Southwest Ninety-Niners Newsletter

contributed by - Tom Wills - compliments of

www.ti99ers.org

OCTOBER 1987
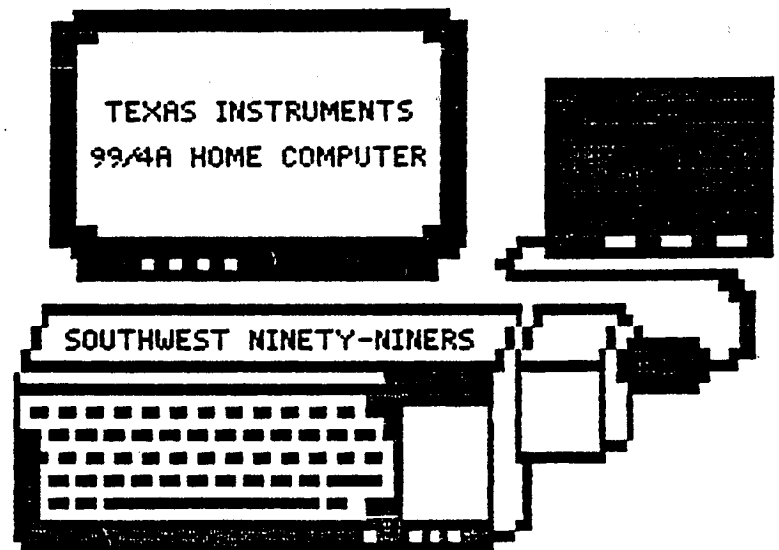
P.O. Box 17831 Tucson, AZ 85730

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BJ & Jack Mathis - Editors

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ATTENTION MEMBERS
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Next Meeting: October 6, 1987 at 7:30pm. Location-Tucson Fire Department Training Center on Ajo Way just west of Park. Les Merryman, MYARC's West Coast Distributor will demonstrate the Geneve 9640.

General Users Workshop: 2nd Thursday of each month at 7:30pm (October 8th). 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 (October 15th). Includes: Writer, Multiplan, DataBases, etc. Mathis Home - 5941 E 26th - 747-5046

Advanced Languages Workshop: 4th Tuesday of each month at 7:30pm (October 27th). Includes: FORTH, A/L, etc. Rod Stallard's Home - 7575 E Logan - 745-6071

GENEVE 9640 — DEMONSTRATION

October 6th, 1987 — 7:30pm

Les Merryman of L & M Systems, the West Coast distributor for MYARC, will demonstrate the latest MYARC products including the Geneve 9640. I hope you will all be at this meeting, bring wives, friends, neighbors, strangers....

Les will bring or send ahead the Geneves that have been ordered through the group. He won't bring anything that isn't requested ahead of time, except demonstration items. You can order at the meeting, but will have to wait for delivery.

MYARC products are available to members of SW99ers at a special discount. I can't publish the prices here, but if you are a member of SW99ers, and are thinking about buying any MYARC item check with me before you go elsewhere. Remember MYARC makes RS232s, RAM disks, etc.

BJ - 747-5046

Summary of Last Month's Meeting

The business portion of the September 1 meeting did the following:

1) voted to purchase 'standard' Extended Basic for $35 to replace the Group system's failed module, and needed to operate the ANTFARM

2) voted to purchase 'super' Extended Basic for around $40, as a Group asset

3) expressed the desire to have the sum-summarized meeting Minutes published for members not in attendance

Reports and advisements were made on:

1) floppy disk storage cases available for order

2) status of the Group library and BBS

3) treasury - current balance $1352.52

4) Les Merryman offering good prices to Group members for MYARC products, talk to BJ Mathis for specifics. Les will demonstrate the Geneve on October 6th.

5) notice was seen on GENIE that a 512K upgrade for Foundation RAMDisks would be available soon

The program portion of the meeting included informal demonstrations of the Spad XIII Flight Simulator and other TI software.

Dave Wolfson, Sec'ty.

Bytes & Jots

Ryte Data is looking for new subscribers. If they don't get new subscribers and some orders they may have to close down altogether. They are making a special offer for group orders: $12 per year per person for five or more subscriptions - mailed to separate addresses, or $11 per year for five or more subscriptions to the SAME address. Five or more orders of Monty Schmidt's book "TECHNICAL DRIVE" are 10% off. Orders of three or more of the new "COMMAND DOS" program by John Clulow are also 10% off. If you are interested please let me know.

We had a visitor from Australia the 15th thru the 17th of September. Geoff Shipton travels all over the world, visiting TI users whenever possible. He gets copies of Fairware and Public Domain programs every where he goes and shares them along the way. Geoff shared everything he had with us. Now it is up to Jack and I to figure out what we got. I am sure there will be many new programs to add to the Fairware list, there are many MAX-RLE pictures and some public domain programs that will be added to the group library as soon as possible. Thanks Geoff! Geoff likes to exchange letters with TI users, his address is: 8 Teasdale Crescent, Plympton Park 503, South Australia.

Tom Wills of Wisconsin, a member of SW99ers, will attend the Applications Workshop on October 15th. Many of us met him when he attended a workshop last spring. Tom is a SysOp on People-Link, the Vice-President of the Shebogan Area 99ers Users Group, WI, and a regular contributor to their newsletter. Tom and his wife expect to move to Tucson soon, they will be looking for a home while they are here. Please come to the Applications Workshop to show him a great Tucson Welcome!

The September Issue of Computer Shopper has an ALPHA SCIENTIFIC ad on page 211: "Attention TI99/4A Owners: 3.5 conversion is just as easy. Works with your controller [MYARC or CorComp] and software." This refers to an ad to upgrade 5 1/4" disk drives to 3.5" TOSHIBA Micro Drives for $125. APLHA SCIENTIFIC, PO Box 626, Chesterfield, MO 63006, Phone (314)878-7117.

Bud Mills Services, 166 Dartmouth Dr, Toledo, OH 43614, Phone (419)385-5964, is carrying a kit and instructions for putting 64K (32K usable right now), on the 16 BIT buss in the TI console. The Kit (includes two static RAM chips, the two support chips and instructions) sells for $27 (including shipping and handling).

I now have a FOUNDATION 512K card. That's right *FOUNDATION*. Jack and Ed Hallett modified my Foundation 128K card, used Dave Wolfson's EPROM burner to burn an EPROM for it and added memory chips. It works, but looses it's memory when the console and/or the PE Box are turned off. Jack and Ed are planning to figure out a clock circuit soon so it can have a power back-up.

Keith G. Koch in the Feb '87 issue of MANNERS (via West Penn 99ers, Sept '87), writes, "Pictures taken from a video camera can be fed into the system.....(99/4A, TMS9918A, by placing the video signal)....on pin 35 of the TMS 9918A video chip, and then turn off the internal sync of the chip with the following program:"

```
100 CALL INIT                                          : *SET SYNC TO INTERNAL
110 CALL LOAD("DSK1.SYNC")                              : ISYNC  LWPI  WS
120 CALL KEY(0,K,S)                                     :        LI    0,>0000
130 IF S=1 THEN 120                                     :        BLWP  @VWTR
140 IF R=73 THEN CALL LINK("ISYNC"):: GOTO 120          :        JMP   RETURN
150 IF R=69 THEN CALL LINK("ESYNC")                     : *SET SYNC TO EXTERNAL
160 GOTO 120                                            : ESYNC  LWPI  WS
                                                        :        LI    0,>0001
Assemble the program below and on the right.            :        BLWP  @VWTR
                                                        : *RETURN TO BASIC PROGRAM
 *INTERNAL/EXTERNAL VIDEO SYNC                          : RETURN LWPI  GPLWS
        DEF    ISYNC,ESYNC                              :        SB    @ERRNBR,@ERRNBR
 ERRNBR EQU    >837C                                    :        RT
 GPLWS  EQU    >83E0                                    : WS     BBS   32
 VWTR   EQU    >2030                                    :        END
```

TIxpo88 - TI Fest West - Report

According to John Martin, President of SNUG, the booth prices this year will be $49. The admission fee will be $5, reduced to $4 for those staying in the Palace Station Hotel in Las Vegas for the TIxpo88. Special room rates can be obtained by calling 1-800-544-2411 and mentioning TIxpo88. Discount AirFares are available from PSA, for reservations call 1-800-435-9772 TI-XPO-88 PSA Smile # M1586S.

The committee to look into the SW99ers having a booth met on the 15th of September. Proposals will be presented at the October business meeting. If the group approves, the next meeting of the committee will be October 13th, 7:30pm at the Mathis home. If you are planning to go to the TIxpo88 or have any ideas for the committee to consider please feel free to drop in.

We are very excited about this chance to gain exposure for our group and help the TI community. I hope everyone will have some ideas to add to the committees'.

BJ Mathis - 747-5046

BASIC EXECUTION SPEEDER UPPER
===== ========= ======= =====

Remember, Basic reads every program line and parts of lines in it's path. Unnecessary comments take time to read.

1. If you must have your program descriptions first in your program, then make your first line read GOTO XXX. Basic will not read these lines (REMs) while executing.

2. REM may be used after a line branch has been placed. It won't be seen by Basic.

3. Use OPTION 1 if you have no use for a zero being scanned on each reading of an array.

4. Do not use DEFINE. Functions are worse time users than GOSUBS. USE DEFINE only when you have a very complicated operation requiring repeated use with a variety of variables.

5. Avoid using GOSUB or GOTO to reach short routines. Replace them with in-line solutions, even if they are needed again elsewhere in the program.

6. Never use an array variable if you can use a simple variable instead.

7. Use one or two character variables. Habitually use the same variables for all loops, i.e.(K,L,M).

8. Do not use unnecessary spaces, punctuations, or GOTOs. (GOTO is not needed after THEN or ELSE).

9. Throw away all variables which are used only once. Replace them with a transient variable which will handle all of the single use variables.(Q=2... Q=3...Q=4...)

10. Do not use a variable when not absolutely needed, use a literal constant instead. (Variables are kept in a table and require time to locate them.)

11. Do not write loops for short repetitive sequences.

12. Keep your programs LINEAR!

13. Do not use LET!!

Compiled by John Hale

TRAFFIC COP
======= ===

As you enter the program on the next page you will notice an extensive use of defined SUB programs, even for the instructions that are used only once in the program. After BJ entered this program I thought it would run faster if I moved the instructions to be LINEAR with the rest of the program, as John Hale suggested above for GOSUBs. I was wrong! .The defined SUBs actually worked faster. A SUB program works faster because it is using a different set of variables (the old ones are temporarily set aside), the variable 'A' in the main program is not be the same as the variable 'A' in the SUB program. With less variables and program lines for the computer to search for, the computer can work faster.

This program orginally came from LA TopIcs "Kid's Corner". It is included for the enjoyment of the "kids" and to help others learn about SUB programs.

Jack Mathis

```
100 ! From TIT-BITS
              of
           Australia
110 ! via  LA 99ers
              &
      Erie Ninety-Niners
120 ! author unknown
130 CALL CLEAR
140 ! **************
    *            *
    * TRAFFIC COP *
    *            *
    **************
150 CALL GRAPHICS :: PRINT "
*       TRAFFIC COP       *
" :: CALL MAGNIFY(3):: CALL
INSTRUCTIONS
160 SP=8 :: CR=0 :: CALL SET
UP(SP)
170 CALL CARS(SP)
180 CALL COINC(ALL,H):: IF H
 THEN CALL CRASH(CR)ELSE 200
190 CALL SOUND(-100,1000,5):
: IF CR>9 THEN 260 ELSE 170
200 CALL KEY(3,K,S):: CT=CT+
1 :: IF CT>75 THEN CALL FAST
ER(SP,BST):: CT=0
210 IF K=83 THEN CALL MOTION
(#6,0,0)ELSE CALL MOTION(#6,
0,SP)
220 IF K=68 THEN CALL MOTION
(#7,0,0)ELSE CALL MOTION(#7,
0,-SP)
230 IF K=69 THEN CALL MOTION
(#8,0,0)ELSE CALL MOTION(#8,
SP,0)
240 IF K=88 THEN CALL MOTION
(#9,0,0)ELSE CALL MOTION(#9,
-SP,0)
250 GOTO 180
260 CALL CLEAR :: DISPLAY AT
(6,1):"YOU CAUSED 10 CRASHES
, WITH": :"THE TRAFFIC RUNNI
NG AT": :TAB(8);SP;"MPH"
270 DISPLAY AT(12,2):"BEST S
PEED SO FAR IS";BST;"MPH"
280 DISPLAY AT(16,6)BEEP:"PL
AY AGAIN?  (Y/N)"
290 CALL KEY(3,K,S):: IF K=8
9 THEN CALL CLEAR :: GOTO 16
0 ELSE IF K<>78 THEN 290 ELS
E END
300 SUB GRAPHICS
310 CALL SCREEN(2):: CALL CH
AR(128,"FF101010101010FF",12
9,"818181FF81818181",130,"01
010101010204F8")
320 CALL CHAR(131,"808080808
040201F",132,"1F204080808080
8",133,"F804020101010101",13
6,"000000FFFF",137,"18181818
18181818")
330 CALL CHAR(96,"000000007F
FFF3F3F3F3FF7F00000000000000
00FFFE1F1F1F1FFEFF")
340 CALL CHAR(100,"00000000F
F7FF8F8F8F87FFF0000000000000
000FEFFCFCFCFCFFFFFE")
350 CALL CHAR(104,"080F0F0F0
F0C0C0C0F0F0C0C0F0F0F07D0F0F
0F0F0303030F0F03030F0F0F0FOE")
360 CALL CHAR(108,"070F0F0F0
C0C0F0F0C0C0C0F0F0F0F0F08E0F0F
0F03030F0F0303030F0F0F0F0F0D")
370 CALL CHAR(112,"014163333
F3F1F1F1F1F1F3F786383030100818
3C6EEFCFCF8F8F8FCFC9E0701")
380 CALL COLOR(13,16,2,14,16
,1)
390 FOR Z=2 TO 8 :: CALL COL
OR(Z,16,1):: NEXT Z
400 SUBEND
410 SUB INSTRUCTIONS
420 DISPLAY AT(10,8):"TRAFFI
C COP": : :" DO YOU WANT INS
TRUCTIONS?" :: DISPLAY AT(15
,11)BEEP:"(Y/N)"
430 CALL KEY(3,K,S):: IF K=7
8 THEN CALL CLEAR :: GOTO 48
0 ELSE IF K<>89 THEN 430
440 CALL CLEAR :: DISPLAY AT
(4,2):"USE THE ARROW KEYS (E
SD,X)": :"  TO STOP THE TRAF
FIC AND": :"PREVENT COLLISIO
NS. WHEN TEN"
450 DISPLAY AT(10,3):"CRASHE
S HAVE OCCURED YOU": :" WILL
 BE REMOVED FROM DUTY."
460 DISPLAY AT(18,4):"PRESS
ANY KEY TO PLAY"
470 CALL KEY(3,K,S):: IF S=0
 THEN 470 ELSE CALL CLEAR
480 SUBEND
490 SUB SETUP(SP)
```

(continued next page)

```
500 DISPLAY AT(4,1):"TRAFFIC
": :"  COP" :: DISPLAY AT(4,
21):"SPEED" :: DISPLAY AT(6,
20):SP;"MPH"
510 DISPLAY AT(20,1):"TI-99/
4A" :: DISPLAY AT(20,21):"CR
ASHES"
520 CALL HCHAR(9,1,128,32)::
 CALL HCHAR(15,1,128,32):: C
ALL VCHAR(1,13,129,24):: CAL
L VCHAR(1,19,129,24)
530 CALL VCHAR(1,14,32,120):
: CALL HCHAR(10,1,32,160)::
CALL HCHAR(9,13,130):: CALL
HCHAR(9,19,131):: CALL HCHAR
(15,13,133)
540 CALL HCHAR(15,19,132)::
FOR Z=2 TO 30 STEP 3 :: CALL
 HCHAR(12,Z,136,2):: NEXT Z
550 FOR Z=1 TO 22 STEP 3 ::
CALL VCHAR(Z,16,137,2):: NEX
T Z
560 SUBEND
570 SUB CARS(SP)
580 IF SP>20 THEN SP=SP-4
590 DISPLAY AT(6,20):SP;"MPH
"
```

```
600 CALL SPRITE(#6,96,14,75,
1,0,SP,#7,100,16,98,250,0,-S
P,#8,108,6,1,128,SP,0,#9,104
,3,190,105,-SP,0)
610 SUBEND
620 SUB CRASH(CR)
630 CALL MOTION(#6,0,0,#7,0,
0,#8,0,0,#9,0,0):: CALL SPRI
TE(#1,112,9,88,120)
640 CALL SPRITE(#2,112,12,88
,120,5,5,#3,112,12,88,120,-5
,-5,#4,112,12,88,120,5,-5,#5
,112,12,88,120,-5,5)
650 FOR Z=0 TO 20 :: CALL SO
UND(-200,-7,Z,110,Z+5):: CAL
L COLOR(#1,12):: NEXT Z
660 CALL DELSPRITE(ALL):: CR
=CR+1 :: DISPLAY AT(22,23):C
R
670 SUBEND
680 SUB FASTER(SP,BST)
690 CALL SOUND(200,-2,0,500,
5):: SP=SP+2 :: IF SP>BST TH
EN BST=SP
700 DISPLAY AT(6,20):SP;"MPH
"
710 SUBEND
```

MODEMS WITH COMPUTERS
====== ==== =========

by Bill Queen

In this article it is assumed that the reader is thoroughly familiar with his own
computer. He may or may not be familiar with a MODEM.

Most makes of computers can be made to communicate with another computer of the same
make and model over a short distance, usually fifty to several hundred feet, simply
by wiring them together.   The TI-99/4A can be connected this way following the
instructions received with the computer from the manufacturer.

A MODEM becomes necessary if the separation between computers is great or if they are
not of the same make and model.   The acronym MODEM, the name given to the
communication device, is a contraction and joining of the two words MOdulate and
DEModulate.

To create and read text, most computers use a code known as ASCII. A MODEM receives
the ASCII code, converts it to tones, then transmits the tones to a telephone line or
a radio transmitter.   Conversely it receives tones from the telephone line or radio
receiver, converts them to ASCII, then transmits them to the computer. The RS232 is
the device used to interface the computer to the MODEM and/or a printer.

However, the hardware is not all that is needed to operate one's MODEM. One also
needs software to control the computer for both transmission and reception.   There
are probably hundreds of software programs known as Terminal Programs available for
this purpose. Each of course is designed to control a specific system.   Some are
commercially available but many good ones can be obtained for the TI-99/4A through

fairware and others free of charge. The Terminal Program I use most and like best is FAST-TERM a fairware program, written by Paul Charlton.

Once a MODEM is in service one can take advantage of the world of information utilities such as electronic bulletin boards, data bases, computer time sharing, etc.

One simply makes a schedule with another person who also has a system set up and they decide who will call who. Then if both are ready at the appointed time they can type messages to one another, after making the connection.

This is possible and even ocasionally desireable but there are much more convenient ways. I am thinking of the electronic bulletin boards or as they are better known the Bulletin Board Services (BBS). These BBS's have storage devices or huge memories so that a great number of people can log on at their convenience, list messages to be be read later by the addressees, and read messages that were left earlier for themselves, and to exchange software programs, etc. All participants can get on at a time convenient to themselves without having to co-ordinate their time with anyone else.

There are three commercial BBS's that come to mind, GEnie, Compuserve Information Service, and The Source. I have been a subscriber to Compuserve for several years. It has areas for exchanging messages, for Special Interest Groups (SIG's) also called Forum's, Information services including a full encyclopedia, on line Shopping services, news services, weather services, travel services, and more. GEnie and The Source are no doubt as versatile. Compuserve charges $6.25 per hour at 300 baud and more at higher baud rates. GEnie charges somewhat less and does not increase the rate for faster baud rates. I am not familiar with The Source at all except I know its name.

There are also many free access BBS's at least thirty five of which are located in Tucson. A typical free access BBS supports message services, bulletins, and SIGs. Usually they are controlled to the extent that one must register (usually on line) then wait for the SYStem OPerator (SYSOP) to verify that one is eligible and issue a first password. Once this is done one is free to use the BBS at any time one can make the connection. Some of the most popular are occupied most of the time, making them hard to log onto.

It is advisable to change your password to something known only to yourself and if you are registered to more than one BBS to have a different password on each.

Of course, as most of you know, the Southwest Ninety-Niners have their own BBS, THE ANTFARM 889-6930, with Edward Hallett as SYSOP. At this writing because of memory and storage limitations only members of Southwest Ninety-Niners have been invited to register. If The Antfarm proves popular enough this could be rectified by adding DSDD drives and/or even a hard disk. That would require a significant investment of club funds so don't expect that much expansion to happen soon.

One of my favorite local BBS's is Compute America at 293-1399. It is operated by a local computer store whose name is also Compute America. It was established fairly recently and thus is not overcrowded so it can be accessed quite easily. Compute America has the usual message and bulletin services as well as several SIG areas including one for the TI-99/4A. I like this because we are able to use it for files that are too large or too numerous for our own Antfarm. By storing programs and files there we can free up our own system for those files and programs that are currently under discussion or most popular, yet leave the entire group of files available to all users at all times. Compute America also gives us an avenue for talking to owners of other kinds of computers and to see something of what is going on in their world.

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-99/4A computer. Only computer related items will be accepted for publication in this newsletter.

WANTED - Super Sketch - Call Peggy Giddings 795-1915 or 621-7374 (work).

WANTED - Good used system w/single or double disk drive, 32K memory and RS232. Will buy separately. Dick Jones, 6748 E Voltaire Dr, Scottsdale AZ 85254. Phone (602)948-3475.

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-99/4A Console $35 o.b.o. Call Ejaz 623-8257.

2-TI-99/4A consoles $50 ea, *2 CDC Floppy Drives DSDD half height $110 ea, Multiplan $30, P-Code Card w/documentation & disks $90. All items are new/unused. *These items are not negotiable. Call Dick 790-4779.

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

Color TV-Monitor 13", two years old, asking $180. Call David 749-1965.

TI-99/4A Console $35. Call John Hedspeth 885-0859 or 745-7253 (work).

TI 32K Memory Card for PE Box $75. Modules: Extended Basic $35, Terminal Emulator II $6, Tax Investment Record Keeping $4, Household Budget Management $3, Personal Real Estate $4, Home Financial Decisions $3, Personal Report Generator $6, Personal Record Keeping $6, Parsec $4, Early Reading $7. Book - Compute!'s Beginner's Guide to Assembly Language $8. Call Jack or BJ 747-5046.

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), all for $125 o.b.o. Call Paul Garrison 747-3884(Days) or 573-0572(Evenings).

FOR MEMBERS ONLY: These items are for sale by SW 99ers, they are used. Call Jack or BJ 747-5046. P-code Card(no docs or disks) $50, Personal Report Generator $6, Personal Record Keeping $6, Tax Investment Record Keeping $4, Terminal Emulator II $8, Home Financial Decisions $3, Household Budget Management $3, The Attack $3, Munch Man $3, Jawbreaker II $4, Tombstone City $3, Music Maker $7, Flip 'N' File for Modules & Cassettes $4, Cassette & monitor cables $3 ea.