# ROANOKE VALLEY 99'er USERS GROUP

18 Benbrook Circle, Roanoke, Va. 24012 Leonard Morgan, President-Editor - 366-0145 Richard Fisher, Secretary-Treasurer - 982-5607

> Tuesday, July 9, 1991 Newsletter No. 58

Meet at Roanoke County Library, 6684 Peters Creek Rd., Roanoke, Va., 24019 Second Tuesday of each month at 7:15 p.m. LET'S ALL BE THERE!!

## APOLOGIES FOR MIBSING THE JUNE ISSUE:

This issue of our newsletter should have been published in June, but due to my procrastination, we failed to put out a newsletter in June and are just now trying to get back on track by sending you this late issue - which probably won't reach you much before our July meeting.

## CONN: CLEARINGHOUSE BBS PRESENTLY ON HOLD:

After our group voted to support the Central Dhio Ninety-Niners, Inc. in their effort to set up a BBS as a "Clearinghouse" for newsletters from around the nation, I called and talked to Irwin Hott personally. He informed me that they were moving forward on the project, but were currently debating whether to buy the Myarc HFDC for their hard drive or go to ESD (Electronic Systems Development Corp.) for their hard drive controller card. They now have four DSDD floppy drives and could relatively easily add 2 more instead of going to a hard drive, but in the meantime have purchased a Zoom 2400 BAUD MoDem with a 7-year warranty. The Spirit of 99 BBS phone number is (614) 263-3412.

## FUNNELWEB WRITERS REDEDICATED TO TI:

Mord has it that Tony McSovern is delaying his move to the AMISA in order to make further improvements to Funnelweb. He plans a complete rewrite of the Editor, and also plans to add hard drive support.

According to the same source, there is now a Digitizer for the TI, which ties together your VCR, TI and printer and produces a nice picture. The equipment is reported to be available from RFW Enterprises, 111 Dakridge St., Chicobee MA 01020, phone (413) 593-3274, and the "Imagewise Portrait Print" software can be obtained from Circuit Cellar Inc., 4 Park St., Suite 12, Vernon CT 06066, phone (203) 875-2751.

# \*TROJAN HORSE \* VIRUS DISCOVERED IN TELCO:

A message on Delphi's TI forum reported that a "Trojan Horse" virus had been discovered in Telco, which causes the disk drive to wipe files off the drive while downloading. Be forewarned, and use freshly formatted disks when downloading with Telco.

# HELCOME TO THO NEW OUT-OF-TOWN MEMBERS:

We are pleased to have two new members from out-of-town join our group for 1991. Joseph Cohen, 144 Mimosa Drive, Charlottesville, VA 22903 corresponded with me since March 1990, and John Simpkins, 805 10th Ave., Apt. 1, Marlinton, WV 24954 since May this year. Joseph is a Professor of Physics at U.Va. and just recently came to this country from Israel. John moved to our area from New Jersey, where he was active in a user group, and says only his monthly copy of MICROpendium has kept him informed of what is going on in the TI world. They have both contributed some software for our edification, for which I'd like to express our thanks. Have included their addresses, since I'm sure they would appreciate any correspondence on our part.

# DPA NEWS DEBUTS:

Dasis Pensive Abacutors (what in the heck does that mean anyway?) has released the first issue of OPA News. Basically, the publication is a catalog, but does have a lot of info on the work that OPA has done, is doing, and is planning to do.

They originally dealt in software such as Diskodex and TASS, but did not get much recognition until they branched out into herdware (RAMBO, TIM). For more info, write: OPA, 432 Jarvis St., #501-502, Toronto, Ont. #4Y-2H3.

# NEW/AGE SPECIAL \* by JACK SUGHRUE, Box 459, East Douglas, MA 01516 \*

# GOOD, BETTER, BEST!

There is only one program in the TI disk community that is (as my 5th-grade pupils would say) "totally wicked awesome rad to a gnarly degree." I agree with the sentiment, if not the mode of expression.

Nothing else in our world computer community has equalled the impact of the FUNNELWEB environment created for us by Tony McGovern and his son, Will. These two Australian geniuses (and I do not use the word

lightly) put together what all of us deemed impossible for the TI.

FUNNELWEB just grew and grew. The original American release was a TI WRITER and EDITOR ASSEMBLER combo, more or less (actually more). Next version a few months later contained a bit more with lots of enhancements of what went on before. TIW, for example, does not contain a ruler or address recall or macro key CAPS or LC. Tony put all these things in fairly early versions, all of which we take for granted in our word processing activities. The environment always loaded by either E/A or XB. thus making it ideal for supercarts (again from earlier versions) or RAMs or whatever device hardwarers could devise. Then things like Disk Manager 1000 and Diskpatch were added and modified. As were loaders for c99, FORTH, etc. Each time Tony (primarily) would unravel the complexities caused by these needs and create new and better solutions than dreamed possible.

When he came up with the windowing effects for the CONFIG program, for example, which established a <u>profound</u> systems configuration (still able to be ported en masse to any newer version, I felt he had reached his

peak. Boy, was I ever wrong.

FUNNELWER is not a program. It is an environment which gives you, the user, some great computing tools in such a complete package that it becomes almost impossible to do without them after using them.

Probably 80% or more of normal (non-programmer) use of computers - expecially the TI - is word processing. People need to communicate. FUNNELWEB turned TIW into a great word processor, adding so many features that should have been in the original cart/disk combo that when you go back to that combo you are apalled at its limitations. As I say, we have become spoiled by Tony and take for granted what is surely a remarkable achievement.

Much as I # my TI, I know that if FUNNELWEB did not exist I would no longer be Tling. I couldn't. FWB's a structure equal to the best that any home computer has to offer its users at any price

any home computer has to offer its users at any price.

Let's face it. It serves as a Master DOS. What does

Let's face it. It serves as a Master DOS. What does a Disk Operating System do? Well, it lets you load up other programs, primarily, or lets you handle some disk management tasks. FWB does all that as a sideline.

With the new 4.31 FUNNELWEB the console 99 disk user has just leaped quantumly into an exciting era. The 40-column (standard) TI computer fan now has available to him or her a package heretofore only available to non-standard 80-col upgraders.

Before I go on, I'd like to say:

#### STOP!

The bad news is this: Will went over to the Amiga a long while ago, and his father will be following shortly. This will mean that the greatest single piece of software for the TI will no longer grow; nor will we be seeing any other pieces come from Funnelweb Farm; nor will there be any more great tutorials (particularly those on exploring XB). This is not only BAD news, it is HORRIBLE news. Not that I can blame Tony. Although close to 100% of all TI disk users use FWB and its

ingrades, an extremely small number has ever gold the author a penny and a tinier number, still, has ever given a second contribution (though the original to present upgrade is similar to the difference between my salary and Donald Trump's). And a tinier number, still, have ever written to Tony to tell him how much they use and appreciate FUNNELWEB and all the other great things he has done for us.

Remember, this is not commercialware. Fairware authors need and deserve our support. Fairware authors of the stature of Tony McGovern have earned massive support financially and socially. They just don't

jet it.

I urge every user group to "charge" a minimum \$10 copying fee to member for this upgrade and send the entire collected sum to Tony. group letter. Write him up in your newsletter. Let's let '91 be the Year of the McGovern. Even more, I urge every single reader to sit down first opportunity and write (probably using FUNNELWEB) a at your supporting enclosing the largest cash (certified check, letter, international coupon, money order) contribution you can really afford. It'll still be cheaper than anything you'd have to pay for that would be in the same league as FUNNELWEB (if such a thing exists). couldn't wait, for example, to shell out \$60 for PRESS (sight unseen) or \$25 to \$60 for data bases. Many of our game cartridges cost at least five times what some consider a "fair" price to pay for the finest piece of software ever for the TI.

How about this for a rule of thumb? Take the most expensive piece of software you ever bought (and probably don't even use anymore) and double it. Send that as a donation. Remember what you paid in those pre-inflationary days for LOGO and MULTIPLAN and TI WRITER and DISK MANAGER II and E/A and whatever?

Well, the new FUNNELWEB has so many new features that most of those expensive cartridges and upgrade disks can be chucked in the basket.

What's your TI worth to you? What'll it be worth to you down the road with Tony McGovern gone? Decide soon about your commitment and make the investment today in your future.

So what are a few of these outstanding features? Well, for one, there is no more Disk Manager 1000 nor Disk Patch, because the new Disk Review performs all the functions of both (and then some) from within the FWB environment, including COPYING FILE BY FILE (to eliminate fractures) WHOLE DISKS TO MULTIPLE DRIVES! So stick a disk in Drive 1 and copy to Drives 2, 3, AND 4, while you go comb your wallaby. Disks can be formatted to Quad density, if you have the right controller. Any formatted to RUN right out of DR, including the huge IV254s. The duick Directory now lets you mark a file from WITHIN the FORMATter or ASSEMBLER. And the disk editing functions are plentiful and profound.

The whole FUNNELWEB 4.31 environment is profound. You'll realize this immediately when you see BOTH central menus displayed on the screen imultaneously and you just have to move the cursor around to either RUN the program (or VIEW and/or PRINT the text file).

This is a <u>must</u> for eveyone!

Get it from your user group today, being aware that everything worthwhile in life costs.

ilf you use MEW-A6B/99 please put me on your exchange list.]

FROM PAGE 4

THE NEW HARD AND FLOPPY CONTROLLER BY ESD SHOULD BE SHIPPING SOON BUT UNTIL IT DOES I WILL MAKE NO FURTHER COMMENT ON THIS. PERHAPS YOU ARE ONE OF THOSE PEOPLE JUST ABOUT READY TO TOSS OUT YOUR TI FOR A NEW PC BECAUSE YOU JUST HAVE TO HAVE MORE MEMORY. TAKE A LOOK AT RAMBO. THIS IS A HORIZON UPGRADE KIT, AND IN CONJUNCTION WITH THE NEW ROS 8.14 WILL EASILY ALLOW YOU TO PARTITION YOUR HORIZON MEMORY BETWEEN RAMDISK AND PROGRAM SPACE. PRETTY SLICK AND COSTS \$45.

BUT I GOTTA HAVE SPEED YOU SAY. AHA I KNEW THAT SUBJECT WOULD COME UP. WELL GUESS WHAT JUST BECAME AVAILABLE THIS MONTH? THE ACCELERATOR, WHAT'S THE ACCELERATOR YOU SAY, WELL DON O'NIEL OF GILROY CALIFORNIA HAS DONE IT. MY PAST EXPERIENCES IN DEALING WITH DON HAVE ALL BEEN EXTREMELY GOOD ONES AND WOULD RECOMMEND ANYONE SERIOUSLY INTERESTED IN THIS NEW DEVICE TO GO FOR IT. THIS DEVICE WILL INSTALL IN YOUR CONSOLE AND CLIP ONTO THE 9900 PROCESSOR, YOU WILL THEN HAVE A 99000 AND IT WILL GIVE YOU UP TO TEN TIMES THE PERFORMANCE OF YOUR CURRENT 4A. IT ALSO HAS A 129K EPROM FOR DEVELOPING NEW CONSOLE ROMS AND A MACRO STORE. ALSO HAS A PORT TO GAIN ACCESS TO THE 16 BIT BUSS FOR NO WAIT OPERATION ON FUTURE PERIPHERALS. A NEW P-BOX CARD WILL INTERFACE TO THE ACCELERATOR, ON THE CARD ARE TWO SETS OF BUSSES, THE 8 BIT AND THE 16. THE ACCELERATOR IS APPARENTLY COMPATABLE WITH THE 9900 AND WORKS GREAT WITH ALL APPLICATION PROGRAMS AND IS ABOUT TWICE AS FAST AS THE THERE IS A PROBLEM THOUGH WITH SOME OF THE GAMES WHERE AUTHORS INCORPORATE LOOPS TO SLOW DOWN THE PROGRAM FOR TIMING. YOU CAN'T SLOW DOWN THE ACCELERATOR, BUT GAMES THAT USE THE VDP FOR TIMING WORK FINE. ALSO GARY BOWSER OF OPA IS WORKING ON SOME PROGRAMS, ONE IS THE Z80 EMULATOR THAT WHEN USED WITH AN 80 COLUMN DEVICE AND THE ACCELERATOR WILL ALLOW US TO PORT OVER COLECOVISION, SEGA AND SEGA GENESUS GAMES. THE COST OF THE ACCELERATOR \$200.

SO THERE. STILL THINK THE TI IS DYING OUT? THESE ARE ONLY A FEW OF THE MANY GREAT, RECENTLY RELEASED PRODUCTS AVAILABLE TO US AND MANY MORE EXCITING ONES ARE IN THE WORKS. THEY ALL APPEAR TO BE JUST STEPPING STONES TO A NEW GENERATION COMPUTER. IF ANYONE WANTS MORE INFO ON THE ABOVE PRODUCTS JUST ASK, IF I CANT ANSWER A QUESTION I KNOW WHO CAN.

I WOULD ALSO LIKE TO MENTION THAT THE EX CORCOMP TECHNICIAN MENTIONED IN MAYS MICROPENDIUM IS INFACT REPAIRING AND SUPPORTING OUR COMMUNITY ON HIS OWN NOW. I SPOKE TO HIM PERSONALLY LAST WEEK AND HE WAS VERY HELPFUL. A COUPLE OLD TI SUPPLIERS ARE ALSO RE-APPEARING ON THE SCENE UNDER NEW NAMES.

ONE CREDIBLE REASON FOR MOVING TO THE PC WORLD MIGHT BE THE MEGA TONS OF SOFTWARE AVAILABLE, BUT I GUESS ALL I CAN SAY ABOUT THAT IS THAT WE ALL HAVE TO LEARN HOW TO PAY OUR SOFTWARE AUTHORS FOR THEIR INCREDIBLE EFFORTS AND I SUSPECT A GOOD WAY TO LEARN HOW TO DO THIS WOULD BE TO BUY A PC AND THROW OUT YOUR TI.

BUT PLEASE THROW IT MY DIRECTION OK

THE EN.... THE BEGINNING

JIM E TOMPKINS

# IT KEEPS GETTING BETTER

WELL HERE'S MY FIRST ATTEMPT AT AN ARTICLE AND HOPEFULLY ITS UNDERSTANDABLE, READABLE, AND MOST OF ALL I HOPE I CAN GET MY MESSAGE ACROSS. THE MESSAGE IS THAT THERE IS A LOT OF NEW HARDWARE AND SOFTWARE AVAILABLE TO US TIERS AND I'M SURE THAT MANY OF US JUST AREN'T AWARE OF IT. SO EVEN IF MY ARTICLE BORES YOU PLEASE READ FURTHER AND AT LEAST PULL OUT SOME OF THE INFORMATION AND PASS IT ALONG TO SOMEONE WHO DOESN'T KNOW.

WE ALL ARE PROBABLY AWARE OF THE DWINDLING MEMBERSHIP IN OUR GROUPS BUT ONE THING THAT SUPRISED ME WAS THAT THERE ARE STILL A NUMBER OF PEOPLE OUT THERE WHO STILL LOVE THEIR TI'S BUT JUST FOR ONE REASON OR ANOTHER DON'T REGULARLY MAKE THE MEETINGS ANYMORE. PERHAPS WE JUST DON'T OFFER THESE PEOPLE ENOUGH, I DONT KNOW. WELL I LOVE MY TI AND TO PROVE THIS I'VE ADDED A RAVE KEYBOARD, AN 80 COLUMN CARD WITH 192K OF VIDEO RAM, RAMDISKS WITH OVER A MEG OF RAM, A NEW ANALOG MONITOR TO SEE ALL THE NEW COLORS AND RESOLUTION THAT THE 80 COLUMN CARD BRINGS, A 40 MEG HARD DRIVE, A P-GRAM + THAT STORES 4 PAGES OF GRAM EMULATION AND MUCH MORE, A LOT OF HOME MADE STUFF, SUPERCARTS, AND ON AND ON. THE TI I HAVE IS STILL THE ONE I LOVE BUT ITS A WHOLE NEW MACHINE NOWDAYS. SURE I'VE SPENT A COUPLE BUCKS BUT NOT NEARLY WHAT I WOULD HAVE HAD I OPTED TO CROSS OVER INTO THE PC WORLD.

SO FAR I'VE BEEN ABLE TO DO ANYTHING I WANT WITH MY MACHINE AT A FRACTION THE COST OF WHAT I WOULD SPEND ON ANOTHER MACHINE AND I'VE STILL GOT A LONG WAY TO GO. I SOON WILL HAVE THE SON OF A BOARD SETUP AND PERHAPS WILL GIVE A DEMONSTRATION IF ENOUGH PEOPLE ARE INTERESTED. WHAT IN THE WORLD IS A SON OF A BOARD YOU ASK? ITS A 2" BY 2" PLUG IN PC BOARD WITH A 16K EPROM AND 2 ICS THAT ALLOWS YOU TO REPLACE GROMS O AND 1 INSIDE YOUR CONSOLE WITH A NEW OPERATING SYSTEM THATS 100% COMPATIBLE WITH THE TI. IT GIVES YOU TRUE LOWER CASE, A BUILT IN 4K MICRO DISK MANAGER AND ALLOWS YOU TO RUN ASSEMBLY, FORTH, AND C99 PROGRAMS. IT ALSO GIVES YOU THE CAPABILITY OF AUTO LOADING DISK PROGRAMS ON POWERUP AND A FEW MORE FEATURES AS WELL. THIS ITEM IS AVAILABLE FROM OPA FOR \$45.

WHO THE HECK IS OPA YOU ASK? WELL REMEMBER TASS THE RLE SLIDESHOW PROGRAM, OR DISKODEX, OR SATURDAY NIGHT BINGO, OR SCRABBLE? ALSO IN 1989 OPA IN CONJUNCTION WITH BUD MILLS PRODUCED RAMBO, MORE ON THAT IN A MINUTE BUT FIRST THERE'S GIZMO- A 10" BY 4" BOARD CONNECTED TO YOUR CONSOLE WITH A 2 FOOT CABLE. IT'S ACTUALLY 8 MODULE SLOTS THAT CAN BE CALLED UP FROM THE STARTUP MENUTHROUGH THE REVIEW MODULE LIBRARY WHICH IS A ROUTINE IN THE SYSTEM SOME OF US MAY HAVE ACCIDENTLY SEEN FROM TIME TO TIME. ANYWAY ALL 8 MODULES ARE RIGHT THERE READY TO GO. GIZMO CAN BE HAD FOR \$75.

THEN THERES TINY TIM, ONE OF A COUPLE OF 80 COLUMN DEVICES ON THE MARKET NOW. THIS ONE USES THE 9958 VDP AS OPPOSED TO THE 9938 AND ALSO HAS 192K VIDEO RAM BUT DOES NOT SUPPORT A MOUSE AS DOES ASGARDS MECHATRONIX CARD. TINY TIM SELLS FOR \$179 AND ALSO INCLUDES SON OF A BOARD MENTIONED EARLIER.

\*\*\*\*\* CONTINUED ON PAGE 5

or two programs. It was mainly to get them off my back that I decided to start Tigercub Software on my own.

Since I thought my programs were no better than the best of the public domain being peddled by the IUG, I set my price at \$3.00 others were charging three or four times as much, and at the time I didn't know how poor some of their programs were. At that price I couldn't afford the advertising rates of 99'er Magazine (I didn't know that most of their ads were run on credit, and the 99'er never got paid!) so I started mailing my Tips from the Tigercub to about two hundred user groups as a promotion idea.

Texas Instruments was being hurt, in the advertising wars, by adlegations that few programs were available for their computer (because they had discouraged third-party competion). So they had published a deluxe quality catalog listing of every TI program they knew of (which was mostly everything in the IUG public domain library) and mailed it to every registered user.

Texas Instruments was also actavely promoting user groups and had appointed a user group coordinator\_I think his name was Ed Weiss (author's note: Ed Weist). He visited our user group, along with programmer John Phillips, and demonstrated the newest TI software Hopper, and an unfinished FORTH, I cornered hie after the meeting and asked if they intended to republash that software catalog. He said they were plannang to\$and definitely wafted to list all my programs. The next day, I mailed him a copy of my catalog and copies of all my programs. A week later the ax fell\_Texas Instruments announced that they were abandoning the TI-99/4A! I had missed the chance to have my advertising mailed, at no cost, to a million users\_at a time when programs were still scarce and I was offering ten times as many as anyone else, at by far the lowest price! Such is life."

The above is taken practically verbatim from a personal letter from Jim Peterson to the author.

# RANDOM QUESTIONS QUOTES

Why Tigercub?

"Tiger because I was writing for the TI and cub because I was writing small programs."

How many programs have you written?

"250 plus the Nuts 'n Bolts. I have never owned or written for any other computer except the TI. Pet peeves? Too many to mention. The biggest faults of the 99/4A? The twenty-eight column screen. They could just as easily have given us forty and the fact that strings can only be stored in the 12K of console ram. This is a little known weakness but a big one!"

"My wife who is sixty-four years of age somehow does not look nearly that old. She speaks a language she sincerely believes is English. After thirty-five years I have learned to understand some of it."

"I like brain games and I think programming is fun! Hard work? Sure but fun! I freely admit that I am a technoklutz."

Irwin Hott says that on several occasions he has been able to help Jim by changing disk drives and performing other maintenance chores. To appreciate this you must realize that Irwin is blind.

What is Jim Peterson's outstanding personality trait? Everyone seems to agree that he goes out of his way to help out. That he is a hard worker. Jim told Irwin Hott that he was going to take 1500 disks to Lima. That boggled Irwin's mind. Irwin said he could not conceive of the amount of work involved in copying 1500 disks to sell in two days.

Editor's note: Jim's famous Public Domain disks as well as his Nuts & Bolts series are available. Write to: TIGERCUB SOFTWARE, 156 COLLINGWOOD AVE. COLUMBUS OH. 43213

# Biography

# A Visit With the Tigercub by Walter Ward Bluegrass 99'ers

We are driving through a quiet residential street in the section of Columbus known as Whitehall. We see a small brick house with a large maple in the front for shade and a somewhat overgrown evergreen hedge.

The man who answers the door is about 6'2'', medium build, medium complexion with a full head of hair which is mostly gray. His manner and everything about him suggest gentleman in the old fashioned sense. We are taken to his computer room which is small and dominated by an 8 x 33 table which occupies almost a quarter of the room. Piled all over the table are disks in boxes and other computer paraphenalia. They are also piled under the table and on the floor. Shelves extend to the ceiling all around the room. They are filled with computer books, magazines and boxed newsletters. etc. Several filing cabinets are similiarily loaded. Sitting in the window sill are his wife's African she has difficulty violets which squeezing through to water due to the clutter.

Our brown eyed host and his charming Japanese wife make us welcome.

"My biography? Let's see. I was born in Minnesota in 1923. I wound up in the Army in World War II. I ended up in Japan an 1945 just after the surrender in the 27th Army Division. I transferred to Gen. MacArthur's Honor Guard Company. I took my discharge in Japan in 1946 in order to go to work for the Army as a Civil Service employee. I married a Japanese gird in 1957. I returned to the U. S. with wife and baby daughter in 1959. My daughter is now married, a registered nurse and has two sons. I also have a son who graduated from The Ohio State University and who now works in insurance.

My hobbies? I like to fish and my annual fishing trip to Minnesota is coming up in July. It will also be the fiftieth reunion of my high school class. I like to garden but ailments are making that more and more difficult. I have a greenhouse full of cactus plants. I like country music. I used to collect military medals and decorations but that became too expensive. I used to play the harmonica.

When my son was sixteen he decided he wanted to be an engineer. He ended up with a degree in advertising and now works as an insurance adjustor. I decided if he was going to be an engineer he should know something about computers. Knowing absolutely nothing about computers; we went shopping. He picked the TI-99/4A because he liked the feel of the keyboard. I have never regretted that decision. It turned out that my son was too interested in sports and girls, cars and girls, and girls and girls, to take any interest in the computer but I became fascinated by it.

I taught myself to program by starting with the "blue book" and other books that came with the computer and by translating the Microsoft Basic in David ii. Ahl's books of computer games to TI-Basic. Within a year I had written about ninety programs. At that time the computer world seemed to be engaged in a conspiracy to ignore the TI-99/4A, I scar so every computer magazine on the newsstands and never found a mention of the TI or an advertisement for any TI product. Finally I did find one small and sent for the catalog. The company promptly went out of business! But their catalog had contained a small ad from the old International Users Group; which had started out as the TI user group and had been converted by La Fara into a business, public domain programs for Jelli**ng** – three dollars each. I began buying and swapping programs from the IUG.

About that time I made contact with a few local users and we started a user group in Columbus. This also brought me into contact with some wheeler-dealers who wanted me to go into parntnership with my ninety programs and their one

of this, one is for a particular application this will allow you to have the fastest program loaded possible, and the second is it will be as small as possible for the application. Disadvantages? History should be explained now as the advantages are distorted. Back in 1950 the concept of loading a new Operating System to speed things up was the best solution to lack of memory. Also it had the other advantages mentioned and it made sure the system was running at peak ability. But that is also where all the trouble started. You see if you want to run something else you'll load it someplace that is already being used. This means you will have to load a program that moves it out of the way, so you can load something else, then you can load this other program.

Does it require much thought to see it is similar to digging a hole and filling it with dirt from another hole so you can re-dig the origional hole. That is not even without mentioning the fact that the other guy may on some systems have as many as three types of Operating Systems, and they are not compatible with each other even though they are all written for the same computer.

So the 99 doesn't have a problem of creating while loading the third program because it is too large. It knows the 2nd program used up all the space. The 99 uses what's called Relocatable Code, which means it just loads where there is space left, and knows how much memory is left. This is Artificial Intelligence. The 99 does not have to ruin everything in memory to see there is a problem, the other guy has to reboot from scratch.

Expansion of the system over time on the other guy also requires a history lesson. For lack of a better term we will say the other guy has a 'Hard Coded' system. I got that term from a Computer Science Professor as he coined it on the air. Hard Coded means that you can't run any program from the area dedicated to the disks or the RS232 or other peripherals. You can't load anything there or even move anything there without special hardware and software. The 99 only has one Hard Coded area, the operating system. The other guy has several and can't move them to another location, remember they are Hard Coded (physically located by hardware).

Let us say we want to add a 1 Meg of memory to a fully expanded system the guy has. Sorry no can do, Hard Coded. For the 99 that is no problem as it can without any modifications at all talk to 128 devics, so just make it a devise and add it on. An example is the 192K Video Display Processor (9958) added to the 99. It can be upgraded and increased in size also. And the GRAM/GROM port for cartridges can talk to 640K of GRAM/GROM but turned into a device could be expanded to a unbelievable 4095 Meg or 4 Gigabytes. This is without even mentioning the RAVE CARD which is an other guy approach to expansion, but that is only 3.5 Meg maximum for the 99.

Five years from now I'll have my TI-99/4A and will still be adding devices and Cards to it. The other guy will have gone through two systems by then just to stay current with expansions. I mentioned one thing the Professor said. He also said that current Mini and Micro computers are similar to shoot-and-throw-away cameras.

The Tamira, 990/10, TI-99/4A, and NXT are the only Memory to Memory transfer, Memory Mapped Memory, and Memory to Memory Archetechiter computers ever built. So I don't think he knew about the TI-99/4A or it's relatives. All the rest are all like the 'Hard Coded' machines he mentioned, why do you suppose they have to replace the mother board for the simplest upgrade? 1950's concept in the 1990s!! Does the other guy really have that much on the TI-99/4A? We shall see. We shall see!

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#### REPRINTED FROM MUNCH NEWSLETTER

# THE OTHER GUYS vs TI-99/4A by Richard Lynn Gilbertson

Little do most of us know just what we have in the TI-99/4A. So it made sense to write about it. First off just what do these other guys have, well more memory and a faster processor. They also have hundreds of companies with support lines and so many different versions of the same machines and software too, that it quite boggles the mind to count them. The other guys have years of major research invested into every software package and so many different operating systems of disk and processing data that it would take several books just to list the names.

 $0{\rm k}$  what does the TI-99/4A have to compete with that? Well hold on to your hat, the YY does have several things and none of these are by any means minor.

First off lets get into a little history. When one of the other guys stores data onto a disk like say "STORE THIS" what you will find on the disk is "STORE THIS crlf". now the "crlf" means it's universal among the other guys for Carridge Return and Line Feed. So every line of the data on the disk has to have this at the end: "crlf" to tell the computer that this is the end of the string of data. Now the 99 has a simpler approach, "OASTORE THIS" is how the 99 does the same thing. The "OA" stands for 10 in hexadecimal and you can see being at the front instead of at the rear of the string means you don't have to read the whole line to see how long it is. The other guys have to load the whole line and make the computer count how long is is, while the 99 just looks at the first one and knows how long it is. If you are searching a disk you can see why it takes so long for the other guy.

The history of why that is comes from the concept the other guys system uses which was conceived in 1953. The 99 uses a concept from 1975. And yes the other guys have not changed because if they did all the software written would have to be totally re-written. Also forget them doing it any time soon. I should also mention that this system of ours is already being used on newer main frames.

Today I was asked if the 99 was compatible with the other guy and as usual was quite insulted. Let me show you why. Go ahead and ask another guy when was the last time he got out his Soldering Iron and added something unique to his system. First off he will look at you like you are truly crazy. Then he will ask 'what do you mean unique?''.

Say 'unique like a interrupt switch to halt everything and do something else previously loaded. Or just stop what you are doing and do nothing. Or do a total reset and start over.' He will reply 'oh yea, I can do that last one.' and he is right he can only do the last one. His software has to do the others, the 79 is already built for those and doesn't care if hardware or software causes it to happen. Or ask the other guy to load and run his very best Telecommunications, Word Processor, Disk Manager, and Assembly Compiler from one disk without changing disks. Honestly he will day 'you can't get all that on one disk', reply 'Really! I can do it on mine. And I still have room for almost a third more.'

Also mention that most of the other guys you've shown your 99 to really love your telecommunications program. (Telco)

How about Operating Systems? The other guy on most of them has to load one before he can do anything. First off what are the advantages

TI-WRITER by Stan Katzman - Part 4:

Well, so far we can create a document, edit it, and save it to disk. Let us now get a document from disk into memory. This is called LoadF.

Go to the Command Mode and then press F for Files, then press LF for LoadF(ile). You will now be prompted for the file name with the header "LOAD FILE, enter filenames". At this point enter "DSK1.filename" (if you have a one disk system). (Before you do this you have to remove the program disk and put the file disk in the drive.) The file will then be put in the memory (Text buffer!) and the cursor will be at the beginning of the file. You can now look at and edit or print out this file.

Let us assume that you forgot what was on your disk. In order to find out what is on your disk you have to ShowDirectory. Let us discuss this process. Again go to the Command Mode and press F and this time press SD. Another line shows up saying "SHOWDIRECTORY, enter disk number:". At this point just enter the drive number that your files disk is in (in a one disk system press I <enter>) and your disk directory is displayed. At the end of this routine on the bottom of the screen it will say "Press ENTER to continue" and you will be returned to the edit mode. While the directory of the disk is being displayed on the screen there is no effect on the appearance written in the Text Buffer or on the disk.

If for some reason we want to get rid of a file on the disk we can "DeleteF" it. Let us go through this process. Enter the Command Mode, press F (for Files) and then press DF (enter). You will now see "DELETE FILE, enter filename:". At this point (if we have only one disk drive) type DSK1.filename (enter). The file is now deleted, removed, gone, in never-never land. Once deleted it cannot be recovered, so be sure you want this removed before you use it. (ED NOTE: There is a way to recover the "lost" file, but it must be done immediately. See Recover File in DM-1000, and/or check out the TI WRITER manual or try one of the many Utility programs available.)

We can also load only part of a file, this is done the following way: At the LF command stage type the line number of the first line of the file part to be loaded, space, line number of the last part to be loaded, space DSK1.filename. (1 disk system) - Example 22 55 DSK1.TEST. This will load lines 22 to 55 inclusive from the file "TEST" in drive \$1. We can also merge files into memory. Here is how: Load a file (or create one) then go to the Command Mode, press LF (enter) and now type the following: the line number of the line in the text buffer AFTER which the file is to be loaded, space, then DSK1.TEST - Example 72 DSK1.TEST. What will happen here is the file TEST will be gut in memory starting at line 72 in the buffer. This could be dicey because if the sum of the two files is greater than 23K you could "overfill" the buffer.

Well we have done enough this time. More next time.

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