

VAST



NEWS

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The Newsletter of the VALLEY of the Sun TI99/ers

SPONSORED BY THE
SOUTHWEST NINETY-NINERS

SATURDAY FEBRUARY 17, 1996

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A FEW
DAYS
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INSIDE INFORMATION

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DISCLAIMER

the VAST COMPUTER USERS GROUP can assume NO responsibility for the accuracy of the information in this newsletter or for the programs or for construction projects tried by its members or others. YOU try them at your own risk!

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SECRETARYS SLATE

MINUTES

VAST COMPUTER USERS GROUP

January 13, 1996

The president, Ralph Rees, called the meeting to order at 1:00 P.M. January 13, 1996, at Glendale Public Library.

First item of discussion was a new meeting place as of March 9, 1996. Walt Brown has offered his home. Others will check some public buildings for openings and reasonable rates.

Ralph announced that a Disabled 286 clone was donated to the club by Al Bristol. This will be used to replace parts for the VAST BBS system. The first item to be used is a color monitor in lieu of the monochrome one. With this in place, Sysop Jim Ely is able to see the color as he applies his special magic to our BBS.

The game "Trade Wars" is being used a great deal on the BBS. Walt brown made a motion to buy this game in the name of Al and Charlie Bristol. This motion was seconded and passed. It will now join "Eclectic Ave" and "Super Slots" as permanent games that was bought by Kevin and Ralph Rees for the club.

It was announced that next month is the FEST WEST '96 and if you buy 10 lottery ticket for the many prizes, a free door ticket is received. The VAST has a table reserved for this event.

Ralph also reported he received and welcomed an envelope of items from Bill Gaskill to be used in the Newsletter.

The Treasurers report was given with a total for the New Year of \$612.34 but with BBS and Newsletter expenses out standing. The annual dues are due as of the January meeting (now).

Jack Workman our Vice President donated a 80 column card to the club and some printer ribbons (from a demised printer) to Harry Sutton and Al Bradbury. He returned the club AMS Card and Jim Wayne will have it this month. The AMS card was discussed along with new meeting place opportunities. The Business part of the meeting was adjourned.

VAST Secretary, Hazel Knight



BY CHARLIE BRADBURY

The VAST Connection BBS is still going strong. For those of you who don't have a modem, or haven't called recently I will update you on the great features our beloved Sysop, Jim Ely, has put on the BBS.

First off, he has put a feature on the BBS called a door menu. On this menu you can choose from a number of games to play by selecting the number beside the desired choice. From there the computer goes off of the regular BBS, and goes in to the game that is on the system. You can play the game for the time allotted, then you can look at scoreboards, play-off tables, and your basic info. Then, when you QUIT the door, or game, the BBS will close down the door menu and return to the normal BBS. The door menu consists of Super Slots, TRI-Mail, Real Time Connect Four, and many, many other things that will make you want to stay on line for the rest of the day.

As most of you know already, there is a Bulletins menu on the board too. Recently I have been looking at some of these, which I don't take time to do very often. I have noticed that just about every time I log onto the board there is something new there, so those of you who think that it is always the same, it's not! The options that have a star next to them are the ones that your security level depends on, if you have a low security level you might not get to read them!

The board now supports three terminal settings 40 column, 80 column ANSI graphics, and RIP Script graphics. Hear that?, all of you with IBM's can call too! I mentioned the Door menu above, well you are going to need an 80 terminal program to play those. If you don't have one already try ordering Jeff Brown's TERM-80. It will support 80 column ANSI graphics, and get you playing those games.

There are also lots of short-cuts to the BBS too! For example, when you log on try entering your name, then a semicolon, then your password (nospace between semicolon & password). It will bypass the prompt to put your password in and put you right into the BBS. If you want more information on what other short-cuts there are drop the Sysop a note on the BBS and he will help you out.

see "CHARLIE". page 9

	THINGS THAT HAVE COME AND GONE AND SOME THAT NEVER WERE	

article by Bill Gaskill

February 1996

OLDIES BUT GOODIES: Flyer time. If your newsletter editor has the space, I've sent along a flyer this month that is a copy of the great "high score" modifications one can make to M6's NIGHT MISSION game. The idea and the instructions come from the ever creative Ray Kazner, who will forever be remembered for writing the "awesome" Woodstock Christmas program.

(Editors note - photo copies of the above flyer will be available at the February meeting.)

COLLECTING CARTRIDGES - NEW DISCOVERIES: Article by Bill Gaskill and Jane McAshan, who was a former member of the Houston User Group.

As most 99ers know, or have at least heard, I enjoy digging into and writing about most aspects dealing with the history of our computer, but none more than the cartridge software that was announced, produced or planned for the TI-99/4A. This article, which is reprinted from the July 1983 issue of the Houston User Group's HUG newsletter, is a treasure trove for both history and cartridge information. The original report was written by Jane McAshan, a Houston area computer retailer and Computer Age business owner, who was also a member of the Houston 99ers. My sincerest thanks go out to Mr. Richard Lumpkin of the Houston Users Group for providing me with back issues of the club's newsletters so that I could uncover such jewels as this McAshan treasure.

Between Jane's article, the always welcome assistance of best friend Steve Mehr, and my own never-ending search for new information, I have uncovered several cartridge software products that were announced, but never produced, and others that the code exists for but that were never "put in a can" (placed in module form) as Ken Hamai used to like to say, and at least one other that actually did get produced for European distribution that I had never heard of. Hope you enjoy the reading.

Bill Gaskill Dec 1995

HOUSEHOLD MONEY MANAGEMENT: I discovered this cartridge in a brochure made for distribution outside the U.S. It may be a European version of Household Budget Management, but I can't tell from the photo. The brochure is dated 11/24/83.

see "THINGS", page 4

ARTICLE BY BILL GASKILL

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CREATING A TI-BASE DATA FILE

To illustrate what you will end up with after a file has been designed and then saved to disk, we will create a sample file that you could use to store data from back issues of your User Group newsletter. But before a file can be created we will need to have a data disk to store it on. So first make sure that you have a newly formatted floppy disk available, and that it is in the active DATADISK drive. If you are operating with multiple drives you may do so by loading TI-Base and then typing in the FORMAT directive or you may of course use your favorite disk manager. Single disk drive owners cannot access FORMAT because it is a program segment, something that we will discuss in article #7. Assuming that you have the data disk ready and that you have TI-Base up and running, from the dot prompt type in:

CREATE NEWSIDX

CREATE is the directive that is typed in at the dot prompt to start any new file. Besides typing in CREATE NEWSIDX you could also have typed in CREATE DSK#.NEWSIDX, where the pound sign is the number of the disk drive where the file to be named NEWSIDX is to be created.

When you enter CREATE NEWSIDX the CREATE screen appears and displays a message that advises you to press the space bar to change (toggle) the data types in a field and that you need to press <ENTER> to advance the cursor to the next field. The CREATE editing line appears as follows:

FIELD DESCRIPTOR TYPE WIDTH DEC

Like most traditional data base and file management programs, TI-Base subscribes to the field, record, file format. That means that NEWSIDX will be a file, that contains individual records, and each record will be made up of from 1-17 fields. A FIELD is the smallest element of a file. Data collected in fields make up RECORDS. Records saved to disk under one structure, with one name, make up a FILE.

see "GASKILL", page 3

THE RACE: This is a Pole Position clone written by Glen Groves when he was running Software Specialties out of his home in Evergreen, Colorado. The code came to me via Steve Mehr in Thousand Oaks, CA, and the program actually has no title on it. There is just a 1983 copyright date and the "Software Specialties" name when the game first boots up. I have no idea why the program was never produced? Although it lacks some of the nice sounds of the Atarisoft program Pole Position, it is virtually identical to the Atarisoft game. Perhaps there were some licensing or possible look-and-feel (copyright infringement) problems that prevented us from getting this neat game officially released for the TI-99/4A.

REPORT ON THE SUMMER 1983 CONSUMER ELECTRONICS SHOW

Chicago, IL-The 1983 Summer Consumer Electronics Show was held here from June 5-9 at McCormick Place, McCormick West, and assorted hotels around town. More than 80,000 visitors were present for the giant convention to see the latest and greatest items for audio, video, games and computers...

Of course the items which were of interest to me and the HUG were at McCormick West. Here there were 150,000+ square feet of exhibit space devoted to computers and video games. There were a few companies who had booths at McCormick Place (Atari, Panasonic), but the ones displaying the items relating to our computer were at McCormick West.

When I arrived on Sunday afternoon, the first place I looked for was the TI booth, and as you can tell from the photo (sorry, I couldn't duplicate the photo, BG), I didn't have to look far! The huge 2-story exhibit was the first one inside the door of McCormick West. There was a large display of assorted software, from TI and their authorized 3rd party people, Scott-Foresman, Adventure International, Milton Bradley, Scholastic, Addison-Wesley, Milliken and DLM Academics. TI's major hardware announcement was a Direct Connect Modem compatible with the Hex-Bus for \$99.95. There had been many rumors in the press, and were in the Show Daily papers (sic), about other new hardware items, however no official announcements were made. TI has a new policy in the Home Computer Division that they will not announce ANY new hardware until they are certain they will be able to ship it within approximately 60 days. Future announcements will not be made solely at the Consumer Electronics Shows, but at appropriate times during the year. TI did announce several new software items.

TI MINI-WRITER -- a mini-word processor with features including; full screen text editing (24 x 40 character

window, 80-character line); 9500 characters stored per file; add/delete characters or line; moveable copy; upper and lower case characters; save/load to and from any storage device; print via the Peripheral Expansion System or Hex-Bus RS-232 to printer; search for desired information; scroll screen; purge text buffer; and cancel commands. Requires cassette recorder and Mini Memory cartridge. PHT 6103 \$19.95

EARLY LOGO LEARNING FUN -- Contains a selection of the best LOGO procedures in a format designed for preschool children (not a scaled down LOGO, but some of the Lamplighter procedures from the Curriculum Guide, useful for 2-5 year olds). \$39.95

WORD INVASION -- A friendly alien octopus protects her underwater territory from a screen full of invading words with a magic ring that moves from arm to arm, firing at approaching words. The player must match the appropriate word with the part of speech that appears below the alien octopus. Players practice identifying the six major parts of speech. (DLM Academics). PHM 3169 \$39.95

WORD RADAR -- You're a control tower operator scanning for words in four quadrants. The words appear for a few seconds then disappear. You must use the radar beam to scan the quadrants and match the words at the bottom of the screen with one of the words in far quadrants (sic). A challenging visual memory and discrimination skills builder for players of all ages. (DLM Academics). PHM 3185 \$39.95 (At the DLM booth, they said there will be 4 more word games available within the next year).

MOONMINE -- You are the captain of the U.S.S. MoonMine and your mission is to capture treasures stolen from Earth. Battle against the mighty Zygonaut and his menacing creatures to save the world's most valuable treasures! A one-player game which tests your skills in strategic planning and quick thinking. This package was featured in the Software Showcase at CES. PHM 3131 \$39.95.

SNEGGIT -- Save the eggs! Hungry snakes are in the barnyard, devouring your eggs by the dozen. You must survive the reptilian attack and save as many eggs as possible. PHM 3145 \$39.95

MUNCHMOBILE -- Not your average car! It has arms which you can use to grab at goodies along the highway. But don't forget about fuel...or you won't have a nice trip. PHM 3146 \$39.95

ENTRAPMENT -- You are in command of a space ship that patrols Earth's atmosphere. Suddenly, the Earth is under attack. A legion of hostile larvae is entering the atmosphere. These creatures turn into ravenous insects and attack the Earth. Unless you immobilize the creatures

see "THINGS", page 6

WHEREFORTHIS OF FORTH

PART 2

BY RENE' LEBLANC

In the last issue of "WHEREFORTHIS" I introduced the idea of the underlying Forth Virtual Machine. Let's use "FUM" for short. In this issue, I'll begin to introduce some of the main components of the FUM.

As you may already know, the FUM is a stack-oriented machine rather than a register-oriented machine. There are two stacks: the Parameter Stack, just called "the Stack" and the Return Stack, called just that. These stacks are both "LIFO" stacks where the values that are pushed onto the Stack are normally accessed in the reverse order they were put on. In other words, the Last In is the First Out (sort of like trays in a cafeteria).

Whereas we talk of "statements" or "procedures" or "subroutines" in other languages, in Forth we talk about "words". A Forth "word" is the Forth equivalent of a subroutine in other languages. In forth circles, "word" is not generally used for a unit of memory. Instead, the term "cell" is used to denote a 16-bit memory unit.

Words do most of their data manipulation on the Stack (Parameter Stack). They also receive their input parameters on the Stack, and they leave their output results on the Stack.

The Return Stack is used to store the return address where control is to be returned after the word reaches the end of execution. The Return Stack is also used to store loop indices during loop execution. The programmer can also use the Return Stack as a temporary location to hold a value, but he must always clear it off before reaching the end of the word's execution or before reaching a loop word.

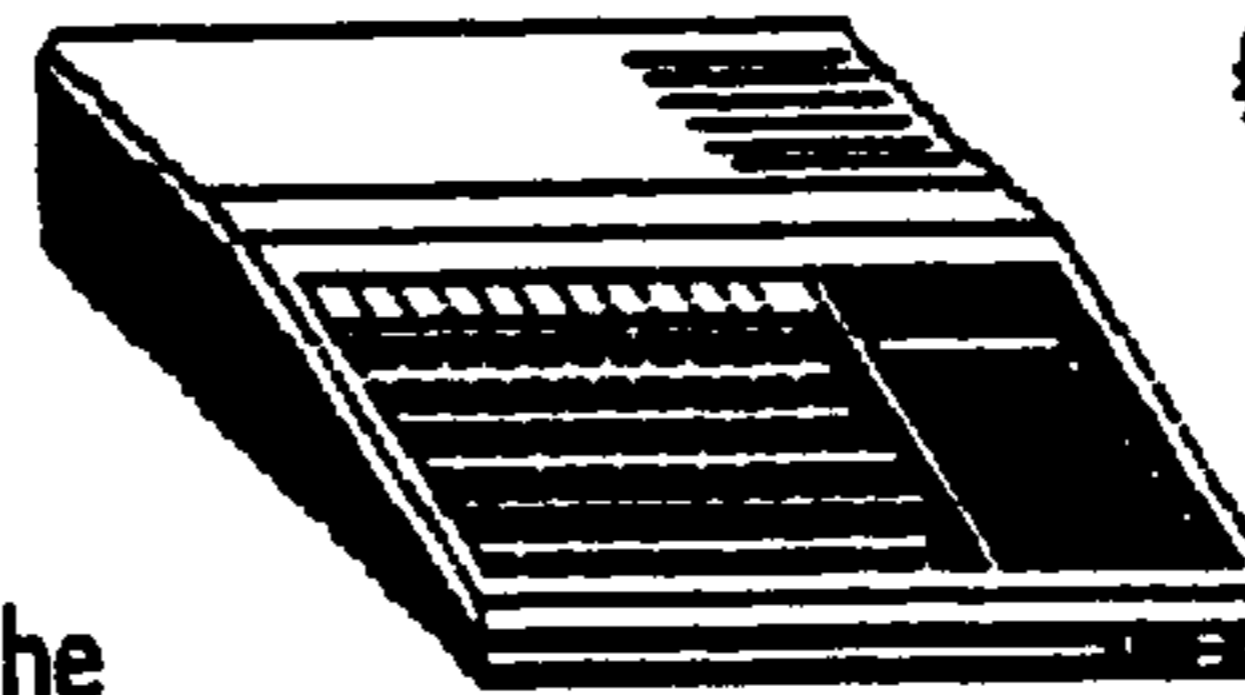
The most usual way to define new Forth words is with the "colon definition". Colon (:) is a special Forth "defining" word that lets you define new words as a sequence of previously defined words. A semi-colon (;) indicates the end of a colon definition. In the abstract

```
: W X Y Z ;
```

is a colon definition defining a new word "W" to be the sequence "X Y Z", where X, Y and Z are some previously defined Forth words.

ALL Forth words are compiled into a "dictionary", which is the Forth object code. In a future issue I will explain some of the details of how Forth dictionaries are organized, but for now I only want to introduce it as one of the FUM's major components.

see "FORTH", page 8



the
ELEMENTS OF BASIC PART 9

COMPUTER TUTOR

by Dave Howell
ERIE 99'ERS

The INPUT statement.

In addition to using the READ...DATA and LET statements for entering data into memory, the INPUT statement allows values to be entered while a program is in progress. When an INPUT statement is encountered in a running program, the computer cannot continue until data has been entered via the keyboard.

The following statement demonstrates the format of a simple INPUT statement:

```
10 INPUT A
```

The INPUT statement causes the computer to sound a "beep", print a question mark, and wait for data to be entered. When the ENTER key is pressed, the program will resume.

The type of data entered at the keyboard must correspond to the type of data specified by the variables in the INPUT statement. If the wrong type of data is entered, the following warning message will be displayed:

```
WARNING:  
INPUT ERROR IN 10  
TRY AGAIN:
```

When the input error occurs, the INPUT statement will automatically be repeated. As a result, an INPUT statement will not allow the program to continue until an appropriate value has been entered.

The values for several variables can be assigned with a single INPUT statement.

```
20 INPUT A$,B,C$
```

When responding to this statement, commas must be used to separate the data, like this:

```
TELEPHONE,814,AREA CODE
```

The data entered in response to an INPUT statement must match the type of variable in the same order; that is, alphanumeric data for variables ending with a string character (\$) and numeric data for non-string variables. If the data does not match the respective variable in the INPUT statement, a warning message will be displayed.

see "BASIC", page 9

there is a lot of new, quality software coming out in the next 6 months. However, as I found when I ventured further in CES, there are a number of companies releasing software for the TI-99/4A, cartridge and cassette based.

A visit to the Emerald Valley Publishing booth found Gary and Pat Kaplan busy promoting not only the 99er (magazine) but several new books (the Best of 99er really looks great!), but also their new line of cassette based software. You'll find pictures of the covers in the back of the June 99er. Several of the programs look good, and the idea of combining a game program with a programming tutorial is good.

Scholastic Inc. announced a series of new cassette based educational programs for the TI (and others).

TURTLE TRACKS -- Use simple commands to draw pictures and patterns and make melodies.

ELECTRONIC PARTY -- 2 games, Surprise...open the presents on the screen for surprise activities; (and) Make A Card...create original electronic greeting cards.

SQUARE PAIRS -- Matching games of memory and imagination, use theirs or create your own. Scholastic promises more packages to come.

As I explored the exhibits, I saw more and more companies with cartridges for the TI-99/4A! This despite TI's stated opposition to non-authorized 3rd party cartridges. For those of us who have the current 4A there will be no problem (just don't let TI touch it, or they will "upgrade" your 4A!). Future versions of the 4A, such as the cream colored ones coming off the lines in July, will supposedly not run 'foreign' cartridges without violating one of TI's patents. It should be interesting to see how the whole thing comes out. Some of the more interesting developments are as follows.

Funware was exhibiting several new programs, they guarantee that their programs WILL run on all future versions of the 99/4A (they have an agreement with TI which covers at least some of their line). That agreement might have something to do with the reason Creative Software recently purchased Funware! Driving Demon and Ambulance should be out in July, with other titles such as St. Nick and Cave Creatures to follow shortly. Creative Software plans Astroblitz, Trashman and Rat Hotel for us.

One of the new entrants to the 99/4A market was Thorn EMI, and it looks like their titles should be available by August or September. The games were actually RUNNING on 99/4As and the graphics looked super!!

RIVER RESCUE -- Navigate a treacherous river and save the refugees! 6 game variations, 1 or 2 players.

SUBMARINE COMMANDER -- Sub patrol simulator to hunt and destroy enemy shipping.

WAR GAMES -- Save the world from a nuclear holocaust! Their newest game and the graphics have to be seen to be believed.

Epyx Computer Software plans to make several of their programs available for the 4A, seven on cartridge and six on cassette. The cassette titles include Seewolf, Spectar, Gun Fight, Circus, Starfire, and Fire One. The cartridges are:

JUMPMAN JUNIOR -- 12 screens featuring electrocution traps, moving walls, hellstones, and other dangers.

PITSTOP -- Fast paced racing action plus the strategy of the pits.

GATEWAY TO APSHAI -- 8 different screens with 50 chambers per screen. Explore the dark labyrinth of rooms and twisted caverns which lead to the fabled Temple of Apschai. Glorious treasures and nasty monsters.

LUNAR OUTPOST -- Alien invaders are preparing a full scale invasion of Earth, and your Lunar Outposts are all that stand between the invasion force and ultimate defeat. Strategy and 3-D graphics are featured.

SWAT RESCUE -- Police action plus strategy and planning are combined in this new high-resolution graphics game.

SILICON WARRIOR -- 3-D graphics, characters that disappear and reappear and real time competition for up to 4 players.

FUN WITH MUSIC -- Learn and play music on your video screen, easy to use with its handy Keyboard overlay, the perfect blend of education and fun.

Completely new to the home market is SEGA, maker of arcade games. After licensing ZAXXON to DataSoft, they decided to enter the market for themselves. Their first titles will be available for the Atari, VIC-20 and TI.

CONGO BONGO -- Climb impossible cliffs, cross treacherous lakes, dodge coconuts, leap over poisonous snakes and outsmart charging Rhinos in your attempt to capture Congo Bongo.

BUCK ROGERS: PLANET OF ZOOM -- Terminate the evil enemy Source Ship, but first fly through enemy infested surface channels and smasher tunnels, around city spires and against an endless array of bizarre alien ships.

see "THINGS", page 8

STAR TREK -- You decide when, where and how to use the Enterprise's Warp Drive, Impulse Power, Photon Torpedoes and Phasers as you battle with the dreaded Klingons, the Federation's deadliest enemies.

One of the major announcements at the CES was the formation of a new division, Atari Publishing. They will be producing proven programs for a wide variety of machines, IBM, Apple, Commodore 64, VIC 20, and TI-99/4A. The first programs to be offered should be available by early fall, and include not only familiar titles from Atari, but 4 which are licensed from Synapse Software.

CENTIPEDE -- Armed with a bug blaster, zap through an invasion of creepy crawlers who threaten the mushroom patch.

DEFENDER -- The only protection left to the humanoids, the target of the crazed invaders.

DIG DUG -- The search beneath the earth yields a bounty of fruits and vegetables, but also Fygars and Pookas.

PAC-MAN -- Gobble the dots, and avoid the goblins.

DONKEY KONG -- Rescue the Fair Maiden by helping Mario negotiate girders, elevators and treachery.

SLIME -- The diabolical alien plan is to raise the level of the Earth's oceans to drown out all life so the slime breathing invincibles can colonize.

PROTECTOR -- The Frauxillian Slimehordes are attacking your cities and carrying off their citizens. Can you get your people to safety as volcanoes erupt and enemy forces conspire to thwart your every effort?

PICNIC PARANOIA -- Can George be fast enough with his swatter to keep the ants and other pests from walking off with his meal?

SHANUS -- The Shadow is there - in one of four levels of 32 rooms, each with bristling danger.

THINGS THAT NEVER WERE:

On April 24, 1985 IUG founder and president Charles LaFara placed the following message on CompuServe's TI Forum.

"The IUG (International 99/4 Users Group) has filed for protection under Chapter 7 of the Federal Bankruptcy act. All software library orders received on or before April 30, 1985 will be shipped prior to May 30, 1985. We highly regret this action but have no alternative at this point. The current library as well as some 400 new programs have been kept intact and will be marketed by a newly formed company which will be announced 6/1.

This new company will use the current IUG catalogs and program numbers so there will be no confusion to new members. I personally feel deeply saddened that the quality of service that we strived for over the past 5 years has suffered so in our last 6 months of operation and hope that our thousands of members and friends can understand that we did everything in our power to continue to support our members to the bitter end. For those hostile members who seem to think that I have amassed a personal fortune from the IUG please rest assured that this is not the case.

The fact is that we currently stand to lose "everything" that Virginia and I have worked for over the past 20 years to assure that our creditors and members are satisfied.

- Charles LaFara -

As we all know, the "new company" never came to be. In fact, the huge library of user written programs that LaFara had accumulated were left in the able hands of Dr. Guy Steffen-Romano, who doled them out with the proper sense of propriety in the years following the demise of the IUG.

MAY 1985: Claudia Cohl, editor of Family Computing magazine, announces their decision to drop TI-99/4A support as a result of little or no advertising revenues coming in from the very few TI-99 vendors and businesses left.

FEST-WEST '96: It will be held in Tucson, Arizona again, compliments of the Southwest 99ers, on February 17, 1996. Be there or be square. I'll be there along with Steve Mehr and Roger Merritt of Comprodine and I don't know who all else yet.

=eof=

FORTH continues

In summary, I have introduced three major FVM components; the Parameter Stack, the Return Stack and the Dictionary. We have seen that Forth words may be defined as a sequence of other Forth words, using the "colon definition". The first identifier following the ":" is the name of the new word, and the ";" is sort of like the "return statement". All the other identifiers correspond to previously defined words that are to execute in the sequence indicated when the new word is executed.

Forth words can be executed simply by typing in the word and hitting Enter. They can also be executed by loading a Forth Screen that has the word on it, but now we are getting into the subject of a future issue.

Just to give you something to try out, boot up your Forth system and put in the following definitions:

see "FORTH". page 9

GASKILL continues

In TI-Base the Field column is automatically numbered from 1 to 17 as you create each field in the record. The DESCRIPTOR column allows you to enter up to 18 characters to describe or name the input field. Aside from the underline and pound sign characters, you will find that only normal letters and numbers are allowed in field names. The TYPE column is used to define the data that will be entered into the field. Three data "types" are supported, Character, Date and Numeric. You may choose the appropriate type by pressing the space bar to toggle through the available choices or you may simply type in the letter C, D or N to designate the data type. The WIDTH field allows you to specify a maximum length for the input in the field. A maximum of 255 characters per field is permitted. If you specify a Date field type then TI-Base automatically inserts an "8" as the field width. The DEC column lets you specify the number of digits to appear to the right of a decimal point in a numeric field. A range of 0-99 is permitted.

When you have defined the first field in any TI-Base data base you simply press <ENTER> at the last column of the field and the cursor drops down to the next field definition line. If you are done defining the file simply press F8 to save it. Pressing F9 will abort the effort. Once you press F8 the file definition is written to the data disk, under the name you specified but with a /S extension, and is then ready to accept record input. In fact, you will be asked if you want to APPEND records immediately after the file definition is saved.

To create NEWSIDX Key in the following structure.

FIELD	DESCRIPTOR	TYPE	WIDTH	DEC
01	SUBJECT	C	032	00
02	SOURCE	C	020	00
03	TYPE	C	015	00
04	DATE	C	005	00
05	PAGE	C	003	00

-eof-

FORTH continues

```
: GREET CR ." HI THERE!" ;
: GREETINGS 0 DO GREET LOOP ;
```

Now, if you type "Greet" Forth will respond with "Hi There! ok". (Forth always acknowledges you with a friendly "ok" if it understood the last command.) Now, try "5 Greetings", or "48 Greetings", or whatever. You must always place a number on the stack before using the word "Greetings". That's the way it is defined.

BASIC continues

In this example of the INPUT statement

```
10 INPUT A$,B$,C$
20 PRINT A$
30 PRINT B$
40 PRINT C$
RUN
```

```
? DESK,CHAIR,"PENCILS,PENS"
(--user's response)
DESK
CHAIR
PENCILS,PENS
```

The data PENCILS,PENS would generally be considered by the computer as two separate values for C\$ in the INPUT statement. However, the quotation marks allow the data to be considered as a single value.

It is good programming practice to include a prompt message in an INPUT statement. A prompt is used to indicate the exact type of data required.

For example, the statement:

```
10 INPUT "CUSTOMER NAME?":A$
```

would cause the following message to be displayed:

```
CUSTOMER NAME?
```

The prompt message in an INPUT statement must be enclosed in quotation marks and followed by a colon. The list of variables must follow the prompt message.

When a prompt message is included in an INPUT statement, the question mark (?) will not automatically be displayed. If a prompt message is included, the prompt will be displayed exactly as it appears in the INPUT statement.

CHARLIE continues

If you notice something is wrong, missing, or if you have a suggestion that would make the VAST Connection BBS any better tell the Sysop. Meanwhile, Keep calling in, and for those out there who haven't called before call today at:

602 **267-1419**

Keep those calls coming!

VAST USERS GROUP INFORMATION

The **VAST COMPUTER USERS GROUP** is a support group for the Texas Instruments TI-99/4A Home Computer and Geneve.

The **VAST COMPUTER USERS GROUP** operates a BBS 24 hours a day, 7 days a week. the phone number is:

CURRENT OFFICERS

(602) 267-1419

PRESIDENT

Ralph Rees.....582-0800

VICE PRESIDENT

Jack Workman.....437-3187

SECRETARY/TREASURER

Hazel Knight.....938-5446

LIBRARIAN

Wallace Knight....938-5446

NEWSLETTER EDITOR

Ralph Rees.....582-0800

BBS SYSP

Jim Ely.....UNLISTED

Send any correspondence to the address below.

ADVERTISING: There isn't any charge to paid members for **PERSONAL** advertising. Non-members will be charged at a cost of \$1.50 per ad.

NEWSLETTER EXCHANGE: We exchange club newsletters with many TI Users Groups. Contact Our secretary.

Opinions expressed herein are those of the writer and not necessarily those of the **VAST COMPUTER USERS GROUP**

NEXT

MEETING ?

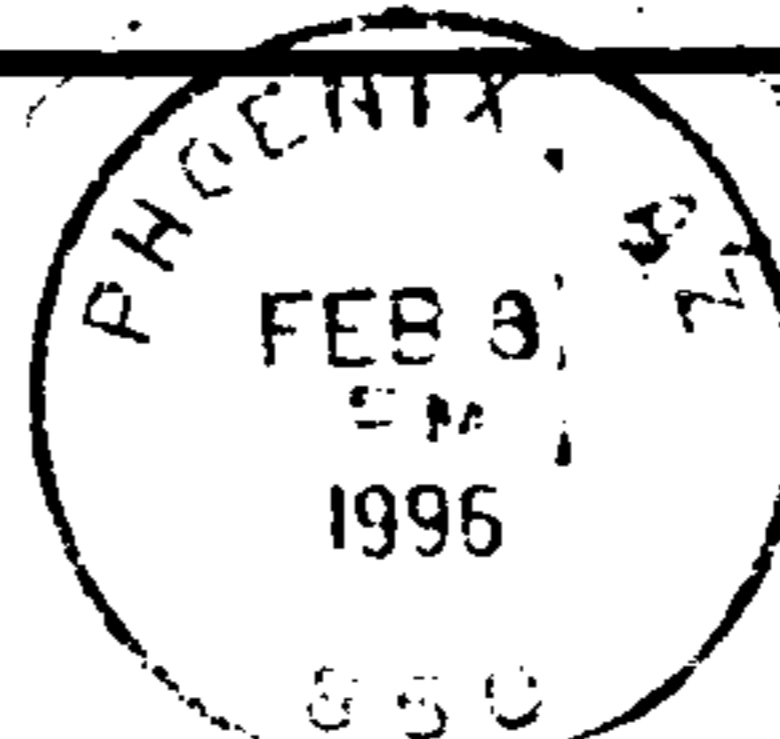
WHO KNOWS? IF YOU DID NOT MAKE THE FEB. MEETING YOU'LL NEED TO CALL AN OFFICER.

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VAST NEWS

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