SouthWest Ninety-Niners

December 1995

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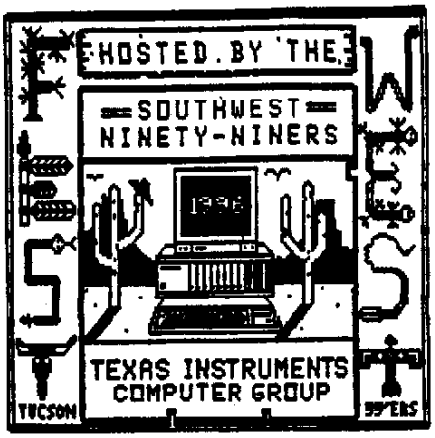

December DOM

Compiled by Matt Matthews

This DOM will complete the public domain files given to us by Bruce Harrison at the last Fest West.

RNDMS/ARC - Sets true random numbers. Leonard was looking for this at the last meeting.

TC/FNT/ARC - Fonts from Tiger Cub to be used with NEWTURN & FONTCONV found on earlier DOM.

TIMEOUTARC - Sets time a program will wait for input.

TITLER/ARC - Screens for your home made VHS videos. Drawing program included.

XBSPDCKARC - How long will an XB program take to run.

I placed this DOM on a DSSD Disk so you folks with only SSSD capability will need to get help from one of the members who has DSSD capability to unarchive these. If you can't find help let me know, I will do it for you. My number is 1-520-428-6910. It is in-state long distance.

Enjoy your toy! Ol' Matt

President's Notes

by BJ Mathis

As you prepare for the coming holidays, keep the following dates in mind!

Christmas Party

December 5th will find the SouthWest Ninety-Niners at our home for the Christmas Party. All members and their families are invited. Plan to bring holiday goodies to share. We will have a gift exchange as we did last year. If you want take home a gift, bring a gift. We had a lot of fun with it last year. It was interesting to see who ended up with what gift. Fest West'96 Raffle Tickets will also be available at our Christmas Party.

Election of Officers

Another date to remember is January 2nd. We will elect the officers for SW99ers 1996. All members need to consider their choices for the coming year. Nominating committee members will be chosen at the November meeting. During the months of November and December the Nominating Committee will contact local SW99ers to find out if they will run and who they would like to have run. I don't plan to run for any office this time, as I have been President since 1987, eight years is enough at a time! So please consider yourself when thinking of officers for 1996. (I will continue as newsletter editor.)

FestWest '96

The most important dates for SW99ers to remember during the coming months are February 16-18th - FestWest '96 in Tucson! We are preparing a list of Raffle Prizes that includes a Myarc HFDC and 40meg hard drive, a printer, a Horizon RAM disk, a SuperAMS (of course!), and possibly even more prizes. We have begun selling Raffle tickets. As in the past buy 10 10 Raffle tickets, get free admission to FestWest'96!

We are looking forward to another great FestWest in Tucson. It is a chance to catch up with new things in the TI community and talk to friends we have made over the many years.

Tom's Observations

by Tom Wills

Elections

January is getting close. We need people to run for ALL User Group offices. As of right now, all offices are open. BJ is hanging it up. I'm hanging it up. And Mike is hanging it up. As to the Secretary, we've had Les Neff filling in only because no one else wanted it. Which means we really need to have ALL the offices filled.

So, who's going to run the User Group next year? The three of us have been doing it for a long time, and burnout is setting in. We're not going to quit the User Group or anything like that. We'll help as needed. We're not dropping out of the picture. We are not leaving the TI community. We just need a rest from years of running the Best TI User Group in the country, if not the world!

Mike Doane is heading up the Nominations Committee. Helping Mike are Tom Holder and myself. We really need some volunteers to run for offices. Why wait for us to call you? Call any of us if you are interested. Our telephone numbers are as follows:

Mike Doane: 298-3835
Tom Holder: 299-6366
Tom Wills : 886-2460

Just remember a couple of things. Every member of the SouthWest Ninety Niners User Group is a asset to the entire group. You're as good a possibility as any one else for being one of the SW99UG officers.

Another ~~thing to remember is that~~ without "U", there is no _ser Group. Every member is important!

Documentation Library

As those who attended the November membership meeting found out, I finally have the Documentation Library organized. Currently we have just under 100 documents in the library. A list was given to everyone who attended the meeting. It has lots of room for growth.

If anyone has a manual or document to add to the library, it will be appreciated. However, I do not want the actual manual itself. Copy the manual onto 8.5" by 11" paper and give it to me that way. I will enter it into the database and assign an ID code to it.

I want to make this library available to TIers everywhere. For those who need a manual mailed to them, there will be a cost involved. This hasn't been set yet, but it will have to be enough to cover copying and mailing charges. Right now I'm thinking of 5 cents a page plus $3 for postage (priority mail).

For members who attend meetings, the procedure will be different. You will have to check out the manual and return it at the next meeting. There will be no charges. All I ask is that you treat the manual with care.

As soon as practical, I will be giving the database listing to BJ to publish in the newsletter. I will also be posting it on the TI Newsgroup, COMP.SYS.TI.

Cactus Patch Notes

I have a hint on how to save time when downloading a file from Cactus Patch. As many have noticed, the number of files in the Cactus Patch file libraries have gotten quite large. Scanning the file listing takes quite a bit of time, and concentration.

There are three ways to find out what files are on the Cactus Patch. The first is the file listing. The second is the catalog. The third, which is an unlisted feature, is a true file catalog.

To get a listing of the file descriptions, press "L" from the file library menu. To get the catalog, press "C" from the file library menu. To get a true catalog listing, press the asterick key (Shift 8).

A faster way is to download the file listing, or the catalog and review it at your leisure. To get the file listing file itself, download the file $DN. Download the file $CT to see the file catalog. The file $DN can be quite large, but as it is a DV80 file, it can be either printed out or viewed in TI Writer. The $CT is a DF80 file, and can be printed out and viewed in TI Writer also.

Of course, you can also capture the data via the Telco capture option to either a printer or a file. This will, however, take some time.

I personally recommend downloading the $DN file so you can see the names of the files, the dates they were uploaded, who uploaded them, and a description of the file. You can see how big the $DN file is by doing the true catalog. It will be one of the very first files listed.

Fest West Telephone Number

There has been a change in the Ramada Inn University telephone number. The current 800 number takes the caller to the Ramada national reservations center. The new 800 number will take the caller directly to the Ramada Inn University.

By eliminating the middle man, there is less of a chance for any mistakes to occur.

The new 800 number is 800-777-2999.

When calling this number, make sure you mention that you will be attending the Best TI Fest in the World, Fest West '96. They will take care of you and there will be no problems.

Another reminder here for SW99UG members to set aside some time the weeking of February 17, 1996 to help out at Fest West '96. Members have always done a great job of helping out at past SW99UG hosted Fest Wests. Let's keep up that tradition of service to the TI community in the typical spirit of Tucson! We can do no less.

SW99ers November, '95 - Minutes

Tuesday, November 7, 1995

The meeting was opened by President BJ Mathis at VFW Post 4903 meeting hall at 7:25pm.

Al Armstrong was asked to conduct the Question and Answer session.

Q When you are doing a randomize and you have more than one variable you want to randomize, do you have to use a separate randomize for every variable?

A No. You randomize once for the whole program.

Q Okay. I randomized with four variables. The only one that truly randomized was the first. If you rerun the program the other three variables are going to come up with the same sequence.

(A general discussion was had on seeding, booting, etc.)

A Let me have a copy of your program and I'll see how it is processing it. It sounds like an interesting question.

Q Does anybody own a Cannon Prowriter 1080 A printer? I need to borrow a book on it.

A Mike will take a look.

A general discussion was had about a different meeting place.

President BJ appointed Mike Doane as Nominating Committee Chairman and he chose Tom Wills and Tom Holder as the other two members.

BJ announced the newsletter deadline is Friday, November 24th. On Super AMS cards, Tex Comp bought seven more and Charles Good sold three in Chicago, (that is four altogether for Charlie). We have to send for more memory chips because we only have six with memory and we need some for FestWest.

Tom Wills discussed Internet and Freenet and had some handouts concerning same.

Tom Wills is maintaining a library and data base of computer manuals available for loan to members and requests any information manuals he doesn't have to add to the data base.

BJ announced the FestWest Committee will meet at the Mathis house November 20th; the General Users' meeting is cancelled until January and maybe permanently; the Exec Committee meeting at the Mathis house November 20th at 6:30 before the FestWest meeting; for FestWest reservations at the hotel there is an 800 number on Jeanine's card and it will be in the newsletter next month.

There was no demo due to band practice in the next room.

There being no further business the meeting was closed at 8:05pm.

Les Neff, Secretary

Mike's Meanderings

by Mike Doane

Hello again. I am back after a two month hiatus. I have been keeping busy with some non-TI activities.

I have not really done very much with my TI the last month or so. My sons have been using it quite a bit doing special reports for their school using "Page Pro". I have an IBM "clown" 486 machine sitting right beside my TI but they prefer using the graphics and fonts capabilities of my TI. Go figure!

They use the 486 to play games on. The one advantage the IBM seems to have over my TI. I guess I own one of the most expensive Nintendo/Sega machines on the market!

I must admit I use the IBM quite often as a fax machine. Of course, a good fax machine only costs about $300 and I probably have about $1200 invested in mine, but hey, I can play games on it too!

The number one thing I have on my wish list for Christmas would be fax capability for my TI. Yeah, yeah, and peace on Earth would be kinda neat too!

Number two would be a working SCSI controller!! I must admit that I have been rather complacent on this score. My SCSI works with my Geneve and consequently I have not been pursuing this major let down to the TI community!! I stated four years ago after the Phoenix Fest-West that another major failure in the hardware end of the TI would spell the end of the TI community as we know it.

The damage done to the TI world by the lack of delivery of this promised device has been almost incalculable! I have long been an un-willing proponent of this device. I felt that it was to the TI'ers best interest to give Bud Mills and Don O'Neil all the time they needed and not to apply pressure to the final release of this product. I no longer feel this way. I bought my SCSI at the FestWest here in Tucson and expected (as I was told) to have the working Eeprom THAT weekend! Needless to say this promise was not fulfilled! I did not receive the Eeprom at the FestWest the following year. I honestly don't expect to see it THIS year either! I hope to be pleasantly surprised but I am not holding my breath.

We do have one bright ray to look forward to. We now have an "expanded" memory device to use with our TI. Thanks to Jim Krych, David Ormand, Jack and BJ Mathis and a handful of loyal dedicated investors/volunteers the TI can still live on. We have programmers at work developing software which will allow us to use our machines to their full potential!

There are over 50 cards out there in the hands of programmers and users. The benefits of these cards may be slow in coming in but they are starting to trickle in. We have received two or three different programs which allow us/you to access the "pages" of memory using Extended Basic! This will be a great help for those of you, like myself, whom do not program in Assembly or Forth. I do intend to learn TI "C" this year, unh huh, and the extra memory makes all the difference in the world!

When you think about what we have managed to accomplish using only 32K of memory, just imagine what FOUR times that amount of memory will lead to!

Imagine, a word processor with graphics capabilities. built in dictionary, disk manager and formatter, all from within the document! How about a Communications program with the ability to send a separate graphics file embedded within your text message! A spreadsheet with text included within the spreadsheet with two or three different fonts! The possibilities are endless!!

On a more somber note, I must tell you that I will no longer be the SouthWest 99'ers Treasurer. This is an office which I have enjoyed holding for the last three years. I am resigning simply because I no longer have the time to pay the attention to the job it deserves. Those rumors about indictments are unfounded (at least they have not found me to serve them!). I am also aware of the vicious rumor that I am resigning simply because I no longer have any room in my driveway to park Mercedes-Benz in! This is most profoundly untrue!! My neighborhood allows curb-side parking!! I would like to continue this post but I feel it is time for someone else to take over and continue on. I would like to thank all of you whose money I have managed to caress, albeit ever so briefly, and to those of you whom managed to keep their money safe from my clutches, er, I mean, collection I warn you to not be so miserly with the next treasurer!

Have a Merry Christmas if I do not see you before then and may your lives be peaceful and happy for at least the following year!!!

Feedforth Dec '95

by W. Leonard Taffs

OLD TIP. If RANDOMIZE is used in a program you will not get TRUE randomizing if the program is loaded from a BOOT program or Ramdisk. To get TRUE randomizing, the program must be loaded from the TI TITLE SCREEN. An old tip worth repeating. I owe thanks to Jack Mathis, Al Armstrong, et al, for this reminder.

WINDOW:1-6. As three people have already written me for help, after typing in the program from the last issue of MICROpendium. in case any readers of this newsletter may have also done so, the notes that were published in MICROpendium did not include 2 important notes: 1) A CALL FILES is necessary to open more than 3 files in this program (one needed to use the disk catalog within the program)--this is clearly indicated in the beginning REM statements of the program. It is also described in the docs, and the procedure also can be viewed by responding affirmatively when the program asks if user wishes to do a CALL FILES, or its data strings in line 40 of the program.

2) The docs for the program are really required as they explain program operation in great detail and also include key-press options in the program for which there was not enough program space to include in on-screen help. The docs also explain in detail the procedures available in the program for opening and closing files within the program itself --this must be understood to make proper use of the program.

Lastly, WINDOW:1-6 reads file records in succession and not simultaneously as the first line of the article says. This is my fault that this word appears--a better choice of word would have been continuous. This was certainly not meant to deceive any reader. The files read by this program are read record-by-record. The "simultaneous" was referring to the program's ability to switch from viewing the record of one file to records of other files without having to have the program read through any single file throughout before it could view a record from another file.

JUSTIFYING WHOLE NUMBERS. To my knowledge there are 3 ways of justifying numbers (lining them up so that the decimal point always appears in the same column):

1) A decimal "justifying" program within the program itself.

2) Making use of PRINT USING and IMAGE.

3) Modifying data or text strings. This method is really modeled after the technique used in (1) except there is no decimal point to use as reference. To use this technique for data or text you set up a "dummy string" of spaces:

```
X$=" (required # of spaces) " :: X=LEN(X$)
```
The number of spaces is determined by the longest data/text item you wish to columnize.
```
A$="(data or text item)" :: A=LEN(A$)
Y=X-A  Y now equals the difference between
```
lengths of A$ and X$.

Now, extend the length of A$ with needed spaces:

```
A$=A$&SEG$(X$,1,Y)
```

To "justify whole numbers", instead of adding spaces after A$, you insert the required number of zeroes in front of the number:

```
X$=" (required number of zeroes) "
```
Let's say the number is 2 and that the longest length of number is 4 (as in 1000).
```
X$="0000" the "dummy" string of zeroes.
```
Whole numbers now need to be converted to STR$ variables:
```
N$=STR$(N)  (where N is the number. N has now
```
become a string variable.
```
X=LEN(X$) :: Y=LEN(N$) :: Z=X-Y (Z equals the
```
number of zeroes needed)
```
N$=SEG$(X$,1,Z)&N$ (needed zeroes prefixed)
```
Now 2 will print out or display as 0002 which now lines up properly in a column with 1000 .

Putting this routine together:

```
100 INPUT "Enter number ":N
 :: IF N>9999 THEN 100
110 X$="0000" :: X=LEN(X$)::
 N$=STR$(N) :: Y=LEN(N$):: Z
=X-Y :: N$=SEG$(X$,1,Z)&N$
120 PRINT "N$= ";N$ :: GOTO
100
```

I have added lines 100 and 120 so you can try it out right away. To use larger numbers than 9999, add more zeros to X$ and change >9999 to whatever will cover the size of your entry. Unjustified text data sample:

APPLES GRAPES PEARS APRICOTS MANGOS ORANGES
BANANAS PEACHES

If printed to screen and justified, it could appear:

```
APPLES     GRAPES     PEARS
APRICOTS   MANGOS     ORANGES
BANANAS    PEACHES
```

A program that will present these unjustified and justified examples is:

```
100 CALL CLEAR
110 CT=CT+1 :: RESTORE
120 B$=" " :: B=LEN(B$)
130 READ A$ :: A=LEN(A$)
140 IF A$="END" THEN PRINT :
 : : :: GOTO 110
150 IF CT=1 THEN 170 ELSE IF
 CT=2 THEN 160 ELSE 190
160 C=B-A :: A$=A$&SEG$(B$,1
,C)
170 PRINT A$;" ";
180 GOTO 130
190 REM * EOF *
200 INPUT "EOF.":K$ :: IF CT
=2 THEN 110 ! Stops here when done
250 DATA APPLES,GRAPES,PEARS
,APRICOTS,MANGOS,ORANGES,BAN
ANAS,PEACHES,END
```

Lines 120, 130 (A=LEN.. part) and 160 have the key elements to justify the data being read.

MORE on RANDOMIZING: Since the "YES/NO" random choice discussion in last months' column I have continued to be fascinated with RANDOMIZE and its ability to enable you to see some of the incredible number of permutations and combinations possible with only a few numbers. I confess my math background did not go much beyond Algebra I and Plane Geometry which experience was accompanied by tormenting mental blocks against "advanced" math. So I play with little projects like those listed this month. The following program one can play around with during coming holidays.

There are 64 combinations of possibilities if you take a 3 digit number, limiting yourself to using zero through 3:

```
000 001 002 003 010 011 012 013 020 021 022 023
                                030 031 032 033
100 101 102 103 110 111 112 113 120 121 122 123
                                130 131 132 133
200 201 202 203 210 211 212 213 220 221 222 223
                                230 231 232 233
300 301 302 303 310 311 312 313 320 321 322 323
                                330 331 332 333
```

With 3 sets of 3 digit numbers, it is clearly evident combinations of these reaches algebraic proportions.

The following program began with numbers 0 through 1. It was easy to increase this on up to 0 through 3. A prompt at the beginning of the program gives the user the chance to set his own choice of which (RND*n) is to be used. The purpose of this program was to provide the experiment of having the user enter a string of 9 digits, using 0's, 1's, 2's, and 3's. For just 0's and 1's, use (RND*2). For using 2's use (RND*3), and (RND*4) for adding 3's. The higher the choice of digits the more difficult it becomes to get a "winner" though chance still plays its role--part of the great fascination of it all. Will your entry come up as a winner in the screen display? How long will it take?

Once the user enters their combination, it is shown as "TICKET" in the display. "NS$" in the display is the STRSing summary of the random choice, displayed in the three 3 number displays shown in TIC-TAC-TOE fashion, though this is not a Tic-Tac-Toe game.

The main program is contained in lines 100 to 330 and the GOSUB lines 430-450. The remainder of the program is a beginning of a scoring section--enough to start any interested programmer--in which the scores are obtained by matching the random string against possible winning combinations listed in data statements.

This is the basis of a program I have written called CHANCE123. In that much longer program, when certain combinations appear they "win" a score. Quite some program space is used for windowed displays and printout options. By adding a few lines to the following program, it could supply print-outs, useful for research purposes if one wanted to write a paper on the subject. A few more lines added to provide counters of recurring significant incidences could make the research even more useful. (CHANCE123 does this). "*RANDOM*" is a much shorter version using data lines as a different method of scoring.

The plan of *RANDOM* takes 9 digits displayed as a string, i.e.: If using (RND*2) for just 0's and 1's then if Row 1 = 000, Row 2 = 101, and Row 3 = 010, then the string becomes: 000101010.

After randomizing for the 9 digits and displaying them, the program will search the data for any matching string (in lines 1000 and on). If it does not find a match, it returns to randomize another string.

If you copy this listing, you need retain only one data line (1070) to run the program, as is, without making any program changes. The structure of the data lines here is only an arbitrary start. Those shown have 7 elements, including the winning combination string, a value for amount won, (losses to be entered as minus quantities), followed by variable descriptors for keeping track of total score subtotals of winnings for each type of win, how many times a combination appears, etc. (Values in the data lines are experimental and the listing here does not show or implement the use of these variables). Variables could be added that would flag bells, whistles, beeps, honks or music fanfares at particular combinations).

Prompts in this program are all optional and bypassed by entering "N" for NO. A CALL KEY option has been included which you can grab by pressing either "R" or "1", just as soon as the display of numbers appears on-screen. "R" will allow you to restart the program taking you to the beginning prompt options. If you don't change options, the program continues where you left off. Pressing "1" will activate a pause/CALL KEY, as the program moves rather rapidly from one display to the next. An alternative to using "1" is to set the delay at the start of the program. Delay amounts between 500 and 1000 are suggested, depending on your choice.

The three opening prompts (all optional) are:
(1) Option to set (RND*n) (GOSUB 430)(2-4)
Use 2 for 0,1 : 3 for 0,1,2 : 4 for 0,1,2,3
(2) Option to enter a winning number (9 digits)
(3) Option to set a display delay time (0-4000)

```
1 ! [*RANDOM*] 11-20-95
  By W.Leonard Taffs,SW99ers
     Tucson, Az.
2 !
10 CALL CLEAR :: DISPLAY AT(
5,1):"*RANDOM* RANDOMIZING S
TUDY#1": : : :"By W. Leonard
 Taffs, SW99ers":"     Tucso
n, Arizona"
20 CALL KEY(0,K,S):: IF S<1
THEN 20
30 DISPLAY AT(20,2):"Want to
 SET RND(*n)? (Y/N)";:: INPU
T "   ":YN$ :: IF YN$<>"Y" A
ND YN$<>"y" THEN Q=4 :: GOTO
 100 ELSE 40
40 DISPLAY AT(23,1):"Enter n
umber for ""N""(2-4)" :: ACC
EPT AT(23,27):Q :: IF Q<2 OR
 Q>4 THEN 40
50 DISPLAY AT(23,1):"ENTER W
INNING NUMBERS (Y/N)" :: ACC
EPT AT(24,10):NY$ :: IF NY$<
>"Y" AND NY$<>"Y" THEN 100 E
LSE 60
60 DISPLAY AT(24,1):RPT$(" "
,28)
70 DISPLAY AT(23,1):"ENTER 9
 DIGITS(0-3)" :: ACCEPT AT(2
3,20)VALIDATE("0123"):WNUM$
:: WNM=LEN(WNUM$):: IF WNM<9
 OR WNM>9 THEN 70 ELSE 80
80 DISPLAY AT(23,1):"DO YOU
WANT DELAY? (Y/N)" :: ACCEPT
 AT(23,20):YNY$ :: IF YNY$<>
"Y" AND YNY$<>"y" THEN 100 E
LSE 90
90 INPUT "ENTER TIME DELAY 0
/+) ":TIM :: IF TIM THEN DL=
1
100 R=1 :: TRN=TRN+1 :: CALL
 CLEAR :: DISPLAY AT(10,1):"
GETTING NUMBER.............
"
110 FOR I=1 TO 9
120 GOSUB 430
130 SP$="000" :: SP=LEN(SP$)
140 IF I=1 THEN A=X ELSE IF
I=2 THEN B=X ELSE IF I=3 THE
N C=X :: N1$=STR$(A)&STR$(B)
&STR$(C):: V1=VAL(N1$)
150 IF I=4 THEN D=X ELSE IF
I=5 THEN E=X ELSE IF I=6 THE
N F=X :: N2$=STR$(D)&STR$(E)
&STR$(F):: V2=VAL(N2$)! :: P
RINT "N2 V2 L180" :: INPUT "
":G$
160 IF I=7 THEN G=X ELSE IF
I=8 THEN H=X ELSE IF I=9 THE
N II=X :: N3$=STR$(G)&STR$(H
)&STR$(II):: V3=VAL(N3$):: V
T=V1+V2+V3 :: V$=STR$(VT)
170 N1=LEN(STR$(V1)):: IF N1
<SP THEN IF N1=2 THEN N1$="0
"&STR$(V1)ELSE IF N1=1 THEN
N1$="00"&STR$(V1)
180 N2=LEN(STR$(V2)):: IF N2
<SP THEN IF N2=2 THEN N2$="0
"&STR$(V2)ELSE IF N2=1 THEN
N2$="00"&STR$(V2)
190 N3=LEN(STR$(V3)):: IF N3
<SP THEN IF N3=2 THEN N3$="0
"&STR$(V3)ELSE IF N3=1 THEN
N3$="00"&STR$(V3)
200 VL=LEN(STR$(VT)):: IF VL
<SP THEN IF VL=3 THEN V$="00
0" ELSE IF VL=2 THEN V$="0"&
V$ ELSE IF VL=1 THEN V$="00"
210 NEXT I
220 CALL CLEAR :: DISPLAY AT
(11,6):A;B;C;"  ";N1$ :: DIS
PLAY AT(13,6):D;E;F;"  ";N2$
 :: DISPLAY AT(15,6):G;H;II;
"  ";N3$
230 DISPLAY AT(16,17):RPT$("
-",3):: DISPLAY AT(17,17):V$
 :: R=R+1
240 NSC=NSC+1 :: DISPLAY AT(
8,9):"TURN ";TRN :: NS$=N1$&
N2$&N3$ :: DISPLAY AT(22,1):
"NS$ is: ";NS$ :: DISPLAY AT
(22,23):"rnd=";Q
250 DISPLAY AT(20,1):"TICKET
: ";WNUM$
260 CALL KEY(0,K,S):: IF S<>
1 THEN 300
270 IF (K=82)+(K=114)THEN CA
LL CLEAR :: TRN=0 :: GOTO 30
280 IF K=49 THEN CALL KEY(0,
K,S):: IF S<1 THEN 280
290 CALL KEY(0,K,S):: IF S<1
 THEN 290
300 IF DL THEN 310 ELSE 330
310 FOR DLY=1 TO TIM
320 NEXT DLY
330 GOSUB 340 :: GOTO 100
340 RESTORE
350 READ A$,B$,C$,D$,E$,F$,G
$
```

```
360 IF A$="4444444444" THEN 4
10
370 IF SEG$(NS$,1,9)<>A$ THE
N 350
380 PRINT A$:B$:C$:D$:E$:F$:
G$
390 IF POS(A$,NS$,1)THEN PRI
NT "FINAL MATCH!": : :: PRIN
T A$:B$:C$:D$:E$:F$:G$ :: ST
OP
400 GOTO 350
410 RETURN
420 GOTO 10
430 ! RANDOMIZE !
440 RANDOMIZE :: X=INT(RND*0
)
450 RETURN
1000 DATA 0000000000,2000,"WB
","WBT","CBT","BONANZA","W"
1010 DATA 0000111222,1000,"WB
","WBT","CBT","BONUS","W"
1020 DATA 0000000111,100,,,,"
0-0-1",W
1030 DATA 0000111222,200,,,,"
0 1 2",W
1040 DATA 0000111000,200,,,,"
0-1-0",W
1050 DATA 0012010032,500,,,,"
NO WIN",W ! TEST SAMPLE
1060 DATA 0000102032,40404,,,
,"MATCH!","W" ! TEST SAMPLE
1070 DATA 4444444444,0,,,,"EN
D","W"
```

As far as randomizing is concerned, you can run it from a BOOT program or Ramdisk but true randomizing is not achieved. This is not a problem if the program is just used for fun, but it does present a consideration if such a program were to be used for research. With true randomizing no series of random numbers should repeat (except by chance!). With randomizing that is not true (via BOOT or Ramdisk), at a certain point, combinations will be recognizable as being repeated. Those with extraordinary memories will recognize this when it happens. For true randomizing, the program has to be loaded directly from the TI opening screen. This will lead to an "honest" game! Possibly one way to beat the problem in a program run from BOOT or Ramdisk, is to repeat the use of RANDOMIZE each time a program line calls for randomizing--each variable must be randomized individually.

This question leaves me wondering if re-running a program from within the program versus QUITTING the game and re-running it affects the true random process? That's an experiment to conduct. To check results, maybe it's worth adding the suggested printer lines...

December almost here! Happy Holidays, everyone!

"A Brief History of Memory"

by J.W. Krych

May be freely reprinted as long as source is identified.

My friends,

It has been a great blessing for me, to have worked with some of the finest software and hardware designers the TI 99/4A Home Computer Community has had come it's way. By working with them, in the project manager role, my own knowledge and expertise has grown.

My first project, the AEMS Project, was no exception. For a very young man, what I learned and saw, was truly humbling. The AEMS Project lasted from the summer of 1990 to the spring of 1994. Nearly five years of hard work.

To say that AEMS was easy, would be an outright lie, and a total deception on my behalf. AEMS was never easy, and while the community can take advantage of that once-controversial pioneering work, I believe a little insight to the actual AEMS Project Team, may help matters. If only from a historical viewpoint.

The following is an excerpt from the last AEMS Project memo. Sent to the final members of the AEMS Project Team, Chuck Abdouch, Chris Bobbitt, Art Green, Joe Delekto, and Tony Lewis. I am still in touch with ALL of them, which I am thankful for.

Regarding actual AEMS Project notes and memos, this will be the ONLY material released to the public domain, while I am alive. Few people have even seen the Project notebook, other that a few bits and pieces of text. The SW99ers are my chosen organization to be the recipient of the Project book, when need be.

And so, from the last Team memo. A brief history. It is my hope and prayer, that you all enjoy this. For many, it will bring back "fond" memories!

"Here is a brief time line of the AEMS Project:

Summer 1990:: Examined idea for a possible expanded memory device for the 99/4A Home Computer, with the "Ease-Of-Use" concept (The programmer would be isolated from the memory paging) with Walter Ryder, original hardware designer. Also sent out letters and asked people in the community about the need for such a card. (Author's note: Barry Traver and Jim Peterson were two of those who responded.)

September 1990: Memory project started, contacts with Chris Bobbitt of Asgard Software achieved.

December 1990: Non-disclosure signed, project almost stopped due to lack of a suitable programmer to assist in the project. Joe Delekto mentioned.

January 1991: AEMS coined, Asgard Expanded Memory System. Joe Delekto now a member. AEMS Team: Chris Bobbitt, Jim Krych, Walter Ryder, and Joe Delekto.

March 1991: Due to problems with Walter Ryder, another hardware designer sought. Also, concept of expanded memory debated.

April 1991: Walter Ryder no longer a member of the AEMS Project Team. Tony Lewis agrees to be a member of the team. AEMS Team: Chris Bobbitt, Jim Krych, Joe Delekto, and Tony Lewis.

May 1991: First memory system block diagram by Tony Lewis. Original design was four(04) megabyte range. Expanded memory style debated. (Author's note: this "debating" was on how to accomplish the project goal of "Ease-Of-Use.")

Summer 1991: System would use the 74LS612, memory mapper, the 4503 DRAM controller from Texas Instruments, include a real time clock, and an interval timer. (Author's note: We were so glad that we never announced until ready to ship-regarding all of these features!)

Fall 1991: AEMS prototype proposed by Tony Lewis: use the '612 memory mapper and a 128K SRAM chip to prove, design, and debug the expanded memory system.

December 1991: AEMS 128K prototype schematics received. Started to procure prototype parts.

May 1992: First word of the N.T.I.S.C. (Our calling) National Texas Instruments Standards Committee and the "soon to be released" 4A MEMEX card.

June 1992: Art Green becomes a member of the AEMS Project and proposes that he modify his Macro Assembler, design a new loader, and create a new Object Linker to handle the expanded memory. AEMS Team: Chris Bobbitt, Jim Krych, Art Green, Joe Delekto, and Tony Lewis.

July 1992: AEMS 128K Prototype completed, and debugged. Sent to Joe Delekto, very carefully!

August 1992: Decision made by Chris Bobbitt to commercially release the 128K design, now known as AMS. Asgard Memory System. Schematics sent to OPA of Canada. New DRAM controller found to replace T.I. part, National Semiconductor DP8422A, allows for a full 16 megabyte memory range.

September 1992: AMS officially announced to the 99/4A community. First major "debate" on DELPHI. "What is AMS and why is it here" released by Chris Bobbitt. First "Fireside Chat" released by Jim Krych.

October 1992: AMS PCB's received from OPA, barely in time for the Chicago TI Fair. AEMS prototype started by Tony. TM Direct Marketing advertises the AMS boards, for $119.95. (Author's note: barely in time means this, sent to the hotel where Chris Bobbitt would be staying!)

Winter 1992/1993: AMS boards sent to Joe and Art. First public domain AMS package, XB Packer by Brad Snyder, released. Major debates on DELPHI over page size and DSR/non-DSR use. Loader issued by Art Green, ABOOT V1.0. Macro Assembler released.

Spring 1993: Debates on DELPHI reach major pitch. Rumors on team members started. Several conferences on DELPHI become heated "word wars." Object Linker is released! Newer versions of ABOOT and the MACRO Assembler are released. 32-bit data routines by Joe near completion. C99 modified for use with the AEMS Object Linker. TI-Nopoly is shown on video tape, as well as the memory system(Loader, Macro Assembler, and Linker) in action at the Lima TI Fair. AEMS prototype still being debugged.

Summer 1993: Memory systems editorial released by Chris Bobbitt. Another memory debate starts, this one lasts about a month. Experiments into using Pseudo SRAM for AMS started. TI-Nopoly is completed by Joe Delekto and Jon Dyer.

September 1993: Due to OPA failing to provide paid-for PCB's, another designer, for PCB's, sought. Due to SUPERams design not working correctly, a simple design based on SRAM is selected, if needed. (Author's note: This SRAM design is what is now known as SuperAMS by the SW99ers!)

Fall 1993: MICROpendium writer Bruce Harrison evaluates the AEMS/AMS cards. The software receives an A- and the hardware receives an A! Last member of team involved in a rumor, Art Green. (Author's note: these rumors were really annoying and troublesome during the Spring of 1993. They told much about our competitors though.)

Winter 1993/1994: Decision made to attempt again SUPERams with PSRAM. Charles Abdouch becomes an engineering consultant to the AEMS Project. In two(02) months, he will design three(03) custom chips, reducing total chip count by 50%, and will get the SUPERams prototype to work correctly using a borrowed 99/4A system and a logic analyzer. Later problems with a modified system are found to be caused by a boot cable extender, solved by different buffer chips. The decision has been made: if SUPERams is completed before AEMS is debugged, we will drop AEMS and use SUPERams. AEMS Project Team concurs. Due to lack of orders, AMS schematics and theory of operations are released to the public domain. With no orders coming in, decision made to announce that the AEMS Project is completed and over. SUPERams design to be made public domain.

April 24 1994: Asgard Expanded Memory Project(AEMS) is officially declared completed. "

I really hope and pray that you all have enjoyed this. Let me make just one clear note here, before any needless concerns are started and rumors fly: THIS WAS ABOUT THE AEMS PROJECT WHICH ENDED IN 1994 AND NOT AT ALL ABOUT WHAT THE SW99ers USER GROUP HAS DONE SINCE THEN!

There, any troubles should be cleared. And to end, a few answers to some questions: The SUPERams PSRAM prototype is with an engineer at the SW99ers. Yes, there is a real life AEMS prototype with three(03) SIMM sockets for testing, with full documentation and schematics.

Take care and God Bless!

Regards,

J.W. Krych
SW99ers Representative
Advanced Institute for Expanded Memory Studies

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

$75 - 14" Commodore Color Monitor Model 1720

Ed Chase (520)299-6511 or #118 on CP

$50 TI RS-232 card o.b.o.
$8 Speech Synthesizer
$5 TI Color monitor cable
$15 IBM Style Keyboard
$2 Continuous Form Feed Legal Envelopes

$1 Disk Manager 2
$1 Football
$1 Household Budget Management
$10 Mini Memory
$1 Munchman
$2 Parsec
$1 Personal Real Estate
$1 Personal Record Keeping
$1 Personal Report Generator
$1 Terminal Emulator II
$1 The Attack
$30 TI Extended Basic
$1 Video Chess
$1 Companion Word Processor
$1 Hypercopy
$1 Pre-Scan It
$1 Quality Soft Screen Dump
$1 Beginner's Basic Tutor
$1 Teach Yourself Basic

Tom Wills (520)886-2460 or #1 on CP

The Altman Fairware List
$2 each postage included - 1995 edition

Modules
$1 Adventure (module only)
$3 Editor Assembler
$1 Home Financial Decisions
$1 Household Budget Management
$5 Multiplan
$2 Parsec
$1 Personal Real Estate
$1 Personal Record Keeping
$1 Personal Report Generator
$3 Pole Position
$1 Securities Analysis
$10 Speech Editor
$1 Tax Investment Record Keeping
$2 TI Writer
$1 Tunnels of Doom (module only)

Disk Programs
$10 Backsteine

Printer Ribbons
$2 Epson MX-80 $4.50 NX-1020
$3 NX-10 or NX-1000 $3.50 NX-2400

Cassette Programs
$1 Teach Yourself Basic
$1 TI-99/4A Trivia Data Base

BJ Mathis(520)747-5046 #3 on CP

Books
$3 Basic Programs for the Home
$2 Computer Playground
$10.50 Home Publishing on the TI-99/4A
Supplement $3 w/disk
$2 Programs for the TI Home Computer
$3 The Word Processing Book
$3 The Writers by Harry Brashear
$2 Using & Programming the TI-99/4A

$10 TI 99-4/A Console
TI Keyboard Overlays $3ea or 5/$10
$10 Speech Synthesizer
$10 Widget
Joysticks (several pair) - make offer
$10 Thermal Serial Printer (Crackd Cvr)
$60 o.b.o. P-Code Card w/documentation
$4 Replacement Console Power Supplies
$3 Joystick Adapter
$10 Cassette Player/Recorder
$2 Replacement Keyboard
$2 Cassette Cable
$8 PIO Printer Cable
$8 Modem Cable (Telco Ready)
$2 RS-232 y-cable
50/$1 Disk Labels
500/$1 Mailing Labels
Tractor feed 1-across

BJ Mathis(520)747-5046 #3 on CP

Super AMS Order Form

Name _____ Date _____

Address _____ Phone _____

[ ] Average User [ ] Programmer [ ] Hardware Designer

Product Name	Price Each	No.Items	Total
Super AMS 128K	$85.00		
Super AMS 256K	$100.00		
Shipping & Handling	$5.00		
	TOTAL PRICE		

[ ] Cash [ ] Check (#) [ ] Money Order (#)

Please make check or money order payable to SouthWest Ninety-Niners
Send Order to: SouthWest Ninety-Niners, PO Box 17831, Tucson, AZ 85731

SouthWest Ninety-Niners Nomination Form

Indicate your nominations for the offices listed below, cut and mail this form to the group P.O. Box, hand it to a nominating committee member, or call a nominating committee member. You may nominate yourself or any other member in good standing. Elections will be held at the January meeting.

Nominating Committee Members are Mike Doane - 298-3835, Tom Wills - 886-2460, and Tom Holder - 299-6366.

President _____ Secretary _____

Vice-President _____ Treasurer _____

Membership Report

Tom Holder, Martin Marcinko, Fred Altimus, and Frank Aylstock renewed their memberships in November. We will send newsletters to 44 members, and 33 groups & vendors this month.

General Users Workshop

Canceled for December.

Contents

Members Meet

Tuesday, December 6th at Mathis' Home, 5941 E 26th St This will be our Christmas Party, so don't miss it! All members and their families are invited, bring Holiday goodies to share! We will also have a gift exchange for those who wish to participate (not every one will want to do so.)

Exec Meeting

December 28th, 6:30pm, Perkins Restaurant, Grant & Swan. Discussion of Fest West '96, plans for Super AMS, and SouthWest Ninety-Niners.

Who Do Ya' Call?

Richard Baron - Disk Librarian	885-4812
Mike Doane - Treas/Technical Assist	298-3835
BJ Mathis - Pres/Editor/Library Chmn	747-5046
Jack Mathis - Technical Assist	747-5046
Matt Matthews - Lending/News Lib	428-6910
Les Neff - Secretary	327-6437
Tom Wills - VP/BBS SysOp/Lending Lib	886-2460
Open - DOM Preparation	??????
Cactus Patch BBS	290-6277

(Area code 520 for phone numbers above)

January Newsletter Deadline))December 20th, 1995((

)))) Note! Early Deadline! ((((

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