Southwest Ninety-Niners Newsletter

contributed by

- Tom Wills -

compliments of

TI99ers
On-Line
User Group

www.ti99ers.org

JANUARY 1987

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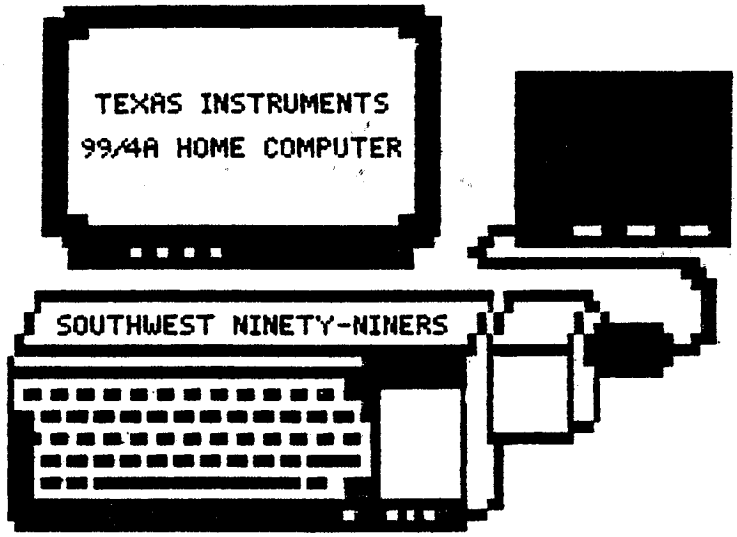

ATTENTION MEMBERS

NEXT MEETING: January 6, 1986 at 7:30pm. THIS IS THE ANNUAL MEETING, new officers will be elected at this time. Location-Tucson Fire Department Training Center on Ajo Way just west of Park.

WORKSHOPS: Basic - 2nd Thursday of each month at 7:30pm (January 8th). Ex-Basic - 3rd Tuesday of each month at 7:30pm (January 15th).
Both at the Mathis Home - 5941 E. 26th - 747-5046

SPECIAL INTEREST GROUPS: Writer & Multiplan - 3rd Thursday of each month at 7:30pm (January 20th). Mathis Home - 5941 E. 26th - 747-5046
Assembly Language & FORTH - 4th Tuesday of each month at 7:30pm (January 27th). Rod Stallard's Home - 7575 E. Logan - 745-6071

PRESIDENT'S CORNER

Remember that the upcoming meeting is the annual meeting of the Southwest Ninety - Niners. We will be electing officers for the coming year and want you there to participate and vote.

This is my last month as president and newsletter editor. The jobs seem to have grown together in our group over the last two years. But both positions will be in capable hands, I'm sure. I want to express my heartfelt thanks to BJ Mathis for her work as associate editor of the newsletter. Without her input the newsletter would not have been anywhere near as good over the last year. She's carried the burden of putting it together for the last six months as other duties ate away at my time. Thanks also to those of you who have been contributors, your contributions have been extremely valuable to us all.

As outgoing president I want to express my appreciation to you all for your support over the last two years. I hope you will give the same backing to your next president. I look forward to seeing you all at the meetings over the next year and sharing our computing experiences.

John McCleary * 296-8198

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THE TAPE CORNER
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by Leonard Taffs

For this month's column I am sharing with you a program that I think is one of the most versatile ones in TI Basic I have seen. It is the answer to the need for a relatively short program that can be used to create simple but sextremely useful lists. Such as mailing lists, address files, phone index, check register, general memo "scratch pad" - - all with the convenience of a search routine: once you have typed in the program and added the data you wish listed all you have to do is type in the item you wish information about and the computer will scan for all entries you have made related to the item you requested. (To me, this program is one of the best uses a computer can be put to.) Here is the program:

```
100 CALL CLEAR
110 PRINT " * * * FILE SEARCH * * *":::::::::::::::::
120 CALL SCREEN(16)
130 REM CALL CLEAR
140 PRINT :::
150 INPUT "ENTER ITEM: ":I$
160 PRINT :" COMPUTER SEARCHING .  .  .":::
170 CTR=0
180 RESTORE
190 READ A$
200 IF A$<>"#" THEN 240
210 IF CTR>0 THEN 340
220 PRINT :" X - CANNOT FIND THIS ITEM":: 230 GOTO 340
240 READ B$
250 IF POS(A$B$,I$,1)=0 THEN 190
260 CTR=CTR+1
270 PRINT "ITEM: ";A$,B$
280 PRINT :"CORRECT ITEM? (Y/N)"::
290 CALL SOUND(100,1000,0)
300 CALL KEY(0,KEY,STATUS)
310 IF STATUS=0 THEN 300
320 IF KEY=89 THEN 340
330 IF KEY=78 THEN 190 ELSE 300
340 PRINT :"PRESS S TO CONTINUE SEARCH":" Q TO END"
350 CALL SOUND(100,1000,0)
360 CALL KEY(0,KEY,STATUS)
370 IF STATUS=0 THEN 360
380 IF (KEY=83)+(KEY=115) THEN 130
390 IF (KEY<>81)*(KEY<>113) THEN 360
400 END
500 DATA A,B
505 DATA 2424,15.63
510 DATA ABICH BUILDING CO.,ROOFING
515 DATA CHECK,AZ.BANK
520 DATA #,#
```

Lines 100-400 comprise this full program. Line 500 starts the data part. I suggest you add the following lines at the very end of your completed data lines:

```
2000 REM OPTIONAL DATA CHECK
2010 READ A$,B$
2020 PRINT A$,B$
```

```
2030 REM OPTION TO SLOW DOWN DATA READING
2040 REM FOR DELAY=1 TO 500
2050 REM NEXT DELAY
2060 GOTO 2010
```

These last lines will be very useful to you later on. BE VERY CAREFUL when you copy this program. Watch punctuation and spaces VERY CAREFULLY! DO NOT CONFUSE THE CAPITAL LETTER "O" WITH THE NUMERAL "0". The data lines 500-515 are sample entries to show you how you enter your data. (This program is set up to handle TWO columns of data. Each data line has two items separated by a comma. I refer to the first item in each data line as the first "column" and the second item as the second "column".) YOU MUST SEPARATE DATA ITEMS WITH A COMMA. YOU CANNOT USE COMMAS IN YOUR DATA ITEMS. If you do, it will screw up the data reading process and you'll get wrong information. So, you cannot use JENKINS,A.B.,210 6TH ST. as a data entry for a mailing list--you will have to substitute some other sign in place of the comma. (I use a slash: JENKINS,A.B./210 6TH ST. In this instance the comma after Jenkins is alright because last names are used as first data item; initials and street are part of second data item. Therefore I cannot use a comma to separate the initials from the street.) If you want to enter amounts of checks in your data and the check is $1,050, you have to eliminate the comma and enter the amount as $1050. YOUR LAST DATA LINE MUST SIGNAL THE COMPUTER THAT IT HAS REACHED THE END OF YOUR DATA. The "#" sign is used for this signal in this program (see Line 200) so the LAST DATA LINE MUST BE: 2000 (or whatever your last number is) DATA #,#.

Once the program is typed in and you have added the data you want to file it is easy to run this program. When you run it, the computer will ask you to "Enter Item: ". Here you type in the item you want (or number in the case of phone list--if you found a number and you can't remember whose it is) and the computer will search until it finds a corresponding item. It then asks you if it found what you were looking for. If you enter Y (must be in capital form) (yes) the computer will cycle to give you a chance to ask for another item or quit. If you enter N (again, must be a capital letter) (no) then the computer will continue to search for the next items corresponding to your requested item until it has gone through your entire data. When it can find no more items it cycles to give you a chance to enter another item or stop.

This program is not limited to two data columns. When I use this for my check and accounts file I use at least five columns. This means lines 240,250,270 have to be changed accordingly. Line 240 would be changed to: 240 READ B$,C$,D$,E$ Line 250 could be changed to: 250 IF POS(ABCDE$,I$,1)=0 THEN 190 and Line 270 to: 270 PRINT:"ITEM ";A$,B$,C$,D$,E$. Lines 250 and 270 are flexible so you can control what you want found and displayed. (No need for the computer to consume the time needed to read data you are not at the moment concerned with.) Note: LINE 250 IS THE HEART OF THE SEARCH SELECTION BY THE COMPUTER. As it is presented above, it scans all five columns. If a data line has 5 elements such as: 3700 DATA 1100,10/2,AVARAICE BUILDING CO.,457.63,ROOF TILES and we had a program of 300 such lines or so, it will take the computer much more time to scan 5 items in each line than if we programmed it (by what we program Line 250 to say) to scan one or two specific columns (AB) or (CD) etc. (More about this later.)

Finally: The next issue will describe this program further. Lines can be added which will add up totals (! Handy for income tax time) if you use this for record keeping, and if you do not have a printer, I will explain the use of lines 2000-2060 which make life a little easier. Do feel free to call me (795-4148) if you have any questions or problems trying to use this program. Much can be learned from studying this program. Have fun with it!

LEONARD

ODDS and ENDS

by Bill Gaskill - Front Range 99ers, Colorado Springs, CO - Oct '86

Some of the FairWare listed in this article may not be available in our library.

Some of what you will read here you may have seen before, some perhaps you haven't seen. All of it is simply a collection of ideas, information and tips about our computer, accumulated over the last three years. It is not presented in any particular order, being written down as it came to mind. I hope you enjoy it.

1. TI's Catalog program on Programming Aids it will write a DV/80 file that can be read by TI-Writer?

If you want to create a list of the contents of all your disks, that you can look at later and find anything in the list that you want, you can use this Catalog program to do it.

Simply choose option 4 from the catalog's menu and send the output to DSK1.CAT and each disk will catalof itself and then write a file to itself (named CAT) that can then be loaded into TIW for later reference.

Each CAT program must be merged into the existing file by using the LF function and then specifying a line number after which the new file is to be positioned. For example, if you have the first disk's CAT loaded into TIW and it ends at line 15 you would merge the next disk's CAT file into TIW with the following keystrokes:

FCTN 9 - to activate the command mode.

LF and then ENTER - to Load File.

1 E 16 DSK1.CAT - to merge the file named CAT from the disk in drive one, encompassing lines 1 to the End of that file, placing it after line 15 of the CAT file already loaded.

Press ENTER - to activate the merge.

Finding which disk contains which program or data file is simply a matter of using the Replace String option from TIW's command mode.

2. A program written in Extended Basic, where you have created line numbers out of sequence, can be made to run faster. You must first SAVE the program in MERGE format, then type is NEW and then re-LOAD the program using MERGE. The MERGE routine cleans up the program by picking up each line in its proper order, where as your original program's line number table was saved in the order you created each line, regardless of the number of the line.

3. REDO can be used to repeat the last command entered from the immediate mode. For instance you can RUN a program, press FCTN 4 to stop it press REDO and ENTER to RUN again. After SAVEing a program you can press REDO to SAVE the program to a back up disk (change disk # if necessary). Try REDO you'll find it very useful in programming. You can use it to help enter a program faster. If you are entering a program that has a lot of very similar lines, you can REDO a line change the line number and anything else you need to change then press ENTER (It

is especially great for entering Basic programs or moving program lines without retyping). Using REDO this way will also let you type a longer program line.

4. RUN can be used with CS1 to redefine a character set with one program and then RUN another program without "killing" the character set or robbing memory from the second program being loaded. You can use RUN within a program to restart it or to RUN starting at a particular line number (ex. RUN 450). (Extended Basic)

5.
```
10 M$="THIS IS MY PROGRAM"
20 FOR H=28 TO 6 STEP -1 :: DISPLAY AT(2,1):SEG$(M$,1,X):: X=X+1 :: NEXT H
```

Will make the string M$ appear on the screen from the upper right, in row 2, one character at a time, until it stops in column 6.

6. Danny Michael's NEATLIST program can be used to print out a listing of any XBasic program regardless of protection status or line number table alteration etc.

7. You can alter the color of your cursor to white on blue (or any other color combination) by including a CALL COLOR(0,16,5) statement in your program.

8. A sub-file can be selected from a memory-resident data file, and saved to disk by creating an array for the record numbers (array pointers) of the selected records and then saving those records referenced by the array pointers.

9. John Hamilton of the Central Iowa Users Group offers a 22 page booklet of TI Tips for only $4. John Hamilton, CIUG Box 3043, Des Moines, IA 50316.

10. Bob Lawson offers a FREEWARE utility that will print out a Household Budget Management file. Bob Lawson, 16223 Mill Point Dr., Houston, TX, 77059. *(Available from SW99ers library. - BJ)*

11. LIST "DSK1.PROGRAM", where PROGRAM is the name of your program, will create a DV/80 listing of your Basic or XBasic program that can be read by TI-Writer. You will need to write a program to be able to get it back to a program file, but you can use TI-Writer to find mistakes.

12. Pressing FCTN V when SAVE(ing) an XB program will save the program with an invisible name. The underline character is actually what is writted to disk (ACSII(95) or >7F), although the delete character (ASCII(127) is what is read. Up to 10 files could be masked on a single disk this way by using a different number of characters for each file.

13. Pressing FCTN X 10 times from any menu screen in Disk Manager II will invoke a proprietary protection routine that will be written on the disk you initialize so that it cannot be copied by another DMII module. If you have Bill Gronos' "Hidden Power of Disk Fixer" you can read all about it. If you wan to see a simpler explanation of how it works read on. The two diagrams below are the first three lines fraom a DISK+AID read of sector zero on my NeatList disk.

Sector Zero on an un-protected disk:

ADR-	0	1	2	3	4	5	6	7	8	9	A	B
00-	4E	45	41	54	4C	49	53	54	20	20	01	68
0C-	09	44	53	4B	20	28	01	01	00	00	00	00
18-	00	00	00	00	00	00	00	00	00	00	00	00

Sector Zero on a protected disk:

```
ADR- 0  1  2  3  4  5  6  7  8  9  A  B
-----------------------------------------
00- 4E 45 41 54 4C 49 53 54 20 20 01 68
0C- 09 44 53 4B 50 28 01 01 00 00 00 00
18- 00 00 00 00 00 00 00 00 00 00 00 00
```

If you compare both diagrams you will see that the only difference between the two is in byte 16 (>10 if you are into hexidecimal arithmetic). The protected disk has >50 written into that byte (the hexcode for P) where the unprotected disk has >20 which is the hexcode for a blank space. As Mr. Gronos says in his book, the protection is "pathetically weak".

14. Both TRACK-HACK and TURBO2 can be loaded onto your FunnelWriter disk and be RUN from the Utilities option. Press 3 from the main menu. Press 9 and then use option 3 for TRACK-HACK and option 4 for TURBO2. It saves swapping to the E/A module (unless you have GramKracker).

15. 4A/TALK can upload DV/80 files to CompuServe' TI FORUM in 7-bit ASCII. The results are screen readable but NOT downloadable in readable format.

16. Terminal Emulator III (that's right, 3!) has a very nice CHARA1 file for true lower case letters that is much easier to read and much better looking than the true lower case upgrade that TI put out for TI-Writer.

17. The NEC JC-1225MA color monitor can be used with a TI, even though it is not specified in the instructions. The Red wire plugs into the "Video In", the yellow wire to "Audio Out".

18. A protected XB program on cassette tape can be duplicated using two cassette recorders set to maximum volume.

19. Record/files that have been DELETEd from a disk are not actually deleted. Only reference to their existence is deleted, not the actual information.

20. J. Peter Hoddie has re-written DM100 and Fast-Term so that they (either one, not both) can be loaded into GRAMS 1 and 2 in GramKracker. The prgrams are available on Barry TRaver's Genial Traveler 1.3.

21. You can make a message flash or flutter on screen any time you use a CALL KEY statement by including a DISPLAY AT statement in a loop created by the CALL KEY. An example is shown below:

```
10 CALL KEY(0,K,S) :: DISPLAY AT(12,2):"THIS IS THE MESSAGE" :: DISPLAY
     AT(12,2):" " :: IF S=0 THEN 10
```

This is only a short list of the no doubt thousands of "things" TI users have discovered on their own. Maybe you can add to the list?

BUYER"S GUIDE

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.

TI-99/4A Console, PE Box w/32K, RS232, TI Disk Controller & Drive. Speech Synthesizer, TI Modem, TI Joysticks, Widget, Cassette Cables, TI-Writer, Terminal Emulator II, Extended Basic, Game Modules. All for $550. Call Rose Lane 628-5936(W) or 889-9911(H).

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

TI-99/4A Console, PE Box w/CorComp DSDD Disk Controller Card, RS232 Card, and 32K Card. One SSDD Internal Disk Drive, one DSDD External Disk Drive, 13" Color TV, TI-Writer, MULTIplan, Editor/Assembler, Personal Record Keeping, Personal Report Generator, Personal Real Estate, Securities Analysis, Household Budget Management, Tax/Investment Recordkeeping, one year of Home Computer Magazines, over 50 disks with several programs including TI-Artist. Instruction manuals and documentation included. Selling as a unit for $500. Call Art Galvan 748-8930 after 4pm.

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).

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.

From the SOUTHWEST NINETY-NINERS - Cassette Cables & Monitor Cables $3 ea. Call BJ 747-5046.

Southwest Ninety-Niners
P.O. Box 17831
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