Southwest Ninety-Niners Newsletter

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- Tom Wills -
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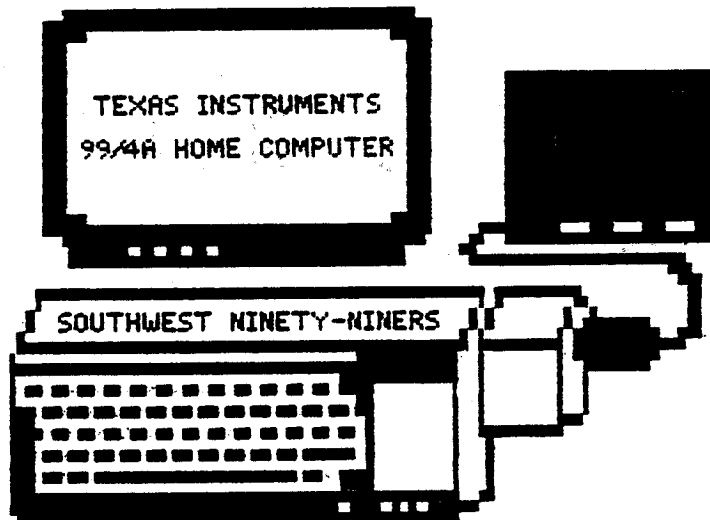
www.ti99ers.org

FEBRUARY 1987

P.O. Box 17831 Tucson, AZ 85730

Officers
BJ Mathis - President
Ed Hallett - Vice President
Dave Wolfson - Secretary
Al Armstrong - Treasurer

Newsletter
BJ & Jack Mathis - Editors

TEXAS INSTRUMENTS
99/4A HOME COMPUTER

SOUTHWEST NINETY-NINERS

ATTENTION MEMBERS

Next Meeting: February 3, 1987 at 7:30pm. Location-Tucson Fire Department Training Center on Ajo Way just west of Park. Ed Hallett will present a demonstration of some new software for a 256K Horizon RAMdisk. This software was sent to Ed by John Klulow (developer of Horizon RAMdisk).

General Users Workshop: 2nd Thursday of each month at 7:30pm (February 12th). Includes: Basic, ExBasic, Hardware/Software Problem-solving, etc.
Mathis Home - 5941 E. 26th - 747-5046

Applications Workshop: 3rd Thursday of each month at 7:30pm (February 19th). Includes: Writer, Multiplan, DataBases, etc. Mathis Home - 5941 E. 26th - 747-5046

Advanced Languages Workshop: 4th Tuesday of each month at 7:30pm (February 23rd). Includes: FORTH, Assembly Language, etc.
Rod Stallard's Home - 7575 E. Logan - 745-6071

PRESIDENT'S CORNER

Elections are over and the new officers are listed above. I am delighted to serve as your President and hope I can do at least as well as John. Ed Hallett continues as Vice President. The new faces on the officers council are Dave Wolfson as Secretary and Al Armstrong as Treasurer. We are looking forward to an active and productive year. I know we will all miss John's leadership both at the meetings and behind the scene. Wesley has been faithful and hard working. They have showed us all what it means to be active members of our group.

Please notice the changes in names and schedules for the workshops. These changes were agreed upon by the new officers council to better reflect the actual interests shown in the workshops. All the workshops have attempted a structured class situation, and have evolved into a less formal arrangement. Each class is built around the questions from the participants. Many people have expressed a desire to get into a particular workshop when they start over again. Please just start going to the workshops you are interested in. Gather your questions and come, even those you think are way ahead of you may learn something. Remember, we all had to start somewhere.

*BJ Mathis * 747-5046*

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   Bytes & Jots
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I can't guarantee all these numbers are still in operation, but they probably are as TI has been very supportive of TI-99/4A users. Perhaps you will find them useful.

TI CARES..............1-800-842-2737   TI RESPONSE............1-800-232-3200
TI SUPPORT............1-800-858-4565   SOFTWARE...............1-800-858-4075
TECHNICAL.............1-806-741-2663   MANUALS AND PARTS......1-806-741-3064

LA 99ers have announced '99 Fest-West '87 will take place on the 2nd and 3rd of May. Those interested in going should contact me for details. Jack and I really enjoyed meeting many of the BIG names in the TI community last year. We are already making plans to attend again.

An 80-column card has been developed by a firm in Germany.

The Turbo XT expansion system for IBM compatibility for the TI is being marketed by Triton. The price is $499, plus $69.95 for MS/DOS, plus $19.95 for shipping and handling. Those who need to move on to IBM, but who don't want to leave their TI behind may wish to look into this enhancement.

The editor of CinDay 99ers warns...Keep an eye on write protect tabs. They tend to become dog-eared when used, from bumping against the slot of the drive. He recently heard a horror story about one of those tabs that came loose and got into the drive.

It has become harder for those of us who like to read about the TI-99/4A to do so. As a special offer, MICROpendium will send you a sample issue free of charge, if you'll just send them your name or give them a call. MICORpendium - PO Box 1343 - Round Rock, TX 78680 - Ph#(512)255-1512. I have order forms made up and available at the meetings if you would like to subscribe ($17 per year).

MG, formerly Miller Graphics, has confirmed that it is phasing out the manufacture of its GRAM Kracker. Craig Miller of MG says the company has "had trouble delivering that product (the GRAM Kracker) since the beginning." Not being able to deliver the product on time was ruining our reputation," he notes. Craig affirms that MG is still in the TI market. "If we weren't in the 4A market, we wouldn't have sent out a new brochure with new products for the 4A."

CorComp says you cannot load the disk manager from a program. Lee Bendik says you can and here's how:
```
        100 CALL INIT
        110 DELETE "LD-CMDS"
        120 CALL LINK("MGR")
```

Asgard has introduced two new programs. "Total Filer" is a text oriented data base program by Warren Agee. "High Gravity" is a game and learning tool by Tom Wibel. Both of these programs are written in c99. "Font Writer is a graphics program by J. Peter Hodie that can use Artist, Graphx, and CSGD font and graphics, and mix text with them.

J. Peter Hodie and Barry Traver plan to form a new venture to produce software and hardware (a possible first project is an 8-port cartridge board).

Hunter Electronics' Mike McCann (author of "Business Graphs 99"), has introduced "Printer's Apprentice", a "Print Shop"-like program.

Disk-Only Software has announced the publication of a new manual called the "Orphan's Survival Handbook", which will be an anthology of both the "Best of" the TI users group newsletters as well as some brand new material for some of the brightest in the TI community.

RAPID COPY, from Texaments, is especially for those of you with MYARC disk controllers. As you may know none of the existing quick copy programs will run with this card. Barry Boone has developed a copier which will copy very fast. If you have a MYARC controller, this program is for you. RAPID COPY copies tracks (instead of sectors), yet will not copy software that uses "funny sectors" for protection.

*BJ * 747-5046*

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RAVE KEYBOARD
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by Roger Hickerson - Bayou Byte - Nov '86

The RAVE Model 99/101 keyboard was received promptly after my order was placed by telephone. I requested shipment by UPS, COD and paid $83 for the keyboard and a cover for the space left in the console when the old keyboard was removed.

The instructions from RAVE are given in easy to understand step-by-step format. Where the possibility of fatal errors occurred, a warning notice was printed, and the instructions were given in even more detail with references to illustrations to provide greater clarity.

Installation involves removing the existing 99/4A keyboard and replacing it with a PC interface. The power supply is connected to the interface and the coiled telephone cord attached to the 11/101 keyboard plugs into the interface board. The cover provided is then fastened down to cover the opening in the console.

The Model 99/101 has a 101 key layout and four setup modes. Two separate modes are command/program modes. Mode 3 is a word processing mode and mode 4 is for MultiPlan. Function key assignments differ in each mode. In all modes, there are four keys dedicated to cursor control and a 10-key numerical keypad. Mode is displayed with the SETUP key and changed with the shifted SETUP key.

In all modes 11 function keys are arranged across the top of the keyboard. The function keys are single keystroke operation which allow use of the overlay strips. Pressing the shift key converts the function keys to control codes.

The Alpha Lock key performs normally, except the position of this key has no effect on joystick operation. The two command/program modes allow the QUIT key to be defeated or implemented as a single keystroke. Mode 2 supports Editor/Assembler editing keys. Mode 1 places the quote key in the unshifted key position for ease in programming.

Due to the short time I have had the keyboard, a full evaluation would be premature. However, it receives four star ratings for ease of installation and ease of use. Users will need to review the key assignments in each of the 4 setup modes. Overall, my impression is the keyboard is a highly desirable addition to any user's system and could be indispensable for those with heavy word processing usage.

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     QS-XREF by QUALITY 99 SOFTWARE
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Review by Todd Clifton

Minimum Requirements: X-Basic, 32K RAM, 1 Disk Drive

QS-XREF is a cross reference program for TI Extended and Basic programs.   For   those
of you who don't know what a cross reference program does..read on.

A cross reference program is a utility that when run against an existing Basic
program will produce a listing of all variables, keywords, and line references in
that program.   This ability is very valuable when writing a program and you need to
isolate a variable and find out how it affects the program when run.   If you have
ever tried to find this information by reading through a listing it can almost give
you an ulcer at times. It is most valuable in disecting a program written by someone
else.

Texas Instruments came out with a cross reference program some years back written in
Basic. The programs (there were 3!) were cumbersome to run and slow. How slow you
ask? I wrote a 12K program and it took the TI program 58 minutes to produce a cross
reference printout!! The information it produced was valuable..but it had its price.
Until recently this was all that was available for the TI-99/4A.

I received QS-XREF in the mail today and was so impressed with the program that I had
to write this reveiw. QS-XREF is written in Assembly Language. It auto-boots from
X-Basic and resides in the area of CPU RAM not used by Basic programs. After the
program is loaded you have some output options. There is always a screen listing of
the references.   You may however, decide for a second listing to your printer or
disk. When you generate a disk file it puts the listing in a D/V 80 format that can
be used by TI Writer. These options are picked through a simple CALL LINK statement.
At this point you just load your program into memory using OLD.   When loaded just
another simple CALL LINK and its off and running....FAST! How fast you ask
again? The same 12K program it took the TI program 58 minutes to list, QS-XREF
listed to the screen and printer in 93 seconds!!! No more running cross refs when
its time for lunch or dinner. On my first day with this utility I produced listings
which before would have taken 6 hours in just 10 minutes. Another added bonus is
when the program encounters a variable in a line where its value is changed it marks
the variable with an asterisk on the listing. So by looking at the listing you can
not only tell where every occurence of a certain variable is, but also where its
value is changed.

I'm not ashamed to admit that many Basic tricks I've picked up over the years I've
learned by examining the programs of others. If you want to do this (and it's a
great way to learn) this program is a MUST. If you need this ability to debug or
modify programs this program is the one!

*Ed. Note: Todd has not had the opportunity to try NEATLIST (Freeware). From what
he tells me, QS-REF and NEATLIST would be complimentary to each other. NEATLIST
prints out the program listing in a special format allowing easier debugging of
Extended Basic programs and also allows printer codes and margins to be set.*

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TI99-OPOLY
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by Mark Appleby of Lehigh 99'er, Pennsylvania - Aug '86

This is the best Monopoly game ever for our computer! It was written as freeware by Ross Mudie of Australia. To play, you need: EXBASIC, 32K and a disk drive. The disk consists of a loader program which loads the seven assembly language file routines and then the 85 sector game itself. After booting the program, you will be given a menu of three options: 1. play game; 2. print rule book; or 3. read rule book on screen. The rule book includes all instructions needed to play the game. No slow routines here folks! This game is very responsive with little, if any waiting time between moves.

There are three modes available to the player:
   1. View mode - lets you see all of your deeds
   2. Transaction mode - lets you sell, build, mortgage your deeds
   3. Save mode - no need to keep the board set up. Reload your game whenever you have the time to play!

Ed. Note: TI99-OPOLY is now in the group library. The January Extended Basic Workshop added a file that adds a title page to the printed book.

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INTRODUCTION TO TELECOMMUNICATIONS
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by Fred and Amy Mackey - Pittsburgh Users Group PA - Dec '86

The whole purpose of telecommunications is to use your computer to locate and retrieve information stored on someone else's computer. This electronic collection of information is called a database. The storing of this information and making it accessible to a computer is really just a variation of the library concept, but instead of information being stored in printed form on rows of shelves, the information is stored in electronic form on rows of disks. Telecommunications is a tremendous asset for anyone; it is a library at your fingertips.

The information available in this electronic library includes news, sports, stock market reports, programs, all of which are available on news and informational services, generally for a subscription fee. Information can also be accessed on bulletin board systems, of which there are thousands across the country, and usually as a free service. A bulletin board, or better known as a BBS, is designed to bring together those with common interests, those owning specific computers who want to share programs and help each other solve problems, and in some cases bulletin boards have served as electronic matchmakers. The personal business possibilities of telecommunications also include making airline and hotel reservations, electronic banking, and bill paying. And you can do all this from your TI-99/4A.

The information being sent from one computer to another is carried over telephone lines in the form of modulated data. (The tones you get when you punch phone numbers on your pushbutton phone represent modulated data.) But telephones and computers are based on different signals. The modem serves as a translator between the two. At one end of the phone line the modem MOdulates the computer's digital signals into analog signals to be carried over the phone lines, only to be DEModulated back into digital signals at the other end.

Modems come in different shapes, sizes, and prices. Some modems are directly connected to the telephone line through the telephone jacks. Other modems are the

acoustic type where the telephone headset is coupled into the suctioned modem cups, one cup containing a speaker which generates audio tones, the other containing a microphone, which receives tones from other modems.

Telecommunications could not exist without software. This is the program which connects the computer to the outside world and gives it the instructions on what to do with the information it accesses.

In summary, to enter the world of telecommunications, in addition to your console, and monitor, you will need a modem and a telecommunications software package. You will also need an RS232 to allow your console to connect to the modem.

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THE TAPE CORNER
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Apologies to those who read this column last month and tried the file program only to find it didn't work! Because of the Holiday Season there was no opportunity for me to proof-read the column prior to mailing. Line 250 of the File Search program was missing an ampersand sign between A$ and B$. It should read:

```
250 IF POS(A$&B$,I$,1)=0 THEN 190
```

The 4th line of paragraph 3, Page 3, should have read: " could be changed to: IF POS(A$&B$&C$&D$&E$,I$,1)=0 THEN 190 " and lines 12 and 13 of this same paragraph should show: " (A$&B$) or (C$&D$) etc." (The underlining of these is also a meaningless error.) With the above correction, the file search program should work.

If you wish to use this program for accounting of financial records and you want to total expense items under a certain category, add these lines to the program:

```
175 SUM=0
262 S=VAL(C$)              If C$ is numeric data to be totaled.
264 SUM=SUM+S
275 PRINT TAB(15);"TOTAL=$";SUM
```

Once you have set the column in which you will enter numbers, DO NOT ENTER ALPHABETICAL characters in this money column because the computer can only add NUMBERS. If you forget this, the program will "crash".

Line analysis of file search program follows: Lines 100-160 set up title and ready the computer input. Lines 170-270 are search program. Lines 280-400 are options to search more or end program. Lines 400-2000 are for data line entries. Line 2000 is a short program to facilitate checking your data. Here is typical data line from a Check Register program:

```
405 DATA 3406,1/12/86,PARSONS REALTY,325.00,MORTGAGE
```

Here you see 5 data items separated by commas. ALL DATA LINES IN THIS PROGRAM should follow this SAME FORMAT. With this program, you must have exactly five items in a data line. As commas are used to separate data items, you CANNOT use them as punctuation marks! If SEARS,ROEBUCK AND CO. is the payee in the above checking program, you must leave out the comma after SEARS. COMMAS CAN ONLY BE USED AS DATA ITEM SEPARATORS.

After entering a few data lines, try running the program. (This will show up any mistakes if you are not listing data correctly—something you want to know before

entering more lines!) Run the program and ask the computer to find items in your data. If it works, you can continue to add the rest of your data. If the program doesn't work (the computer is continuously responding with "CANNOT FIND...") it might be because you are not entering your item request correctly—this must use the EXACT SPELLING as used in the DATA. Entering "Auto" cannot find "AUTO". The one other main thing to check is whether you have set up lines 240 and 250 correctly. The following list of reminders may be helpful in locating problems with this program:

1) Do all data lines have 5 items per line? (Or total number of items you have decided on for your own program)
2) Did you omit any SEPARATOR commas in your data lines?
3) Have you extra commas in data lines?
4) Did you keep using upper or lower case letters consistently in data lines? (Your preference)
5) Have you used any ALPHABETICAL characters in the money amounts column? (Permissible ONLY if NOT using the adding program)
6) Does your concluding data line read: (line number) DATA # ?
7) If you get an error message similar to: "DATA ERROR IN LINE 240" or "DATA ERROR IN LINE 2010" your inclination may be to think you typed something wrong in line 240 or 2010 etc. IN MOST CASES this indicates an error in one of your DATA lines.
8) Do you have correct STR$ letters in line 250? THIS LINE CONTROLS WHICH DATA COLUMNS ARE SEARCHED!! If it is set to look for A$ but you are looking for an item in C$, the computer will not be looking in the right place and will not find it.
9) Are your READ lines providing enough STR$ letters to cover your data items? Line 240 should have 4 letters for 5 item data lines (1st item taken care of in line 190). Line 2010 must have 5 STR$ letters.
10) Check your PRINT COMMAND Line 270! All else may be o.k. but you have to TELL COMPUTER HERE what you want to see!

Once you have entered all your data, try RUN 2000 to check your data. Be sure to adjust line 2010 to include enough STR$ letters to cover number of items in your data line. Line 2020 need only print the first and last STR$ letters of 2010—for, if data is o.k., the last data displayed when the computer finishes its run of reading all data, should be the first and last items of your last data line (and then the closing number sign(s) #). As data scrolls up the screen, items being read should stay in their relative positions. If data which started out appearing on the left side of the screen suddenly begins to appear on the right side of the screen, it probably indicates an error. With a printer, you could get a print-out to help you locate the error. If no printer is available then you can use the DELAY part of the data reading program at line 2000—this will slow down the scrolling of data on the screen enabling you to spot where the trouble starts. Lines 2040-2050 are this DELAY Program. Notice that these lines have the letters REM just after the line number. Remove the REM (either by DELETING or re-typing) from both lines 2040, 2050. Now the DELAY part of the program has been activated. RUN 2000 to see the change. You can speed up or slow down this scrolling rate by setting the number 500 in line 2040, to a larger or smaller number. The other option for checking your data is to use your editing mode to review your lines. The RUN 2000 program might help you find the error more quickly.

Once again, call me if you have any problems using this program.

Leonard (795-4148)

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GENIAL TRAVELER
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Ida McCargar

I received volume 1, number 1 of Barry Traver's "magazine on disk", "GENIAL TRAVELER". Like a magazine, the disk contains articles, tutorials, and programs. There is a mixture of simple and more technical or advanced material. Mr. Traver planned to bring out 6 issues a year, but is a little behind schedule. However 5 issues have been published, so if you subscribe you are assured of getting your full subscription. In addition, he includes 2 bonus disks, so for $30 you get 8 "flippy" disks (the equivalent of 16 SS/SD disks). That is little more than the cost of the disks. You may begin with a sample issue for $7, and if you like it, he will probably enroll you as a regular subscriber for $23 more. Write to GENIAL TRAVelER, 835 Green Valley Drive, Philadelphia, PA 19128 - Ph#(215)483-1379.

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BUYER"S GUIDE
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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-994A computer. Only computer related items will be accepted for publication in this newsletter.

TI-99/4A Console, Cassette cable and two games $60. Call Ejaz 623-8257.

TI-99/4A Console $50; TI LOGO $15; (plus the following cartridges) Car Wars; Tax/Investment Record Keeping; Attack; Number Magic; Tombstone City; and TI Invaders. Documentation and cables included. Call and make an offer John 296-8198.

TI Program Cassette Recorder w/cable $25. Call Mike 722-8620 evenings and weekends.

Thermal Printer w/one roll of thermal paper and cable $45. TI 32K Memory Card for P-box $80. Full height SS Disk Drive PHP 1240 $40. Call Jack or BJ 747-5046.

Star Micronics Thermal Printer w/4+, 100' rolls of Thermal paper & instruction book. Requires parallel RS232 hook up - $100 o.b.o. Shugart SS Disk Drive PHP 1250 for use in PE Box w/TI Disk Controller Card PHP 1240 & TI Disk Manager 2 - $100 o.b.o. Manuals and ribbon cable included. Call J.F. Hale 296-5602 evenings.

Sakata SG1000 high resolution green monitor composite video w/video cable $60. Call George 742-3091.

TI-99/4A Console, TI Joysticks, Thermal printer, Cassette Recorder, 12" TV(BW), Selling all for $125 or best offer. Call Paul Garrison 747-3884 (Days) or 573-0572(Evenings).

From the SOUTHWEST NINETY-NINERS - For members only: TI-99/4A Consoles $35 ea, Cassette Cables & Monitor Cables $3 ea. Call BJ or Jack 747-5046.