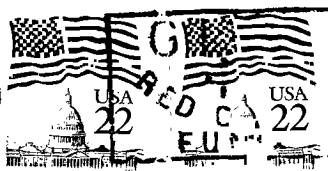


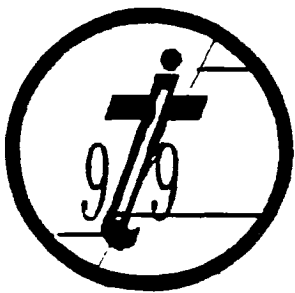
# MID-SOUTH USERS GROUP



P.O. Box 38522

Germantown, Tn

38138



UG  
EDMONTON 99ERS USER SOCIETY  
P.O. BOX 11983  
ALBERTA, CAN. T5J-3L1

0  
**t d b i t s**

**PRESIDENTS BIT**

Houdy once again. I hope everyone had a nice summer... I had a nice visit to Knoxville this summer where I visited some of the officers in the TI users group up there (who receive our newsletter). I had a really nice visit with them and enjoyed the chat with them. I believe they mentioned they have about 75 or so paid members. We by the way have about 120 paid members with around 155 on our mailing list.

I would like to take this opportunity to ask for some help in coming up with articles for the newsletter. If you have something that you think others would be interested in write it up in an article with TI-Writer or use REM statements and type it into a program and transfer it to me (phone) or write it on paper, stone tablet or whatever you like and give it to me and I will put it in the newsletter. I am also looking for suggestions on what you would like to see in the newsletter or at the meetings. We try to come up with what we think you might like but we would be glad to take suggestions on what you would like to see since you are the ones that are going to see it. Even a vounteer to demonstrate something would be nice also. Contact one of the officers if you have any idea or suggestions.... I will see everyone at the meeting....

Gary Cox  
President

**LATE BREAKING HARDWORN NEWS**

The article last month with this title was only intended as a joke and none of it was real. It was just for filling space and was also accidentally printed twice in case you are wondering why it was in there twice. I had several calls asking about if this was a joke or not one of which was from Atlanta so I thought I would clarify this. P.S. I did not write the article....

Gary Cox

~~~~~

## DISAPPEARING TAILS

When you notice that your Gemini 10X or 15X printer types lower case letters without tails, (distenders) - the parts below the line as in the letters f,g,j,p,q and y, - you have a problem. This is caused by the printer head pins being clogged by fiber and ink from the ribbon (or your print head is worn out.) The print head may be cleaned as follows: Take a wood toothpick. Dip it completely in a bottle of rubbing alcohol (70% isopropyl alcohol). Keep the bottle in as near a horizontal position as possible without spilling the contents. Then insert the toothpick to remove as much as is possible at a time. Keep the toothpick horizontal while moving it to the top of the print head on the side next to the platen and roller. Now turn the toothpick to a vertical position as you touch it to the print head. The alcohol will flow down to the pins in the print head. Next, pull the release lever all the way out (toward you - see page 21 of the Gemini Users Manual), so that you may take a piece of paper hand towel (lint free) and move it down between the print head and the platen. The alcohol which has picked up or dissolved some of the dried ink will flow onto the paper. Push the release lever fully in while the hand towel is picking up the ink. This will cause more of the ink to be absorbed on the paper. Pull the release lever out so that the paper may be removed. Repeat the above procedure until only alcohol shows up on the paper.

Morton Dworshak

## WILL O WISP

Here is a very neat sprite demonstration that runs in Extended Basic and will have your eyes twirling...

```
1 ! Program Name: WILL O' WISP
2 ! BY TigerCub Software
3 ! SPRITE MOTION STUDY
4 !

5 CALL CLEAR :: CALL SCREEN(2):: CR=48

6 FOR CH=48 TO 63 :: FOR L=1 TO 4 :: RANDOMIZE :: X=INT(16*RND+1)*2-1
  :: X%=SEG$ ("0018243C425A667EB199A58DC3D8E7FF",X,2):: B%=B%&X%
  :: C%=X%&C% :: NEXT L :: CAL L CHAR(CH,B%&C%): B%,C%="" :: NEXT CH

7 FOR N=1 TO 28 :: CALL SPRITE(#N,CR,INT(14*RND+3),B*N+20,120,5,0)
  :: NEXT N :: IF CR=64 THEN CR=48 :: T=T+1+(T-2)*2 :: CALL MAGNIFY(T)

8 X=(INT(3*RND)-1)*4 :: Y=(INT(3*RND)-1)*4

9 IF INT(10*RND+10)>10 THEN 11

10 CR=CR+1 :: GOTO 7

11 FOR N=1 TO 28 :: CALL MOTION(#N,-Y*20,X*20):: NEXT N :: GOTO 8
```

~~~~~

ASSEMBLY LANGUAGE TUTORIAL #3

by  
Mack McCormick  
CIS# 74206,1322

If you have the Molesworth book refer to page 42 or page 50-56 in the Editor/Assembler manual. Here's a brief step by step.

1. Select EDITOR/ASSEMBLER from the main menu. Place your editor assembler disk A in drive 1.
2. Select 1-EDIT from the E/A menu.
3. Select 2-EDIT from the EDIT menu.
4. Enter your program just as shown. You may omit any comments if you desire.
5. Press FCTN ESCAPE twice to return to the EDIT title screen.
6. Select 3-SAVE. Answer Y to the VAR/80 prompt. Enter your source file name such as DSK2.SOURCE. If you only have one drive place another disk in drive one first and use DSK1 instead of DSK2.
7. Press FCTN ESCAPE to return to E/A title screen.
8. Select 2-ASSEMBLE. Answer Y to the load assembler question. Insure the E/A disk A is in drive 1.
9. At the SOURCE FILE NAME enter the same file name you used in 6 above. ie. DSK2.SOURCE, press enter.
10. At the OBJECT FILE NAME enter DSK2.OBJECT and press enter.
11. Press enter at the LIST FILE NAME. More on this feature next time.
12. At the OPTIONS prompt enter R. Press enter. R means you used R in front of your register numbers in the source code. You may also enter CLST. C is compressed object code (will not load from X/B loader). L is a source listing if you entered a LIST FILE NAME at the prompt. S prints the symbols and registers used in the program on your source list. T prints the full text string in your source listing. More on these features later. Assembler executing will appear followed by 0000 errors (you hope). Press enter.
13. Press 3-LOAD AND RUN.
14. At the FILE NAME prompt enter your OBJECT file name ie. DSK2.OBJECT. Press enter. Press enter again to get to the PROGRAM NAME prompt.
15. This is the name we DEF in our program in this case

START.

16 Your program will execute.

SUMMARY.

I realize this has been long but there has been much to cover to get started. Don't get discouraged. We'll go at this together. I strongly recommend you study these references in your Editor-Assembler manual and experiment on your own. Until next time. "ASSEMBLER EXECUTING".

Page 20-36 Using the Editor-Assembler Cartridge. Page 39 Sec 3.1 Registers Page 46-48 Source Statement Format Page 53 Predefined Symbols. (\*) Page 57-62 Sec 4.1.1, 4.1.4, 4.2, 4.4 Addressing. Page 80 Add Instruction Page 85 Add Immediate Page 88 Divide Page 90 Increment Page 107 Branch Page 115 Jump Less Than or Equal. Page 143 Compare Immediate Page 163 Load Immediate Page 165 Load Workspace Pointer Immediate Page 166 Move Word Page 168 Move Byte Page 200 Shift Left Arithmetic Page 212 Block Starting Symbol Page 225 Data Page 227 DEF Page 228 REF Page 248 VSBW, VMBW Page 329-330 Graphics Mode Tables Page 394-396 Numbering Systems Page 428-429 ASCII character set Page 442 Other Returns To be continued next month.

FORTH TO YOU TOO! - SESSION 3  
BY  
LUTZ WINKLER

As mentioned there is an elegant way to autoboot whatever you want your system disk to do, but before we can proceed with that we'll have to consider the following :

Since FORTH is a disk-based system it occupies memory which otherwise would be available for programming. That - in my opinion - is the reason TI provided many of the utilities as LOAD OPTIONS. Look at the menu and also Appendix F. Some of the options, i. e. the editor, are essential, others are rarely needed. For instance, if you are not programming in Code there is no need to clutter up the memory with -CODE and -ASSEMBLER. Similarly, if you aren't going to operate with graphics then there is no need for -VDPMODES etc. It is not very likely that you will run out of memory while still in the learning process but why boot unnecessary stuff? I consider only -DUMP, -COPY and -PRINT along with the editor as essential. To show you how fast memory is occupied even with your extra 32K, do this (assuming you are in FORTH): enter

```
: FREE SP HERE - . ;
```

(colon FREE SP HERE minus dot semicolon) Now enter FREE. You should get an answer of about 14140 (9790 if you opted for the 64-column editor). If you want to see how fast memory shrinks with each LOAD OPTION boot a few more, but enter FREE in between them. (If you are convinced enter COLD.) Here is what I autoboot and why :

1. -PRINT so I can list the screens I am working on
2. -COPY so I can copy disks screens
3. -DUMP which allows me to look at the parameter stack

4. -BSAVE a must to enable the quick autoboot

If you want to use a printer there is one more item to check. Look at SCREEN 72 in the manual or - for practice - call it up from your disk. Look at where it says "RS232.BA=9600". This routine is written for a serial printer operating at 9600 BAUD. If yours is on the parallel port (PIO) you must modify #72 as shown below and FLUSH it to your system disk.

```
SCR# 72
0 ( ALTERNATE I/O SUPPORT FOR PIO PRNTR 04/27/84 LW )
1 0 CLOAD INDEX BASE->R DECIMAL 68 R->BASE CLOAD STAT
2 0 0 0 FILE >PIO BASE->R HEX
3 : SWCH >PIO PABS 10 + DUP PAB-ADDR ! 1- PAB-VBUF !
4 SET-PAB OUTPT F-D" PIO" OPN 3
5 PAB-ADDR VSBW 1 PAB-ADDR 5 + VSBW PAB-ADDR ALTOUT !
6 : UNSWCH 0 ALTOUT ! CLSE ;
7 : ?ASCII ( BLOCK# --- FLAG )
8 BLOCK 0 SWAP DUP 400 + SWAP
9 DO I C 20 : + I C DUP 20 < SWAP 7F > OR
10 IF DROP 0 LEAVE ENDIF LOOP ;
11 : TRIAD 0 SWAP SWCH 3 / 3 * DUP 3 + SWAP
12 DO I ?ASCII IF 1+ I LIST CR ENDIF LOOP
13 -DUP IF 3 SWAP ~ 14 * 0 DO CR LOOP
14 OF MESSAGE OC EMIT ENDIF UNSWCH ;
15 R->BASE -->
```

To make sure that everything is ok with your new version of #72, enter

```
-FRINT
```

```
turn on your printer and enter
```

```
SWCH ." THIS IS A TEST" CR UNSWCH
```

Make sure there is a space between ." (DOT-QUOTE) and THIS. If your printer responds with THIS IS A TEST, pat yourself on the back and play with SWCH ." xxxxxxx" UNSWCH some more. If not, you will have to start over again, and this time pay close attention, particularly to spaces!

Before we proceed with the actual set-up for your autoboot take a quick look at any SCREEN between 8 and 19, no not in the manual, on your display (remember nn EDIT). Not much there that's legible, but believe it or not on those few SCREENS resides every FORTH word that is identified in the Glossary as a RESIDENT word, only they are saved in a binary form. We will do the same with the LOAD OPTIONS you decide upon by the use of BSAVE. So let's go. First, start off with COLD, then boot your options by entering the appropriate words (-PRINT, etc) and as the final one -BSAVE. Find the apostrophy key (FUNCT 0 ~ that's 0 not ZERO!). This is also a FORTH word pronounced TICK (page 3, Glossary). Now enter:

```
' TASK 22 BSAVE .
```

```
(tick TASK 22 BSAVE dot)
```

Here is what's happening: We are saving in binary form all that has been added to the dictionary (by booting the LOAD OPTIONS) starting at screen 22. We can afford to wipe out 22 and some of the following screens because they contain the 64 column editor which you have either booted already (so it's in the autoboot dictionary) or you aren't going to use it. The final dot will print on your display the first screen after the BSAVE is done. All other LOAD OPTIONS remain intact and can be booted when needed.

~~~~~

Now for the finishing touches. Enter EMPTY-BUFFERS 3 EDIT and carefully erase all but lines 0,1,2,13 15. On line 2 take out the parenthesis around 84 LOAD, and change 20 LOAD to read 22 BLOAD. You might want to replace the word BOOTING on line 0 with some other phrase which would let you know that you are using your new system-disk. On line 5 put: 0 DISK LO ! and depending on how many drives you have and whether they are single or double sided enter ONE of the following: (for one single-sided drive skip this)

90 DISK SIZE ! 180 DISK\_HI ! ( for 2 single sided drives)  
180 DISK SIZE ! 180 DISK\_HI ! (for 1 double sided drive)  
180 DISK SIZE ! 360 DISK\_HI ! (for 2 double sided drives)

Note that these words use the underline, not the hyphen. (If you have double DENSITY drives it is not quite that easy, you have to make several modifications to screens 33 and 40 as well as define a new word to install a proper disk header.)

After you have FLUSHed your edit go COLD and with any luck you will have a working system disk. You are ready for FORTH. It's time to start learning and for that read Chapters 1 and 2 of STARTING FORTH. I went through the book first and annotated each page with the corresponding remarks from the manual's read 22 BLOAD. You might want to replace the word BOOTING on line 0 with some other phrase which would let you know that you are using your new system-disk. On line 5 put: 0 DISK LO ! and depending on how many drives you have and whether they are single or double sided enter ONE of the following:

(for one single-sided drive skip this)  
90 DISK SIZE ! 180 DISK\_HI ! ( for 2 single sided drives)  
180 DISK SIZE ! 180 DISK\_HI ! (for 1 double sided drive)  
180 DISK SIZE ! 360 DISK\_HI ! (for 2 double sided drives)

Note that these words use the underline, not the hyphen. (If you have double DENSITY drives it is not quite that easy, you have to make several modifications to screens 33 and 40 as well as define a new word to install a proper disk header.)

After you have FLUSHed your edit go COLD and with any luck you will have a working system disk. You are ready for FORTH. It's time to start learning and for that read Chapters 1 and 2 of STARTING FORTH. I went through the book first and annotated each page with the corresponding remarks from the manual's Appendix C (Notes on STARTING FORTH).

Enjoy.  
End Session 3

To be continued next month.

## FORTH VIDIO TAPE REVIEW

I have just received my FORTH Vidio Tutorial Tape by Datax Inc and am very dissappointed in its quality. The tape's purpose is to give a tutorial on FORTH enough so to prevent you from having to read through a long manual to learn FORTH. However, the tape seems to only give an over view in general of FORTH. It does not get into any specific details, graphics or the editors as each of these are unique to each version of FORTH and each machine that runs it. In other words it is not specifically a FORTH tutorial

for the FI. In my opinion the tape is very unprofessionally done! In fact, an annoying repeating tune is played through out the entire tape (approx. 2hrs) as back ground music and will almost drive you insane! The tune is one made by the computer and sounds terrible! The picture quality of the tape is not as good as it could be and the narrator does not (in my opinion) sound in any way professional. In fact, the narrator does not speak clear english and added to that it the narrator seems to have a cold as she sounds like she is talking through her nose but the sniffing really gave it away.... In my opinion the tape is not worth the \$30 I payed for it and therefore can not recomend it. However, through all the faults that it has I did learn a little about FORTH (but not \$30 worth!!!!).

## PATCHES

Here is a neat sprite demonstration written in Extended BASIC that I think you will find very interesting.

```

1 ! Program Name:  PATCHES
2 ! BY TigerCub Software
3 ! SPRITE DEMONSTRATION PROGRAM
4 !
5 CALL CLEAR :: CALL SCREEN(5):: A$=RPT$("AA55",16):: B$=RPT$("F",64)
  :: CALL MAGNIFY(4):: RANDOMIZE

6 FOR CH=40 TO 136 STEP 8 :: CALL CHAR(CH,A$,CH+4,B$):: NEXT CH

7 C=2 :: S=40 :: R=1 :: FOR T=1 TO 24 STEP 2 :: COL=150*RND+50
  :: CALL SPRITE(@T ,S,C,R,CDL,@T+1,S+4,C+1,R,CDL):: B=B+B :: C=C+1
  :: R=R+15 :: NEXT T

8 FOR T=1 TO 50 :: CALL COLOR(@INT(24*RND+1),INT(16*RND+1)):: NEXT T
  :: GOTO 7

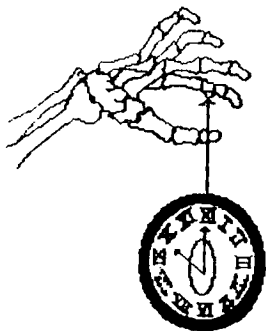
```

## GRAPHX

At this months meeting a fantastic program called GRAPHX will be demonstrated. Ten of us ordered it from Sydney Australia and just recently received it and it is absolutely out of this world. In case you are not familiar with it GRAPHX will allow me to draw any kind of graphics on the screen using the joystick and keyboard and then print it to the printer. It is very professionally written and is up in the league with those expensive drawing programs many have seen on other brand computers. The author of the program took into consideration just about every possible desire that I would think of wanting in a drawing program. Some of the graphics in this newsletter were drawn with GRAPHX. GRAPHX has many neat commands to assist me in drawing. Since circles are



hard to draw there is a command that will draw a perfect circle and stretch it to the size I want it. Then to draw diagonal lines there is a type of rubber band command (as I call it) where I can stretch a line around the screen in any way I want it. Other commands include copying and moving of figures already drawn. I can also draw my pictures in any color I wish. A very neat feature is the zoom command where I can magnify a section of a picture and draw very detailed drawings. The program is fairly easy to operate and is menu driven. As I already mentioned the picture I draw can be printed to any Epson compatible printer including Star Gemini 10x and SG-10.... Don't miss this meeting!



Gary Cox



### PRINTER COMMANDS

Here is a list of printer commands to enable you to make special printing with your printer. These statements are valid for Epson compatible printers including the Gemini 10x and SG-10... Please note you must do an OPEN #1:"PIO" before you can use one of these commands as the printer must be opened before you can send the command to it. Also if your printer is not connected to the parallel port you may change the PIO to whatever your printer name is. Also note you do not need to use the open statement for each one as you only need to open the printer once. Trying to open the printer twice will result in an error....

ITALIC

PRINT #1:CHR\*(27)CHR\*(52)

ELITE (12CHRS PER INCH)

PRINT #1:CHR\*(53)CHR\*(27)CHR\*(66)CHR\*(2)

CONDENSED (17CHRS PER INCH)

PRINT #1:CHR\*(27)CHR\*(66)CHR\*(3)

ENLARGED (5CHRS PER INCH)

PRINT #1:CHR\*(27)CHR\*(64)CHR\*(27)CHR\*(8)CHR\*(1)

ENLARGED (6CHRS PER INCH)

PRINT#1:CHR\*(27)CHR\*(66)CHR\*(2)

ENLARGED (8.5CHRS PER INCH)

~~~~~  
FRINT #1:CHR\$(27)CHR\$(66)CHR\$(3)

DOUBLE STRIKE

FRINT #1:CHR\$(27)CHR\$(64)CHR\$(27)CHR\$(71)

EMPHASIZED

FRINT #1:CHR\$(27)CHR\$(72)CHR\$(27)CHR\$(69)

ENLARGED DOUBLE/STRIKE

FRINT #1:CHR\$(27)CHR\$(70)CHR\$(27)CHR\$(87)CHR\$(1)CHR\$(27)CHR\$(27)

DEMPHASIZED ENLARGED DOUBLE/STRIKE

FRINT #1:CHR\$(27)CHR\$(69)

UNDEFLINE

FRINT #1:CHR\$(27)CHR\$(64)CHR\$(27)CHR\$(45)CHR\$(1)

## TIBBS UPDATE

Our TIBBS is quickly becoming one of the largest in the country. Already running with over 1 MEGABYTE of disk storage space we have now added a 128k card to the system which will improve the speed of the system as well as relieve the constant running on the disk drives as the message base will now be in memory and the drives will not be needed to read messages. This cuts down on the wear and tear of the drives and disks from the constant running. On the way is a TRIPLE TECH CLOCK/CALENDAR card from LorComp who was nice enough to offer it to the group at a special price. (the card will be reviewed in the next newsletter) The clock card will allow us to limit the time one person stays on the system therefore keeping someone from tying up the system for hours at a time. Then most of all it will keep the time you are on the system and change the date at 12 pm for Pierre and myself who has to do it manually at 12 pm every day which gets old after a while. The card will also add to the speed of the system as it has a 64k buffer and the system will no longer have to wait for the printer to execute it's commands before the system can continue on. (numerous information is logged to the printer during a call to the board such as messages are printed, which programs were downloaded etc...) All of this comes by the way of the donations that were given specifically for the TIBBS board. I would like to thank all of those who donate and continue to donate to the board as well as Pierre who had put in many many hours of hard work to keep the system going and improving it. GOOD WORK PIERRE!!!

Give it a call 24 hours a day at 901-357-5425. We keep from 15 to 20 programs available for transfer from the TIBBS board to your system (downloads) as well as numerous articles on assorted subjects from computers to movie reviews. Try it out any brand computer can call.

Gary Cox

We wish to give credit to the PUGET SOUND PAPERS who printed this All Purpose Handy Dandy Reference sheet in their April 195 Newsletter.

QUICK REFERENCE SHEET									
COLOR CODES				PATTERN IDENTIFIER				ERROR CODES	
COLOR	VALUE			CONVERSION TABLE	FIRST	COMMAND OR STATEMENT			
TRANSPARENT	1			0 0 0 0	0	OPEN			
BLACK	2			0 0 0 1	1	READ			
MED. GREEN	3			0 0 1 0	2	PRINT			
LT. GREEN	4			0 0 1 1	3	PASTORE			
DARK BLUE	5			0 1 0 0	4	OLD			
LT. BLUE	6			0 1 0 1	5	SAVE			
DK. PL.	7			0 1 1 0	6	DELETE			
CYAN	8			0 1 1 1	7	END			
MED. RED	9			1 0 0 0	8				
LT. RED	10			1 0 0 1	9				
DK. YELLOW	11			1 0 1 0	A	SECOND	TYPE OF ERROR		
LT. YELLOW	12			1 0 1 1	B		EDIC'S NOT FOUND		
LT. GREEN	13			1 1 0 0	C		DEVICE OR FILE NAME		
DK. YTA	14			1 1 0 1	D		PROTECTED		
WHITE	15			1 1 1 0	E		BAC OPEN ATTRIBUTE		
				1 1 1 1	F		ILLEGAL PERATION		
							OUT OF SPACE		
							ATTEMPT TO READ PAST		
							LET OF FILE		
							DEVICE ERROR or		
							WAREWARE ERROR		
							FILE ERROR - File or		
							disk does not exist		

ASCII CODES									
CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE
30	48	65	A	82	R	99	o	116	L
31	49	66	B	83	r	100	0	117	l
32	50	67	C	84	R	101	o	118	l
33	51	68	D	85	r	102	o	119	l
34	52	69	E	86	R	103	o	120	l
35	53	70	F	87	r	104	o	121	l
36	54	71	G	88	R	105	o	122	l
37	55	72	H	89	r	106	o	123	l
38	56	73	I	90	R	107	o	124	l
39	57	74	J	91	r	108	o	125	l
40	58	75	K	92	R	109	o	126	l
41	59	76	L	93	r	110	o	127	l
42	60	77	M	94	R	111	o	128	l
43	61	78	N	95	r	112	o	129	l
44	62	79	O	96	R	113	o	130	l
45	63	80	P	97	r	114	o	131	l
46	64	81	Q	98	R	115	o	132	l
47	65	82	R	99	r	116	o	133	l

CALL KEY VALUE OF REGISTER KEYS									
CHARACTER SETS	CODE	KEY	CHAR	KEY	CHAR	KEY	CHAR	KEY	CHAR
1	30-31	PCFN 4							
2	32-39	PCFN 1							
3	40-47	PCFN 2							
4	48-55	PCFN 3							
5	56-63	PCFN 4							
6	64-71	PCFN 5							
7	72-79	PCFN 6							
8	80-87	PCFN 7							
9	88-95	PCFN 8							
10	96-103	PCFN 9							
11	104-111	PCFN 0							
12	112-119	PCFN 1							
13	120-127	PCFN 2							
14	128-135	PCFN 3							
15	136-143	PCFN 4							
16	144-151	BASIC							
17	152-159	PCFN 5							

EXTENDED BASIC STATEMENTS									
ABC	PRESS	COMMENT	CHAR	KEY	CHAR	KEY	CHAR	KEY	CHAR
1	CTRL A	START OF HEADING	ESC	KEY	ON	WARNING	SPEEK		
2	CTRL B	START OF TEXT	ESC	KEY	LET	OPEN	BOUND		
3	CTRL C	END OF TEXT	ESC	KEY	LIN	OPTION BASE	SPRT		
4	CTRL D	END OF TRAMP	ESC	KEY	LINUT	PATTERN	SPRITE		
5	CTRL E	IND. TRY	ESC	KEY	LUI	PEE	STOP		
6	CTRL F	ACKNOWLEDGE	ESC	KEY	LOC	LOC	ION		
7	CTRL G	BE. L	ESC	KEY	RAN	RAN	IFY		
8	CTRL H	BACKSPACE	ESC	KEY	M	TION	RANDONIZE		
9	CTRL I	MULTI TAB	ESC	KEY	IF	THEN	NE		
10	CTRL J	LINE FEED	ESC	KEY	DATA	ON	BREAK		
11	CTRL K	VERTICAL TAB	ESC	KEY	SPRITE	INIT	ON ERROR	RESTORE	
12	CTRL L	FORM FEED	ESC	KEY	DIR	INPT	ON GOSB	RETURN	
13	ENTER	CARRIAGE RETURN	ESC	KEY	DISPLAY	INPT	ON GOTO		
14	CTRL M	SHIFT IN	ESC	KEY					
15	CTRL N	SHIFT OUT	ESC	KEY					
16	CTRL O	DATA LINK ESCAPE	ESC	KEY					
17	CTRL P	DEVICE CONTROL 1	ESC	KEY					
18	CTRL Q	DEVICE CONTROL 2	ESC	KEY					
19	CTRL R	DEVICE CONTROL 3	ESC	KEY					
20	CTRL S	DEVICE CONTROL 4	ESC	KEY					
21	CTRL T	DEVICE CONTROL 5	ESC	KEY					
22	CTRL U	NEGATIVE CHARACTER	ESC	KEY					
23	CTRL V	SYNCHRON. JB ID.	ESC	KEY					
24	CTRL W	END OF TRANSMISSION	ESC	KEY					
25	CTRL X	END OF MEDIUM	ESC	KEY					
26	CTRL Y	END OF TEXT	ESC	KEY					
27	CTRL Z	END OF PAGE	ESC	KEY					
28	CTRL A	REPEAT	ESC	KEY					
29	CTRL J	UNIT SEPARATOR	ESC	KEY					
30	CTRL M	LINE FEED	ESC	KEY					
31	CTRL V	SHIFT SEPARATOR	ESC	KEY					
32	CTRL Y	DELETE CHARACTER	ESC	KEY					

ADDRESS PARAMETERS DESCRIPTION									
ADDRESS	PARAMETERS	DESCRIPTION							
32768	PCFN 0	RATE OF FLASH OF CURSOR							
32769	PCFN 1	ENABLE SPRITE action							
31804	PCFN 2	Returns to title screen							
31805	PCFN 3	ENABLES BUIT KEY(Fact =)							
31806	PCFN 4	ENABLES SCRL							
31807	PCFN 5	ENABLES A.LSPRITE MOTION							
31808	PCFN 6	Goes to Lonsore BASIC							
31809	PCFN 7	after new a type							
31810	PCFN 8	R's DEKLOAD							
31811	PCFN 9	Highpal & SPRITE in motion							
31812	PCFN 0	ENABLES LONS NEW frs new							
31813	PCFN 1	protects Protects frs new							
31814	PCFN 2	Returns to title screen							
31815	PCFN 3	ENABLES SPRITE LONS LOAD							
31816	PCFN 4	ENABLES SPRITE LONS LOAD							
31817	PCFN 5	ENABLES SPRITE LONS LOAD							
31818	PCFN 6	ENABLES SPRITE LONS LOAD							
31819	PCFN 7	ENABLES SPRITE LONS LOAD							
31820	PCFN 8	ENABLES SPRITE LONS LOAD							
31821	PCFN 9	ENABLES SPRITE LONS LOAD							

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## FREE DRAWING

As usual another cartridge will be given away at this meeting. You must be there to sign up and win!

Gary Cox

## FREE TRIVIA AND GRAPHICS

Club member Danny Cox is giving away two terrific FREEWARE programs called Trivia and Graphics demonstration. If you would like a copy send 2 initialized disks (one disk for Trivia and one for Graphics) to:

Danny Cox  
1812 THE ELMS  
MEMPHIS, TN. 38127

Or pick up a copy at the meeting. If you like them and think they are worth \$5 a piece Danny requests you send that amount to him but regardless of whether you send any money you are encouraged to copy and distribute these programs.

## BOARD MEETING MINUTES

August 22, 1985

The main discussion centered on the program for the next meeting. Proposed was a demonstration of a bio-rhythm program written by club member Gerald Smith, and GRAPHX. Al Doss would again call and reserve the Red Cross for the September meeting. A price of \$1.00 was agreed and voted for the cost to members for club disks which could be purchased blank or with library programs on them. It was also decided that Pierre would have Disk Manager as the program of the month and it will be available to members at the coming meeting. Yvonne Morgan is to contact United American Bank for a possible demo of their on-line Banking Service at the next meeting or a future meeting. Yvonne and Gary Cox are to send out a mailing to all the local elementary schools to inform the younger people that might not know that our group exists. The same mailing would be done for the high schools in the Memphis area. Gary is to make a notice that could be posted on the schools bulletin boards. Gerald Smith, acting treasurer, submitted the following report on the clubs finances at 8/22/85.

### PETTY CASH

|                                   |         |         |
|-----------------------------------|---------|---------|
| BALANCE AT 8/1/85                 | \$66.25 |         |
| Disbursement for TIBBS phone bill | -19.00  |         |
| transfer to checking account      | - 2.50  |         |
| Total Petty Cash at 8/22/85       |         | \$44.75 |

### CHECKING ACCOUNT

|                   |            |
|-------------------|------------|
| BALANCE AT 8/1/85 | \$1,106.63 |
|-------------------|------------|

Less:

Postage for news letter (12/84 4/84.....61.28  
Postage for newsletter (8/85) and

```

(dues renewal notices.....37.84
Printing cost for 8/85 newsletter.....85.19
Total Disbursements.....$184.31          922.32
Add:
Income from Dues.....75.00
Income from Equipment/software sales...137.50
Donation to TIBBS..... 5.00
Total Income.....217.50          1,139.82
Transfer from Petty Cash.....+ 2.50
Balance at 8/22/85                                     $1,142.32
total cash available at 8/22/85                         $1,187.07

```

## LIBRARY BIT

The latest programs to arrive in the library is Disk Manager 1000, Trivia 99er and 2 disks of music programs. All of these are FREEWARE and are available at the library. Also now available is a GREAT graphics demonstration and Trivia game written by a club member Danny Cox! The club has now received plenty of disks (around 400) so we should have plenty to fulfill your requests for programs.

Those of you who just have the console and cassette tape we now have a list of books and cassette programs that are available through the library. See Aldolph Butler at the meetings for details or to check out or get a copy of a program.

Gary Cox

## HELP

Carl Jones of Union City Tennessee writes to our group these questions. If anyone has the answers please write back to Carl and tell him of your answers.

1. How to read a memory image file such as a BASIC program or the Editor program?
2. How to set up a PAB to access a disk by sectors rather than by file name?
3. How to use the interrupts for user-defined interrupt routines?

If you have the answers to any of these questions write to Carl at:

CARL A. JONES  
1208 SUNSWEPT DR.  
UNION CITY, TN. 38261

## SHOPPERS CORNER

Danny Cox has Multiplan for sale for \$20 as well as some assorted programs. Call him at 358-6958 for details.

The club has SS/DD disks for sale for a dollar a piece. You may purchase them at the meeting.

Larry Hamel has a new Myarc Controller Card for sale. It runs Double Sided/Double Density. It has a disk manager cartridge as well as the new manager program which has some great features in it. He is selling it for \$129 far below the price others are selling it for. Call 872-4742 if interested.

Around town, Games and Gadgets has numerous game and educational as well as usefull cartridges for sale. Childrens Palace has a few Atari Soft games for sale and the Computer Center at Poplar and I-240 has some software and a few pieces of hardware for sale. Then last but not least Stewart Software at 4646 Poplar has TI printer cables for sale.

If you are looking for a FEB system TRITON at 1-800-227-6900 has them for \$299. Also keep an eye in the paper in the Classified Computer Ads section a good deal pops up there every once and a while.

Always check the sign table at the meeting also. There is always something for sale there.

### **MEMBERSHIP NOTICE**

On your newsletter you will notice some figures above your name and address. The first figure should be a Y if you are a member. The next figure is the date that you joined or last paid your dues. If you have not paid your dues for a year you need to do so. If there is an B3 there you especially need to do so. The next figure is the date you last attended a meeting. Three dollar signs (\$\$\$) will indicate that your dues are due and that is your last newsletter. You need to rejoin before or very shortly thereafter receiving the 3 (\$\$\$) to ensure you get the next newsletter on time. So if your membership dues are due please pay up so you will continue to get your newsletter, library access and all of the other benefits. The dues are the major funding of the Club to pay for the production and mailing of the newsletter as well as numerous other expenses. Thank you.

### **PROTECTION**

There are strong FEDERAL LAWS against duplicating copyrighted programs. Please don't break these laws!

**TIBBS BULLETIN BOARD  
901-357-5425**

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### **DISCLAIMER**

The Mid-South 99 Users Group is not affiliated with or sponsored by Lewis Instruments and has no relationship with them, implied or otherwise. Any mention of a company or product is not an endorsement of either the company or the product.

### ANNOUNCEMENT

The TidBits newsletter is available in LARGE PRINT for the visually impaired. Contact Howard Watson for copies.

### FREE NEWSLETTERS

When you come to a meeting as a visitor for the first time and become registered on our files by filling out a "User Profile" sheet (does not obligate you to join), you will automatically receive three issues of our newsletter, TidBits. If you have not joined our club within three months, you will notice three dollar signs (\$\$\$) on your mailing label. That means this is the last free newsletter you will receive. You must pay the annual membership dues to continue receiving TidBits afterwards. Watch your newsletter label and pay your dues to ensure that you keep receiving the newsletter.

### CALENDAR

MEETINGS: September 19, October 17, November 21.  
WORKSHOPS: September 21, October 19, November 23.

### OFFICERS

|                   |                      |          |
|-------------------|----------------------|----------|
| Gary Cox          | President            | 358-0667 |
| Rick Glisson      | Vice-President       | 386-1159 |
| Yvonne Morgan     | Secretary            | 372-7002 |
| Tara Kirby        | Treasurer            | 388-1104 |
| Pierre LaMontagne | Chairman - Library   | 353-3067 |
| Howard Watson     | Editor - Newsletter  | 755-4859 |
| Dick Vandenberg   | Chairman - Program   | 274-1892 |
| Mac Swope         | Chairman - Equipment | 363-0735 |

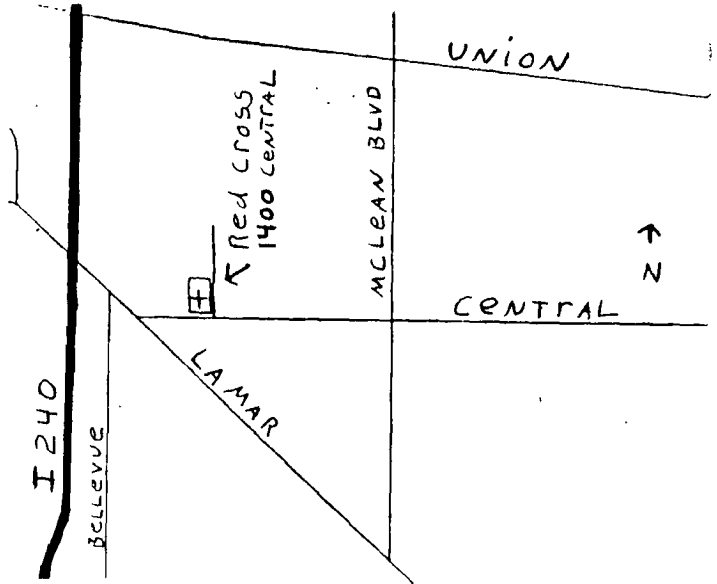
### GROUP MAILING ADDRESS

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

**NOTICES**

**MEETING**  
 7:00 P.M.  
 Thursday, September 19  
 Red Cross Building  
 1400 Central Av.

**WORKSHOP**  
 9:00 - 12:00  
 Saturday, September 21  
 PLACE TO BE ANNOUNCED  
 AT MEETING



**MEMBERSHIP APPLICATION**

NAME \_\_\_\_\_  
 ADDRESS \_\_\_\_\_  
 CITY \_\_\_\_\_ ST \_\_\_\_\_ ZIP \_\_\_\_\_ INTERESTS \_\_\_\_\_  
 PHONE ( ) \_\_\_\_\_  
 EQUIPMENT & SOFTWARE: \_\_\_\_\_

\$15.00 FAMILY  
 \$10.00 JUNIOR (under 15)/  
 ASSOCIATE (newsletter only)

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