

# VAST NEWS

for the VAST Computer User Group

Volume 7 Number 1

January 12, 1991

## TI World and Local News

(compiled by Jim Ely  
from various sources)

### RAVE 99 Shipping PE/2's!

Tom Wills of the Southwest 99'ers Users Group in Tucson has informed us that RAVE 99 is shipping the first version of their new Expansion system, the PE/2A. This is the version that was primarily designed to be used with the Geneve/9640 and by those persons who did not intend to use the RAVE 99 keyboard interface. The PE/2B, which has the capability of housing the "guts" of the 99/4A and the RAVE 99 keyboard interface, will be shipping about three weeks later according to Wills. No real explanation was given, but the capability of putting the 99/4A inside the Expansion system does take a little more internal circuitry in the unit. With the PE/2B, as with the PE/2A, all one has when the installation is complete is the Expansion system and an IBM compatible keyboard and a monitor plugged into it. It eliminates the "firehose."



### LOCALLY...

#### VAST BBS To Change Telephone Number

In an economic move, it has been decided to change the location and phone number of the VAST BBS. Effective the evening of February 9, 1991 the *NEW* number will be

233-0790. As was explained at the December meeting, the group is not only paying for the telephone, but also a mileage charge which is added to every bill so that the BBS can be accessed by the majority of members without a toll charge. The new number does not have the additional charges connected with it

### INSIDE INFORMATION

ITEM	PAGE
Secretary's Slate	3
Editor's Desk	4
New-Age/99	5
Speak Out!	7
Disk Of The Month	9
4/A Foray	9
Q & A	11
VAST Information	14

See **NEWS** on page 2

---

**NEWS, from page 1**

and is therefore a lot less expensive to the group (in the neighborhood of \$30 a month less expensive!). The BBS will be shut down in the afternoon of Saturday, February 9, and will be back up and running in the evening of the same day. **NO OTHER CHANGES WILL BE MADE TO THE SYSTEM**, so if you can call it now, you can call it then without any changes, except for the phone number! **PLEASE** continue to call! Again, the **NEW** number on February 9th will be **(602) 233-0790**.

That is about the extent of the new news this month

---

**A Word From Our President,  
Mike Grogan**

1991!! WOW!! A brand **NEW YEAR**. I hope that all of you had a Merry Christmas and that '91 will bring you and your family even closer together.

With every year that passes since **TEXAS INSTRUMENTS** put the 99/4A out the door, it seems that we just keep on going... and going... And no wonder!! Our machine has a lot going for it... even today! Take a look at some of the new programs and hardware that keeps popping up. Sure, some of the "old timers" have gone on to other machines, but we still get new people receiving TIs from someone's yard sale. That doesn't mean that it's a **CHEAP** machine. I mean you could spend as much expanding the TI as you could most other machines. It just depends on what you want your machine to do. But on the other hand you can do alot

more for less than All the others.

Some of the newer people that have had a TI for less than 3 years are starting to add to the machines long life line. New programs and all the new hardware are not all from the "old timers." Anyone that builds a new program or even buys a program is helping the TI life line.

Sure there are people that use the fairware programs and do not send their money. And those are the people that hurt us the most. Think about it for a moment and if there are any programs in your files that you have not paid for, **DO IT NOW**. The people that write those programs released it for everyone, not to get rich but because they love this machine and want to give back what they have received from the TI community. Even if you can not send the money at least send them a letter telling them how you like the program and how you use it. Tell them how much you appreciate their work. If they don't hear from anyone then they might get the idea that their work is not good enough to be spread around. How much do you think you would have if you had to spend \$200 for a program? And if there is an update how much would that cost? What about special help to customize the program to your needs? Could you get all that from the big boys?? I think not. Send in the money for all their work. It's cheap insurance that you will have a machine that you can continue to use for years to come.

The same can be said about your membership to a users group. Join in and help

---

**See NEWS on page 4**

# SECRETARY'S SLATE

## MINUTES

VAST Computer User Group

DECEMBER 8, 1990

The regular monthly meeting of the *VAST COMPUTER USER GROUP* was held on Saturday December 8, 1990 at the Pyle Adult Recreation Center in Tempe.

The meeting was called to order by President Mike Grogan at 10:10 a.m. All officers were present. The meeting was attended by 16 members.

The Minutes of the November meeting were accepted as published in the December newsletter. The Treasurers report was read and accepted.

### COMMITTEE REPORTS

#### NEWSLETTER:

No special report. Once again, members complimented Jim Ely on a job well done. Seems like the newsletters gets better each month.

One suggestion from Mike Marfisi was that maybe we could cut mailing costs a bit by mailing the exchange newsletters 3rd class instead of first class. He will check on the cost savings.

#### PUBLICITY:

Tom noted that the Pennysaver ad was still screwed up. He will continue to try to get it corrected.

#### PROGRAM:

Dan pointed out that our program/demo for this meeting would be on First Base.

Next month Mike Marfisi will demo TIPS to show all the neat stuff that can be done with this fine program.

#### BBS:

Sysop not at meeting.

#### OLD BUSINESS

There was no real old business to conduct.

#### NEW BUSINESS

Mike Grogan mentioned that the biggest single expense the club has is for the operation of the BBS. The phone bill runs about \$45 per month. The reason is that we are operating the BBS from Glendale with a Phoenix phone number. This was done in order to avoid as many members as possible from having to pay toll charges. However, this cost is getting prohibitive.

Mike pointed out that he has 2 phone lines installed in his home in west Phoenix. He would be willing to take the BBS into his home and utilize the second phone line for the BBS. We would pay that part of his phone bill which would be about \$15 per month.

Jim raised the concern that every time we have changed the BBS phone number we seem to lose callers. He would like to avoid

See **SECRETARY'S SLATE** on page 4

**SECRETARY'S SLATE, from page 3**

more losses.

Bud Barnes was appointed to check with Ma Bell about the cost of moving the BBS to Mike's home while keeping the present phone number Vs the cost of moving it and using the phone number that Mike already has. Bud will report next month and we will decide then what to do.

Mike Grogan reminded us to be sure to spread out the club info cards and posters. We need fresh blood in the group. As an incentive he suggested several ideas.

A motion was made and seconded that beginning January 1st and throughout 1991 any member who gets a new person to join the group will get a "certificate" good for \$2 in club credit. This credit may be used for anything within the club such as purchasing of library material, blank disks etc. Members who accumulate 3 certificates during 1991 may use them as payment in full for 1992 dues. So by bringing in 3 new members a present VAST member can get a full years membership free.

There being no further business, the meeting was closed at 11:10 a.m.

Dan Shell did a demo of the First Base Data Base Program as the program for November.

Respectfully,  
Mike Marfisi,

Secretary,  
VAST COMPUTER USER GROUP

**NEWS, from page 2**

grow. There is no law that says that you can only join just one group. You can get something from each and every group you join. Even if you might not be able to get to a meeting, club newsletters have new information it them all the time. If you see something that your club has not seen, you could put it in your newsletter. It will help someone somewhere. Join today and do what ever you can for your club. NOTE those last two words: "YOUR CLUB."

I want to thank all of you who have supported this club and given of yourselves. It's people like you that have turned this club around and helped us work together.

*HERE'S TO A BRIGHT NEW YEAR...*

Mike Grogan

President, VAST

**From the  
Editor's Desk  
Happy New Year!**

I'll keep it short and sweet this month, just to give you the calendar for the next 2 months with our meeting dates indicated. I didn't want the newsletter to get too big and have to pay additional postage like last month. As it is, it got bigger than I expected at the last minute thanks to several submissions by Mike Grogan. Thanks, Mike. Jim

FEBRUARY 1991							MARCH 1991						
SUN	MON	TUE	WED	THR	FRI	SAT	SUN	MON	TUE	WED	THR	FRI	SAT
					1	2						1	2
3	4	5	6	7	8	9	3	4	5	6	7	8	9
10	11	12	13	14	15	16	10	11	12	13	14	15	16
17	18	19	20	21	22	23	17	18	19	20	21	22	23
24	25	26	27	28			24	25	26	27	28	29	30
							31						

~~~~~  
 W-AGE/99 \* NEW-AGE/  
 99 \* NEW-AGE/99 \* N  
 EW-AGE/99 \* NEW-AGE  
 /99 \* NEW-AGE/99 \*  
 ~~~~~

by JACK SUGHRUE,  
Box 459, East Douglas, MA 01516

### #5

Anyone in the TIworld owning a disk system longer than a month who has not contacted Jim Peterson at TIGERCUB Software is leading a deprived life.

Jim has the largest collection of stuff at the cheapest prices possible for our amazing 4A. He couples this "best for the least" business with a fantastic knowledge of the machine and a kind, generous spirit. No one knows the BASIC and XB workings of the TI better than Jim. He is an expert in everything!

Mr. TI, as he is known by his thousands of admirers, seems to take to his computer the way Jean Henri Fabre took to ants. He is meticulous and creative and understands the soul of the 4A. I'm still in awe of his skills and dedication and influence.

There is no one in the entire TI World (unless he or she has been hiding under a rock since the 70s and has just been handed a machine) who has not felt the influence of the mild-mannered, modest man.

I've dissembled hundreds of programs with his fingerprints on them: programming tools he has given to us. For years Jim provided newsletters with free tutorials called "TIPS FROM THE TIGERCUB" which were (and are) so jampacked with wonderful program-

ming goodies that it is hard to imagine what TI life would have been without this marvelous source. In addition, he still sends "CARE" disks to sharing newsletter editors, along with numerous other goodies. He has also written the ultimate tutorial on programming in the form of subprograms that can be easily merged into any XB program (including a subprogram that makes BASIC programs into XB programs). These loaded disks of subprograms (called NUTS & BOLTS) can be purchased from him and readily used with your own or other programs. These Tigercub touches are what I see on almost every good XB program written for the TI in the past half decade."

Jim has also written so many programs for the Public Domain that we just take for granted that these kinds of programs have "always been there." They weren't. Until Jim gave them to us. There isn't a user group library in the world that doesn't have heaps of programs from Mr. TI.

He also wrote numerous "commercial" pieces of software. "Commercial" only in the sense that they were for sale. They were low-priced and high quality in the heydays of the 4A when everything was high-priced and too often of extremely poor quality. Years later, I still use a large number of his programs in school (ANTONYMY, SYNONYMY, MECHANICAL APTITUDE TEST, SCRAMBLE, SQUINCH (a fiendish word game), and many others). I wouldn't like to be without the other utility and game programs that I've enjoyed so much from Tigercub over the years (particularly the un-

See NEW-AGE on page 6

**NEW-AGE**, from page 5

endingly fascinating NUTS & BOLTS disks, which I had the honor of demo-ing (Jim wrote the remarkable demo programs) at a recent computer fair. [I had the greater honor of meeting Jim at a fair in Lima, Ohio.]

The man's remarkable and is universally liked (which is remarkable unto itself).

[Jim's three NUTS & BOLTS disks (with a wonderfully descriptive manual/tutorial) are now only \$10 each. His five disks full of "TIPS FROM THE TIGERCUB", a newsletter editor's Godsend, are only \$5 each. His 120 original programs (a refundable \$1 for the catalog) are now just \$1 each!]

Praising Jim's efforts on our behalf is not the purpose of this article. (It's just impossible to write about Tigercub without doing so.) The purpose of this article is to tell you about the latest goodies to come out of Tigercub. Jim, because of his huge number of TI contacts (without a doubt more than anyone else in the world), has been able to put together the largest collection of Public Domain and Fairware programs, files, and templates in existence.

This PD extravaganza can be dipped into by sending a refundable dollar for this catalog. (\$2 for both the Tigercub and TI-PD catalogs.) Within is an unbelievable world of goodies. A 4A maniac's paradise! At only \$1.50 per disk! Not per program. Per FULL disk! And that's postpaid!

These disks do not contain a pile of junk you'll never use, either. They are selected

from the thousands Jim has in his library. And they are catalogued and sub-catalogued and regrouped.

An example:

Interested in music? Those are the 600 series. What kind of music? Well, remember those great graphic/music combos of Sam Moore? 600 is a disk called "SAM MOORE MUSIC #1" (341 sectors). It has 11 super selections on it. But there is also a "SAM MOORE MUSIC #2" (343) and a 3 (348) and a 4 (337) before #604 moves in "BILL KNECHT HYMNS" (334) and so on.

You get the picture. You get a disk full of the kind of things you want and can use: educational programs, graphics, printer utilities, typing, health, you name it. Games are broken down into so many categories it's amazing. There are three full disks of card games, alone.

All the programs now run in XB and all come with the famous Tigercub Loader, the forerunner of all the good loader programs found elsewhere.

Jim even has games broken down by specific type: "ROAD CROSSING GAMES", "KEYBOARD MANEUVERING GAMES", "Q\*BERT GAMES", "FORMER COMMERCIAL GAMES", "EASY GAMES FOR KIDS", "KING KONG TYPE GAMES", "TWO-PLAYER JOYSTICK GAMES" (there are loads of one-player), "GERMAN GAMES", and on an on, page after page.

There's even such esoteric stuff as "LIGHT PEN PROGRAMS" (including a disk file

See NEW-AGE on page 7

**NEW-AGE, from page 6**

which teaches you how to make your own light pen).

There are disks of programs about Chemistry; Hi-res Drawing; Physics; Children's Programming with Speech; Sorts, Scrambles & Searches; Auto-loaders; Calculators & Converters; Astronomy, Religious Programs. The list seems endless.

The catalog gives you the full listings of the files on the disk: "FINANCIAL PROGRAMS" (356 sectors) includes the following selections with authors where known: Amortization Schedule (M Holgers); and #2 (J Roche); Compound Interest (C Good); Estate Tax Securities (R Shumaker); Debt Calculator (K Romstedt); Financial Math (C Ehninger); Financial Statement Ratio Analysis (C Colton); Investment Analysis (A Robertson) and 15 more.

Just the work and time involved in the collecting, reviewing, selecting, debugging, sorting, creating full disks, cataloguing, printing, and distributing must be incredible. To charge \$1.50 a disk is the greatest TI giveaway of all times.

Order the catalogs today; then, after you wipe the drool off the table, order as much as you can to show Mr. TI how much you support his endeavors. TIGERCUB Software, 156 Collingwood Ave., Columbus, OH 43213.

j.s.

**SPEAK OUT!**

Mike Marfisi voices his opinion on Mail Ordering...

Before I begin, I think that it is very important that I say, up front, I have nothing but undying gratitude to all of the fine companies and individuals who have done so much and gone so far in supporting the TI. All of these fine folks have given much of themselves to make our TI the wonderful computer it is. Having said that, I am about to take some of these same people to task. I am totally fed up with companies who toot horns and advertise products that they are not prepared to deliver. Some examples:

MYARC still advertises HFDC's and 9640's. When is the last time you actually heard of one being delivered? How about the long awaited completed version of MDOS for the 9640?

ESD CORPORATION has advertised its new Hard drive controller and said they would ship by Nov. 30th. Bud sent his check and when he had not heard from them by the middle of December, called to find out what was going on. He was told that the company had some problems with suppliers and shipping would be delayed until January. Swell! I wonder how long Bud would have been waiting to find this out if he had not made a phone call?

ASGARD has an order I placed way back in September for items listed in the catalog I had received, including an update for their spellchecker, SPELL IT!, that corrects

See SPEAK OUT on page 8

**SPEAK OUT, from page 7**

several program bugs. To this day, more than 13 weeks later I have made 3 phone calls and still don't have the programs. I understand that one of the programs hasn't even been completed, yet orders are being taken. Remember PRESS?

Orders were being taken for over a year on a program that never was finished!

RAVE 99 has advertised, shown at fairs and taken orders for a new PE box. I placed an order which appeared on my MAY Mastercharge bill. I have been paying 21% interest on a piece of hardware for which I have seen some schematics and photographs. I must point out in RAVE 99's favor that John McDevitt has kept me totally informed of the progress on the PE box. I have heard from him each month with explanations for each delay along with news of several improvement that have found their way into the system. He has held the price on all of these upgrades for those who have placed orders.

My point in all of this is that I am getting real tired of companies advertising products and then not delivering them in a timely manner. But I am not unreasonable. I understand that there are times when delay is unavoidable. But, damn it, keep us informed! Be honest with us! Don't advertise software that isn't even written yet! Tell us about it, yes. Allow us to reserve a copy of it, yes. But don't give us the idea that our order will arrive in your office and you will drop a package in the mail in a day or two, and then forget we exist. Keep us informed!

If a supplier can't ship a product within 30

days, the federal law says he **MUST** inform the buyer and give the buyer the chance to cancel an order or choose to wait. And he must inform the buyer each 30 days. That is the law! With the notable exception of the folks at RAVE 99, and ASGARD, **ONLY** in the case of PRESS, have you heard from a TI supplier when an order is to be shipped in less than a timely manner.

Enough said!

Soap box returned to laundry room!

Spleen vented!

I feel much better!

Mike Marfisi



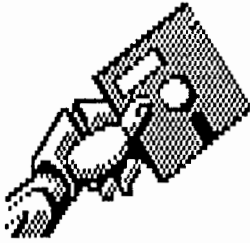
**Just a reminder...**

**If you haven't already done so, PLEASE renew your membership in the VAST User Group this month!**



**Thanks**





## Disk Of The Month

by Jim Ely

This month's Disk Of The Month is the brand new version of Funnelweb, version 4.31. This latest version gives support for users of the Myarc Hard and Floppy Disk controller card and a hard-drive. It can be run from its own directory on the hard-drive leaving the DSK1 emulation file free to be used as a work disk. Other enhancements include the ability to specify a character set (such as a foreign language CHARA1 file) for the Text and Assembly editors (by pressing FCTN 9 from the central menu) and the ability to mark files using the Quick Directory (invoked by pressing AID) from within the formatter or assembler. Remember, Funnelweb is a SHAREWARE program and the author deserves to be paid for his work. The DOM charge DOES NOT include the fees entitled to the author, but it does give you the opportunity to "Try the program before you buy it."

### MEETING

January 12, 1991

Pyle Adult Recreation Center (PARC)  
655 E. Southern Ave. Tempe, AZ

This month's program will feature Mike Marfisi *attempting* to demonstrate the fabulous TIPS (TI Print Shop) graphics program. That, in itself, should be a kick!

## 4/A FORAY

by Ralph Rees

Hello again Fellow Vastians! I hope you have all had a Very Merry Christmas and will enjoy a Great New Year! If you will recall last month's installment, we discussed the repair of an electronic instrument. In this issue we will talk about smoking! No, I'm not talking about the kind that the surgeon general warns about... read on.....

- S - M - O - K - E -

A sheet of paper crossed my desk the other day and as I read it, the realization of a Basic Truth came over me. So simple! So obvious we couldn't see it! The author, of unknown origin, I think has discovered what makes integrated circuits work. He says that SMOKE is the thing that makes IC's work because every time you let the smoke out of an IC it stops working. I was flabbergasted! Of course! SMOKE makes all electrical things work. Remember the last time the SMOKE leaked from your computer or peripheral? Didn't it quit working? I sat and smiled like an idiot as more of the truth dawned. It's the wiring harness that carries smoke from one device to another in electronic or electric machines and when the harness springs a leak, it lets the smoke out of everything all at once and then nothing works. A starter motor on an automobile requires LARGE quantities of smoke to operate properly, that's why the wire going

See 4/A FORAY on page 10

4/A FORAY, from page 9

to it is so big. So in view of all this. do everything you can to keep the smoke in your computer.

**DID YOU KNOW?**

January, 1981

- Prototype models of Extended Basic and 32k memory expansion were released in the U.S.

February, 1981

- International Users Group claims 1500

Come Help Us Celebrate The  
TI-99/4A's 10th Year  
Anniversary

UGOC in association with the  
Pomona Valley UG is hosting

**FEST WEST 91**

**THE HAPPIEST FEST ON EARTH**

Across the street from Disneyland PLUS many more attractions in the area for the wife/husband and kids to enjoy while you meet internationally renowned TI entrepreneurs, enthusiasts, and innovators. Fest tickets are on sale now (\$6.00 for both days). Ticket requests with a post mark before January 1, 1991 are eligible for a drawing for one free night at the RAMADA.

Plan your **THREE DAY** weekend now!  
Fest dates are Feb 16 & 17, 1991

The Fest will be held at the Ramada Main Gate, Anaheim Toll Free 1-800-447-4040 Special rate to fest goers (\$55.00 per night plus taxes)  
Only 50 rooms available at this rate and closing date for this rate is 15 Jan 91

Travel Arrangements may be made by contacting Ruth Dickey, Travel Concepts. (714) 778-5453

For future announcements contact the UGOC BBS at (714) 751-4332 or write to:  
Fest West 91 Committee  
C/O Bill Nelson  
11692 Puryear Lane  
Garden Grove, CA 92640

**FEST WEST 91**

members.

- TI introduces a new 10" color monitor for the 99/4. The new monitor is made by Panasonic and will replace the 13" model previously sold for the 99/4.

January, 1982

- The Peripheral Expansion Box and the P-Code and 32k memory expansion cards to go in the PEB debut at the Winter Consumer Electronics Show in Las Vegas on January 7th.

- Mini-Memory, TI Invaders, Car Wars, Tombstone City, Blasto, The Attack and Munchman also make their official debut.

February, 1982

- The "new" keyboard for the 99/4A is demonstrated at the Los Angeles-South Bay Users Group meeting.

- "Introduction to TI Basic" by Zamora and Albrecht is released.

- TI introduces the first VALUE PACKS.

- The "MUNCHMAN PLAN" is introduced. It is an ill-fated marketing scheme that requires 99ers to buy any four existing modules or any one VALUE PACK software library in order to get MUNCHMAN. Users are issued a proof of purchase card by retailers and must then send it to TI to get a free MUNCHMAN by mail. It was the only way to get the module at the time.

January, 1983

- TI produces a little known 220 page

See 4/A FORAY on page 11

---

#### 4/A FORAY, from page 10

catalog listing virtually every piece of software available for the 99/4A to that date, from both TI and other sources. The publication, which is authored by a team of seven TI employees, gives detailed descriptions of each program and the required hardware. The very same catalog was the source of information for the much valued and excellently presented Unisource Encyclopedia/Catalog. Verbatim descriptions from the TI catalog can be seen throughout the Unisource Publication. (Anyone have either one? I'd love to see it!)

☛ TI announces the CC-40 (compact computer 40) on January 6.

☛ COMPUTE! magazine begins coverage of the TI-99/4A with a single article that is written by C. Regena. It covers the hardware, software and miscellaneous resources of our computer.

☛ PARSEC released in England.

☛ TI announces July release of TI-99/2 in England.

(Sources—Joe Nolan, *Tacoma 99'ers*—Bill Gas-kill, *Midsouth 99 U.G.*)

One more quick note. I have been doing a column for the newsletter now for a couple 3 months and I think it's safe to tell you that it's FUN! So why don't you right now, while you're reading this, think about a short note, review and/or column and upload it to the BBS or mail it to Jim. See your name on a byline! If you don't you'll miss out!!!

—Ralph...

# 2 & A

## Questions & Answers

by Mike Grogan

### THE RETURN

**Q** I have a black and silver TI99/4A and P-BOX. I also use a WIDGET. Lately I have been having trouble with computer lock-ups. I have unplugged everything and plugged it back, but I still have a lockup after about an hour. Could it be that my computer is about to die. And should I get a back-up TI?

**A** First of all, anytime you have things that connect together, you have a built-in problem. TI could have made better connectors. But that's another story. The connectors can build up crud very easily, even in the cleanest, smoke free homes. With your system I would check and clean the widget first, then the cartridge port, then the big foot P-BOX connector and the carts. The best cleaning can be done by taking everything apart. I won't go into the detail of taking the computer apart. I could write a whole book on it. You might be surprised at the amount of dirt and hair that can get into your computer system. You can do a mild cleaning of all the connectors without taking it apart. I use isopropyl alcohol (rubbing alcohol) (.89 cents) and some of those foam tipped sticks women use to put makeup on with. They have a rough and a smooth side. The rough side can scrub pretty good and will not take any metal off of the connectors like a pencil eraser some people use. It also will grab a hair that's in the con-

---

See Q & A on page 12

Q & A, from page 11

nector. First use one to go over the area without alcohol. Then another one with the alcohol. Then another to make sure there is no film left. If this doesn't work or if you need help, ask someone in your group that has taken a TI apart and help or watch them do it. That way if you need to do it next year you can show someone else how. You might even make it a club demo. Now's the time to clean the keys too!!

A clean TI... is a happy TI...

**Q** I have one of those cassette cables that can connect two cassettes at one time. I was having trouble one day with loading and then all the sudden all was alright. What could have happened?

**A** If you have a dual cable and use only one connector, then I would wrap tape around the ends that you do not use. A number of things could have caused your problem including the connectors touching something. Also clean the recorder heads and adjust the tone and loudness settings.

**Q** I have just found out that some tapes and a couple of disk that I had kept on top of my TV are blank. Could they just get old and lose my files?

**A** Never keep tapes or disks on or around any electric device. It could scramble any and all your files in a second. Try to keep them in a storage box. Also you might look around your desk for those paper clip boxes that have a magnet in the top. Even the paper clips can get magnetized and cause problems. You do make back-ups of your disk, don't you??

**Q** I am looking for a computer desk. Can you tell me the best and cheapest way to go?

**A** Well, I have a desk that I put together for about \$50 total. I found two of those two drawer file cabinets at a yard sale for \$5 each. I then went to HOME CLUB and got a 10 ft. long counter top for, I think, about \$1.50/ft. Then I got some lumber and built some shelves on it and stained it at a cost of about \$15. Then I got a power strip (\$8) which I mounted under the counter top. This is what every thing plugs into with a surge protector (\$10). Not a bad little desk even if I do say so myself with a total cost for all the material about \$58. It's better than those units that you have to put together anyway that cost \$150-\$200+.

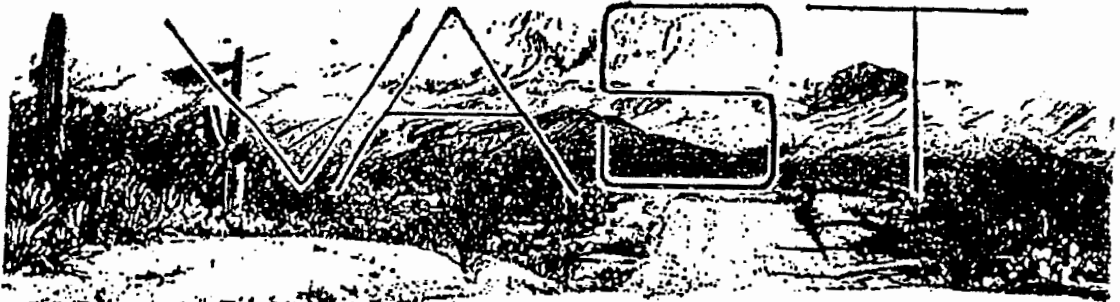
I am looking for other questions or answers for this column, which I hope will be a continuing effort. Send questions or answers to: Mike Grogan, 3040 N. 48th Ave., Phoenix, AZ 85031. m.g.



**May You Have A Happy And Prosperous New Year!**

# THE DIFFERENCE

IS



VAley of the Sun TI-99/4A  
USER GROUP  
INVITES  
YOU

*and all Personal Computer owners and users to Join them the 2nd Saturday Morning of each month between 9:00am and 12:00pm (noon) at the PYLE ADULT RECREATION CENTER in Tempe.*

## VAST OFFERS :

- . 24 hour a day BBS
- . Monthly Newsletter
- . Download from BBS for members
- . Computer "Hands On" demonstrations
- . Loan of a MODEM System for members
- . A library of programs for disc and cassette
- . A friendly forum for discussion of your PC problems

*For more Information on VAST, contact either:*

*Mike Grogan (Pres)...272-4315 or Mike Marfisi (Sec/Treas)...491-1552*

**VAST NEWS**  
c/o MIKE MARFISI  
1425 E. DEL RIO DRIVE  
TEMPE, AZ 85282

**FIRST CLASS MAIL**

**FIRST CLASS MAIL**

## **VAST User Group Information**

The *VAST Computer User Group* is a support group for the TI-99/4A Home Computer and compatibles.

The VAST Computer User Group operates a BBS 24 hours a day, 7 days a week. The phone number is (602) 433-2767.

### **CURRENT OFFICERS**

#### **PRESIDENT**

Mike Grogan . . . . . 272-4315

#### **VICE PRESIDENT**

Jim Ely . . . . . 275-8018

#### **SECRETARY/TREASURER**

Mike Marfisi . . . . . 491-1552

#### **LIBRARIANS**

Hazel & Wallace Knight . . 938-5446

#### **NEWSLETTER EDITOR**

Jim Ely . . . . . 275-8018

#### **BBS SYSOP**

Leo Baker . . . . . 931-9010

Send any correspondence to the address above.

### **ADVERTISING RATES**

There is **NO CHARGE** to **MEMBERS** for **PERSONAL** advertising. Non-members will be charged \$1.50 per ad per issue.

Please contact the Secretary/Treasurer for **COMMERCIAL** advertising rates.

**DISCLAIMER:** The *VAST Computer User Group* can assume **NO** responsibility for the accuracy of the information in this newsletter or for programs or construction projects tried by its members or others. **YOU** try them at your **OWN RISK!** Any material herein may be republished by other user groups so long as credit is given to the **ORIGINAL** sources.