansion Box

FROM: HUNTER VALLEY 99er

HANDY TIPS FOR THE TI99/4A COMPUTER

Here are a few tips for beginners (good for experienced programmers, too) from old newsletters.

##1 If you have the speech synthesizer and the TEII cartridge here is a trick for debugging programs. All you have to do is enter your program, type LIST "SPEECH" and hit enter. The computer will read your listing back to you.

##2 If you want to disable the quit key (fctn +/*) type in CALL INIT || CALL LOADX-31806,16) and then enter. You must have Extended Basic.

##3 If you are going to save a program to tape and type OLD CSI instead of SAVE CSI don't panic. Press FCTN and E together then press (ENTER). This will take you out of the tape loop.

##4 You don't have to enter line number in TI BASIC or EXTENDED BASIC. Before you start enter NUM n(1),n(2); where n(1) is the starting line number and n(2) is the desired increment.

##5 In TI Basic you can edit a line with the edit command or with the FCTN key and either the E or X keys. To use edit, type EDIT n (n=line number). The other way is to enter the line number and press FCTN X or FCTN E. This is the only edit method recognized by Extended Basic.

##6 You can list programs to the screen in several ways. Try these; LIST, LIST n, LIST n-, LIST n-n.

##7 If you want or need to renumber the lines in a program either to make it neater or make room for new lines you don't have to renumber them individually. Just enter the command RESn,n for resequence (starting number, interval between lines).

##8 When entering a listing in Extended Basic and several lines are very similar, you can save time by typing in the first line and hitting (enter). Then press FCTN 8 (redo). Change the the line number and make the changes to the line as needed and hit (ENTER).

##9 Have you ever pressed ERASE by mistake and lost the whole line? Don't panic and DON'T hit (enter). Instead press FTNC ? and (enter). Your line will still be intact.

##10 In Extended Basic type in RUN CSI. Follow the instructions on the screen. It will load the program and then run it automatically.

##11 In Extended Basic you can use Rem or I to put documentation in a program that the program will ignore.

##12 When you want to stop a listing on the screen in Extended Basic, just hit any key. To start the list again, strike any key.

##13 You can add comments after a GOSUB or GOTO. They won't interfere with the program and you don't need REM or I.

##14 With Extended basic and a disk system, save a program under the name LOAD. When you start with this disk in the drive #1, it will load and run that program.

##15 If you have the TEII cartridge and the Speech Synthesizer type in the program on page 37 of the TEII manual. Try entering strings of K's, Q's, U's, W's, J's, jor x's for different sound effects. Try mixing them for interesting sounds.

##16 If you have Extended Basic and 32K type this in as the last line of your program: CALL INIT || CALL PEEK(2,A,B)|| CALL LOADX-31804,A,B)
This will return you to the title screen when the program is ended.

##17 When hooked up to a black and white tv use CALL SCREEN(15). This will disable the color generator and remove the vertical lines you may have seen.

##18 To speed up loading Infocom games, don't use Extended Basic. Use Mini-memory or E/A instead. To use these, select the load and run option and type DSKI.BOOT. When this is finished loading, press (ENTER) until you get the program name, then type START. On the Mini-memory, you'll get an error after BOOT loads, but keep pressing (ENTER) and proceed as above.

##19 If you want to disable the keyboard for any reason, type in CALL LOADX-3257,2,128). You will have to turn off the console to regain control.

UNLIMITED BASIC

by Jim Peterson

Those who have learned something about programming in assembly, Forth, C, Pascal, Fortran, or what have you, like to put down Basic as being a primitive language fit only for beginners and children. The truth of it is, those languages are so hard to learn that few of their proponents become truly proficient in them, and their programmers have contributed relatively few programs to us. If Basic did not exist, the TI world would not have 5000 programs available - or even 500!

Basic is relatively easy to learn, easy to write, easy to modify, and has all the speed that is necessary for most purposes. After years of programming, I am still surprised that I can usually find some combination of Basic commands to accomplish almost anything I want to do.

TI Basic also has one invaluable feature which, I understand, is not available even in IBM Basic - it allows the use of subprograms with local variables which are distinct from variables of the same name in the main program. The great advantage of this is that libraries of subprograms can be assembled, and merged into programs as needed with no worry about conflicting values assigned to variable names. I took advantage of this feature to compile my three disks full of 348 Nuts & Bolts routines. These effectively add 348 more CALLs available to TI Basic - but, I must admit, some of them do execute much too slowly!

Assembly language is difficult to learn, and difficult to write, but its capabilities are almost unlimited, and it takes up little space in memory. And the wonderful thing is - assembly language routines can be called upon, from Extended Basic, to do whatever Basic cannot do or cannot do fast enough!

It is possible to create an entire programming environment in assembly, to be called on from XBasic as needed. SXB was the first of these, but I have had no experience with it. Riccio's STAR was nothing but a random collection of assembly routines which had already been published separately and were best kept separated. Curtis Alan Provance's EDP and Craig Sheehan's XDF are superbly written programming environments oriented toward graphics, and Norm Stillwell's Music Preprocessor is a similar tool for programming music. Unfortunately, no programmers - myself included, I'm sorry to say - seem to have taken advantage of them.

Triton had the opportunity to greatly increase the power of TI Extended Basic when they introduced their Super Extended Basic module. Unfortunately, most of their added CALLs are nothing that cannot be emulated in ordinary XBasic (as Art Byers has done) and some are worthless fluff. I asked Mike Dodd why they did not give us a 40-column screen and he replied, "We never thought of it - and there was room, too!"

But, if Triton had included something worthwhile, programs written using those commands could not be run by those using the original Extended Basic module - which is why I have never used any of them.

What we really need are small assembly routines which can be loaded into XBasic when needed and then LINKed to perform whatever needs to be done. These routines can be placed on the same disk as your XBasic program, and loaded into it by a CALL LOAD. However, far better, they can be merged invisibly into the XBasic program by using ALSAVE, for much faster loading, and can then be copied together with the main program.

SPIRIT OF 99

ALSAVE, by Tod Kaplan, ranks with FUNLWEB, DM1000, DSKU, BOOT and REDISKIT among the greatest tools ever given to the TI community - and from a programmer's viewpoint it ranks above them all. I should give equal credit to Barry Boone's SYSTEX, which does much the same thing.

Barry Traver has written, and collected, a diskfull of these routines which he has distributed under the name of XXB ((Extended Extended Basic). Karl Romstedt, in connection with his assembly classes, wrote a double diskfull of great routines which were also recently distributed with Barry's Genial Traveler. My 127 Screen Fonts offers 127 different screen character sets. In Tips #57 I published a neat routine by Gikow to detect the position of the Alpha key, and in Tips #59 I have a great boot tracking routine by Adrian Robinson. Bud Wright wrote a routine for Irwin Hott, to convert lower case to capitals so it could be accessed by speech. Someone released some code for quick flip-on "help" screens. I am sure there are others that I have not heard of - and I would like very much to hear of them!

When these assembly routines are merged in with ALSAVE, they effectively add new CALLs to the TI XBasic language - in fact, they can be accessed by a CALL to a subprogram which contains the CALL LINK. Even TI's built-in CALLs can be modified, as John Behnke did with his remarkably ingenious VDPUTILII (which I scrunched into BXB and Karl Romstedt speeded up into his assembly version BXBAL).

We need lots more of these little specific assembly routines. I will never be able to learn assembly, but I seem to be pretty good at putting ideas into the heads of those who can, so -

I wish there was a CALL LINK("COUNTN",N()) to sort numbers and a CALL LINK("COUNTS",M\$(),FIELD) to sort strings on a specified field. I know that John Clulow's assembly sort, Peter Hoddie's Sort Experiment, and TI-Sort do the job, but they are rather large programs. A simple XBasic sort can be written in half-a-dozen lines, surely a simple assembly sort is possible? Come to think of it, I like to cram my records together separated by ASCII 0 to 31 rather than on fixed fields, so I would also like a CALL LINK("SORTA",M\$(),A) to sort on the first occurrence of ASCII A!

I wish there was a CALL LINK("COLOR",SET,FORE,BACK) that was faster than the XBasic CALL COLOR, so I could speed up my music that is accompanied by changing kaleidoscopic colors. Maybe that's not possible?

I wish there was a CALL LINK("SOUND",ATTACK,DECAY,DURATION,VOLUME,NOTE1,NOTE2,NOTE3,NOISE) so that I could program attack and decay in music faster than I can through a loop in the volume control.

POS in Extended Basic is very useful to find the first occurrence of a specified character or string, but they failed to give us a CALL LINK("LASTPOS",M\$,P\$) to find the LAST position.

ACCEPT AT with a negative SIZE to accept a default of whatever is on the screen is very useful, but if you elect to key in something which is shorter than the default, you must erase the extra characters. This results in a lot of burps and honks out of the computer, especially when the previous input becomes the default. How about a CALL LINK("ACCEPT....?" with SIZE and VALIDATION if possible, which would accept the default if the first keypress was ASCII 13 but would otherwise ignore the default? I have written such a routine in XBasic but it depends on CALL KEY and therefore results in errors if you type too fast.

Well, those are just a few ideas. If anyone responds to those, I am sure I can come up with more!

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MUNCH.
MEMBERS AS OF
9-1-90

NEXT MEETING TUESDAY SEPTEMBER 11, 1990 HAPPY BIRTHDAY MUNCH, we're @!!

MUNCH OFFICERS AND NUMBERS (all in 508 area unless noted)

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Vice President	Bruce Willard	852/3250	MUNCH DUES	
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Library	Al/Lisa Cecchini		SUBSCRIPTION	\$12.00
Disk Librarian	Lou Holmes	617 965/3584		
Tape Librarian	Walter Nowak	413 436/7675		
+++++++	Jack Sughrue	476/7630		

AUGUST MEETING. As usual, the August meeting had only nine members attending. Bruce did a demo on TI Base and Corson demoed the Asgard program Spell-It, which everyone felt had a lot of problems in it. We welcome back former member Don Mason, it was good to see him. Ben Parda won the raffle.

SEPTEMBER MEETING. This looks to be a good meeting. Historically we have good attendance at this meeting and this month we have Jack Sughrue doing a presentatin on using your cassette recorders. Jack has some very good ideas on how to expand the use of your systems.

NEW TI PUBLICATION. Vulcan's Computer Buyer's Guide is a new Computer Shopper like magazine with one BIG difference. It will have a monthly T.I. column. The cost of a subscription is \$12 for 12 issues or \$19 for 24 issues. To order call 1-800-824-0676; MC, VISA & AMEX are accepted. This looks like a good magazine, let's get behind it.

RAFFLE. Every month we have a raffle to help defer the cost of the monthly hal rental. The number of prizes awarded depends on the number of tickets sold. This month we have some TI T-Shirts, disk holders and some games for prizes. If you have some old things you no longer use how about some donations for the raffle.

LIBRARY NOTICE. Please return any items borrowed from our library. If you can not come to a meeting or give these items to someone who will be at the meeting.

REPRINTS. Reprints are permitted as long as credit is given to M.U.N.C.H.

ARTICLES. I am always looking for articles for this newsletter, anything which interests you will probably interest other members of the TI community, so please share your ideas and opinions with all of us.

DISK LIBRARY. The disk library will be at the meetings from now on. We have copies of all disks in the library and they are available to members for just \$1.50 each.

DISK OF THE MONTH. We have a special offering this month. Mickey Schmidt's manual "Getting the Most from Your Cassette Recorder" and a disk of all its programs done by Jack Sughrue. The charge for both will be \$5.00.

WANTED. Ben Parda is looking for Yahtzee cartridges, if you have one to sell see Ben.

