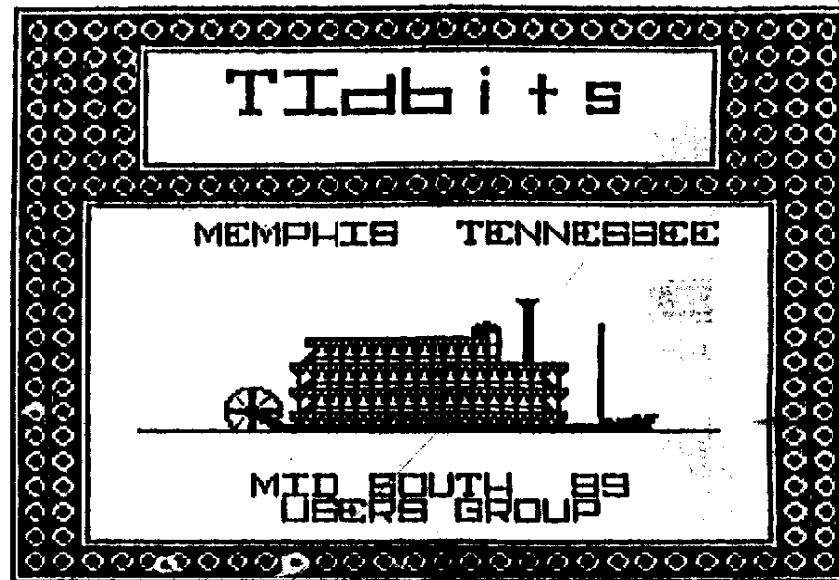
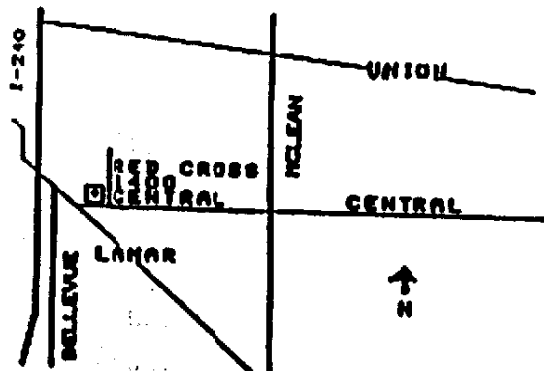


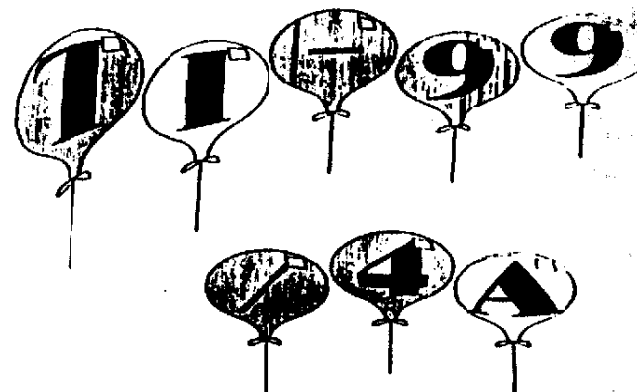
NOTICES

MEETING
 7:00 P.M.
 Thursday, June 21st
 Red Cross Building
 1400 Central Ave.

WORKSHOP
 9:00 am - 12 noon
 Saturday, June 23rd
 To Be Announced



June 1990 Issue



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



UG 2/86
 DALLAS TI USER GROUP
 P.O. BOX 29863
 DALLAS, TX 75229

FIRST CLASS MAIL

T I D B I T S

OFFICERS

Gary Cox	PRESIDENT	901-358-0667
Richard Hiller	VICE-PRESIDENT	901-794-9945
Michael Dorman	SECRETARY	501-732-5126
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David Ferguson	Disk Librarian	901-795-3287
Pierre Lamontagne	CO-Librarian	901-386-1513
Michael Dorman	Editor - Newsletter	501-732-5126
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Mac Swope	Chairman - Equipment	901-363-3880
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PRESIDENT'S BIT

By Gary W. Cox

At last months meeting we tried something new which turned out quite well and that was having snack food and drinks at the meeting. We will be trying that again at this months meeting.

As a reminder note Pierre's BBS is still up and going strong. The number is (901) 386-1760. Give it a try!

I have mentioned before another group called the Home Computer Users Group supporting all computers in general but geared more toward IBM compatibles. However, the group is designed to support the home use of computers rather than business applications. The group meets at 6:30 the 4th Tuesday of each month at the new auditorium at State Tech. Check it out! This months meeting will be a presentation of Weather Forecasting using programs and weather services VIA your computer. The demonstration will be by yours truly...

Several people asked what happened to Bill Gaskill's article last month. I spoke with Bill for about an hour on the phone (at his expense!) and it appears that a monthly article has become more than he can do right now. Just collecting the information for his monthly article is a great time consuming task! However, he does plan on continuing an article or two every so often and will have many articles appearing in Micropendium. Plus he has sent us a few new articles for the newsletter for the next few months. Thanks Bill!!

C ya at the meeting...

PROGRAM BIT

Meeting: 7:00pm, June 21, 1990 - Red Cross Building

- 6:30pm - Doors Open
- 7:00pm - General Discussion
- 7:30pm - Demonstration of ROS 8 Operating System for the Horizon Ras Disk. This is the latest operating system and will specifically take advantage of Rambo for the readisk! Demonstration by Jim Saenenes.
- 7:45pm - Demonstration of The Missing Link. Demonstration by Jim Saenenes.

Plus Jim will give a pre-view (if ready) of a program he is working on called "Contents" which can be used to keep track of files, books, tapes or just anything that has a table of contents in it.

9:30pm - Clean Up Period

9:45pm - Late dinner at location to be announced at meeting.

Plus snack food and drinks will be available at the meeting.

IN THE NEWS

By Gary V. Cox

Version 3.0 of TI BASE is now available. Many enhancements and time saving abilities have been added. Owners of previous versions may upgrade for \$14.94 plus \$3 shipping. Those who purchased TI BASE after March 31, 1990 can obtain a free upgrade (plus \$3 shipping). For the free upgrade be sure to include your sales receipt and both disks, other upgrades just return both disks...

Texaments has offered our group discounts effective until July 30th on many of their products. The products and prices are as follows: TI BASE version 3.0 for \$19.95, TI Artist Plus for \$19.95, Artoons for \$10.95, The Missing Link for \$20.95, Guidelines for \$6.95 and \$2 off of any TI BASE application. The savings range up to \$5 per program plus with enough orders shipping charges are also lower! If interested in any of the discounts let us know at this months meeting.

Also new from Texaments is Artoons, a huge 3 disk set, contains precision drawings of all your favorite cartoon characters...like The Simpsons, Peanuts Gang, scenes from The Far Side, and Muppet characters, to name a few. There are over 50 cartoon drawings in this fun-filled package for TI Artist users. All drawings are stored in the popular instance format. \$12.95 plus \$2.50 shipping.

Also according to Texaments, shipment of all Myarc products has been delayed due to Myarc's inability to ship products on a timely basis. If you have not heard from Texaments after placing your order don't worry "as soon as Myarc ships us our order, we will immediately ship yours." It is recommend that you now call Texaments to find out the availability of Myarc products before placing your order.

For more information contact Texaments at 53 Center Street, Patchogue, NY 11772, phone (516) 475-3480 (voice), (516) 475-6463 (BBS).

New from Rave 99 of 112 Ranbling Road, Vernon, CT 06066 is a new Expansion Chassis. The new chassis is designed to use the existing TI or Gaseva PEB cards and disk drives. A 200 watt power supply is provided for "more than enough power for most applications". The new chassis has slots for 8 expansion cards and contains a power switch, keylock, turbo switch, power LED,

Hard Disk LED, and Turbo LED. Model PE/2-A replaces the original TI PEB while model PE/2-B provides additional space to allow the TI motherboard to be installed in the chassis. Estimated cost for the PE/2-A is \$275 and the PE/2-B is \$325 with \$12.50 shipping. For more information call Rave 99 at (203) 871-7824.

A mesorial disk of Bill Knecht's music is being made available. It contains 63 songs of Religious, Christmas and Popular songs with Graphics. It will be formatted to suit your system (DS/DD, DS/SD, SS/SD). Price is \$10 per complete program and proceeds will be used to purchase hymnals for the church where Bill was a member. Mail donations (\$10) to his father, Henry Knecht, 3309 Flamborough, Pasadena, TX 77503 (713) 473-8870.

As for what went on at the Lima TI faire here is a message downloaded from Genie from Barry Travler giving a brief summary of the event.

Well, I'm back from the Lima Faire (first TI faire I've been able to attend since Tucson), and I'm glad to report that things are alive and well with the TI-99/4A and Myarc 9640, and the Faire was a resounding success.

Speakers (in alphabetical order) included Chris Bobbitt, Gary Bowser, Charles Good, Bruce Harrison, Jim Horn, Irwin Hott, Harold Hoyt, Bill Hudson, Beery Miller, Bud Mills, Jim Peterson, Karl Ronstedt, Paul Scheidemann, Gary Taylor, and myself. (By the way, user groups - not individuals, please! - may order the three videotapes - including at least 16 hours of presentations - from Charles Good at cost by sending him either \$15 or three new blank tapes plus \$3 for shipping; his address is Dr. Charles Good, Box 647, Venedocia, OH 45894.)

I don't have a list of the vendors (and didn't have much of an opportunity to travel around, since I had a table myself), but it seemed like most major vendors were represented (which the list of speakers appears to confirm). In addition, a surprisingly large number of user groups had tables (more than last year, I believe), which is certainly an encouraging sign as to our continued survival as a TI community. (For example, one user group that I was glad to get to know better who had a table at Lima was the Kawartha 99ers User Group from Peterborough, Ontario, Canada.)

Here's some of the news relating to the Lima Faire:

Chris Pratt of ESD (Electronic Systems Development Corp.) announced plans to release a hard and floppy disk controller. According to ESD, the card will have "a new revolutionary design using surface mount parts." Reportedly, its "unique design eliminates heat problems on the card." Moreover, the card "features an EEPROM which allows future DSR upgrades to be loaded by disk," and "set-up information stored in the EEPROM eliminates dip switches on the board." (Modestly, ESD claims that the card is "designed by an electronics and computer corporation which supports its users." We'll see....)

At the show, Charles Good (at whose home I stayed while at Lima;

thanks, Charles, for the kind hospitality, and thanks to Ohio State University Lima Campus for their hosting of the "T.I. Computer Multi User Group Conference" on May 26, 1990!) introduced version 4.3 of Funnelweb, which has some nice new features (especially for those who have 80-column cards).

Jia Peterson released many Tigercub Software programs (with exception of the Nuts Bolts disks) for FREE DISTRIBUTION, providing that no price or copying fee is charged. (This is brand-new news; the new Tigercub programs are not included in the latest TI-PD catalog uploaded to this network. If you want more information, send \$1.00 to Jia Peterson, Tigercub Software, 156 Collingwood Avenue, Columbus, OH 43213, requesting his latest TI-PD catalog, including supplement #8.)

Harrison Software has a great new disk of music out, "Mozart Serenade," which includes "Eine Kleine Nachtmusik" (K. 525), 2 piano sonatas (K. 311 and K. 331, the latter containing "Rondo alla Turca"), and 12 variations on "Ah! vous dirai-je, maman" ("Twinkle, Twinkle, Little Star") (K. 265). (If you want a copy, send \$6.00 to Harrison Software, 5705 40th Place, Hyattsville, MD 20781, specifying whether you want it in BSSD or on a SSS D "flippy.")

William A. Shores, 5737 Glendale Drive, Pockport, NY 14094 introduced an Extended BASIC Module Expander, which gives you XB and 5 other cartridge selections all in one, with the hardware kit being available for \$25 plus \$3 shipping (although there is an important limitation: only modules with 16-pin gross can be used with the E/B Module Expander). (Before buying, you should also check out the module expander available from Gary Bowser, Oasis Pensive Abcutors, 432 Jarvis Street, Suite 502, Toronto, Ontario, Canada M4Y 2H3.)

Lots of other new stuff was there as well (e.g., Brad Snyder's The Animator, available from Asgard Software, P.O. Box 10306, Rockville, MD 20849), but I think I've said enough to show that there's lots of action going on, so keep on computin'!

The following edited from the May 1990 Micropendium:

Donaldson Software of Buckingham, Quebec, Canada has ceased operations according to Floyd Donaldson of the company. Donaldson Software produced mainly cassette based software for the TI99/4a.

LGMA Products has relocated to 5618 AppleButter Hill Rd., Coopersburg, PA 18036, according to Al Beard of the company. LGMA products include 99 Fortran and 9640 Fortran...

Asgard Software has released two new adventures for the Adventure module. Castle Darkholm and Rattlesnake Bend. Both adventures are available on cassette or disk for a suggested retail price of \$8.95 each.

Also now being sold is Spell It! described as compatible with any word processor which can store a file in D/V 80 format. Spell It! would seem to be quite a comprehensive spell checker and a big

step upward from previous spelling checkers! The three disk SS/SD version of 25,000 words sells for \$24.95, DS/DD version of 25,000 words for \$19.95 and the HDPC version of more than 250,000 words for \$34.95 plus shipping of \$2.50. We should have a review of it in our newsletter soon and a demonstration of it at this month or next month's meeting. For more information about Spell It! contact Asgard Software at P.O. Box 10306, Rockville, MD 20849 or call (703) 255-3085.

That's the news for this month!

FOR SALE

Thomson 4120 color monitor. Monitor accepts RGB analog, RGBI and composite video signals and thus will work with the TI99/4a, any IBM compatible using CGA and is perfect for the Geneve 9640. Monitor provides an 80 column display when used with the Geneve or compatible video card. Asking \$150 (plus shipping if shipped out of town). If interested contact Gary Cox at (901) 358-0667.

THE MISSING LINK

A New Operating Environment for XB Users

Review by Bill Gaskill

The Missing Link (TML), which was written by EZ-KEYS author Harry Wilhelm, is an assembly language program that gives Extended Basic users and programmers access to the 99/4A's bit-mapped graphics display mode. Programmers with the ability to work in assembly gained access to this mode when TI brought out Editor/Assembler, but it has never been directly accessible to Extended Basic programmers. TML has changed all that. You can now write programs in Extended Basic that display the same kind of stunning detail and graphics that appear in programs like Parsec or MunchMan. Even if you are not a programmer, you can still benefit from TML through applications that are written in the TML environment.

THE PRODUCT:

The \$24.95 (plus \$2.50 S/H) package comes with a SS/SD diskette and a laser-printed, 30-plus page manual. There is no specific loader provided, just RUN "DSK#.TML" is all that's required. You must have a 32K memory expansion card or unit, and either TI's Extended Basic V110 or the Triton/R9 Super Extended Basic module. At least one SS/SD disk drive is required.

SUPPORT:

The Missing Link is warranted for a 90 period from date of purchase, with a \$5.00 replacement fee required after the 90 day warranty has expired. No upgrade policy on the program has been announced to my knowledge. The usual Textants upgrade policy offers upgrades at 40% of the original purchase price with the return of the original diskette. Free support after the sale is offered by Textants via queries that are addressed to the author, through Textants.

OVERVIEW:

The Missing Link is a programming environment that supports the creation of peripheral applications in such the same way that TI-Base does through its command file programming language. The "platform", in this case TML, provides the environment and the appropriate commands to access that environment, then you provide the custom code by writing your programs using TML supported statements. With the introduction of TML the Extended Basic programmer has a powerful new tool for professional application development with high-res graphics, and the Extended Basic user has the ability to access those applications, from nothing more than the Extended Basic module (and 32K memory of course).

A program called PaperSaver, that comes on the TML disk, will give you a superb idea of what I mean when I use the term "professional application development". PaperSaver is a multi-window, multi-font program that displays a "preview page" of a formatted TI-Writer document. Along with the display of the page, which shows exactly how the document will look when printed, two other windows on the same screen allow you to edit the contents of the page or just read it if you like. Of course you can print it too. This is ALL done with an Extended Basic program. If you buy the \$3.00 demo of The Missing Link you get to see PaperSaver in action too, though it is not the full-bore program.

FEATURES:

TML is feature-laden, but not intimidating. It supports windows, multiple colors, multiple fonts, varying text formats, Cartesian Graphics (lines, circles, boxes etc.), TI LOGO-like turtle graphics, Sprite Graphics, it both loads and saves TI-Artist pictures and it even has a single-density screen dup feature that you can see in use in the Mutual Fund Performance program that accompanies this article. While you will have to learn how to "tweak" The Missing Link to make your XB program fit it's environment, you DON'T have to learn a new programming language to take advantage of all of the powerful features that it offers. The list below gives you an idea of the command structure required.

CALL LINK("CLS")-clears the screen.
CALL LINK("COLOR",16,5)-makes the screen blue with white text.
CALL LINK("PE")-sets the status of the pen (that you draw with) to pen erase.

CALL LINK("WINDOW",r1,c1,r2,c2)-defines the upper left then lower right corners of a window.
CALL LINK("PRINT",row,column,string, number or string variable)-displays text or numbers on the screen.
CALL LINK("INPUT",row,column,string,number variable,length,prompt string)-accepts input from the screen, with input parameters for length and suggested responses)

As you can see, there is not a lot of mystery to the commands. Except where features unique to The Missing Link are called, like CALL LINK("PIXEL",row,column,FG color,BG color), the CALLS are much like most of the 40 Column display packages available for the 99/4A. Creating the commands with that kind of familiar structure is a credit to Harry Wilhelm's foresight, and it makes the package that much friendlier to the first-time or novice user.

PROGRAM OPERATION:

You don't have to be a wizard to figure out how to use The Missing Link, or even how to set it up if you want to change some of the default parameters. That which isn't clearly explained, or already obvious on the screen displays, is covered well in the manual when it comes to the mechanics of getting the program up to speed. After typing in OLD "DSK1.TML" and RUN or just RUN "DSK1.TML" you are prompted to choose between Myarc or TI controller cards (because it makes a difference on how many files you can have open at the same time) and then whether you want to use the 16 color mode or the two color mode. That's about it. If you want to change default fonts or other parameters the screen displays are again functional and the manual answered any questions that I came up with.

PERFORMANCE:

The Missing Link proved to be a flawless performer, with no crashes or lockups or any other unwanted surprises. Speed is on par with what an Extended Basic program without TML can produce. I saw no indication that beeps, honks or any CALL SOUNDS are supported by The Missing Link.

One of the things that you are advised of right up front with TML is how much of the VDP RAM (Stack) is taken up in gaining access to that Bit-Mapped Graphics mode through Extended Basic. It's a lot. Enough so, that you will have to watch your use of string variables in program design. There just isn't a whole lot of room left for large arrays and such. So sloppy or indiscriminate use of string variables won't cut it.

EASE OF USE:

With the exception of a couple of programming things that I couldn't find in the manual, I found TML pretty painless to use. One of the biggest reasons for that is the fact that I already program in Extended Basic, so I am not really learning a new language. I am simply taking advantage of the enhancements to

Extended Basic that The Missing Link has given me. TML scores high in ease of use because Harry Wilhelm has opted to make virtually all of the power of the program available through the familiar CALL LINKs and CALL LOADs that I grew up with.

DOCUMENTATION:

Despite that fact that The Missing Link comes with 31 pages of detailed instructions, there were still some questions that I couldn't find the answers to. The biggest one was how to convert the Row and Column positioning that I am used to using in the XB Graphics mode, to the dot-row/dot-column designations required for TML screen display and input. Harry Wilhelm provided the answer to this by explaining that I needed only multiply the graphics row or column number times 8 and then subtract 7 to come up with the equivalent bit-map position. In other words, the formula is the same as that used in determining Sprite positions. This applies only to the default 8 X 8 font though. The other fonts require some experimentation on your part.

I also found experimentation necessary when designing and then using windows. I discovered that a window must be called before it can be used, and it is called by redrawing it. So I discovered that routines to draw and use windows are best placed as CALL SUBs at the end of your XB program or at least as subroutines that are accessed with a GOSUB and RETURN, because they are accessed often. Other experimentation revealed at least a workable way to do inverse video. I couldn't find instructions on that in the manual either, though the manual does make reference to the fact that it can be done.

Overall, the manual covers a lot of ground, but it skims over some of the material too quickly. It ignores some areas all together and proved to be a frustration to me at first. From an appearance aspect, the manual is on par with some of the best produced in the TI community. From a content point of view I rate the documentation as average for the most part and inadequate in a few areas. The manual is not TML's strong point.

CONCLUSION:

The Missing Link is a VERY impressive programming environment, that cries out for some innovative applications along the line of the PaperSaver program that comes with the package. Though TML sports a self-professed limitation in the amount of stack space available for string use, the author shows us how that limitation can largely be overcome through the judicious use of DATA statements and recurring use of variables. With nothing more than familiar Extended Basic-like programming statements, anyone can create superb graphics or convert existing XB programs to the TML environment. I took the Mutual Fund Performance program that appeared in the December 1988 MICROpendium and converted it to the TML environment in less than an hour, and that was while I was still learning the ins and outs of TML.

While I can't honestly say that The Missing Link has the same

impact on the TI community as the introduction of the Editor/Assembler package did back in 1981, I think it comes close. The Missing Link has a much broader audience. I would guess that most every 99/4A still in use has the Extended Basic module plugged in most of the time. If this statement fits in your case, then The Missing Link is for you. It is an excellent application that is sure to find a place in your software library.

REPORT CARD:

PERFORMANCE:.....A
EASE OF USE.....A-
DOCUMENTATION.....C+
VALUE.....A+
FINAL GRADE.....A+

BERLIN TI'ERS!

By Martin Zeddies

EDITORS NOTE: This article comes to us from our group member in West Germany, Martin Zeddies. Article has been edited for proper English translation.

The regional TI99/4A meeting in Berlin.

Not only in the the United states do users of the TI 99/4A computer system exist but many TI'ers are also living in other countries around the globe and you can find some of these computer freaks in Germany too! One german computer group has a base in Berlin and meet once a year for a regional meeting.

This article talks about the meeting of the 19th and 28th of April 1990 in Berlin, Germany.

The meeting started in the evening of a Saturday in a little pub near the "Kurfuerstendamm", the biggest shopping street in the town. Last year I met 15 people at the meeting but Mr. Franz Neudert, commented to me before that he thinks that this year some people would like to come to the meeting. So I was very curious as I entered the pub this time.

As I walked in this Saturday I saw more than 40 people in the room! Some are well known and others I never have seen before and some people were there from EAST-Germany because the political changes of November 9th 1989 made that possible.

This evening I stayed from 8pm to 12pm in the pub and talking with many users about programming, new software and other TI related subjects. Many WEST users expressed interest in the handling of the TI 99/4s in EAST-Germany. We heard stories about smuggling a TI-console to the East. I heard that many people in East-Germany only 'work' with just a TI99/4a console. Most all EAST-german users were looking for modules like TI-EXTENDED BASIC. One

East-user even built a copy of an Expansion Box at home after he got the plans and the IC's from the West and he showed the working box during the second day of the meeting.

The last few people left the meeting at 12pm to go to their hotels because the next point of the meeting was a city sightseeing tour.

This tour started on Sunday at 8am and went over 2 hours through some interested points of EAST and WEST-Berlin. All participants were drives -in small groups - in their private car's. One well known speaker was on board each of the cars. This year many WEST-Germans, which drove hundreds of miles to visit the regional Berlin meeting, made for a lot of fun at this very special kind of sightseeing tour.

The sightseeing tour ended at 10am and the TI-freaks began to set up there computer systems at the meeting point.

The 2nd day of the regional TI99/4A meeting began with a short speech of the leader of the TI 99/4A User group in which he thanked all the people that came to the meeting. Very cordial was the receptions of the EAST-German users. Many WEST-TI freaks gave the EAST any tips where they can get softwares. Some of the others had presents for the new EAST friends including books and modules.

Then some TI-FREAKS gave an introduction of very new TI-99 software which was programmed in Germany. The greatest hits was a XB-Compiler which translated XB-Programs into E/A programs which can then be run with the Editor Assembler module. The author of the XB compiler said that he has had some problems with some special not so often used XB-functions though. But in my eyes his XB-Compiler looks very good and it took only 3 months for the programmer to write his compiler.

Another great software product called MEMORY MANAGER was programmed by Christopher Winter who wrote C-COPY some time before. My feeling is that with MEMORY MANGER you can handle nearly all functions on a TI 99/4A computer system. This program is a MUST for each full time TI 99/4A computer freak.

The last great software product was the newest version of the YAPP graphic program which is programmed by Alexander Hulpks. The actual version number is now 0.47 and the program will operate using a CORCOMP Disk controller. In the older versions of YAPP errors existed which made the use of the Corcomp controller a problem.

The biggest news on the TI 99/4A user meeting in Berlin was the introduction of the new Floppy disk controller of the SYSTEM 99 USER GROUP through Michael Becker. This controller can handle diskettes in DSDD format very quickly and many were sold at the meeting for only 350 DM (WEST-mark). However, on the GENEVE the controller may not work correctly. On our tests at the meeting the new SYS99-Disk controller had no problems with access after running 10 minutes with the GENEVE. One function that you notice about the card is that depending on if the card is reading or writing the LED on the card will turn either GREEN or RED. The

overall construction of the hardware the SYS99-Disk controller made a very good impression. Plus many of the chips on the card can be changed without a soldering iron since sockets are used to plug them in!

That's all that I like to write about the 2nd regional TI 99/4A User meeting in Berlin. I hope that you have enjoyed this article in the TIBbits newsletter. Your member Martin Zeddes !

TI-BASE V. 3.0

IT WILL LEAVE YOU BREATHLESS

(C) 1990 by Bill Gaskill

The introduction of TI-Base V3.0 caught me by surprise. Recently, I had been musing about how the limitations of V2.03 were beginning to stifle my creative efforts, when suddenly an offer to beta test a copy of V3.0 came my way. A conversation with Steve Lambert from Texaments a couple months back had sort of warned me that there was a version 3.0 in the works, but I had no indication of how far along it was. Then, about a month ago, I received a call from TI-Base author Dennis Faherty asking if I would be interested in beta testing TI-Base V3.0. Needless to say I jumped at the opportunity. When the postman delivered V3.0 I cranked up my system and put the new release through the paces. What I found in this newest version of TI-Base left me breathless! When V3.0 is released in May or June, it will leave you breathless too.

After having spent about 100 hours on the program it is my opinion that TI-Base V3.0 is indisputably the single most flexible data base management tool in the 99/4A or 9640 world. It is arguably also one of the best overall productivity tools ever written for our computer, and with the enhancements made to V3.0, now deserves to be considered on par with TI-Writer and Multiplan as part of the "big three" in productivity software.

From an outward appearance, V3.0 looks no different than version 2.0 or any of the maintenance releases that followed V2.0 (V2.01, 2.02, 2.03 and 2.04). But inside, the program is incredibly enhanced, and so feature-packed that it appears Incebot Inc. was able to add most if not all user-suggested improvements, and then they threw in some more of their own.

Right away you will notice that the program disk is virtually full, where previous versions had somewhere around 300 sectors of programming code and support files. The OVLAY/P file, which contains the program segments like CATALOG, COLOR, LIST and the like, is some 30 sectors larger itself. Nothing was given up in the new version to make room for the enhancements though, so you still have the familiar TI-Base tools at your disposal, along with over 20 MAJOR additions or enhancements to the package.

Despite the larger programs, loading times have not suffered. In testing V2.03 versus V3.0, I found that the hard disk load time actually dropped some 27 percent from V2.03 to V3.0, while floppy disk load times increased slightly. Figure 1 lists the comparisons, using the most common loaders that TI-Base supports.

LOADING TIMES COMPARISON		
	V2.03	V3.0
Hard Disk E/A5 loader	10.25	7.46
Floppy Disk KB loader	68.53	76.00
Floppy Disk E/A5 loader	55.18	62.00
Floppy Disk E/A3 loader	not tested	
Floppy Disk MMem loader	not tested	

Figure 1.

WHAT'S NEW:

What's new? Plenty! If my thirteen year old were writing this article he would call V3.0 "sweet". It is truly a superb blend of the old and the new that is painless to upgrade to, since no compatibility is lost in command or data file structures, and it is more flexible, powerful, fault tolerant and feature packed than ever before. Writing command files still requires knowledge of the TIBCPPL (TI-Base Command File Programming Language), but there are SO many more tools to work with that it is a custom application programmer's dream. But it is a users dream too, since so much more can now be accomplished directly from the dot prompt. That means that the non-programmers who want a powerful data base can also take advantage of TI-Base more than ever before.

NEW OR ENHANCED FEATURES:

NEW FEATURES/ENHANCEMENTS
{ ("Contains" directive)
APPEND TO/FROM
AVERAGE
command retrieval at dot prompt
CATALOG enhancement
CLOSE enhancement
COMMAND FILE EDITOR enhancement
CR/LF ON or OFF
DISPLAY of printed output enhancement
ERASE LINE (Fctn 3)
FORMAT (in reports/displays)
GO directive
INSERT LINE (Fctn 4)
INSTALL
INVERSE ON or OFF
LEN
LITERAL print or display capability
MACRO feature added

MODIFY STRUCTURE enhancement	}
READCHAR emulates CALL KEY	}
REPEAT feature for display, print, write	}
REPORT	}
SCOPE added to DELETE and RECALL	}
SUBSTR	}
SUM FOR/SUM TO enhancement	}

Figure 2.

-APPEND TO/FROM; allows you to merge two like files with assembly language speed instead of having to write a command file to do it. This is a tremendous feature! Earlier this month I wrote a MERGE program for Dino Fioramenti in Dallas, so that he could merge his commercial mailing lists. It took some 70 lines of CPPL code to get the job done, and because the program is interpreted, it does not exactly operate at lightning-quick speed. With V3.0 the job can be done in one-tenth the time, and with only two dot prompt commands;

USE (FILE) APPEND FROM (ANOTHER FILE)

-An AVERAGE command has been added that includes SCOPE capabilities so that one could determine the average of a specific set of numeric values. For example, in a data base that included fields named PAIDOUT and ACCT; AVERAGE PAIDOUT FOR (ACCT=100)

would give you the average dollar amount paidout (in the PAIDOUT field) for those expenditures made in budget account 100.

-GO; allows you to GO directly to a record, such as GO 5 to go to the 5th record in a file.

-Device file names and pathing for different devices can now be up to 29 characters long, where previous versions supported a maximum of 19 characters. This is especially useful for owners of Myarc's Hard and Floppy Disk Controller card. Hard disk owners will benefit from it the most though, as directories can now be created that are more descriptive of their contents. For example, I have a directory on my hard drive called NAMESINDEX. Before V3.0, I had to list my TI-Base directories to shorter, more cryptic names in order to fit the 19 character limitation.

-In most circumstances, a variable can now be used in place of an absolute number, which means you can now program TI-Base to accept a value from the screen and then have that value interpreted and used in the program. For example, you can now go directly to any record in the file from a screen-entered variable by inclusion of only a few lines in a command file. The Movrec command file below shows how.

```
* movrec
CLEAR
LOCAL NR N 4 0
USE YOURFILE
TOP
```



```
-----  
SORT OFF WRITE 12,02 "READ WHICH RECORD?"  
READ 12,20 MR  
MOVE MR  
DISPLAY  
RETURN
```

Prior to V3.0 TI-Base would error out when the MOVE MR line was read, because the command file interpreter would not be able to determine the value of the MR variable.

-The CLOSE directive has been modified so that if nothing has been changed in a file, nothing is written back to the data disk. This allows write protect tabs to be used on data disks where data is to be used for information only, such as in the MICROdex Libraries from Texaments, that contain reference information designed for READ/PRINT only access. It also speeds up overall program operation time by eliminating an unnecessary step.

-String access and manipulation has been enhanced tremendously! You can now search anywhere in a text string, for a partial word, a word or an entire phrase. In all previous versions of TI-Base, string data searches always had to begin at the left-most character in a field, and the item being searched for was pretty much limited to the number of characters contained in a pre-defined LOCAL when used in a CPPL environment. With V3.0 you now have the power to begin the search anywhere in a string, and the length of the item to be found is no longer dependant upon a pre-defined LOCAL. For example, assume that your data base has a field named SUBJECT. Assume also that in the SUBJECT field there is a record that reads:

```
"THIS IS ONLY A TEST RECORD"
```

You can now search for the phrase "ONLY A TEST" with the following command:

```
DISPLAY ;FOR "ONLY A TEST" %SUBJECT
```

The dollar sign is the equivalent of the "contains" concept used in many IBM type data base managers. Thus the above command would be interpreted as reading:

```
"DISPLAY (all field data in every field) where "ONLY A TEST" is contained anywhere in the data found in any SUBJECT field entry."
```

This is truly a significant addition to TI-Base, and one that I have been waiting for since V1.0.

A LEN% directive has been added to V3.0 that will return the actual length of any string just like the LEN command in Extended Basic. Also, a new SUBSTR directive has been added to V3.0. It is basically the equivalent of Extended Basic's SEG\$ command, so you can now perform global replacements and the like anywhere in a string. For example, using the "THIS IS ONLY A TEST" string from above, you could change ONLY to JUST with the following command:

```
REPLACE SUBJECT WITH SUBSTR("JUST",9,4)
```

```
-----  
SUBSTR syntax is SUBSTR(variable,start position,length)
```

In the above example, the command would be interpreted as reading:

"Look at the SUBJECT field in the data base, locate the text that starts 9 positions from the left and replace whatever is in positions 9-12 with "JUST".

-The SCOPE option has been added to the DELETE and RECALL directives. This means that a global delete of all records in a file could be performed with a simple;

```
DELETE RECORD ;FOR 1-1, or
```

you could delete all records where ZIPCODE="12345" etc.

V3.0 now gives you a nice screen display of the number of records deleted or recalled at the end of the operation too.

-The CATALOG directive has been improved to provide automatic paging of output so that when a screen fills with program or file names the display halts and prompts the user to press a key to continue. In previous versions the user was required to halt the display with the space bar.

-The command file editor now displays the name of the command file being edited and even tells you the line number the cursor is positioned at. Believe it or not, this feature does not exist in some of the most expensive and sophisticated IBM-type data base managers.

-A very welcome READCHAR directive has been added that executes at the end of a keypress, much like Extended Basic's CALL KEY command. This means that menus can now be built that let the user make a selection with a single keypress. READCHAR is not case sensitive either, so the alpha lock key can be up or down and READCHAR still operates correctly.

-The SUM directive has been enhanced. SUM can now direct its output to a variable. In V2.0 the caret symbol contained the value of a SUM and that had to be inserted into a LOCAL with the REPLACE directive in order to use it in your program. Now you can simply direct the results of a SUM command right from a statement or command file by using:

```
SUM AMOUNT TO TOTAL
```

where AMOUNT is a field in your data base and TOTAL is a predefined LOCAL. You can also now display or print the value of SUM by DISPLAYING or PRINTING TOTAL, something that previous versions did not support.

SUM also supports the SCOPE feature too.

```
SUM A ;FOR (CHECKNUM>1034)
```

would total field "A" for only those records where the CHECKNUM field contained record data greater than 1034. Lastly, both

AVERAGE and SUM results can be suppressed with the SET TALK OFF statement so that the screen display is not affected by their operation. Previous versions automatically displayed the results of a SUM.

Thanks to the changes in SUM you can now also determine the value or contents of a any LOCAL by typing in:

DISPLAY (or PRINT) (NAME)

where name is the name of the LOCAL.

-Here's one I REALLY like. You can now "print" data to the screen by setting the PRINTER-DISPLAY. This means that you can give the user the choice of screen or printer output in a single statement rather than having to use double statements (DISPLAY or PRINT) as in earlier versions.

-Carriage returns and line feeds can now be suppressed in data files printed to disk for inclusion in TI-Writer files or reports. Previous versions always double-spaced the output and forced the user to edit the file to remove the unwanted spaces or blank lines. No more. Simply type in SET CR/LF ON or OFF depending upon whether you want them or not.

-PRINT, DISPLAY and WRITE now have REPEAT capabilities similar to Extended Basic's RPT\$ command. For example, you could repeat a series of characters across the screen or across the page with statements like;

DISPLAY (20*)
PRINT (80-)
WRITE 12,1 (30-)

The DISPLAY example would scroll a line of 20 asterisks up from the bottom of the screen, the PRINT example would print 80 dashes on a piece of paper and the WRITE example would display 30 equal signs beginning at row 12, column 1 on the screen.

-ERASE LINE and INSERT LINE capabilities are now available from the dot prompt. You can now press Fctn 3 to erase a command or Fctn 4 to repeat it, thus saving a lot of re-typing time. It would be nice to see these same capabilities available from within the APPEND and EDIT modes, but they are not, at least in the beta version.

-A brand new REPORT function has been added that allows total control and placement of printed output. This means that you can now design a report that can create forms, tables or labels and the format can be saved to disk. You can even do a SET FORMAT-(name) directive that will set a particular report format as the default one to use within your command file or from the dot prompt. Invoking the default is simply a matter of using an asterisk with the DISPLAY or PRINT command such as DISPLAY * to display your data in the default format named or PRINT * to print the data in the default format.

This is an exciting enhancement that will challenge even the

Navarone Data Base Manager's Report Writer in output, but not in ease of use. The Navarone Report Writer uses a true Cut and Paste method to design a report, while TI-Base V3.0's Report Writer requires conceptualization on the part of the user. But the output possibilities are almost limitless in TI-Base, where the Navarone product limits the report design screen to 80 columns, and it performs only SUMming of data. The TI-Base Report Writer will support virtually any function within a report that can be designed in a command file, including calculations and accessing of multiple data files for information to be included in one report. How's that for POWER?

-I've saved what I consider the best for the last. A major enhancement of the MODIFY STRUCTURE command has been provided in V3.0 that allows existing data to be recovered after you change a file's structure. All previous versions of TI-Base caused existing data to be lost forever when you went in to change the structure of an existing data base. No more. Once a file's structure has been modified, an operator selection menu allows options to;

- * Use Old Data
- * Restore Into New Structure
- * Destroy Data
- * Abort

If you only change field names in the MODIFY STRUCTURE, no manipulation or restructuring of existing data is required. It is only when actual field lengths and types are altered in data that a restructure is offered or required.

-Dennis Fsherty has also given us access the resident inverse video character set that TI-Base uses, so that we can now program our own inverse video displays. To top that off, it can be done in two different methods. The first is via the command;

SET INVERSE ON/OFF

which is a toggle switch to turn inverse on or off. The second method allows individual characters to be set to inverse display by adding 128 to the ASCII value of the character and then punching that number in with the Control key down. For example, you could display an inverse video UPPER case A by holding down control and typing in the number 193 (65+128=193).

Another use for the Control key is instantaneous command retrieval at the dot prompt, for any of the fifty or so commands TI-Base supports. For example, if you wished to DELETE data in the current data base you could press Ctrl D and TI-Base would display the DELETE directive at the dot prompt, with the cursor automatically positioned at the second space to the right of the directive to accept the rest of your statement. If you wanted DISPLAY instead of DELETE, you would simply press Ctrl D again to toggle the options available in the "D" area until DISPLAY appeared. A nice, professional feature.

Finally, V3.0 has an INSTALL feature that allows command files to be loaded into memory so they are RUN from memory rather than

disk, which allows them to execute much faster. Up to 2500 bytes are available, which translates into about three or four sizeable command files stuffed in VDP RAM. How that kind of space was tweaked out of VDP RAM I'll never know. INSTALL options include:

- ' ADD
- ' REMOVE
- ' LOAD
- ' SAVE
- ' CATALOG

A spin-off of the new INSTALL feature is that command files which exist in the INSTALL area of memory can now be executed from the dot prompt without having to use the DO directive. Instead, you would just type in the name of the command file. For example, if you had a command file named MENU1 that you wished to execute, and it was loaded using INSTALL, you would simply type in MENU1 from the dot prompt instead of DO MENU1 as in previous versions of TI-Base.

Another by-product of INSTALL is a MACRO capability that allows you to create a function or series of functions that could be accessed by typing in one word. For example, you could create a MACRO that summed and then averaged the DEPOSIT field in your checking account data base, all with a simple command at the dot prompt like DEP, if that is what you named your macro. A macro can be as complex as a command file and as many macros can be defined as the 2500 byte area of INSTALL memory will hold.

CONCLUSION:

I don't know if there are any further tricks or other features for TI-Base coming out of the minds of those wizards at Insebot Inc. in Port Orange, Florida, but the ones that we have been given in TI-Base V3.0 ought to keep us busy for awhile. In the 10 plus years since the 99/4 line of computer has been in existence, there has never been a truly flexible and powerful data base manager to compliment our spreadsheet and word processing productivity tools. More than EVER before, TI-Base fills that void and it does so in a manner that would do credit to similar programs written for an IBM PC. The big difference is that TI-Base makes it all happen in a 48K environment, on a computer that was designed when people thought it impossible to ever write programs that would surpass DOS's 640K limit on an IBM.

If management of data is one of your needs, then you should seriously consider TI-Base V3.0. Speed-wise, it still can't compete against PR-Base or FirstBase in some areas, but in flexibility and overall power to the user, it simply has no competition to be compared against. If you already own TI-Base the upgrade to V3.0 is a must. You will not want to be without the powerful features and enhancements that this upgrade offers. It is awesome!

For more information on TI-Base V3.0, contact:

Texaments
53 Center St.

or Insebot, Inc.
P.O. Box 291610

TECHNICAL INTERFACE

By Marshal Ellis

TECHNICAL INTERFACE : MID - SOUTH 99 USER GROUP

This pamphlet is a compilation of previously published articles of interest in the T.I. home computing world. I have been republishing these in order to keep our members abreast of things going on in the technical realm. Even though the very nature of this publication will eventually bring it to an end, some things are still happening:

A short while ago, I entered a contest. The sort of thing that I don't normally do. But this was a contest to submit a phrase or name (reverse acronym?) to go with with the initials "T" and "I". I had stumbled upon the last notice of Steve Mehr's T.I. name contest in the August issue of the L.A. TOPICS newsletter. His previous contest pitted all contestants against the initials "I", "B", and "M". This is fun stuff!

I had just come up with a name along this same line. In having just begun putting together the "Technical Interface" pamphlet, it seemed appropriate to submit this idea. Let's see what someone else thinks of this idea. So, off the letter went accompanied by one of my first cover sheets from the pamphlet.

The long wait is over now. I received a note from Steve on the 27th of April showing the entrants and winner! So, the following is an excerpt from Steve's response:

The winner in the Name contest still needs to be announced, so here goes. And the winner is... Marshal H. Ellis

Marshal says that T.I. stands for "TECHNICAL INTERFACE"

Congratulations Marshal. Many thanks go to Bill Haras for also entering the contest. Although Bill Haras won for most entries submitted, (see Bill, you DID win a contest!) I had to pick Marshal for the explanation of his entry. Marshal is a member of the Mid-South 99 User Group and he writes ...

"I as the keeper of the old newsletters. I hope for the collection of publications to be informative to all members. Perhaps with a little forethought, the re-publishing of articles, on a somewhat monthly basis, might be stimulating to most of the members ... I am including a copy of the cover sheet from my first pamphlet so that you can see (for yourself) what I mean ... This is the name I have chosen for the pamphlet which I put together ... This is the position of the TI-99/4A in respect to

bringing operators and programmers together. This orphaned computer is the Technical Interface!" Way to go Marshall!

As promised, all entries received are included following this article. Very nice work!

T.I. stands for . . .

*** TECHNICAL INTERFACE ***

Talking Ignoramus	This Incongruity
Taken In	Time Indulger
Tarnished Image	Tinker Instruments
Trade In	Tipy Id
Torturous Involver	Tiresome Irritant
Truely Interesting	Titillating Inquirer
The Lap	Together Invincible
The Itch	Total Incarnate
Too Idyllic	Tolerant Insanity
Torturing Instrument	Torsentor Itself
Totally Ignorant	Touchy Immortal
Terrific Idea	Tough Inapirer
Terrible Ichor	Torrid Inept
Technical Issue	Towards Impressive
Totally Incompatible	Toy Impediment
Tremendous Ingenious	Toxic Infection
Taciturn Ichthyornis	Tractable Insect
Tactical Invader	Tragic Insult
Talented Invalid	Traspler Inexhaustible
Tainted Intelligence	Transcendental Ideal
Texas Injurer	Transitory Inventive
That Incursion	Trap Inexplainable
Thinking Inducer	Treasure Inextinguishable
Thoroughly Independent	Trash It
Temporarily Indesposed	Traumatic Inclusion
Teaparing Imbecile	Trendy Incidental
Tantalizing Incubator	Travesty Improper
Tender Intimidator	Treacherous Infirmity
Tickling Interrupter	Tresbling Impotent
Tasty Interference	Tyrant Invigorous
Tattered Ichthyosaur	True Ire
Tangled Interlocutor	Triassic Industry
Therapudic Intruder	Tribulating Indispensable
Thought Intensifier	Tricky Indolent
Teasing Idiot	Tutor Infallible
Tedious Idiocy	Typical Inert
Temperamental Insentient	Tenacious Issue
Tepestuous Intervendor	Troubling Insubordinate
Teatress It	Triumphant Infuriator
Terminal Impairment	Torsent Incredible
Terribly Industrious	Trusty Indigenous
Theoretical Influence	Turtle Infested
They're Impeccable	Tumor Insufferable
Testing Infestation	Try Insulting
Thing Imperious	Tuneful Insinuator
Tigerish Isopod	Threshold Irrestible

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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 21, July 19, August 16 (3rd Thursday!)
WORKSHOPS: June 23, July 28, August 25 (4th Saturday!)

24HR TI BULLETIN BOARD

The Midnight Hour BBS 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

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

EQUIPMENT, ETC. _____

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