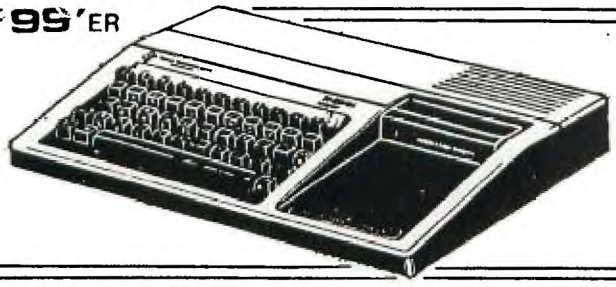
99'ER



NEWS

ENTERPRISE, ALABAMA

JUNE '84

A member writes . . .

Roger B. Crampton, PhD
Wiregrass 99/4 Users Group
106 Hardwood Place
Enterprise, AL 36330

A MESSAGE TO ALL MEMBERS

Call this a"voice from out there", but as a member of this club, I get the impression that few people are interested in carrying on. The poor showing at the meetings and general lack of response can lead to one thing-an end to our organization. Least we forget. we still have one of the best computers in the country. We have a lot of money invested and both our hard and software will serve us well for a long time to come. Lastly, there has been a lot of hard work put into organizing this club, plus untold hours spent in getting a tremendous library of programs.

Let's face it! At first most of us were interested(and intrigued with) GAMES. Now that this has worn off and we understand our equipment better, it is not the time to quit. Rather it is a great opportunity to learn what our equipment can really do. For instance, there is unlimited possibilities in learning to program; to understand programs; to change them to suit our needs;to embellish them with a few simple graphics; and on and on.Instead of thinking QUIT-we should be thinking of what we want and how to help each other. Sure it takes time, but it is time well spent, for WE ARE LEARNING. All this applies to the young ones(kids, if you like) as well as the others.

Perhaps this writer is wrong-and I would be more than happy to be proven wrong. If I am right, then let's DO SOMETHING! Even with our limited range of experience and knowledge, it would be easy to organize, on a systematic basis, classes that would be continuous(sort of a cours) in nature. All we have to do is SPEAK UP!!!

NEW PROGRAM

Thanks to Bill Butch, we have a good new program in the library. This is a check book balancer(not again) and check file program. It will SAVE your check NO and AMT, compute bank balance using all checks written, deposits, autimatic withdrawls and service charges. It is menu fed, requires a data saving space(cassette or disk) and has excellent graphics. The disk version will also print the data, plus has input feature for CK NO, PAYEE,DATE AND AMT. Deposits and withdrawls are easily recognized. Both versions will display on screen and are continuous from month to month.

Trouble in Flippyville

by Lloyd Picou

To disk drive owners who make flippies our of your single-sided disks: Finally ran into a bad one. Had stored some programs and files on a flip side and wanted to use them. I kept getting some weird I/O errors or no data. That's when I found our I had a disk problem. Put in the Disk Manager module and found out there were about 45 errors (whatever that means). On closer examination of the disk, I noted a "scrubbed ring" near the outside edge. I then experimented a bit more and found I could safely use about half of side 2. Incidentally, side 1 is perfect.

Lesson from this is to carefully examine side 2 and if you have the time, check for disk errors with the Disk Manager before you initialize side 2. Bear in mind-- on most of our disks side 2 is not guaranteed to free of defects.

INSTRUCTIONS ON INSERTING BUFFER CHIP TO
8510 BPI PROWRITER PRINTER

1. Remove 4 srews on bottom of printer.
   Plate should come off.
2. There should be 4 more screws on P.C.Board. Remove these screws.
   The board should come off with about one inch of space.
3. Remove plugs in order to take board out (there will be about 7 or 8 plugs.)
4. Take board out.
5. You will see one empty socket. Install chip to this socket. **Make sure knotches on this chip are facing in the same directions as the knotches on the other chip.**
6. To place printer badk to original order, just reverse order of directions.

If you have any more questions, Please contact me at 1-800-354-0554,ext.5620.

Sincerely,

Kathleen Seery

Kathleen Seery
Account Representative
Fortune Group

REM'S
On DSK.

by K. Johnson, SFV 99ers

For those with or about to get disk systems:

To get into Disk Memory for TI99/4(A), you need:

1. TI Disk Manager Command Module (To initialize, copy, manipulate, etc.) Usually included when buying Item 2.
2. TI Disk Controller (and PE Box if it is a card type).
3. Most any 35 or 40 track diskette "Drive".

TI Disk Controller Card for the PE Box will interface with and operate most all 5 1/4" diskette drives (TEAC, Radio Shack, Tandon, Shugart, etc.)

The signal input/output connector for diskette drives is pretty well standardized by manufacturers, so there should be little trouble in just plugging it in. The drives may be "stand-alone" with their own built-in power supply or: without case or power supply to fit into the PE Box, using its power supply.

Half Size, Double Sided 5 1/4" diskette drives are available thru Terri Masters at a very reasonable price. Double Sided means you get twice as much storage per disk. Half Size means you can get two disk drives into the PE Box.

Of all the Half Size diskette drives, TEAC is the only one known which has a low enough power consumption to allow two drives to be simultaneously powered by the PE Box power supply.

Double Density is a special means of packing twice the amount of data on a disk as Single Density. Almost all late model diskette drives (as does TI Disk Manager II Command Module) will handle Double Density data but the TI Disk Controller Card can only record or read Single Density data. Hopefully some sharp technical Third Party will give TI99 a Double Density capability someday.

Most diskettes manufactured today start out as Double Sided, Double Density; but if too many disk errors are found in testing, they may be downgraded and sold as Single Density or Single Sided or both. Providing there is a slot in the diskette jacket on both sides for the read/write heads, you may use a Single Sided diskette for writing on both sides with some risk of losing some data. However, of those known to be doing this, there has been no report of any problems.

When using Disk, the Controller (PE Box) power must be turned on first or at the same time as the computer console. When the computer first "boots up", it looks for a signal from a disk system. If it doesn't find one then, it is always assumed there is no Disk. Even if the controller is turned on later, the computer will get confused and lockup if access to DSK is tried. So, if you type in a program and find you forgot to turn on the disk system first, then you will have to SAVE to cassette, re-power up in the right sequence, load from cassette and then SAVE to disk.*30*

THIRD PARTY HARDWARE

by Roger Crampton

In the weeks following Texas Instruments' surprise announcement that it was leaving the home computer market, crowds of TI-99 owners were frequently seen gathered around the leftover and mostly depleted T.I. displays. In fact, you may have been a member of that crowd, trying to buy that final piece of TI hardware that would permit you to use your computer as a word processor or in your business. The shortage of Extended BASIC modules and 32K memory cards left many enthusiasts with partial systems, not quite capable of using some of the better programs. That new printer was of little use without an RS-232 card, nor were spreadsheet applications practical without memory expansion and some means of producing hardcopy.

Thousands of TI-99 owners were disappointed when they found their local K-Mart totally sold out of everything except Munchman modules. Their plans to gradually expand their system as finances allowed were shattered. Several local users' groups established hot-lines to keep track of where the last peripherals could be found, and the crowds surrounding the computer counters at J.C. Penny's became larger and angrier.

The anger of course wasn't directed at the retailer or the machine, but at the company that seemed to have abandoned the TI-99 enthusiast. Remember the Wafertape drives and the inexpensive combination printer/plotter that TI advertised in many national magazines? Unkept promises such as these caused a bitter taste among owners of incomplete systems, and some choice words were heard describing a new attitude toward the Texas Armadillo Manufacturing Company (and other Texas Companies that were previously admired by computer hackers.)

But in our haste to purchase additional TI-produced hardware for our now obsolete but still loved(?) TI 99/4 computers, we may collectively have shot ourselves in the foot. Our knee-jerk reaction to the near panic that followed the infamous October 31st announcement may have resulted in the acquisition of what will perhaps turn out to be inferior equipment.

Had we waited just a few months, we could have completed our systems with superior peripherals, and at less cost. The new third-party equipment has appeared and initial reports are enthusiastic and encouraging.

Some marketing experts have concluded that the primary reason for the TI-99's economic failure was the company's emphasis on cheapness rather than quality. Owners of the TI-99 have few doubts concerning the machine's quality, and those fortunate enough to have acquired the console for less than a hundred dollars are especally aware of the tremendous bargain that they made.

But TI's marketing strategy did not include making the peripherals inexpensive. Profits from software and hardware were heavy, but the stategy backfired, since it depended on an enormous base of console owners, all purchasing other equipment from the only game in town. Neither did TI encourage third-party harware manufacturers to develop new or improved products to enhance the basic TI-99/4A system. Their intention of cornering the market was similar to the well known "razor-blade" strategy-- give the razor away, but make certain that only your blades will fit in it.

Now that TI has officially departed the low end computer marketplace, it seems that "Third Party" manufacturers have suddenly appeared like moths emerging from their chrysalides. New memory expansions, mother boards, printer interfaces, command modules (some re-programmable), and inexpensive printers are appearing with regularity in the advertisements in 99er (now HCM, et tu Brutus?) and Enthusiast magazines.

Remember when you had no choice in disk drives except the single-sided, single-density type? With TI gone, at least two companies, MYARC and CORCOMP, are manufacturing controllers that will allow you to use just about any combination of disk drives that you want. Can you imagine connecting <u>four</u> DSDD drives to your little TI-99? That's over a million bytes of storage!

Of course, the quality of these new devices remains to be seen, but if past experience is an accurate predictor, quality should compare favorably with the over-priced Texas Instruments peripherals and software. And in many ways, the third party devices are far superior because they include innovations that T.I. seems to have deliberately ignored. For example, T.I.'s advertisements never mentioned the capability of expanding memory by 128K, or of adding 64K of non-volatile RAM, both innovative pieces of hardware which have been available from "third-party" developers for several months. (Perhaps the term "third-party" is also obsolete. Now that TI has removed itself from the picture,

"second-party" seems more appropriate.)

For the brief years that the TI-99 was manufactured, TI owners were victimized by the myth that disk drives, RS-232's, and memory cards made by Texas Instruments were somehow superior to those produced by other companies. It is becoming painfully apparent now that a Tandon 100 disk drive at $199 works equally as well as a Tandon 100 with the TI logo on it and a $299 price tag. An Epson printer with a TI decal attached is not worth the extra hundred dollars, nor is a GE cassette recorder's performance improved when the letters TI are stamped onto its case.

The myth of TI's superiority has been burst, and new opportunities are available to TI-99 owners whose systems are as yet incomplete. Of the two million plus TI-99 hobbyists, probably less then half use a disk-based storage system, and the market for printers is nearly as large. The new direct-connect printers that do not require an interface will be popular as a means of adding a fhard copy capability to a basic TI-99 system. Letter quality printers using a stand-alone RS-232 interface are now available, and the cost has come down to the affordable range. A new assembly language word processing program, the COMPANION from Intelpro of Canada, is an alternative to the module-based TI-Writer, and is superior to TI-Writer in many ways.

The future of the TI-99/4A seems bright indeed, as each month brings news of innovative and inexpensive products from third-party companies. There are even published rumors of two completely new consoles that will be fully compatible with the TI-99 but include many very advanced features.

The little TI-99 that started out as a glorified game machine is finally becoming a full-featured machine, but it had to become obsolete first.

##

A THANK YOU TO ESJC

For the 16 months of our Users' Group's existence, we have been very fortunate to have an ideal meeting place at no cost to the group. The Science Building at ESJC has been our home on the second Tuesday of every month, and we would like to take this opportunity to thank ESJC and its president, Dr. Joe Talmadge, for their hospitality and kindness.

Everything about ESJC makes it a perfect meeting place:

1. It is accessible for wheelchairs, so Charlie can race around and do wheelies at the meetings.
2. The raised seating provides a clear view for everyone to see demonstrations of programs at each meeting.
3. The college lets us use their television sets for monitors, thereby eliminating carrying heavy TV sets to the meetings. We also use their roll-around carts and extension cords.
4. Blackboards are available for our tutorials in programming.
5. The college is clean, pleasant, has well-lighted parking lots, and is generally a nice place to meet. It also doesn't cost our meager treasury anything.

Again, our most appreciative thanks to Enterprise State Junior College for its help and friendly cooperation for the last 16 months. Without ESJC it would have been much harder to get organized and become such a successful Users' Group.

++

Laws of computer programming-- #1

IF AT FIRST YOU DO SUCCEED-- TRY TO HIDE YOUR ASTONISHMENT.

++

$$$

Here is the shortest complete game that you'll ever see for the TI-99. A complete game in only 4 lines of programming. Use the space bar to drop bombs from the moving airplane, see how quickly you can destroy all of the barrels of enemy fuel. Runs in extended BASIC only. (Courtesy of Jean-Pierre Pelletier)

```
90 REM VOICI UN JEU COMPLET DE 4 LIGNES SEULEMENT.....J.PIERRE PELLETIER
100 CALL CLEAR :: CALL HCHAR(23,2,30,30):: CALL COLOR(9,4,4):: CALL HCHAR(24,1,9
6,32):: CALL SPRITE(#1,43,2,35,256,0,-10)
110 CALL KEY(0,K,S):: CALL SOUND(-1000,-3,0,200,10):: IF S=0 THEN 110 :: CALL PO
SITION(#1,XX,YY):: AA=XX :: CALL SPRITE(#2,46,2,XX,YY)
120 AA=AA+4 :: CALL LOCATE(#2,AA,YY):: IF AA>=21*8 THEN CALL SOUND(100,-7,0):: C
ALL POSITION(#2,R,S):: CALL HCHAR(23,S/8+1,32):: AA=0 :: CALL DELSPRITE(#2):: GO
TO 110
130 CALL SOUND(-100,-3,0,2000-(AA*4),10):: GOTO 120
```


SMART PROGRAMMING GUIDE™ FOR SPRITES **5.95** Plus Shipping

This guide will show you some of our professional programming secrets on how to: Use CALL PEEK • Get sprites to pick up objects, eat dots and lay down a trail. • Shoot sprites without missing a coincidence. • Make one sprite chase another. • Easily convert sprite rows and columns into graphic rows and columns and visa versa. • Generate moving sprite patterns. • Use 3 different CALL KEY or CALL JOYST examples for moving sprites. • Write a GENERAL BAR GRAPHING program (to one pixel accuracy) that shows you sprites aren't just for games.

Full of fast running and Byte saving examples that you can use in your existing programs or combine together to write your own programs. Each example program is fully documented in a step by step method that is easy to understand. A TI 99/4 or 99/4A computer and the extended basic command module are required.

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BUBBA.

The NEW CorComp
99000 EXPANSION SYSTEM

The NEW CorComp

99000 EXPANSION SYSTEM

Available approx mid April 84' **Approx** suggested retail price 549.95

This is a BRAND NEW ultra modern Expansion System designed for the TI 99/4A and for the new CorComp 99000 computer system. It is about half the size of the current TI Peripheral Expansion box but contains twice the power.

Along with the built in powerful System Motherboard that contains the following items, this unit will house two half high disk drives or one full height disk drive.

1. Flex cable interface that is a **small** round cable (not a fire hose) that hooks into the side of the TI 99/4A via a **small** L type connector.

2. RS232 Interface with 2 serial ports and 1 parallel port. The serial ports are TI compatible and the parallel port is a true Centronics output. This allows you to hook up most printers, plotters and modems.

3. 32K of Expansion RAM which will allow you to run TI MULTI-PLAN, TI LOGO, TI WRITER, TI FORTH, PLATO and TI Assembly Language programs as well as larger and more powerful Extended Basic programs.

4. Double-sided Double-density disk controller that will control up to 4 disk drives. This controller has the same powerful features as the 9900 disk controller card for the TI expansion box. (See the sheet on this controller card)

5. Specially designed power supply for low heat and high power. This power supply can easily handle the System Motherboard, 2 Slim Line disk drives and the future auxiliary cards that can be mounted to the motherboard.

6. This motherboard also transmits the system status to the graphic display panel for the following items. Flex cable interface, RS232 interface, 32K RAM, Disk Controller and for **many** other items.

NOTE: More information on the 99000 EXPANSION SYSTEM will be released at a later date.

CorComp Incorporated 23461 Ridge Route Drive, Suite H • Laguna Hills, California 92653

The NEW CorComp
9900 MICRO-EXPANSION SYSTEM

The NEW CorComp

9900 MICRO-EXPANSION SYSTEM

Available end of March 84'

This unit is about the size of two Speech Synthesizers put together (approx 5"W x 5.5"L x 2.8"H) and it can be purchased in the following ways. As a stand alone RS232 only or with the 32K RAM and Double-sided Double-density Disk Controller card installed into it. The 32K RAM and Disk Controller card may be purchased separately and each is easily installed into the Stand Alone 9900 Expansion box.

Suggested retail price:

RS232 Stand alone unit only 149.95

RS232 Stand alone with 32K of RAM and
a Double-sided Double-density disk controller ..... XXX.XX
32K RAM / Disk controller card for RS232 Stand alone box ..... XXX.XX

1. This unit provides an economical method of expanding the versatility of the TI 99/4A home computer. It plugs directly into the side of the computer and eliminates the need for a large expansion box.

2. The RS232 allows both serial and parallel interfacing for printers, plotters and modems.

3. The Disk Controller portion of the 32K RAM / Disk Controller card has the same features as the 9900 Disk Controller card for the TI Peripheral Expansion box. (see the sheet on this controller card)

4. The 32K of memory that this optional board adds to the computer will allow you to run TI LOGO as well as larger and more powerful Extended Basic programs. If you add a disk drive to this unit you can then run TI FORTH, TI WRITER, TI MULTI-PLAN, PLATO and TI Assembly Language programs.

CorComp Incorporated 23461 Ridge Route Drive, Suite H • Laguna Hills, California 92653

The NEW CorComp
9900 DISK CONTROLLER CARD

The NEW CorComp
9900 DISK CONTROLLER CARD

Available end of March 84' Suggested retail price 199.95

1. Fits in any TI Peripheral Expansion box.
2. Will control up to 4 Double-sided Double-density disk drives which can be accessed as DSK1 or in lower case as dsk1.
3. Allows you to mix your drive types:
   Half high drives (slim line type) with
   Full height drives
   Single-sided Single-density through
   Double-sided Double-density.
4. Each Double-sided Double-density (DS DD) drive will store 360K Bytes of information. With two DS DD drives hooked up you will have 720K of on line storage. With four DS DD drives hooked up you will have 1.4 Megabytes of on line storage.
5. The tests to date have shown that this Disk Controller will load files 2-4 times faster than the TI Disk Controller.
6. The Disk Manager program for this card will come on a 5¼" floppy diskette. This program has many new enhancements added to it over the Disk Manager cartridge. This Disk Manager will also allow you to Load and Run assembly language programs such as TI FORTH without using the Editor/Assembler module.
7. This Disk Controller also adds the following new commands and programming statements to the computer:
   CALL PEEK(address,v,v,v,.....v) peeks into CPU RAM
   CALL POKE(address,dv,dv,.....dv) pokes into CPU RAM
   CALL PEEKV(address,v,v,v,.....v) peeks into VDP RAM
   CALL POKEV(address,dv,dv,.....dv) pokes into VDP RAM
   CALL MGR loads and runs the disk manager program.
   CALL EXEC(address) executes machine language code in ROM or RAM
   CALL MOVEM(type#1-4,from address,to address, # of bytes to move)
   this will move blocks of memory from one location to another.
   type#1-4 can be numeric variable or direct number:
   1 = Move from VDP RAM to VDP RAM
   2 = Move from VDP RAM to CPU RAM
   3 = Move from CPU RAM or ROM to VDP RAM
   4 = Move from CPU RAM or ROM to CPU RAM
   Note: v can be a numeric variable or **string** variable!
   d can be a direct number or **string**!
   address can be a variable or direct number.
   single dimension numeric and string arrays may be used.
   numerics and strings can be mixed in the same CALL.
8. This card also has provisions for setting the head seek (step) times for all four of your drives. This will allow you to use some of the faster disk drives that are currently available.

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