

VAST NEWS

for the VAST Computer User Group

Volume 8 Number 9

September 12, 1992

TI World and Local News

(compiled by Jim Ely from Various sources, mostly MICROpendium Magazine)

Buyout Nearly Complete

It looks as if the buyout of MDOS from Myarc is nearly complete. Spearheaded by Beery Miller, the project has raised most of the \$10,000 that is needed to cement the deal. Only a few hundred dollars remained to be raised in early August. The deal includes the source code for MDOS, Myarc Advanced BASIC and the P-system.

What does this mean to the average Geneve user, if there is such a person? For one, there will be new hope that the MDOS operating system will be debugged and improved. Improvements will be made to some extent based on input from those users who have contributed to the buyout fund drive. As part of the deal, Miller has also agreed to send copies of the final MDOS to all registered Geneve owners, as determined by Myarc records. (For those with short memories, the final version of MDOS, along with Advanced BASIC were supposed to have been mailed by Myarc in November 1990.)

Those who have never registered their Geneve's or purchased their Geneve's from another user would do well to send some sort of contribution to Miller. Even though Myarc had promised a final version of MDOS, Advanced BASIC and the P-system as part of the Geneve, there's no way that it is going to happen. Loyalties now will have to lean toward Beery Miller and his group. Whether this benefits Geneve users will be seen in the future. But at least Myarc is now out of the loop, which should initially relieve a lot of frustration. We'll see where it goes from here.

FestWest '93 Update

A video promoting FestWest "North" '93, to be held Feb. 13-14 in Salt Lake City, Utah, is planned for distribution to user groups, according to Richard Paul Phillips, advertising director for the event.

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SECRETARY'S SLATE

MINUTES

VAST Computer User Group
August 8, 1992

The August 8, 1992 meeting of VAST was called to order by President Jim Ely at 9:59 a.m. The attendance consisted of 18 people, including all officers and one new member. The meeting was opened with the acceptance of both the minutes and treasury report. Next on the agenda were the committee reports.

PUBLICITY: Ray Frantz had nothing new to report. The ad has been discontinued for a couple of months in the hope that the response will be greater after schools have started and the winter visitors return south for the season.

LIBRARY: Wallace had nothing new in particular to report although Hazel had prepared a brief description of a few programs in the library. Jim encouraged further notes from the librarians.

PROGRAM: Curt Mavity encouraged more people to volunteer to put on a program demo after the business meetings. He would also like to hear from members that have a particular program that they are interested in seeing demonstrated. Ralph Rees volunteered to demo "Mugboot" at the next meeting.

FEST-WEST: Ralph reported that the bank account had finally been closed and the video tapes had finally come back from Tucson. Jim Ely officially disbanded the Fest-West committee. Good job!

BBS: Nothing new.

RAFFLE: Gene Gipson was not in attendance

and so there was no report and also no raffle after the meeting.

NEWSLETTER: Jim asked for more biographical sketches of members that have not submitted one as of yet. A discussion of the availability of exchange letters followed. Members are reminded that the library has an extensive collection of newsletters from around the world.

Jim also promised to look into publishing an index of all of the articles that have been published in our newsletter. He may put the info on a diskette in the library or publish it in a series in future newsletters.

Jim also asked for more articles from members. He also stated that the articles by Chris Taylor are being well received and could take up a full issue on their own merit.

OLD BUSINESS: The picnic committee was not at the meeting and so no new info was available.

Bud Barnes also spoke of the upcoming tour of ESC Lithographics, stating that no exact date had been set. There was a great deal of interest in either a Friday evening or a Saturday tour and Bud thinks that it could take place in October or November. He is still trying to co-ordinate the tour with all parties involved.

There being no further business, Jim asked for a motion and the meeting was adjourned at 10:40 a.m. After a short intermission the Fest-West videotape was played, featuring the lecture of Chris Taylor.

Respectfully submitted,
Tom Pfeffer, Secretary/Treasurer

— NEWS, from page 1

Phillips, a director at a commercial television station, says the video will feature merchandise from TI vendors who register and send promotional materials. He says promotions including direct mailings to user groups will begin as soon as enough premier TI vendors have committed to attend.

For information, contact the FestWest North '93 Committee, 1396 Lincoln, Apt. B, Ogden, UT 84404, or phone (801) 393-9605 or (801) 894-6815 (voice) or (801) 394-0064 (BBS).

Harrison Products Not Necessarily Myarc Compatible

Bruce Harrison of Harrison Software says none of that company's products except its MIDI-Master music will be guaranteed to work on any system containing Myarc products.

"We're sorry for our potential customers who maybe inconvenienced," Harrison says, "but we feel it's better if those who have Myarc equipment do not order software from us, rather than find through our software that Myarc products are not truly compatible with software written for the TI-99/4A."

Harrison also notes that the company has reduced prices on most of its software items, "at least for the next few months."

For further information, write Harrison Software, 5705 40th Place, Hyattsville, MD 20781.

TI Emulator Project Underway

Mike Wright is seeking support for a TI

emulator that runs on a PC. This software project is feasible, according to Mike and Barry Traver, who has seen some of the results. Mike would like to see 1,000 TI users send him a dollar signifying their support. I don't think there's any problem with sending a buck, but I don't see how 1,000 users will do this by the deadline of Sept. 15 that Mike has set for these contributions. The interests of TI users are too varied to expect this number of them to jump on the band wagon. But who knows, maybe we'll see someone running Munch Man on a PC sometime. It can happen.

Banish Static!

The Static Release Cloth, originally developed for Hanna-Barbera Productions to alleviate static build-up on animation cels, has been reformulated for other applications, including video monitors, computers and peripherals and other sensitive electronic equipment.

The non-toxic cloth, sold as an 18x18-inch square with 32 wiping sides, retails for \$6.95. Dealer inquiries are welcome. S/R Laboratories Inc. is located at 31200 Via Colinas, Westlake Village, CA 91361. Phone number is (818) 991-9955.

From the Editor's Desk

Surely, parents must be back in "seventh heaven" as their children have finally returned to school. Does this mean that summer is officially over? It can't. The temperatures are still too HOT!

IN THIS ISSUE

I am fast running out of my stock pile of articles that had been submitted for publication. I would still like to get a number of biographical sketches of some of the folks that have not submitted them yet. Come on, Gene and Brian and Chris and Leo and Walt (who??) and ...

But that is a little off of the track. In this issue we have Ralph's *4/A Foray* column on page 5 which this month discusses some ideas on how we might attempt to attract new users to the group and a reminder that new user that have joined us need our help. If you read last month's issue, Chris Taylor, in *Chris' Corner*, described the major difference between the TI-99/4 and the /4a. This month on page 6 is a continuation, or postscript, if you will, to that article. Page 9 has an editorial of sorts by Jim Peterson on just what a *Home Computer* is. And on page 10 is a short but interesting little program that will tell you what *Day Of The Week* any particular date fell or falls on.

I think this is a pretty interesting issue...

ON THE PICNIC

Well, since none of the Picnic Committee was

at the last meeting, I don't know what the status of the event is. I hope either Gene or Brian comes to this meeting because now is the time to make the plans!

UPCOMING MEETINGS

Here is the 2 month calendar with our meeting dates highlighted...

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

That's it for this month. I'll see you all at the meeting!

Just a reminder...

The **VAST BBS** can be reached 24 hours a day, 7 days a week at **(602) 233-0790**.

This is a local call for most area residents. Give it a call for the latest information about



the VAST Computer User Group! And now it's **FASTER** than ever!

4/A Foray

by Ralph Rees

▶ LOST SOULS DEPARTMENT

Okay, after our FEST we managed to find a few more "LOST SOULS" in the TI Community but I know there has got to be a bunch more out there! I would like to see this group continue to grow. I would like to put forth a few ideas and ask for any you might have to help enlarge our membership.

1) Is there any chance we could set up a small display table at a shopping center to show what our little orphan is capable of doing? At the very least, there is the possibility of someone who has a TI in the closet might be interested enough to come to a meeting to get a better idea of what we are all about OR people that pass by our table might know someone with a TI that is looking for support.

2) Are we utilizing all the FREE advertising that's out there? Are we listed in all the computer/electronics periodicals that allow FREE listing of user groups?

3) Perhaps another Fair of our own? I am not talking FEST WEST either, I am talking VAST's own fair, carnival, etc. I shudder at the thought, but maybe there's a way to pull one off without the headaches that go with it. We possibly could state in a few ads "TI Users Convention - 40+ tables available - 1st come, 1st served.

4) Continued use of the mailing list is a must. We have in that list a "captured" audience of known TI purchasers. Ray Frantz and Ed

Morse have already called a good amount of people and got quite a few to come and check us out. It Works!

5) A small card or flyer that can be placed on computer bulletin boards, food store bulletin boards, etc. I personally have placed a small card that we have in the cartridge ports of all TI's that I see at Thrift stores that I go to. What better thing for a person to have when they buy one of our little beauties than a place to call to learn how to operate it.

We have the resources to implement these ideas or ones that you might have, but the idea is to DO IT! If you can help the group get larger with more people, you are helping yourself.

▶ NEW ORPHANS DEPARTMENT

Now along those same lines, when we get new people we need to remember that they will not know all the simple little commands, tricks, etc. that we take for granted. We need to think about how we can best serve new users and help them as best we can. A call at meetings for anybody needing help doesn't always work because new members are almost always shy OR think their question is too dumb to ask (I remember being that way, do you?). Do you have any ideas on how to serve them better?

That's about all I have on my feeble mind this month. Keep your diskettes spinnin'.

FCTN +

—Ralph...





Chris' Corner

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Why the TI?

part two, continued

Now for the postscript to last month's article.

I was hesitant to talk technically about the VDP but I must for those who would like to delve deeper into my infatuation with the TI.

As stated the original VDP chip, the 9918 differed from the 9918A, in that the 9918A contained a bit-map mode. The other modes: graphics one, multi-colour and the text modes were the same. In fact, simply changing the 9918 in the original 99/4 console to the 9918A would make both machines both hardware and software compatible. Remember that the VDP is socketed which means that simply disassembling the console, replacing the chip and properly reassembling the console is all that is required to make the upgrade. Now for more tech talk.

The maximum number of pixels – picture elements or dots – that is displayed with the 9918A is 256 across and 192 down. This yields an aspect ratio of 4:3. I mention aspect ratio because of the computers then mass marketed, only the Mac and the TI had a 4:3 aspect ratio prior to the introduction of VGA graphics in the IBM world. The simplest example of the importance of the aspect ratio would be to draw a circle on the computer. If the computer had the same aspect ratio as the display monitor (4:3) then it would appear as

a circle, otherwise, it would appear as an ellipse. The most immediate effect would be on the text displayed because when the characters are created some would look funny in order to compensate for the aspect ratio distortion.

Anyway, it is from the 256 by 192 dots that the 9918A develops its various graphics modes. To illustrate my point I will deal with graphics mode one. In graphics mode one, the display is subdivided further into tiles or characters. Each character is 8 by 8 dots. Therefore, the display consists of 32 characters (columns) across (256 equals 32 times 8) and 24 rows of characters (192 equals 24 times 8). Now, since these subdivisions are a physical part of the chip, it only needs to keep track of the subdivisions (characters or tiles, call them what you wish). In graphics mode one, the VDP chip need keep track of the locations of the 32 columns and the 24 rows which means that it must keep track of 768 subdivisions. So only 768 BYTES are needed to keep track of the positions of the characters. These positions determine what will be shown on the screen and thus, may be called the screen table. Computer arithmetic works best when the numeric boundaries are based on powers of two. In this case the boundary used by the processor is 1024 bytes or one K or kilobyte.

Using the "CALL CHAR" of TI BASIC it is possible to redefine the shapes of the tiles to form characters or alphabets. In TI BASIC, only 128 characters can be redefined through a very tedious and time consuming process. The 9918A, however, permits 256 characters to be redefined. The amount of space required to redefine all the characters is 2k (2048 equals 256 times 1byte-each character row consists of 8 bits which equal one byte-

— See *CHRIS' CORNER* on page 7

— *CHRIS' CORNER*, from page 6
times 8 rows). The processor chip uses 2K boundaries to describe pattern tables.

Finally, graphics mode one has provision for coloring the various character tiles. By assigning a colour to each dot that is on and another colour to each dot that is off, only two colours are needed per character tile. To further save memory, the colour assignments are restricted to groups of eight tiles. In the case of TI BASIC, using the "CALL COLOR" command one can access 16 (128 possible tiles divided by 8 groups) of the possible 32 colour sets used in graphics mode one. And as you may have guessed, by using 32 byte tables the processor creates colour tables.

If you are still with me great! These tables are accessed by special registers. There are seven write only video registers in the 9918A. We will concentrate on the pattern, colour, and screen registers. If there is sufficient interest I will conduct a special class detailing information on the other registers.

Recall that the primary reason that I maintained interest in the 99/4A was to help me with my language studies. Once I had written a character generator that eliminated the use of "CALL CHAR" and obtained access to all 256 character tiles, I was able to accomplish most of my goals. I went further, once I found out how to use the various tables. For example I could, create Russian, Korean, Vietnamese, and Arabic characters and have them instantaneously available by simply pressing a button which would select which pattern table I desired. Unfortunately, not very many TI users had need of multi lingual computer capabilities. But there was another

potentially more powerful use for the ability to quickly change tables.

When the Apple computer was in its heyday, almost all of the software shown on it emphasized its graphics. Then some bright programmer realized that by using a process called page (tables) flipping, animation could be done on the computer. Well, it didn't take long before animated graphics dominated Apple's graphics demonstrations. Little did TI users know that the animation potential of the 99/4A dwarfed anything seen in the early eighties and with the 9938/9958 AVDP available today, still can hold its own. The original 99/4A came with 16K of video ram attached to the VDP. Theoretically, it permitted up to 16 tables of screens, or 8 tables of patterns, or 512 tables of colour, or any combination thereof. Couple this with the use of sprites which were optimized for animation and were, also, table based and you begin to see the tremendous possibilities of the 9918A VDP. If what I am saying is true, you wonder, then how come no one ever did it. I did but only for my amusement. I guess the obstacles that Texas Instruments created to limit easy access to the resources of the 99/4A were not worth the time and effort to many. As easily as one can use TI BASIC, commands I can use Wycove forth to change and manipulate the resources of the VDP.

If you don't quite understand what I am saying about how tables or pages are used in animation, maybe when you were younger you made stick figures "move" by drawing a series of pictures of pieces of paper and then rapidly flipping them. The result was that the stick figure seemed to move. If you did not do this

— See *CHRIS' CORNER* on page 8

COMPUTER AND ELECTRONICS SWAP MEET

LOCATION:

**ELECTRONIC MATERIALS AND
COMPUTERS PARKING LOT
3102 W. THOMAS, PHOENIX, AZ
272-3200**

Individuals and Dealers are welcome to come and sell. Booths will be one standard parking space in size and will cost \$10.00. All proceeds will go toward *ADVERTISING*. Booths are limited so reserve early by contacting BILL or BUD at the store. Admission will be FREE for buyers.

Sellers are limited to Computer and Electronic items (Bring tables and shade!). As this is a "CO-OP" Swap Meet, sellers will be expected to lend a hand cleaning up afterward, spreading the word, etc...

SUNDAY

Sept. 20, 1992

8:00 a.m./3:00 p.m.

— CHRIS' CORNER, from page 7

when you were young do it now. Take about ten small pieces of stiff paper and draw a stick figure which changes its position on each successive piece of paper and then flip it. It's really that simple. By drawing, let's say, an airplane and then changing its position just a little on a series of screens, it can appear to move smoothly by sequentially and rapidly selecting the different screens. Each screen table can hold a slightly different view of the airplane such that near real-time animation could be done with the TI using the 9918A. If you upgraded the 9918A to the 9938/9958, the animation could be dazzling since these processors support fourteen times more video ram than the 9918A.

So you see, in just a discussion of only one of the graphics modes of the 9918A, impressive things could be done. When the bit-map mode was added, the 99/4A with additional CPU ram became a serious computer. If Texas Instruments offered the 9938 in a pin compatible (hardware) version for the 99/4A, I for one would gladly spend fifty to seventy five dollars to protect my investment. Hint, maybe we can start something, maybe a users group draft petition.

P.S.S. The TIM board offered by OPA features the 9958 processor which is mostly compatible with the 9938 in the Myarc 9640, Dijit AVPC and the Mechatronic 80 column card. It eliminates mouse support, monochrome output and composite video output (which means that you must also buy a RGB colour monitor).

Next month: Peripherals in the Nineties... 3.5 inch drives, laser printers, monitors, etc. ct ❖

THE HOME COMPUTER

By Jim Peterson

(from the April 1992 issue of 99'er News - submitted for publication in VAST News by Ray Frantz)

Can you stand a few more words from the last surviving advocate of the HOME computer?

AND — what is a home computer? It is a computer designed to be used by a person who has no particular interest in computers, who regards them as just another electronic tool to be used to make life easier and more enjoyable. Also, that person is probably just a bit intimidated by computers.

Now what percentage of VCR owners have never learned to program their VCR? How many don't know what some of the buttons on their cable TV remote do? How many housewives are failing to take advantage of half the push buttons on their microwave, or their washing machine? I don't think anyone has the answer to those questions, but I am sure that the percentages are very large.

Many people who buy a new appliance NEVER read the manual. They learn some of its features by experimenting, and never use the rest. Most other people read the manual ONE TIME, file it away with the other warranties or lose it, and operate the appliance based on what they remember from that one reading. Of course, there are an increasing number of people who are incapable of reading the manual at all, and very few people who are capable of writing a manual that anyone can understand.

The average home computer buyer, knowing

nothing about computers, can easily be convinced that he needs 640K of RAM, a hard drive, a mouse, and who knows what else. He needs all those things like he needs a hole in the head, and he is completely baffled by the technical jargon in the manuals that come with the machine.

His computer probably comes bundled with an assortment of "FREE" software that is alleged to be worth more than the machine itself. It is probably excellent software — but each program comes with a thick manual, hopefully written in intelligent English, which MUST be studied before the program can be used.

Big programs like that are fine for the workplace, where a worker becomes familiar with a program and remembers how to use it because he uses it every day. For the typical HOME computer user, they are totally impractical.

So, what IS a HOME COMPUTER? It is a computer with no more memory than is needed to do the job, practically automatic in operation (i.e. with built-in disk operating system!), with one disk drive, and with an adequate supply of short, simple programs to do what needs to be done at the moment and no more. So simple they can be operated by reading on-screen instructions and prompts.

I happen to own such a computer. It is called the Texas Instruments TI-99/4a HOME computer. jp

NOTE: That is the end of what I consider a profound piece of writing!!! And just to add my two-bits, I came SO CLOSE, within the

— See *COMPUTER* on page 10

— *COMPUTER*, from page 9

last week, of ALMOST “upgrading” my TI-99/4A basic system to something that I NOW realize, I would have regretted. Thankfully, I was too late... someone else had bought the “up-grade” equipment. I am constantly asked if I have a hard drive... no I DO NOT, there is no justification of me “needing” THAT much storage space. The above article by Jim Peterson really hit home with me... if I go any further than what I have RIGHT NOW, then the FUN will just not be there anymore. I have a system with dual DS/SD drives... and another complete back-up system... I’m done adding anything else, except more fantastic disks from Jim Peterson and other accomplished programmers... at 1000th of the price of the “BIG SYSTEMS” software. Thank you Jim, I NEEDED that article! rf ❖

Get Your Programs DAY OF THE WEEK

By Bill Sheridan

(From the K-TOWN 99ers Newsletter via
the LA 99ers TopIcs Newsletter)

This short program (TIny Gram) I saw in an issue of MICROpendium written by Robert Neal of the TI User Group of Will County. I thought it was real clever and added it to my disk of miscellaneous programs.

The program will compute the day of the week (Monday, Tuesday, etc.) from the date (MM,DD,YYYY) entered. It’s handy for finding out on what day of the week you were born.

The following is the nuts-and-bolts of the program. You may want to add your own REMs, PRINTs, etc.

```

100 INPUT "ENTER MM,DD,YYYY:
":M,D,Y

110 A=Y-(INT(Y/28)*28):: B=A
/4:: E=A-(INT(B)*7)

120 C$="511462403513":: IF E
=0 THEN IF M<3 THEN C$="40"

130 E=VAL(SEG$(C$,M,1)):: IF
Y<1900 THEN A=A+12

140 G=A+INT(B)+D+E:: F=G-(IN
T(G/7)*7)

150 DATA SUN,MON,TUES,WEDNES
,THURS,FRI,SATUR

160 RESTORE :: FOR B=0 TO F
:: READ C$ :: NEXT B

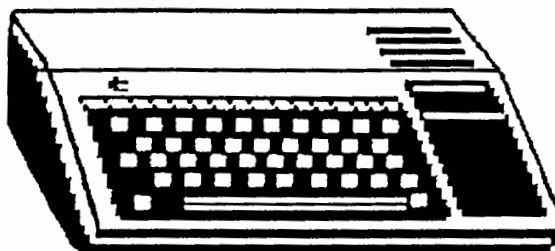
170 PRINT "THE DAY IS ";C$;"
DAY"

180 PRINT

190 INPUT "DO ANOTHER? (Y/N)
: ":YN$

200 IF YN$="Y" OR YN$="y" TH
EN GOTO 100

```



REMEMBER THIS?

TI-99/4A

**GET IT OUT OF THE CLOSET! LEARN TO USE IT!
LEARN TO LOVE IT!**

LOOK

**...WORD PROCESSING...SPREAD SHEET MANAGEMENT...GAMES
...DESKTOP PUBLISHING...DATA BASE MANAGEMENT...MUSIC
...MUCH...MUCH MORE!** WANT MORE INFO?...

CONTACT US! WE ARE HERE TO HELP! WE ARE THE...

VAST USER GROUP

**MEETING AT
THE PYLE RECREATION CENTER
SOUTHERN & RURAL RD.
TEMPE, AZ.
FOR INFO CALL**

940-0974

966-8374



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) 233-0790.

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Send any correspondence to the address below.

ADVERTISING RATES

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

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

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