

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



# TIDBITS

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## MAY INDEX

PRESIDENT'S BIT.....	2
MYARC DOS.....	4
EDITOR'S BIT.....	7
SHOPPERS CORNER.....	7
AVATEX 1200 SOUND.....	7
GPL PROGRAMMING - PART 1...	11
MULTIPLAN TIPS.....	12
PROGRAM BIT.....	13
LIBRARY BIT.....	13
IN THE NEWS.....	14
COMPUTER TERMS.....	17
WEIRD SOUNDS.....	18

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# T I D B I T S

## PRESIDENTS BIT

At last month's meeting the demonstration was the new MYARC computer, the GENEVE 9640 presented by Jack Riley, Vice President of sales for MYARC. Gary Cox and I arrived early at the Red Cross Center and were getting a little panicky fearing Jack had forgotten us. Our special guest did arrive in plenty of time and this is how the meeting went:

Jack began the meeting explaining how Lou Phillips got involved with the TI computer business. Lou had been a Vice-President for Chase Manhattan Bank in charge of their electronics, computers. He was approached by Texas Instruments to develop the Winchester Hard drive for the 99/4A. Lou has since developed the floppy disk controller, the RS232, a memory expansion, and of course the Geneve 9640.

Jack removed and opened up the clamshell case of the computer card saying, that four circuit boards have been developed, the latest having a blue soldering mask. The computer's real-time clock is battery backed and, of course, the logic gate array which was designed by and specially manufactured for Myarc. The gate array is a chip that acts like a data buffer and a traffic cop. One of the important features of the gate array will be that in the future it will have the potential to adapt to new hardware environments.

With the Myarc 512K card installed in the PE box, the 9640 was running with 1 megabyte of RAM. There is a port for a mouse and has composite/ analog RGB outputs. (Due to a limited number of pins provided for the monitor jack, it is necessary to relocate a jumper on the board if switching back and forth from composite to true RGB.)

Jack explained that in order to use your 99/4A command modules with the 9640 you must first save your cartridges to disk using an assembly program that will be provided with the new computer. Using the Widget (NAVARONE) and the EDITOR/ASSEMBLER, the program saves all of your cartridges to floppy disks in the Gram Kracker (MG) format. You can then run the module in the 9640 from the disk drive. Because the 9640 runs at a much faster clock speed than the 99/4A, it is necessary to boot a program that purposely slows down the VDP before you run your saved cartridges. The programs are run with the use of an GPL interpreter.

The programs which Jack demonstrated all seemed to work just fine. He told us that the 9640 supports all of the 99/4A sounds although his monitor did not support audio. We were told that speech is not built into the 9640 but that a board has been designed to house just the Speech Synthesizer inside the PE Box in much the

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same fashion as the Triple Tech Card. It is not yet manufactured by Myarc but is currently by another 3rd party. His comment was that Triple Tech's card "will and will not work with the 9640" because of the way the speech was engineered into that card. The clock and print buffer of that card do work fine. But, since those capabilities are already built into the 9640, they would be redundant. 99/4A Basic programs are compatible with the Geneve and most Extended Basic programs will be compatible with Myarc's "Advanced Basic". Since four more graphic modes are available to the Geneve than the 99/4A, some statements may have to be modified slightly. Assembly programs are compatible unless they deviate from TI's defined keyboard scan routine. In other words, since the 99/4A keyboard is no longer used, any program that attempts to scan the 4A keyboard grid for input will not work properly. This is true of the TEII cartridge and Fast Term. The IBM style keyboard that comes with the 9640 has a small input buffer so that you can type ahead of the current task.

Jack then loaded Multiplan (80 columns!) into the Geneve and demonstrated its improved speed in the "99/4A mode". (Gary with his trusty 4A vainly attempted to keep up with the Geneve.) We were told that the increase in speed was because the Geneve incorporates 32k of "no wait state ram" which allows the processor to run more efficiently, up to six times faster in scrolling speed. Copy functions and calculation of formulas are also greatly improved in speed. The 80 column on composite was readable but with much color bleeding. It is advised to use the 40 column mode with composite.

The Geneve will work fine with all of the other third party disk controllers and ram disks. It is necessary to install a simple jumper in the Myarc ram disk for it to work. Myarc is to release a separate hard drive/floppy disk controller in the near future (up to three hard drives at 134 megabytes per hard drive, plus 4 floppy disks at DS/Quad density, AND built-in support for 3.5 inch drives!! \$265.00 for the controller.)

The enhanced TI Writer (also 80 column), also known as MY-WORD, when running on the Geneve is fast! Scrolling is accomplished at blinding speed. A page function is available on the newer release. It has new capabilities to view a file on disk without losing the text that you are currently working on. The real time clock can be left displayed while you are busy writing. There is a reference ruler at the bottom of the page to assist in setting tabs and charts. They are said to be working on a new word processor package, perhaps to be called MYproWORD which can incorporate the mouse, thesaurus, and spelling checker, etc. Storage space allotted to the TI MY-WORD is approximately 2000 lines on a single working file. Testing for the current spelling checker (DRAGONSLAYER) has not been completed. There may be problems with the method in which that program returns to the cartridge work area.

Myarc's DOS (MDOS) looks identical to the industry "standard" as set by MicroSoft for the IBM. Batch commands, AutoEXEC commands, and setting up macros are all similar to MSDOS 2.11. Some consideration is being given to a plug in card to give IBM compatibility. FORTH is expected to run as fast on the 9640 as

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assembly runs on the 4A. A complete C-language isn't yet available but is hoped to be completed by Clint Pulley in the future.

The next demonstration was of Geneve's graphic skills. With the mouse and a program called DRAW, choosing from a pallet of 256 colors, Jack easily wrote his name and then used various commands to manipulate the design. We were told that the ability for the computer to digitize pictures is built in. Boxes, circles, fills, lines and rubberbanding were shown. Then, Jack loaded several predrawn pictures. The drawing was detailed at 512 by 424 pixels and zoomed into a 12 pixel resolution, informing us that the square pixels generates a "true aspect ratio", meaning very little distortion is noticed. The pictures can be dumped to your printer in color! The mouse and the DRAW program are not yet available but are expected to be released together in a package later. Test shipments of the computer has already begun; but Myarc is deliberately holding back on large shipments in case some hardware bugs are discovered. He stressed that software bugs can easily be solved but hardware flaws cannot. Included with the machine will be a large detailed manual, leaving the system "open" for software development. He reports that of the units already shipped, there is no negative feedback. If that continues, then mass production can start. Myarc is shipping the units in the order in which they were received. With 200,000 PE Boxes sold in the U.S., the initial market is pretty strong. With the the flexibility of the gate array, this machine can adapt to newer equipment.

Again, special thanks to the people of MYARC and to Jack Riley for the excellent demonstration of a powerful machine! We wish you much success!...Mac Swope

## MYARC DOS

The following is a preview (not a review) of the new Myarc 9640 DOS as given in the Myarc DOS manual that was released to the TI Forum on Compuserve. The first 9640s that have been shipped come with DOS 0.0 which is not the full DOS that is referenced in the Myarc manual. The full DOS is to be released shortly.

Myarc DOS has been patterned after MS-DOS and, in fact, the DOS commands are identical in almost every way. This does not mean that the Geneve is MS-DOS compatible. A 9995 is not an 8088. It does mean, however, that one who is used to using an IBM PC will feel completely comfortable in navigating through the 9640's DOS.

The Myarc DOS manual is written in plain English in a style that should prove effective for novice users. This is a refreshing change from the IBM PC-DOS manual which does not attempt to arrange the DOS commands into a logical order, but merely presents DOS commands in an alphabetical, reference manual.

Myarc DOS, like MS DOS, uses working default drives named A, B, C, D, etc. DSK1 will become A, DSK2 will become B, etc. Myarc DOS uses subdirectories as well. Subdirectories are essential to the efficient use of hard drives.

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The DOS commands and syntax are almost exactly the same as MS DOS. The differences only occur when there is a basic difference in the hardware or peripherals between the 9640 and the IBM. One example is the lack of file extensions in the 9640 since the TI controller card cannot have periods in the filename. This is not a big limitation since the 9640 can have filenames of 10 characters as does the 4A.

Myarc DOS uses wildcards (^ and ?) in the same manner as MS DOS.

As in MS DOS, commands vary between internal and external commands. This means that some commands are resident once DOS is loaded(internal) and some are called from files on the DOS diskette(external).

The following summary lists the DOS commands:

|          |                                                                                                                                                                                                                          |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ASSIGN   | Assigns requests for one disk drive to another disk drive. External command.                                                                                                                                             |
| ATTRIB   | Sets or displays the read only status of a file or set of files. External command.                                                                                                                                       |
| CHDIR    | Changes current working subdirectory. Internal command.                                                                                                                                                                  |
| CHKDSK   | Checks a disk and reports status of the disk and status of the computer's memory. External command.                                                                                                                      |
| CLS      | Clears the screen. Internal command.                                                                                                                                                                                     |
| COPY     | Copies a file to another file. Internal command.                                                                                                                                                                         |
| DATE     | Sets and displays the current date. Internal command.                                                                                                                                                                    |
| DIR      | Displays files on a disk. Internal command.                                                                                                                                                                              |
| DISKCOMP | Compares two diskettes. External command.                                                                                                                                                                                |
| DISKCOPY | Copies a complete diskette to another diskette. External command.                                                                                                                                                        |
| ERASE    | Deletes files. DEL is another form of the same command. Internal command.                                                                                                                                                |
| FORMAT   | Formats a diskette for use. External command.                                                                                                                                                                            |
| GRAPHICS | Enables DOS to print graphics images on the screen using the normal print screen function. External command.                                                                                                             |
| LABEL    | Assigns, changes, or deletes the volume label (name) of a diskette or fixed disk. External command.                                                                                                                      |
| MKDIR    | Creates a subdirectory. Internal command.                                                                                                                                                                                |
| MODE     | Selects the active display, and controls the number of characters per line. Can also control the line width and spacing of the printer and can control the communications parameters of a serial port. External command. |
| PATH     | Designates where DOS will search for commands within a directory structure. Internal command.                                                                                                                            |
| PROMPT   | Changes the system prompt. External command.                                                                                                                                                                             |
| RENAME   | Changes the name of a file. Internal command.                                                                                                                                                                            |
| RMDIR    | Removes a subdirectory. Internal command.                                                                                                                                                                                |
| SPEED    | Changes the execution time of GPL program and controls an additional wait state. (This command is not in MS DOS but is included so that 4A programs can be run at the proper speed.) Internal command.                   |

```

TIME      Sets and displays the current time.  Internal
          command.
TREE      Displays the path of each subdirectory on a disk.
          External command.
TYPE      Displays the contents of a file.  Internal
          command.
VER       Displays the version number of DOS.  Internal
          command.
VOL       Displays the volume label of a disk.  Internal
          command.

```

One of the powerful features of DOS is the ability to create batch files. Batch files are text files which contain one or more DOS commands. The batch file performs these commands as though each command was typed in separately.

When you type and enter a program name at a DOS prompt, DOS goes through the following sequence in trying to execute a command. First, DOS looks for an internal command. If an internal command is found, DOS executes that command. If not, DOS looks for an external command or a program file. If that is not found, DOS looks for a batch file which is in Display Variable 80. DOS then carries out the commands in the batch file.

A special file can be named AUTOEXEC. This file will be executed each time the Geneve is booted up.

Several additional commands are used as batch file commands only. These commands are all internal commands:

```

ECHO      Controls whether the commands are displayed as
          they are executed.
FOR..     Carries out a command for each value in a given
IN..     set, and a value is assigned to each value in the
DO       given set.
GOTO      Transfers control to the line following the label.
IF [NOT] Conditional execution of commands.
PAUSE     Causes the system to pause until a key is pressed.
REM       Displays a message if Echo is turned on.

```

Myarc DOS also allows for a system configuration file (CONFIGSYS) to be present on the boot-up disk. The following commands can be in the CONFIGSYS file.

```

BUFFERS   Defines the number of disk buffers DOS allocates
          memory for.
FILES     Defines the number of files DOS can use at one time.
LASTDRIVE Specifies the last valid drive letter.
RANDISK   Specifies how much memory will be allocated for use as a
          randisk.
SPOOL     Specifies how much memory will be allocated for use as a
          print spooler.
TIMODE    Allocates 128K of memory for use with TI-99/4A- based
          application programs.

```

One of the things I have most wished for in my 99/4A is an open and flexible DOS environment. Coupling the power of an MS DOS-like DOS with the speed of the 12mhz 9995 and the incredible

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graphics power of the Yamaha 9938 should provide a powerful work tool as well as a wonderful graphics computer. I'm looking forward to buying a Geneve in the near future. Michael Dorman

## EDITORS BIT

THINGS I WOULD LIKE TO SEE!! As I am the first one to read the newsletters that we receive from the other user groups, I get the chance to read them word for word. Sorry the rest of you don't have time to read them. Being retired has its advantages!! But if each one of you would take a Newsletter home with you and read it, I bet that you could find at least something to write a paragraph on. I will then compile them into an article.

This next paragraph will be directed to the Editors of those newsletters and Officers of other Usergroups. I notice that there is not enough information about your BBSs in your news letters. Let's give the Sysop some billing. I know that he would like to see his/hers name in print. Also, it would be nice to know what hours the BBS is on line, baud rate, phone number of board and even a voice number that your club could be reached when someone came into town. In fact, if this info was passed on to the Computer Shopper, they have a listing of BBS's and usergroups that come in handy when visiting out of town. They will print them if you will let them know...Al Doss

## SHOPPERS CORNER

Jim Peterson of TigerCub Software at 156 Collingwood Ave, Columbus, OH 43213 Phone (614) 235-3545 has 1 Gram Kracker for sale plus GK Utility 1 and Gram Packer. Asking \$200.

To place your For Sale note here call Al Doss. Also check out the For Sale table at each meeting for more deals...Gary Cox

Editors note: There are many things on Risky Business. Check it out or call Beery Miller at 726-5551

## AVATEX 1200 SOUND

This article first appeared in the PUNN- Portland Users of Ninety Nines written by Walt Morey and was reprinted here in our newsletter from the HUGgers, Hoosier UG of Indianapolis, IN.

If you or someone you know is into electronics this project is for you. Of course, you will have to own an Avatex 1200 modem! What this project will allow you to do is install a speaker into your Avatex 1200 modem so that you can listen to what happens as a call is being made (busy, someone answers etc...). The Avatex 1200hc, by the way, has a speaker already built into it while the plain Avatex 1200 doesn't leaving you in the dark as to what is happening. First thing, PUNN (and the Mid-South 99 UG) will

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assume no responsibility for any damage done to you or your modem. This project is done AT YOUR OWN RISK! Also keep in mind that any modifications you do to your equipment may void any warranty.

Now, to get down to business. First, remove the three Phillips screws from the back and pop open the cover. There are four pressure clips holding on the cover. If pressure is not applied just right they will break (I ought to know, I broke one!).

All components can be mounted onto a small breadboard and wires run from the various points on the pc board.

Set the modem so the LED's and buttons are facing you. Look to the left of the three control buttons; there will be 5 resistors side by side. The leftmost one is labeled "R21". This is the series resistor for the MC light. It will be used to switch the sound device. On the far end (rear) of R21 is an area of metallization (trace) which connects both R21 and its neighbor. This, if measured with a voltmeter to ground is +5 volts.

From the front of R21 (opposite of just mentioned) run a wire to a 3.3K resistor. This resistor connects to the base of a PNP transistor such as a 2N2907 or 2N3906. We will call this Q1. The emitter of Q1 will be connected to +5 volts from the back of R21 or from any +5v line from the regulators. (They are on heatsinks near the back on the right side.)

Time to test. If you have gotten this far without any trouble you can now test the hookup. Turn on your modem and measure the voltage between the collector and ground (heatsink of regulator). You should get around +5 volts. If not, turn off everything and check your wiring. If all goes OK, call a computer. When you get the connect signal the voltage on the collector should drop to zero.

Great! Now to build the amplifier. If you are mounting everything on the breadboard it will make a neater package and give you less trouble. The amplifier consists of an LM386, 10K trimmer pot, 100K resistor, 220uf electrolytic cap, voltage above 10v, a .1uf cap, and a small 8 ohm speaker (2"). Follow the schematic diagram provided in connecting everything. Placement on the breadboard is not critical but try to get everything in the smallest possible space.

For output from the modem, find U27, a small 8 pin IC just behind the board above the main PC board and about center. Pin 1 is on the right rear of the chip (see picture). Be VERY careful in soldering a small wire to this lead. This will go to the input of the amp through the 100K resistor then the pot for volume control.

As far as mounting the speaker, it should fit in just to the front of the rear mounting peg on the cover (the one near the rear of the cover). Determine the exact location for mounting that will not interfere with the modem circuitry or the amp board. Draw a circle around the speaker then drill a few holes in the cover to allow the sound to come through. Mount the speaker using Perma-bond or whatever you want to use. (Perma-bond works best). Connect one speaker wire to the negative side of the 220uf cap and

the other to a ground point on the amp board. Run the ground lead of the amp to the right side of either cap on the modem board (behind the regulators) or to the center lead of either regulator (the former would be better and easier).

A good area to mount the amp circuit (if made small enough) is on three layers of double sided sticky foam tape. You can get it in most stationery sections. Mount it between the two IC's next to the power supply caps and between the hole for the cover mounting peg so it clears when the cover is closed. The speaker wires should be long enough to open the cover and fold it out to the right side so it lays flat.

So far, so good. If you don't have butterflies in your stomach yet you will soon. Now it is time to power up and see if it works. You should hear some noise from the speaker. If not, try adjusting the 10K trimmer pot on the amp. Set it so the noise can be heard but not disturbing. You may want to turn it up up down later. Boot your terminal program and type in "AT". Your modem should respond "OK". Now type in "ATO". This will take your modem off-hook and give you a dial tone. You should hear it now. Hit enter and you will get the NO CARRIER message. Now, dial up a BBS and listen to the tones, and the connect signal. When you get the connect message the MC light should go out and the amp should be silent.

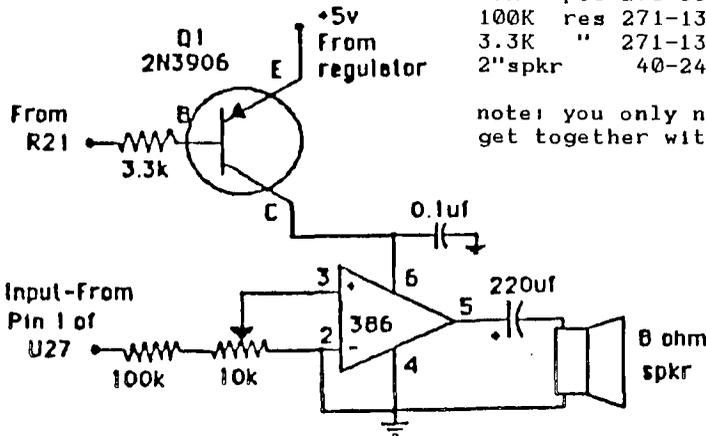
If everything worked, CONGRATULATIONS! If not, shut it off, check your wiring and call for help.

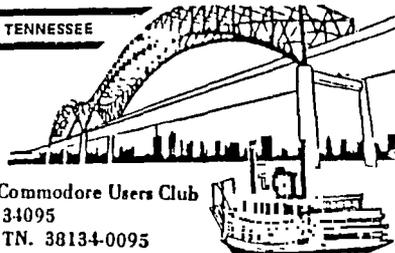
Parts available from Radio Shack:

Avalex 1200 Audio

| Parts     | Part#    | Pkg | price  |
|-----------|----------|-----|--------|
| 2N3906    | 276-1604 | 15  | \$1.98 |
| LM386     | 276-1731 | 1   | \$1.09 |
| 220uf cap | 272-956  | 1   | \$0.79 |
| 10K pot   | 271-335  | 1   | \$0.49 |
| 100K res  | 271-1347 | 5   | \$0.39 |
| 3.3K "    | 271-1328 | 5   | \$0.39 |
| 2" spkr   | 40-245   | 1   | \$1.89 |

note: you only need 1 each so get together with friend





NEWS RELEASE . . . . . - Memphis Commodore Users Club  
P. O. Box 34095  
Memphis, TN. 38134-0095

MEMPHIS COMMODORE USERS CLUB is sponsoring a Computer "FAIR" in cooperation with other local computer users groups. The FAIR is open to the public and will be a chance to see demos of hardware and software. Personal computer models will be displayed by the groups representing most of the popular lines, including:

- COMMODORE \*
- APPLE \*
- ATARI \*
- FRANKLIN \*
- ADAM \*
- I. B. M. \*
- & (COMPATIBLES)
- OSBORNE \*
- TANDY \*
- TEXAS INSTRUMENTS \*
- TIMEX/SINCLAIR \*
- KAYPRO \*
- AMIGA \*
- ATARI ST \*
- COCO \*
- SANYO \*

This is a rare opportunity to see so many models at one time in one place.

Saturday, May 16, 1987  
1:00 pm - 6:00 pm  
STATE TECHNICAL INSTITUTE  
5983 Macon Cove - Memphis, TN.

For additional information, contact:

Robert Earnheart 377-6416  
Ken Akins 388-1112

\*Registered trademarks of respective companies

# GPL PROGRAMMING - PART 1

GPL....What is it? It stands for Graphics Programming Language and was developed by Texas Instruments for the TI-99/4A computer. TI developed GPL for two purposes. One, they wanted the proprietary rights to a programming language, and two, they needed a way to maximize the limited amount of memory available to their machine. Many people have heard since the development of the GramCracker by MG the words GROM (Graphics Read Only Memory). This is what TI called their memory chips that they would use in nearly all of their application modules. This GROM memory would then be used for booting their operating system and their TI-Basic system through their GPL-Interpreter written in the ROM of the console. It was quickly learned that the operating system and TI-Basic would cover a 24K boundary from G>0000 to G>5FFF. The purpose of this code as hackers would soon learn, was that programming in GPL the size of programs were nearly 40% smaller due to the fact that GPL operates on a byte at a time while assembly requires two byte instructions.

Many people have noticed that their Basic or Extended Basic programs run slower than their modules and assembly language programs. I will try to explain what is happening and why. Assembly language is the hardcore language of any computer. To run a module, the GPL-Interpreter written in assembly language must interpret the code from the module. Thus a module program is interpreted once (Note: TI allowed the possibility of Basic programs being run out of Grom with special coding. As this is more complicated, I will not explain this feature in any more detail except that it can be done.). A simple assembly language program is just that. Simple as it needs no interpretation and runs as is. In order to run a Basic or Extended Basic program (Basic and Extended Basic are written in GPL), the program is interpreted by an interpreted language. Thus it has been interpreted twice. That is why basic programs are so much slower. A simple test can be performed with the standard 1 to 10,000 count to compare the various speeds of the languages. Assembly >.5 seconds Forth 1.3 seconds GPL 5 seconds EXT Basic 34 seconds Basic (too long to wait)

As one can quickly note from the stats, GPL is much quicker than Basic or Extended Basic and slightly slower than assembly language or Forth. With the conservation of 40% memory, one can easily see the benefits of applications written in GPL.

More than a year ago, one would not be able to program in GPL, but a German Software Company released through RYTE Data, a GPL-Assembler which now allows one to program in GPL. In addition, with a GPL-Interpreter written in assembly and loaded into low memory, one can execute GPL code that has been loaded into the ROM (This program was written by Monty Schmidt, author of Techie BBS). As of this writing, I am still trying to compile all the information into a series of articles. Next month, I will try to explain how to modify some of your GPL code in the console through GRAM/GROM devices and I will also show some actual GPL source code and comment it to show how easy it can be to program...Beery Miller

# MULTIPLAN TIPS

The following article was written by Steve Zimmerman of the South California Users Group reprinted from the Epie 99'er Newsletter July-August.

One of the most useful features of Multiplan is WINDOWS! Windows are a big thing now - just read the magazine reviews and ads for programs such as Framework and Symphony. Windows enable you to see two parts of the screen, in different areas of the worksheet, at the same time. Sounds simple enough, but what good it is? Well, let's say that you have a worksheet with about 60 rows of labels in Column 1, and that you enter data for each day in a month in columns 2-32. Since your basic column width shows only 4 columns, you can see the labels only while entering the first 3 days data. If you make the columns narrower, of course you can see more - if the numbers aren't too long. If the numbers are too long, and you make the columns narrow, you just see "\*\*\*\*\*", an error symbol which means that you have too many numbers to display in that column width. To enable you to enter later columns of data in the proper rows, you need to create a window.

To do this, position your cursor (the cell pointer) in R1C2 (one column to the right of your labels), and hit the W key (for windows). On the next menu, you want to key S (for split). On the next menu key V for vertical, and Multiplan will respond with "at column 2", linked yes no, with the NO highlighted. Use the Tab (CTRL 2) to move the command cursor from the 2 in "at column" to the linked field, key Y to link the windows, and then key ENTER. With practice, this command sequence becomes W S V Tab Y ENTER. You now have a window, linked vertically. As you move the cell pointer down in the active window (the one you just created), the labels move along. As you move the cell pointer to the right, columns will disappear on the left side of the second window, but the labels will remain in view.

To "uncreate" this window, key W (for window) C (for close); Multiplan will respond with \*2, key Enter, and the window closes. You can do the same thing with horizontal windows. If you have labels across the top and you want to see them as you move up and down.

You can move the cell pointer between window by using CTRL 6 (change window), which makes a different window the active window. Ctrl 6 again will take you back to the original active window.

There is a way to keep your row labels on the left in view and also keep your column labels in sight. To do this, you must use the Title option, rather than the vertical or Horizontal options. The command sequence is Window, Split, Title.

Before you enter this, make sure your cell pointer is in the column to the right of your labels column and in the row below the row which contains your column labels. Multiplan will propose the number of rows and columns to be contained in the label windows, so if you didn't have the cell pointer in the right place, just enter the appropriate numbers of rows, tab over, enter the appropriate number of columns, and hit Enter. Multiplan will

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create 4 windows, numbered clockwise from the upper left, 1,2,3, and 4. Window 3 will be the active window, containing your data. You can now move to any row or column of your worksheet and still be able to see your row and column labels. This is a great help in entering data in a large worksheet!

To sum up, Split lets you create multiple windows, Border lets you highlight or separate windows visually, Close lets you uncreate windows, and Link lets you set up or break links between windows. You can Split your screen into a max of 8 windows (if you can get them to fit and still show you anything), you can link windows to make them scroll together, and you can use the Title command to show row and column labels to make data entry easier on a large sheet. To move from the active window (which is the most recently created window) to another, use Ctrl 6 (change window).

The ability to use multiple windows is one of the most powerful features of Multplan and I hope that this "raises the shades" for those of you with windowing questions!

## PROGRAM BIT

6:00pm - Doors Open

6:30pm - Library Opens

7:00pm - 7:20pm General Discussion

7:20pm - 8:00pm Demonstration of TI-Artist drawing program along with a support program called Display Master and Artist Extras. Thanks go to Inscebot Inc for the complimentary copies of TI-Artist, Display Master and Artist Extras for review purposes. Inscebot has also offered the group a substantial discount on ordering these three programs so all interested should see me after the demonstration.

8:00pm - 8:10pm Break period.

8:10pm - 9:00pm T O B E A N N O U N C E D

11:00pm - Doors Close

Coming next month - demonstration of Tower Air Traffic Controller program...Gary Cox

## LIBRARY BIT

This month's Library Bit is brought to you in part by Floyd Pemberton of the Dallas TI Home Computer User's Group. Floyd visited our meeting back in February. Since his work brings him to our area on a regular basis he has the opportunity to visit around with several user's group as sort of an ambassador.

I can tell that you are just dying to know what in the world this has to do with the library. There is an opportunity here for the

free exchange of software! He brings us programs from his group and in turn takes programs from us back. He also shares the programs with other groups he may visit such as the groups in Nashville and Knoxville. The latest addition to our library, contributed by Mr. Pemberton, is a collection of five disks called simply 'SUPER DISK' and a utility disk cataloger program that will wear your elbow out if you are using two drives. More about these later. I will also have available at the meetings a copy of the Dallas library and if you see programs that you would like to have just contact Rick Glisson and he will be glad to write the programs for you (just kidding) Floyd will bring the programs to us the next time he comes to town.

On another note Beery Miller has volunteered his copy of the Houston User's Group library to expand our ever growing files of programs. All that is required is that the disks be unpacked from DS/DD diskettes. That is going to take a while, but we are working on it and should have it available for your inspection by the June meeting. Thanks Beery for all the help with the library and your assistance to the group.

As I mentioned earlier 'SUPER DISK' is a collection of programs similar to Funnel-Writer. There are several nice features that go along with these disks, not the least of which is that you don't have to pass any title screens to go to the main menu. On the auto-load from X-Basic the program boots up the main menu that allows a choice of a Catalog program, Fast-Term (ver.16), DM-1000, Disk+Aid, Turbo Copy (updated), TI-Writer, or Utilities. Most of these are well known and if you would like to have a disk with these features without having to go to the trouble of adding them to FunlWriter, here it is.

On selecting UTILITIES you get a second menu for the second disk that includes a diagnostic program, label maker, file breaker, a program for setting printer codes, Nibbler, Neatlist, and many other programs too numerous to mention. Personally, I don't see how they got it all on two disks.

There are three eight by ten color glossy diskettes of documents with circles and arrows on the back of each one explaining what each one was to be used as evidence...(sorry folks...I'm regressing). As I said, three disks of pretty good documents that explain what the programs are and how to use them. That's good too 'cause some of them I haven't seen before. Anyway, copies will be available at the library table at the meetings or order by phone  
1-800-RgLisSon.....DFerguson

## IN THE NEWS

The BIG news of the month is last month's meeting where nearly 65 people attended to see the Geneve 9640 demonstration by Jack Riley. This was the largest crowd at a meeting since we were at the Board of Education several years ago. Mac should have an article elsewhere going over the 9640's specifications and the

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April Micropendium had a lot to say about it as well. However, I do want to comment on a few features that I was impressed with. One great feature was the graphics capabilities of the 9640. The graphics displayed were very high resolution and Jack showed us a very neat feature called a ZOOM which will enlarge a picture up to 10 times it's original size at an amazing speed for a very closeup view. The 80 column TI-Writer, Multiplan and FAST-TERM were very interesting! The increased speed of TI-Writer and Multiplan on the 9640 was fantastic. In short the Geneve 9640 is truly an amazing machine. Shipping of the Geneve 9640 has begun although production is a little slow right now. A BIG THANKS goes out again to Jack Riley for being so kind as to drive to Memphis to give us the demonstration. THANKS Jack! I know several people in our group have a Geneve on order so we will have more demonstrations when they arrive.

A general COMPUTER FAIR will be held May 16th at State Tech from 1pm - 5pm in the Fulton Auditorium (and rooms 212-222). Every brand computer club in Memphis will be represented including Adam, Apple, Amiga, Atari-ST, Coco, Commodore, Epson, Franklin, IBM and Clones, Kaypro, Sanyo, and of course the TI99/4A! (possibly others too that I might have left out.) For information, contact Bob Bernheart at 901-377-6416 or Ken Ackings at 901-388-1112. Hopefully, this newsletter will be out in time for you to read this before May 16th... It is planned for this to be an annual event. Maybe we could even incorporate a TI Fair into it next time! Volunteers are needed to bring systems so if you can help call Al Doss or myself. At least bring yourself as this will be an event for all computer owners. Organizers plan on putting out a lot of publicity for this event so we might draw many more TI owners who still do not know about us.

Just received is the latest version of Funlwriter. The version number is still 3.4 but it has been updated as of 4/10/87. I have only briefly looked through it but I did notice a few new features and version 3.5 of DM 1000 has been added with a selection to return from DM 1000 to Funlwriter. Thanks Tony for sending up an updated copy!

Looking elsewhere in the news Texcomp of P.O. Box 33064, Granada Hills, CA 91344 (818) 366-6631 is marketing what they call a video interface for the TI99/4A. This interface replaces your TI RF modulator. Just like your TI RF Modulator this video interface converts the signal from your computer into channel 3 or 4 but also "processes, amplifies and enhances the video screen to give you a color display on your TV which up to now could only be obtained from the best color monitors" according to Tex-Comps' ad in the April Micropendium. They say it also works with other computers, video games, cam-corders and video recorders. Price is \$34.95 plus shipping and handling.

DataBioTics Inc. of P.O. Box 1194, Palos Verdes Estates, CA 90274 has released a bunch of new products (price listed does not include shipping). The first two are two new cartridge based games called Junkman Jr. and Star Runner. Price is \$16.95 each.

Next, two new word processors have been released. The first is called Wordwriter available in cartridge form. It allows you to

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load and save from disk or cassette as well as print a hard copy if you have a RS232 or printer. Price is \$34.95. The second is Wordwriter + also available in a cartridge which includes all the features of Wordwriter plus it has a built in 20-pin edge connector for direct hookup to your parallel printer. No RS232 is needed and printer cable is included. Price is \$54.95.

Two more new products by DataBioTics is Console Calc and Console Calc +. Console Calc is an electronic spreadsheet built into a cartridge and no 32K memory is needed. It allows you to do many of the things other spreadsheet programs do like track income and expenses, prepare income tax records etc... Has 864 cells expandable to 2520 cells with 32K. You can load and save your records to disk or cassette and print them to a printer if you have an RS232 and printer. Price is \$24.95. Console Calc + has all of the features of Console Calc except it has a built in parallel printer interface for use with any parallel printer (no RS232 needed). Price for Console Calc + is \$44.95.

Also new is Super 4th which supports speech, sound and multiple disk drives including hard disks. Comes with a decompiler and 109 page manual. Requires Superspace I or II and disk system. Price \$17.95.

Next from DataBioTics is Superspace II 32K memory module. This module gives you the power to create your own cartridge based software, load in your own assembly code, vacuum software out of other cartridges, or even save your favorite ROM cartridges to disk and run them at the touch of a single key! Design your own menu loader for up to 7 Assembly Language programs. Equipped with a battery to save your programs in memory for at least two years. Includes built-in Editor/Assembler GROM and free Editor, Macro Assembler disks, Super Space II manual, Introduction to Assembly Language. To get your started a menu and cartridge loader are provided along with E/A utilities, GROM header templates, a bitmap graphics demo and a free "C" compiler. Requires a disk system and memory expansion. Price is \$59.95.

Then last is Paraprint Printing Connection. It allows you to connect any parallel printer to the TI99/4A. Paraprint plugs into the side of your console and your parallel printer plugs into it. Price is \$39.95.

The above products also available from TexComp at (818) 366-6631 for the same prices listed plus shipping. DataBioTics also markets many other products such as Disk Master I, 4A/Talk, Pilot and much more.

For Gram Kracker owners a new version of the Gram Packer utility disk by Peter Hoddie is out. Price is \$10 from Disk Only Software, P.O. Box 244, Lorton, Virginia 22079. For those who have purchased old copies of the Gram Packer utility disk may return the original disk (only) plus \$3 to Genial Computerware, P.O. Box 183, Grafton, MA 01519 to receive an update. Also notice the new address for Disk Only Software now in Lorton, Virginia.

Other new versions of programs are out such as a completely

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reworked version of Printers Apprentice by McCann Software and a new version of High Gravity by Asgard Software. Asgard has also developed a sequel to the Old Dark Caves adventure game.

Diversions Inc. of 505 W. Olive Ave. #520, Sunnyvale, CA 94086 (408) 245-7575 is marketing what they call a Chest-Top Publishing package for the TI99/4A. This allows images printed by the computer to be transferred onto T-Shirts, jackets, banners or other cloth items. Compatible printers include C. Itoh, Brother, Epson, Okidata, Panasonic, Star and Gemini types. Contact Diversions Inc for more information.

Remember, every Thursday (except meeting nights) c99 programming classes are held by Dicko Vandenberg. For information about the classes call Dicko at 901-274-1892.

There is a lot more news of new software and products but I have no time left to mention them all as this past month has been very busy for me with college! Take a look at the latest Micropendium and the TI section in the Computer Shopper for the latest information on what's new, tutorials and reviews.

As a closing note I would like to wish our Treasurer Gerald Smith a full and speedy recovery from his recent heart attack. Your presence in the community is very much missed and our thoughts and prayers are with you... Gary Cox

## COMPUTER TERMS

This article has travelled quite a ways around the world. It originally appeared in the Washington DC "Gazette" of July 13, 1983 and was reprinted in the SLaves newsletter of Salt Lake and Valley 99 UG and we are reprinting it from the Hunter Valley 99'er NEWS of Australia.

Listed below are common computer terms but I do not think you will find the definition in any computer dictionary!

APPLE - Typically a device used to seduce men, usually equipped with display screens and/or worms.

BAR CHART - A list of places to go when it's Miller time.

BUBBLE MEMORY - A derogatory term, usually referring to a person's intelligence. See also "vacuum tube".

BUG - Small living things that small living boys throw on small living girls.

CARRIAGE RETURN - The act of returning a vehicle to the rental counter.

CHARACTER DENSITY - The number of very weird people in your computer club.

CLOSED LOOP - A method of execution no longer in vogue, except in Iran.

CODE - Usually lasts about three to five days, accompanied by sore throat, runny nose and fever.

COMPILE - A heap of decomposing vegetable matter.

CPU - A juvenile way of telling your dog has missed the paper.

CRT - A movie about a little alien who forgets his telephone

number and must write home.  
 DEBUG - The act of placing shoe leather against a small creeping creature.  
 ERROR - Something only humans can commit.  
 INTEGRATED CIRCUIT - The end result of busing.  
 KEYPUNCHING - An activity similar in most aspects to cowpoking.  
 MEGAHERTZ - A very large car rental company.  
 MODEM - A contraction. Commonly used as in "Gimme some modem cookies".  
 NETWORK - The occupation of a fisherman.  
 OUTPUT - What people who talk backwards do to their cat.  
 PROGRAM - What commercials try to do to us.  
 RAM - A male sheep with horns.  
 REAL TIME - Here and now, as opposed to fake time which only occurs there and then.  
 RECURSIVE - See "Recursive"  
 ROM - A RAM ater a delicate operation.  
 SNOBOL - A small white round object thrown in the winter.  
 TERMINAL - What most people have to be before consenting to see a doctor.  
 TYPEWRITER - A contradiction in terms.  
 VACUUM TUBE - A derogatory term. See "Bubble Memory".

## WEIRD SOUNDS

Here is a small program which requires XB and 32K that produces some very strange sounds. The program came from out of the March 1987 newsletter of the SF 99er Times of Newhall, California.

```

100 CALL INIT
110 FOR C=1 TO 4
120 FOR Z=1 TO 400 STEP 8
130 CALL LOAD(-31744,Z^(1-C))
140 NEXT Z
150 NEXT C
160 CALL SOUND(1,1000,0)
170 GOTO 100

```

Special Note by Gary Cox

This program makes use of the CALL LOAD statement which in using it you can do things with the computer you are not supposed to be able to do. There is a whole list of CALL LOADS that do all kinds of things. However, many on my list do not work for some reason. If someone could submit a list of them that they have verified as working, we will print the list here in the newsletter or if someone could go through my list and verify which ones will work, we will make up a list. (It is a big list. That is why I have not gone through it).

## PROTECTION

There are strong FEDERAL LAWS against duplicating copyrighted programs. Please do not break these laws!

## DISCLAIMER

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## NEWSLETTER 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. Please pay your dues to be able to continue to receive the newsletter and other benefits of the group. You will note a letter and date on the top of your address lable. The letter Y indicates if you are a member and the date indicates the last time you paid your dues. One year from the date your dues are due!

## CALENDAR

MEETINGS: May 21st, June 18th, July 16th (3rd Thursday!)  
WORKSHOPS: May 23rd, June 27th, July 25th (4th Saturday!)

## OFFICERS

|                   |                            |              |
|-------------------|----------------------------|--------------|
| Mac Swope         | President                  | 901-363-3880 |
| Michael Dorman    | Vice-President             | 501-732-5126 |
| Gary Cox          | Secretary                  | 901-358-0667 |
| Gerald Smith      | Treasurer                  | 901-363-6273 |
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| David Ferguson    | Co-Librarian               | 901-795-3287 |
| Rick Glisson      | Co-Librarian               | 901-386-1159 |
| Adolph Butler     | Chairman Cassette Library  | 901-948-0732 |
| Al Doss           | Editor - Newsletter        | 901-743-6781 |
| Gary Cox          | Chairman - Program         | 901-358-0667 |
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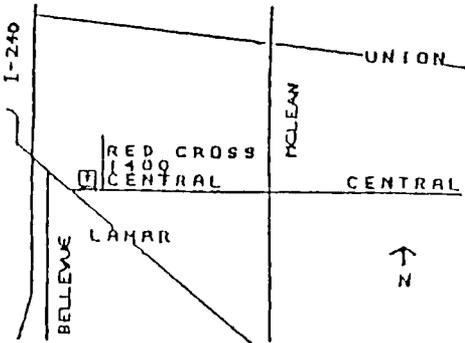
## GROUP MAILING ADDRESS

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

NOTICES

**MEETING**  
 7:00 P.M.  
 Thursday, MAY 21st  
 Red Cross Building  
 1400 Central Av.

**WORKSHOP**  
 TO BE ANNOUNCED



**MEMBERSHIP APPLICATION**

NAME \_\_\_\_\_  \$15.00 FAMILY  
 ADDRESS \_\_\_\_\_  \$10.00 JUNIOR (under 15)  
 CITY \_\_\_\_\_ ST ZIP \_\_\_\_\_  \$10.00 ASSOCIATE (N/L only)  
 PHONE ( ) - \_\_\_\_\_ INTERESTS \_\_\_\_\_

EQUIPMENT, ETC. \_\_\_\_\_

Detach and mail with check payable to: Mid-South 99 Users Group,  
 P.O. Box 38522, Germantown, Tn, 38183-0522.