



DALLAS
TI
HOME
COMPUTER
GROUP

DALLAS 99 INTERFACE

Volume 7, Number 7

July 4, 1987

This newsletter is the official publication of the DALLAS TI HOME COMPUTER GROUP, a non-profit organization serving member/users of the Texas Instruments 99/4A HOME COMPUTER. For more information you are invited to attend our next meeting or send a SASE to: DALLAS TI HOME COMPUTER GROUP, PO Box 29863, Dallas, Texas 75229

>>> NEXT MEETING <<<

99er Connection BBS

Saturday, 11 July, 1987

24 Hours, 300/1200 Baud

The Dallas Infomart

214-272-2786

JULY HIGHLIGHTS

Meeting Day:

Main Program: Prgrming SIG
Software SIG
Hardware SIG
Guest/New Member Meeting

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NEXT-STEP Workshop July 24

Dallas TI Home Computer Group
PO Box 29863
Dallas, Texas 75229

TO USER GROUP EXCHANGE RECIPIENTS,
PLEASE NOTE CHANGE OF ADDRESS!

MEMBER 62 EXP: 92987
GREG JUSTICE
5209 LONGHORN TRAIL
GARLAND, TX 75043

FIRST CLASS



SCHEDULE OF COMING EVENTS

EVENT	DATE	TIME
Infomart Meeting	7/11/87	
Programming SIG	" " "	9:00 am
Main Meeting	" " "	10:00 am
Hardware SIG	" " "	1:00 pm
Executive Committee	7/18/87	1:00 pm
Committee Chairmen	" " "	2:30 pm
TI-Artist MiniSIG	+# 7/19/87	2:00 pm
Newsletter Deadline	7/24/87	Midnight
NEXT-STEP WorkShop	# " " "	5:15 pm
Infomart Meeting	8/ 8/87	
Hardware SIG	" " "	9:00 am
Main Meeting	" " "	10:00 am
Software SIG	" " "	1:00 pm
Executive Committee	8/15/87	1:00 pm
Committee Chairmen	" " "	2:30 pm
TI-Writer MiniSIG	8/16/87	2:00 pm
NEXT-STEP WorkShop	+# 8/21/87	5:15 pm
Newsletter Deadline	8/28/87	Midnight

NOTES:

= DTIHCG Membership Required
 + = Reservations Required
 SIG = (S)pecial (I)nterest (G)roup

C E O T I C S 6 by Jim Leshar

The Cutting Edge Of Technology In Computer Science

BEFORE WE GET INTO MOLECULAR MEMORIES, LETS LOOK AT AN AMAZING THING ABOUT A WINCHESTER HARD DRIVE. DID YOU KNOW THAT THE READ/WRITE HEAD RIDES ON A THIN FILM OF AIR, PROVIDED BY THE DISK TURNING AT 3600 RPM? ALSO THE THICKNESS OF THIS FILM OF AIR IS EQUAL TO 1/3 THE WAVELENGTH OF GREEN LIGHT. GREEN LIGHT WAVE LENGTH IS 5000 Au, OR ANGSTROM UNITS IN LENGTH, WHICH WHEN CONVERTED TO INCHES 1/3 WAVELENGTH OF GREEN LIGHT = ABOUT SIX AND 1/2 MILLIONTHS OF AN INCH. THE ARTICLE SAID IT WAS LIKE A 747 FLYING 1/10 INCH ABOVE THE GROUND.

WELL BACK TO MM. SOMEWHERE OUT IN THE WASTELANDS AROUND AROUND SAN JOSE CALIFORNIA, DOWN A WINDING CANYON ROAD STANDS A GREEN METAL AND GLASS BUILDING, IBM'S HIGH TECH ALMADEN RESEARCH CENTER. SCIENTIST ROGER MC FARLANE SAYS THEY ARE LOOKING AT 1000 GIGABYTES ON A 5 1/4" DISC, THE EQUIVALENT OF 2 MILLION FLOPPIES. HE SAID THAT THE STORAGE CAPACITY OF A LASER DISC IS LIMITED BY THE DIA. OF THE LASER BEAM, BUT THEY HAVE DEVELOPED A NEW SYSTEM WHICH CAN STORE A THOUSAND TIMES MORE INFORMATION IN THE SAME SPACE AS CURRENT LASER DISK TECHNOLOGY. THE REMAINDER OF THE ARTICLE READS LIKE TEXTBOOK ON INORGANIC CHEMISTRY, SO SUFFICE IT TO SAY THAT WE ARE FAST APPROACHING "H A L"

Dallas TI Home Computer Group

Program Schedule - Infomart

July 11, 1987

9:00 - 9:55 Programming SIG
 10:00 - 11:55 Main Meeting
 10:00 - 10:30 Business Meeting
 10:30 - 11:30 Main Program: Software SIG
 11:30 - 11:55 Guest/New Member Orientation Meeting
 12:00 - 12:55 LUNCH BREAK
 1:00 - 2:55 Hardware SIG

Meeting room numbers can be obtained at our booth, or check the master list posted on the two overhead projectors, located just past the Registration booths. Children under age 16 MUST remain with their parents at all times, in accordance with Infomart regulations!

All meetings will begin promptly on the hour, since other groups may be scheduled to use the room after us. Please be on time.

FROM THE OVAL OFFICER: Louis Guion

Another new month brings another new project. This month, we will try to get a Solid State Software cartridge library started. One of our new members asked a question about what the club had to support the "console only" user of the TI-99/4A. We had to admit, "Not much!", so the idea of the club sponsoring a cartridge library came of age. The purpose will be to gather as many cartridges as possible under the club's wing and to loan these cartridges out to any member that wishes to try or use the cartridges on his own system. While all of the details remain to be worked out by the person that accepts the responsibility of caring for these cartridges, it is my feeling that we want to gather the cartridges at the least possible cost to the club, and, in the same spirit, make them available to members at the lowest possible cost. That would be free, of course. Only if abuse and loss become common would we have to ask for deposits or rental fees. The intention is to support the TI-99/4A user by making as many titles available to him/her as possible.

So that we may establish this service, I take this opportunity to ask you to donate any cartridges for which you no longer have a need to the club for use in this software library project. Bring your offerings to INFOMART on July 11th, or to any meeting held after that date. We will gladly accept cartridges by Imagic, Milton Bradley, Atari, CorComp, Mechatronics, MicroPal, Funware, Navarone, or, of course, Texas Instruments. We already have one each of Extended BASIC, TI-Writer, and Multiplan cartridges, but could use several more as I'd suspect these will be the most popular cartridges in the system. Games, data bases, disk managers, or what-have-you are all welcomed by the DTIHCG Cartridge Library! There may be some really useless titles (to you) that would really expand someone else's use of their system, so please donate them to this new effort to support the club.

The way I see this service working is for a custodian to bring the donated cartridges to each INFOMART meeting and, possibly, to each NEXT-STEP Workshop. At those times club members (only) could check out a number of cartridges for a 30-day period. They would be returned at the meeting, just as they had been checked out. The member would be responsible for the cartridge, of course, and could either replace the cartridge or pay a suitable replacement fee should he lose or damage the module while it was signed out in his care.

To go along with this service on cartridges, the club now owns two loanable 300-baud modems with TEII cartridges and a SUPERSKETCH, and may include these as a part of the cartridge library. It depends very much on the strong back of a custodian! We also have the established INFOCOM game library service, run by Lynn Niliffer, which operates in much the same way as I have proposed the cartridge library operate. These services should make a real difference to the members with minimal systems as well as giving them a low-cost peek at some of the reasons they might want to expand their systems.

Once again, please bring any cartridges you'd like to contribute to this project to INFOMART on July 11th. Thank you for supporting the club which in turn supports you. That is the only way it'll work.

It is with regret that I report the demise of the Longhorn BBS, which held forth at (214)240-4608. Operated by DTIHCG member and DALLAS 99 INTERFACE Editor Greg Justice since June 22, 1986, the Longhorn reached its first birthday with over 5800 callers having been connected. Sixteen people a day, on average, were served. The Longhorn was a labor of love for Greg. He decided to cease operations and devote his equipment and energy to other matters of interest to him in the 4/A world. Thanks, Greg, for the opportunity to avail ourselves of the Longhorn. Good luck.

Another new plan for those of you that are "fast with a buck". Fast at spending it, that is! In line with my penchant for having to name most services and meetings, I'm going to call this one the HARDship Account. What is it, you ask?

It came to my attention that there are still a few of you that do not have Horizon's Ramdisk Card yet, but are still wishing for one. In order to help you reach that goal by Christmas 1987, the group is offering you a sort of pay-as-you-go plan, or a modified law-a-way, if you prefer. You can pay into the club (in \$20 increments, please) advance payments toward a HRD card. You can pay in any amount that you chose each month, but I caution you that in order to have it under the tree on December 25th you'll have to make your last payment at the November 14th meeting. That gives you 5 months to finish your contributions and equates to about \$40 per month (for a 256K expanded HRD) if you make your first installment at the July 11th meeting. If you will need construction services, perhaps you had better pick up the rate to \$50 a month. Not painless, but think of the enjoyment the HRD will bring after it is opened in December. The club will hold the money so that you can't get your grubby little hands on it. When you reach the magic amount needed to purchase a HRD, the club will order it for you at the then-current price. No interest paid (we aren't a Savings and Loan), and your money cheerfully refunded if you fail to meet the goal by Christmas. I know L.M. is going to hate me for the bookwork involved, but I really do want to make it as easy as possible for you to enjoy your own Horizon Ramdisk. So, see L.M. at the INFOMART meeting to set up your HARDship account!

Present costs are \$153 for the HRD card and parts kit, \$28 for the expansion parts necessary to get to 256K, and \$50 for construction and testing (of a 256K card) if you are unable to assemble your own kit. I caution you that these prices are subject to change and that they probably will, what with the not-so-friendly rivalry existing between the Japanese and US Customs agents affecting memory chip prices. These are MEMBER-ONLY prices, and are a pass-thru without profit to the group--just another service of the DTIHCG.

DOM-MASTER, John Creviston, has issued a recall for the

June DOM, and offers to exchange it for a corrected copy and to tender the club's apologies to boot.

See you Saturday! =lig=

FROM THE PROGRAM DIRECTOR: Jackie Guion

Last month's 9 o'clock SIG had demonstrations of various labelers for the 4/A. Included were a graphics labeler and some six or seven other labelers which were designed for everything from making diskette labels to making warning tabs for disk mailers which warn against X-raying the contents. There were labelers for making shipping tags, and just plain labelers for making what-have-you labels. If you missed getting copies of these programs, John Creviston still has a few of the two-disk sets left.

July's 9 o'clock SIG will be on programming. At the time this column was written, there is still some uncertainty as to what the program will be since I have been unable to firm-up plans due to vacation schedules.

At our main meeting last month, Jon Hodges discussed spike and noise suppression. He also spoke on the damage that static electricity can cause when allowed to "zap" and "zing" solid state components. His newsletter article will cover this in more detail. This month Jon will again be covering the main meeting for us as he does our demonstration for the Software SIG. He will be showing us how to use TI-Artist files with TI-Writer. Many of us should find this information quite useful. He's been researching this topic for a couple of months, so he should have a lot of answers for us. Maybe this is how Greg Justice gets the pictures of the columnists into the newsletter. Come and see!

Last month's afternoon SIG was an informative session covering loaders and how to load files. An in-depth discussion, with handouts, demonstrated and dissected various loaders. The second part of the meeting covered the various techniques which identify a file's type and suggest a method of loading. It attempted to answer the age-old question, "How do I load this file?" I've been told that the handout covering how to run the programs will be donated to the club library so that you can get it that way if you missed the program.

In July, the afternoon SIG, which is a Hardware SIG this month, will be covering some of the new hybrid cartridges that may be used in the GROM port of our computers. Sort of an appropriate subject, since the Oval One has started a drive to collect cartridges for a Club Cartridge Library. I bet he won't get any of these special ones, though! By the way, do set aside some of your outgrown or underused cartridges as donations. Someone else is sure to have a blast with them.

THE ARCHIVER UTILITIES: Dan Johnsen

In recent month's I've had quite a few questions put to me about the ARCHIVER utilities. Most of the time they start

off with, 'Why won't this file run?' or 'Why won't this file un-ARCHIVE?' Usually we end up with, 'What is an ARCHIVER utility? Why and how do I use it?'

The ARCHIVER program by Barry Traver is designed to create a single output file, into which multiple input files have been 'packed.' It makes it much simpler to copy, transmit or otherwise handle programs that consist of several related files. If you're only working with one file, it's difficult to lose a small (but probably important) piece of the whole package.

For that reason, ARCHIVER has become very popular among Bulletin Board users and operators. Some popular programs require two or three assembly language, memory-image files, a handful of supporting data files and one or two text files for documentation. The BBS operator can ARCHIVE (or 'pack') them all into a single file; the users can then download that file and be relatively certain they have everything needed to run the program.

"But," you say, "wait just a minute there, Bozo! Those ARCHIVERed files won't run worth a darn and besides that they don't look like much of anything else that I've ever seen." True enough, an ARCHIVERed file isn't good for much of anything by itself; you need a copy of the ARCHIVER program (or one of its friends) to 'unpack' the files and put them back in their original format. It may actually be an advantage that ARCHIVERed files are in an unusual format. If you spot a DISPLAY file with FIXED length records, 128 bytes long (DIS/FIX 128), there's a good chance it was created by ARCHIVER.

So now it's time for the HOW-TO. Most likely you have received an ARCHIVERed file and you want to put it back the way it originally was:

1. Note the name of the file and its size (number of sectors); you'll need at least that much space on your output disk. If it's not a 'DIS/FIX 128' file, don't bother to go any farther...
2. Fire up the ARCHIVER utility. If you are using Barry Travers' ARCHIVER program, it loads from extended BASIC. If you are using Barry Boone's ARCHIVER II program, you'll need some sort of loader for memory-image, assembly language programs (FUNNELWEB and DM1000 loaders both work, I'm sure there must be a dozen more).
3. Select the option that says you want to 'restore' or 'unpack' a file. Enter the name of the file to be unpacked. Enter the number of the disk drive to which the output will be written.
4. Some versions will allow you to unpack a single file (from all those that were originally packed together), others will ALWAYS unpack all files without giving you a choice! If you are asked, tell ARCHIVER whether you want to unpack all files or selected files only...

5. Sit back and watch while the program rebuilds the original files!

While you are watching, it might be a good time to send a Fairware donation to the appropriate Barry. The original ARCHIVER was distributed with Barry Travers' TRAVELER; he asks for a \$3 donation from those who receive copies from other sources. Barry Boone's ARCHIVER II is distributed entirely as Fairware and the amount of donation is left to your conscience.

There are several versions of Travers' program floating around. The original allows you to pack or unpack, all files or selected files; other versions have been written for unpack only, enhanced single drive operation, etc. Boone's program is smaller, loads faster and runs significantly faster. It does not allow selective unpacking, however. There may be multiple versions of ARCHIVER II as well, but I'm not aware of them. I wouldn't be too surprised to find compatible programs from other authors as well.

So now for the common questions again: "Why won't this file run?". If its a DIS/FIX 128 file it probably needs to be UNPACKED first to restore the files to their original format. "Why won't this file 'un-ARCHIVE'?". Best bet is you have either a bad copy or a file that was never processed through ARCHIVER in the first place. Remember, there are DIS/FIX 128 files that come from other sources...

The ARCHIVER utilities can be useful for any number of purposes (e.g., if you ARCHIVE your backup copy of complex programs, you'll never have to worry about keeping track of which files are part of that package). Like any other program, however, it is of no use at all if you don't understand HOW and WHEN to use it!

HARDWARE SIG: Jon Hodges

TWO MONTHS AGO: We had an upgrade session for adding a diode to the keyboard so the ALPHA-LOCK key has no effect on the joy-stick's upward movement. Naturally, the modification worked. One thing I would like to modify in my instructions, though. When you are about to attach the diode to the circuit trace on the back of the keyboard, you should tin both the diode lead and the circuit-board trace with solder. Then hold the diode in place with some pliers while pressing down on the lead with the soldering iron. That will heat the solder ALREADY THERE and complete the connection. I had a temporary lapse of memory when I showed you that other "un-approved" method. A member came up and gently corrected me afterwards, for which I am grateful. The "un-approved" method is likely to spawn cold solder joints, which are not fun to track down.

LAST MONTH: It's late at night, and you've been working on this report for over two hours. You are about to put the finishing touch on it, save it, and print it out. Then the lights flicker for an instant. You try to continue, but the computer has locked up on you. What happened? Probably a surge in the power line caused by lightning. Be glad it

didn't fry your equipment!

Sound familiar? Only in your worst nightmare, you say. However, it CAN happen here. That is why we discussed Static and Surge protection at the last Hardware SIG meeting. That is also why we had a MiniSIG on installing MOVs in Power Strips for our members. If you missed out, let Tom Hall know. He made a few copies of my lecture notes, scrambled as they were, and also copied the TI-ARTIST screen printouts I had used for my examples. He also can schedule another Mini-SIG if enough interest is shown.

Some people have asked about what a MOV does. I have responded in the article MOVs and WATER TOWERS, or the non-technical person's guide to electricity. If you are having problems following our discussions of electricity, it may be of some help to you. Sorry I didn't make it clearer in my lecture.

THIS MONTH: Our own John Guion will be taking a whimsical look at new items you can "stick in your GROM port!" If you had the mistaken impression that when TI pulled out of the market, people stopped making cartridges, guess what! Not only are cartridges still being made, but NEW CONCEPTS are being packaged in cartridge form. Come out and see what you've been missing.

MOVs and WATER TOWERS: Jon Hodges

Some people have asked about what a MOV does. The technical term is clamping voltage to a maximum level. To help the nontechnical types understand electricity, I like to compare voltage with water, because the comparison works so well. Imagine a water tower 200 feet high. When the water level is at 200 feet, cast iron pipes can handle the pressure just fine, but copper and PVC pipes have a little trouble holding up to it, and plastic-coated cardboard piping (my own invention for the sake of illustration, hereafter referred to as plastic) won't hold up at all. If I cut a hole in the side of the water tower 30 feet up, obviously no more than 30 feet of pressure can build up, and we then can use plastic piping.

Translating that to electronics, we can say that voltage is like water pressure. The higher it is, the more likely that voltage-carrying devices will break down. Old tube-type equipment is like cast iron pipe. It could take tremendous abuse without suffering any decrease in performance. Solid State devices like transistors are like copper pipe. They still perform well, but are less likely to last through a high-voltage situation. MOS technology chips are like plastic pipe. Just a little excess voltage can cause a breakdown. AC line voltage is like 20 feet of pressure. When converted to DC, it is well within the tolerance of all the devices that will be using it. But increase it to 200 feet even for an instant, and you are bound to crack your plastic pipe, or zap your MOS chips. You might even crack your copper pipes, or transistors. Enter the MOV. It acts like that hole in the water tower wall at 30 feet that lets off excess pressure. As long as the voltage is below a certain level, it does nothing. But when the voltage rises beyond that level, the MOV shorts it to ground until it once

again is below the maximum level allowed, protecting the electronic equipment from damage.

There are other comparisons with water and electricity that work well, too. Electrical current, measured in Amps, is like water current in cubic feet per second. When someone talks about a device using 2 Amps, imagine a water wheel passing 2 cubic feet-per-second of water. Now that could be a giant wheel going slowly, or a tiny wheel spinning very fast. The difference would be due to the pressure (or voltage) applied to the wheel. And, both wheels put out different amounts of power, or work. Power in electronics is rated in Watts. We get it by multiplying the voltage by the current. You can see that with low voltage, you need a lot of current to equal the work done by high voltage and a little current. That is why a 12 Volt Automotive system can use up more current than you think it ought to. Even though the voltage is low, the devices need a lot of current to pass for a little work to be done, like the giant wheel that spins slowly.

There is one more comparison that can be made, and that is with resistance. Everyone knows that, given the same amount of water pressure, a 2" pipe passes more water than a 1" pipe. The opposite of passage is the resistance to passage. Then we can say that a 1" pipe has a higher resistance to water passage than a 2" pipe. But raise the pressure in the 1" pipe, and you can equal the flow of the 2" pipe. Resistors cut down on the flow of current by a certain amount, rated in OHMS of Resistance. A resistor rated at 100 ohms will pass twice as much current as a resistor rated at 200 ohms, as long as the voltage remains constant.

Well, are you waterlogged yet? You ought to be. Grasping the concepts of electricity is hard work, and not something most people pick up quickly. However, through familiarity with the terms, you will find it easier to follow some of our discussions, and get the gist of what we are talking about.

THE GAMEMASTER: David Moore

I have received a lot of comments on the first 99ER GAME REVIEW. I am glad to see we have a lot of serious gamers out there besides myself. I would like to first give you an update on the MBX. If you are still trying to find one, all I can say is "good luck". Joy Electronics has sold all of theirs.

Since I will be printing all of your high scores and to keep some from sending FALSE SCORES in to be printed and also since there will be prizes, (did he say PRIZES?), yes and I will tell you all that in a moment, first

***** THE RULES *****

1. all high scores have to be on a game on the 99ER GAMES LIST.
2. you MUST have a picture of your screen with the high

score VISIBLE. (to do this all you have to do is make sure you DON'T USE FLASH!! also it helps to have as few lights on as possible, a Polaroid snapshot will do)

3. on back or front of photo print your name and date you got the score.

Now let me tell you wonderful gamers about the prizes. Each lucky gamer that has the HIGHEST SCORE at the end of the month of the particular games on the list (it only has to be one) will receive the following

1. a package of NEW DISKS!!!
2. the current DISK-OF-THE-MONTH!!!

and that's not all. if you continually have the highest score 6 times, then you will get to receive your very own, never worn before, OFFICIAL GAME MASTERS T-SHIRT!!!

Now for the list of games (if you do not have any of these games see me and I will help you).

=====

-THE GAMES-

1. DONKEY KONG (ATARI)
 2. CENTIPEDE (ATARI)
 3. PARSEC (TI)
 4. SPACE STATION PHETA (DOM)
 5. ACE (XB)
 6. BREAKOUT (EA OPT.5 VERSION)
 7. TI INVADERS (TI)
 8. PAC MAN / MS. PAC MAN (ATARI)
 9. TI TOAD (XB)
 10. JUGGLER (XB)
- =====

If you would like to see one of your favorite games on this list, let me know and it might get on. This contest is open to all and begins with this issue. The prizes will be awarded at our regular Infomart meetings each month, you will also see your name here in the GAMEMASTER'S 100% LIST in each column. All pictures and requests need to be sent to:

DTIHCG (100% LIST)

PO BOX 29863

DALLAS, TEXAS 75229

Please include your name and address (no handles or nicknames please) All questions and feedback will be answered, leave comments and such on 99ER CONNECTIONS BBS to the GAMEMASTER.

All photos of high scores will be available for verification at all the Infomart meetings. Remember all entries have to be received no later than the last day of each month or you will have to wait until the following month to qualify. There will be one prize awarded to each winner (this ain't wheel of fortune you know). Have fun and GOOD LUCK!!!!!!!!!!!!

=game master=

NEXT-STEP WORKSHOP: Tom Hall

Two thirds of what we hear and read only once is forgotten within 24 hours, and practically out of mind within 30 days. Information repeated several times during a day for 8 days is virtually memorized at the end of 30 days. The memory will retain up to 50% of information memorized in this manner. This is why we keep repeating the purpose and function of the **NEXT-STEP MEETINGS**. Please re-read this column 8 times.

NEXT-STEP - like in, what is your logical next step with your computer. Do you want to learn (or acquire) a particular program? Do you want to find out about hardware, and if you need it? Do you want to find out why something doesn't work right? (And how the heck to fix it) Well this is the purpose and function of the **NEXT STEP MEETINGS**.

Who comes to these meetings? There are three types: The folks who really do need someone to assist them with their special problem, the folks who are "experts" on our computer and people who just enjoy the fellowship and are interested in chatting with other TI99/4a owners.

The **NEXT-STEP MEETINGS** are unstructured, that is, there is no planned program (we do that at the **INFOMART**). However, if you have a special problem, and let me know in advance, I will plan on someone being there who can assist you. Generally, others will have similar interests, and they will attend too. We always have several systems set-up. All you need to do is bring that special program (or ask me to bring it) or bring that piece of problem hardware. **MEETINGS** are always the 2nd Friday following the regular **INFOMART** Meeting, starting at 5:15 til we are finished (usually around 9pm. This year we have been very fortunate in having **GREG JUSTICE** as our host at his place of work **TDIndustries**.

If you attend a **NEXT-STEP WORKSHOP**, I guarantee you will learn something new and you will enjoy yourself. Please join us on August 21, at 5:15 (no penalty if you are late), **TDIndustries** for the **NEXT-STEP WORKSHOP**.

MINISIG: Tom Hall

If you missed the last two **MINISIG's**, you have only yourself to blame. In June, **MIKE STANFILL** and **JIM STEWART** hosted the Speech in the Console **MINISIG**. In July, **JON HODGES** and **JIM STEWART** hosted the Surge and Noise Suppressor **MINISIG**. Both were great successes, thanks to **JOHN GUION** and his helpers.

Sunday, July 19th, 2pm, **RIP DOWLING's** home, in Arlington, will be the site of the **TI-ARTIST MINISIG**. The sign-up sheet and directions will be available at the **INFOMART**. **JON HODGES** will be the Sig Leader. We still have a few places open. If you are undecided about buying **TI-ARTIST** this will be a good opportunity to see what is going on.

Sunday, August 16th, 2pm will be the date of the August **MINISIG**. I need a sponsor/leader/host. This will be a Back to school special! The nuts bolts of **TI-WRITER**. This meeting will be directed towards using **TI-WRITER** for school work, so it's OK, if you want to bring your teenager. Also, bring any and all specific questions you may have about **TI-WRITER**, from the basic to the complicated. The **SPELL-CHECKER** will also be demonstrated.

A sign-up sheet will be available at the **INFOMART**. If you would like to assist with this **MINISIG**, please let me know.

If you have a question about **NEXT-STEP** or a question/suggestion about **MINISIG's**, you may leave me a message on the 99'er, **STARTEXT - MC116172**, or call (metro) 267-5987.

VOLUNTEER COLUMN: Imogene Osborn

Wow! What a great time we had at the Library Sig and Barbeque Dinner. Thanks to **The Guions**, and **Johnsens** for all the superb planning and cooking; to **Charlice Althar** for the Library preparation and dividing the sections to each system, **Louis, Jackie, and John Guion, Brian McIntosh, Tom Hall, Rip Dowling, Jim Stewart, Rex Stubbs** and **Jim Leshar** for bringing their systems, **Greg and Joyce Justice** for being the hosts. Everything seemed to mesh together for a **Marvelous Day**.

Jim Stewart has volunteered to contact all persons signed up for the Mini Sigs, also he is hosting numerous Mini Sigs at his office, for which we are all appreciative.

It has been suggested that if someone is having problems with his/her system, it would be advantageous to all if the system was brought to the Next Step, then that individual would get all the time they might need without holding one of the four systems brought specifically for others to get their particular Next Step solved. This would keep things moving and all would have time for a turn. Sounds good to me, let me hear any other suggestions you might wish to share. Thanks of course to the Phone Committee always. With vacations, we could use some standby help if you could spare about 30 minutes about twice a month. Take some time now, and think about bringing a monitor to the meeting or signing

up to bring a system to the Next Step on July 24th. Please come by the back of the room at the Yellow Sheets and Visit. See you at Infomart July 11th. Let's keep the VOLUNTEER CONNECTION ALIVE!

FUNNYWEB FARMS: Mike "Cardiac Arrested" Stanfill

I don't care how loud or long they say it, ASSEMBLY LANGUAGE IS NOT THAT EASY!! So with this in mind, and in lieu of an actual TINYGRAM (the reasons of which are none of my business), I've decided to reveal some of the not-so-mystical revelations I've stumbled across in my Editor/Assembler journeys.

By the way, I'm assuming that any of you who have read this much of this drivel without their brain frosting over at least understands the basics of assembly language and won't necessarily have to be spoon-fed every single step necessary, which would probably include the metabolizing that is so symptomatic of our species!

(Deep breath) Now then, (or then row):

The two specific assembler items that caught my eye (and we all know how painful THAT can be) was a couple of simple utilities called VMBW and VMBR, which stand for Video Multiple Byte Write and Video Multiple Byte Read (would I kid you?) And what they do is wonderfully simple and powerful. All you have to do is tell them three things:

(1)The location on the screen you're starting at. (In Assembly the upper left screen position is zero, followed by one, two, etc., all the way to 767, get it?)

(2)A block of memory where the screen info is to read from or saved to. and

(3)How many screen positions are going to be saved. What these deviously

What these deviously clever little buggers will then do is READ (or WRITE) a large chunk of data to (or from) the screen! From one single ASCII character, to and entire screenful!

Here's a complete sample program to give you an example:

	DEF SAVE,READ	*THE LABELS YOU'LL 'LINK' TO.
	B *R11	*RETURNS YOU TO X-BASIC.
AREA1	BSS >300	*SETTING UP THE DATA STORAGE AREA.
SAVE	LI R0,0	*THE LOCATION WE'RE STARTING AT.
	LI R1,AREA1	*TELLING WHERE THE STORAGE AREA IS.
	LI R2,768	*NUMBER OF SCREEN POSITIONS TO SAVE.
	BLWP @>202C	*>202C=VMBR READ DATA. SAVE AT AREA1.
	B *R11	*AND BACK TO X-BASIC.
READ	LI R0,0	*ZERO=SCREEN POSITION.
	LI R1,AREA1	*AREA1=STORAGE AREA.
	LI R2,768	*AMOUNT OF DATA TO READ FROM AREA1.
	BLWP @>2024	*>2024=VMBW READ DATA AT AREA1. WRITE
	B *R11	*TO SCREEN AND BACK TO X-BASIC..

Now what's so important about this that I should be bothering you about it? Well, let's consider the possibilities for their use:

(1)You could have a 'Help' screen that could appear instantly.

(2)Use several of these in a game type program to go instantly from screen to screen.

(3)Use it save or re-draw a picture in a drawing program.

There are lots of possibilities. I like it because it's a gentle intro to assembly programming.

Now, lets have some fun with the above program. Assemble it and name it 'SAVER'. Now go to X-BASIC and ENTER this:

```
100 CALL CLEAR::CALL INIT
110 CALL LOAD("DSK1.SAVER")!MAKE SURE 'SAVER' IS ON DISK 1.
120 INPUT A$
130 CALL KEY(O,K,S)::IF K<>32 THEN 130
140 CALL LINK("SAVE")::CALL CLEAR
150 CALL KEY(O,K,S)::IF K<>88 THEN 150
160 CALL LINK("READ")::GOTO 130
```

When you RUN the program you'll see the '?' prompt. Type in anything your greasy heart desires and ENTER it. Now press the space bar. The screen will clear itself but not before the screen contents have been saved. Now press the 'X' key. VOILA! The garbage previously written to the screen has miraculously been revived. This can be done over and over if you like (and if you have a low threshold for boredom.). But I'm sure you can see the possibilities for such a simple little utility such as this.

Now, if any of this has piqued your curiosity about the assembly language then I commend you for your courage in, hopefully, exploring deeper into this mysterious programming method. But just remember, if you run into undecipherable roadblocks, any calls to my home will no doubt result in my being 'in the shower', if you know what I mean, and I think you do!

Good luck! Good hunting! Good gravy! Goodbye!

STANFILL'S STALL: Mike Stanfill

Let me quickly apologize for my absence at the June meeting. I wanted and tried very hard to attend but the fates, cruel mistresses that they are, prevented me. I'll do better (knocking upon my pointy, wooden cranium) this next time and I'll have newsletters, Micropendiums (a month old but what the hey!) and other magic to share with you, the luckiest and most fortunate of computer cuddlers!

Until we meet again, Mr. Newsletter, signing off!

THE TRADING POST: Any DTIHCG Member**FOR SALE:**

I used 99/4A Peripheral Expansion Unit (#75) with the following cards installed:

- 32K Memory Expansion (access light no longer works)
 \$30 - TI Disk Controller #30 - RS232 interface with parallel and serial cable #30 - Flex-cable interface card #10

Full height 2-sided IBM disk drive #40

Application software including TI-Writer, Multiplan, LOGO II, and Editor/Assembler with all associated disks, modules and manuals (#7-\$10 ea)

Two books: USING PROGRAMMING THE TI-99/4A (Including Ready-to-run programs) and PROGRAMS FOR THE TI HOME COMPUTER (#5 ea)

Various module software including Extended BASIC, Personal Record Keeping, Personal Report Generator, Terminal Emulator II, Music Maker and several games, all with the original soft-back instructions. (\$2-\$12 ea)

3 years of 99er and Home Computer Magazine magazines (#25) (FREE with entire purchase)

1 nonfunctioning 99/4A console. I believe that the power supply is the rascal, but am not willing to take the time to troubleshoot. (FREE with purchase of at least \$100)

Prices are VERY negotiable. Suggested offer for the entire package is \$325. Reply to Stephen Schaub, Startext MC 118509, or call (214)438-2712 7am-10pm for a complete list of individual prices or to make an offer or inquiry.

FOR SALE:

1 - Nearly new TI Pbox with "standard" TI cards: 32k, RS232, Disk Controller, and new SSSD Drive. \$ 275.00.

1 - Standalone DSDD Disk Drive in TI Heavy-duty power supply case. \$ 125.00

Reply to Greg Justice, Startext MC 146041 (aka DAL99ER), or call (214)240-6647.

The TRADING POST is a service provided for any non-commercial entity, to buy, sell, or swap any computer related product. Currently the service is available free of charge, and limited only in size to what is reasonable subject to space limitations. Ads will be printed ONCE per request. The deadline for requesting space is the same as the other newsletter columns, two weeks before the Infomart meeting.

Computer Council of Dalles NEWS

The May and June User Forums continued to grow, both in vendors and meeting rooms used. Attendance may be slightly suffering competition from the beautiful weather, but remains high. Further details below.

The financial growth is welcome and necessary. CCD's only source of income, table rentals in the vendor area, increased in May compared to April, and again in June, compared to May, because more tables were rented (a total of 49 in May and 54 in June, not counting club DOM's or several no-shows). Additionally, several expense items from prior months were received to the extent that CCD expenses are now essentially current. This allows more accurate budget projections for the rest of the year.

With more financial information, CCD is able to adopt a policy on audio-visual expenses. The overhead projectors, microphones, and so forth are rented by CCD for each meeting. In the future, CCD will pay for overhead projectors, marker and chalk boards, and microphones. Currently, this is the second highest meeting cost (behind our lease with INFOMART). If additional equipment is desired, affiliated groups must either bring it, or repay CCD for the rental costs incurred. For example, turning on a phone line costs \$40. The cost of individual items is available from the Events Coordinator and each representative. If special equipment is needed, as much notice as possible should be provided the Events Coordinator, so that equipment can be shared wherever possible, to reduce these costs. For additional information, see any CCD representative.

Each User Forum contains over 100 individually scheduled meetings. The hours of 9 AM and noon are the busiest. To assure adequate room availability, room requests must be turned in to the Events Coordinator by Friday of the week before the meeting (dates below). Rooms requests should be channeled through the appropriate program office of each affiliate, since only affiliated groups can reserve rooms.

After much research, INFOMART has agreed to provide standard plastic name badges (presumably like we used to get), individually printed, at a cost of \$0.25 each. Interested parties should contact their group officers.

Several children were stopped running loose in INFOMART at the June Forum. Remember that INFOMART requires that all children under the age of 16 be accompanied at all times by a parent or guardian. Rowdy or unruly behavior will NOT be tolerated! This is a necessary commitment by CCD and each affiliate to use INFOMART's facilities. Please act accordingly.

The survey forms filled out several months ago are now being analyzed. Hopefully preliminary results will be available next month.

Two organizations have applied for membership in CCD: the Chinese Information Resources Association and the North

Texas Association for Artificial Intelligence. Discussion will occur at the next CCD board meeting, scheduled for July 13th.

CCD is trying to improve relations with the MIDI group affiliate. They have not nominated a representative on the board, attended the last several board meetings, or provided CCD with a copy of their bylaws. These actions are required of any affiliate per the bylaws. The Board intends to discuss what action(s) are appropriate in response to this continued failure to comply with affiliate responsibilities at the next board meeting. Comments and opinions should be directed to the appropriate affiliate officer or representative, or via feedback to this author via the Startext mailcode listed above.

Volunteers are urgently needed during both setup and breakdown. If you happen to arrive early (before 9 AM) or stay late (after 4 PM), drop by the Information Booth and see if you can help. It doesn't take too long, or involve much effort, but would be greatly appreciated.

Meeting dates for the next three months are: July 11, August 8, September 12. See you there!



"They just replaced me with a computer at work."

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