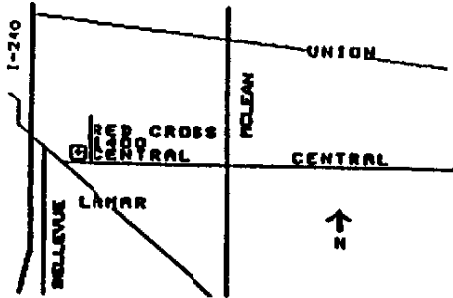


NOTICES

MEETING
7:00 P.M.
Thursday, June 15th
Red Cross Building
1400 Central Ave.

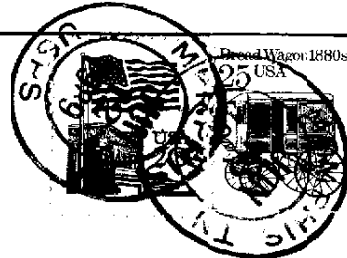
WORKSHOP
9am till Noon
Saturday, June 24th
To Be Announced



JUNE 1989 ISSUE

J9

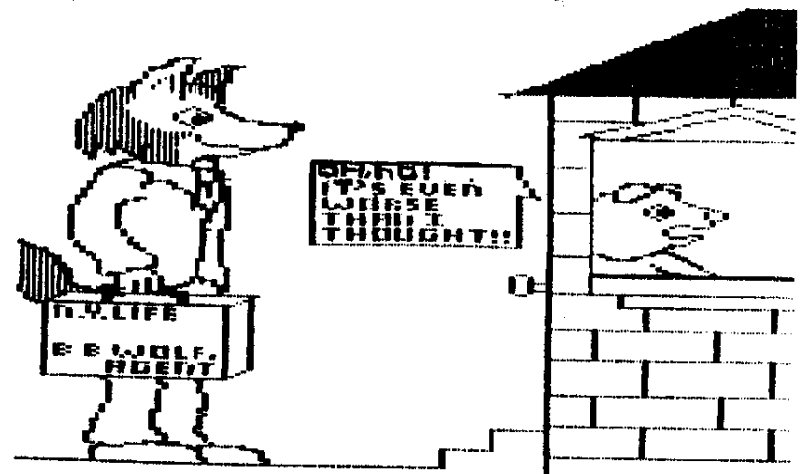
Mid-South 99 Users Group
P. O. Box 38522
Gerantown, TN 38183-0522



FLOYD J. Pemberton Jr.

481 Spruce

Lewisville, TX 75067



T I D B I T S

OFFICERS

Gary Cox	PRESIDENT	901-358-0667
Mac Swope	VICE-PRESIDENT	901-363-3880
Richard Hiller	SECRETARY	901-794-9945
Bob Jones	TREASURER	901-363-9213
Michael Dorman	Midnight Hour BBS SysOp	501-732-5126
David Ferguson	Disk Librarian	901-795-3287
Richard Hiller	CO-Librarian	901-794-9945
Michael Dorman	Editor - Newsletter	501-732-5126
Gary Cox	Program Chairman	901-358-0667
Al Doss	Information and Assistance	901-743-6781
Mac Swope	Chairman - Equipment	901-363-3880

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PRESIDENTS BIT

By Gary W. Cox

At the last meeting attendance was quite low possibly due to the stormy weather that we were having at the time. However, I have been noticing that quite a few regular attendees are missing! What ever happened to some of the long time members like Dicko Vandenberg and Gerald Smith? In fact, the only original officers of the group who is still a member is Howard Watson. Please come, we need your support!

I decided at the last minute to have our group attend the Shows Unlimited Computer Show at the Cook Convention Center. Turnout at the show was low but several people did show interest in our group. If anything we showed that the TI community is still alive and well. However, due to the low attendance show management expressed that there may not be any more fairs here in Memphis until 1990. It would be nice if we could combine the MACC fair and Show Unlimited fairs together??? Unfortunately we just do not have the volunteers and support necessary here to pull off a really BIG event... Nevertheless I would like to thank Michael Dorman, Mac Swope, Jim Wilmont, Lynn Crow and Ed Walton for their help at the fair!

We are still in need of volunteers to step in and take charge of things in the group. I am doing the best I can but I am having a lot of trouble just keeping up with just the work essential to group operation. Thus I would like to apologize if my responses to letters etc. take some time...

I would like to encourage everyone to call our BES! It's a great place to communicate with other TI'ers both local and who call in from out of state. Plus the download section is huge containing a vast array of programs for the TI99/4a and Geneve 9640. Many of the programs which appear on the BBS take months to reach the library and in fact some never make there. Call the BBS for the latest and best in programs and information! The BBS is open 24hrs a day at 300/1200/2400/9600 (hayes) baud. Michael Dorman does a lot of work to keep the system up and running as well as up to date so please show your support by calling! The number is 735-9980 (local call). Outside the Memphis calling area dial (501) 735-9980.

Lynn Sampson of a local non-profit organization called Friends of Young Flyers is looking for anyone to donate TI equipment to their organization. Their organization administers education scholarships in the area of aerospace science, law, general aviation and engineering. Friends of Young Flyers is non-profit corporation which is four years old and is running on a very tight budget thus the reason for asking for donations. One of the items that they really need is an expansion system in order to use their TI99/4a to assist them in their needs. The organization has a 501 C3 educational status thus donors can receive a tax credit. If anyone out there has any equipment that they can donate please

contact Lynn at (901) 781-3184.

In closing I would like to welcome a new overseas user group to our newsletter exchange list. They are the TISHUG Users Group of Redfern, N.S.W. Australia, they have a great newsletter!

C ya at the meeting...

LIBRARY BIT

By David Ferguson

The disk library has now been updated as of June 3rd and you can find the new library list in the newsletter download section of the BBS (list will also be available at the meeting, and is available by request from the librarian...). The filename on the BBS for the file is LIB_8906 and is in archived format (you must unarchive it to view it).

I've added about forty new disks and the library now totals 262 disks of programs which are available to members. There is still more to come as time allows. The library is divided into 9 separate sections, an introduction and 8 separate categories for the convenience of the librarian (me) to ease the job of updating. (orders from the old listing will still be accepted) The 8 separate categories are as follows:

1000 - 1999 EDUCATIONAL PROGRAMS
2000 - 2999 ENTERTAINMENT AND GAMES
3000 - 3999 GRAPHICS AND DEMOS
4000 - 4999 MUSIC AND SONGS
5000 - 5999 PROGRAMMING LANGUAGES
7000 - 7999 UTILITY PROGRAMS
8000 - 8999 MISCELLANEOUS PROGRAMS

If you download the file off of the club BBS an introduction file called LIBRARY_IF is included which will print the entire list from the TI-Writer text formatter program. It prints just fine to an SG-10 printer (mine) in condensed print, with 8 lines per inch. I did this to save the group postage for mailing the list and to save myself paper on printing copies. If anyone has any trouble printing the list, you might want to check the transliteration codes at the beginning of the include file. They may not work with your configuration.

EDITORS NOTE: New lower prices are also in effect for library usage. Costs for ordering disks by mail are \$2 for the first disk and \$1 for each additional disk per order. Please try to limit your orders to around 5 disks per month to help the workload on the librarian. At meetings copies of disks are FREE if we use your disk or \$1 if we use our disk. Note that you must be a paid member to use the library.

IN THE NEWS

By Gary W. Cox

Having trouble with your new Star NX-1000 printer? It appears that the later versions of the NX-1000 are not compatible with the TI99/4a due to a problem in an EPROM chip located in the printer. Although the self test works fine and the printer appears to operate with other computers nothing is printed from the TI99/4a. The problem seems to be in just certain versions of the printers' EPROM. One version that I have found to be bad is version 1.5 while my NX-1000 has a version 1.31 and works fine. The version number is printed when the self test is performed and is also written on the EPROM itself which is located next to the dip switches under the cover. From what I have been able to determine Star is providing FREE of charge an updated EPROM to correct this problem. Locally repair for Star printers may be obtained from the National Repair Center located on Winchester road. Their phone number is (901) 366-6207. Many other repair centers are available nationwide. Otherwise you must call Star Technical Support at 1-900-860-9104. The charge for calling this number is \$2 for the first minute and \$1 for each additional minute. In my opinion this is quite steep, especially for a problem Star is responsible for. However, in calling their 800 number (800-537-8270) I was told that the 800 number is for authorized service centers only. Their old technical number is disconnected and in calling their general information number (714-768-7203) I was told that I must call the 900 number if I want service!

In response to my article in our April newsletter about Tenex, Roger Dooley President of Tenex writes to our group:

Recently, there have been rumors that Tenex is leaving the Texas Instruments market. These are not correct.

In fact, the sole action that we have taken is to eliminate a portion of our TI products which were characterized by one of two conditions:

1. low demand from TI owners.
2. higher than average return rates.

Many of the products dropped dated back 5 years or more, and were simply no longer in demand.

We intend to continue stocking Texas Instruments merchandise as long as there is a market for it.

The greatest danger to the preservation of the market, we feel, is that there is currently a very limited number of developers working on TI99/4a products. All software and hardware markets are driven by product introductions and upgrades of existing products; the fact that so little new commercial software and hardware are being introduced not

only makes life more challenging for firms like ours, but also encourages users to change to machines with more development activity.

We appreciate your interest and concern. We look forward to serving you in the future.

The letter is signed Roger B. Dooley President of Tenex. Thanks Roger for the letter, we are all glad you are sticking with the TI99/4a!

The following edited from the May 1989 Micropendius Magazine.

A database of users groups from around the world has been compiled by Andi Wise, newsletter editor for the Eugene, Oregon, TI99/4a Users Group. It is compiled in Mark Beck's Creative Filing System data manager and is available for a \$5 fee that goes to support the club, from the Eugene TI99/4a Users Group, P.O. Box 11313, Eugene, OR 97440.

Asgard Software recently introduced three new products to the TI marketplace. They are Page Pro 99, a page-making program, Page Pro Pics, a series of companion disks for Page Pro 99, and Music Pro, a music-composing program. Page Pro 99 from Ed Johnson, was developed over a 2 year period, according to Asgard Software. Compatible with the TI99/4a and the Geneve, the program is designed to create letterheads, signs, charts, maps, graphs, business forms, short documents and newsletters. The program operates in a VYSIWIG (what-you-see-is-what-you-get) mode. The printed page will look exactly like what is on the screen. Written in assembly language, Page Pro 99 sells for \$24.95. Requirements are 32K, XB and a disk system. The program also operates on the Geneve 9640.

As for Page Pro Pics, it is a set of five companion packages to Page Pro 99. It includes hundreds of large and detailed pictures for use with Page Pro 99. The five volumes and their contents are Volume 1 (animals), Volume 2 (Holidays), Volume 3 (Computer), Volume 4 (Home/Misc) and Volume 5 (people). Each volume sells for \$6.95 and require Page Pro 99.

Music Pro is a project of David Caron, Lucis Dorais, and the Ottawa TI99/4a Users Group. The program is described as a "word processor for music" or a MUSICAL PROCessor. Music Pro has a full featured editor that allows the user to create music by typing notes on a staff. The cursor is used to delete or insert notes and phrases and transform blocks of music to different durations or frequencies. Music Pro automatically takes care of different voices with different durations playing simultaneously. Music Pro can save the music scores and even print them in sheet music form on an Epson compatible printer. Sample songs are included with Music Pro as well as a detailed manual, keyboard overlay strip and keyboard note map. The program requires 32K, XB and a disk system. (The MUSICAL PRO is not compatible with the Geneve). The price is \$17.55.

For more information on the above Asgard Software products or to order write Asgard Software, P.O. Box 10306, Rockville, MD 20850 or call (703) 255-3085. Add 75 cents shipping for within the U.S. and \$3 Airmail elsewhere.

McCann Software of P.O. Box 34160, Omaha, NE 68134, is offering a version of TI-FORTH for the Geneve users for \$15. Included is a diskette with TI-FORTH for M-DOS, source code and documentation.

A window oriented program similar to GEOS on the Commodore 64 has recently been released for the TI99/4a. Written by Joe Ross, the program uses icons and a series of windows to perform a variety of functions, ranging from disk management operations to loading and running programs. Called cSHELL99, it is written in Clint Pulley's c99 and assembly. All assembly language routines are placed within "c" structure, and some of the routines include source code so that users may take advantage of and expand the basic system.

One of the program's apparent strengths is that users may use the program's loaders to execute "c" and assembly language programs and return to the DOS like shell environment when finished. The program requires an expansion system with 32K and disk drive. A joystick to control cursor movement and printer are optional. Included with the program is a comprehensive manual that describes the programs features as well as the use of loaders, "c" reference stack, REF/DEF table, system functions and globals available to the user. The author says that "interfacing with the cSHELL99 shell is rather easy process for both experienced and being beginning "c" programmers. Also included with the package is a c99 sound library, similar to the BASIC CALL SOUND command, the source code to a c99 graphics library, a c99 speech library and a variety of modules that demonstrate the ability of c99 to move between text, graphics and bitmap mode. It is not necessary to have a copy of c99 though to run cSHELL99. (c99 is available from Clint Pulley, 38 Townsend Ave., Burlington, Ontario, Canada L7T 1Y6, write to him for pricing and include a SASE). cSHELL99 sells for \$30 and is available from Joe Ross, 119 Knollwood Terrace, Clifton, New Jersey 07012.

Page Pro 99

The Page-Making
Software for
your TI-99/4A or
Myarc Geneve 9640

■ Page Pro 99 is a remarkable program that does one thing and one thing very well - it lets you compose a 66 line page full of text, graphics and lines quickly and easily. There are no formatters, no cryptic commands or functions - just a "what-you-is-what-you-get" screen, and the ability to paste in pictures and type text.

■ Page Pro 99 will allow you to put up to 28 pictures of any size or shape anywhere on the screen. It will let you type text in a complete large font and a small font of your choice (both with full upper and lower case, along with numbers and symbols), and draw lines anywhere you need them. You can easily create forms, advertisements, flyers, maps, graphs and charts, and even labels, certificates, signs, reports and newsletters. After you've created your page, you can print it out on your Epson or compatible printer in any of three densities, from "rough draft" up to reproduction-quality.

■ Page Pro 99 has many features to make producing your page as painless as possible. You can literally type in any direction (up, down, left or right), you have a host of text editing functions (insert/delete characters and lines), you can window around the page with ease using the standard TI-Writer keys, you can load in pictures and get rid of them at your option, you can read in a text file and paste it on the page, save a Page-Pro page as a text file, load in new fonts or line patterns, and more.

■ Page Pro 99 also comes with a collection of artwork and fonts, as well as utilities to convert TI-Artist fonts and instances into Page Pro 99 format, as well as make 2 column justified text for use in Page Pro 99 from your TI-Writer files.

■ We don't call Page Pro 99 a "desktop publishing program", but it lets you do more, more easily than many programs that claim to be. Page Pro 99 is so capable we did the manual entirely with the program, TI-Writer and standard TI-Artist fonts and instances.

■ Page Pro 99 requires 32K, disk and the Extended BASIC, TI-Writer or the Editor/Assembler module, and an Epson or compatible printer (Star, Panasonic, etc.). Some utilities require Extended BASIC. Complete documentation included.

\$24.95 &
\$.75 S&H

Canadian purchasers
please add \$50 more

Europe/Australia/
Asia, \$4.00 for
Air Mail Delivery

Visa and Mastercard Accepted

Asgard Software
P.O. Box 10306
Rockville, MD 20850
(703)255-3085

FOUR-A/TALK

Random ramblings about things TI.

By Bill Gaskill - June 1989

AAARRRRGGGHHH!!!

Once again I come to you on bended knees, begging your forgiveness for not keeping my promise (sort of) on the Genial Traveler Diskazines, and borrowing a title for this edition of Four-A/Talk from best friend Steve Mehr to express my frustration at having to admit the error of my ways once more. When I "really" got into the GT disks I discovered so much wonderful material that I realized each disk could easily fill an entire Four-A/Talk article, which would leave room for nothing else. Since your newsletter editor likes to spice up each edition with a variety of articles, by different authors, they would have had to cut the Four-A/Talk information down to a portion of what it should be. So, I have decided to do the GT reviews as separate articles. If room permits, you will find my overview of GT Volume 1 numbers 1 and 2 in this newsletter. If not, perhaps it will appear in a future edition.

WHAT'S HOT:

- TI-SORT from Insebot Inc., Art Green's TI-Writer (re-write) V4.3 (no it's not a typo, V.2 was covered last month), Jim Peterson's Public Domain Catalog, TimeLine99, Marty Kroll's CATLIB V1.5 and CATCOM companion to CATLIB, Randy Moore's Sector Editor for hard or floppy disks and Page Pro 99 from Asgard.

DISCOVERIES:

-The wizards from Florida, Insebot Inc., namely Dennis and Chris Faherty, have done it again! They have created an assembly language sort program that is without equal in the TI Community. The version that I beta-tested sorts TI-Base files, fixed length files from any program, delimited files from any program and data files created from Basic (and Xbasic) programs.

I was purposely given the file without any documentation and still managed to figure the program out in less than five minutes. It uses many of the familiar TI-Base interface routines, so it wasn't too difficult. A nice touch.

From what I can tell, TI-SORT is limited to 99,999 records in a file. No, that is not a typo. TI-SORT can order a data base that is one record short of one hundred thousand records. It uses a disk-caching method to sort large files, where blocks of data in 180 record increments are sorted (which takes 3-5 seconds per block!) and then a temporary file is written to disk for each block of data. When all records have been sorted the temporary files are used to reference the correct order of the records for

the write to disk of the sorted file. This does make the program disk intensive, but 99,999 on 24K of RAM? Come on! I'm not going to complain, are you?

I performed a few benchmarks to give you an idea of the speed of the program. I sorted a 2990 (999 sector) record file on my hard disk by a single field (you can sort by up to 8 fields). It took 13:49. The actual sorting of data took about 6:28. The remaining time was consumed in writing the sorted file back to disk. That might seem like a lot of time, but 3000 records is a pretty hefty data base by 99/4A standards.

I then took a TI-Base file that was 800 records long (268 sectors) and sorted it on a floppy disk. It took 13:03 to get the job done. The exact same file sorted by the exact same field on my hard disk took 3:03. So as you can see, the type of disk drive you use makes a substantial difference in sort speed. Using the hard disk saved a full ten minutes. A ram disk would be slightly faster than the hard drive.

TI-SORT works off of a floppy, ram disk or hard drive. As you can see from the benchmarks, it also sorts data that resides on any of the same media. The commercial release of TI-SORT is scheduled for the end of June. The price tag will be \$14.95 plus \$2.50 to cover shipping and handling. If you are interested in this jewel of a utility, write to:

Insebot Inc.
Box 291610
Fort Orange, Fl.
32029

You may also call them at 904-767-3922.

-Art Green's Macro Assembler is now in Version 7, with continued performance improvements. The TI-99/4A Object Code Linker is now in Version 3.

-Dick Altman's Fairware List, now managed by Steve Mehr, hasn't been updated since 1987. Steve is in need of some honest help from us in bringing the list up to snuff. If you have a program that you would like on the list, or if you know (from your own experience) that a particular piece of software that used to be fairware, is no longer fairware, or if you know that a fairware author's address has changed, PLEASE contact Steve with the information. The address again is:

Steve Mehr
633 Hollyburne Lane
Thousand Oaks, Ca. 91360

As an aside, you might be interested in knowing that I have put a little pizzazz into the Fairware List's organization. If Steve decides to go with it, folks who send for it may get the version that provides a menu of choices to browse through the list with, rather than the three TI-Writer files of the past.

NEWS:

-FEST-WEST '90 will be held in Tucson, Arizona February 17th-18th, 9am-5pm and 9am-3pm respectively. The Days Inn on Broadway in downtown Tucson has been chosen as the site. More on this in future columns. Thanks SouthWest 99ers!!!

-Art Green has released version 4.3 of his marvelous TI-Writer clone. The upgrade fixes a small bug in the indent routine that exists in V4.2 where you would save a file and the margins were not recalled when the file was reloaded.

-Insebot's Dennis Faherty has begun work on a "fully" hard disk compatible version of TI-Base. He hopes to have it out by mid-summer or earlier if all goes well. Also in the works is a stand-alone report generator for TI-Base. For those who have wondered, among the other features planned for TI-Base V3.0 are a repeat key to speed up data entry and to save you from having to type in a command each time you want to perform a similar function from the dot prompt, and a new directive that will support string searches anywhere within a string.

-Insebot's Chris Faherty is hard at work on TI-Artist Plus!, reported to be "much more" than just an upgrade to TI-Artist. No release date announced yet. Insebot's address;

-I've also heard that Martin Smolley of the NorthCoast 99ers has come up with some neat TI-Base routines to print graphic labels by manipulating the codes in the PRINTER driver file. What an innovative user he is. I'll bet he could write a book on all of the things that can make TI-Base do, if he could just find the time to write it.

-Assembly language wizard Marty Kroll is considering a hard disk version of his CATLIB disk library utility. More on this in a future Four-A/Talk hopefully.

-I just received a copy of Page Pro 99 from Asgard and will feature it in the next Four-A/Talk, or perhaps MICROpendium if John and Laura are interested. I can tell you already, from about 30 minutes of using it, that it is FUN!!!! The program is destined to be a hit in the TI Community, guaranteed. The price is \$24.95 plus \$.75 shipping and handling. If you are interested, Asgard may be contacted at:

Asgard Software
Box 10306
Rockville, Md.
20850

HARD DISK USER TIPS:

-Much to my delight, I have discovered that Myarc's NDMS, V1.28, the disk manager for my 20mb hard drive, may be accessed from FunnelWeb V4.10 that is being run off of the Horizon Ram Disk. Probably because of the way I have the HFDC configured (I use it only for the hard disk), I always had a problem getting NDMS to

performs properly when booted from the E/A5 loader in JJ's Menu on my Horizon Ras Disk. The program would load, but disk management functions would not work correctly. To get MDMS to work properly I had to insert the Editor/Assembler module in my console and load MDMS from it, after shutting the auto-boot feature of JJ's Menu off. Now, I just load FunnelWeb, access the E/A loaders, select loader three (3) and type in the correct directory and file name (WDS1.UTIL.MDMS in my case). Program performance is flawless and the access to it is ram/hard disk fast. I believe that I would never have truly been able to equate power computing with the 99/4A had I not purchased Myarc's HFDC and a hard disk. What a marvelous addition to my hardware!

THIS MONTH IN TI-99/4A HISTORY:

1979:

The TI-99/4 is unveiled but doesn't actually make it to market until early 1980 because of pre-production bugs that couldn't be worked out in time for the Christmas season.

-The new computer has a chiclet style keyboard and no lower case letter set, and it is supported by a line of stand alone peripheral devices that have to be "chained" together.

1981:

The TI-99/4A is unveiled at the Summer Consumer Electronics Show in Chicago. It has a suggested retail price of \$525 for just the console.

-Additional releases at the '81 Summer CES were TI LOGO, TEXNET, TELL, the Scott, Foresman ADDITION and SUBTRACTION I modules and the EDITOR/ASSEMBLER package.

-An external keyboard interface for the TI-99/4 is designed, and the plans introduced to the public by Mike Kovacich in May of 1981, only weeks before TI introduces the 4A with its improved keyboard.

-Denali Data, Oklahoma City, Oklahoma introduces a joystick adapter so that Atari joysticks can be used on the TI-99/4 Home Computer.

1982:

TI issues a full page ad in the Summer Consumer Electronics Show trade paper warning third-party software developers of possible legal action if they produce "unlicensed" software for the 99/4A.

-TI UK announces that the PE box is to be available in England by August.

1983:

Plans to introduce the TI-99/8 (the 64K upgrade computer for 99/4A owners) are shelved indefinitely. The beige colored, plastic

cased version of the 99/4A, with the new GROK, is released.

-Jim Peterson, 156 Collingwood Avenue Columbus, Ohio 43213, issues "Tips From TigerCub" #1.

-Prostick II joystick released.

1984:

Myarc releases MPES expansion system with DS/DD disk controller card.

-SunWare, a Lubbock, Texas firm, offers cartridge making service to programmers of 99/4A applications.

-TI establishes 800-TI-CARES phone.

-Assembly language DEBUGGER program is released to the public domain.

-HOMEWORK HELPER released by Navarone.

-Phil Barnes releases 99CALC, the first XB spreadsheet available for the TI-99. The program is advertised in the June issue of Computers and Electronics, on page 117.

-"32 Basic Programs for the TI-99/4A" book by Dilithium Press debuts.

-"The TI-99/4A Idea Book" book by David Ahl debuts in Creative Computing.

1985:

Great Lakes Software, Howell, Michigan announce the release of JOYPAINT 99, a graphics drawing program to compete with TI-ARTIST and the Australian produced GRAPHX.

-Nutmeg 99ers in Waterbury, Connecticut are formed with David Gallagher as the person to contact for membership.

-Harold Simmons, 9818-49th Avenue, in College Park, Md. 20740-1432, starts an all TI-99/4A museum.

-Millers Graphics releases EXPLORER.

-Navarone Industries releases Console Writer word processor in a module.

-Mark Sumner, CSI Design Group, who is later to become the first TI99/4A Sysop on GENie, releases "WINDOWS" for the TI Home Computer. The program is actually written by Ken Dibble.

1986:

Craig Miller sells the rights to The Smart Programmer to Richard Mitchell, Super 99 Monthly publisher. The two journals are merged under one name, The Smart Programmer, which will be published from

Sulphur, Louisiana.

-Tenex Computer Express begins offering MS-DOS and Apple clone computers in their TI-99/4A catalog.

1987:

Myarc receives an award from the Front Range 99er Computer Club of Colorado in appreciation for its support of the TI-99/4A computer community.

-Ryte Data's R/D Computing publishes a 64K memory map modification project.

-Ryte Data announces that it has a poor subscriber base for the R/D Newsletter, and that operations will cease if more interest is not generated.

-Monty Schmidt releases GPL assembler / linker for the 99/4A.

1988:

DataBiotics announces that the long-awaited GRAND RAM card for the PE Box will ship in July.

-Pilgrim's Pride, a long-time supplier and supporter of 99/4A products, closes its Hatboro, Pennsylvania retail store. Mail-order business is retained.

TRIVIA:

Did you know that;

-It is the "A" in the TMS9918A Video Display Processor chip that gave the 99/4A its name. The 99/4's screen controller chip is the TMS9918. Both are 40 pin silicon chips but the TMS9918A chip has a bit map mode that the TMS9918 does not.

-The TI-99/B came with Extended Basic and Pascal in ROM chips like the 4A has TI Basic.

-In July of 1981 TI Engineer Richard Tarrant submitted plans for the TI-99/7? The 99/7 was an upgrade plan to the 99/4 that provided software compatibility with the 99/4 but had 512 bytes of scratchpad workspace instead of the 256 bytes found on the 99/4, 90K of internal GROM instead of the 18K found on the 99/4, a 58 key keyboard with 4 rocker switches, instead of the 99/4's 40 key keyboard, bi-directional cassette interfacing, designed I assume to allow any cassette recorder to be used with the 99/7 instead of the limited number of recorders the 99/4 supported, 64K of expansion memory, support for an 80-column printer rather than the 32 column thermal printer that was the standard for the 99/4 and a disk controller that would handle 3 SS/SD or DS/SD diskettes. A new 300 baud modem was also planned that would support originate/answer capabilities rather than the originate only capabilities of the existing modem available for the 99/4. The 99/7 also featured a Pascal Interpreter built in, the same console

Basic as the 99/4, a cooling fan with system shut-down capabilities in overheat situations, a keyboard with 55 keys in a row/column matrix, a Fctn key, a Ctrl key, four function rocker switches and an LED indicator for modem carrier detect and software monitoring. One of the four rocker switches provided hardware selectable originate or answer status for the modem. I am unable to determine what the other three were designed for.

-MG's ADVANCED DIAGNOSTICS, written by Steve Hildon, was originally called MEMORY and DISK DIAGNOSTICS?

-Craig Miller was involved in a project in 1984 to create a SCI TECH Ram disk for the 99/4A that never came to fruition? The product was to have been available in 248, 504, 760 and 1016 sector models. It was also slated to have a 32K add-on feature that would allow for expansion memory directly on the ram disk instead of having to use the TI 32K card. Mention of it is made in MINI-MAG 99, along with Renoir and some other projects that MINI-MAG editor Leslyn Tepper was made privy to through her association with Jerry Price of TEX-COMP and and Bill Moseid of Model Masters.

-Bill Moseid's MINI-WRITER word processor for the Mini-Memory module, later marketed heavily by TEX-COMP as part of an AXIOM GP-100TI printer and MINI-WRITER word processing package, was originally slated to be picked up and produced by TI as a licensed word processing program for the 99/4A. The '83 bailout quashed the plans apparently.

-The famous Ashton-Tate firm that markets dBase for IBM and compatibles never had an Ashton? The firm was started by Larry Tate after he purchased the rights to market Wayne Ratliff's data base program. Larry gave it the name dBase, not Wayne. Tate has since died and the firm now is a corporation, but there never was anyone named Ashton. Mr. Tate just thought that the name had a certain ring to it.

STARLINK

By Gary W. Cox

The following information was obtained from the Dallas 99 Interface newsletter, a representative at Starlink and from the Galaxy BBS.

An alternative to PC-Pursuit! Starlink Communications, a division of GTC, Incorporated of Virginia Beach, VA recently announced a new asynchronous outdial service aimed at the personal computer owner who uses his computer for leisure time communications with computer Bulletin Board Systems (BBS's).

Starlink utilizes the Tyanet international packet switching network. This service is said to offer cleaner communications through the Tyanet network as well as more competitive pricing than the competition as well as offer three times more cities which can be accessed through the network. Over 150 cities are accessible through the network and the network is accessible through more than 800 Tyanet local access numbers. After establishing an account with Starlink a user can have his computer call his local Tyanet access number and enter his access number, Starlink account number, password, and the appropriate city that he wishes to initiate calls from. He is then connected to a modem in that city and can dial local numbers (data communications only) as if he were located there in that city.

There is a one time signup fee of \$25, a monthly account maintenance fee of \$10 and a \$1.50 per hour charge for connect time. There is no minimum usage charge and a user may use as much or as little time per month as desired at the \$1.50 rate, according to the information which I have obtained. Rates are slightly higher for Hawaii, Alaska and Canada.

GTC also operates the Galaxy Information Network, a nationally accessible BBS reachable through Starlink. This BBS offers up to the minute national, international, sports and entertainment news, a large file library, active message bases, games, multi-user teleconferencing and UPI news.

The Galaxy Information Network charges \$2.00 per hour connect time. When the Starlink charges are added, the total charge for using Galaxy is \$3.50 per hour. However, the messagebase and "chat" areas are accessible with just the \$1.50 Starlink access charge. Note that all rates quoted are NON-PRIMETIME (after 7:00pm) as daytime access is much more expensive!

Starlink's method of payment is by credit card or checkfree direct bank account debit. Users may sign up or obtain information about the service by calling (800) 321-0156 (VOICE only!) or by VIA computer at (804) 495-4636.

Further information on charges are as follows downloaded from the Galaxy BBS.

STARLINK CHARGES

REGISTRATION

STARLINK registration is a one-time non-refundable fee of \$25.00.

USAGE

All STARLINK accounts are charged a monthly \$10.00 service fee. Users in the Continental US are charged \$1.50/hr and NO KCHAR fee. STARLINK Hawaii accounts are charged \$1.50/hr and \$.02/Kchar. STARLINK Alaska accounts are charged \$2.50/hr and \$.05/Kchar. STARLINK Canada accounts are charged \$3.00/hr and \$.02/Kchar. These charges are for usage from 7pm - 6am Monday - Friday, all day Saturday, Sunday, and major US holidays based on your local access time zone. Charges for prime time are \$20.00/hr and \$.10/Kchar.

OTHER FEES

Change of Password, ID, or Username: \$20.00
Detailed Billing : \$5.00
Dishonored Checking Debit or CreditCard Charge: \$20.00

TELCO CHARGES, IF ANY, WILL BE ADDED TO YOUR BILL. PLEASE CONTACT THE TELCO OPERATOR OF THE OUTDIAL CITY IN QUESTION FOR ASSISTANCE.

I haven't used this service yet but it sounds like a good deal. Note that Memphis can be dialed into from the service thus BBS traffic may pick up here from many long distance callers!

GENIAL TRAVELER

Volume 1 Numbers 1 and 2

Overview by Bill Gaskill

The idea of a diskzine or magazine on disk is not a new one and it didn't start with the Genial Traveler issues. Apple owners had the heralded MICROzine product 2-3 years before the GT issues ever came to life. Nonetheless, Barry Traver can certainly be credited with bringing the concept to the 4A community, and with style.

Genial Traveler first appeared on the scene in September of 1985 with advance notice to the TI Community being published in a variety of locations including MICROpendium, Tiger Cub Software flyers and more. Currently, there are nine Genial Traveler floppies available, at a cost of \$36 per year. If you are not a GT subscriber, you REALLY should be. Some of the best information and public domain or fairware programs appear first in Genial Traveler. Contact;

GENIAL COMPUTERWARE
835 Green Valley Drive
Philadelphia, Pa. 19128
215-483-1379

After wrestling with a variety of ways to present the information, I have decided to do a disk at a time, with commentary on each of the files or programs contained on the disk being discussed. I hope that you find the information of use. Perhaps you will discover something truly useful that you didn't realize even existed, I did.

TRAVELER11-side one of the GT Volume 1 Number 1 floppy diskette.

2FONTS/S1 -assembley language source code files for 2FONTS/0
2FONTS/S2 program found on back side of GT Volume 1 diskette.

ARTICLES
ARTICLES/O -an XB program that loads the ARTICLES/O file below, and then reads the DV/80 file called MENU which contains the items listed on screen for you to select from. The ARTICLES program is a neat example of how extended basic and assembly language can be used together. There are CALL LOADS to change from the 28 column graphics mode to the 40 column text mode, display text in 40 column mode, routines that show how arrays created in extended basic can pass or retrieve data from assembly and more.

ARTSTGRPHX -article by Ron Albright on the pluses and minuses of TI-Artist and Graphx and how each can be used in conjunction with the other to benefit the user. A nice idea I suppose, but how many users own both programs?

DOUBLETEXT -article by Tom Freeman on how to print text files in double column.

DSRLNK/S -the source code for a Device Service Routine link for extended basic. This means that an extended basic program can gain access to the device polling routine inside the computer that controls input/output devices such as the RS232, your disk drives and the like. The file is the work of Texas Instruments and John Clulow.

FRIEND -a short note from Barry Traver asking subscribers not to pirate the GT disks for friends.

GENIAL -a text file authored by Barry Traver explaining the name GENIAL for the GT diskazines.

GOOD/GUYS -a list of popular TI vendors including Barry's favorite Pilgrim's Pride, which has since closed its store front operation and gone to mail order only.

LOAD -XB loader that boots the WELCOME/O file and then the ARTICLES/O file for menu display.

MENU -the menu system for access to the programs and files on side 1 of the disk. I puts the screen in 40 column (text) mode and also contains a new CALL LOAD that emulates the NEW command.

RAW/S -source code for Barry Travers Read And Write A/L utility.

RS232/AL -source code file for the tutorials found in RS232/TXT1 and RS232/TXT2. Authored by Mack McCormick, former technical editor for MICROpendium.

RS232/TXT1 -assembly language tutorial explaining how to by-pass the RS232 ROM by programming at the chip

level.

RS232/TXT2 -part 2 of above tutorial.

SIDEWYSTXT -documentation for SIDEWYS/CH and SIDEWYS/SC files on flip side of GT disk. Authored by Tom Freeman.

TINESAVING -tips for saving money when using CompuServe.

WELCOME/O -uncompressed object code file that is booted by the LOAD program on the GT disk. Displays the smiley faces and erases them when sprite collision occurs.

WELCOME/S -source code for the WELCOME/O file above that explains its origin in Peter Lottrup's Mini-Mem assembly book. It is the file used to set up the LOAD screen that erases the smiley faces. Good assembly language tutorial for sprite use.

XBALT/DIR -directions for using Todd Kaplan's XBALT/O file that is found on Traveler12 (the flip side of this disk.

TRAVELER12

2DRIVECOPY -an extended basic utility that copies the entire contents of a SS/SD diskette in one disk drive to a pre-formatted diskette in another drive.

2FONTS/O -a machine code program that allows the XB programmer to switch between the standard TI character set and a true lower case set that appears on screen just like the first TI-Writer true lower case upgrade in the CHAFAI file. Ugly but functional.

2FONTSDEMO -XB demo program for 2FONTS/O. CALL LINK("NEWSET") displays the true lower case letters, CALL LINK("OLDSET") restores the standard character set.

CATALOG -another neat IB utility that provides disk cataloging to screen or printer or filename. Written by assembly language wizard Todd Kaplan.

CHAR/O -an assembly language object code file that redefines the upper case character set so that upper case letters are instantly redefined as larger letters like those that appear in the Home Financial Decisions module. The assembly language programming was done by John Bohos. The file is accessed via a CALL LINK from any XB program. Very attractive and nicely done.

CHARDEMO -the XB demo program for CHAR/O.

CHGE/TO/O -an XB program containing a CALL LOAD statement that will change the first line number in your program to zero. Changes only one line of Basic or XB code, not the entire program.

DEFTABLE -Basic program to PEEK into memory and display or print the first and last addresses of the code that is currently in low memory. Reads E/A, Mini-Men and XB module addresses. If you run the program from GT's menu you will see that the CHARAI file and Barry's CHAR routine are in low memory from the CALL LOADs that occur when the GT LOAD program is booted.

DOUBLEPRNT -the actual Tom Freeman program to print two column text.

FIREBUTTON -a Barry Traver "Micro Tutorial" on how to detect which firebutton, on which joystick has been pressed. Presented as an IB program.

HIDECTOR -an XB program that allows you to place information from another disk or that you enter from the keyboard, into an unused sector on another disk. Makes use of the RAW utility, calculates the bit map of the target disk. Excellent example of how TI Disk Controller formatted disks are read, written to etc. Program contains typical example of Barry Traver humor along with CALL LOAD examples.

HOLEYMOLEY -an XB game by John Behnke of the Chicago TI Users Group. It pits you as the farmer against a mole who is trying to eat all of your carrots. I recall seeing an Atari 2600 game of a similar vein years back. Good graphics and support for speech. Requires a joystick to play it. We don't see such from John these days, since he joined Chicago's finest. Probably stuck on the graveyard shift.

LOAD -an interesting program that emulates the 8PL coded color bar screen that appears each time you turn your computer on. But for the fact that it tries to fake you out by telling you that "all circuits are busy", you couldn't tell the difference between it and the real thing. You would probably think that something has gone wrong with your console when you tried to load GT and had it return to the color bar screen. Cute program. Originally authored by John Hoge in 1980, modified by Barry Traver in 1984.

LOCKITUP -an XB/AL utility to make your floppy disks unreadable to others. Actually, I think it moves the contents of the File Allocation Table in sector 1 so that there are zeros in the first 3-4 bytes, thus preventing the disk from being cataloged, but still allowing you access to the files/programs because you know the names of them. Same type of

thing can be done with a sector editor, but with a great deal more effort, or with Advanced Diagnostics with less effort. AD just takes longer to load than LOCKITUP does.

MAKE/DATA -a utility to create the ASCII bit coding for sideways characters that are used by your printer. Companion program for Tom Freeman's SIDEVYS programs on the flip side of the GT1 disk.

MENU -XB program that lists/runs the contents of GT side two.

MULTIPLIBI -one of the MOST interesting programs on the disk. It demonstrates a method of multiplying large numbers that I have never seen before (so-called Russian Multiplication?). The multiplication is actually done by division and addition. The method works with small numbers too, but would not be needed. Of course if you use a calculator you don't need to learn this method either. But if you are interested in mental gyanastics involving numbers you will want to look at this program.

PENNEYTOSS -a game program that must be rigged! I played the computer and lost EVERY time. Fun to play though. No graphics, just text with minimal color. Written in TI Basic by Barry Traver.

PROTECTOR -XB/AL utility to write-protect all files on a disk.

RAW -an XB/AL utility that allows you to Read And Write to a single disk sector at a time. Authored by Barry Traver with credit for assistance in the development given to; Michael Riccio, Todd Kaplan, Paul Charlton, Chris Faherty and a couple of the other assembly language wizards that the TI Community has been blessed with.

RAW/MENU -XB program that loads all of the RAW-based utilities on the GT1 disk.

RAW/O -an assembly language object file that provides Read And Write capabilities to from and to a floppy or ram disk. Written by Barry Traver himself. The file is used throughout GT Volume 1 in many of the other programs. It was also used by John Johnson when he created the utilities for Bill Warren's PR-Base V1.0. A very useful utility for the extended basic programmer.

SEARCHMAZE -one of the best TI Basic games you will ever see, second only to Worm of Beemer I think. It has great graphics and is fun to play. You must search for and destroy a host of X's that are placed at various locations within a maze, all within 5 minutes. Written by Barry Traver from an idea in

Craig Miller's Smart Programmer's Guide To Sprites book. It obviously doesn't use sprites though.

- SECTORZERO** -simply the best program available to explain the use of sector zero on a floppy or ram disk. Runs out of extended basic and even allows you to analyze your own disk, down to the byte level. Neat, informative and very useful.
- SHOW/DV80** -an XB/AL program that invokes the 40-column text mode and then provides the ability to display text files of up to 30 sectors in length. Line feeds and carriage returns should be removed from the text file first.
- SIDEWYS/CH** -XB program that prints a text file sideways with true lower case letters based upon the CHARA1 file coding used in TI-Writer.
- SIDEWYS/SC** -XB program that prints a text file sideways using small capital letters for the lower case set.
- SWEEP/DISK** -an extended basic utility that makes use of Barry's RAW (Read And Write) assembly routine to re-write the file allocation table on the disk so that it appears the disk is empty. Save you the time and bother of initializing the disk.
- XBALT/O** -an assembly language utility to merge A/L code in with an XB program so that both are saved as an XB program., thus reducing disk space needed to store the program and load time since you don't have to CALL LOAD a DF/80 file. Although IBALT/O is the first of the two out of the gate, Barry Boone's SYSTEM is easier to use.

QUESTIONS/ANSWERS

By Gary W. Cox

Can the Terminal Emulator II (referred commonly as the TE2) be used to access our BBS? The answer is NO. The TE2 was once the only terminal program available for the TI99/4a. Since then many terminal programs have come out, most notably Fast-Term, 4A/Talk, Mass-Transfer and Telco. The most obvious limitation of the TE2 is it will operate only at 110 and 300bd! However, a more serious problem exists in that it has a problem in it's protocol. Although our BBS operates at No Parity, 8 bits and 1 stop bit setting the TE2 at these protocols produces no results and is in fact different from it's default settings. In trying all possible combinations of the protocols I was unable to properly communicate

with our BBS using TE2. I was able to get the BBS to send data over the screen but experienced some very strange results when I tried to type anything. Although I found TE2 will work on some systems and on systems running on a TI99/4a machine its capabilities compared to that in terminal programs written today are like the difference between a Vacuum Tube and Transistor! So if you ever think of getting on a BBS please obtain from our library a copy of MASS-TRANSFER or Telco and it will save you a lot of time and trouble.

What are the connections for a modem and printer cable?

For a parallel printer the connections are as follows:

PIO PRINTER

1	----	1
2	----	2
3	----	3
4	----	4
5	----	5
6	----	6
7	----	7
8	----	8
9	----	9
10	----	11
16	----	16

All other pins should not be connected. This pin configuration should be correct for most parallel printers and has been tested to work on my Gemini 10X and NX-1000. However, note that on the 16 pin PIO connector the pins are numbered differently from most connectors. The pins on the 16 pin PIO connector are as follows:

2 1 < top of connector 4 3 < keyway on this side 6 5 8 7 10 9 12
11 14 13 16 15

The main problem that I have found in cables is that some of the connections are not connected very well or is wired incorrectly.

As for the serial cable for a modem pins 2 and 3 need to be switched. In other words pin 2 on the RS232 goes to 3 on the modem and pin 3 on the RS232 goes to 2 on the modem. All other connections can go straight across.

Can I access unlimited Speech Capabilities of the Speech Synthesizer without using the TE2 cartridge? The answer is YES through a program called TEXT TO SPEECH. This is simply a copy of the TE2 speech section which can be loaded into Extended BASIC and uses in a similar manner as in the TE2 cartridge. Come to this months meeting for a demonstration!

IN THE MIDNIGHT HOUR

By Michael Dorman

New Uploads

There have been several new uploads to The Midnight Hour BBS since last month. They include:

- 4QUIZ.ARK - 4 Extended Basic quizzes that cover U.S. Presidents, States & Capitols, and more.
- UGLIST2 - TI-BASE listing of TI Users Groups.
By Bill Gaskill from Andi Wise's database.
- XCHAR.ARK - A program that allows use of CHARA1 files in Extended Basic programs.
- MAGFM22.ARK - Magic File Manipulator v.2.2 by Ben Hathaway. Direct connect transfer TI/IBM
- MAILLIST.ARK - Extended Basic program by Bill Gaskill Nice Mail List program.
- TRAPTRAK.ARK - Track Sector Editor from France. Works with TI & CorCoop disk controllers.
TRAPDOC.ARK - Does not work with Geneve. Abbreviated Docs in English. Full docs in French.
- UGALTNDX.ARK - Alternate indexes to use with UGLIST2.
- LIB_8906 - MidSouth 99 Users Group Library List as of 6/5/89

9640 files include:

- CALACAL.ARK - Screen Calendar Maker
- FBLOCKM.ARK - New 9640 Fortran BLOCKM routines.
- CURVE.ARK - 9640 Fortran Curve demo program.
- 3DBARCHA.ARK - 9640 Fortran demo - Bar Charts
- 8OCOLFIX - A program that fixes the screen glitch that appears after entering GPL and returning to MDOS 1.14 - by Beery Miller
- ABASIC.605 - Myarc's pre-beta release Advanced Basic MDOS.95H Dated 6/5/89. Use MDOS .95H for testing Adv. Basic only. Do not format floppies using HFDC at CRU >1100. Do not use MDHV with MDOS .95H.
- CHAOS2.ARK - A 9640 Fortran graphics demo. Neat.

ENCRYPT.ARK - A utility to encrypt/de-encrypt programs.

F77VSC99.ARK - Programs to compare 9640 Fortran and c99/MDOS speed.

INFOCOM.ARK - Runs Infocom programs in 80 columns and allows full path name saves and a graceful exit to MDOS. Wonderful!!!

NITEMUS - "A Little Night Music" by Mozart.
Programmed in c99 by Ken Gilliland.

PLOTHS.ARK - Revised c99/MDOS routines for pixel plotting.

TI Forth for MDOS

McCann Software has released TI Forth for MDOS. I ordered it two weeks ago and received a copy last week. One of the things I liked most about the new Forth is the ability to choose either file or disk based Forth. This Forth like the TI-released TI Forth uses 4 sectors to create a Forth "block". However, unlike TI-Forth, McCann's version allows you to select FILEFORTH which, in combination with the new word CREATE-FILE, allows you to select the size and disk location of a file named FORTHSCRNS. FORTHSCRNS is the file used by TI Forth for MDOS to represent the location of the file screens (or blocks). FORTHSCRNS can be any multiple of 4 sectors that will fit on a diskette.

This allows the user to create a disk that can be used with any type of TI disk or file copier. Under TI Forth (4A) this was impossible. This is a great advantage to developers who would like to distribute Forth programs without having to impose severe limits on the user on how to store and use the files.

TI Forth for MDOS does not come with many pre-built screens except for those necessary for the file/disk management scheme and the (well-done) 64 column editor. I found that most of the screens in TI Forth (4A) will not be of much use to the MDOS version because of the many differences in graphics handling.

However, TI Forth for MDOS appears to have completely allowed for all MDOS XOP calls. So, creating new graphic Forth screens should not be a major problem.

The calls are completely documented as are the new Forth words on the disk/file scheme. However, basic documentation on how to start and run TI Forth for MDOS was definitely lacking. McCann assumes the user to be a knowledgeable user of TI Forth and has the TI Forth manual.

This caused me a bit of trouble at the beginning but now I'm looking forward to using TI Forth for MDOS in the near future.

TI Forth for MDOS can be purchased for \$15.00 (including shipping & handling!!) from:

McCaan Software
P.O. Box 34160
Omaha, NE 68134

Reviews Wanted

Purchased some new software lately? (Or hardware?) Tidbits is in need of anyone who is willing to write a review of any new program or piece of hardware.

Just send your review to Michael Dorman or Gary Cox or upload to The Midnight Hour BBS. Paper submissions are welcome but diskette submissions are preferred. My address is:

Michael Dorman
1503 Clement Rd.
West Memphis, AR 72301

Any other type of articles are also gladly accepted. Remember, this is a USERS' group!!!

Et cetera

I have seen some very good notices and comments lately about 9640 News lately. Asgard News, for one, had a very favorable mini-review in the latest issue.

9640 News is a diskazine for the Myarc Geneve 9640 that is published by our very own Beery Miller. Great job, Beery!!

Speaking of our own, Gary Cox has had several articles published lately by MicroPendium. Congratulations as well, Gary! The talent in our users group is very strong and we should all feel proud.

NOTICE

Information contained in TidBits is accurate and true to the best of our knowledge. Viewpoints and opinions expressed in TidBits are not necessarily that of the Mid-South 99'ers. We welcome any opinions/corrections from our readers. Articles may be reprinted elsewhere as long as credit is given to the author and newsletter.

GROUP INFO

Visitors and potential members may receive 3 free issues of Tidbits while they decide if they wish to join (no obligation). On the top of your label is a code. A 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. A dollar sign (\$) on the label will indicate that your dues are due. The library is open only to members. Library list is \$1. Mail order disk library access is \$2 for the first disk and \$1 for each additional 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 correspondence to group address.

CALENDAR

MEETINGS: June 15, July 20, August 17 (3rd Thursday!)
WORKSHOPS: June 24, July 22, August 26 (4th Saturday!)

24HR TI BULLETIN BOARD

The Midnight Hour BIS 300/1200/2400/9600 Hayes 501-735-9980
Dial 735-9980 from Memphis area for toll free call.

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

MEMBERSHIP APPLICATION

NAME _____ ; \$15.00 FAMILY
ADDRESS _____ ; \$10.00 JUNIOR (under 15)
CITY _____ ST _____ ZIP _____
PHONE() - _____ ; INTERESTS _____

EQUIPMENT, ETC. _____

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