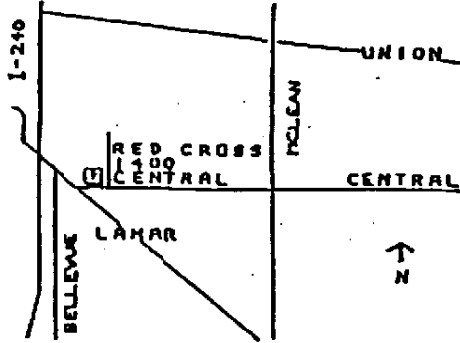


NOTICES

MEETING WORKSHOP
 7:00 P.M.
 Thursday, October 15th
 Red Cross Building
 1400 Central Av.

9 A.M. till noon
 Saturday October 29th
 IBA IBA IBA IBA IBA



MEMBERSHIP APPLICATION

NAME _____ \$15.00 FAMILY
 ADDRESS _____ \$10.00 JUNIOR (under 15)
 CITY _____ ST ZIP _____ \$10.00 ASSOCIATE (N/L only)
 PHONE() - _____ INTERESTS _____

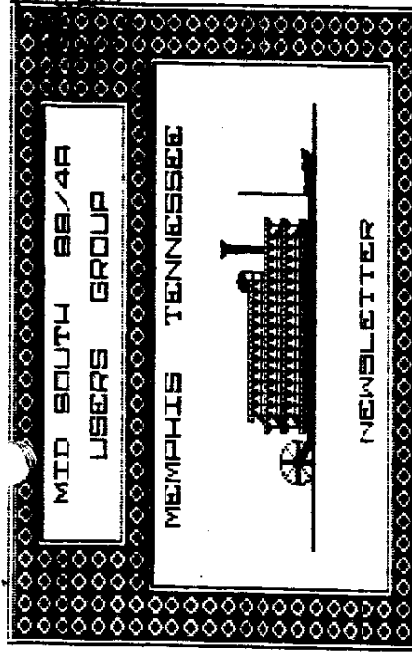
EQUIPMENT, ETC. _____

Detach and mail with check payable to: Mid-South 99 Users Group,
 P.O. Box 38522, Germantown, In, 38183-0522.



STRIKE BACK AT CANCER
 GIVE
 AMERICAN CANCER SOCIETY

GERMANTOWN, TN 38103
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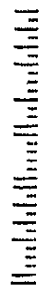
P.O. BOX 38522 GERMANTOWN, TN 38103-0522

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Y 5/67
 FLOYD J. FEMBERTON, JR.
 481 SPRUCE
 LEWISVILLE, TX 75067



COMMENTARY

Is the TI99/4A still alive? The answer to that question is up to you. In reading newsletters from other user groups, some are having trouble. One of the main problems is lack of interest and lack of help. However, what many people do not realize is that if they do not support the TI user groups and then that group goes under major support for the TI99/4A will be gone. Without a users group a major link of information, assistance, programs, etc.. will be lost! In order to gain support one group printed a cartoon in their newsletter showing a poor helpless dog with a gun to his head. The caption read "support your users group or we will kill this dog". I wonder if he is still alive?

It is true the TI99/4A will not do everything that it used to, it will do more! In fact, Texas Instruments told Ralph Fowler (author of TI-BBS) that a BBS could not be operated on the TI99/4A. Since then many things that TI said was not possible has come about. The problem we face is that it is up to us to obtain continued support for the TI99/4A. This support involves money. We MUST support those vendors who continue to support the TI99/4A. While a few companies supporting the TI are doing very well, many are not. If in the months to come if each and every one of us would at least buy one item from any company that supports the TI we could show that we are still here. Prices for software on TI99/4A are VERY low as compared to other machines. Just go out and try pricing software for an IBM compatible machine! Those companies that support the TI are not going to stay in the TI market for long if no one buys their software and hardware! About FREEWARE authors, send in money to them! They will not continue to write anything for the TI unless we support them.

How can you support your users group? If you can't write articles, demonstrate a program, make a suggestion, write a program, write an article, help produce the newsletter, write messages on our BBS or do anything else, you can attend a meeting. If not many people show up at a meeting we can just assume that they are not interested as meeting attendance is the only way that we can determine how many people are really interested. The officers work very hard to keep the group running and when a good crowd shows up at a meeting it makes us feel like all the work was worth it. Speaking of other groups, did you know that dues for our group has not been raised since the beginning of the group? Did you also know dues for our group are one of the lowest for any group of any brand in the country? For example, one group in town charges \$25 membership and does not even have a newsletter. Our group is one of the most active around. Not only do we have meetings but we have C99 classes, we are active in the community participating in fairs and shows in malls, we take trips and after our meetings we have started going to Shoney's to talk. Everyone is welcome to come along after a meeting to Shoney's with us... Our temporary treasurer Al Doss reports that we have about \$900 in

the bank. We continue to operate our 24 hour a day BBS. By the way, you should find that you will be able to access the TI-NET BBS a little easier as we have limited access to non-members. The paying members of the group have more capabilities when they get on the system not to mention able to get through more easily without a busy signal. Our club recently purchased a second system which we are now using to carry to fairs and to each meeting as it has become increasingly difficult for the officers to bring their own personal systems to every meeting. The club's first system is the one that we have running our BBS. That system contains 4 DS/DD drives, Corcomp controller, Corcomp 512K memory/ramdisk, Corcomp Tripple Tech Clock Card with 64K printer buffer, a 300/1200bd modem, and a printer.

However, not only do we have a users group here but we have a group of people who have developed good friendships. Maybe we should diversify and incorporate other activities such as trips, dinners etc... Many of us have been in the group a long time and I would like for us to all stick together for a long time to come...

Don't make us have to shoot a dog to gain your support, support the users groups and vendors!

TO OTHER GROUPS: One answer that we have found in response to losing members is to gain new ones. By ads we have had in the local newspaper and computer shopper as well as flyers we have handed out at local fairs etc., we have attracted new members in place of the others who have left. Maybe you should also try regular steps?...Gary Cox

DEATH OF A COMPUTER

Taken from the April 1984 Texas Monthly

Amid great fanfare, the 99/4A home computer was born into the aristocratic Texas Instruments family. The year was 1981. The precocious infant grew quickly. But in 1983 it met an untimely end, largely because of the unreasonable demands of its pushy parent. This is the first in the series of articles on the creation and demise of the TI99/4A.

Almost immediately, people at Texas Instruments were calling it Black Friday. Early in the afternoon of October 28, 1983, the rumors began to fly, and at the company's Lubbock-based consumer products group, the rest of the day was chaotic. Middle managers called employees in, a few at a time, to tell them that yes, it was true and there was nothing that could be done, and then everyone in Lubbock was on the phone to friends at all the other TI facilities, and by four o'clock, when the official corporate announcement was released to the press, there wasn't a soul at the company who hadn't heard the bad news. Texas Instruments, the company that had put more computers into American homes than anyone else, was pulling out of the home computer business.

Who could have imagined that it would end this way? Only a year

earlier the consumer products group had been the toast of Texas Instruments, and the TI home computer, the 99/4A, its biggest success. Back then, TI people talked about the 99/4A with awe. It was destined to dominate the home computer business, they said. It was going to reach \$1 billion in sales. It was going to be the biggest winner in the history of the company. Back then, TI assembly lines in Lubbock were cranking out five thousand computers a day, and that still didn't keep up with the demand.

Just before Christmas in 1982, one of the men in charge of producing the TI home computer had to have emergency surgery, and as he was being wheeled into the operating room, the doctor walking beside him found out where he worked. "Do you have anything to do with the ninety-nine four A?" asked the doctor. Yes, the man replied. "I've been looking for that computer everywhere," said the doctor. "Do you think you could get me one?" When they got into the operating room, the doctor told the anesthesiologist that the patient worked for TI and could get a 99/4A - and the anesthesiologist asked for one too. Right there in the operating room! That's what it was like, back then, to be a part of the team that produced the 99/4A.

It wasn't suddenness alone that made the 99/4A's fall from grace so stunning. Texas Instruments was a proud and stubborn company that, as much as any single corporation, had helped spark the electronics revolution. It was not accustomed to failure. In 1978 Business Week magazine had pointed to TI as the company that would "show U.S. business how to survive in the 1980's and most TI employees believed it. "The company", one former manager said at the time, "can do anything."

But not much went right for TI in the eighties. Texas Instruments had always been the world's largest maker of semiconductors, but in 1983, for the first time it was outproduced by Motorola. Texas Instruments had practically invented the digital watch, but several years ago it could only stand by as its watch business was swept away in a flood of foreign imports that were not only cheaper but better. The home computer fiasco made these other difficulties pale by comparison. In just two quarters of 1983 the 99/4A cost Texas Instruments an astonishing \$400 million in corporate losses. In July problems with the 99/4A forced TI to post the first quarterly loss in its fabled fifty year history. On Wall Street TI stock dropped 39 points because of the home computer. The dramatic and humiliating announcement of October 28 was just the exclamation point. Texas Instruments wasn't infallible anymore.

Nobody likes to dwell on failure, least of all Texas Instruments, so it is no surprise that the company officially "declined to cooperate" with this account of the rise and fall of the 99/4A. The two men most responsible for the decision to get out of the home computer business - chief executive officer Mark Shepherd and chief operating officer J. Fred Bucy - were unavailable for interviews. Although they used pending litigation as ostensible justification for their silence, it was also made clear to me that there were other reasons. Now that the home computer was part of the past, I was told, Bucy and Shepherd and everyone else at TI would just as soon forget it had ever happened.

Yet the anatomy of this failure, as pieced together from current and former TI employees, is worth examining, for there is in it a message for Texas. In part because of the decline of the oil industry, the state had been in a frenzy to get a piece of the hot new high-tech industries. In San Antonio, Mayer Menery Cisneros has made recruiting high-tech business a personal crusade. In Austin, the city and University of Texas made extravagant promises to Bobby Ray Inman, the head of the new Microelectronics and Computer Technology, in order to get MCC to locate there. When Austin landed MCC, it was one of the most heralded events in years. Cisneros, among others, suggested that the eighty-mile stretch of I-35 between Austin and San Antonio could turn into another Silicon Valley.

Underlying the talk was a seductive idea. High tech was going to be the new salvation for Texas, the new economic base, the new oil. It was going to galvanize Texas the way Silicon Valley had galvanized Northern California. High tech was clean, it was sexy and exciting, its potential seemed limitless and best of all, it wasn't dependent on the machinations of a handful of oil ministers halfway across the globe.

The disaster of the Texas Instruments home computer could make us think twice about a high-tech panacea. Whatever its problems, Texas Instruments is still a good, strong, innovative company that ought to have been able to succeed in the home computer business. With hindsight it is easy to see the mistakes that company made, but it is also important to realize that those mistakes suggest something about the nature of the computer business. Maybe it isn't as limitless as we like to think it is. Maybe a new company or a new product is as likely to fail as to succeed. Maybe the whole business of high tech and computers is a good deal more dicey than its proselytizers in Texas like to admit - as dicey, in fact, as oil. TI isn't the only company that has had problems: so have Apple and Atari and Timex and dozens of smaller companies. Many of them have made the same kinds of mistakes TI made. Thus the story of the 99/4A is more than a chronicle of one company's troubles. It is a cautionary tale of the computer age.

Next month detailed steps in the creation of the TI99/4a and the mistakes that TI made along the way...

DIPS AND CABLES

As an added note to last month's article on the Avatex 1200hc if you are unsure how to set the DIP switches on the back of the modem the following settings have been found to work quite well. Switch 1 down, 2 up, 3 down, 4 up, 5 up, 6 down, 7 down and 8 down. For the Avatex 1200 switch number 6 should be down and the 7 up. Make sure the modem is turned off when changing the DIP switches! It is not necessary to set the DIP switches in this manner but I have found these settings produce the best results.

If you are making your own cable for your modem all you have to do is make pins 2 and 3 cross over (switch them) all other

connections may go straight over unless you have some other ideas in mind. My cable just has 2 and 3 switched.

For those of you needing the pin outs for wiring a cable (parallel cable) for your printer the following wires should be connected:

PIC	PRINTER
1	-- 1
2	-- 2
3	-- 3
4	-- 4
5	-- 5
6	-- 6
7	-- 7
8	-- 8
9	-- 9
10	-- 11
16	-- 16

All other pins should not be connected. The only cross over is pin 10 on the PIC port going to pin 11 on the printer. This pin configuration should be valid for most Epson compatible printers but I have tested it out only on the Gemini 10X and NX-10 and found it to work fine. Note that the pins on the small PIC connector are numbered differently from centronics connectors such as the one connected to the printer end. The pins on the TI PIC connector are numbered as follows:

2	1 < Top of connector
4	3 < Keyway or cut edge on this side
6	5
8	7
10	9
12	11
14	13
16	15

The major problem that I have found in wiring your own cables is the problem of getting all the wires to make contact. If you are using a solderless snap on connector make sure the top is snapped on tight and use pliers to press the top onto the wires to make sure they make contact. Use an OHM meter to check to see if all the connections are made properly with the correct pins going to the correct places and that all pins are making contact...Gary Cox

THE TI 994A

This is my first attempt to write an article for the newsletter or anything for that matter, so bear with me. In 1983 or so I started noticing the prices for the TI99/4A was getting into my price range. Not knowing that TI had pulled the plug on little darling I went to Sears and bought mine. The price was \$49.00. WOW what a deal! \$49.00 for a computer that cost \$500 or more when they first came out. I rushed home and plugged it in to try my hand in programming. I must have did something right cause the master title screen came on. O K now what? After untold

number of incorrect statements I decided to get out the book and do a little reading, giving some credit to the old saying "WHEN ALL ELSE FAILS READ THE INSTRUCTIONS". I read the instructions over and over sitting up till all hours trying to get something to happen. All I was able to do was get a little worm to crawl back and forth across the screen. WOW! Look what I did honey! I wont wake my wife up again to see what I did. She loses her sense of humor that early in the morning. Wanting to keep the programs I had in from a book I got a cassette recorder. After typing in a short program I hit save CS1. WOW! Look at this. It tells me exactly what to do. I hit record and then heard the wierdest noise. Wonder what that means? Hey honey, come here! Well excuse me! How was I to know you were in the bed again. It's just 2:00 am. I don't know where the time goes when I set down at the key board, it just flies by. I thought I was really doing something all alone with my books and computer. I wanted more. So I subscribed to COMPUTE Magazine. It had a few programs for the 99/A at first but they keep getting fewer and fewer. After about 3 or 4 months I called and cancelled the subscription. All alone again. Then I heard that MCM was still being published so here I went again subscribing for 2 years. The programs on tape and the magazine was fine while I got them. Little did I know that I was about to be left in the dark again. The magazine just quit coming one month after only 5 or 6 editions. A call to the hot line assured me that it would continue next month, that they were changing the name of the magazine and it would be bigger and better. What they didn't say was that it wasn't going to have anything in it about the 99/4A. That has been 2 or 3 years now without even a note saying anything or a refund for the unused portion of the subscription. After a few months I got a sample magazine from MICROpendium. I thought this looks good, so I gave them a try. So far it has been great reading articles from others that have gone thru the same things I have. Still using the cassette I wanted to upgrade somehow, but how? I started checking the want ads in the local paper for a few weeks. Finally BINGO there it was. A complete system with monitor and PE box and everything. Hands shaking I could hardly dial the phone. I kept saying "please have it". When the fellow answered I could hardly speak, just stuttered, "Do you still have the TI computer?" I asked. "Sure do," was the response. "I want it! Dont let anyone else have it." I was like a little boy on Christmas morning. I didn't even ask him what he wanted for it. It was from this conversation I found out about the Mid South 99/4A Users Group. I called the number this fellow in the paper gave me for a person in the Group. That was my first meeting of Al Doss the editor of the Newsletter. The next morning Al and I went to pick up my "new computer". Ever since that day I called Al, I havent felt all alone anymore. There were other 99'ers in Memphis! I went to the next monthly meeting. That is where belonging to a users group really means a lot. I shook more hands that night than I can remember. I met Gerald Smith, Gary Cox and others. I want to take this time to thank each and everyone in the group that has helped what they were doing, when I called, to answer my questions. Never has any of them said I dont have time now, call back later. Everyones has gone out of their way to help me. Due to my work schedule being a Firefighter for Memphis and a Sears service tech, I don't have much time to help, but I do have a little spare time. That is why I'm writing this article. I'm off

From both jobs today. Sears messed up or I would be working there. What I'm trying to say, if everyone takes just a few minutes a month to help with something then no one or two people will be swamped. Do like I did, call someone and ask, what can I do to help? The numbers are on the back page of the newsletter. They are there for two reasons, one being when you need help and the other is when you can help...Henry Badon

EXPANDING YOUR TI

Whether you have just a console or a full blown system there is always room to expand your system to make it better, faster and easier to operate... This article will give you some ideas on how to expand your TI99/4A to it's fullest potential.

To begin with I will assume you have just the console and nothing else. The first step is to get a cassette recorder as some storage and retrieval device is needed. Almost any cassette recorder will work. A cassette cable is needed to connect the computer to your cassette recorder. A cable can be obtained at Games N Gadgets in the Mall of Memphis or at one of the mail order places who support the TI99/4A. However, if you plan on jumping right into an expansion box with 32K and disk drive then skip getting the cassette recorder as you will probably never use it once you get a disk drive.

Definitely the next step is to purchase Extended BASIC. The BASIC built into the console is very primitive and extremely limited. Extended BASIC (referred to as XB) can be purchased at any mail order place supporting the TI. Be sure to get TI Extended BASIC, Micropal XB or a compatible. The Myarc XB will not work unless you have a Myarc memory card and other equipment...

Now that you have a cassette recorder and XB you can do some pretty good programming and run some good programs. However, the next step will really boost your computing power. That next step is going with a full blown expansion system which is needed for most of the programs written today for the TI99/4A. A full blown system includes an Expansion Box, 32K, disk controller card and at least one disk drive. The best way to go is to find someone selling their TI system as the TI Expansion Box and equipment is the best to go with not to mention the cheapest. Sometimes people will sell the above equipment for as little as \$200! No matter which way you go with, you need the disk drive and 32K memory! Another way would be to buy the Myarc expansion system. This is a miniature expansion system which has the 32K and disk controller built in as well as sometimes the RS232 (will mention it next). The only problem with this is it is a little expensive and does not allow for expansion later such as if you wish to add a card to do something else such as adding a RAMDISK whereas the expansion box has 8 slots to expand with. However, there is another alternative. Ryte Data markets their own nice little neat Expansion Box similar to TI's but it looks like an IBM expansion box. After purchasing it you can then proceed to purchase the 32K, disk controller and a disk drive to place in it. From what I

know the Ryte Data expansion box will do everything that the TI expansion box will. This way is not quite as expensive as the Myarc system but more than the TI system. However, if you go with the Ryte Data Expansion Box you can in turn get a better disk controller card while you are at it such as the Myarc or Corcomp which gives you more capabilities than the TI disk controller such as double density capability. See the April issue of our newsletter for more details on disk controllers and disk drives. So I would recommend at this point, if not sooner, to get a copy of Funwriter in our library. It is a utilities package full of items such as a word processor and disk manager.... Now that you have an Expansion Box, 32K and a disk drive you can run many fantastic programs written in assembly language, program in different languages and do all kinds of neat stuff. Also you now need the Extended BASIC to do all of that of which you already have from your purchase earlier. So now what? Well you can never have enough equipment. The next purchase I would recommend is the RS232 card. This will allow you to connect a modem and printer to your TI. By the way the RS232 card for the TI has two ports, one serial and one parallel which in turn can be split again with a Y cable. Many other computers do not have both a serial and parallel connection on their computer, some do not even have an RS232 but something simulating one. This RS232 allows us to connect to any standard RS232 device! That's why we can use practically any kind of modem. On the serial port we can place a modem and on the parallel port we can place a printer. A modem and/or printer is the next step after buying an RS232, an RS232 by itself can not do anything as it is just for interfacing the computer with an external device. With a modem you can send programs to friends and communicate with other computer users through electronic bulletin boards or even call up services such as Comuserve and get business reports... With a printer you can print documents, letters, pictures or whatever you would like to print. A Star NX-10 or SG-10 is a good printer to go with (see article on printers in a previous newsletter). A good modem to go with is an Avatex 1200hc (see September newsletter).

After you get a modem and printer what next? How about speeding up your system by getting a 64K printer buffer like the one Tenex sells for \$59. This buffer allows the computer to send all the data into the buffer which in turn feeds it to the printer as soon as the printer can print it as the computer sends the data to the printer much faster than the printer can print it. If the buffer was not present you would have to wait until the printer was finished before you could use the computer. This way the computer is free when the printer is printing. I have found this especially helpful when printing a lot of documents!

So now what? Well maybe before even getting a buffer, RS232, modem and printer you may want to add another drive to make copying programs much easier not to mention other operations easier. I would highly recommend going with double sided drives which will double your storage capability on a disk. A good way to go is to buy two Teac 1/2 high drives low power drives for the Expansion Box or replace your TI 55/50 drive with a double sided drive and then maybe add an external drive. See the April issue of our newsletter for more details on doing this. However, Texcomp advertises a nice easy way to add internal or external drives to

your PEB. See Micropendium for details.

Now after all of that I think your best bet would be to go with a RAM Disk. A "RAM DISK" operates just like a disk drive except it is a card which is placed into the Expansion Box. This card contains memory chips which in turn retain the programs that you save to them the same as a disk would. Most Ram Disks are battery or power backed so that they maintain the memory when the system is turned off. The advantages of a Ram Disk is the very fast access time. For example, instead of several seconds to load a program less than one second may be needed. With John Johnson's operating system for the Horizon Ram Disk (in our library) the user can easily create a menu which is immediately displayed as soon as your system is powered up. From this menu you can select any of the programs and that program is immediately loaded at amazing speed. On my Ram Disk I have many of the programs that I use frequently such as II-Writer, Mass-Transfer, Max/Rle and others. All I have to do is turn on my system press a button and WHAM whatever I want is now ready! The best Ram Disk that I have seen so far is the Horizon Ram Disk which I own. I would recommend the 180K version which is the equivalent to a double sided single density disk. The Ram Disk can be configured to be any drive number that you wish no matter what controller card that you own. A Ram Disk is truly an outstanding device and the next best thing to a Hard Drive. The advantage of a Hard Drive is massive storage capabilities. However, the Ram Disk is faster than a Hard Drive as the Ram Disk is transferring memory to memory which is much faster than going through the controller card.

Now that you have all of that what now? Maybe a double density disk controller card. With a double density controller card as Myarc or Corcomp you can double your current disk storage capabilities as well as speed up drive access time. The Myarc and Corcomp disk controllers also give a few other capabilities as well.

How what? The list can go one and own. You can go to more advanced and faster Extended Basics such as the Myarc X8 or purchase a Digit Systems graphics card. If you wish a clearer display and have an RGB monitor the Digit Systems RGB conversion kit will do that... If you want your computer to keep up with the time how about a clock card? Want stereo sound from your TI then you can get the stereo music card which not only gives your stereo sound but more advanced sound capabilities. How about a Gram Karte, (like a Gram Kracker) or Speech Synthesizer? The list seems endless.

Hopfully this article has given you some insight into what direction you can take your system...Gary Cox

MORSE CODE

The International Morse Radiotelegraph Code is a language of sound used for radio communication. It requires the simplest of radio equipment, and as demonstrated can be generated by a microcomputer, which could be part of the ham's equipment.

After entering the message into the message buffer, which will only hold 255 characters at a time, the SEGS function takes over and will display the characters in the message one at a time, the position of the character, and the ASCII code of the character being sent. It will also send the sound pattern of the character as Morse code. This program is written in TI Extended BASIC and is available in the club's library. It generates the Morse code at speeds ranging from 5 to 45 wpm. The dash is three times the length of a dot. All elements of the code are keyed to the dot, both element spaces equal in length to the dot, character spaces equal in length to dashes and word spaces equal to seven dots in length.

This program also uses a memory buffer to hold the message that has been entered from the keyboard. The buffer will hold up to 255 bytes. After the buffer is full the program will, using SEGS to loop through the buffer and send each character in morse code. When the buffer is empty the program will branch to the buffer entry portion for another message, and wait until it is filled again.

This program will generate the Morse code for each letter in the English alphabet, each number, all punctuation symbols, special signals, such as SOS, XXX, and TIT (for distress, urgency and safety, respectively), the Q signals (a form of shorthand for Ham radio operators), operating signals and some foreign alphabetic characters that are different from our own.

The CALL SOUND(D,F,V) statement is used for generating the sound of the coded character. D, F, and V stand for duration of element, tone frequency, and volume level respectively in the CALL SOUND.

A FOR-NEXT loop is used for the delay between elements, characters, and words, with modifications for characters that end with a delay inside a loop.

CALL KEY is used to select the code speed (5-45 wpm)

INSTRUCTIONS FOR USE:

Once up and running this program will let you do the following. set speed, set volume level, and hold a message (up to 255 bytes) in the buffer

You may obtain the program from the library, it uses multiple statement lines. The next time it is demonstrated, I hope to have it up and running in c99...Lynn Crow

IN THE NEWS

PLEASE READ!

CHICAGO TI FAIRE

The November 7th Chicago TI Faire in Chicago Illinois is coming up

quick! When I spoke with someone in the Chicago users group about a month ago 36 of the 40 available tables were sold and the remaining 4 tables were expected to be sold during October. Some of the vendors who will be there are Asgard Software, Boston Computer Society, Bud Mills Services, Bystemaster Computer, Chicago C128 Users Group, B and D Computer Supplies, C and G Drives, Channel 99 Users Group, Competition Computer Products, Compuserve/II Forum, Corporate Disk Company, Data System and Disk Movers, Great Lakes Software, Horizon Computer Limited, MUI Electronics, L.L. Conner Enterprise, Myarc Inc., Rave 99 Ltd., Rye Data, T.A.P.E. (Mechatronics), Tomputer Software, Service Solutions Inc., Will County Users Group and Corporate Disk Company. Lou Phillips of Myarc Inc. is scheduled to demonstrate the Geneve 9640, Dave Wakley of the Chicago UG will be holding a seminar and a demo of Triton's Turbo-XT... In order to get the special fair discounts at the Hotel where all the fair goers will be staying we must have our reservations in by October 22nd. So far those who have signed up as being interested are, Bob Jones, Lynn Crow, Richard Miller, Mac Swope, Gary Sparks, Gary Cox, Rob Neill, Michael Dorman and Rick Glisson.

MEMPHIS MACC USER GROUP FAIR

Don't forget about the Memphis Area Computer Council (MACC for short) "User Group" fair to be held October 31st from 10am to 5pm at State Tech located at 5983 Macon Cove in Northeast Memphis off Exit 13 on I-40. The fair is an opportunity to compare notes and get information about computers and software. Ten computer families may be represented at the fair: Adam, Apple (including Macintosh), Atari, Commodore (including Amiga), IBM compatible, Kaypro, Osborne, Tandy, Texas Instruments and Tirez/Sinclair. Software and hardware demonstrations will show off programs and peripherals available for the different machines. Knowledgeable users will answer questions concerning computer systems in general and the machine of their choice in particular. There is no admission fee for the fair. State Tech will also be giving guided tours of their Microcomputer Resource center during this fair. Make plans today to attend! For more information contact Ken Akins at (901) 368-1112 or call the Flagship America BES at (901) 382-1864 300/1200/2400bd 24hr. You may also write:

Memphis Area Computer Council
P.O. Box 31864
Memphis, TN 38184-1864

MACC is an organization of many different brand user groups in the Memphis area whose purpose is to support and assist owners of the various type computers. Through our user group fairs we hope to show what each group has to offer. Plans are underway for the future to have a vendor fair.

Volunteers from our group are needed to help out at the fair in the way of helping out at our table and bringing equipment. Please speak up if you can help or at least stop by and be sure to tell your friends about the fair as the fair is for every brand computer owner. While I am thinking about help I would like to give a very special thanks to Lynn Crow, Andrew Freeman and Mac Swope who were the only ones who helped Al and I out at the Kirby

Woods Mall Information Fair. THANKS!!!

At this month's meeting we will be giving away a Navarone Disk Fixer cartridge as well as possibly a few magazines and books. You must be present to sign up and win. It pays to be a member of the Mid-South 99 User Group!

Texaments of 53 Center Street, Patchogue, NY 11772 or (516) 434-3480 has introduced three new Character Sets and Graphics Design support software packages. They are CSGD User Disk #5, CSGD User Disk #6 and CSGD Cataloger. According to the manufacturer CSGD User Disk #5, a two-disk set, contains 16 new and two revised fonts for use with CSGD Messages, Letterheads, Labels and Banners. There are also eight Documprint fonts for use with the CSGD III Docuprint program. Also included in User Disk #5 are 26 monogram graphics, 24 assorted small graphics and 15 large pictures (used exclusively for CSGD I) Price is \$10.95 plus \$2 shipping and handling.

CSGD User Disk #6, another two-disk set, contains 16 new fonts and one revised font, 26 monogram graphics, 18 different small graphics and 13 large pictures. Price is \$10.95 plus \$2 shipping and handling.

The CSGD Cataloger allow the user to print out CSGD small graphics and fonts to paper for easy reference, according to Steve Lanberti of Texaments. CSGD Cataloger is designed to allow all CSGD graphic files and II Artist graphic files to be cross-referenced on data sheets. Price is \$6.95 plus \$2 shipping and handling.

CSGD fonts and graphics, including the new User Disks, may be used by programs which are CSGD graphics compatible, the manufacturer says.

Asgard Software has released Recipe Writer 2.0. The upgraded program has been rewritten in c99 and "completely changed" according to Chris Bobbit of Asgard. He says the new version features space for a fill title, the oven temperature, 23 lines of ingredients and 23 lines of preparation instructions; a line for multiple keywords to describe the recipe; wildcard keywords search routine to allow the user to find all recipes with any given keyword even if it was misspelled; complete recipe editing utilities; complete print utilities; a conversion utility to convert the ingredient list by any factor to like make a recipe for one into two... Minimum requirements for the program are a T199/4A, 32K, XB or E/A and one disk drive. Price is \$19.95 including shipping and handling. Also available is the Electronic Chef series of companion disks for Recipe Writer 2.0. Titles currently available are Southwestern Foods, Appetizers and Soups. Scheduled volumes are Meat Dishes, Chicken Dishes, Side Dishes and Desserts. All volumes, which require Recipe Writer 2.0 are \$6.95 each including shipping and handling. For further information contact Asgard Software, P.O. Box 10306, Rockville, MD 20850 or (301) 559-2429.

Did you know Family Computing still supports the T199/4A? While recently in a book store I noticed on the cover that they list the T199/4A. Although they do not have much for the T199/4A they at

least support us which I was surprised to find out!

Tony McGovern of Kotara, Australia (author of Funlwriter) reports that a MS-DOS system for the TI is under development there. McGovern wrote in response to an inquiry from Micropendium. He says the program is entirely the work of his son, Will McGovern, who is in his last year of high school, and for that reason it may not be out until the end of the year.

"The actual file transfer code is not quite finished yet - mainly the final details of sector blocking for the TI to MS-DOS direction," the elder McGovern writes. "The MS-DOS disk handling code itself is pretty polished now. The program automatically senses whether it has a TI or MS-DOS disk and catalogs appropriately. It handles MS-DOS 3.2 subdirectories with ease, and can format MS-DOS disks. "the program presently runs on a hard disk controller (and DSDD drives, naturally). The disk access code itself has been kept completely modular, and porting to other controllers will be no more difficult than absolutely necessary. "Yes - the TI99/4A is a very tolerant machine, and doesn't object to having MS-DOS 3.2 directories on its screen at all." McGovern says that the next edition of Funnelweb (formerly Funluriter), v 4.0 will be fully compatible with Myarc XBII. He says all changes since Funnelweb v 3.4 will be incorporated in the new version, whose number has been updated because of the need for some changes to the externally defined reference block. He says he is working on the final item for it, a CONFIG program to eliminate any need for programming, even in XBASIC. Funnelweb is available through the KUS9ers, 6 Arcot Close, Terro, NSW, Australia 2322 as well as our group library.

Not-Polyoptics has announced an upgrade to Spad III, its machine language flight simulator for the TI99/4A, scheduled for release last month. According to Michael U. Capobianco of Not-Polyoptics, Spad XIII Mk. 2 is twice as fast as the previous version and more responsive. New features have also been added, he says. In addition to the six "out of the cockpit" views, a removed viewpoint, showing the plane from an observer's standpoint, has been included.

"Better algorithms produce improves graphics and a more realistic flight performance," Capobianco says. "Keyboard/joystick interface has been augmented to allow new functions and greater flexibility. Finally, an optional Red Baron Fokker tri-plane opponent provides even more exciting dogfights."

Spad XIII, Mk. 2 requires a TI99/4A with XB, 32k, and a disk drive. The program will retail for \$29.95, according to the manufacturer. Registered purchasers of Spad XIII can obtain the upgrade by sending \$6.95 plus \$1 shipping and handling to Not-Polyoptics, P.O. Box 4443, Woodbridge, VA 22194.

Some of the above information obtained from Micropendium....
Cox

SHOPPERS CORNER

Ed Johnson has the following equipment and software for sale.

PEB, 32K, TI disk controller, TI SS/SD drive, Black and Silver console, XB, cassette recorder, Cassette cables, joysticks, all original program books, Disk Manager cartridge, TI Invaders, Home Budget and a few others. He is accepting the best reasonable offer for everything ranging between \$200 and \$300 dollars. If interested call him at (901) 873-3648.

The best deal of the month comes from TexComp who advertises some great deals on easily adding disk drives to your system such as a second alone DS/DD drive with case and power supply for \$119.95 or two half height drives for the PEB for \$89.95. See the September Micropendium page 9 for details.

For Sale: Complete system includes modem, RS232, etc. by the piece or entire system. Nnaemeka Egwuokwe (Meka) Telephone 743-1694

The best deal on Writer EASI word processor comes from Innovative Programming with a price of \$39.95. Their number is 800-255-2985.

Mike McLoghlin has the following equipment for sale: PEB, 32K, RS232, 1 internal SS/SD drive, 1 external SS/SD drive with power supply, Speech Synthesizer, 300bd direct connect modem, P-Codes card with documentation and disks, Black and Silver console, Multiplan, Editor/Assembler, some AtariSoft games and a bunch of other software. Asking \$300 for everything. Mike can be reached after 5:30pm at (901) 382-2938...Gary Cox

LIBRARY BIT

At one of the officers meetings the possibility of providing a mailout service from the library was discussed. In other words, those of you who receive our newsletter who are out of town could receive a copy of the current library list and/or copies of the programs listed therein by mail. Of course the offer is not limited to out of town members, but will be available to all members. The only stipulation thus far is this, the service will not be provided for associate members (those whose membership is for the newsletter only). You must have full membership to take advantage of the benefits of the library. This is not a new policy as this has always been true for members who wanted library privileges.

Terms of this "PROGRAMS BY MAIL" service are as follows:

1. As previously stated you must have a full membership in the group which includes library privileges.
2. You may request up to 5 disks per order.
3. Disks must be ordered by disk number according to the current library list. No orders will be filled for single files or programs.

Program disks will be \$2 per disk. This price includes mailer and postage and I will included a current copy of the library listing on one of the disks or a printed copy may be obtained for \$1.

Now for the very latest in new programs which will be available at

the meeting.

DISK # 119 : BALLRANK - If you are really into sports and follow the different teams all season long. If you would like to be able to project the season winners or if you would just like to keep season records on your favorite team(s), then this is the program for you. I haven't found anything that has been overlooked in this program for sports fans. (XB)

DISK # 120 : 99-ANIMATOR - A very well written animator program that will help in the development of sprite motion for a program or create your own cartoons. (XB)

DISK # 121 : SPACESTATION PHETA - Work your way through the different levels of this program if you can. Once you get a handle on the basic moves the program changes the game. And it does get DIFFICULT! I've been to level 16 only after committing suicide about a hundred thousand times. Try it,....if you dare. (EA-5)

That's all for now. See you at the meeting!...db

PROGRAMING

THE POWER OF RELATIONAL EXPRESSIONS
by Jim Peterson

What the h... are those, you say? You may well ask. The "1 book" that came with your computer says nothing about them, and most of the programming tutorial books on the subject are equally silent. If you waded through the computerese and mathematase text of the User's Reference Guide, you found them discussed on page II-14 under Relational Expressions and on page II-51 under IF-THEN-ELSE, but you probably didn't realize their potential. Then, you graduated to Extended Basic and found those easy-to-use, in-the-clear logical expressions AND, OR, NOT and XOR, and you looked no farther.

So, what can a relational expression do? Nothing that can't be done without it. But it can often do the job so much more compactly, so much more efficiently, and therefore so much faster! So, let's learn to use them. And let's learn in plain English, not computerese. The following may not be technically correct, but it's the way it all works out.

First, every expression has a true/false value, which is entirely different and separate from the value of the variables or numbers or strings it contains. On the II-99/4A, a false statement has a value of 0, which is easy to remember - A FALSEHOOD IS WORTH NOTHING. Unfortunately, a true statement has a value of -1, which doesn't fit in too well! On some other computer you may have learned that a true expression has a value of +1, but on th

it's -1. So, in ...F=7 :: IF F=8 THEN...., F=7 has a value of -1 because obviously F does equal 7, and F=8 has a value of 0 because it is not true.

Second, when an If refers to a variable without an "=" sign, it

means "<>0". For instance, IF X THEN 1000 means "if X is more or less than 0, if it is not 0, if it is anything other than 0, then go to 1000".

Third, the computer will try to use the expression mathematically before it tries to interpret its true/false value. Remember that everything within parentheses is worked first. For instance...X-1 :: Y=2 :: IF (X-1)+(Y-2) THEN 1000...Since both are true, this works out to IF (-1)+(-1)<>0 THEN 1000, and since -1 plus -1 is r

0, we go to 1000. On the other hand, X-1 :: Y=2 :: IF X-1+Y=2 Th

1000 will first be calculated as X-1+Y, which comes out as X-3, and then as X-3=2, which has a true/false value of 0 (false) because X-3 has a true/false value of 0 (false), not 2! Finally, always remember that a variable keeps its previous value until the calculation of an entire equation is completed. X-3 :: X-X+(X+3)*X-X/X X+(X-0) is worked as X-3+(3+3)*3-3/3 3+(3-0). Now that you have assimilated this vast knowledge, how can it be used? The most common way is in the expression IF (X-1)+(Y=2) THEN 200. In this case, if it is true that X=1 but Y does not equal 2, then -1+0 is <>0 so you go to 200. If X is not 1 but Y=2, then 0+-1 is still <>0, and if X=1 and Y=2 then -1 plus -1 is still <>0, so you still go to 200, but if X is not 1 and Y is not 2 then 0+0 is not <>0 so you do not. Of course, in Extended Basic, you could simply write IF X-1 OR Y=2 THEN 200.

If you want to go to 200 only if X=1 or if Y=2 but not if both are true, then you can write IF (X-1)+(Y=2)=-1 because either -1 plus 0 or 0 plus -1 will equal -1. In Extended Basic, this is the "exclusive OR", IF X-1 XOR Y=2.

And if you want to go to 200 only if both are true, you can write IF (X-1)+(Y=2)=-2, or more commonly IF (X-1)*(Y=2) because if either or both are not true the multiplication by 0 will give 0. I

Extended Basic, this is IF X-1 AND Y=2. And you can write more complicated versions, carefully watching your parentheses, such as IF (X-1)+((Y=2)*(2=3)) which translates to IF X-1 OR Y=2 AND 2=3.

So, if you're programming in Extended Basic, why bother with all those parentheses? Why not just use OR and AND? In the above cases, that is true. But you have not yet begun to see the power of relational expressions!

Since the true/false value is a numeric value, it can be used in calculations, and it does not have to be used with an IF statement.

For instance, this is a statement that I have used within a loop to alternate control of the two joysticks between two players...X=X+1+(X=2)*2 :: CALL JOYSTICK(X,Y,2). In this, the first time around, X has not been given a value, so the equation is read X=0-1+(0=2)*2 and, since 0 does not equal 2, 0+1+(0*2)=1 and joystick #1 is activated. Next time around, X=1 and X-1+1+(1=2)*2 gives X a value of 2, since 1=2 has a true/false value of 0. The 3rd time around, X now has a value of 2, and X-2+1+(X=2)*2 which is worked as X-2+1+(-1)*2 and then X-2+1+(-2) which is X-2+-2 and X=1 again!

If you think that's neat, look at this one from the Airport Area U newsletter, credited to Robert Cooley - X=X=0 :: CALL JL(X+2,Y,2). Here, the first time around, X does equal 0 so the statement X=0 has a true/false value of -1 so X=-1 and X+2 activates joystick #1. Then X=-1 so X=0 has a true/false value of 0 so X=0 so X+2 activates joystick #2...and so on! Of course, you could also write IF X-1 THEN X=2 ELSE X=1 if you prefer.

Another example: A=INT(10*RND):: B=INT(10*RND):: FOR J=A TO B
 ...Now, if the random B happens to be smaller than the random A,
 the loop falls through with nothing happening. You could add a
 line IF A>B THEN T=1 ELSE T=-1 and FOR J=A TO B STEP T. But why
 not just FOR A TO B STEP (B<A)+ABS(A<B). If B<A then -1+ABS(O)
 gives a STEP -1 to count backwards, but if A<B then 0+ABS(-1)
 gives STEP 1, and if A=B then 0+ABS(O) equals STEP 0! Here's
 another example - 100 INPUT "SCREEN COLOR? ":S :: FOR SET=1 TO 14
 :: X=SET+1-(SET>S):: CALL COLOR(SET,X,X):: NEXT SET
 changes the character sets to colors 2 to 16 in sequence, skipping
 over whatever color has been selected for the screen.
 Strings can also be manipulated. 100 PS(1)="S" 110 INPUT "HOW
 MANY? ":N :: PRINT "THE PRICE IS "STR\$(N) DOLLAR"PS(CABS(N>1)):
 GOTO 110. Or, more efficiently 100 INPUT "HOW MANY? ":N :: PRINT
 "THE PRICE IS "STR\$(N)SEGS(" DOLLARS",1,7-(N>1)):: GOTO 100
 However, it is also possible to overdo it. The following routine
 will read key input to move the cursor around the screen in all 8
 directions, stopping at the borders or travelling along them if
 struck diagonally. However, it requires so many calculations for
 each key input that it is not the fastest method for accomplishing
 this.
 100 CALL CLEAR :: R=1 :: C=3
 110 CALL KEY(C,K,ST):: IF ST=O THEN 110
 120 C=C+((K=82)+(K=68)+(K=67))*((C<32)-((K=87)+(K=83)+(K=90))*(C>2)
 130 R=R+((K=90)+(K=88)+(K=67))*((R<24)-((K=87)+(K=69)+(K=82))*(R>1)
 140 CALL MCHAR(R,C,42):: GOTO 110

So - for compact, efficient programming, learn to use the
 relational expressions! But also learn when not to use them!

NEWSLETTER EXCHANGE

The MID - SOUTH 99/4A USERS GROUP offers a lot of assistance to
 its members. For just one example, take a close look at our
 newsletter library.

Our club's collection of newsletters offers a rich source of
 information. They are accumulated through exchange arrangements
 with other clubs across the country. Software reviews and
 evaluations can be found on most any type of program or package.
 Quite a few noticeable software authors are also newsletter
 contributors in their own club. They usually publish hints and
 techniques to help others learn. You will find that hardware
 product reviews and explanations are plentiful. Most hardware
 developers propose and present their ideas in their club's
 newsletter. This often leads to full construction articles. And,
 as would be expected, most of the articles include information
 about where one can find needed software and hardware at
 attractive prices.

Any club member may take advantage of the information resource.
 Drop by the newsletter table and browse a while. You are lib
 to find an article of interest. Take a newsletter home for
 further study, be sure to bring it back. Consider writing a short
 article for our newsletter about something you find... Marshal
 Ellis

PROTECTION

There are strong FEDERAL LAWS against duplicating copyrighted
 programs. Please do not break these laws!

DISCLAIMER

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 has any relationship with any company implied or otherwise. Any
 mention of a company or product is not an endorsement of either
 the company or the product.

NEWSLETTER INFO

Visitors and potential members may receive 3 free issues of
 TIDbits while they decide if they wish to join (no obligation).
 A Dollar sign (\$) indicate that your dues are due. Please pay
 your dues to be able to continue to receive the newsletter and
 other benefits of the group. You will note a letter and date on
 the top of your address label. The letter Y indicates if you are
 a member and the date indicates the last time you paid your dues.
 One year from the date your dues are due!

CALENDAR

MEETINGS: October 15th, November 19th, December 17th (3rd Thursday!)
 WORKSHOPS: October 24th, November 28th, December none (4th Saturday!)

OFFICERS

M Swope	President	901-363-3880
Michael Dorman	Vice-President	501-732-5125
Gary Cox	Secretary	901-358-0667
Gerald Smith	Treasurer	901-363-6273
Pierre LaMontagne	TI-NET Sysop	901-386-1513
David Ferguson	Co-Librarian	901-795-3287
Rick Elisson	Co-Librarian	901-386-1158
Al Doss	Editor - Newsletter	901-743-6781
Dick Landenberg	Chairman - Program	901-274-1892
Gary Cox	Information and Assistance	901-358-0667
Mac Swope	Chairman - Equipment	901-363-3880

24HR TI BULLETIN BOARD

TI-NET(Mid-South User Group)	300/1200 bd	901-386-1760
Risky Business (Beery Miller)	300/1200 bd	OFF-LINE! (moving)

GROUP MAILING ADDRESS

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 Germantown, In. 38183-0522