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P.O. Box 38522, Germantown, In 38183-0522

Newsletter for the MID-SOUTH 99 USERS GROUP Vol 4, 412 DECEMBER 86



PRESIDENTS BIT

Well another year has about come and gone and it's time to elect new club officers. I really hope that all members realize how important the officers are. They have the responsibility ۵Ē keeping the club operational. The club president also has the responsibility of assigning the different club functions to those chosen and known to be diligent workers. The club runs like a well piled machine not by accident. There are many people behind the sidelines who give a great deal to make this club successful. This year has been great for the club. It has even gone international with the addition of our member from South Africa. Many members are distinguished enough in TI circles that their names are becomming common to all TI users. Our group has been written up in many national magazines and listed as one of the best clubs in the country. This club has gone from about 300 members around Christmas '83 to our current membership of about 100. I think all of our current members really want to see our club continue to grow and succeed, but in order for that to happen, the right people have to be nominated and then elected. Those people I speak of are those who really have the desire for our club to be the best, because if we can't succeed at being the best we won't succeed at being one of the rest. Sure our equipment is not the latest thing, but even TI didn't know what they had created until Users Groups and third party vendors started showing them. The nominating committee has the dubious task of selecting the candidates for the club officers positions. and a dubious responsibility it is. No matter who they select I'm sure all of you will give the new officers the same support that has been given to the current officers. Now that I have said all I want to about the coming elections, let's talk about your place in the club. Good workers are always needed by any club and our's is no different. Come forward and take your place with those of us who enjoy giving our time so that others can become as convinced about our equipment as we are. It doesn't require that you spend a great deal of time. It only requires a little dedication. It requires determination and a little "How does that work". Trial and Effort. There is nothing special about how many of our members got as good on our computer as they are, THEY PRACTICED. You are only going to get out of our club what someone has put in it. Be that someone. Lend a hand and you will be amazed at all the things our computer can do and you will learn a valuable lesson... "THDSE WHO THINK THEY CAN, CAN". Think about that one. We can only go forward if people want to go forward. It takes many people to put together an organization like our's, be one of them and you will find yourself learning and enjoying your computer and your club much more.

Did you know that with the arrival of CHARACTER SETS AND $\ \mbox{GRAPHICS}$ DESIGN III that there are 70 different fonts that can be used to

produce banners. There are also several hundred graphic pictures that can be included in those banners. Dave Rose has joined up with the people who have TI-ARTIST and now have one of the finest packages on the market for our computer. My astonishment never ceases when I use the packages of Dave Rose. He really is an asset to 3rd party vendors. His work is very professional and enlightening.

Al Doss has received from TI the diagnostic disk. One program runs from Extended Basic and the other runs in Mini Nemory. Both are really good and will give you confidence knowing your equipment checks out alright.

Well I got all my equipment back working and now I have started experiencing problems with my TEAC 558's. Using the CORCOMP disk controller leaves me with all kinds of posibilities for failure. I guess after talking to Gary Cox, I am just going to have to find the culprit through trial and error. I sure hope it's not anything really bad.

I hope everyone had a big Thanksgiving and everyone is well. I seem to have gotten over my Kidney Stones. I hope I never see (or feel) any more of those. My bank account has suffered drastically from my hospital stay but the money doesn't count now that the pain is over...Gerald Smith

MEMS

In case you have not already heard Millers Graphics recently announced that they will be going in with another computer firm to manufacture a card for the Expansion Box that will make the TI. MS-DOS compatible (IBM/PC compatible). The price for the card-is expected to be less than buying a MS-DOS computer system. Expected release date for the card is early 1987. According to my information it is already substantially completed. Atari and Commodore, don't you wish you could say that?

I forgot to mention on my CHICAGO TI FAIRE article last month about a new program for the Gram Kracker called GRAM Packer from GEnial Computerware. It allows the user to pack programs like DM1000, TI-Artist etc... into the GK. I will have a review of it soon.

The group has received an offer for group discounts on TI Artist and companions, XB detective, Rapid Copy, CSGD and Myarc PEB cards. Those interested should contact me. The more we buy the more the discount.

MICROpendium is offering a FREE sample issue just for writing in and asking for one. With Home Computer Junk flaked out and Compute dropping TI coverage they want everyone to know that they are around supporting us and will continue to do so as long as we are around... Also Regina who wrote for the old 99'ers and for Compute will now be writing for MICROpendium. I always enjoyed her articles in 99'er and welcome her to MICROpendium. Their address is: MICROpendium, P.D. Box 1343, Round Rock, TX 78680.

According to the K-Town 99er newsletter who got their information from the Greater Akron 99ers of Houston Texas, various parts for our system can be ordered directly from TI to do your own repairs. By taking the part number from the part you wish to replace and calling TI Dealer parts at 1-800-741-3067 you can order the part you need. For example, you can order the "Grom port extension" (cartridge port 90 degree connector to the mother board) part number 1049693-1 for \$5.84 + SN. This is cheaper than exchanging the console for \$30 when you only have a bad GRDM connector...

German company is negotiating with an American company to market turbo pascal for the TI99/9A without having to use the P-Code card.

Myard will soon be releasing their Mard Disk controler card for the T199/4A. Expected price for the card is under \$200...

A new programming language for TI has been developed by DataBioTics called Pilot. We will have a review in the newsletter soon and we will try to demonstrate it at this months meeting. Thanks goes to DataBioTics for the complementary copy for review.

If you are looking for an Expansion Box Ryte Data of 210 Mountain St., Maliburton, Ontario KOM 150, Canada is marketing what they call the 99AT expansion system. It has 5 slots for standard TI size cards, smaller connector cable than TI's and up to 'I drives can be conected to the system. Advance orders are now being taken for the 99AT as the project is just now being completed. Price is \$210 Canadian Funds or \$155 U.S. funds. Please note you will still need to buy drives and cards for the box as it comes empty.

Just when you think TI has totally forgotten about us we received a package from them with some dianostic software. This software could help you determine what is wrong with your system when you have trouble. The dianostic programs are available out of our library.

In the November 1986 Micropendium I see a Flight Simulator is set for January release for the TI! The manufacturer says the program is set in World War I France and includes full screen line graphic views in 3-d perspective, a 360-degree panorama of the area while in flight, mathematic algorithms of the physics of flight for complete acrobatic control of the plane and a battle mode for the expert pilot. The flight simulator called "SPAD" will retail from Not-Polyoptics for \$29.95 and requires the E/A, 32K and a disk system. For further information write to Not-Polyoptics, P.O. Box 4443, Woodbridge, VA 22191 or (703) 491-5543.

The "Orphan's Survival Handbook" by Ron Albright, described as "the one-stop information source for the TL user," has been published by Disk Only Software. The 200+ page looseleaf book contains an anthology of material gleaned from hundreds of user group newsletters and hundreds of hours of downloaded files from BBS's. The book has material such as schematics, hardware hacks, programs, tips, tutorials and much more. Registered purchasers of the book will receive updates which they can insert into the book. Ron also wrote the Orphan Chronicles published my Millers Graphics which was an excellent book and I will be one of the First in line to buy his newest publication. For more information contact, Disk Only Software (DOS), P.O. Box 4170, Rockville, MD 20850; (301) 369-1339 or 1-800-446-4462 plus 897335 at the tone (touch tone required). Projected retail price is \$16.95...

The Boston TI99/4A Computer Society of One Center Plaza, Boston, MA 0210B is offering a TI Writer Tips and Tricks book for \$5 plus \$1 shipping. I purchased the book in Chicago and found it to be a very valuable asset in learning to use TI Writer to it's maximum potential. Many features which are unclear in the TIW manual are explained as well as a few tips the TIW manual does not mention. I reccommend it to anyone who uses TI Writer or any of it's clones (like Funlwriter...)

David Johnson has sent to me a great autodialer program for people who have 100% Hayes Compatible modems. The program is SHAREWARE and those who are interested should check with our library.

The TI is far from dead especially with all these new programs available. Among some of the best that I have seen recently is a super graphics drawing program (like GRAPHX) is Joupaint 99, Font Writer, Pre-Scanit and the new Megatronics Extended BASIC. The Medatronics is 100% compatible with all TI programs that run in TI Extended BASIC plus you have the additional graphics capabilities that you might have seen demonstrated in the Apesoft demonstration disk that we have in our library. Mac Swope purchased the cartridge in Chicago and demonstrated it last month. Hopfully he will have a review for us soon. However, from what I have seen looking through the manual it looks super and what's more it only requires standard 32K memory and nothing else to operate. it will operate with out the 32K but you do not have the However, expanded GRAPHICS capabilities. I believe the cartridge also has further programming capabilities besides the expanded graphics in which every pixel on the screen can be accessed!

Merry Christmas and Happy New Year...Gary Cox

PRESCAN

Pre-Scanit is a new program available from Asgard Software of P.O. Box 10306, Rockville, MD 20850 (301) 345-2492. Pre-Scanit does just what the name says it pre-scans your programs so your computer does not need to or almost does not need to.

Most people who use the TI and other computers probably have noticed that only the TI hesitates when "RUN" is typed. What is happening is the computer is scanning the program for errors and setting up variable space and whatever else it needs to do before it actually begins executing the program. However, by using special statements within the program you can cause the computer not to prescan parts of your program. But, when you do this you run into problems. If all the variables being used are not prescanned an error will occur. Therefore, all variables must be referenced once outside the portion of your program that a pre-scan does not occur. (The pre-scan is turned off by using a With programs you are just starting to write it is not too difficult to incorporate the on and off commands into the program and keep the first references to your variables at a place in the program that is still being pre-scanned (usually the first lines in the program is the best place to reference all your variables).

What Pre-Scanit will do is rewrite already written programs for you incorporating the on and off commands into the program and putting all references to variables and whatever else needs to be prescanned at the begining of the program. So time for the computer to prescan a program will at least be cut in half if not eliminated.

Pre-Scanit does take a while to rewrite a program like maybe 10 minutes for a 40 sector program but nothing like what it would take us to rewrite the program with the on and off commands! PSI is very user friendly and easy to use even to the amature who just wants to cut down the prescan time on his existing Extended BASIC programs. I ran PSI on one of my programs which originally took 11 seconds for the prescan. After PSI rewrote it the prescan was 4 seconds and it even added a few more bytes of program space available instead of taking up more space. After Pierre and I ran Pre-Scanit on TIBBS the prescan was cut from almost one minute to about 10 seconds!

Pre-Scanit, written by Peter Hoddie, is a very good value for only \$10 and will prescan programs written in Myarc XB, Megatronics, MG and TI Extended BASIC. More files will be created for compatibility other versions of XB as necessary...Gary Cox

PROGRAM

6:00pm - Doors open.

6:30pm - Library Dpens.

7:00pm - Meeting Begins.

7:00pm - 7:20 General discussion and election of officers for the offices of President, Vice-President, Treasurer and Secretary.

7:20pm - 8:00pm Demonstrations. The demonstrations have not yet been determined but possible demonstrations include the new Pilot programming language of which a copy was provided to our group for review purposes by DataBioTics. Then the new Character Sets and Graphics Design III may be demo'ed...

8:00pm-10:30pm (('CHRISTMAS PARTY))\ complete with food, punch etc... This will be a great opportunity to get to know your fellow TI'ers better while we sit around and talk, eat and have fun! This will be our first social get-together and if it goes over well we might want to have more in the future. Everyone is welcome!

11:00pm - Doors close.

The demonstrations will be short this month in order to party but as usual newsletters from other groups will be available for reading as well as the library will be open so don't miss it! However, the library may close at 8:00pm so Pierre can join the party too but we might possibly have it setup where you can serve copy library programs yourself (self-service).

I would would like to take this opportunity to welcome to the group several new members (local and out of town) as well as several new prospective members. Some may think that interest in the TI99/HA is dying but I see more and more interest building. Right now our group has more interest and participation than ever and we now have two TI bulletin boards in Hemphis as well, both equipped with the latest hardware and constantly updated software. I think the TI is here to stay for a long time to come!

For those who are new in the group the number for the two boards are (TIBBS) 901-357-5425 and (Risky Business) 901-726-5623. Make sure you call the first time with TE2 or FAST-TERM. The BBS's provide the latest news and information as well as a means of communications with people across the country who call into the system and other members locally. The boards carry a big list of software which can be downloaded directly to your computer at home. Any computer brand may call into the systems but a TI is needed for access to the special features. To call the system you need at least an RS232, modem and TE2 but a disk drive, 32K and an XMODEM terminal program (available from our library) is almost necessary for good results and mandatory in order to download programs. Just call either of the two numbers using a 300 or 1200 baud modem 24 hours a day. I think you will find it very interesting.

Those interested in what is available in our groups library may see the list at the meetings for programs on disk or call Adolph Butler for a listing of what we have on cassette. Programs are, available FREE of charge. Blank disks are usually available for purchase at the meetings but sometimes we run out so it is best if you can bring your own disks to the meeting for copies of programs.

One program every new member with a disk system will want to get is FUNLWRITER. It is a word processor, disk manager, Editor/Assembler and various other utilities on 2 convenient disks. You no longer need to switch between XB, TIW and E/A! It is available FREE of charge from our library as SHAREWARE. Even if you already have TI Writer this program is much more convenient and better and works just like TI Writer because it is an enhanced TI Writer! You will also want to obtain the TI Writer manual if you do not have one from TI. Cost is \$3, call 1-B00-TI-CARES. The Funlwriter disk comes with some additional documentation.

If you have suggestions on what you would like to see in the newsletter or just any suggestions about the group please speak up as this group is your group and for the benefit for all.

COMMING SOON: David Cotner wrote how to build a numeric keypad for the TI and comming soon will be how to build your own robot for you TI for under \$50! Look for it in a future newsletter when the design is finalized (that is if it works?) ... Gary Cox

XB TUTORIAL 3

By Funlweb Farm, Australia

(continued from last month)

Our next example will be a good start on a non-trivial utility program for printing out TI BASIC or XB listings on a 80 column printer in two side by side columns which preserve the normal screen listing format. If you just LIST "RS232.BA*...." then the computer sends it out in OIS/VAR 80 format and it is up to you to tell the printer how to handle it. Something approaching screen image format is only obtained (with extra paper consumption) with the printer margins set way in. 60-col printout heats none at all by miles but let's try to be fancier. If you don't have disk or printer then this lesson won't be of immediate use, but will still be a good example to work through as a programming exercise. We might as well do something useful.

First we figure out what needs to be done, and work out a set of procedures that can be CALLed as needed. The program will do only the minimum necessary to do the job properly. Bells and whistles can be added later. In one or two places we shall make provision for adding extras (bells and whistles have nothing on speech) by dummy subprograms which can be filled in later. For a good discussion of the use of such "stubs" see the excellent book by R. Mateosian, "Inside Basic Games". The detailed coding examples in this book are in Apple or Trash-BO Basics, but Mateosian develops ideas in a form much more in tune with a TI XB subprogram realisation than with these less capable Basics.

So let's start designing our program by deciding what we want it to do. We want the output nicely formatted on the page with top and bottom margins, in 2 columns each in screen image (20 char/line) format. More columns (assuming the output device will handle them) are no problem -- once you can count to 2 then 3 is easy. Lines of Basic are not to be split from from one column to the next or from one page to the next. Some things commonly encountered in printed listings, such as indenting of FOR-NEXT loops don't fit at all well with the multi-statement lines of XB (but might with TI Basic listings) so will not even be thought about here. On the other hand insertion of spaces before REM or SUB statements greatly improves the readability of XB listings, without doing violence to the idea of being screen list compatible. Page numbering is no big deal to add (a console only XB program can fill 6 pages).

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At the other end of the business the LISTing to be printed is assumed taken from a disk file such as USK1.LIST where it has been written by LIST "DSK1.LIST". A trivial difficulty easily taken care of is the blank first record written by LIST. The real problem is that LIST doesn't care about preserving XB lines as distinct entities. Each XB line starts out as a separate print record and if it is less than 80 characters long stays in one show which print records contain the start of XB lines. So if we are going to meet our specification that XB lines be treated exactly as in a screen list then something more subtle than a simple LINPUT is needed. There's one of our most important building blocks identified --- SUB BASICLINE(...).

Any utility program needs title and advice screens so there's SUB TITLES to keep all the details from cluttering the main program. The program will also need SUB OPTIONS(...) to handle file and device name entry and print options which might be offered.

Now the real core of the program is the way in which it must assemble a whole page before printing anything because line feed moves ever on (at least it does on our TI-99 printer). So we need SUB PAGEBUFFER(....) to take the output of BASICLINES, chop it into screen format hunks and decide where these are to be located on the page. Then we need SUB PRINTPAGE(...) to massage the completed pages and ship them off to the printer. That about sums up the sub-programs that are called directly from the main program, and all that is necessary is to figure out the initalisation -- DIMs, default filenames etc etc, and to write the logic for program flow.

Before we start writing any code we should decide what utility sub-programs are to be used by those already defined. As the list is written into columns SUB WRITECOL(...) is a good candidate for repeated use, and SUB WRITEPAR(...) to take a line of BASIC and return it chopped up into 28 character lines to WRITECOL, Since BASICLINE fetches the input records it is the appropriate place to detect End Of File. We might as well use PRINTPAGE to wipe the slate clean before writing a new page.

Let's dress up the input of filenames and Yes/No responses a little as SUB FILENAME(...) and SUB YN(...), with SUB MORE(...) to end it all. Other useful utility sub-programs which will be included are SUB TXTCOL(..) to change display colors in one CALL, SUB KEYCON to carry the burden of "press any key to continue", and SUB DELAY(...) is always handy.

That about finishes the roster of procedures necessary to make up the listing program, and now the detailed coding can start after some thought on the necessary chains of parameter passing. The principle that you should plan your programs from the top down and code them from the bottom up is just as valid in Extended Basic as it is in TI-LOGO or TI-FORTH where the form of the language makes it difficult to do otherwise. Sub-programs make it possible to go the same way in XB with ease. Less capable dialects of Basic make it a lot harder to keep your thoughts organised and your code on the rails.

The actual program will now be listed piece by piece and commanted on in detail. The listing has been transferred into this TI-Writer file from a working copy of the program using a more elaborate version. The present program is actually a simplified version of the one originally written, but is powerful enough to do a useful job. 100 REH ** SIMPLIST ** 110 REH * PRINTER LIST * 120 REH * FROM DISK ** 130 REH -FUNNELWEB FARM-140 OPTION BASE 1 :: DIM PRLN%(66,2) 150 REH * DEFAULT VALUES * 160 CALL TITLES :: SFIL%="OSK1.LIST" :: POEV%="RS232.BA=4800" 170 CALL KEYCON

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The first part of the main program shown here sets default values and OlMensions the string array PRLNS for two columns of 56 lines each. The top and bottom few lines will be left blank so that page format is obtained without sending printer control codes. A 66 line/page, 80 col. printer is assumed.

180 REM * NEW FILE ENTRY *
190 CALL DPTIONS(SFIL\$,PDEV\$
):: ENOFILE=0 :: LINPUT #1:NEW\$
200 REM * NEW PAGE ENTRY *
210 CALL PAGEBUFFER(PRLN\$(,),ENDFILE)
220 CALL PRINTPAGE(PRLN\$(,),PDEV\$):: IF ENDFILE=0 THEN 210
230 REM * ENO OR NEXT *
240 CLOSE #1 :: CLOSE #2 :: CALL MORE(NM):: IF NM THEN
C ALL SPEAK("GODOBYE"):: GOTO
250 ELSE 190
250 STOP

OPTIONS returns file and device names as entered there, and the remainder of line 190 resets the End of File flag, and throws away the first line of the list-file. At new page entry the page buffer is filled and then printed out repeatedly until it runs out of listing, and then it asks if you are finished. That's all there is to the main program folks. And now to the sub-programs that do all the work.

260 SUB TITLES 270 CALL CLEAR :: CALL SCREEN(11):: DISPLAY AT(12,6)BEEP : "PRINTER LISTING" 280 SUBEND 290 SUB OPTIONS(S\$,P\$):: DISPLAY ERASE ALL :: CALL TXTCOL(16,5) 300 CALL FILENAME(1,2,"Edit as needed and ENTER","N?") 310 CALL FILENAME(4,4,"Source file for listing",S\$) 320 CALL FILENAME(8,4, "Printer devicename", P\$) 330 CALL YN(" Change mind ?" , "N", 22, 5, I):: IF NOT(I)THEN CALL HCHAR(22,1,32,64):: GOTO 300 340 DISPLAY ERASE ALL :: IF SS-"" OR PS-"" THEN DISPLAY AT(1,2)BEEP: "NO INPUT/OUTPUT POSSIBLE" :: CALL DELAY(500) :: GOTO 300 350 OPEN #1:55, DISPLAY , INPUT , VARIABLE 80 :: OPEN #2:P5 .DISPLAY .DUTPUT, VARIABLE DO 360 SUBEND

TITLES here is little more than the barest stub, but you can fill that out to your own fancy. OPTIONS takes down the file names, does some checking, and opens the files.

370 SUB PAGEBUFFER(PRLN\$(,),EFL) 380 REM * NEW COL ENTRY * 390 PLN=6 :: COL=COL+1 :: IF COL>2 THEN COL=0 :: SUBEXIT E LSE PRINT "":"** Reading column #";COL:"":"" 400 REM * NEW PARA INPUT * 410 IF EFL THEN PRINT "":" *":"*** END OF FILE ***":" *" :"" :: SUBEXIT ELSE CALL BASICLINE(NEW\$,EFL):: PRINT NEW \$:"" 420 CALL WRITECOL(PLN,COL,PRLN\$(,),NEW\$) 430 IF NEW\$="END OF COL" THEN 390 ELSE 410 440 SUBEND

The new column entry in PAGEBUFFER resets the line counter PLN to top of page with a margin, increments the column count, and exits back to the main program if the page is full. If not it tells BASICLINE to fetch a new program line and WRITECOL to enter it in the page buffer. If BASICLINE says it has read the last line it exits and lets the main program worry about that, otherwise it gets another Basic line or starts a new column. A stub here, CALL SKIPLINE(NEW\$,SK), could have uses.

450 SUB BASICLINE(N\$,E) 460 N\$="" :: IF NX\$="" THEN LINPUT #1:NX\$ 470 N\$=N\$&NX\$:: IF LEN(NX\$) <80 OR EOF(1)THEN NX\$-"" :: E=EOF(1):: SUBEXIT ELSE LINPUT #1:NX\$ 480 PX=POS(N\$," ",1):: IF PX<2 OR PX>6 THEN 470 490 P*POS(N\$," ",1):: IF PX<P THEN 470 500 NR=-1 :: FOR I=1 TO PX-1 :: C=ASC(SEG\$(NX\$,I,1)):: N R=NR AND C>47 AND C<58 :: NEXT I :: IF NOT(NR)THEN 470 510 IF SEG\$(N\$,LEN(N\$),1)=" " THEN 470 520 IF VAL(SEG\$(NX\$,1,PX-1))<VAL (SEG\$(N\$,1,P-1))THEN 470 530 REM ** CHECK QUDTES 540 N Q,I=0 550 I=POS(N\$,CHR\$(34),I+1):: IF I THEN NQ=NQ+1 :: GOTO 5 50 ELSE IF NQ<>2*INT(NQ/2)THEN 470 560 SUBEND

The procedure BASICLINE which retrieves complete lines of Basic code from the LIST-file is the only part of the program with decision flow complex enough to warrant drawing out a flow diagram beforehand. I am not going to reproduce this here, but you can work out your own and see if it leads to similar code. The problem comes when the procedure has read in a line exactly 80 characters long. Does the next LIST record then represent a continuation of the same line of Basic or is it the start of a new Basic line ? This difficulty can't be ignored if screen list is to be preserved since 28 into 80 does not go exactly. format The procedure provides a cascade of tests each of which checks whether the record being scrutinised should be appended as a continuation of the previous Basic line. A few more rare cases could be tested for along the same lines. There is at least one (that I know of) unlikely case which BASICLINE cannot resolve even in principle. Can you spot it ? It does seem to work well already though. The intricate input code is needed since a VARIABLE file can only be read sequentially, and if the battery of tests says that the last record LINPUTted does start a new Basic line, then this must be saved till BASICLINE is called the next time.

Just be thankful for static variables in XB subprograms / You also have to take care not to set off the End of File alarm prematurely.

570 SUB WRITECOL(P,C,P\$(,),N\$):: IF NC THEN P=6 :: NC=0 580 IF P>=57 THEN N\$="END of COL" :: NC=-1 :: SUBEXIT 590 CALL WRITEPAR(P,C,P\$(,),N\$) 600 SUBEND

Now that WRITECOL has the line of Basic it sends it off to be formed into a paragraph. This simplified program handles coming to the end of a column in a slightly wasteful way that is very simple to program. A normal XB program line lists at most on 5 screen lines, and no matter how tricky you are in entering longer lines the program has already limited it to a string variable (max length 255 or 10 screen lines) or has crashed with an error. The simple minded solution is to exit with End of Col message if the proposed starting line for the new paragraph is past a fixed place somewhat short of the end of the column. The value entered, line compromise between making the program totally #57. is a bulletproof or wasting space. A better approach is to print a 6 far as possible, testing each new paragraph to see if it fits, and if not, holding it over for the next column. If you wondered why the string was called NEW\$, then spare a thought for OLD\$ which which vanished without trace during program simplification for tutorial purposes.

610 SUB WRITEPAR(P,C,P\$(,),N \$) 620 P-P+1 :: IF LEN(N\$)>20 THEN P\$(P,C)=SEG\$(N\$,1,20):: N\$=SEG\$(N\$,29,LEN(N\$)-20):: GOTO 620 ELSE P\$(P,C)=N\$:: N\$=""

Sub-program WRITEPAR almost was called SALAMI as it slices up NEW\$ and assigns the slices to successive printlines. Once entered line 620 loops on itself recursively until the remaining piece fits on a screen line. It assumes range checking has been done before entry.

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640 SUB PRINTPAGE(P\$(,),O\$)::PRINT "":"** Page print started" 650 PRINT "";"** Assembling printlines":" and printing to" :: PRINT "": " ":05 660 FOR I-1 TO 66 :: PRINT #2:TAB(9);P\$(1,1);TAB(45);P\$(1,2):: P\$(1,1),P\$(1,2)="" :: NEXT I 670 SUBEND Not much needs be said about PRINTPAGE beyond noting that line 660 formats a single print record from the two column entries and erases the page buffer as it goes. 680 SUB YN(A\$, B\$, R, C, X) 690 DISPLAY AT(R,C)BEEP:A\$&" (Y/N) "&B\$:: ACCEPT AT(R,C +LEN(A\$)+7)VALIDATE("YN")SIZE(-1)BEEP:A\$:: X=A\$=B\$:: R -R+2 :: SUBEND 700 SUB KEYCON :: DISPLAY AT (24,6)BEEP: "ANY KEY TO PROCEEO"

710 CALL KEY(3,1,ST):: IF ST=0 THEN 710 ELSE DISPLAY ERASE ALL 720 SUBEND

730 SUB FILENAME(R,C,M\$,D\$)

740 DISPLAY AT(R+1,C):RPT\$("-",LEN(M\$)):: DISPLAY AT(R,C

):M\$:: IF D\$<> "N?" THEN DISPLAY AT(R+2,C):D\$ ELSE SUBEXIT 750 ACCEPT AT(R+2,C)SIZE(-15)BEEP:D\$:: SUBEND 760 SUB MORE(NM):: DISPLAY ERASE ALL :: CALL TXTCOL(3,12)):: CALL YN("More listings","N",16,2,NM):: SUBEND 770 SUB DELAY(A):: FOR A=1 TO A :: NEXT A :: SUBEND 780 SUB TXTCOL(A,B):: CALL SCREEN(B):: FOR I=0 TD 12 :: CALL COLOR(I,A,B):: NEXT I : : SUBEND

The FILENAME routine writes an underlined heading, DISPLAYs the default response, and ACCEPTs the reply. If it is asked no question, "N?", it expects no answer. The other SDBs just do their job when called. YN acts like input routines familiar in other TI modules.

790 SUB SPEAK(A\$):: CALL PEEK(-28672,SP):: IF SP=96 THEN CALL SAY(A\$) ELSE CALL DELAY(S*LEN(A\$)) 800 SUBEND

This is a last little goodie tagged on so that you may add speech prompts to your program where desired. A bald CALL SAY has the annoying behaviour that it seems to take forever in giving up the attempt if no speech synthesizer is attached. Line 800 checks that speech is connected and line 820 substitutes a controlled delay if not. CALL SPEAK("....") can then be inserted anywhere it is wanted in the program.

So there we have it, a worked out example of a non-trivial and useful program that makes essential use of the sub-program facility of XB. It shows that the XB programmer can, with a style that finds natural expression in the language without undue contortions, follow the general principles of "structured programming" without getting hung up in the Swiss straight-jacket so beloved by some proponents. The program as presented is a cut-down version of the all-singing, all-dancing model, COLIST, which has now grown to >22K and uses 48 subprograms. In all the versions, subprograms have been an essential tool for program development. Now it's time to take retrospective look at what at what we have done and chase a few more subtleties

(To be continued...)

SOAPBOX

I think it is about time I get on my soap box and say a few words about some things I see going on now in the TI World.

I want to first start off talking about FREEWARE (also called SHAREWARE). For most of our meetings we have been taking up a collection for a particular FREEWARE autor and sent him the money to show our support and I want to encourage other groups to do the same. I have heard from some FREEWARE authors that they have not received anything from some of the major groups and this goes for me too. Still I have received more response than I expected and am happy with the response I have received but many others are

just not going to continue unless they receive some support. Even if you can not send any money just send a thankyou note or something to say thanks. I am just happy to get a thankyou note from someone saying that they enjoyed my programs. These FREEWARE authors and a few third party vendors is all that we have left supporting us and we are going to have to support them if our computer is going to survive! Sure there is many computers that are way beyond our capabilities but just because something gets old it does not mean it is no longer any good. My car is 11 years old and just because it is old I am not junking it, It is still in good shape and runs good as well as it still looks good, Mu TI is still in good shape, it can do more than what it was designed for and it is much more friendlier than many other machines. I have used 180's, Apples, Commodore's, Atari's... and out of all of them I enjoy none more than my TI.

FREEWARE authors is not the only people that we should support but we should support third party vendors as well. Picating is causing large losses for these third parties who are trying to support us while we just don't care and copy their software and complain when the vendor try to protect it! Some vendors have thought about getting out of the TI market because of pirates coping their software but were talked out of it. I know many people also complain about about these companies announcing products before they are in production and delays in getting their products out etc... Many times these delays are not the fault of the third party vendor. All of them are only very small companies and have to get their parts from many suppliers. When just one part is on back order the product must wait until that part comes in and is not the fault of the vendor. I had much rather wait for item to be fully tested and assembled in a moderate manor an rather than just slapped together and shipped full of bugs. However, if it was 18M or Tl following these practices I would complain but these vendors are only as I said very small so they are doing the best that they can. All I am asking is give these of the doubt, your patience and try people the benefit to understand their posisition. I grant you some out there just want to grab your money and then give you the shaft and by all means you should warn everyone about these people (does the letters NAG or HCJ ring a bell?). If we continue to give constant negative feedback to these companies who are truely trying to support us, they are not going to stick around too long and then who do we have?

further illistrate my point I read some very negative comments Τo in a newsletter directed toward Millers Graphics because MG to send an unprotected copy to an individual who claimed refused he just wanted to see how one of their programs worked. Of course to refuse as if they sent out one unprotected copy they MG had then why protect any of them? Then the article went on to say that could write their own software to do the same thing and that they the Gram Kracker is useless and that they could build one themself! If comments like that keep up they will no doubt soon have the chance to prove if they can do just that. I have had nothing but support from Craig Miller and I have purchased many products from them and found all them all to be of the best quality possible. Craig has always been there with help anytime I will certainly buy anything from Craig that I needed it.

without wondering if it worked or if it had bugs in it! Furthermore without my Gram Kracker I could hardly function on my computer!

hope no one if offended by what I am saying and if so I apologize but I am just making my observations known as a neutral observer. Although membership in our group is growing I see national interest dropping to the really dedicated people. This just means that we must give even more support to the vendors and FREEWARE authors. Price on TI software compaired to other computers (try pricing IBM software!) is very reasonable and in some cases almost too low. Many vendors are still developing new software and hardware though for our TI99/4A so all is not lost and I plan on keeping this club going for a long time to come as is the feeling of many others in the club. We have still much potential and support left in this computer which was and still is ahead of it's time. The next time you receive a FREEWARE program or a friend offers you a copy of a program just think about what I said, Comments are most welcome...Gary Cox

CONVERTER

This comes to us from Bytemonger the Bluegrass 99 Computer Society, by Wesley R. Richardson.

ED's note: This is quite a nice program that I have run successfully...Ed

100 |****UNIT CONVERTER**** 110 !**** T.I.99/4A.32K**** 120 [****Wesley R.Richardson ; Dct.1986**** 130 [**Bluegrass 99 Computer Society ** 140 !UARIABLES D5, I, 5, 55, T, T5, U5(,), U(,), W, W5 150 CALL CLEAR 160 DIM U\$(15,14), U(15,14) 170 DS-"...." 180 CALL SCREEN(5) 190 FOR I=0 TD 14 200 CALL CDLOR(1,16,5) 210 NEXT I 220 GOSUB 700 230 DISPLAY AT(14,8):".,LDADING DATA" 240 FOR 5-1 TD 15 250 READ U\$(5,0), V(5,0) 260 FDR T=1 TD V(5,0) 270 READ U\$(5, T), V(5, T) 280 U\$(5,T)=SE6\$(U\$(5,T)&D\$,1,13) 290 NEXT T 300 NEXT S 310 GOSUB 700 320 FDR S=1 TD 15 330 S\$-" "&STR\$(S)&" " 340 S\$=SEG\$(S\$,LEN(S\$)-2,3) 350 DISPLAY AT(S+4,0): 55; U\$(5,0) 360 NEXT 5 370 DISPLAY AT(21,3): "CNDICE ? (1-15)";

```
3BO ACLEPT AT(21,19)VALIDATE(NUMERIC)SIZE(2):S
390 IF (S<1)+(S>15)THEN 380
400 1F 5=15 THEN END
410 INAIN 100P
420 V(0,0)=1
430 IF S>1 THEN 450
440 V(0,0)~273.15
450 GOSUB 700
460 GOSHB 730
470 FOR T=1 TO V(S,0)
480 GOSUB 660
490 IF 5>1 THEN 510
500 GOSUB 750
510 DISPLAY AT(T+4,0):T$;U$(S,T);W/V(S,T)
520 NEXT T
530 DISPLAY AT(20,4): "X TO EXIT P TO PRINT"
540 DISPLAY AT(21,4): "KNOWN ? (1-"; STR$(U(S,0)); ")";
550 ACCEPT AT(21,19)VALIDATE(NUMERIC,"XP")SIZE(2):W$
560 IF WS="X" THEN 310
570 IF WS-"P" THEN 810
580 T-UAL(W$)
590 IF (T<1)+(T>V(S,0))THEN 550
600 DISPLAY AT(22,4): "INPUT ";U$(S,T);" ?"
610 ACCEPT AT(23,6)VALIDATE(NUMERIC):W
620 V(0,0)+W+V(S,T)
630 IF S>4 THEN 650
640 GOSUB 750
650 GOTO 450
660 T$-" "&STR$(T)&" "
670 T$=SEG$(T$,LEN(T$)-2,3)
680 W-V(0,0)
690 RETURN
700 CALL CLEAR
710 DISPLAY AT(2,8); "UNIT CONVERTER"
720 RETURN
730 DISPLAY AT(3,15-LEN(U$(5,0))/2):U$(5,0)
740 RETURN
750 I TEMP K->
760 W=-1*((V(0,0)-273.15)*(T=1)+V(0,0)*(T=2
)+(U(0,0)*9/5-459.67)*(T=3)+(U(0,0)*9
/5)*(T-4))
770 RETURN
780 | TEMP ->K
790 V(0,0)--1*((W+273,15)*(T-1)+W*(T-2)+(W+459,67)*5/9*(T-3)+
(5/9)*W*(T⊷4))
800 RETURN
810 IPRINT
820 OPEN #1: "PIO"
830 PRINT #1: TAB(8); "LINIT CONVERTER"
840 PRINT #1:TAB(15-LEN(U$(S,0))/2);U$(S,0):""
850 FOR T-1 TO U(S,0)
860 GOSUB 660
870 IF S>1 THEN 890
880 GOSUB 750
890 PRINT #1:T$;U$(S,T);W/V(S,T)
900 NEXT T
910 PRINT #1: "": ""
920 CLOSE #1
```

```
930 GOTO 550
940 DATA TEMPERATURE, 4
950 DATA CELSIUS, 1, KELVIN, 1, FARENHEIGHT, 1, RANKINE, 1
960 DATA TIME.9
970 DATA NANOSECONDS. 1E-9. MICROSECONDS. 1E-6.
MILLISECONDS, 1E-3, SECONDS, 1
980 DATA MINUTES, 60, HOURS, 3600, DAYS, 8, 6464, MONTHS
(MEAN), 2.628E6, YEARS (MEAN), 3.1536E7
990 DATA MASS. 14
1000 DATA GRAIN, 6.479891E-5, CARAT(HETRIC), 0.0002.
GRAM, 0.001, SCRUPLE(APOT), .00129597862
1010 OATA PENNYWEIGHT.0.00155517384.DRAM(AVOIR)..0017718452.
OUNCE (AVOIR), 0283495231, OUNCE (TROY), 0311034768
1020 DATA POUND (AVOIR),0.45359237,KILOGRAM,1.SLUG.14.5939029,
TON (SHORT), 907, 18 474, TON (METRIC), 1000
1030 DATA TON (LONG), 1016,0469080
1040 DATA LENGTH. 14
1050 DATA ANGSTROMS, 1E-10, KR86 WAVELENG, 6,0578021E-7.
MICRONS, 1E-6, MILLIMETERS, 1E -3, INCHES, 0,0254
1060 DATA FEET, .3048, CUBITS, 0.4572, METERS, 1, FATHOMS, 1, 08288.
FURLONGS, 201, 168, KIL DITETERS, 1000
1070 DATA MILES, 1609, 344, LIGHT-YEARS, 9, 46055E15, PARSEC, 3, 08374E16
1080 DATA AREA, 14
1090 DATA BARN, 1E-20, CIRCULAR MILL, 5,0670748E-10, CM 2, 1E-4.
INCH 2.6.4516E-4, FOOT
                       5.0.03530304
1100 DATA YARD 2, 83612736, METER 2, 1, ARE, 100,
ACRE. 4046.8564224, HECTARE, 10000, KIL OMETER 2, 166
1110 DATA MILE 2,2509988.11, SECTION, 2509988.11,
TOWNSHIP. 93239572
1120 OATA VOLUME, 14
1130 DATA TEASPOONS, 4.92892159375E-6, TABLESPOONS,
1.478676478125E-5, INCHES 3.1.63 87064E-5
1140 DATA OUNCE (FLUID), 2.95735295625E-5,
CUP, 2.365882365E-4, PINT (LIQUID), 4.7317 6473E-4
1150 DATA QUART(1.10010), 9.4635295E-4, LITERS,
1.000028E-3,BOARD FEET,.002359737216 ,GALLONS(LIQU),.003785411784
1160 DATA FOOT 3, 028316846592, YARD 3, 764554856984.
METER 3,1,COROS,3.6245563
1170 DATA SPEED, 12
1180 DATA FEET/HR, 8.46666666-5, FEET/MIN, 5.08E-3,
INCHES/SEC.0.0254, KILOMETERS/HR, 0.2777770
1190 DATA FEET/SEC, 0.3040, MILES/HR, 0.44704, KNOTS,
0.5144444444, METERS/SEC, 1, MILES /MIN, 26.0224
1200 OATA KILOMETER/SEC, 1000, MILES/SEC, 1609. 344,
TIMES C 1.10HT, 2.997925E0
1210 DATA ACCELERATION, 5
1220 DATA GAL, 0.01, INCH/SEC 2, 0.0254, FEET/SEC 2, 0.3040.
METER/SEC 2,1,6'S,9.80665
1230 OATA DENSITY, 5
1240 DATA KILOGRAMS/M 3,1,POUNOS/FT 3,16.018463,
0, POUNDS/IN 3,27679,905
1250 DATA FORCE, 8
1260 DATA DYNE, 0.00001, POUNDAL, .138254954376,
OUNCE (FORCE), 27801385, NEWTON, 1, PO UND (FORCE), 4.448221615
1270 DATA KILOGRAM-FORCE, 9.80665, KILOPOND-FORC,
9.80665,KIP,4448.221615
1200 DATA PRESSURE, 14
1290 DATA DYNE/CH 2,0.100, NEWTON/M 2,1, PASCALS,1,
```

KGF/M 2,9.80665,LBF/FT 2,47.880258 1300 DATA MILIBARS, 100, TORR (0 C), 133.322 NM HG (O C),133.324,INCH (H2O),249.082 ,FEET (H2O),2888.98 1310 DATA PSI,6894.7572,KGF/CM 2,98066.5, BARS, 100000, ATMOSPHERES, 101325 1320 DATA POWER, 14 1330 DATA FOOT-LOF/HR, 3.766161E-4, CALORIES/HR, .0011622222, FOOT-LBF/MIN, .02259696 6, CALORIES/MIN, .0697333333 1340 DATA BTU/NR, 292875073, WATT, 1, FOOT-LBF/SEC, 1.3558179, CALORIES/SEC, 4.104, BTU /MIN, 17.572504 1350 DATA KILOCAL/MIN, 69, 7333333, HP550FT-LB/SEC, 745, 69987, HP (ELECTRIC), 746, KILO CAL/SEC, 4184 1360 DATA BTU/SEC, 1054, 350264 1370 DATA ENERGY, 11 1380 DATA ELECTRONVOLTS, 1.6021E-19, ERG, 1E-7, FOOT/POUNDAL, .04214011, JOULE, 1, CALOR IES, 4.184 1390 DATA FOOT-LBF, 1, 3558179, BTU, 1054, 350264, WATT-HR, 3600, KILOCALORIES, 4184, KILOWATT-NR. 3.6E6, TONS TNT. 4.2E9 1400 DATA PREFIX, 14 1410 DATA ATTO, 1E-18, FEMTO, 1E-15, PICO, 1E-12, NANO, 1E-9, MICRO, 1E-6, MILLI, 1E-3, CENT I, 1E-2, DECI, 1E-1, UNIT, 1 1420 DATA HECTO, 1E2, KILO, 1E3, MEGA, 1E6, GIGA, 1E9, TERA, 1E12 1430 DATA END,0

This typed in by Marshal Ellis

SUBSCRIPTIONS

Looking for something that is TI related to subscribe to? Since many of the major magazines have forgotten about TI's many others are available. Listed below are some of the most well known of thest publications. Subscription prices listed are U.S.A. rate in U.S. dollars.

MICROpendium P.O. Box 1343 Round Rock, TX 78680 (512) 255-1512 (\$20.50 year) The largest TI only publication. Write for a FREE sample issue.

The Computer Shopper 407 S. Washington Ave. P.O. Box F Titusville, FL 32781 (305) 269-3211 (\$21 year)

The name describes the magazine. It is a huge publication with mostly ads but with very informative articles for most computers including a good section on TI by Ron Albright! This one can be sometimes be found in major bookstores.

Genial TRAVelER Diskazine 835 Green Valley Drive Philadelphia, PA 19128

(\$30 year published every other month)

This is a VERY good magazine on disk with great programs written by Barry Traver.

The Smart Programmer 171 Mustang Street Sulphur, LA 70663 (318) 527-0025 (\$15 year)

A very technically oriented publication with memory maps stc...

Ryte Data computing newsletter 210 Mountain Street Haliburton, Ontario KOM 150 Canada (\$14 year)

Chicago-Area II99/4A Users Group Don Jones - Dept M2 P.O. Box 578341 Chicago, Illinois 60657

They are offering a non-attending membership which includes the newsletter (published 10 times a year with a super summer issue), library access, sample disk or cassette (please specify when subscribing), free password to their BBS for initial membership of \$21. I decided to join myself to get their GREAT newsletter! I would like to mention a big THANKS to Chicago UG member Grant Schmalgemeier who has called me on several occasions in answer to my questions. They currently have well over 600 members, WOW!

Clubline~99 P.O. Box 1005, Station A Hamilton, Ontario LON 3R1 Canada (Subscription \$25)

Most user groups offer out of town memberships. For other newsletters take a look at what we receive at the newsletter table. Some of the newsletters we receive are as big as magazines!...Gary Cox

SUPPLIER LIST

Tenex P.O. Box 6587 South Bend, IN 46660 1-800-348-2778

Millers Graphics 145 W. Cypress Ave. San Dimas, CA 91773 (714) 599-1431

DataBioTics -P.O. Box 1194 Palos Verdes Estates, CA 90274

Triton P.O. Box 8123 San Francisco, CA 94128 1-800-227-6900

Texcomp · P.O. Box 33084 Granada Hills, CA 91344 (818) 366~6631

Texaments Asgard Software P.O. Box 10306 53 Center Street Patchogue, NY 11772 Rockville, MD 20850 (301) 345-2492 (516) 475-8480 Ryte Data Great Lakes Software 210 Mountain Street 804 E. Grand River Ave. Haliburton, Ontario KOM 150 Howell, MI 48843 Canada Rave 99 Horizon Computer Limited 23 Florence Road P.O. Box 554 Bloomfield, CT 06002 Walbridge, Ohio 43465 (203) 242-4012 Disk Only Software (DOS) P.O. Box 4170 Rockville, MD 20850 (301) 369-1339 or 1-800-446-462 plus 897335 (touch tone) Tigercub Software Not-Polyoptics P.O. Box 4443 156 Collingwood Ave Whitehall, OH 43213 Woodbridge, VA 22191 (703) 491-5543 (614) 235-3545 Pilgrims Pride

Pilgrims Pride 5 Williams La. Natboro, PA 19040 (215) 441-4262

Pages and pages of of more third party vendors and dealers exist, so many so I can not list them all here but above is some of the major suppliers. Many of the above are dealers with major companies such as Myarc, Corcomp and others... The TI still has full support!...Gary Cox

SHOPPERS

The December Computer Shopper had an ad from Rocky Mountain Micro of P.O. Box 1693, Sandy, Utah 84091 (801) 572-6272 had a small add listing a standalone Multicom 32K memory with Centronic Port and RS232 Port all in one unit for \$99.95. A 32K memory card for the PEB was listed as \$49.95 and a standalone RS232 and parallel port unit was listed for \$69.95. Sounds like a pretty good deal...

If you have something you would like to buy, sell or trade call Al Doss to place a FREE ad (non commercial) in the newsletter to members of the group. Commercial ads may be placed for \$10 for a full page ad (5" by B") and \$6 for a half page ad (5" by 4"). Ads will be placed in the newsletter as soon as possible depending on when received and available space. Our newsletter is mailed out to between 160-190 people and user groups each month.

For sale by Beery Miller the following, TI Acoustic Moden 35.00, TE 2 10.00, Minimem 40.00, Multiplan 40.00, Adventure 10.00 see him at meeting or call at 726-5551 or try out your moden and call

1

Risky Business at 726-5623.

FLECTIONS

Listed below are the nominees for officers to be elected for the term of 1987. The election will be held at this month's meeting. The candidates were nominated by the nominating committee and nominations from the floor at the November meeting. The election is by secret ballot. Write-in votes are permissable. The cadidate recieving the most votes for an office will be declared the winner. There are no run-off elections. The following have been nominated for office:

OFFICE CANDIDATE

President Mac Swope Dick Vandenberg

Vice President Michael Dorman Richard Hiller

Secretary Gary Cox

Treasurer Gerald Smith

The officers elected this month will be sworn in at the January meeting. They will attend the next board meeting prior to the January meeting in order to have a smooth transfer of duties and responsibilities.

Please make it a point to attend this month's meeting and vote for the candidate of your choice. Be sure your dues are paid up. They may be paid at the meeting before voting...Richard Hiller

THINKING

When I sit down to work with my TI-99/4A. I first make sure I am free of static electricity, and then I turn on the power switch. Magically, like in H.G. Wells' novel "THE TIME MACHINE", I find myself transported through time into the future. I begin to work on my computer and all of the trials and tribulations of daily life seen to slip away to the mystical hum of the fan in my P.E. Box. I am elevated from reality into the world of fun and games. YES! It's a game of me against the computer, and after it's 'over, I find we have both won. It's great to be able to experience a dimension where time stands still. Where the only human being is me. I am the master of my environment. I make all the rules. I make all the decisions. I set all the guidelines. Anything that happens is because of me. I take all the credit, I take all the blame. Just me and my computer. My computer becomes an extension of my thoughts. A tool! That's right! Just a tool to help me in my daily life, both business and pleasure. My computer has become a part of me. By thoughts are it's thoughts. By abilities are it's abilities. By shortcomings are it's shortcomings. By successes are it's successes. By failures are it's failures. This one on one environment is one in which I thrive. I perform my best when I am in this dimension. I am truly free to do what I want knowing I control my surroundings. I am confident that each escape into the future returns new knowledge and that I am blessed with a constant thirst for knowledge. Also that I will return with a higher understanding of the computer that we are all trying so hard to understand.

But Then! Almost sadly, I have to slip from this unique dimension and return to the reality that each of has to face daily. Immediately my eyes scan the room to my clock. "Where have I been for all that time?", I ask myself. And then I smile. No one can take that feeling away from me.

Now you know why I cherish my TI-99/4A so much. My dream is that each and every one of you learn to enjoy your computer as much as I enjoy mine. I really hope this feeling is not unique to me only, because if it is, I have great sadness for you.

I could go on forever, but newsletter space is limited. So let me leave you with this thought. Each and every day, I specifically set aside time to sneek off into my computer room, shut the door, and turn my computer on. Why, you ask... Because It's my magic carpet ride to the future. It's my ticket back to FantasyLand, and I've always been a kid at heart. "KEEP THE FAITH"..... Gerald Smith

PROTECTION

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

24hr TIBBS BULLETIN BOARD 901-357-5425 300/1200 baud

DISCLAIMER

The Mid-South 99 Users Group is not affiliated, sponsored by or has any relationship with any company implied or otherwise. Any mention of a company or product is not an endorsement of either the company or the product.

NEWSLETTER INFO

Visitors and potential members may receive 3 free issues of TiDbits while they decide if they wish to join (no obligation). A GREEN newsletter and/or dollar signs (\$\$\$) indicate that your dues are due. Please pay your dues to be able to continue to receive the newsletter and other benefits of the group. You will note a letter and date on the top of your address lable. The letter indicates if you are a member and the date indicates the last time you paid your dues. One year from the date your dues are due!

PLEASE NDTE LARGE TYPE IS AVAILABLE FH. 743-6781

CALENDAR

MEETINGS: December 18, January 15, February 20th (3rd Thursday!) WDRKSHOPS: December 27, January 24, February 28th (4th Saturday!)

OFFICERS

Gerald Smith	President	901-363-6273
Dick Vandenberg	Vice-fresident	901-274-1892
Ralph Wilson	Secretary	901~382~0795
Mac Swope	Treasurer	901-363-3880
Pierre LaMontagne	Chairman - Library and Sysop	901-357-8110
Adolph Butler	Chairman Cassette Library	901-948-0732
Al Doss	Editor #1 - Newsletter	901-743-6781
Gerald Smith	Editor #2 - Newsletter	901-363-6273
Gary Cox	Chairman – Program	901-358-0667
Gary Cox	Information and Assistance	901-358-0567
Мас Ѕморе	Chairman - Equipment	901-363-3880

GROUP MAILING ADDRESS

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

NOTICES



WORKSHOP 9:00 - 12:00 NONE THIS MONTH MERRY CHRISTMAS AND A HAPPY NEW YEAR



MEMBERSHIP APPLICATION

NAME			1	\$15.00	FAMILY		1
ADDRESS			1_1	\$10.00	JUNIOR	(under	15) 📜
CITY		 STZIP	11	\$10.00	ASSOC1A	TE (N/L	$- \text{onl} \dot{y}$
PHONE ()	 : INTERESTS				·	

EQUIPMENT, ETC.

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