

# HUG

HOUSTON USERS' GROUP  
[FOR THE TI-994A & COMPATIBLES]



MARCH  
1988

**MEETING SCHEDULE**  
FIRST SUNDAY OF EVERY MONTH  
(2nd Sunday if 1st Sunday  
is on a holiday weekend)

HUG TIBBS - 24-hour BULLETIN BOARD  
(713) 781-4844 300/1200 bps

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## AT THE NEXT MEETING

SUNDAY, MARCH 6, 1988 2:00 P.M.

St. John's School - 2401 Claremont

AGENDA for this month's meeting includes a Sprites programming demo by Gregory Rashall, and a Multiplan Tutorial session by Ken Espiau. Mike Connell is going to describe a new terminal emulator that he downloaded, if he has it worked out by then (Minimal Documentation = Maximal Headache).

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	Some TI-Writer Printer Codes Techniques
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	HUG Classifieds
	Library Update
	Funlweb LOAD Info
	Meeting and Member Info
	McDLT Graphics

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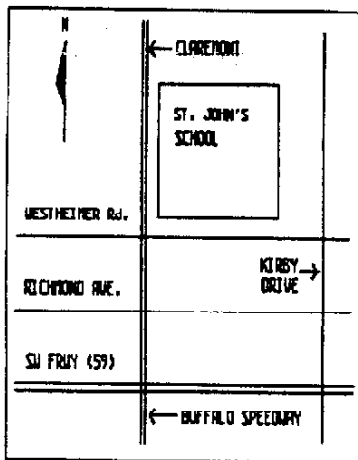
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(x) HUG Meeting date

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**HUG MEMBERSHIP INFORMATION**

Annual renewal fees for HUG are \$15. A ONE TIME initiation fee, for new members ONLY, is \$10. The initiation fee, used to purchase user group equipment, entitles the new member to receive six free programs - of his own choosing - from the groups Public Domain software library. Members receive a monthly issue of the HUG newsletter, may order additional programs from the software library and are permitted access to all "user" levels the groups electronic bulletin board, (BBS) HUG-TIBBS. All renewal and/or new membership fees must be sent to the groups Secretary at: Houston User Group, c/o Ruth Sandy Herman, 6219 Sanford Road, Houston, Tx. 77096. Membership applications are available either from Ruth, at the same address, or the club bulletin board (BBS): HUG-TIBBS at (713) 475-8909. Please direct any questions regarding current membership to the Membership VP, Kim Peterson (713) 498-3047. For a free sample of this newsletter please contact the Editor.

**HUG MEETING LOCATION MAP**



**Commercial Advertising Rates**

Full Page: \$15.00 per mo.  
Half " 10.00 " "  
1/4 " 7.50 " "  
1/8 " 5.00 " "  
Business Cards 2.00 " "

**Individual HUG Members**

List your PERSONAL software/hardware items wanted or for sale for

FREE

(Multi-Mo. disc. available)

in this section.  
Call Editor: 469-5089

**FOR SALE**

**TELECOMMUNICATING EQUIPMENT** - Comuserve Starter Kit unopened \$25.00, Volksmodem 300 Baud MODEM, ac adapter, TI RS232 cable.... \$40.00 Call RDM HODGMAN (713) 358-8618 evenings.

**BASIC EQUIPMENT** - TI-99/4A console (still in box), XB, Speech Synthesizer. \$75.00 Leave msg on HUG-TIBBS to: DAVID HIRSCH

**P-CODE CARD** - with docs and software in-cluding Compiler \$150. Leave msg for GARY HUX on HUG-TIBBS.

**DSDD Disc Drive**, Tandon TM-100; \$35.00. Call JIM WRAY (713) 479-3297 after 9 pm or (713) 282-1759 M-F days.

**SYSTEM** - Console, PEB w/ TI-SS drive, TI-Disc Controller, RS/232, 32 k card, 13" Color Monitor, MX-80 Impact Printer, plus stand-alone disc controller and double box w/ two SS TI-drives, Extra console, 300 baud Signalman Mark III modem (direct connect), Widget, X-Basic; TI-W; MPlan; TE-II; PRK; HBM; Navarone Data Base Man.; power strip, discs. Also has for sale separately a Brother 50 typewriter with 2k interface. Contact James E Keith of Johnson Users Group/////713-333-4504.

**TI 99/4A Console**, PEB with TI controller card and TI SS drive--will run but will not Save or Load. X-Basic and DM-II modules. \$100. Charlie Finn///713-559-1450.

**INFORMATION AND DRAWINGS** - on John Willforth's "32k in the console" micro expansion can be obtained by sending your address and Self-addressed legal size envelope (use two \$.22 stamps) to: Editor, HUG News; Box 690311, Houston Texas 77269. This is the console mod which uses 4 chips 6264LP15 to replace the 32k card in PEB. Costs \$20.00 and WORKS just like the original memory. Great for "second console" or for non-PEB-systems, or if your 32k card dies! Requires console dis-assembly and soldering, and about 6 hours. (Plans courtesy of John Willforth and other great supporters of the 99/4A).

)/-----/ NOTICE \-----\  
)-----\ TO ALL NEWSLETTER EDITORS /-----\  
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There has been a change of newsletter Editors with the HUG group, however, the former Editor is now in charge of the newsletter library. Therefore, please CONTINUE to mail all exchange newsletters to: KIM PETERSON, 13107 Bafing, Houston Texas 77099-2244. Thank you for your continued support.

As editor of the HUG Newsletter, I am attempting to deliver an informative and interesting collection of articles which will be relevant to the users in this club, and possibly in other users groups. This Newsletter is open to support all the activities of this club and at the same time to provide a source of additional information both from the members within this group and also from other groups and hardware/software suppliers.

The only way I can know what it is that you, the Users, want articles on, is if you tell me. And the primary source of information to answer questions or provide articles from will have to be from Users like us, whether in this group or another. We have a lot of members who have more problems than answers, but then we also have a lot of people in this group who can and have provided answers and information. So what we need is a willingness to provide this information and help to others; an "inter-active" level of discussion and guidance I guess you could call it.

There certainly have been several people who have contributed to the newsletter with articles, and also with ideas and information which could be useful to others. So please keep it up! I have and will, with Kim Peterson's help, continue to look in other groups newsletters for new NEWS and articles, but give us the benefit of your "expert" (or not) knowledge and send those tips, ideas, etc. On the other hand, the list of possible subjects for full-size articles is pretty enormous: reviews of software; reviews of hardware; tutorials on everything; hardware tips and additions/modifications; new programs/routines you have written or discovered; lists of addresses or info; ETC.

Everything which is in the above paragraph also applies to the Programme information and format to be presented at the meetings--if you have a program or hardware item to demo or can show HOW something works or how it can be worked better, contact Mike Connell, because he needs to hear from those who can contribute for the benefit of others. It seems that other than one or two individuals, plus demos of programs by the Librarian, Mike has to depend on himself to come up with both an idea and a demonstration. We need YOUR input as to WHAT you want to see, and also your willingness to show what you are working on or with, to the whole group.

SO..., thanks to those who provide, and thanks also to those who attend and watch; and ask, and listen, and learn. And if there is anyone out there who would be willing to contribute a steady, regular column on BASIC/X-BASIC programming; or telecommunications/BBS's info; or Multiplan lessons; or whatever, please speak up. Surely we have ONE person who can "speak" 9 times this year on (X-)BASIC. Most of the larger newsletters do have regular contributing columnists, on a variety of subjects. Plus, as stated above, any guest writer of even a single article will be greatly appreciated, and rewarded with six, yes, '6' Library Program credits.

McDLT

(or Merging Character Definitions in Less Time)

From: CALL SOUNDS - Newsletter of the Central Westchester 99'ers, FEB 1987, p.3.//tks

For you programmers who create graphics by redefining characters, I strongly suggest using a Character/Sprite Editor. (note: There are at least 3 in our club disk library, probably more!) With this you simply 'draw' the desired shape and the program does the tedious task of calculating the corresponding hexadecimal string (ie. HEX\$ = "0018FC3C7EFFFF7E" defines a Tank). Note there are 16 Hex codes ranging from 0 (Binary 0000) to F (Binary 1111), each describing 4 dots in the 64 (8x8) dot grid of each char. If, however, the 'pattern identifier' is less than 16 characters, the remainder will default to zeros.

To save space, "FF000000000000" can be entered as "FF". Also up to 4 consecutive characters can be defined in 1 statement. Another way to save space is to use RPT\$. "FFFFFFFFFFFFFFFFFFFFFFFF" can be typed in as RPT\$("F",32) (or 2 solid boxes).

If many characters are to be redefined and/or you want to use these definitions in future programs, save the strings as DATA statements in Merge format (DIS/VAR 163). If your Editor doesn't already do that, use this routine: (HEX\$=char code; LIN=line # in merged prog.)

```
OPEN #1:"DSK1.filename",VARIABLE 163 :: PRINT #1:CHR$(0)
CHR$(LIN)CHR$(147)CHR$(200)CHR$(LEN(HEX$))HEX$CHR$(0)
:: PRINT #1:CHR$(255)CHR$(255) :: CLOSE #1
```

If you now type NEW, MERGE DSK1.filename, LIST, you will see (for example): 10 DATA 0123456789ABCDEF

From here, any program can simply READ and define the new characters.:

```
FOR CH=1 TO N :: READ CH$ :: CALL CHAR(88+CH,CH$) :: NEXT CH
```

Or simply Edit the DATA line and Insert CALL CHAR(...

One last tip from a program I wrote recently to create a graphics screen: I merged in 40 DATA lines of 16 Hex codes each, one line for one new character. To save program space and execution time, and since 4 characters can be defined in 1 DATA statement, I used the following routine to convert the 40 lines to only 10 lines of code:

```
OPEN #1:"DSK1.filename",VARIABLE 163
FOR C=1 TO 10 :: READ A$,B$,C$,D$ :: HEX$=A$B$C$D$
PRINT #1:CHR$(0)CHR$(C)CHR$(147)CHR$(200)CHR$(LEN(HEX$
))HEX$CHR$(0) :: NEXT C
PRINT #1:CHR$(255)CHR$(255) :: CLOSE #1
```

(Merge new file and Delete excess lines) So next time you're programming graphics, and you want to cut your time spent at the keyboard because of a Big Mac Attack, remember McDLT.

#####

BEST O' BOARDS

by Kim Peterson - Houston Users Group - February 1988

There's been a whole bunch of good stuff clicken' across the local TI bulletin boards lately that some of you may be missing out on. Both MUG-TIBBS (713-781-4844) and THE PHOENIX (713-537-0741) have a LOT of daily hints and tips for the 99/4A user, be it software, hardware or whatever. In addition, there are lot's of tutorials, reviews and downloadable programs. Use of the boards is FREE-for-the-asking and requires only the addition of a "modem" and an RS-232 port to your currently owned 99/4A console. If you are one of those who have not been introduced to the wonderful world of electronic mail or haven't been on line in some time, consider gettin' on one of the boards. The following is one small example of ongoing subject matter. I hope you find it useful.

Re SPEECH Message 10045 01/20/88  
To HENRI SCHLERETH(RETRIEVED)  
By BOB SEDDON-HOUSTON, TX

I would like to get my TI-Writer files speaking (w/a speech synthesizer). Where can I find a program to do this? There is a hint in the terminal emulator manual.

Re (R)SPEECH Message 10054+ 01/22/88  
To BOB SEDDON(RETRIEVED)  
By IRWIN HOTT-COLUMBUS, OH

You can get your TI-Writer files to speak in a couple of ways. In Basic, if there are any commas or quotes, you will lose the remainder of the string.

```
10 OPEN #1:"SPEECH",OUTPUT
20 OPEN #2:"DSK1.XXXIX",INPUT
30 IF EOF(2) THEN 60
40 INPUT #2:A$
50 PRINT #1:A$
55 GOTO 30
60 STOP
```

That is bare bones and will crash at the end. You can use Text-To-Speech (on disk) in Ex-Basic. That requires a little more programming. Feel free to give me a call if I can be of any more help. I am blind and use speech for everything. I have written many Basic and Ex-Basic programs using speech. I am currently using the TI Speech and 2 other external synthesizer. For some things one is better than the other.

Re MORE ON SPEECH Message 10058+ 01/22/88  
To BOB SEDDON(RETRIEVED)  
By JOHN GUION-LUBBOCK, TX

If you would like to go to a little more trouble, the program listed above can be made to speak the entire file. First, load your file into TI-Writer. Next, use the Replace String command to replace the commas in the file with semi-colons. Then use the Print File (PF) command to write the file to disk (instead of PID or RS232). Just type C DSKx.filename over the default printer name. The "C" option here removes any control codes in the file that would mess up the speech.

To finally speak the file, use Irwin's program on the file you just created. For something more automatic, you'll need the ability to read in the entire line of the file, which requires

the LINPUT command of Extended BASIC. However, you'll have to deal with the string after you input it since there are probably some changes that will have to occur in lines with certain characters that are neither text or punctuation. The last thing that you will need to deal with is the fact that TE-II text-to-speech can't handle lower case text. I haven't played with the XB text-to-speech in so long I don't remember if it will or not. You might consider writing an XB program to convert files that removes unwanted characters, removes commas, and capitalizes the whole file. I've done each of these tasks in separate programs before, but it does turn out to be pretty slow. Good luck. \_jPg\_

Re (R)SPEECH Message 10071+ 01/22/88  
To BOB SEDDON(RETRIEVED)  
By MICHAEL CONNELL-WOODLANDS, TX

OK, You asked that question at the last HUG meeting and I said that I would type a program up in a MSG.

```
10 OPEN #1:"SPEECH",OUTPUT
20 OPEN #2:"DSKx.FileName"
30 INPUT #2:A$ !THIS READS ONE LINE
40 IF LEN(A$)=0 THEN END
50 PRINT #1:A$
60 LET A$=""
70 GOTO 30
```

LINE 70 returns control to line 30 and gets another line to read. REMEMBER this file is to be typed in only in BASIC w/ TE/II CART inserted. ALSO, did you know that you could change the pitch of the voice by a line like:

```
10 PRINT #1:"//20"
```

The '/' tells the speech synthesizer to change pitch and the number is the pitch level. You can put 0-100 as the pitch. 0= loud wisper type voice. 1= High pitch voice - 100 lowest pitch. You may already know about this but here it is anyway. THANKS. Mike

Re (R)MORE SPEECH Message 10078 01/23/88  
To JOHN GUION(RETRIEVED)  
By IRWIN HOTT-COLUMBUS, OH

Text-To-Speech does not do well with lower case characters. It says them one at a time. Next time, I will ad a few files to this BBS that I made up for 6Erie.....

## TIWRITER OVERLAY OVERVIEW

by Tom Kennedy

How many of you have a typewriter, please raise your hand. Keep your hand up if your typewriter has interchangeable text. How about automatic bold and underline? Or some amount of memory storage (for letter heads, etc.)? How about an erase key? Those of you left have probably got a pretty expensive piece of machinery, but TI-WRITER has ten times the functions, or features of the best typewriters. With TI-WRITER, your only limitation is your own creativity.

To start off with, what will you need to operate your Word Processor? You must have the 99/4A console (TI-WRITER won't work with the 99/4), a TV or monitor, the cartridge and disk package, the disk system, memory expansion, the RS232 interface, and a printer. In other words, the whole works. The printer is something you definitely want to be careful in choosing because all of your work will be in vain if you can't print out exactly what you type in, and with an attractive appearance. First, let's look at the command line. That's the line at the top of the screen when you're in the command mode. There are seven commands shown and sixteen sub-commands that are options of the main seven. The commands are selected by typing only the letters that are capitalized in the word. For instance: "F" for Files, "SH" for Search, or "LF" for Load File. That's an interesting point: you can access any of the sub-commands from the main command menu. In other words, to ShowDirectory (which is a disk catalog) you would enter the command mode, (FCTN 9), and either type "F" for files, and "SD" for ShowDirectory, or just type "SD" immediately. This feature saves a lot of time and keystrokes.

The first command is Edit. This simply enters you into the text-edit mode in which text is created.

Next is Tabs. When you hit "T", the top part of your text is shown with a scale across the top showing the current tabs and margins. Changes are made by simply typing over existing entries with the appropriate symbol (L,R,T, or I).

"F" for files allows you to work with your text file as a whole. To Load, Save, Delete, Print, Purge, or ShowDirectory. "PF" for print file is not what you'll get when you print out through the text formatter; it just prints a "hard copy" of the whole file, just as you see it on the screen. It doesn't print with any of the modifications made by the format commands (more on those later). "PF" is useful for making a fast copy of a long letter, or whatever, in order to check for errors without having to scroll back and forth or up and down. Purge simply erases the file from memory to prepare for a new entry. It is similar to the "NEW" command in BASIC.

Next is "L" for Lines. This allows you to work with whole lines or groups of lines by moving them to somewhere else in the text, copying to somewhere else and leaving the original intact, to delete groups of lines, or to quickly move the cursor to some line in the text with the ShowLines option.

Search (or "SH") gives you the option of either the FindString routine or the ReplaceString routine. FindString will move the cursor to the first and/or each successive use of the word string you give. ReplaceString searches the text for a given string and replaces all or one occurrence with the new string. This is great for correcting a repetitive spelling error.

RecoverEdit is a failsafe repair in case the text buffer was purged in either the File or Quit command. It will pull back everything but the first line and restore the file. I guess the loss of the first line is the penalty paid for accidentally erasing a file, which can't be done very easily.

Finally, Quit, as the name implies, blows it all apart and leaves you with the title frame. But before it goes, all open files are closed (such as to disk or printer) so no data is lost. Fortunately, it first gives you the option of saving your file (in case you forgot to do that already) or just purging the file and going back to the edit mode. But if you really want to quit, you type "E" for Exit and it shuts down.

Now let's go over the keyboard. TI-WRITER makes extensive use of the FCTN and CTRL keys and uses every possible function of the top line of keys (the numbers). There are also many functions that have duplicate methods of keystrokes to activate them. For instance, to enter the command mode, you either press FCTN 9 or CTRL C. The reason for this duplication is to allow you to choose which is easiest to use depending on where your fingers are at. The problem though, is that it can be very confusing trying to remember the fifty different key combinations that activate the thirty functions. A better method is to just pick which keys you're going to use for what function and ignore the rest. What I do is use the number line keys for anything shown on the overlay strip and just memorize the few functions hidden down in the keyboard. Let's start by going down the overlay strip, left to right as shown on the next page.

The last four key functions to mention are the cursor arrows: UP, DOWN, LEFT, & RIGHT. These stay the same as in console BASIC. Now, if you're still following along you may be quite confused with this onslaught of information. The point is, you can't learn all of this in one sitting, but after using TI-WRITER for a while you start to pick things up as you need them. Rest assured, you do spend the majority of your time typing. The purpose of most of the functions I've mentioned are to manipulate the text which is already in the file. I have simply tried to cover all of this in order to bring something to your attention that you might have missed, or to peak your interest in the capability of the TI-WRITER software.

To review, in the command mode we can choose between Edit, Tabs, Files, Lines, Search, RecoverEdit, or Quit. As sub-commands of those seven, we can choose Load File, Save File, Print File, Delete File, Purge, ShowDirectory, Move Lines, Copy Lines, Delete Lines, Showlines, FindString, ReplaceString, or Exit.

```

*****
OOPS! * CTRL 1 * This can be a real lifesaver. It recovers, or "backs up" a function
      *(CTRL Z)* that you didn't mean to hit. Like if you goofed and hit "Delete Line"
      * instead of "Insert Character", hit "OOPS!" and the line comes back.
Del Char * FCTN 1 * This is the same as "DEL" in console BASIC. It deletes one character
      *(CTRL F)* under the cursor and pulls the rest of the line up to fill.
Reformat * CTRL 2 * This is used to close up the text after using Insert Character. It
      *(CTRL R)* deletes all spaces between the cursor and the next word in the text
      * Then it draws all subsequent words up through the paragraph until it
      * encounters a Carriage Return.
Ins Char * FCTN 2 * In Word Wrap mode (solid cursor), 32 blank characters are inserted
      *(CTRL G)* after the cursor. The bulk of the text is pushed down the line. After
      * insertion of new text, hit Reformat. Any remaining spaces are removed.
Screen * CTRL 3 * In the Fixed mode (hollow cursor), this operates the same as BASIC.
Color * * This allows you to choose which of the five color combinations of
      * text/screen you prefer. The default, for no good reason, is white on
      * dark blue. This is hard on the eyes. I prefer to turn down the color
      * on my monitor and use either black on green or black on light blue.
Del Line * FCTN 3 * Deletes the entire line that the cursor is on, including the space
      *(CTRL N)* of the line.
Next * CTRL 4 * This advances the cursor to the beginning of the following paragraph
Paragraph*(CTRL J)* and puts the first line at the top of the page.
Roll Down* FCTN 4 * This is a "vertical block scroll", meaning the next 24 lines of text
      * of text are shown. Scans quickly down the text to get to some point.
Dupe Line* CTRL 5 * Creates a duplicate below of the line the cursor is on. The Move/Copy
      * function can do the same, but this key makes it faster and easier to
      * create repetitive lines such as a double row of '*'s under a title.
Next * FCTN 5 * A "horizontal block scroll". It jumps across to
Window * * display the next block of 40 characters, in increments of
      * 20. For example, the screen starts out on column one to
      * forty, then twenty to sixty, then forty to eighty.
Last * CTRL 6 * The opposite of "Next Paragraph"
Paragraph*(CTRL H)*
Roll up * FCTN 6 * The opposite of "Roll Down"
      *(CTRL B)*
Word Tab * CTRL 7 * This moves the cursor down the line to the first letter of each word.
      *(CTRL V)*
Tab * FCTN 7 * Just like on a typewriter, this moves the cursor to next setting,
      *(CTRL I)* defined using the Tab function on the command line.
New * CTRL 8 * Places Carriage Return at end of current line, then skips down to next
Paragraph* * line. If you have preset an auto-indent, (by using an "I" in Tabs)
      * then it also indents over to the proper column.
Ins Line * FCTN 8 * inserts a blank line above the line the cursor is on.
      *(CTRL O)*
New Page * CTRL 9 * Inserts a blank line with a Np and Cr symbol at the beginning.
      * This causes the printer to feed to the next page.
Command/ * FCTN 9 * This is how to exit from the edit mode to get to the command line.
Escape *(CTRL C)* It is also used to cancel a command already in progress.
Word Wrap*CTRL 0 * Switches from the "Word Wrap" mode to the "Fixed" mode. In Word Wrap,
      * upon reaching the end of the line the cursor jumps to the next line.
      * If you're in the middle of a word at the end of the line, the word you
      * were on moves down too. This allows you to just type continuously
      * without looking up to see when to hit enter. In the fixed
      * mode, when you reach the end of the line your letters just
      * pile on top of each other and you hit enter to move to the
      * next line.
Line * FCTN 0 * This removes or displays the four-digit line numbers at the left side
Numbers * * of the screen. The numbers are used for reference when manipulating
      * blocks or lines of text, just like when editing a BASIC program, line
      * numbers are needed to refer to where changes will be made.
Quit * FCTN = * Quit is the same as in console BASIC. Use Quit option of the Command
      * line to safely exit TI-WRITER.
Back Tab * CTRL T * The same as Tab except it backs up one setting.
      *
Beginning* CTRL V * Moves the cursor to the beginning of the line you're on.
of Line * *
Del.End * CTRL K * This is just like Delete Character (FCTN 1), except it takes out
of Line* * everything to the right of the cursor.
Home * CTRL L * Moves the cursor to row 1, column 1, on the screen only. Unfortunately
Cursor * * it doesn't move to first line of text, which would be more convenient
      * when at the end of a long document and want to jump to the top. [For
      * that, enter S, then enter I.]
Left Mrgn* CTRL Y * Allows you to temporarily back-arrow beyond the left margin when it
Release* * has been set past zero.
*****

```

PRINTER COMMANDS FOR SIX PRINTER MODELS  
 (also a good comparison of capabilities!)

Use .TL ~:~ or CNTL-U or CHR#(~); to input ASCII values:  
 EX: CHR#(27);CHR#(52) sets the GEMINI 10X to ITALICS font.

	GEMINI 10X-15X	GEMINI SG-10	EPSON MX-80	EPSON FX-80	PANASOSIC KX-P1091	OKIDATA
ITALIC charset end (= normal)	27;52 27;53	27;52	#####	27;52	27;52	####
INTERNATIONAL--charsets						
USA	27;55;0		27;82;0			
England	27;55;1		27;82;3			
Germany	27;55;2		27;82;2			
Denmark	27;55;3		27;82;4			
France	27;55;4		27;82;1			
Sweden	27;55;5		27;82;5			
Italy	27;55;6		27;82;6			
Spain	27;55;7		27;82;7			
ELITE end ELITE	27;66;2 27;66;0	27;66;2	####	27;77	27;77	28
CONDENSED or... end CONDENSED	15 27;66;3 18	27;15	27;15 15 18	27;15	27;15	29
PICA or... end PICA or end PICA	18 27;66;1 27;66;3 27;66;2	27;66;1	####	####	27;80	30
EXPANDED or... end EXPANDED	27;87;1 14 27;87;0 20 or 13	27;87;1	27;14 14 27;20 20 or 13	27;87;1	27;87;1	31 31
SUPERSCRIPT	27;83;0*	27;83;0	####	27;83;0	27;83;0	27;74
SUBSCRIPT * not with double-width or emphasized end SUPER/SUB	27;83;1* 27;84	27;83;1	####	27;83;1	27;83;1	27;76
NEAR-LETTER	####	27;66;4	####	27;120;1	27;110	27;49
EMPHASIZED end EMPHASIZED	27;69 27;70	27;69 27;70	27;69 27;70	27;69 27;70	27;69 27;70	27;84 ?
UNDERLINE end UNDERLINE	27;45;1 27;45;0	27;45;1	####	27;45;1	27;45;1	27;67
DOUBLE STRIKE end DOUBLE	27;71 27;72	27;71 27;72	27;71 27;72	27;71 27;72	27;71 27;72	27;72 ?
7/72" LINE SP.	27;49	27;49	27;49	27;49	27;49	####
1/8" LINE SP.	27;48	27;48	27;48	27;48	27;48	27;56

	GEMINI 10X-15X	GEMINI SG-10	EPSON MX-80	EPSON FX-80	PANASOSIC KX-P1091	OKIDATA
1/6" LINE SP.	27;50	27;50	27;50	27;50	27;50	27;54
n/72" LINE SP.	27;65;n	27;65;n	27;65;n	27;65;n	####	####
n/144" LINE SP.	27;51;n	27;51;n	####	####	####	27;37;57
one-time n/144	27;74;n	27;74;n				
n/216" LINE SP	####	####	####	27;51;n	####	####
TOP MARGIN, n	27;82;n	27;82;n	####			
PERF. SKIP, n	27;78;n	27;78;n	27;78;n	27;78;n		
end PERF. SKIP	27;79	27;79	27;79	27;79		
LEFT MARGIN	27;77;n	27;77;n	####	27;108;n		
RIGHT MARGIN	27;81;n	27;81;n	####	27;81;n		
PRINT WIDTH	####	####	27;81;n	####		
PAGE LNG,LINES	27;67;n	27;67;n	27;67;n	27;67;n		
PAGE LNG,INCHS	27;67;0;n	27;67;0;n	####	27;67;0;n		
SET VERT. TABS	27;80;n1;n2;n3;..0	27;66;n1;n2;n3;..0		?		
VERTICAL TAB	CHR\$(11)	11	11	11	11	11
One-time LF.	27;97;n	27;97;n	####	####		
TOP OF FORM	CHR\$(12)	12	12	12	12	12
SET HORZ. TABS	27;68;n1;n2;n3;..0	27;68;n1;n2;n3;..0		?		
HORIZONTAL TAB	CHR\$(9)	9	9	9	9	9
BACKSPACE	CHR\$(8)	8	####	####	?	
One-time TAB	27;98;n	27;98;n	####	####		
NORMAL GRAPHIC	27;75;n1;n2;n;n;...where n1+256*n2 is					
	the number of "n" values, at 60/inch.				?	
DOUBLE DENS.	27;76;n1;n2;n;n;...where n1 +255*n2 is					
	the number of "n" values, at 120/inch.					
QUAD DENS. GR.	27;122;n1;n2;n;n;n;n	####	####			
	at 240/inch.					

=====  
(adapted from article in NUTMEG TI-99ers Newsletter, date unk.)

Notes: #### means "function not available".  
: blank or ? means "unknown status or required code."  
: Please assist by making any corrections and additions and reference copy to: Newsletter Editor  
Houston Users Group  
10910 High Knob Drive  
Houston Texas 77065



HUG LIBRARY CATALOG ADDENDUM  
March 1988

Please separate from  
the newsletter and  
place along with your  
Software Library  
Catalog for  
future reference.

- 0249 CINDERELLA\*\*ADVENTURE MODULE REQUIRED  
A cute adventure game written by Lucille Rock of Woonsocket, R.I. 52 sectors
- 1222 RLE-KIM & MICHAEL DOUGLAS\*\*DP/128 Printer required  
A picture of the father and son actors that can be printed out using Program #1078. 91 sectors
- 1223 RLE-HUG A WARM PUPPY\*\*DP/128 Printer required  
A cute cartoon of Snoopy at his "Hug" booth that can be printed out using Program #1078. 25 sectors
- 1224 RLE-CASHY AT THE PLATE\*\*DP/128 Printer required  
A caricature of the baseball player that can be printed out using Program #1078. 54 sectors
- 1225 RLE-CASTLE\*\*DP/128 Printer required  
An intricate picture of a castle that can be printed out using Program #1078. 30 sectors
- 1226 RLE-CHEKOV\*\*DP/128 Printer required  
A picture of Star Trek's own Chekov that can be printed out using Program #1078. 54 sectors
- 1227 RLE-DR WHO\*\*DP/128 Printer required  
A picture of Dr. Who's laboratory that can be printed out using Program #1078. 25 sectors
- 1228 RLE-DRAGONS\*\*DP/128 Printer required  
A group of pictures of medieval dragons that can be printed out using Program #1078. 121 sectors
- 1229 RLE-DRAK\*\*DP/128 Printer required  
A picture of creature in space that can be printed out using Program #1078. 25 sectors
- 1230 RLE-DRESSER\*\*DP/128 Printer required  
A picture of an antique dresser that can be printed out using Program #1078. 54 sectors
- 1231 RLE-DROP\*\*DP/128 Printer required  
An intricate picture of a drop of water that can be printed out using Program #1078. 93 sectors
- 1232 RLE-DUCK\*\*DP/128 Printer required  
A cute caricature of a duck that can be printed out using Program #1078. 54 sectors
- 1233 RLE-ERROL FLYNN\*\*DP/128 Printer required  
A picture of the late actor that can be printed out using Program #1078. 27 sectors
- 1234 RLE-ELVIS PRESLEY\*\*DP/128 Printer required  
A good picture of "The King" that can be printed out using Program #1078. 21 sectors
- 1235 RLE-EXTRATERRESTRIAL\*\*DP/128 Printer required  
An eerie picture of an extraterrestrial that can be printed out using Program #1078. 54 sectors
- 1236 RLE-CLARK KENT\*\*DP/128 Printer required  
A cute picture of mild-mannered reporter Clark Kent that can be printed out using Program #1078. 41 sectors
- 1237 RLE-EGRET\*\*DP/128 Printer required  
A pretty picture of an egret that can be printed out using Program #1078. 54 sectors
- 1238 RLE-ALBERT EINSTEIN\*\*DP/128 Printer required  
An interesting picture of Albert Einstein that can be printed out using Program #1078. 56 sectors

- 1239           **RLB-BIRZ PARK\*\*DF/128** Printer required  
A very beautiful forest scene that can be printed out using Program #1078. 71 sectors
- 1240           **RLB-EVIL FACE\*\*DF/128** Printer required  
An ugly looking character that can be printed out using Program #1078. 54 sectors
- 1241           **RLB-FEMALE WARRIOR\*\*DF/128** Printer required  
A picture of a female warrior that can be printed out using Program #1078. 54 sectors
- 1242           **RLB-FISH\*\*DF/128** Printer required  
A group of pictures of various types of fish that can be printed out using Program #1078. 130 sectors
- 1243           **RLB-FLORIDA MAP\*\*DF/128** Printer required  
An interesting map of the state of Florida that can be printed out using Program #1078. 25 sectors
- 1244           **RLB-FLICKER\*\*DF/128** Printer required  
An intricate picture of a bird in flight that can be printed out using Program #1078. 54 sectors
- 1245           **RLB-FLOWERS\*\*DF/128** Printer required  
A pretty picture of a cluster of flowers that can be printed out using Program #1078. 54 sectors
- 1246           **RLB-GADWALL\*\*DF/128** Printer required  
A beautiful picture of a duck that can be printed out using Program #1078. 54 sectors
- 1247           **RLB-GHOSTBUSTERS\*\*DF/128** Printer required  
A cute picture of the "Ghostbusters" emblem that can be printed out using Program #1078. 25 sectors
- 1248           **RLB-GEOMETRIC SHAPES\*\*DF/128** Printer required  
A group of different geometric shapes that can be printed out using Program #1078. 250 sectors
- 1249           **RLB-GERMAN SHEPHERD\*\*DF/128** Printer required  
A unique picture of a German Shepherd that can be printed out using Program #1078. 25 sectors
- 1250           **RLB-GET SOLAR\*\*DF/128** Printer required  
An unusual picture of a solar power system that can be printed out using Program #1078. 54 sectors
- 1251           **RLB-HANDS DRAW\*\*DF/128** Printer required  
A picture of hands drawing a picture that can be printed out using Program #1078. 23 sectors
- 1252           **RLB-HILL STREET\*\*DF/128** Printer required  
A picture of one of the characters from Hill Street Blues that can be printed out using Program #1078. 29 sectors
- 1253           **RLB-HOUSE\*\*DF/128** Printer required  
An intricate drawing of a house that can be printed out using Program #1078. 54 sectors
- 1254           **RLB-HULK HOGAN\*\*DF/128** Printer required  
A picture of the famous wrestler "Hulk Hogan" that can be printed out using Program #1078. 34 sectors
- 1255           **RLB-HUNTER\*\*DF/128** Printer required  
An unusual picture of a pretty lady that can be printed out using Program #1078. 54 sectors
- 4326           **RETRACK\*\*EA/3**  
A "Freeware" track copier by James Schroeder for use with the TI and CORCOMP disk controller cards. Auto-loads from EA/3. 19 sectors
- 4327           **ASUB\*\*YB**  
An Extended Basic program with assembly routines that gives you a variety of the different sound effects available on the TI. 34 sectors

TI-WRITER PRINTER CODES

TRANSLITERATE CODE	FUNCTION	SPECIAL CHARACTER MODE						
0	Terminate Tabulation	CTRL	U	SHIFT	2	CTRL	U	
7	Sound the buzzer	CTRL	U	SHIFT	G	CTRL	U	
8	Backspace	CTRL	U	SHIFT	H	CTRL	U	
9	Horizontal Tabulation	CTRL	U	SHIFT	I	CTRL	U	
10	Line Feed	CTRL	U	SHIFT	J	CTRL	U	
11	Vertical Tabulation	CTRL	U	SHIFT	K	CTRL	U	
12	Form Feed	CTRL	U	SHIFT	L	CTRL	U	
13	Carriage Return	CTRL	U	SHIFT	M	CTRL	U	
14	Print Enlarged Characters	CTRL	U	SHIFT	N	CTRL	U	
15	Print Condensed Characters	CTRL	U	SHIFT	O	CTRL	U	
17	Select Printer	CTRL	U	SHIFT	Q	CTRL	U	
18	Turn OFF Condensed Printing	CTRL	U	SHIFT	R	CTRL	U	
19	Disable Printer	CTRL	U	SHIFT	S	CTRL	U	
20	Turn OFF Enlarged Printing	CTRL	U	SHIFT	Y	CTRL	U	
27	Escape	CTRL	U	FCTN	R	CTRL	U	
27;48	Set Line Spacing To 8 Per Inch	CTRL	U	FCTN	R	CTRL	U	0
27;49	Set Line Spacing To 7/72 Per Inch	CTRL	U	FCTN	R	CTRL	U	1
27;50	Set Line Spacing To 6 Per Inch (Normal)	CTRL	U	FCTN	R	CTRL	U	2
27;51	Set Line Spacing to n/216 Per Inch	CTRL	U	FCTN	R	CTRL	U	3,n
27;52	Turn Italic Character Set ON	CTRL	U	FCTN	R	CTRL	U	4,n
27;53	Turn Italic Character Set OFF	CTRL	U	FCTN	R	CTRL	U	5
27;56	Disable Paper-End Detector	CTRL	U	FCTN	R	CTRL	U	8
27;57	Select Paper-End Detector	CTRL	U	FCTN	R	CTRL	U	9
27;65	Set Line Spacing To n/72 Per Inch	CTRL	U	FCTN	R	CTRL	U	A,n
27;66	Set Up 8 Vertical Tab Settings	CTRL	U	FCTN	R	CTRL	U	B,n1,n2
27;67	Set Form Length n To 127 Lines	CTRL	U	FCTN	R	CTRL	U	C,n
27;68	Set Up To 12 Horizontal Tab Settings	CTRL	U	FCTN	R	CTRL	U	D,n1,n2
27;69	Turn ON Emphasized Printing	CTRL	U	FCTN	R	CTRL	U	E
27;70	Turn OFF Emphasized Printing	CTRL	U	FCTN	R	CTRL	U	F
27;71	Turn ON Double-Strike Printing	CTRL	U	FCTN	R	CTRL	U	G
27;72	Turn OFF Double-Strike Printing	CTRL	U	FCTN	R	CTRL	U	H
27;75	Turn On Single Density Graphic Printing	CTRL	U	FCTN	R	CTRL	U	K
27;76	Turn On Db1, Density Graphic Printing	CTRL	U	FCTN	R	CTRL	U	L
27;77	Turn Elite Mode ON	CTRL	U	FCTN	R	CTRL	U	M
27;78	Set Skip-Over Perforation	CTRL	U	FCTN	R	CTRL	U	N
27;79	Release Skip-Over Perforation	CTRL	U	FCTN	R	CTRL	U	O
27;80	Turn Elite Mode OFF	CTRL	U	FCTN	R	CTRL	U	P
27;81	Set Right Margin at n	CTRL	U	FCTN	R	CTRL	U	Q,n
27;82	Select n of 8 International Char sets	CTRL	U	FCTN	R	CTRL	U	R,n

Your TI-WRITER word processor has two ways of outputting codes to your printer. The above codes work for EPSON compatible printers. The following is a explanation of how to use these codes.

TRANSLITERATE CODES:

These codes can only be used when you print your file through the FORMATTER of TI-WRITER. The main purpose of these codes are if you want to have specific print changes within your text. For example, if I wanted to have a line of text to be printed in ITALICS, I would do the following: On a separate line I would enter .TL 94;27;52 The 94 is the ASCII code for the circumflex symbol (SHIFT 6). This tells the FORMATTER that whenever it runs into the symbol to output the ITALICS code (27;52) to the printer. To turn off the ITALIC mode, we would have to have another transliterate code to do it. AGAIN on a separate line we would enter .TL 126;27;53 The 126 is the ASCII code for the TILDE symbol (FCTN W). When the FORMATTER sees this symbol, it outputs the ITALIC OFF code to your printer and returns to normal PICA type. The line of text would look like this on your screen: Printer set for ITALICS.~  
 Each TRANSLITERATION must be on a line by itself followed by a carriage return. It is best to have your codes at the begining of your file. Or a separate file can be created and then used with the .IF (Include File) command at the start of your text file.

SPECIAL CHARACTER MODE:

This mode can be used in either the EDITOR or FORMATTER. Its purpose is to send a PERMANENT printer control code to your printer. To enter these codes into a text file, you would enter whatever codes are desired on a separate line within the file. All of your codes may be entered onto the same line ending with a carriage return. Just as with the Transliterate codes, you can have a separate file set up for whatever codes you require. You can also combine transliterate codes with Special Character Codes. The transliterations still must be on a line by themselves.

FUNLWEB LOAD PROGRAM  
AA239 TERRY VACHA

Some have wondered how to set up the Funnelweb load program to incorporate their favorite programs as part of the Funnelweb menu. The great thing about Funnelweb is that it loads just about everything and can act like a raa disk on a floppy. You could, with a couple of drives, set up Funnelweb so that you basically leave two disks in your drives and every program you use will come up on the Funnelweb menu, whether it need EXB, E/A, TI-Writer loader, or whatever.

Well, after talking with Tom Nellis, and horsing around myself, I can offer these suggestions.

With Funnelweb you get two menus for yourself, one with numbers and letters that shows up right after the initial bootup, and one later under "User's List". Well, the menu on the "User's List" is taken care of with the "Minsti" program which comes with Funnelweb". So, I won't discuss that one. I'll discuss the menu that FIRST appears at the beginning.

When you want to add your favorite program to the menu, you need to alter the LOAD program. To alter the LOAD program you need to know a "K" value. What's that?? you ask! Well the "k" value is the NUMBER OF THE MENU ITEM on the "LOADERS" menu of Funnelweb that successfully loads your favorite program. For example, suppose a program will load with the TI-Writer loader. That is item number "1" on the Funnelweb "Loader" menu. Therefore, you will set "K=1".

I have reproduced some lines of the Funnelweb "LOAD" program below. I have also left some lines out. Below is just an example. You can see how I set up my menu items and hat my choices are when I turn on my TI. Since I have a Raa disk, I designate it by DSKR, if your favorite program is on DSK2, then you have to use that instead.

```
160 OP$(0)="1 TI-WRITER "
170 OP$(2)="2 EDIT/ASSM "
180 OP$(2)="3 Fast Tern "
190 OP$(3)="4 TI-Artist "
200 OP$(4)="5 Myarc DM "
210 OP$(5)="6 Dpatch "
220 OP$(6)="7 TI-Forth "
230 OP$(7)="8 Drive 1 ON"
240 OP$(8)="9 ARCHIVER "
250 OP$(9)="A MAXRLE "
260 OP$(10)="B TRACKCPY2 "
270 OP$(12)="C CASSETTE "
280 OP$(12)="D .. "
290 OP$(13)="E .. "
300 OP$(14)="F .. "
310 OP$(15)="G .. "
320 OP$(16)="H .. "
330 OP$(17)="I .. "
```

```
360 A$="DSKR.UTIL1" :: K=1 :: GOTO 520
370 RUN "DSKR.TIART"
380 A$="DSK4.ON" :: K=4 :: GOTO 520
390 A$="DSK4.OP" :: K=3 :: GOTO 520
400 A$="DSK4.FORTH" :: K=60 :: GOTO 520
410 DELETE "SD.3" :: RUN "DSK1.LOAD"
420 RUN "DSK4.ARCHIVER"
430 A$="DSK4.MAXRLE" :: K=4 :: GOTO 520
450 A$="CS1." :: K=2 :: GOTO 520
460 RUN "DSK2R.LOAD" ! OPTION @D
470 RUN "DSKR.LOAD" ! OPTION @E
480 RUN "DSKR.LOAD" ! OPTION @F
ETC.
```

Note that line 370 is simpler than the rest. Any program that you want loaded which will run from extended basic can be loaded with a simple "RUN" statement. It's the E/A, etc. programs that require more.

HUG Newsletter

c/o Richard Lumpkin  
10910 High Knob Drive  
Houston Texas 77065

```
-----+
| BULK RATE |
| U.S. Postage |
| P A I D |
| Bellaire, Texas |
| Permit No. 644 |
-----+
```

Membership Renewal Status

(four digit code left of your name)

If code contains one of the following:

\*\* : membership expires with this issue  
\*\* : dues one month delinquent  
\*\*\* : dues two months delinquent  
"LAST ISSUE" : Membership deleted!!!!

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