



THE TACOMA INFORMER

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TRIVIA:

Did you know that...

-LA99ers User Group member forever George F. Steffen wrote the 99/4A version of Beanstalk Adventure and that he also wrote so of the assembly software for Craig Miller's Gram Kracker conversion utilities?

-Funware, the Richardson, Texas company started by an ex-TI employee that produced Ambulance, Henhouse, Rabbit Trail etcetera, also planned to introduce another cartridge game called Galactic Barrier, but never did?

-Moonbean Software of Northampton, Massachusetts, long-time supporter of the 4A community with a stable of game programs, used to be called HI-FI Exchange?

-TI community personalities Cheryl Whitelaw, Steven Shaw and Tom Wynne all made it into the 99er Hall of Fame with their game scores in Munchman (178,950), Pinball (10,028,010) and Tombstone City (1,009,600) respectively?

-The Turbo Pasc 99 project marketed by L.L. Conner Enterprise, was originally undertaken by Barry Boone under the support of Steve Lamberti of Texaments? Wonder what happened? Texaments even advertised it in MICROpendium a couple years back. Must have taken too long to convert it all over from the German language that it was originally written in.

-Lou Phillips (who?) was once a VP at the Chase Manhattan Bank in New York?

-Windows99 from CSI Design Group in St. Louis, Mo. was written by Ken Dibble (who?)?

Until then....

WORKING WITH NUMBERS
JOE NOLLAN

There are a number of statements in BASIC that help us deal with numbers. The math functions are pretty much straight forward and covered well in the book. There are problems which are not algebraic functions but more of a house keeping nature. The first number problem that I encountered was after dividing \$17 between 3 people my answer had eight decimal places. This is a common problem when dealing with numbers. The solution is fairly simple. Consider the number 5.66666667. To reduce this to two decimal places so that it can more easily represent dollars and cents, first multiply it by 100 to yield 566.666667. The next step makes use of the INT function which will eliminate the fractional portion of the number giving us 566. This can now be divided by 100 to yield 5.66. Although this process was explained in a step by step manner it can often be done in a single statement like $X=(INT(X*100))/100$.

Another common problem is rounding off. If you have a number like 5.98 and would like it rounded off to the nearest dollar this method can be used. First add .5 to the value then use the INT function. In the example of 5.98, adding .5 to it will yield 6.48 and the INT function will reduce it to 6 even. If the original value was 5.14, adding the function would reduce it to 5 even. The BASIC statement would look like this: $X=INT(X+.5)$.

There are a couple of statements that are invaluable when numbers are involved. The STR\$(N) statement will convert the numeric variable N into a string variable. This can be used when printing the value in a statement. When printed as a string, you won't have an extra space ahead of the number. The inverse of the

function is the VAL(N\$) statement. This statement will convert a string value in a numeric expression. You can not multiply a string value by two.

A big word with numbers is concatenation. This shows it's ugly head when you print out a column of numbers and the trailing zeros are left off making your column look like it was done by a five year old. The problem can be solved by converting the numbers to string variables and printing them as such. The trailing zero problem can be solved by adding a small amount to the number. Working with dollars and cents, you may have a number like \$9.50 that will look like \$9.5 when printed. For example let's start with a numeric variable X and use it to represent the cost of an item (dollars/cents). The \$9.50 will be used as the value for this example. First we add a small amount to the value which will not affect the original number. In this case we are dealing with two decimal places so we will add a three decimal place number to it. $X+.001$ will do it. We now have a value of 9.501. The 1 digit will hold the zero next to it. Before this figure is printed it is first converted to a string, then printed without the last character. First use X=STR(X) to convert it to a string variable. Now we will use the SEG\$ function to drop the last character. The SEG\$ function requires a string (X\$), a starting value (1), and how many characters (LEN(X\$)-1)). The BASIC statement would be: X=SEG$(X$,1,LEN(X$)-1))$. With these values the SEG\$ function will take all of the X\$ starting with the first character and include everything but the last character. Our new string will have our 9.50. This value can be printed in a sentence with

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ANNOUNCING THE
WORLD'S FAIRE OF TI SHOWS

TI INTERNATIONAL EXPO 89

When: Saturday, September 16, 1989

Where: Howard Johnson Inn
5821 Richmond Highway
Alexandria, Virginia
703-329-1400

Route 1 South and I-95 on the Capital Beltway - Exit 1, Route 1

Sponsored By:
Mid-Atlantic Ninety-Niners (MANNERS)

Show Time: 9:00 am - 5:00 pm
Exhibition floor

Pre-Show Reception: 6:00 pm Friday

Post-Show Reception: 6:00 pm Saturday

Banquet: 7:00 pm Saturday

Cost:

- \$3.00 - Advance sale admission tickets to all show events
- \$4.00 - Purchased at the door.
- \$15.00 - Buffet dinner - advance sales
- \$7.00 - Buffet dinner - Children to age 11

Booth Rates - Commercial Vendors:

- \$50.00 - First Table
- \$15.00 - Second Table
- Two free show admissions included.
- Electric available, but limited

Booth Rates - User Groups

Contact EXPO 89 for details

Show Rates for Hotel:

\$55.00 + tax per night. Regular price \$85.00. Contact hotel directly for show rates. Mention TI International Expo 89.

International attendees may write EXPO 89 directly for room reservations. Possible extended show rates for vacationing attendees. Contact EXPO 89 directly.

Avoid a sell out! Reserve your hotel room early. You MUST reserve a room by August 25, 1989. After this date, contact us directly.

Food: Howard Johnson restaurant and other local establishments a short walk or ride away.

FAMILY EVENTS:

Make this a family affair and plan a vacation everyone will treasure for a lifetime. Relive the history of the United States. Enjoy southern hospitality at its finest!

- * Off-Peak season - no maddening crowds - no heavy traffic - in a suburban setting.
- * Tour major national historical sites - the Capitol, the White House, Lincoln Memorial, Viet Nam Veterans Memorial, the Washington Monument, the Jefferson Memorial, the Smithsonian Museums and so much more.
- * Visit historic Georgetown minutes away.
- * Shop in historic Old Towne Alexandria.
- * A short distance to Mount Vernon, the home of George Washington.
- * Civil War battle fields and monuments nearby.
- * Hotel shuttle buses just minutes from the subway system and National Airport.
- * Washington tour buses leave the hotel daily.
- * Spend a day in Atlantic City, N.J. - casino buses direct from your hotel door.
- * Our international guests will enjoy the finest American department stores and shopping centers, a short drive away.
- * Visit historic Baltimore Inner Harbor. Go aboard a Tall Ship, see the National Aquarium and more.

Children in school during the show? Many school systems permit excused absences for educational or historical visits. Check with your school systems for details.

Enjoy a family vacation with off season rates, favorable exchange rates, lower prices and cooler temperatures.

- * Average daytime temperature, 80. Average evening temperature, 62.
- * International travelers will enjoy favorable currency exchange rates.
- * Its never been a better time to visit the United States and Washington, D.C. !

Advance ticket sales, and booth reservations may be made by check, money order or Visa and MasterCard.

- * Add 6% to credit card sales.
- * No credit card charge for hotel reservations made directly with the hotel or through EXPO 89.

For vendor and User Group packages, attendee information, advance ticket sales, or credit card orders contact:

Mid-Atlantic Ninety-Niners
TI International Expo 89
P.O. Box 4005
Rockville, MD 20850

Complete packets will be available in June.

301-340-7179

TI NET/Delphi: TELEDATA
CIS: 74405,1207

See you at the TI International Expo 89 on September 16th !

Transportation:

By Air - National Airport with on call hotel Shuttle Pick Up. Dulles and Baltimore International Airports within 45 miles. No shuttle pick up, although you can get to the hotel without renting a car. Contact EXPO 89 for details.

Automobile - On the major North/South Interstate Highway, 95. All other major routes into the Nations Capital accessible to I-95.

Train - Union Station, Washington, D.C. for those arriving from the North and West.

Alexandria, VA station for those arriving from the South

Both stations have subway stops. Ride to the station nearest the hotel for on call hotel shuttle pick up. Contact EXPO 89 for specific directions.

Show Highlights:

- Major TI/Geneve hardware and software vendor booths
- Noncommercial booths sell user owned TI/Geneve hardware
- Hardware Workshops
- Hardware Repair Workshops
- Software Workshops
- Product Demonstrations
- Panel Discussions
- Speakers
- Door prizes

Celebrate the 10th anniversary of the TI Home Computer at EXPO 89.

Many large and small TI/Geneve vendors have been invited to attend EXPO 89, the largest Faire in the Southern United States, to sell the latest in TI hardware and software.

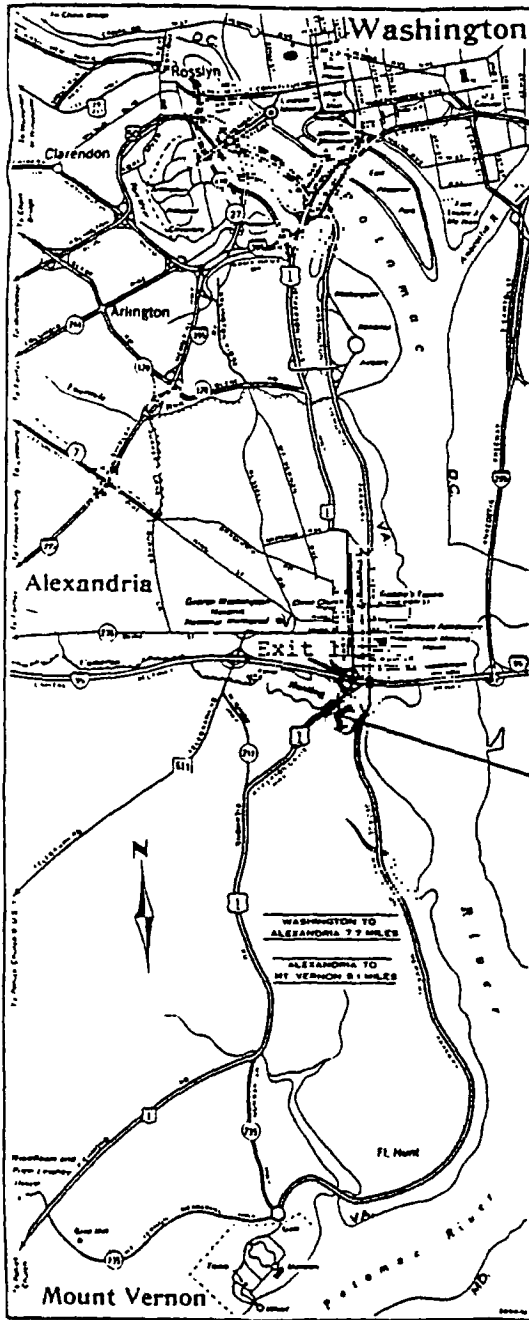
Noncommercial booths are available to sell user owned, noncommercial, excess or surplus TI/Geneve hardware items. This alone could pay your way to the show. Contact us for details.

New product releases are expected by several vendors during EXPO 89. Get them here first.

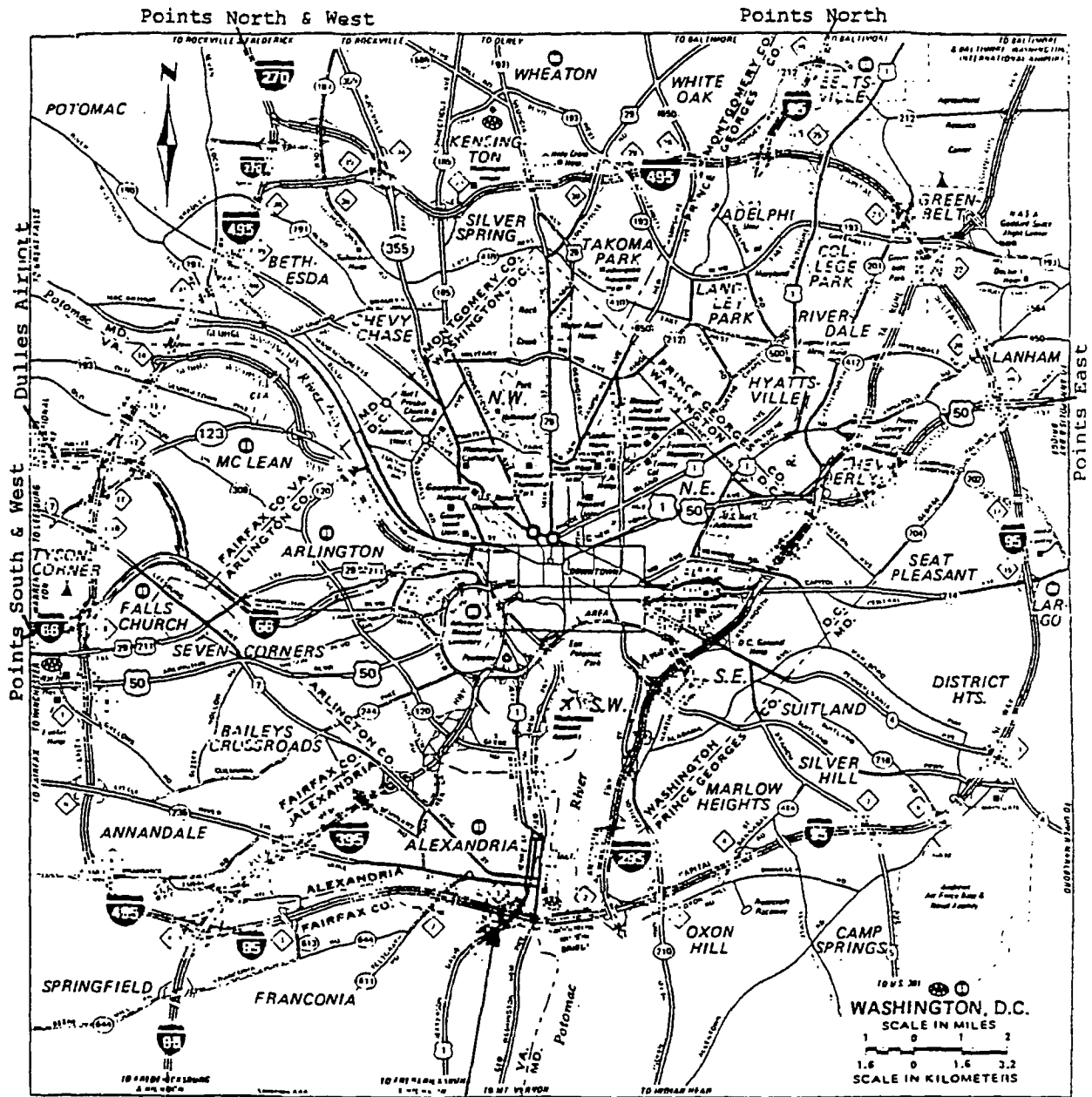
Many famous personalities in the TI/Geneve community have been invited to share their wealth of knowledge with YOU at EXPO 89! Meet the people you have always heard about.

Many of the National TI/Geneve Telecommunications networks will be in attendance to demonstrate their systems at EXPO 89.

Many U.S. and Canada User Groups will be represented at EXPO 89.



Expanded view of map on right



Points South

Howard Johnson Hotel

ORPHANS by Steve Mickelson

ORPHAN NEVER LACKING LOVING PARENTAL CARE

By Steve Mickelson

Today's state-of-the-art computers have an abundance of features which would have been considered truly amazing only a few years ago. For example, it's not unusual for contemporary systems to include spreadsheet and wordprocessing capabilities, or arcade games featuring multi-colored screens, music and digitized speech.

But a computer existed more than half a decade ago that already had all of the above features and more. That computer was Texas Instruments' TI-99/4A, also known as the original "Home Computer" (a term coined by TI). Despite being an orphan, for five years this computer has survived and thrived.

TI produced over 3 1/2 million of the 16-bit TI-99/4A computer consoles worldwide, including about 1/4 million Expansion Systems. Most of the early software produced for the TI was "locked" in GROM (Graphics Read Only Memory) cartridges distributed through TI. For each cartridge sold, TI collected a fee - a policy which unfortunately discouraged many potential software writers.

After TI unsuccessfully tried to undersell the popular Commodore Vic-20, the company decided to cut its losses. TI stopped production of the TI-99/4A in October 1983. By rights, this should have led to the disappearance of the computer within a couple of years.

But despite TI's failure in the marketing the 99/4A, the company had assured the survival of its orphan computer by implementing a policy of consumer satisfaction.

Support for the user:

Back in the early 80's, TI

responded to the computer literacy needs of many fledgling users by creating a number of regional workshops, exclusive to the 99/4A. Also a regular bulletin was mailed out to users.

As sales rose, demand for information outstripped supply. This led the company to encourage the formation of local user groups. TI sent out starter packages to aid in the formation of local user groups. These new groups began their own newsletters to their members. A number of user groups began to exchange newsletters. When TI pulled the plug on their popular home computer, the existing network of user groups filled the void, providing the invaluable technical assistance needed by users.

Additional technical and hardware support:

The TI-99/4A endured for another reason. Since the 99/4A was built to the high commercial standards of Texas Instruments' mini-computers, many systems have been in use for five or more years with little or no need for repairs. For those users with problems, TI created a toll-free 800 line called "TI CARES". TI released updates for example existing TI software, and even some previously commercial software programs, to all user groups for release in the public domain.

Support for orphaned 99/4A's also came from many third-party sources. For example, a couple of magazines, Home Computer, MICROpendium and Asgard News, catered exclusively to the TI user (though Home Computer is now deceased). And many hardware manufacturers picked up the slack, increasing production of cards for existing expansion systems, as well as designing brand new add-ons and expansion systems.

Among these companies, Myarc is probably the best known.

Shareware software and hardware kits have also come from talented individuals within the many 99/4A user groups. For example, the Horizon RAM disk and MBP real-time cards have come from user groups. And DM-1000, a disk manager from the Ottawa User Group, has become the standard in the worldwide 99/4A community.

From mail order to regional TI Fairs:

Several mail order suppliers still meet the needs of TI users. And now another forum has emerged for users to not only see the latest hardware and software for the 99/4A, but also to meet the remaining software authors and distributors within the TI community. That forum is the local or regional TI Fair. Chicago just had their sixth annual TI Fair, with others taking place in Milwaukee, Philadelphia, Las Vegas, and Los Angeles.

In Canada, Ottawa and Halifax have been local focal points for TI forums. These events, usually held in community halls or auditoriums, give TI users an opportunity to meet one another in person, see the latest hardware and software, and hear lectures and demonstrations on their beloved orphan computer. TI-ers have been known to travel hundreds or thousands of miles just to attend such an event.

The legend lives on:

Today, many of the original TI computers are still in service. For example, some of these robustly built systems have seen two or three owners without enduring any hardware failure.

Surprisingly, more options are now available for the TI-99/4A, in hardware and software, than when Texas Instruments originally

discontinued the computer. There are now several languages for the 99/4A: Extended BASIC, two versions of Forth, a Turbo Pascal, Pilot, Fortran, and c99, among others. There are currently also several data bases, including TI-Base (which looks similar to D Base III). Other available databases are Creative filing System and PR Base.

A host of other useful programs are now available too. For example, there are utilities that allow the user to port text files to and from an IBM, by reading/writing and even formatting in IBM disk format. There are several good graphics programs, including TI Artist, Picasso, Joypaint, and Graph X. And as for word processors, there are Companion, Writerease and the Press. As well, a number of advanced disk, diagnostic and assembler utilities are available for any interested 99/4A users.

New Hardware:

New hardware add-ons for the TI include voice recognition systems, trackballs, mice, 80-column cards, double and quad disk controllers, as well as hard disk controllers, real-time clock cards, speech cards, digitizers, music-synthesizer cards, and battery-backed RAM disks with up to one megabyte of pageable memory.

It is also possible to purchase IBM-XT keyboards interfaces, and hardware to dump the older cartridge software to disk.

One of the most recent hardware developments has been the Myarc 9640, also known as the Geneve. The Geneve, literally a computer on a single card, has many features of the discontinued TI-99/8, as well as a number of other features which are simply state of the art.

For example, the Geneve uses the upgrade-compatible Yamaha

9938 video display chip. And this "intelligent" video chip has mouse and joystick ports built in, with 80 column display, digitizer capabilities, as well as composite, analog RGB, and RF-modulated video outputs.

The Geneve has the same sound chip as the TI and comes with IBM XT, 12-function keyboard. The operating system, M-DOS, has the same command set as MS-DOS. Yet, a GPL software interpreter creates a TI-emulated operating environment within the 9640, one which lets most of the 99/4A programs run on the Geneve as if they were booted on a 99/4A.

Nevertheless, the Geneve's 12 MHz clock speed allows the user to run programs at selectable speeds up to 3 1/2 times faster than those of the 4A. The 9640/Geneve has 32K or an optional 64K of O-wait memory, plus 640K of RAM on the card. Also, the Geneve has a battery-backed real-time clock. The Geneve's graphic output is up to 512X424 pixels, in any of 256 colours.

Recent software offerings for the Geneve include a mouse-driven art program which can load and print 99/4A art and GIF pictures, as well as GEME, a mouse-driven windows-like utility, which allows up to four programs to run at the same time. Overall, the Geneve brings to the TI-user many advanced features not possible in the TI-99/4A.

A bright future:

In the near future, we can expect a MIDI interface card, a Canadian built Z-80 card, Kermit software, GIF software for the TI, and possibly an IBM co-processor card. Also, expected in the near future is a stand-alone Geneve computer system, available to any user who does not already own a TI-99/4A system.

As long as we have a

dedicated community of innovative enthusiasts, the TI-99/4A orphan will continue to endure and prosper a contemporary classic, one of the true paradoxes in today's computing world.

Steve Mickelson is President of the Toronto 9T9 Users Group and edits Newsletter 9T9.

The above article was written in the early fall of 1988 and was printed in the January edition of Toronto Computes. Downloaded from the TI Round Table library on GENIE.

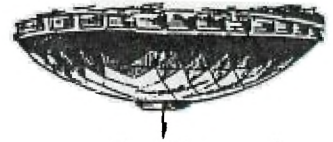
MATH FROM PAGE 2

a statement like PRINT "THE ITEM COST IS \$";Z\$;" WHOLESALE."

Printing a column of numbers presents another problem. Tab settings will line up the LEFT digits which is great if the values all have the same number of digits and awful if they don't. One way to solve the problem is to use the LEN(X\$) statement to determine the TAB(Z) value. Look at this example: PRINT "ITEM COST";TAB(15-LEN(X\$));X\$. In this example the larger the number, the smaller the TAB will be and the column will be lined up on the right.

These are not the only way to solve number problems. X-BASIC has ways around them as well. This is intended to give some ideas so that you can solve your specific problem. I write articles like this to start the gray matter working and thinking "I'd like to fix this program so that-". Remember, I'm more than willing to help with any specific programming difficulties you may have.

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MEETINGS ~ 1st and 3rd THURS. ~ 8 p. m.

South End Pool Building - 482 E. 56th Street - Tacoma, WA

For More Information Call 474-7310