MID SOUTH 99/4A
USERS GROUP

MEMPHIS TENNESSEE
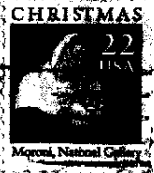
NEWSLETTER

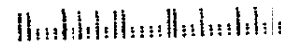P.O. BOX 38522 GERMANTOWN, TN 38183-0522

T I D B I T S

DECEMBER INDEX

Y 5/87
FLOYD J. PEMBERTON, JR.
481 SPRUCE
LEWISVILLE, TX 75067

PRESIDENTS BIT

On this month's slate we have some very informative reviews by Jonathan Leslie and Gary (I know that guy) Cox of several new software and hardware products. Together they bring us the latest from Funnelweb, the Geneve 9640 , and new improvements to the Horizon Ramdisk. <my DSDD HRd is hot off soldering iron!> Among other reviews are a compressed explanation of a new Archiver and the continuing saga of how our microcomputers became orph ed by Uncle Tex. I extend a welcome to all new members of our group and encourage you to attend our meetings and get involved. Our new News-Letter Editor, Henry Badon, has published his first emphisized N/L with dot matrix precision! (maybe he can get someone with NLQ to help us out) Some spelling errors have been deliberately placed throughout Garys reviews to see if anyone is inceed reading the articals! Thanks Henry!

The current Bulletin Board is being revised with a much needed (hopefully more reliable) program. An all assembly BBS has also been ordered, so we may be exposed to several programs before one is picked. Please be patient. Since Pierre has less time spend on maintaining the BBS, some of the frills may have to go. However, I think all will agree that a good message base and download section are most important, since providing information and dialogue among members is top priority.

As the year comes to an end, it is time to look back on '87 and see what goals have been met and what can be done to make the following year better. We have had several vital members drop from activity because of many reasons. Lately I've seen the potential for some serious divisions which I feel can be avoided.

Remember, WE ARE HOBBIEST! Few of us depend on our 99/4a to provide income. Because the 4a community has so many expert 'mechanics' , we are able to upgrade our systems year after year with a wealth of software, and projects to interface more ecuipment. Years ago, I heard many in the group pr dict that the 4a would be "Hot Rodded into 1950's Roadsters" with yellow and ge flames painted down each side! (personally, mine is candy apple red.)

Sure, some in the group are driving new iBMW's... but thats just their family car that they drive to work, one cant pop the hood and improve anything without first going to the bank or fearing he will have to take it back to the dealer for repair$. Year after year someone is prophesying that this is going to be the last, and someone comes out with Meg wheels <thats MEG, not MAG>, (and in the case of the 9640, a new high performance engine) and passes right by! "Street posts lookin' like a picket fence."

Further, Please remember, that this is a volunteer effort; that bringing equipment back and forth to the meetings for demonstrations is a risk to the equipment; and that this group's treasury cannot recover as quickly as some other groups because of a limited membership. A good tresury reserve provides a buffer in the event that we are denied current access to a reliable copier, or TI forbid, a crash of the groups equipment. Also, very few people want to feel that it is their money, and not their participation, that is needed of them.

Enough of this soapbox, the holidays will soon be here, crank up you TI , load in some Christmas music, and listen to it PURR! Oh yeah, see you at the meeting. Mac Swope

PROGRAM BIT

This months program will be a little shorter as we will have our "Christmas meeting" where will have food and drinks (non alcholic) at the meeting so we can just sit around and talk and have a good time...

We will have our elections this months plus I will be demonstrating the latest version of SPAD XIII flight simulator now called SPAD XIII MARK 2. Several good improvements have been made into the program and who knows what else we will have. The library will be open with a bunch of new programs so everyone please come... Gary Cox

GROUP NEWS

Nominations were taken at the last meeting for the officers, or victims, (depends on how you look at it),to be voted in at this months meeting. It will be a tough and dirty race between the candidates. Here are the nominations:

President - Mac Swope
Vice President - Richard Hiller
Secretary - Gary Cox
Treasurer - Bob Jones, Al Doss, Ralph Wilson

TREASURER REPORT:

Bank Statement 10/14/87 = $910.00
                  Petty cash + $045.00
                        Total = $955.00

        October postage - $044.00
    October TI-NET phone - $021.00
Additional BBS expenses - $007.50
   October NET BALANCE = $882.50

        November postage - $044.00
Chicago Faire video tape - $025.00
  Purchase of blank disks - $031.00
   November sale of disks + $018.00
Nov. membership renewals + $070.00
                   Misc. + $019.00
   November TI-NET phone - $021.00
Additional BBS expenses - $007.50
            Petty cash + $010.00
            NET TOTAL = $871.00

The attendance of about 40 people at our November meeting was much better than that of October. The For Sale table was packed full of equipment and software that people were selling. You can easily pick up some good bargins at the for sale table each month. If you have something you would like to sell just bring it along to the meeting.

We have had an addition of about 10 more disks to the library. Among them is Funnelweb 4.0 dated 11/04/87 written by Tony and Will Mcgovern of Kotara Australia. If you are not familiar with Funnelweb (where have you been?) it is nothing short of a FANTASTIC utility package! With Funnelweb you have a collection of utilities all available from a menu and you only have to use your Extended BASIC cartridge to access them. No constant swapping between many different cartridges. The main points of Funne)) are as follows. Funnelweb has all TI-Writer options. .ne TI-Writer and TI-Writer system disks are no longer needed. Everything is on the Funnelweb disk. However, the TI-Writer portion has been greatly enhanced from that available in the cartridge. In particular one of the recent additions to it is the (V)iew file option in which you can view a file on disk while still retaining the file that you have in the editor. That's handy if you are looking for a particular bit of information in a file and do not wish to load the whole file into the editor... DM 1000 is included in the Funnelweb package which is an excellent Disk Manager, surely no one is still using the very outdated Disk Manager II cartridge! Next you have all the functions of the Editor/Assembler cartridge through the loaders section of Funnelweb. From the loaders you can load and run assembly language programs which will not load through Extended BASIC. MAX/RLE and POP MUSIC DEMO are two examples of programs where the E/A loaders are needed. You also have a programmers editor and assembler, a good disk sector editor where you can edit the contents of a disk itself. Many programming utilities, loaders and a user list where you can add your own selections to the menu for your own programs. A easy to use configure program is included in order to allow you to customize Funnelweb to your needs without having to recode the program. I can not is)ne anyone not having this great package. If Texas Instruments .ere to have sold it would have probably cost in the hundreds of dollars. It is available in our disk library on two single sided disks or on double sided disk.

Also new is Archiver version 2.3 by Barry Boone which will not only archive programs but compress them from 25% to 80% of their original size just like archivers on IBM computers. This saves a lot of space and time when you intend to send a lot of files over the modem...

This will be about my last meeting of which I will be able to attend on time. I will be starting a large load of classes this coming semester at college and one class (which I must have now in order to graduate on time) lasts until 6:55 on meeting nights. This means I will be unable to pick up the key from the Red Cross to open and setup the room for the meetings. Therefore if we are to have meetings someone needs to do that!

This will also be Dicko Vandenbergs last meeting as Program Chairman as due to an extensively long work schedule and other obligations he unfortunately can no longer do the job. Th)job just requires that you work up what is to be done at the meeting and to host the meetings activities.

Below is a list of TI phone numbers to remember:

TI CARES	1-800-842-2737	Main Line, Questions
TI RESPONSE	1-800-232-3200	
SOFTWARE	1-800-858-4075	
BUSINESS	1-800-847-2787	
Technical	1-806-741-2603	
rts	1-806-741-3064	

The end of the year is almost here. 1988 will mark the sixth year of our groups existance! Back when I was President in 1985 I thought that would probably be our last year. Since then we have still grown and held a steady membership of currently 90 members and we exchange newsletters with 61 user groups across the U.S.A., Canada, England and Australia with a total mailing of newsletters each month about 180. Looking ahead we still have another good year coming. Many companies continue to support and develop new products for the TI99/4A. As long as we continue to support them they will support us. Have a Merry Christmas and a Happy New Year!... Gary Cox

GENEVE GLEANINGS

As you can see, this is not going to be a regular column so it's living up to its title's definition, in part, of "slowly". Much has happened since my last article as many of you may already know. But then if you don't have access, direct or indirect, to a national BBS such as GEnie or CIS, then you may not be up on all the latest.

Different versions of MDOS have been uploaded to the national BBSs as well as updates to MYWORD and Multiplan. Right now I'm operating with MDOS v0.99B, MYWord v1.0, and v1.04 of Multiplan. MDOS is almost identical to MS-DOS as advertised by Myarc. Geneve owners now have a reason to use their Users Manual at last! Most of the commands work and work well. A few of the commands I've had to experiment with and use suggestions provided from GEnie users in order to get them to work correctly as the format didn't exactly follow the manual. For instance, I couldn't get ASSIGN to work until I used the way given by John Johnson. Of course any commands that deal with hard drives don't work and probably won't until the advent of the Myarc hard/floppy controller card. I haven't been able to do a screen dump using SHFT/PRTSC although CTRL/PRTSC will send all screen display to the printer. That and TIMODE are about the only commands that will not work at all. Also the ASSIGN comand does not work upon doing a warm boot, although others have said it does for them, and all commands are internal. Having all comands internal could be a problem depending upon your point of view. The positive side is that all commands are instantly at your beck-and-call, especially nice when using only floppy drives. The negative side is that having all commands in memory leaves less memory for program space (not a problem at this time!) and makes it impossible to alter or improve upon any particular command. Should you have the talent and inclinaton to do so, which I do not! Even then though one could write their own command file and simply name it differently than an internal name, yet making it descriptive. Some would say that

Myarc is essentially keeping Geneve owners captive to whatever they think is best. You decide for yourself.

So I don't sound too negative, let me repeat that most of the commands in the manual DO work, and work well. I love having Batch file capability and all of the functions of a disk manager available in command mode without having to load in a disk manager! Imagine being able to protect/unprotect, copy, dele)\ rename files; check, compare, copy, format or label a disk /) display its directory right from command mode. In addition to that, you can switch between 40 and 80 column display, reconfigure the prompt, and display a D/V 80 file. More can probably be done if you know how to use MDOS to its fullest. The ASSIGN command will prove most useful as it will let you reassign requests for one drive to another drive. This would be when a program requires that its main disk be in drive #1 and you want it to be in another drive such as a ramdisk. When the final version of MDOS is out, hopefully all of the problems will be fixed. Maybe v1.0 will be out by Christmas. Some present!

My biggest regret now is that the only programs that will run from MDOS are ones that have been written specifically for the Geneve (in Assembler). Therefore in order to run your old library, it is necessary to load and run the GPL interpreter. This can be written into your Autoexec file to be automatic. MY-Art and John Johnsons COLOR are the only programs are the only ones I know of at this time that will run directly from MDOS. Peter Hoddie has said that in a future version of MY-Word he will probably have it do so as he has had many requests for this. Of course I'm sure that any new programs to come out under the MYARC label will run from MDOS. Even this hassle is greatly reduced if you are us')\ a power-backed ramdisk or a hard drive.

In my last article I mentioned about some cartridges saved to disk that would not run on my 9640. This list has been reduced a little. It now consists of SHAMUS, PLATO, CONGO BONGO, DIG DUG, QBERT, TI LOGO II, HENPECKED, TI CHESS and MS PACMAN. I've also heard that SLYMOIDS doesn't work. Most of these cart-on- a-disk files mentioned will load but then won't run properly. CONGO BONGO will play correctly until going to the second level at which time it locks up. QBERT appears to load and play properly but there is no screen display. Rather hard to get anywhere with that one! TI CHESS loads but refuses to allow any moves, declaring them all "Illegal Moves". And MS PACMAN runs great if all you want to do is go left, right and up. You can't move down! A few of these I have tried from different sources with no better results. This may be a problem for my particular system as a friend has told me that he has run a few of my non-working ones with no problems. I did say in my first article that my results do not necessarily reflect those of all 9640 owners and there are more cartridges out there that I have not tried so my list is not conclusive. This' matter is not a problem for me as the above mentioned list doesn't contain any programs that I need or wish I really had.)

The newest Multiplan patch increases buffer space from 15K to 41K although the number of rows and columns is the same. It also lays out the command line at the bottom of the screen better than the first one and the garbage seen when loading a file is gone. One

6

bug has been reported about using the NAME command so I have avoided using that for now. It IS nice to have up to 7 columns 24 rows on the screen at one time. And the speed with which screen updates, calculations and other manipulations are done is SO nice when compared to the 4A version. Spreadsheets on other computers may be faster, but it is more due to the program being used than the computer itself now with the 9640. One method I use on MP)\ich can be used on the 4A or 9640 is to save my spread- sheet to /) ramdisk and then upon exiting MP to load in a disk manager and copy it to a floppy. I prefer this rather than waiting for the S-L-O-W disk save routine used in MP. Of course there is the danger of losing that file if the system locks up or loses power during the process, but that is a hazard when working on ANY computer program.

PRBase has now been modified by Mike Dodd so that it will run on the 9640 as well as the 4A. My most gracious thanks go to Mike for allowing me to continue to use what I think is the best database for the 4A and 9640. Not to mention saving all those precious data disks! What's even better is that Mike has modified the disk format so that you can now copy or format a data disk with any disk manager. Included in the update are docs and two files for doing the conversion of the data disks yourself. The files run under MGs Advanced Diagnostics. You can also use a new sector editor named GBS which I'll mention in a bit. I can't tell if PRBase runs any faster on the 9640 since it was already FAST!!! Thanks again Mike!

GBS is a new sector editor program from Canada that is just super as far as I'm concerned. I now use it all the time instead of my)\ r workhorse. I mention it in this article since it has a \ction that will let you copy sectors selectively. This is what I used to convert my PRBase data disks. It does run quite well on the 9640 and boy does that cursor fly at speed 5! I was unable to get an earlier version of John Birdwells Disk Utilities to run on my 9640 although this may have been my fault. There is a new version out which is supposed to be THE definitive disk manager and sector editor, though its distribution seems to be limited.

As far as graphics programs go, The Printers Apprentice would not run on the 9640 as produced, but a patch was published to allow this. Joy Paint 99 will work, though there are a few limitations. The catalog function won't work and will disable any further disk I/O, so you need to catalog your picture disk beforehand to avoid this. Speed is increased as you increase the GPL interpreters speed which can present a few minor problems, but all in all it remains a functional and very nice graphics program. Picasso, a new program, that is fairware(?) works well on the 9640 and appears to be a very good desktop publishing type of program. Its distribution is in question right now. A new version, 2.0, has been seen and said to be much better than v1.0. This is one to keep an eye on folks! As far as TI-Artist, GRAPHX, Bit-Mac, Draw n /) t and others go, I don't have 'em so you'll have to find out . J yourself on them. Then of course there is MY-Art. I purchased it at the Chicago Faire this year, but to review it properly will require a separate article. (Oh noooo!!) Just let me say that works GREAT and is a JOY to use even though I'm no ARTIST! <grin>

7

Even though MDOS is a full featured disk manager among other things, I still use a disk manager program sometimes. Like when I'm in the 4A mode and don't feel like rebooting... DM1000 has worked fine on the 9640 ever since v3.51. Version 3.8, being the latest, is the best of course. It formats in true 18 sector style now, so I have not experienced any compatibility problems between it and Myarc DMIII. On the 9640 it runs very fast, as most programs do, although file reads and writes still aren't greatest. Were it not for DMIII, I would be using it exclusively. Myarc DMIII is still the best as far as I'm concerned, but it had one bug on the 9640, NO FORMATTING ALLOWED. This was very cumbersome since I used it for everything else. Then I would have to exit and load up DM1000 just to format a disk. Then I could either put up with DM1000s slow read/write or reload DMIII. A real pain to say the least! Now that is all history with Mike Dodds modification/rewrite of DMIII. The title screen comes up while loading, cursor speed has been adjusted for the 9640, and the read/write buffer has been increased to 384 sectors or a whopping 96K (for us TI owners anyway)! And joy of joys, I can now format and clone a disk without going through keyboard calesthenics! Again my hats off to you Mike!

Let me wind up this article with a list and brief description of the commands available at this time in MDOS.

ASSIGN --- Assigns requests for one disk drive to another drive
ATTRIB --- Displays or changes the write protect staus of a file
CHDIR ---- Changes the working directory to any drive in use
CHKDSK --- Checks and reports status of a disk and memory
CLS ------ Clears the screen display and homes the cursor
COPY ------ Copies a file from one disk to another
DATE ----- Sets the date in the 9640 clock
DIR ------- Displays the directory of the current working disk
DISKCOMP - Compares two diskettes to see if they are identical
DISKCOPY - Copies a complete diskette
ERASE ---- Deletes a file from a diskette
FORMAT --- Formats a diskette as SS,DS,SD, or DD
LABEL ---- Assigns or changes the name of a diskette
MODE ----- Sets the width of the screen display, the line width and spacing of a parallel printer, and the communications parameters through the serial port
PROMPT --- Changes the setup of the prompt
RENAME --- Changes the name of a file on a diskette
TIME ----- Sets the time of the 9640 clock
TYPE ----- Displays the contents of a D/V 80 file
VER ------ Displays, on the screen, the current version of MDOS
VOL ------ Displays, on the screen, the current name of a diskette

Some of the above parameters, as well as ramdisk size and the number of files and buffers available can be set up upon booting. This is done by including the appropriate commands in a file named AUTOEXEC which is looked for by MDOS upon bootup like the LOAD file searched for upon bootup in TI or Myarc Extended Basic.

I hope this article has gone a little ways towards explaining the present state of affairs of the Geneve in general. Purchasing a 9640 may not be the right thing for you, but I have been most pleased with its performance. And with cooperation between Myarc

and the programmers in the 4A/9640 community, I can see there could be some great programs in the future while still maintaining almost complete compatibility with the still growing library of 99/4A files.... Member Jonathan Leslie - Olathe, Kansas

CERTIFICATE 99

Certificate 99 is a new program by Great Lakes Software. The program allows the user to create certificates, awards, diplomas, licenses, flyers, advertisements, signs and notices. Unlike many graphics programs this program provides an easy way to create graphics on the printer without having to go hassel required by many of the graphics drawing programs. Once your certificate is designed it is then printed to any Epson/Star compatible printer.

When the program boots up it asks for the type font to be used for all of the text. Fonts are different styles of lettering. Seven fonts are selectable and examples of each font is displayed on the screen. The fonts are built into the program so no additional fonts can be added but the ones provided are quite adaquate for any need that you may have. Also you can only select one font as fonts can not be mixed.

Next the program asks you if you wish text to be automatically centered. If you select YES the program centers each line of text typed in for the certificate. This prevents the user from having to "eye ball" center the text. The only time you would not want an auto center of text would be like when you have a list of items or something simular where a certain format is needed.

Next the border selection screen appears. The border is the graphics that sourround your certificate. You may choose from twelve different borders ranging from just a plane border to a really fancy border. The borders are built into the program so no borders can be added however, it would be hard to design borders yourself anyway... If you wish you can chose not to use a border.

After the border selection screen the graphic selection screen appears. This screen contains twenty four graphic pictures that can be placed onto your certificate. The pictures are of such things as a coke can, fist, no smoking symbol and other different items. After selecting the graphic you are asked if you would like it enlarged. In most cases you would want the graphic enlarged otherwise it is quite small. Unlike the other graphics these picture graphics can be changed or added to. A graphics drawing program is necessary to make any changes. Great Lakes Software recommends using their Joypaint 99 and Joypaint Pal program to do this. The recommendation is a valid one as I tried to load the graphics with Graphx and several other drawing programs and they would not load except with Joypaint and Joypaint Pal. However, I was able to use the conversion section of TI Artist to load them using the Draw N Plot format so TI Artist may work but I did not have time to fully check into this option.

Only one graphic may be selected for your certificate. After selecting the graphic the screen shows 6 posisitions of which the graphic may be placed (9 posisitions are avaialbe if the graphic

is not enlarged).

Next the signature screen will appear. On this screen are seven built in signatures of such people as Ronald Reagan, Lee Iacocca, R. Paquette, Santa Claus, M. Thatcher, M. Qaddafi and A. Khomeini (thank goodness they spelled those names and not me!). The signatures can be used to make your certificate look official with one of these official signatures. However, you can place a blank signature line onto the page and put your own signature on certificate after it has been printed or you may select not to use a signature at all. The pre-defined signatures are built into the program and can not be changed, however, there is really no need to add any signatures as you can just have the certificate signed after being printed. Also Certificate 99 automatically selects a place for the signature location depending on where you have your graphic picture located...

Next is the enter text screen. This is the screen where you enter your message onto the certificate. You may either fill your certificate all with large letters or all with small letters or a combination of both. A combination of both big and small letters would be best as the large letters can be used for the title and the small letters can be used for a message. Two screen areas are displayed on the screen. At the top is where you enter the large letter text. As you type in the large letter text areas below in the small letter text area becomes shaded in indicating the areas being filled up on the certificate. Consequentially when small text is typed in the small text area areas are shaded in above in the large text area. This way there is no change of your text overlapping because of a miscalculation of how large the large text would be etc... A shaded area also indicates where the signature is placed and where the graphic is if you select to have them. Any shaded area can not be used because it is restricted as something else will be occupying that space shaded in.

At this point you are ready to print. By pressing ENTER on the last line of text entering you are asked for the print device name which in most cases will be "PIO.LF". Then you are asked for print density 1 or 2. 1 is normal and 2 prints the picture darker. Then the program procedes to do some calculations and in about 30 seconds it starts printing your certificate. After printing the program asks if you would like to make another certificate. If the answer is yes or no you are asked for a setting of the default screen color. This screen color will be saved to disk and the next time the program is run the screen will be the color you select here. This is simply a cosmetic thing to help your eyes out a little if you have trouble seeing with certain colors. In fact, everything that you type in is saved including all the selections at the prompts so the next time you run the program you can just press enter on all the selections if you wish the same options as last time. The text is also saved so be careful not to type anything you do not want anyone else to see as it will appear the next time you run the program.

The program operates well, is easy to use and the only program of it's kind on the market today for the TI99/4A. The same thing can be done with some of the other graphics drawing programs but with

much difficulty and time. This program provides a fast easy means of printing out flyers or certificates or whatever you would like.

The only problems that I see with certificate 99 is that I would like to be able to select more than one graphic picture for the certificate. I would also like an easier way to add my own graphic pictures but it can be done like it is setup now with a little bit of work. It would also be nice if I could save my certificates to separate files instead of the program just saving the last certificate that I created erasing any previous certificates. However, this is not a big deal because the certificates are so easy to create. The instructions are quite adaquate as well and the program is so easy to use I used it the first time without reading the instructions. The only thing lacking in the instructions are details on how to add your own graphic pictures. Although I did not try adding my own graphics I assume it is done by following their format for placing the graphic pictures onto the screen. This lack of details on adding graphic pictures is the only really weak part of the package.

The major uses of the program that I have found for myself is for announcements such as DO NOT SMOKE signs or for directions like ENTER HERE etc... For that I find this program to be very good because it does provide a fast easy means to make up a flyer without the hassel involved with using a graphics drawing program. You can also make up some certificates for fun such as a diploma with with Ronald Reagan's signature etc... The program comes with some official looking paper to be used for any official type documents you may wish to print as well as some foil seals to make it look even more official.

The program runs in Extended BASIC and requires one disk drive, 32K and an Epson/Star compatible printer. The program sells for $19.95 plus $1 shipping from Great Lakes Software of 804 E. Grand River Ave., Howell, MI 48843. Certificate 99 was demonstrated at last months meeting. Knowing what I know now about the program would I still have purchased it? YES. I give the program an overall grade of an A- since there is a tiny bit of room for improvement... Gary Cox

RAMDISKS

What is a Ram Disk? It is a device which operates just like a disk drive except memory chips are used to store the data rather than a diskette. You might consider a Ram Disk a minature hard drive as access time is just as fast but you do not have as much storage space. Ram Disks for the TI99/4A fit into the Expansion Box and can be configured as drive numbers 1 through 9 no matter what type disk controller card that you have.

Why do I need a Ram Disk? That is what I thought until I saw one in operation. The most obvious advantage to having a Ram Disk is the speed at which it can load files and programs. Rather than taking several seconds to load a program a Ram Disk can speed up the loading as fast as into the mili-second range (almost instant). So a Ram Disk will save time. So I thought "so what I save a few seconds". Little did I know that I just scratched the

surface of a Ram Disk's capabilities.

The Ram Disk that I am most familiar with and the one that I own is the Horizon Ram Disk. I have the Double Sided/Single Density version. Other Ram Disks may or may not be simular to this one. In order for the Ram Disk to operate an Operating System must be loaded into it (just like an operating system must be loaded into an IBM compatible machine). The Operating System is what contr the functions of the Ram Disk. Since the Ram Disk is powered b rechargeable battery the Operating System as well as the contents of the Ram Disk are maintained when the power is off thus they need not be loaded every time you turn on your system. There are three operating systems available for the Horizon Ram Disk. The first one is the one that comes with it. That one provides some good functions and allows operation of the Ram Disk but that is not the best one available. By far the best Operating System for the Horizon Ram Disk is John Johnsons of the Miami Users Group. It is fairware and available in our library. With his Operating System a whole new world of features are available added to that of the original Op System. Peter Hoddie also has an operating system on a chip for the Ram Disk, I have not seen it so I am not familiar with it's capabilities.

The latest version of John Johnsons Op System is 7.1 . Since there is no need to use the original operating system with this one I will not discuss the original. So with the Op System loaded and the Ram Disk formatted you can then create a menu of programs available on the Ram Disk. Since the menu comes up automatically when you turn on your system (no title screen anymore) you can edit the menu directly by pressing FCTN 5 and typing in the selections and the corresponding programs or files you wi o load in when that selection is pressed. Three screens full of listings of programs are available that you can program into the menu. Pressing the SPACE bar will alternate between the menu screens. Also if you still wish to have your TI Title Screen you can hit FCTN 9 and it will carry you to it or you can do a CALL AD and the automatic menu can be turned off but can be accessed by a CALL MENU. The Ram Disk can also be accessed through BASIC or XB by simply accessing it just like it was a regular disk drive.

So when you turn on your system you now immediately have a menu of programs available on your Ram Disk. By pressing the selection of what you want that program is loaded into the computer and run in a matter one or two seconds or in some cases (with assembly files) almost instantly. For my Ram Disk I have the Editor and Formatter portion of Funnelweb loaded into the Ram Disk. Plus I have DM 1000, Archiver, Rapid Copy, Mass-Transfer and phone file and some other utility programs. So as soon as I turn on my system my most used programs are already available and can be ready and operating in a matter of a few seconds by pressing a button rather than having to find the disk and waiting for the files to all load from a disk drive. So with my setup I can hit the selection for Funnelweb, it will load and be ready, hit the Editor selectio nd PUP I am in the Editor. Then I can jump to the Formatter pri my document, jump back to the Editor, jump back to the formatter in a matter of seconds not worrying about where the editor or formatter files are located. I can then go back and load in DM 1000 by a press of the button. I can jump into Extended BASIC and run a

program. If I want DM 1000 I can type CALL MGR and DM 1000 will be loaded from the Ram Disk. If I am in XB and want other programs I can set them up where they can be called (With a CALL statement) from XB (no programming needed to do this) or just call them up like from a normal drive.

Many other small features and CALLs are also available in addition this. However, there is still more. With the 7.1 Op System I c partition my Ram Disk into several Ram Disks allotting the desired space up to the limit of the Ram Disk. So I can set up a drive 3 and 4 allotting 360 sectors each or any combination of 720 sectors (if I have a DS/SD Ram Disk) using just my one Ram Disk. This is useful for like Multiplan if I wish to have a separate section for it only and not combined with my main Ram Disk section. Changing the drive numbers can be done by CALLS or by loading in the configure program. For example I can type in XB CALL DN(5) and my Ram Disk will be drive number 5 etc...

Ram Disks have become the most popular item today and I have found it to be the most revolutionary piece of hardware since the Gram Kracker! The time and trouble I have saved by having the Ram Disk has been tremendous. Access time to the Ram Disk is just as fast if not faster than any other computer on the market today.

Ram Disks can be purchased in variable sizes ranging from single sided/single density to double sided/double density or even up to 1 Megabyte! Also several Ram Disks can be placed into the Expansion box and it does not matter what controller card that you have as the controller card is not accessed in order to operate the Ram Disk.

Horizon Computer Limited of P.O. Box 554, Walbridge, Ohio 43465 sells the 360 sector ram disk (104K) for $165 or the 720 sector (192K) for $210 already assembled ready to go. I would recommend the 720 sector Ram Disk as single sided is not quite enough and I have found double sided to be adaquate. If you like to build your own projects and are good at doing so the Ram Disks can be purchased in kit form where you put it together. Bud Mills Services of 116 Dartmouth Dr. Toledo, Ohio 43614 sells the parts necessary to build your own Horizon Ram Disk in sizes SS/SD, DS/SD, DS/DD, 512K and One Meg...Gary Cox

TIPS

If you have a Plato cartridge and it will not operate it could be because you have a device set at CRU address 1000 which can interfere with the operation of the Plato cartridge. One such device is the Horizon Ram Disk. To solve the problem simply set the device's CRU address to something above 1000 and this should solve the problem. The device will usually have DIP switches to c e the CRU address.

Having trouble with your equipment or having frequent lockups? Bring your equipment to our Saturday Workshop for a diagnosis and possible repair. That is what the workshops are for to help you with any problems you may have. Workshop locations are not always

announced in the newsletter so call one of the officers for information on where the current months workshop will be... Gary Cox

ANNOUNCEMENTS

TBBS T.U.G. Bulletin Board is now back online after a long absence. T.U.G. is one of the oldest BBS's in town formerly running on an TRS-80 computer now running on an IBM compatible with a new version of the TBBS software. The BBS has many sigs for the different computers including a TI Sig of which I am the Sysop. The board is very fast and easy to use. Give it a call 24hrs a day at (901) 358-8227 300/1200bd.

The Memphis Amateur Radio Group would like to invite everyone to their Christmas Party Friday December 18th from 6pm - 10pm at Stroh's Belle catered by Leonards Barbque. Cost will be approximately $5.00 a person. For more inforation and if you plan to go you need to call Wade McKay at 398-5566.

Plans are underway for yet another MACC computer fair, this time with vendors. We are also looking into the possibility of combining the Memphis HamFest with the computer fair. The date of the fair will be sometime the middle of next year...

The TI FEST-WEST, TI XPO 88, is scheduled for Feb. 27-28 at the Palace Station in Las Vegas, Nevada. Reduced room rates and discount airfaires are available, according to organizers. For room reservations at the Palace Station, call 1-800-544-2411 and for PSA air reservations call 1-800-435-9722. Mention TI XPO 88 PSA Smile No. M15868. For further information, contact the Southern Nevada Users Group, P.O. Box 26301, Las Vegas, Nevada 89126 or (702) 647-1062 or (702) 878-3167. Online information is available 24hrs at 300/1200 baud at (702) 648-1247.

DEVELOPMENT OF THE 99-4A

Continued from the article "Death of a Computer" in the October newsletter. Article edited from the Texas Monthly April 1984.

In 1975 the personal computer industry was still in its infancy. Apple was a tiny company operating out of its founder's garage; IBM, which now dominated the business, hadn't even considered getting into so nebulous a venture; the handfull of people who brought computers were mostly technology buffs who liked playing with machines. That year Texas Instruments introduced something called the TMS 9900 microprocessor chip, which would eventually spawn the 99/4A computer.

The microprocessor is one of the great inventions of the age, as seminal a step in the development of the modern computer as the invention of the silicon chip in the late fifties. The silicon chip made it possible to put complicated electronic circuitry on a tiny piece of silicon; the microprocessor made it posible to compress an entire computer onto a chip not much larger than a postage stamp. Today there are any number of microprocessors inside a personal computer (different chips control the graphics and memory and so on), but the central microprocessor, called the CPU, is the computer's brain, the thing that reads the bits of information sent to it.

Though selling consumer items like pocket calculators and computers is what gives Texas Instruments visibility, the company's biggest profit have always been made in less glamorous ways. Chief among them the manufacture of silicon chips, which it sells in huge lots, at low prices, to other companies. Getting the volume up and the price down has always been the linchpin of TI's sales strategy. And so it was with microprocessors. Although TI did not invent the microprocessor - the credit for that goes to a Silicon Valley company named Intel - the company quickly asserted its superiority in the marketplace with its first chip, introduced in 1974, a four-bit chip called the TMS 1000. (The term "four bits" means that the circuitry can handle four bits of information at once. It is a measure of complexity and also of speed; an eight but chip can work twice as fast as a four bit chip.) The TMS 1000 soon became the most ubiquitous chip in the business, used in video games, calculators, microwave ovens, and hundreds of other electronic products; to date, more than 100 million TMS 1000's have been sold.

TI's second-generation microprocessor was the 9900 but though it was a quantum leap technologically, it was a flop in the marketplace. It failed in part because it was too far ahead of the field; while Intel and everyone else were just beginning to a eight-bit microprocessors, TI leapfrogged them and made the sixteen-bit 9900. The idea was that the 9900 would make the eight-bit competition instantly obsolete and this new TI microproessor, like the TMS 1000 before it, would become the industry standard. Instead, the industry flocked to the eight-bit microprocessors and left the 9900 dying on the vine. But to back down and built eight-bit microprocessors like everyone else was an abhorrent idea of TI, a company where managerial decisons are shaped by an internal framework that is a culture all its own.

Using the TMS 9900 the TI99/4 (not the 4A) home computer was developed. However, with it's $1150 price tag it did not go over well at all. One of the major complaints about the 99/4 was of its terrible keyboard.

By the fall of 1980, with TI selling fewer than a thousand computer a month, the people in the consumer products group had come to the not unexpected conclusion that it was time to go back to the drawing board. Peter Bonfield, then the head of the home computer division, felt that the most cricital flaws in the 99/4 were its price and its 9900 microprocessor, so he asked his engineers to design a microprocessor and that cut the cost in half. The chip they chose to use was the Z-80, first manufactured by the Zilog Corporation, one of the most widely used eight-bit microprocessors. It was so good that they thought they might get TI to bend its rules a little. The engineers loved working with the Z-80, and when they finished the rough designs, in the latter part of 1980, they thought they had a winner, a more elegant, more

14

15

useful, and less expensive machine. Benfield thought so too. But then came the hard part. Benfield had to get the new design past Bucy and Shepherd — and past a young TI engineer named Don Bynum.

When Bonfield's new computer design began making the rounds at TI's Dallas headquarters, Bynum was assigned to the company's Corporate Engineering Center, where research and development proposals were evaluated. This position not only allowed him see the design but to take sides. He sided against Bonfield and quickly became the leading in-house critic of the new computer. His entire argument was based on the idea that the 9900 microprocessor should not be abandoned, precisely what Brucy and Shepherd wanted to hear, of course. To prove his point he put together his own redesign of the 99/4 called the Ranger. The Ranger did not solve the price problem or the keyboard problem or the software problem, but it did address another nagging problem, the haphazard way the peripherals fit together with the computer ("Peripherals" is the term for computer add-ons, like additional memory and disk drives, that allow the machine to do such complicated tasks as word processing and financial analysis.).

When Shepherd and Bucy shot down the Z-80 design, they also shipped Peter Bonfield off to the calculator division (he left TI soon thereafter) and replaced him with Don Bynum. In November 1980 Bynum moved to Lubbock to run the home computer division, and the first thing he did was confiscate all the prototypes of the Z-80 computer. The second thing he did was trot out his Ranger designs. And the third thing he did was realize that the Ranger was a mistake. A couple of months after he arrived, the Ranger was as dead as the Z-80 computer, for Bynum had seen designs for yet another computer and he had fallen in love.

The new design had been slapped together by a small group of engineers. They were frustrated with the way things were going, but they had become convinced that the Z-80 design would not be approved. The engineers' new design kept the 9900 microprocessor and the main circuitry of the machine but changed the way the computer looked. Now the computer had a typewriter keyboard. The keyboard had also been separated from the screen — unbundling the system, it's called — so that the screen became optional (The keyboard could be attached to a TV set). They also drew up proposals for cutting down the number of chips needed to run the computer, which had the effect of dramatically cutting costs.

When Bynum came on board, they showed him what they had done, and he was immediately enthusiastic. He asked them to work on his own pet peeve, the peripheral mess. He had his home computer set up inside an old upright piano cabinet, and he would tell his engineers that they had to come up with a better way to store peripherals because he didn't have any more room in his piano. They came up with the expansion box that had separate compartments for the different peripherals. Bynum became the champion of the new design, and it breezed past the corporate hierarchy in D s. By the summer of 1981, after months of working up prototypes, getting the kinks out of the system, and passing the various radiation tests mandated by the FCC, the TI99/4A was ready. The basic cost of the computer to the retailer was $340 — an the price to the consumer, without peripherals, was going to be $550.

Don Bynum did his job. But would it sell?

Why do you need a home computer? It is hard to imagine in more basic question, but no one in the home computer business has come up with a compelling answer. It is hard to sell a product when you can't tell people why they need it.

man whose job it was to answer that question at TI was William Turner, and he was that rarest of birds at TI, an outsider. He had been hired away from Digital Equipment Corporation, and important maker of minicomputers, in May 1980 and had been named marketing manager for TI's consumer products group. Although he had a degree in mathematics, he had gotten his job precisely because he wasn't an engineer. Turner had spend his career marketing computers. He brought to the home computer division something it hadn't had before: a salesmentality. Bill Turner was gung ho about whatever product he was selling, upbeat and enthusiastic no matter what the actual state of affairs. He was great with numbers and projections. In meetings he always had a chart that proved beyond all doubt that the home computer was about to turn the corner. His optimism had a lot to do with the early success of the 99/4A, and with its ultimate failure.

He came to his job with two crucial theories. First, he believed that you couldn't sell a home computer in a computer store. Computer stores were meant for people who already knew something about computers or who were serious enough about them to spend several thousand dollars on one. Those people were not likely to wind up buying a home computer. Turner wanted to get the 99/4A placed in the kind of retail stores that already carried the company's pocket calculator, stores like Penney's and Sears and Montgomery Ward. From the day he walked in the door, Turner spent much of his time building up this retail network, and he was good at it. Every month he would report new successes. Toys R Us had signed up, K Mart had signed up and even 7-Eleven was on the verge of signing up before the roof fell in at TI.

Turner's second theory was that the price of the 99/4A had to be a lot lower. If the price was low enough, it wouldn't matter that the home computer was more toy than tool (so they thought then). People would buy it on a lark. Bill Turner wanted to sell price, and that became the cornerstone of his marketing strategy. I didn't hurt his standing in the company that he was advocating the one strategy that TI's management had always felt most comfortable with.

So in the months after the 99/4A was introduced, Turner began bringing the list price of the 99/4A down, from $550 to $450 to $375. He did this partly by making what seemed to be outrageous volume projections and then hustling up new retail outlets to absorb that volume. He also pushed Bynum's engineers to find ways to lower the cost of the machine, by simplifying the design, inating chips, and so on. That way the profit margin on each uter remained steady - 40 per cent — while the price went down. With each new round of cost cutting, the engineers became increasingly unhappy with Turner, for they felt he was pushing them to do too much too fast. TI had once produced fewer than eight thousand 99/4's a month; it was now producing that many

99/4A's in a good week. That wasn't enough for the consumer products group, with its large overhead and R and D budget, to turn a profit, but it was more than enough to make people believe Turner when he pulled out his latest chart and said the 99/4A was about to take off.

By then, however, TI was not the only company in the home computer business. Atari, the video game maker, had a computer out some time that was under $1000 - the Atari 400. Several companies, particularly Matel and Coleco, were trying to get out of video game consoles (which wouldn't have a chance if home computers really hit) and into home computers. Timex had a home computer in development, which it hoped would establish and entirely new market, under - $100 computer. And then there was Commodore, nine months after TI put out the 99/4A on the retail shelves of America, the Commodore Corporation, of King of Prussia, Pennsylvania, introduced its first home computer. It was called the Vic 20, and it came on the market at $299.

To be continued next month. Coming next month
Launching the great price war!

EDITOR'S NOTE

I hope this copy of the December newsletter is not a complete disaster. This is my first time to do anything like this. If there is any thing that I need to know dont hesitate to call me, my number is on the last page of this newsletter. I was con'ted to start doing the newsletter after Al Doss had a heart attact while on vacation in Florida. Al is home now doing fine but the pressure of doing the newsletter was too much for him. I was asked if I would like to do it. If anyone wants to submit an article for the next newsletter give me a call and if it can be taken by modem I'll take it. If it cannot be sent that way mail the copy to me and I'll key it in. My address is 2123 Rushmore Memphis, Tn. 38116. Thanks......Henry Badon

GROUP INFO

Visitors and potential members may receive 3 free issues of TiDbits while they decide if they wish to join (no obligation). A Dollar sign ($) indicate that your dues are due. On the top of your lable is a code. An Y means you are a member, N means 3 free list, UG means user group and S means a business. Beside the Y is a date, one year from that date your dues are due. The library is open only to FULL ($15) members. Library list is $1. Mail order disk library access is $2 per disk max of 5 disks per month order by disk number only. At meetings library access is FREE if you exchange your disk for ours or $1 per disk for our disks. Send all mail order library requests to librarian's address. Send dues and correspondance to group address.

CALENDAR

MEETINGS: December 17th, January 21, February 18 (3rd Thursday!)
WORKSHOPS: December NONE, January 23, February 27 (4th Saturday!)
c99 CLASS: Every Thursday except meeting night, location TBA.

OFFICERS

Ma hope	PRESIDENT	901-363-3880
Mi el Dorman	VICE-PRESIDENT	501-732-5126
Gary Cox	SECRETARY	901-358-0667
Gary Cox	Temporary TREASURER	901-358-0667
Pierre LaMontagne	TI-NET System Operator	901-386-1513
David Ferguson	Disk Librarian	901-795-3287
Richard Hiller	Cassette Librarian	901-794-9545
Henry Badon	Editor - Newsletter	901-345-1673
----------------	Assistant Editor	--- --- ---
Dick Vandenberg	Chairman - Program	901-274-1892
Al Doss	Information and Assistance	901-743-6781
Mac Swope	Chairman - Equipment	901-363-3880

24HR TI BULLETIN BOARD

TI-NET (Mid-South User Group)   300/1200 bd   901-386-1760

GROUP MAILING ADDRESS

Mid-South 99 Users Group
P.O. Box 38522
Germantown, Tn. 38183-0522

LIBRARY ADDRESS

David Ferguson
3377 Creighton Ave.
Memphis, TN 38118