SouthWest Ninety-Niners

August 1993

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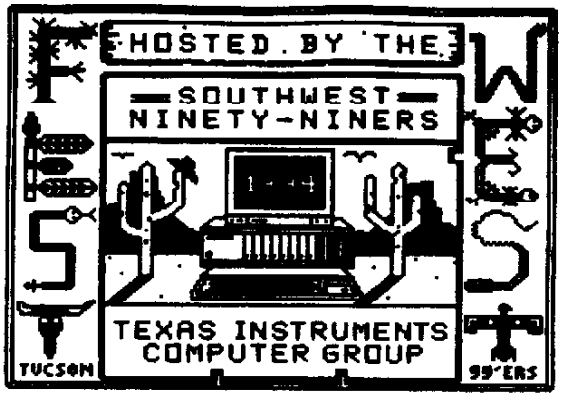

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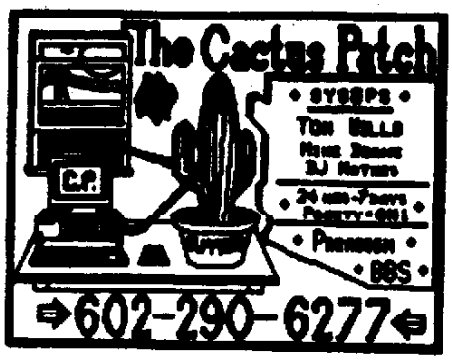
Disk of the Month
August 1993

by Mike Doane

This month's DOM is a quickie! It consists of two archived files to create sprites. The program "ARCHIVER 3.03" is also on the disk.

ARCHIVER is a FAIRWARE program from Barry Boone. This program "archives" or compresses any program into a non-executionable file for storage space. It is an extremely easy to use and understand program. The "docs" are not included on this disk but the program is available from the SW99'ers disk library. The program itself is self-explanatory. It will compress a file into apx. 1/3 to 1/4 of it's original file size. I use it to store my back copies of the DOM's. I can compress six or seven DOM disks (360 sectors) and store them on one DSDD (1440 sectors) disk. I can retrieve them and "un-arc" the file I want and make copies for anyone who requests a back issue. It sure cuts down on my storage space needs. If you have ever seen the mess my computer are is always in you would sympathize! A word of caution! If you attempt to "archive" an "archived" file you will be in for a surprise!! It actually gets LARGER! The archived files are easy to spot. They are saved as an IF-128 (Internal Fixed - 128) type of file.



The SPRITEBUILDER (SPRTBLDR) and the SPRITESHOW (SPRITES) program are "ARCHIVED" files. You have to un-arc them to a separate disk because of their size. They will "un-arc" to apx. 315 sectors (SPRITES) and 354 sectors (SPRTBLDR). SPRITES has 127 filenames so this file will require a complete disk all to itself. There is a program to allow you to install more than 127 filenames per disk and with any luck I will include it on a future DOM.

Next month I hope to be back to a more varied format of DOM in order to help you get the most out of you T.I. I hope you can use these programs to occupy yourself and keep out of the heat.

DOMs are available FREE to SW99ers attending the membership meeting each month. If you are unable to attend the meeting, members may buy DOMs for $1, either at a later meeting or by mail (no extra cost by mail). Non-members should send $2 for each DOM requested.

July SW99ers' Minutes

Tuesday July 6, 1993

1. Tom Wills handled the Question & Answer period.

   Q. Would someone explain how to unarchive programs from CACTUS PATCH?

   A. Those not attending the July meeting missed out on a good explanation (blow-by-blow or step-by-step) on "Downloading" from Cactus Patch and using ARC3.03 to unarc files.

2. Jack Mathis will celebrate his next birthday on August 21, in "wonderful" Korea, during his government subsidized (all expense paid) year long vacation. We plan to get a Birthday card and have those at the August meeting sign it. If you wish to write Jack direct, Jack's address is:

   Tsgt Jack C Mathis
   19th TASS
   PSC 3 Box 5614
   APO AP 96266-5614

3. 100 Vender packets were mailed last week. We expect to send out 20 to 30 more shortly.

4. Tom Wills has been asked to have a workshop for learning to use the CACTUS PATCH BBS. A show of hands indicated there was considerable interest in it. Tom wishes to have the worship at someone's home, rather than at his place, so all attention would be directed at the user station procedures and not be distracted by the BBS equipment. We will work out the date, time and place by the August meeting.

Ed McCullough, Secretary

Tom's Observations

by Tom Wills

What a month it's been since the last newsletter was published. We are literally praying for rain, and the MidWest is getting flooded out. Many members of the TI community are being affected by this flooding. Let us all keep them in mind.

Collecting Cartridges

Recently I received a publication from Bill Gaskill called Collecting Cartridges for the TI-99/4A Home Computer. This is a very interesting piece of literature that Bill has put together.

Collecting Cartridges is a 104 page publication, printed very professionally on 8.5" by 11" paper (single sided). It is apparent at first glance that Bill put a great deal of effort into putting this compendium of TI modules together. The print quality is top notch. On the cover page there is a graphic of the Household Budget Management manual and a TI command module.

Bill states the book may not be complete yet, as he is looking for any additional information about TI cartridges he can find. I find it hard to believe there can be any additional information to be found about TI Command Modules. Bill has done one very superb job on this book.

The book contains twelve chapters. Those chapters are Cartridge History, Collecting Guidelines, Cartridges Listings and Descriptions, Cartridge Names Sorted by Manufacturer, Explanation of Superscripted Notation, Cartridge Program References, Cartridge Trivia, Command Module Simulator, Cartridge Newsbytes, Milton Bradley MBX System, Romox ECPCs and Software Centers, and The Other Cartridge Using Computers.

The history of the command module (cartridge) is generally unknown to most members of the TI community, including me. Bill writes that the first cartridges were introduced in 1978, and not to the TI community (the TI-99/4 wasn't introduced until the summer of 1979), but to the Commodore community. There were 360 cartridges released or announced for the TI-99/4 and 4A between 1979 and 1990. Of those, only 275 are verifiable titles.

Two of the first cartridges released were for the TI 99/4, called Diagnostic Demonstration and Beginning Grammar. The first third party cartridges were from Milton Bradley, titled Connect Four, Hangman, Zero Zap, and Yahtzee. These cartridges are still around and as popular as ever.

There is a table listing 49 companies and the number of cartridges announced or released by each. DataBiotics was the most prolific with 28 different titles! Three companies announced/released 20 or more titles each and 6 companies announced/released from ten to 19 titles each.

Have you ever wondered about the original packaging the modules came in? Bill covers this also. For instance, did you know that the Early Reading module was cartridge #30112, the box was part #30100, the Teacher Guide was part number 30124, and the Student Reader was part #30148.

One of the most interesting sections is the listing of the command modules. It list modules in alphabetic order, listing the name, number, manufacture, retail price, and release date. Many of the entries include notes about the cartridge color, miscellaneous label information, and some documentation information.

Some comments are very detailed, others don't have any. Overall, this is a very informative section. The next section lists cartridges in alphabetic order by manufacturer. Following that list are the the "superscripted" notes in the cartridge listing. There is a great deal of trivia in Bill's notations.

Would you like to know when and where modules were referenced in major TI magazines? There are eleven pages of this information. For example, Donkey Kong was written up in articles in the 9/83 and 11/83 issues of Enthusiast 99, the 3/84 issue of MICROpendium, advertised in the 11/83 issue of Enthusiast 99, and reviewed in the V4N2 issue of Home Computer Magazine. Bill even lists the pages on which to find those articles, ads, reviews, etc.

A five page Trivia section is also very interesting. For example, did you know that the Miner 2049er game, authored by Bill Houge appeared on the Atari, Apple, and other computers before being ported to the 99/4A by Tigervision. Miner 2049er was only available in the I/O port cartridge type cartridge because of the large program size. Find this out and much more in the Trivia section.

Bill Gaskill has done an excellent job of putting this hard to find information together. I recommend this book to any and all TIers. Bill is selling this book for a paltry $15.00, including shipping!!! This book is worth more than that. I personally would recommend sending Bill a few extra dollars for this. I have no idea how much it cost Bill to produce this book, but copying must be at least $7 or $8, and shipping will be another couple of bucks. Don't forget the wear and tear on Bill's computer, nor the time he spent on it. Vendors have left the TI community because we have been too cheap to make their efforts worthwhile. To get quality products from vendors, we must allow them to make a profit on their labors. It is for this reason that I feel it is well worth a few dollars above and beyond the $15. Bill has worked hard on this book, and should be amply rewarded. Bill has done much for the TI community, and let's show our appreciation for his unswerving dedication to the TI-99/4A!!!

To order this book, send $15 (at least $15 - more if possible) to:

Bill Gaskill
2310 Cypress Court
Grand Junction, CO 81506

Cactus Patch Update

The third Saturday of August has tentatively been reserved for a BBS Workshop. Les Neff has graciously offered his home as a site for this one time workshop. The exact date and time will be determined at the August 3rd Membership meeting. Please let us know then if this will work out for those who desire to attend this workshop.

Things have been slow on Cactus Patch this month: few callers, low message turnover and few new files. Now would be a good time to call Cactus Patch to see what this BBS is all about.

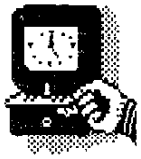
Fest West 94 Update

Information packets have been mailed to TI Vendors User Groups. Several were returned due to groups folding or changing addresses without notifying the Post Office. I've heard from one User Group who was impressed by the information packet, I hope everyone was impressed. We wanted to show everyone they can come to Tucson for the Best Fest in the West, and have a vacation, too.

As of this time, there are about four vendors who have unofficially committed themselves to attending Fest West 94. Once they send in a deposit, we will publish their names. The earlier we receive their deposits, the sooner we can get the word out. That makes everyone more anxious to attend FW94, and the sales of the vendors will go up. Come on vendors, send in those small deposits so everyone will know you ARE attending Fest West 94!

The Fest West user ID on Cactus Patch has been used several times in recent weeks. To review the use of the Fest West ID, after connecting with the Cactus Patch BBS, enter Fest West at the prompt for the name. At the prompt for the password, enter FESTWEST. Or, at the prompt for the user name, enter 94;FESTWEST. All I ask is those who do call the Cactus Patch using the Fest West guest user ID is that they leave me a feedback message telling who they are and what user group they belong to.

What the TI99/4A has done to me



by David Ormand

Texas Instruments has been in the computer business a long time. It must have started in the 60s or 70s, when all the other big computer makers were getting into the business - Digital Equipment, International Business Machines, Data General, Control Data Corporation, etc. TI thought they should get into the business too, so they invented the 990 computer. This was a big job, a MAINFRAME, that would let several users work on the same computer from their terminals at the same time, operate line printers and big hard drives, and had a real operating system - DX-10. It sold pretty well, so they took the idea behind the "brain" of the 990, which was all individual logic devices and separate integrated circuits, and put them all together into one integrated circuit: the TMS9900 microprocessor. They put this chip, or its younger, more advanced brothers, into other products, like the 990/10 mainframe computer, the TOW missile guidance computer, and our wonderful TI99/4A Home Computer!!! YAY!!! Probably lots of other products (it would be fun sometime for some user group to find out all the things TI put the 9900 family processor into). Then, in the early 80s, TI, always long on technology but short on marketing, made some mistakes with the 99/4A, lost a great deal of money, and dropped it.

I got my basic console just before TI dropped its support, for help in college classes and for word processing and such, and for quite some while enjoyed it, even the cassette tape machine screaming its bits out. When prices on the expansion system fell below $500 after TI made the announcement, I quickly picked out the rest of the system. Gosh, it has been addicting! Word processing and spreadsheet usage is still the pre-eminent use for my two systems (now a Geneve 9640 with CorComp DS/DD, RS232 and modem, and 198K Horizon RAMdisk, and a stock TI99/4A with DS/SD, RS232, and my new favorite cartridge, the SuperSpace II from DataBioTics), but being a tinkerer and engineer, I have done my share of interface projects and XBasic, Assembler, and c99 programming.

I guess God doesn't mind having it around, since He used it to keep me employed. I was working with Hughes Aircraft Co. while they paid for my engineering master's degree, and when I graduated, I was slated to be laid off (yes, another very clever company). But a friend at church who also worked there suggested I give my resume to a software support group at the company, and when they saw that my hobby was TI99/4A programming, they hired me like a shot to work on TOW 9989 assembly language software! To say I was delighted would be an understatement! Always put your 99/4A involvement on your resume!

Since then, while learning structured programming and the MIL-STD-2167A software development process, not only for work but for more and better TI projects (!!), I have discovered that WE ARE NOT ALONE! All those people that bought 990 mainframe computers 15 years ago? They are diehards, too! TI seems to be trying to kill its 9900 involvement, but all those 990 users like their machines, and a cloud of third-party manufacturers and software companies has arisen to support them. Sounds just like our case!

The TI99/4A is not the only small computer. Commodore has sold more units than TI ever did. Nor is it the best, in terms of speed or capacity. This is why many TI owners have gotten a newer, more powerful machine to supplement their TI (in fact, I have an Atari ST to do what the TI just can't do). But there is something about the 9900 family that compels allegiance, a cult attraction, if you will, a wholesome fixation, such that not only do companies and individuals cherish their 990 mainframe computers, but the little TI99/4A, the most successful of the "orphan" computers, continues to survive against all odds as its user community struggles to make it survive. It is the CHALLENGE of survival that pervades our world - you see it at every TI fair, and in the pages of every User Group newsletter and every Micropendium magazine - that makes our machine so unique. That challenge, and the delight of being part of a subculture that has accepted that challenge, is probably the most important thing the TI99/4A has done to me. That is why I look forward with complete assurance of seeing my 9900 systems (and who knows, maybe a 99105 system before too long - POWER!!) sitting on my table, chugging their little silicon hearts out, when the year 2000AD rolls around!

LONG LIVE THE TI99/4A!
.....And it probably will!

Fireside Chat 02: What's In A Page?

Jim Walter Krych

My friends,

Today, there endeavors two camps of thought for memory expansion for this, our home computer. One camp would have you believe that they are the established "standard" for memory expansion.

This camp proposes that a universal Device Service Routine be written to allow for greater memory. This camp also wants memory at only a certain location, plus they want "pages" of eight kilobytes size.

They promise that their device will handle up to 64 megabytes of memory. You can select which amount can be ram disk and CPU ram.

And General Custer was promised full retirement after one more "last stand."

The point that I am bringing up here is that anyone, and I do mean anyone, can promise anything and more often everything.

The cold reality is that more often than not-promises are broken. It takes very hard work to get any project to work, either software or hardware. And since hardware requires software to really work, you have the classic "The Son becomes the Father and the Father becomes the Son."

And often the whole project, even when complete, is a failure. A sad and sobering fact.

Is it not a coincidence that a "standard" was set up that spelled out what memory expansion "had to be?" And what better protection against failure than to have a community constantly told that the memory system was forthcoming, to try to discourage other lines of thought, to make everyone believe that it was the standard.

Only, the memory system does not yet exist.

And what of this second camp for memory expansion? To say that any memory project is hard is to underestimate the problems that all computers have, should programs require more than what is actually addressable.

You cannot fit a mountain into a mole hill.

But, and this is the crux of this fireside chat, you can make a mole hill accept a mountain. By making the mountain into sizeable chunks. Voila! PAGES!!!!!!!!!!!!!!!!!!!!

And, my dear Friends, what constitutes, a "page?" Should it not be small enough to handle enough of a task, yet easy enough to use?

The second camp, ASGARD, uses four(04) kilobyte pages, the first camp proposes nothing smaller than eight(08) kilobytes. And there seems to be great resistence from them about a 4k page.

You say potato. I say potato. The point is mote.

If one has to program on the hardware level, page size can be a difference- if you do not believe in modular code. Code which is broken up into chunks for easier debugging, and often faster speed.

However, the four kilobyte page has been used by many people. TI used it. On both the 4A and the 8. Microsoft uses it, in conjunction with a 64k window. The EMS and LIM uses it.

But, this is not enough for some people. They resist the four kilobyte page. So what do we do? It is how we make the programmer use that page is what the difference is. Like butter and yoghurt, same milk different use.

We are all familliar with the memory for the TI 99/4A. An upper area of 24k and a lower 8k of RAM. I did not include the cartridge space. A total of 32k space.

There is our window, a 32k space. (24k on the AMS.)

But we do not stop here. Remember, first and foremost, ASGARD is a SOFTWARE company. To release a large memory system without software is paramount to sending troops into battle-without bullets.

Imagine, no do not imagine, a new assembler. One that allows for and was designed sepecially for, expanded memory. It contains new statements-like FLOAT. It has a library of routines to facilitate large movements of data. Like VDP into CPU and CPU into VDP, CPU to CPU, EXIT, ETC. These routines WORK NOW! They were developed in conjunction with the AMS card.

A new loader and linker. Overlays of 32k in length. 32k.....Now you see why page size is mote.

With the ability to have our own "TSR's", programs that stay in memory. New and powerfull SOFTWARE.

And with the potential fired on by large memory, that, my Friends, is EASE OF USE EXPANDED MEMORY.

I have said much in this fireside chat. I look forward to saying much, much more to you all in the future. Take care and God Bless!

Feedforth Aug'93

by W. Leonard Tabbs

FEEDFORTH did not appear in last month's newsletter because of my having to deal with the after effects of an auto accident on Memorial Day. Miraculously, our lives were spared and neither my wife nor I suffered any serious physical injury--though our car was just about totalled. Material in progress for the July newsletter remains to be edited.

As I begin this column I once again think about how many TI newsletters seem to pass up the TI beginner and the not-quite-so beginner. If we assume that no one is a beginner anymore, then the end of the TI community is written on the wall. (People have been saying that since the early 80's). We know all good things do come to an end. Still, as long as people abandon their TI's, there are going to be the sales (or give-aways) of TI99/4A's, and that means there will still be some people who may be looking for help that is not confined to the latest developments of "advanced" information. Did you see the letter in the last MICROpendium (written by a Casa Grande TI owner)? It raised the same point--newsletters full of articles for the large system owners with

Ramdisks galore, Hard-Drives, or Geneves, make the assumption that the TI Cassette user, or the owner of a single drive PE box does not exist any more! So I want my contribution to recognize these vastly ignored users as well as those that just picked up a TI at a swap-meet. They will be the future of the TI when our older generation has passed away.

Now to discuss a simple program I have been using which relates to manipulating DV/80 data files. The DV/80 data files were created using a TI-Writer type program which means each data line is restricted to 80 characters. (If one does not own or use a TI-Writer type utility program, one can still create such DV/80 files. How to create these will be a topic for a future FEEDFORTH column). I had a massive DV/80 data file to assemble--far in excess of a TI-Writer type program's capacity to manage without my having to break it up into 100+ sectors each. (With my system, the 100 or so sector size is the maximum my TI-Writer program can manage before "Buffer Full" greets me). The challenge to me was to read the file and later copy (with provision for editing in transit). In other words, take data from one file or more and create and expand or reduce the file size as the need arose. This led me to review the simplicity of reading a file without using a larger FILE READER utility program. What is needed?

First, the program must have an instruction to open a file. Second, get input to be displayed from that file. Thirdly, alter the data if necessary, (compress to smaller line if wished, etc.). Next, save the data. This means opening a second file, and sending the data back to the second file. The second file is best opened prior to opening the first file. With multiple files to read, this second file must be left open to be able to accept more data. The program to do this might be:

1) Open Second File (OUTPUT)
2) Open First File (INPUT) to be read
3) Input from first file
4) Display First File contents (a line at a time)
5) Process Input line as needed
6) Display processed line and send to OUTPUT file.
7) Fetch next data
8) At end of First File, close File 1
   If only a single file is processed, then close OUTPUT file, File 2

The program (to read one file and create a second file) then, might look like:

```
100 OPEN #2:DSKn.OUTFILE,OUTPUT
    (,DISPLAY,VAR.80)
120 OPEN #1:DSKn.INFILE,INPUT
130 LINPUT #1:A$
140 IF EOF(1) THEN 200
150 DISPLAY AT(n,n):A$
160 REM IF MODIFYING A$ DO SO HERE
170 PRINT #2:A$ (THIS GOES TO NEW FILE BEING
    CREATED)
180 GOTO 130 (GET NEXT DATA INPUT)
200 REM CLOSE #2 (OUTPUT FILE) IF NO FURTHER
    FILES TO BE READ. IF READING MORE FILES
    FOR SAME OUTPUT FILE THEN DELAY CLOSE OF #2
210 CLOSE #1
220 REM (END OF PROGRAM TO READ 1 FILE AND MAKE
    1 FILE.
230 REM IF PROGRAM IS TO READ MORE FILES GIVE
    INSTRUCTION HERE
    REM DON'T FORGET TO CLOSE #2 (OUTPUT FILE)
    BEFORE ENDING PROGRAM!
```

Suppose you only want to read a file? All it takes is using lines 120-150 and 180! It's probably a good idea to close the file (L210) when the End Of File is reached (that's what the "EOF" in L140 refers to), though I have found it has not always been so critical. On the other hand, closing OUTPUT files, if you are using one, is absolutely critical or you will have no new file or data saved! If you read your TI manual, there are certain conditions where the computer closes files if you don't, but OUTPUT files are something else. A bit of advice, if you are going to create an OUTPUT file, wait to activate it until your program for INPUT is free of error. If a program crashes on the INPUT section your output file is NOT CLOSED (if you had opened one). Thus the reason for making sure, the INPUT file is working O.K., first.

COPYFILE is a tiny program I wrote when I got tired of waiting for TI-WRITER type programs to load on my simpler systems. By using this program I found it was, in some cases, even faster. Another thing, this little program can handle any DV/80 file of any size. For example, my most recent file consisted of 1060 (80 character) records-- approximately 3 times the capacity of my Funnelweb Program Editor. The following EXTENDED BASIC program is just for COPYING DISplay VARiable 80 files:

```
1 REM [COPYFILE] 4-29-93
2 REM By W. Leonard Taffs
3 REM SW99ers, Tucson, AZ
10 CALL CLEAR :: DISPLAY AT(
12,4):"'COPY FILE' PROGRAM"
: :" SET OUTPUT FILE LI
NE 125!" :: INPUT "ENTER OUT
PUT DSC #: ":DSC$
100 CALL CLEAR :: INPUT "ENT
ER FN$,DSC$: ":FN$,DSC$
110 FN$="DSK"&DSC$&"."&FN$ :
: PRINT :: PRINT FN$;" O.K.?
" :: INPUT "":K$ :: CALL
 CLEAR
120 OPEN #1:FN$,INPUT ,DISPL
AY ,VARIABLE
125 FF$=SEG$(FN$,6,10):: FN2
$="DSK"&DSC$&"."&FF$ :: PRIN
T FN2$: : :: OPEN #2:FN2
$,OUTPUT,DISPLAY ,VARIABLE 8
0
130 ON ERROR 200 :: LINPUT #
1:A$ :: CT=CT+1
135 CALL CLEAR :: DISPLAY AT
(15,1):"Saving to DSK3": :A$
;" ";CT :: PRINT #2:A$
138 DISPLAY AT(1,10):SEG$(FN
$,6,10)
140 IF EOF(1)THEN 200
150 ! PRINT CT : A$
160 CALL KEY(0,K,S):: IF S<>
1 THEN 170
165 CALL KEY(0,K,S):: IF S<>
1 THEN 165
170 GOTO 130
200 PRINT CT;A$ :: PRINT #2;
A$ :: CLOSE #2
205 PRINT :: PRINT "FILE ";S
EG$(FN$,6,10);" READ."
PUT "":K$
210 CLOSE #1
```

The program may look a little long, but actually the working lines are very few. The rest are "cosmetic" for display, or functional for convenience--such as the CALL KEY routine to be able to interrupt display without disturbing the continuation of the program.

Care must be used in using this program to avoid loss of data. You might play it extra safe when the program has finished by typing (immediate mode) a CLOSE command. If you opened #1:"DSK1.FILENAME", OUTPUT, then type "CLOSE #1". If the file closed properly in the program, you should get an I/O Error message, after typing your IMMEDIATE MODE command. If you do not get such a message, you have closed the file that the program should have closed. (Not closing an output-to-disk file will lose all data. Even worse, in some circumstances, it can really mess up your disk. My own experience of this was to find the disk directory lost). So, close a file 3 times too many rather than fail to close it once! If you cannot remember what file number you opened, you can always go through different numbers (such as one to ten--or whatever range of numbers you tend to choose). All your different closing attempts (in immediate mode) will result in I/O error messages except for the correct closing number (unless the computer happened to close the file for you by default).

I have not translated "COPYFILE" into TI BASIC, but if any reader cares to have such a version, I will be glad to program it for them.

Next month I plan to refer to Sanders' Elementary TI book. (Every once in a while I drop everything and go back to reading basics). I had not seen the Sanders book until just a month ago. I was very impressed with what he was trying to do in the way he organized this book. Some things (for beginners) he explained very well, in a way that I had never seen before. Even though it is a very basic book (could have been marvelous for beginners!) I wanted to try some of his suggestions. Imagine my surprise to find numerous errors. Even a proof-reader should have been able to catch some of these errors. I could not imagine a publisher releasing such a book without more careful checking for errors -- PARTICULARLY in the PROGRAMS themselves. Gosh! -- what frustration this must have brought beginners, trying to learn how to use their computer! (Wonder how many potential TI community members were lost due to this!). The book, in my judgment, with corrections to its programs, would be one of the best available to beginners; as it is, so many of even the simplest programs have glaring errors rendering them virtually useless to the unfortunate beginner. So, next month, I intend to pick some of his examples (with errors corrected), because Sanders obviously had good intentions. Either someone sure let him down in its editing, or there is the possibility I have a draft copy that was not intended to be released. In case this was not a draft copy and there are people out there who could use some of the corrections, I will include some of these in our next issue.

Telecommunications: An Appeal

by David Ormand

To my friends in the Southwest Ninety-Niners TI99/4A Users Group:

I have a confession. I have been unfaithful. I bought an Atari 520ST computer.

But wait, let me explain! To practise MC68000 assembly language, to use a c compiler with really, truly floating point numbers (which c99 can do only in a kludgey way), and to play newer, better games from the original computer game company, $130 was too good a deal to turn down! Besides, Atari is about as stupid a marketting power as TI was and is, so the ST series is only a little above the 99/4A in orphan terms. And most importantly, I still have my two 9900 systems forever!

But I have learned something from the Atari people. I have visited a few of their meetings. Pathetic things, really. Five to ten people show up, moan about how little support they get from Atari, conduct their business, show a demo, and quit. However, I discovered they have a Bulletin Board System, just like our Cactus Patch, except even more restrictive - you can only call their BBS if you are a club member! And at the last meeting I was at (shucks, I may join to see if $25/year is worth it - not near as good a value as our $15). they actually discussed a question brought up by a member as to whether they should discontinue their monthly meetings at the UA campus and conduct all their club activities on the Bulletin Board.

When I heard that, I was astonished! Here is a group of people, in no way of higher quality to the people of the SW99ers, but nearly all of whom are practised telecommunicators! And what's more, I have looked at four telecomm programs for the Atari, and none of them are as capable and user-friendly as our TELCO! Yet for all that, only a tiny percentage of SW99ers own or use modems. It must be fear of making mistakes, apathy, or lack of education that is at the root of this attitude, and I am making this appeal to urge a change.

One of the things I do with my TI is to telecommunicate. I just punch the menu button for TELCO, select Autodialer, select Cactus Patch, and in a matter of moments I am reading messages to me from my other SW99er friends that use the Patch, or finding out the latest news, asking questions, or helping someone else who has a question. Or, I can get new programs that are making the rounds in the TI world, or GIF pictures, or articles to read about the AMS/AEMS card. An incredible resource, and lots of fun! I know it is far easier to call the patch with TELCO than to balance my checkbook with Multiplan, so it just isn't a case of difficulty. Nor should there be any fear of hurting anything - there is almost nothing you as a normal user can do that will "crash" the Cactus Patch, and if it should ever "crash," we have two very competent and experienced system operators ("sysops") that will fix it easily.

You can take any approach to telecommunication that you want. If you don't want to pay anything, calling the Cactus Patch is free. There are other bulletin boards in Tucson that don't cost anything (there is a list you can get from the Cactus Patch) for you to talk to other people that are interested in the same things you are (my other favorite BBS is the christian board at 889-8796). If you don't mind paying $9.00 a month, GEnie, which is a national computer network (like CompuServe, which I am sure you've heard about) charges $8.95 per month, plus $3.00 per hour past your first four free hours after 6:00PM on weekdays or all day long on the weekends. You can catch up on all the news from Beery Miller, Chris Bobbitt, Barry Boone, and all the TI heavy hitters in four hours every month, and still have lots of time left over to get the newest programs and information articles about the TI. Besides, there are other "bulletin boards" on GEnie if you have other interests, like geneology or photography, and you can look things up in an encyclopaedia that is constantly being updated, or get news or stock listings or buy articles or plane tickets or play wierd games with other people all around the

country! So many possibilities! And if you really get addicted (I have resisted this step), you can call long-distance to other bulletin boards around the nation! People representing other TI BBS's are always calling the Cactus Patch and leaving invitations to call them!

There is a whole great world out there through your telephone, and I urge you not to be afraid or apathetic to just peek through the door! Don't have a modem? You can get really great devices for less than $50! There is always the possibility of our group doing a bulk order, and lower the price even more! Lots easier to connect than your floppy drive! Don't know enough? It's just a program, and Tom Wills, BJ Mathis, Mike Doane, myself, and many others would be delighted to help you!

The most important appeal I could make to you is this: Our computer, just like the Atari, will only survive in such a small market if the people in the community "network." That is, stay in touch, contribute as they can, learn what is going on. There are people, members of the SW99ers, who we never see because they live at a distance, even out of state, and who never have any real contact with the group other than reading this newsletter and paying their annual dues. Take advantage of your priviledges of membership! The group has free or cheap software, printer ribbons, low-cost floppy disks, library resources, and other great things for the members, but if you only have access to them once a month at the meeting, or never because you don't even come to the meeting, then you are simply not getting the value out of your membership. It's FREE, it's FUN, to call the Cactus Patch, and you can ask the officers (most of whom call regularly) and really cash in on your annual dues!

I hope we never come to the point where, due to lack of interest, our meetings are so worthless that we would consider doing away with them. But I know our club would be more interesting for everyone if the members were in more frequent contact, and there is no easier way for that than the Cactus Patch!

The TI-99 Home Computer Timeline

by Bill Gaskill

part 1

1993 marks the 10th anniversary of the decision by Texas Instruments to abandon the Home Computer. I have compiled the information in this timeline not in celebration of TI's decision to orphan the 99/4A, but rather to honor the community that remains ten years after TI's decision. I hope you enjoy the reading.

The Birth of the MicroComputer Industry

1947: Bell Labs engineers John Bardeen, Walter Brattain and William Shockley invent the transistor, which paves the way for the creation of smaller computers.

1955: IBM becomes the first computer manufacturer to offer plug-in peripherals for their computers. Although the computers are of the mainframe type, the concept will catch on and become an integral part of microcomputer technology.

1959: Texas Instruments releases the first integrated circuit after its engineers figure out how to put more than one transistor on the same material and connect them without wires.

1964: John G. Kemeny and Thomas E. Kurtz develop the BASIC programming language at Dartmouth College. BASIC will become a mainstay in the microcomputer world.

1969: Intel, then a one-year old company, releases a 1K-bit RAM chip, which is the largest amount of RAM ever put on an integrated circuit up to that time.

1972: Intel introduces the 8008 chip in April 1972. It becomes the first 8-bit microprocessor to hit the market.

- Nolan Bushnell founds Atari and ships the Pong game.

1973: The first "mini" floppy disk is introduced.

1974: Intel introduces the 8080 chip in April 1974. The 8080 is the first microprocessor capable of addressing 64K bytes of memory.

-Texas Instruments releases the TMS 1000 4-bit chip. It becomes an immediate success as over 100 million are sold for use in video games, microwave ovens, calculators and other electronics products.

- In an article appearing in the July 1974 issue of Radio Electronics, author Jonathan Titus tells readers how to build the Mark 8 "personal minicomputer."

- Motorola begins work on the M6800 chip, designed by Chuck Peddle. Peddle would later leave Motorola to join MOS Technology, the creators of the 6502 chip. Peddle ultimately became Commodore's Systems Division Director, responsible for the release of the PET 2001 in October 1977, after Commodore acquired MOS Technology in order to have its own chip source.

- Naval Post-graduate School instructor Gary Kildall creates a new operating system for Intel's 8080 microprocessor called CP/M, an acronym for Control Program for Microcomputers. It sells for $70.

- Creative Computing magazine is founded by David H. Ahl in Morristown, New Jersey.

- Brian W. Kernighan and Dennis M. Ritchie of Bell Labs develop the C programming language.

1975: Texas Instruments introduces the TMS 9900 microprocessor, the first 16-bit chip on the market, but it does not sell.

- Micro Instrumentation and Telemetry Systems, a company founded by Ed Roberts as a vehicle for supporting his experiments in electronics, introduces the MITS Altair 8800 microcomputer in January. MITS becomes the first company or corporate venture into microcomputers for sale to the general public and the Altair becomes the first microcomputer to have software written for it by third-party programmers. Its open bus architecture also allows people to begin making hardware peripherals, making it the first microcomputer to also have third-party hardware add-ons created for it. The whole Altair kit, including the 8080 processor, motherboard, power supply, and 256 bytes of memory sold for $395.

- MOS Technology introduces the 6501 microprocessor, a short-lived predecessor to the famous 6502 that would power the Apple, Atari and Commodore machines from their introduction to their obscelescence.

- Byte Magazine publishes its first issue in September.

- Bill Godbout and George Morrow (who would later build the Morrow Computer) build the first 16-bit computer with RAM and a built-in cassette interface. An advertisement for the unnamed computer appears in the first issue of Byte Magazine, but not one of the computers is sold.

1976: Zilog, a computer chip company which is founded by former Intel employee Federico Faggin, introduces the Z80 microprocessor.

- Shugart introduces a 5 1/4" floppy disk drive in December that sells for the unheard of price of $390. It is housed in a cast aluminum case. In 1979 the company will enter into an agreement with Matsushita of Japan to produce the now familiar sheet metal enclosed case that would retail for $125 and sell for $50 in OEM quantities. This is the same disk drive that Texas Instruments would sell to 99ers for almost $500 in 1979-83.

- Apple Computer Inc. is formed in April by Steve Jobs and Steve Wozniak.

- Texas Instruments makes the decision to produce a personal computer built around its unpopular TMS 9900 microprocessor. This is Mistake #1 according to Joseph Nocera, in his "Death of a Computer" article.

1977: The Radio Shack Division of Tandy Corporation and Commodore Business Machines join the new microcomputer market with introductions of the TRS-80 and PET 2001 (Personal Electronic Terminal) respectively. The TRS-80 is announced in August and the PET in October.

- Computer Shack, later known as Computerland, opens its first store in February.

- Ohio Scientific Instruments offers the first microcomputer with Microsoft BASIC in ROM.

- Axiom Corporation of Glendale, California enters the microcomputer printer market with the first low-cost electrosensitive line printer in the industry.

- The research and development process for TI's planned personal computer is in full swing and a corporate decision is made to assign the task of creating the computer to the Consumer Products Group which makes watches and hand held calculators at TI. Chief Operating Officer J. Fred Bucy decides to move the Consumer Products Group from Dallas to Lubbock, Texas, which is only 29 miles from his home town of Tahoca. This is Mistake #2 according to Joseph Nocera.

1978: The Plato computer aided instruction system is developed at the University of Illinois. Control Data Corporation would license these applications to Texas Instruments late in 1983, but by then, the fate of the Home Computer was already sealed.

- Machine and operating system independent UCSD Pascal is released by the Regents of the University of California at San Diego for $200.

Treasurer's Report

August 1993

by Mike Doane

This month's Treasurer's report is an easy one. In fact almost every one of the summer reports are easy. We don't usually have too much activity so my job is made nice. I wish to thank you all for that! It will be nice to get the balance back up soon. We will begin to start showing some expenses incurred to our hosting of FESTWEST 1994. We (the SW'99ers) can use and welcome all the help you can give us to help make this Fest a memorable one. Now, on with the show!

Description	Amounts	
Balance 06/27/93		$994.79
Income:		
Memberships	$15.00	
Library Sales	$ 3.00	
Ribbons/Disks	$ 7.00	
Misc.(Int.,etc.) (Includes June's interest)	$23.13	
SUBTOTAL		$1042.92
Expenses:		
Newsletter/postage	$63.80	
FestWest Mailings	$144.09	
CP Support	$25.00	
SUBTOTAL of expenses		$232.89
Working Bal. 07/26/93		$810.03

The savings account statement is :

Balance 06/27/93 :	$50.12
Interest (Includes May's interest)	$ .24
Balance 07/26/93 :	$50.36

Our balance will increase as the weather cools off and people begin purchasing items from the library again. (I certainly hope so. It is almost time to begin placing my bets for the World Series! Here's a "Hot Tip" for you. Don't put any money on either the Chicago Cubs or the Cleveland Indians!)

Don Walden of Cecure Electronics has the Treasurer's "Find of the Month"! A 3 1/2" floppy drive with cables, adapter plate, and shipping for $62.34. This is a ready to bolt up unit. You can mount this in your P.E.Box or in a separate stand alone drive box. These are the 1.44 megabyte drives BUT you can only format them to T.I. standards (720 sectors if you have a T.I. Disk Controller, 1440 sectors sectors if you have a CorComp or Myarc controller). These drives consume a little more power than 5 1/4" so I reccommend you either upgrade your power supply or install them in a "stand alone" unit box.

Wise Buys

The following information is provided as a service to our members. The items listed are for sale by the individuals indicated and are subject to prior sale. The group assumes no responsibility for items listed and makes no claims as to their condition or interface compatibility with the TI-99/4A computer. Only computer related items will be accepted for publication in this newsletter.

TI Console w/RF Modulator
Extended Basic, Speech Synthesizer
Terminal Emulator II, Tombstone City,
The Attack, Car Wars, Parsec, Blasto
with manuals
All for $50

Danny Stern (602)297-3839

$200 Complete TI System
Includes: Expansion Box w/SSSD Drive
TI Disk Controller, Memory & RS232
Plus: C.Itoh Printer, Console, Speech,
ExBasic, Multiplan & TI Writer

Norma McCargar (602)889-8401

$150 Complete TI System
Includes: Expansion Box w/SSSD Drive
TI Disk Controller, Memory & RS232
Plus: Beige Console w/dust cover,
ExBasic, Tax Investment Record Keeping,
Home Financial Decisions, & TI Writer

Larry Newman (602)299-2092 or $10 on CP

Double-Sided 1/2 height
TEAC Disk Drive - $20

First Base by Warren Agee - $10

Entec external power supply box. Has enough power for a hard disk and two full power floppies. Light toggle switches on front to control 3 outlets on the back of the box. Asking $50.

"I  My TI" White Hats
Black Letters
Red Heart
$5 Mesh Style
$6 Golf Style
plus $1 shipping

Tom Wills (602)886-2460 or $1 on CP

TI-99/4A Console
$20 o.b.o
J. J. Horton (602)882-2330

MICROpendiums
May, July, August 1985
February, October, December 1986
January thru October 1986 (10 total)
February, May 1988

$1 each including postage

Call or write: Ralph Jones
2820 Juniper Ave
Morro Bay, CA 93442
(805)772-2947

P-Code Card w/documentation
$60 o.b.o.

$100 Expansion Box w/SSSD Drive
TI Disk Controller, Memory & RS232

$15 TI 99-4/A Console
$15 Speech Synthesizer
$4 Replacement Console Power Supplies
$5 TI to Atari Joystick Adapter(single)
$5 TI to Atari Joystick Adapter(dual)
$10 Cassette Player/Recorder
$2 Replacement Keyboard

$5 24-Cassette or Module Drawers
$7 36-Cassette or Module Drawers
$3 Flip N File for Diskettes

50/$1 Disk Labels
500/$1 Mailing Labels
Tractor feed 1-across

TI Keyboard Overlays $3ea or 5/$10
Modem Cables 6'=$8 (Telco ready)
$3 Cassette Cable

Diskettes
25/$7 (SW99ers only)

BJ Mathis(602)747-5046 $3 on CP

Printer Ribbons
$3 NX-10 $4 NX-2400
$2 Epson MX-80 $5.50 NX-1000

Cassette Programs
$1 Teach Yourself Basic

Disk Programs
$2 Airline
$10 Hitchhiker's Guide to the Galaxy
$3 Touchdown

Modules
$2 Chisolm Trail
$2 Decimals 1
$20 Extended Basic
$1 Household Budget Management
$5 Multiplan (no manual)
$1 Munchman
$1 Personal Record Keeping
$1 Tax Investment Record Keeping
$1 Terminal Emulator II
$10 TI-Logo II

Books
$1 Basic Computer Games
$3 Basic Programs for the Home
$3 Beginner's BASIC (Blue Book)
$2 Computer Playground
$3 Executive Computing - How to Get It Done on Your Own
$10.50 Home Publishing on the TI-99/4A Supplement $3 w/disk
$3 Practical Basic Programs
$2 Programs for the TI Home Computer
$3 Programming Basic w/the TI Computer
$1 Sams TI-99/4A Basic Programs
$3 The Word Processing Book
$3 The Writers by Harry Brashear
$3.25 User's Reference Guide
$2 Using & Programming the TI-99/4A

BJ Mathis(602)747-5046 $3 on CP

Membership Report

Nineteen SW99ers signed in at the June meeting. Les Neff and Mike Doane renewed SW99er memberships. We now have 56 current members. We will exchange 55 newsletters this month.

Members Meet

First Tuesday, August 3rd, Devon Gables Health Care Center (Exec Dining Rm.) at 6150 E. Grant across from the Price Club at 7:15pm. Les Neff plans to show us how he uses MultiPlan.

TI-Base Workshop

Second Tuesday, August 10th, 7:30pm. Tom Wills' home 6925 E Kingston Dr - 886-2460.

Cactus Patch Workshop

Tentatively, Saturday, August 21st. Les Neff's home 4242 E 6th St - 327-6437. Details and time will be discussed at meeting August 3rd.

Exec Meeting

Friday, August 27th, 6:30pm. Perkins Restaurant at Grant & Swan, NE corner. All SW99ers are invited to help plan for our Users Group and Fest West '94.

General Users

Canceled for August.

Advanced Languages

Canceled. Anyone interested in hosting Advanced SIG, please contact an Executive Committee member.

Contents

Who Do Ya' Call?

Richard Baron - Disk Librarian	885-4812
Mike Doane - Treas/DOM Prep/Tech Asst	298-3835
BJ Mathis - Pres/Editor/Library Chmn	747-5046
Matt Matthews - Lending Librarian	602-428-6910
Ed McCullough - Secretary	296-5183
Rod Stallard - Vice Pres	745-6071
W. Leonard Taffs - Newsletter Lib	795-4148
Tom Wills - BBS SysOp/Lending Lib	886-2460
Cactus Patch BBS	290-6277

(Area code 602 for all phone numbers above)

September Newsletter Deadline ››› August 27th, 1993 ‹‹‹

SouthWest Ninety-Niners
PO Box 17831
Tucson, AZ 85731

Happy Birthday Ed McCullough and Jack Mathis!

Dallas TI HC Group 9307
Dallas 99 Interface
PO Box 29863
Dallas TX
75229