

SouthWest Ninety-Niners

May 1990

P.O. Box 17831 Tucson, AZ 85730

OFFICERS

- BJ Mathis - President
- Tom Wills - Vice President
- Ed McCullough - Secretary
- Larry Newman - Treasurer

NEWSLETTER

BJ Mathis - Editor

LIBRARY

- BJ & Jack Mathis - Co-Chairmen
- Ida McCargar - Fairware/Lending Librarian



ATTENTION MEMBERS!!

Next meeting, Thursday, May 3rd at Devon Gables Health Care Center in the Executive Dining Room at 6150 E Grant across from the Price Club at 7pm. SouthWest Ninety-Niners Show & Tell will be the theme for this meeting.

WORKSHOPS

GENEVE USERS

Second Tuesday of each month at 7:30pm (May 8th). THIS MONTH at Tom Wills' home - 6925 E Kingston Dr - 886-2460.

GENERAL USERS

Third Tuesday of each month (May 15th) at 7:30pm. Mathis' home - 5941 E 26th - 747-5046.

ADVANCED LANGUAGES

Fourth Tuesday of each month (May 22nd) at 7:30pm. Rod Stallard's home - 7575 E Logan Dr - 745-6071.

**The Cactus Patch**

◆ SYSOPS ◆  
DAVE ORMAND  
◆ AND ◆  
TOM WILLS  
24HRS/7DAYS  
PARITY=8N1  
PARADIGM SYSTEM

**602-290-6277**

OOPS!

Last month we published an article about the FCC imposing surcharges on modem use. Further research has shown this article was an old one that had been started on the rounds again. The information was incorrect. Sorry about that!

.....BJ

THE PICNIC

Hopefully, this newsletter will arrive in your mailbox in time to remind you of the SouthWest Ninety-Niner Picnic at Larry Newman's on April 28th at 4pm. A map was included in last month's newsletter. All members and their families are invited. Paper plates, cups, and utensils will be provided. Please bring folding chairs, tables (if you have any), beverage, and something to share with the rest of the SW99ers. Call Larry at 299-2092 or BJ at 747-5046 if you need help finding his house, or have any questions.

**SOUTHWEST 99ERS  
PICNIC!**

**APRIL 28TH - 4PM**

**3818 LIZARD  
ROCK PLACE**

**299-2092  
LARRY or SUE**

## APRIL SW99ERS' MINUTES

Thursday April 5, 1990



1. New members Ken McLay, Iip & Stephanie Wagner were introduced to the group. Two visitors, John Campbell & Harry Detwiller, joined later in the evening, and new member Richard Baron arrived, later.
2. The annual picnic will be held at the home of Larry Newman on April 28 at 4:00PM. The address is 3818 Lizzard Rock Place.
3. Due to other commitments for the Mathis family, the General Users Workshop for April will be held at the Les Neff residence - 4242 E. 6th St.
4. Beginning April 22, the new telephone number for The Cactus Patch will be 602/290-6277.
5. Ida McCargar advised the group that GENie is offering free registration during the month of April.
6. Ed Hallett initiated a discussion with the objective of making software available to the members at the lowest possible cost, thereby increasing the service to the membership. He asked for a cost analysis to determine if the cost of software from the Disk Library can be reduced. After some discussion, it was the consensus that the minimum balance for the club banking account should be that which would operate the club for one year, if all income should cease.
7. There is a rumor resurfacing regarding a proposal by the FCC to impose a surcharge on the use of modems. We will try to have a realistic report on this at the next meeting.
8. CompuAdd has offered to grant a discount to club members who make purchases in their store. We must show our membership cards to obtain the discount.
9. BJ Mathis presented a demonstration on graphics, starting with construction of Basic and EXBasic characters. Several program were shown which demonstrated the use of graphics, speech and music.

*Ed McCullough, Secretary*

## DISK-OF-THE-MONTH APRIL 1990

by *Ida McCargar*



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).

Cassettes are prepared each month for members with "cassette only" systems. The COMs are FREE to "cassette only" members who attend the membership meeting each month or for \$1 as outlined above for DOMs.

April's disk contains an assortment of programs - printer utilities, programming utilities, music, games and graphics. You will also find the Documentation for the latest TIPS program, v1.5, which was evidently defective on last month's disks. Have fun!

.....Ida

## LIBRARY NEWS



The following disks have been added to the Library.

- #508 FRACTIONS+ - Fractions and mixed numbers. A program to check work and provide drills in all functions. Plus a timed test for estimating answers. Runs in IB. Can be adapted for cassette. By Don Shorock.
- #509 BASEBALL/AMERICAN LEAGUE - Team Logos in TI-Artist P files. By Deanna Sheridan. Send her at least a note of thanks, or a small contribution if you use this program.
- #510 BASEBALL/NAT'L LEAGUE - Logos of Nat'l League teams. Jiffy Card borders also on this disk. By Deanna Sheridan.
- #511 GROCERY MANAGER - A very elaborate system for tracking your grocery supplies and compiling shopping lists. By Bartley Busse.
- #512 QBASE v1.0 - A "Quick and dirty" Data Base program for those times when you don't need a formal DB manager like PRB or TI-B. Also for those who never really learned to use the others. This one is EASY! By Bill Sponchia. He asks \$10.
- #513 ARCADE GAMES #1 - from Program Innovators. Arcturus, Elephants, Fences, Freeway, Body Snatch, Martians, Skeeters, and Looney/Lan(Basic only). They ask a paltry \$3.00.
- #515 ARCADE GAMES #3 -Backgammon, Bullfrog, Katzenous, Klaatuu and Krunch (Basic), Klingons, TItris, Inviders. Also from Program Innovators.
- #516 ARCADE GAMES #4 - 4 in a Row, Bonkers and Awari (Basic), Cockroachs, ICBM, Interstate, SP-Pirate, War Lords. Same as above.



NEW\*FILES - All new uploads will go to this section;  
UTILITIES - All utility programs, such as Disk Managers;  
GAMES - TI and Geneve games;  
GENEVE - Files for the Geneve only;  
MUSIC - All music programs;  
TI-99/4A - Files which can run on the TI-99/4A ONLY;  
GRAPHICS - TI Artist, Graphx, etc. type files;  
WRITER - TI Writer application files

## SHORT LIFE HISTORY



James G. Shoun/Sheila H. Shoun  
9/18/26 2/22/37

Winter Quarters: #714-4555 So. Mission Rd #714  
Tucson, AZ 85714  
Phone 602-889-8953

Tom has been heavily involved with Cactus Patch as it's CoSysOp since his arrival in Tucson in December of 1988. Prior to that, Tom ran the Paradigm software (the software Cactus Patch uses) in Sheboygan, Wisconsin, where he operated the Nearer The Lake BBS for the Sheboygan Area 99'ers User Group. Nearer The Lake operated on a Geneve using a 20 megabyte Seagate ST225 harddisk. Tom has had the experience needed to make the upgrading of Cactus Patch a success.

Not only has Tom been a SysOp of a Paradigm BBS system, he has also be involved in helping the authors, Mike Kiable and Travis Watford, code sections of the software. a number of the enhancements to PBBS are because of Tom's dedication to the TI/Geneve computers and the BBS system he was using.

A new version of the PBBS software is expected to be arriving any day now. When it does, Cactus Patch will be operating under PBBS version 3.50, with all the needed enhancements required to operate under a Harddisk configuration.

Why do we need to upgrade Cactus Patch, and what is it going to cost the user group? Good questions. The subject of the harddisk has been brought up before, but the cost of upgrading was always too expensive. We are getting the HFDCC for \$194 and the ST225 harddisk for \$150. Just 6 months ago, this would have cost us \$270 and \$235. A substantial savings indeed. The prices are at an all time low, and will probably not remain at these levels, so it was felt now was the time to act.

As to the costs listed above, the users of Cactus Patch are being asked to foot the bill. And to help defray the cost, the obsolete equipment, obsolete due to the upgrade, will be sold. This will make up most of the cost. So far, Cactus Patch members have pledged \$80 to the upgrade fund. The user group treasury should not have to put forth one penny of the expense. The users, who will benefit from this upgrade, will shoulder the costs. This is the way it should be.

If any user group member has any questions as to this upgrade, or wishes to pledge some money to the cause, contact Cactus Patch's new SysOp, Tom Wills. He will be glad to answer any questions you may have.

We have 3 children. Gary is 42, and has 2 boys - Jim 22 and Jerrod 20. Gary is the Brand Commissioner of the Brand Board, you know, in charge of rustling in Colorado. Steve is 39, and has 3 children - Steve 18, Brandy 16, and Seth 7. Steve has 21 years in with Ma Bell now U.S. West. Wendy is 32, and has 3 children - Jocelyn 11, Lauren 9, and Luke 6. Wendy is a registered nurse in Canon City, Colorado. She is married to a great fellow, Larry 33, an Electric Diesel Mechanic at one of the coal mines.

Sheila came from England, she was an ice skater and auditioned for a job with the Ice Capades. She received a two year contract, stayed with them five years and retired, stopping in Denver to make her new home. She says "What does a skater do when you don't know anything else?" A friend suggested she get a cocktail waitress job at the Quorna Restaurant (a very nice restaurant and just happens to be across the street from the capitol). Now is where fate comes in. I was the Executive Pilot for Colorado at the time, spent a lot of time at the Capitol and the nicer restaurants and the rest is a short story. Sheila went on to be a great secretary for Atlas Aircraft, the Rocky Mountain Distributor of Piper Aircraft. Then to Aircraft Radio, as Secretary to the boss, they repair and install instruments and radio's in most of the aircraft in the west, jets included.

I retired as Director of Colorado Air Transport in 1980, flew for 6 sitting Governor's, over 20,000 hours, 5000 prisoners and mental patients. I have been in every state in the continental 48 every month of the year. I was awarded the "Job Well Done" by Senate and House Joint Resolution, unanimously by 100 legislators. I was one of four people to have received the award up until I retired, and since have been Sargeant At Arms for the Colorado State Legislature, as well as Division Manager for United Security of Omaha Nebraska. I started out as a cowboy, cattle buyer, and feed lot owner. Did time in the United States Marine Corps. Graduated from Colorado A.&M., now known as Colorado State University. I belong to the Sigma Chi Fraternity. I am a past Commander of the Knights Templar (Masonic organization), a past president of the Rotary Club, past president of the Fremont County Cattleman's Assoc. I was awarded the "Safety Pin" by F.A.A. and the "Million Mile" Safety award by AOPA (Aircraft Owners and Pilots Association).

My hobbies include carpentry, plumbing, electricity, my TI computer (mostly TI Writer and Multiplan. I have been a member of SW99ers nominating committee and the Fest-West '90 committee.

Sheila's interests are, of course, dancing, plus, sewing, knitting, crochet, TI Writer and Multiplan. She has worked for Pima College as data input, part time. She takes care of me, full time.

We have a TI with PE Box, Speech synthesiser, Panasonic KX P1080i printer, Avatex 1200 Modem, an adequate book and disk library and 18 modules. I think we need a widget.

I am afraid I haven't told you everything but it seems to much to print in that little space anyway. Goodbye!  
Sheila/Jim Shoun.

## SECTOR 1



*by Curtis Alan Provance  
Paragon Computing  
from New Hampshire 99ers*

Before we actually add any files to the disk, take another look at sector 0. It should look something like this:

```
424C 414E 4B20 2020 2020 C168 0944 534B
2028 0101 0000 0000 0000 0000 0000 0000
0000 0000 0000 0000 0000 0000 0000 0000
0000 0000 0000 0000 0300 0000 0000 0000
0000 0000 0000 0000 0000 0000 0000 0000
0000 0000 0000 0000 0000 0000 0000 0000
0000 0000 00FF FFFF FFFF FFFF FFFF FFFF
FFFF FFFF FFFF FFFF FFFF FFFF FFFF FFFF
... (the rest are all FFFF's)
```

To refresh your memory, the lone 0300 in the middle of the block means that sectors 0 and 1 are currently in use.

```
sector 7654 3210 FEDC BA98
9999(hex) = 0000 0011 0000 0000(binary)
```

Now, lets add some files. Enter the following program in Extended Basic - but don't run it until AFTER you save it. Save it under the name DSX1.TESTPROGRM:

```
100 OPEN #1:"DSX1.TESTFILE1
110 OPEN #2:"DSX1.testfile2,RELATIVE
120 OPEN #3:"DSX1.TESTFILE3,INTERNAL
130 FOR K=1 TO 200 :: PRINT #1:X :: PRINT
#2:X :: PRINT #3:X :: NEXT X
140 CLOSE #1 :: CLOSE #2 :: CLOSE #3
```

Save the program, then run it (it takes a few minutes to run) then delete the first files as follows:

```
DELETE "DSX1.TESTFILE1"
```

Load your disk editing program and look at sector 0 again. It should look like this:

```
424C 414E 4B20 2020 2020 C168 0944 534B
2028 0101 0000 0000 0000 0000 0000 0000
0000 0000 0000 0000 0000 0000 0000 0000
0000 0000 0000 0000 3700 0000 FCFE FFFD
FFFE FFEF FFDF 0700 0000 0000 0000 0000
0000 0000 0000 0000 0000 0000 0000 0000
0000 0000 00FF FFFF FFFF FFFF FFFF FFFF
FFFF FFFF FFFF FFFF FFFF FFFF FFFF FFFF
... (the rest are all FFFF's)
```

The only information available in this sector is what parts of the disk have been used. We can see from the part that I underlined that sectors 0, 1, 2, 4, and 5 are used:

```
sectors 7654 3210 FEDC BA98
3700(hex) = 0011 0111 0000 0000(binary)
```

Go to sector 1 by pressing the control key and M at the same time. You will see the following:

```
0005 0002 0004 0000 0000 0000 0000 0000
(the rest are all zeros)
```

What this means to the disk manager is that the header for the first file may be found in sector 5, the next header in sector 2, and the last header in sector 4. The order of the header files is determined by the ASCII value of the characters in the name. Press CONTROL M to go to sector 2.

Press CONTROL A to view the screen in ASCII mode. The header should start with the word TESTPROGRM. This is the first file you created on the disk. (when you saved the program BEFORE running it). The disk manager typically reserves the first 32 free sectors for file headers - and since sector 2 was available, that is where TESTPROGRM's header was loaded. We'll check out header sectors next month - for now, press CONTROL M to go to sector 3.

Now you should see TESTFILE1. YES! You did delete the file - but everything that was in the file (including the header) is still on the disk. When the disk manager "deletes" a file, it simply removes its header number from sector 1 and changes the appropriate bits in sector 0 to show that the sectors that were once occupied by the file are available again. This has the effect of making the file invisible without having to physically erase every sector. This also makes recovering an accidentally deleted file a lot easier (subject for later discussion). Press on ... (with CONTROL M) to see sector 4 - DSX1.testfile2.

This file was also created before TESTFILE3 (found in sector 5) but in ASCII, the lower case letters are found after ALL the upper case letters. Therefore, a file name of ABC would be found after a file called XYZ. However, the ordering of the files isn't critical - as we will see now.

Press enough CONTROL B's to go back to sector 1. After the 0004 block, change the next 0000 block to be 0003 (do this by using the arrow keys to move the cursor over to the last 0 in that block - then press 3). Now press CONTROL W and ENTER twice. This will write the revised sector back to your disk. If you really want to you can put TESTFILE1 back in its right place by changing the 5 to 3, the 2 to 5, the 4 to 2 and adding a 4 on the end:

```
0003 0005 0002 0004 0000 0000 0000 0000
```

then write out the sector the same way.

Press CONTROL B again to go to sector 0. At this point, you will have to take my word for it, but all those FFEF's etc. in the middle of the sector should be FFFF's. Move the cursor down to the fourth line near the end (where the F's start). Press the capital F key and hold it down long enough to go through the 7. Now write this sector to disk with a CONTROL W and two ENTERS.

Press FUNCTION 4 to go back to the main menu and select the disk directory. When you catalog this disk, you will find that TESTFILE1 is back with all its original information! I should mention that we did the restore the hard way - you could have gotten TESTFILE1 back simply by adding its header sector to sector 1 and then using any copy program to copy it to another disk!

Enough magic for this month. Next month, we'll learn what's in a header files and devise a way to tell whether or not a "deleted" file has been overwritten by new material.

## **MECHATRONICS 80-COLUMN CARD AVAILABLE**



*Chris Bobbitt - Asgard*

If you are TI-99/4A user, you are probably aware that the Mechatronics 80-column upgrade device was discontinued 6 months ago. However, I'm pleased to announce that by special agreement with the developer, and the firm that acquired the rights to manufacture it from Mechatronics, this solid piece of German engineering is now available again!

This 80-column device is the easiest to install video upgrade available for the TI-99/4A. Upgrading to 80-columns with this enhancement requires no other peripherals into it. Plug your monitor cable into the

special connector in the back and you instantly have a beautiful, high-resolution display! Because the new manufacturer added circuitry to improve the video display. The picture is as clear on a \$50 composite monochrome monitor as it is on a \$1000 VGA monitor.

The Mechatronics 80-column card is compatible with virtually every TI-99/4A program, and functions well with almost every program designed for use with an 80-column device or in the TI mode of the Geneve. Anyone who does word processing, telecommunications, or spreadsheets will appreciate doubling the width of the screen. You'll never have to window over in TI-Writer again! New 80-column software is coming out almost daily, making this an even better value. The next generation of TI software will require an 80-column device, and the Mechatronics 80-column card is one of the best around, if not the best.

Users familiar with the device's previous incarnation would be pleased to note that a new, more detailed manual for it has been written, the software included with the device has been substantially upgraded, and the internal program code has been vastly improved. All in all, the new manufacture has paid strong attention to detail, ease-of-use, and versatility.

Finally, while the original card cost over \$250, we are pleased to be able to offer it for only \$200, plus \$10 S&H. Considering the cost of acquiring another computer capable of doing high-quality, VGA and Amiga-like graphics possible with the Mechatronics 80-column card and its 9938 Video processor, it makes much more sense to upgrade your TI than to buy another machine and start all over. This device will help carry your TI into the '90s with style.

At the moment, the manual is being translated from the original German, and we are taking orders. If you are interested in purchasing this device, only send your name and address, and we'll contact you when it is available. If you would like to receive it as soon as it arrives, send a post-dated check or credit card number and expiration date (add 7% for Visa/Mastercard), and we will ship yours the moment they arrive from Germany.

Please note that in order to get this special price, we need to order a minimum quantity from the manufacturer, hence we won't be able to place an order until a certain number of orders have been received. If you'd like to do your part in bringing this useful addition back into the TI world, send us a postcard expressing your intention to buy it when it is available, or an order, today.

This product carries a 90-day warranty. Most parts are socketed, hence it can be serviced after 90-days by any reasonably competent technician, or returned to us for servicing for parts plus labor.

To order, send to:

Asgard Peripherals  
PO Box 10697  
Rockville, MD 20849  
(703)255-3085

A subsidiary of Asgard Software (of course).

Addendum: Custom cables and special software packages are available to purchasers of this device at a reasonable cost.

## HEATHKIT SK-203 PRINTER-BUFFER

by George Tony - Victoria 99er

This buffer has recently been put on sale at a clearance price and is certainly a very versatile unit. It comes with 64K of memory and is expandable to 512K. It has both Serial and Parallel inputs and outputs, and may be operated straight through, crossed, or both inputs to one output. The Serial baud rate, number of data bits and number of stop bits selected for the output can be different than the input parameters. For example, I was running 4800 (701) into the unit and feeding out 500 (8N1) to a printer. It allows printing extra copies using front panel buttons, or clearing the buffer, etc. It also has a digital display showing the amount of memory currently available, and it tests the memory at each powerup. Connecting cables follow IBM conventions, which may seem odd to some TI users. DB25 Connectors are used for the PARALLEL Connectors and DB9 for the SERIAL! Of course, there are no hookup diagrams shown in the handbook for the TI, but I've made a copy of the diagrams I used to make up cables, and it's included below. These may save time if you are making up cables. My cables were shielded, although I haven't shown them to be. You can make them either shielded or unshielded. Other models of printers may require minor changes but you can consult your printer handbook for this. If you can pick one of these buffers up at a good price, I'd say "Go for it!" The kit requires lots of careful soldering, but all 34 IC's are socketted, which makes it a little easier, both for the building and for any required fault finding.

### TI-99/4A to Heathkit SK-203 Buffer

PIO Output	Signal	SK203 In(Par)
1	STROBE	1
2	DATA1	2
3	DATA2	3
4	DATA3	4
5	DATA4	5
6	DATA5	6
7	DATA6	7
8	DATA7	8
9	DATA8	9
10	BUSY	11
11	GROUND	18
16	GROUND	19 to 25

RS232 Out	Signal	SK203 In(Ser)
1	GND	5
2	RD	2
3	TD	3
6	DSR	4
7	GND	5
20	DTR	6

### Heathkit SK-203 Buffer to Parallel Printer Cables

SK203 Out	Signal	Par Printer In
1	STROBE	1
2	DATA1	2
3	DATA2	3
4	DATA3	4
5	DATA4	5
6	DATA5	6
7	DATA6	7
8	DATA7	8
9	DATA8	9
10	ACX	10
11	BUSY	11
18 to 25 inclusive	GROUND	15,17,19,20 to 29 inclusive 30 to 36 have no connection

Note: Some printers have 5 volts on pin 18 of their input connector - Do not ground!

### Heathkit SK-203 Buffer to Serial Printer Cables

SK203 Out	Signal	Ser Printer In
2	RD	2
3	TD	3
4	DSR	6
5	GROUND	1,7
6	DTR	20

Note: Above for printers with DB25 Input Connector. Printer input pin 6 may not be required.

### Heathkit SK-203 Buffer to Radio Shack CoCo Serial

SK203 Out	Signal	Ser Printer In
3	DATA	4
5	GROUND	3
5	BUSY	2

(4 pin DIN connector)

## HARD DISK, II, WRITER & PRBASE?

by BJ Mathis



I have a TI-99/4A with a MYARC HFDC and a 40 meg hard disk. I would like to use BA-Writer with it. So far I have found I have to put the BA-Writer files in the root directory in order to use them. Jack managed to put them in their own directory and get them to run. However, I found that even when working with very short files the buffer would not

always clear so that when I worked with a file, then loaded and saved another short file, the information from the two files would get intermingled. This happened even if I purged the files in between saving the first file and loading the second.

So, BA-Writer was put into the root directory. Now, files over approximately 50 sectors will do the same thing the short (17 sector files) were doing.

Does anyone have any suggestions? I have tried TI-Writer V4.2, also. No luck at all getting it to load from the hard disk. I haven't tried FunnelWriter, I would like to be able

to continue to use BA-Writer.

I am also, having trouble with PRBASE files. I can load the data files into PRBASE, delete any record, change data, or enter new data into a deleted record. Deletions work fine, however, not all changes or new data entered into deleted records will save to disk.

If anyone has any suggestions, hints, etc. for those of us with TI's and hard disks, please let me know by writing care of the SouthWest 99ers address, calling me or Jack at (602)747-5046, or publishing the information in your own newsletter.



## 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 capability with the TI-99/4A computer. Only computer related items will be accepted for publication in this newsletter.*

TI-99/4A Console \$25; Expansion Box w/32K, TI Controller, SSSD drive, & RS232 \$250; TI-99/4A Color Monitor \$100; TI ExBasic \$25; Multiplan \$10; Adventure w/disk, Hunt the Wumpus, Jaw Breaker II \$4 ea; Parsec \$3; Personal Real Estate, Household Budget Management, Home Financial Decisions, Securities Analysis, Early Learning Fun, Munchman, Hangman, The Attack, Tombstone City, Chisholm Trail, Car Wars \$2 ea. Books: Compute's Guide to TI-99/4A Sound & Graphics, Programs for the TI Home Computer, Games TI's Play, Texas Instruments Software Development \$3 ea; 36 Texas Instruments TI-99/4A Programs for Home, School, & Office, Free Software for Your TI-99/4A, Compute's Programmer's Reference Guide to TI-99/4A \$2 ea. Call Jack or BJ (602)747-5046.

Parsec \$4. Donkey Kong \$8. Call Dick Paschal (502)790-4779.

Complete TI System, Console, PE Box w/all cards, 12" B&W TV, TI Printer, Speech Synthesizer, Cartridges and books. \$400 takes all. Call Les Neff (602)327-6437.

TI-99/4A Console, TI-99/4A Monitor, Axiom Interface, Personal Real Estate, Home Financial Decisions, Home Budget Management, several books, \$140 takes all. Call Ed Hill (502)744-1169.

TI-99/4A Console, Speech Synthesizer, ExBasic, Mini Memory, Cassette Player, Joystick Adapter, many other game & educational modules. \$120 or best offer for all. Call Art Gorosave 883-2303.

WANTED: Small desk or table for printer stand, reasonable price. Call Tom Wills 886-2460 or leave a message to #1 on Cactus Patch 290-6277.

TI-99/4A Console, Expansion box w/all cards, ExBasic, and 11 other cartridges (mostly games). \$300 takes all. Call Bill Williamson 586-2281 or write HCR Box 1933, Benson, AZ 85602.

Smith-Corona Fasttext 90 printer w/manual, and PrinterII (instructional software especially for this printer from McWare). This printer is mostly Epson compatible for text. Contact Pam Elliott (815)534-7790 or BJ 747-5046 for address.

99/4A Console, Expansion unit w/32K & 2 disk drives, joysticks, Speech Synthesizer, dual cassette cable, Extended Basic, Logo II, Personal Record Keeping, Hangman, Video Games 1, Munch Man, Addition & Subtraction 2, Reading Fun, plus additional modules, books, & magazines. Asking \$225 or best offer for all. Call David Keathly (214)733-1079(h) or (214)733-7097(w).

FROM SOUTHWEST NINETY-NINERS: Feb '90 Disk Library Catalogs \$1 ea. Munchman, Personal Record Keeping, \$2 ea; Printer Ribbons: Star Micronics XI-1000 Rainbow \$9, XI-2400 \$4.50, XI-1000 \$4, XI-10 \$3, Semini 10X \$1. Tractor feed 1-across mailing labels 500/\$1; Disk Labels 50/\$1; Cassette Cables \$3; Overlays \$3. Books: Home Publishing on the TI-99/4A Supplement #3 w/2 disks \$10.50; Starting Forth \$12, Pocket Guide to Forth \$5, Discover Forth \$5, Thinking Forth \$10; The Writers by Harry Brashear \$3; Using & Programming the TI-99/4A \$4; TI-99/4A BASIC Programs w/cassette \$5 - Book only \$3; TI-99/4A: 51 Fun and Educational Programs, The Elementary TI-99/4A, Compute's TI Games, Compute's TI Collection Vol 1, How to Feel at Home With a Home Computer, Computer Playground \$2 ea. Call BJ or Jack (602)747-5046.