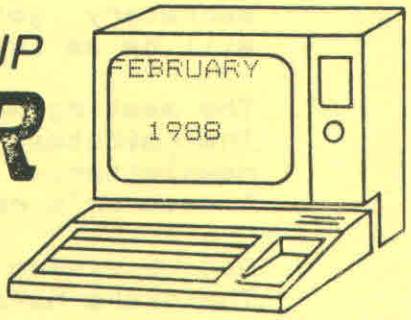
CEDAR VALLEY 99'ER USER GROUP

NEWSLETTER



CEDAR RAPIDS/MARION, IOWA

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****NEWSLETTER TOPICS****

1. Future Meeting Dates
2. Next Meeting Notes
3. Minutes From February Meeting
4. March Meeting Notes
5. Accessing Printer Characters
6. For Sale/Wanted
7. From the Mailbox
8. Shareware
9. Printer Cables

****FUTURE MEETING DATES****

Please mark the following dates on your calendar for future meetings: MARCH 14, APRIL 11, MAY 9.

********NEXT MEETING********

This month's meeting will be held on March 14, 7:00 PM at the JA Building, 330 Collins Road NE, Cedar Rapids. The assembly language class will continue, and several programs will be available for demonstration.

CVARE
activities person
Bryan McCoy 393-7505

* * *MINUTES OF FEB MEETING* * *

Ten souls braved another Iowa winter evening to attend the meeting. The secretary joined several other members at the caucuses, so these minutes will be as informal as the meeting.

The meeting was called to order at an unspecified time by the President. The minutes of the January meeting were approved as written in the newsletter. The Treasurer had left on vacation so there was no treasurer's report.

Old business consisted of Bruce Winters report on the bulk disk order. The disks have not arrived.

One visitor, now new member, Wayne Betts attended. Wayne is returning to the group after a hiatus. Welcome back Wayne.

The meeting then turned to an open discussion session. Gary Bishop filled us in on a change he has made to the ROM in the Disk Controller that enables it to more closely emulate MS/DOS disk addressing. He will write an article describing the details. Gary also filled us in on his keyboard enhancement and demonstrated his progress to date. Gary is also working on changing TI FORTH to the FIG 83 standard. We discussed many hardware and software enhancements, etc. It was informative.

The meeting adjourned at approx. 9:00 PM.

-Respectfully submitted by Jerry Canady

* * * MARCH MEETING NOTES: * * *

Election of officers;

March is the meeting to elect officers for the next year. They take over the reins in May. Come prepared to select or volunteer for office.

Fairware;

We will be taking up a collection for DM-1000 and FUNNELWEB at the March meeting. If you use these fine programs please provide some remuneration for the authors so they will have a desire to continue to support us.

I will do a quick review of the enhanced features of FUNNELWEB 4.0. There are some truly remarkable changes; A bell in the editor, Directory printout from SD, File marking from SD, etc.. Come look and bring your wallet.

Demos;

FUNNELWEB 4.0, SUPER EXTENDED BASIC, E-Z KEYS will be available for review and we will continue with the ASSY class. Come along and join the fun.

* * * ACCESSING PRINTER CHARACTERS: * * *

Before we start this month's subject I wish to digress to a discussion of the SPECIAL CHARACTER MODE (SCM). To cover some confusion I may have caused in my Jan. article I will cover the SCM and provide some TI WRITER manual references.

When I refer to the SCM this is the entry you make while in the flashing underscore _ cursor. This is accessed by the keystroke CTRL U (see page 98 in the manual). The first CTRL U provides the SCM cursor, the second CTRL U will return the normal cursors. The characters displayed on the screen while in SCM for ASCII 0 - 31 are presented on page 146 of the manual. If you look closely it is HEX 0 - 31 with the exception of 10 (LF), 12 (PA), 13 (CR) and 30 (CURSOR). You use the SCM whenever your printer manual requires and ASCII less than 32. If your manual uses <ESC> or ESCAPE it is looking for ASCII 27, to enter <ESC> in your document takes three keystrokes, <CTRL U><FCTN R><CTRL U>. Your screen will show a small HEX 1b or ASCII 27. If your manual asks for CHR$ below 32 you enter them in SCM. CHR$ 32 and above are from the normal keyboard. The chart in the Jan article represents the keystrokes required to accomplish printer control. To convert to your printer substitute the CHR$ required to replace the the ASCII code represented by the keystroke in the chart.

This month we will discuss accessing those characters that most printers provide which are beyond the normal keybord characters.

We will look at access via TransLiterate files and thanks to the TIGERCUB, Jim Peterson, via SCM. The SCM entry allows use with PF in the Text Editor as an addition to the Jan chart.

To control my STAR SG-10 through the FORMATTER I build various transliterate files for the intended purpose. To begin I built a file I have chosen to call TEMPLET, this file contains ASCII codes 0-9, 11 & 14-31 + 127. These codes represent non-printing characters that do not interfere with normal printer control or use up printable characters. I have included the DEL character (127) only to show its availability. I do not recommend its use in normal .TL files unless you change the CHARA1 file so you can see it on the screen. The normal presentation is a space, so it is hard to recognize in your document. In the TEMPLET file below I provided the Special Character Mode (SCM) key stroke after the : so I can determine the best memory jogging code to use for the purpose I have in mind. I have this file saved and protected, then I Load it when I wish to make a new special purpose file.

The FILE below is for demonstration purposes and not a file I use, so please forgive the lack of consistent mnemonics. When you make your own files you will want to use coding that works best for your purposes. The idea is represented by this file's use of the arrow keys to access the arrow you wish to print. Many of the rest are fill to show the full file capacity.

This file accesses some printers' characters assigned to ASCII codes 128 thru 255. With the SG-10's STAR and IBM modes and several files I can create documents that include electronic symbols, mathematical notation, Greek alphabet and a variety of other characters without designing a special character. They even included the Suit characters if you wish to write about card games.

The last column, ESC > (n-128), shows the character keystroke to use in the SCM to obtain the same printer character as the .TL file. To access ASCII codes 128 thru 255 you must set the eighth bit to 1, enter the desired character and return the eighth bit to normal. My printer manual indicates, <ESC> ">", sets the eighth bit to 1 and <ESC> "#", accepts it as is. So if I wish to print a right pointing arrow →, I need to insert ASCII 167 to access this character. To find the keyboard entry I would use the following formula, 167 - 128 = 39 = ' or apostrophe. The keystroke entry would look like this; CTRL U,FCTN R,CTRL U,SHFT .(>),FCTN O('),CTRL U,FCTN R,CTRL U,SHFT 3(#). Remember that I am portraying keystrokes, do not type in the commas or parenthetical information. This entry will print → through either the Editor or Formatter. Now look for your printer's character you desire and use this formula; desired ASCII - 128 = ASCII of key to press to replace the ' above.

One word of warning, I do not recommend mixing .TL files and direct SCM entry in the same document. It can be confusing. For example determine how I used <ESC>(ASCII 27) in the last column and also transliterated it in the .TL file.

TEMPLET	FILE	RESULT	ESC > (n-128)	
.TL 0:2<CR>	.TL 0:190<CR>	×	>	×
.TL 1:A<CR>	.TL 1:177<CR>	Å	1	Å
.TL 2:B<CR>	.TL 2:175<CR>	□	/	□
.TL 3:C<CR>	.TL 3:180<CR>	¢	4	¢
.TL 4:D<CR>	.TL 4:167<CR>	→	'	→
.TL 5:E<CR>	.TL 5:164<CR>	↑	$	↑
.TL 6:F<CR>	.TL 6:181<CR>	≠	5	≠
.TL 7:G<CR>	.TL 7:188<CR>	±	<	±
.TL 8:H<CR>	.TL 8:206<CR>	½	N	½
.TL 9:I<CR>	.TL 9:186<CR>	∞	:	∞
.TL 11:K<CR>	.TL 11:200<CR>	†	H	†
.TL 14:N<CR>	.TL 14:199<CR>	'	G	'
.TL 15:O<CR>	.TL 15:182<CR>	Ω	6	Ω
.TL 16:P<CR>	.TL 16:187<CR>	π	;	π
.TL 17:Q<CR>	.TL 17:204<CR>	¼	L	¼
.TL 18:R<CR>	.TL 18:198<CR>	°	F	°
.TL 19:S<CR>	.TL 19:166<CR>	←	&	←
.TL 20:T<CR>	.TL 20:176<CR>	₧	0	₧
.TL 21:U<CR>	.TL 21:197<CR>	µ	E	µ
.TL 22:V<CR>	.TL 22:183<CR>	♂	7	♂
.TL 23:W<CR>	.TL 23:207<CR>	‖	O	‖
.TL 24:X<CR>	.TL 24:165<CR>	↓	%	↓
.TL 25:Y<CR>	.TL 25:203<CR>	⌀	K	⌀
.TL 26:Z<CR>	.TL 26:184<CR>	Σ	8	Σ
.TL 27:F/R<CR>	.TL 27:178<CR>	ø	2	ø
.TL 28:F/Z<CR>	.TL 28:179<CR>	ϴ	3	ϴ
.TL 29:F/T<CR>	.TL 29:230<CR>	▪	f	▪
.TL 30:6<CR>	.TL 30:191<CR>	÷	?	÷
.TL 31:F/U<CR>	.TL 31:212<CR>	¢	T	¢
.TL 127:F/I<CR>	.TL 127:229<CR>	▪	e	▪

Try this with your printer and have fun. Ask if you have a problem. If I have any luck next time we will do some other nice things and may be able to print the special screen characters.

JERRY CANADY

FROM THE MAILBOX

The following information has been received by the group since the last newsletter. Please notify one of the officers if you would like to have a copy of any of the following articles.

C99 integer arithmetic; hints from Regena on Basic; LOGO fractals; new expansion box and new IBM clone card; various Geneve articles; reviews of Quik Font and EZ-Keys; update of CHECKSUM. (MICROpendium, January 1988)

Review of the Gram Karte and associated utilities. (Quad Cities TI Computer Club, February 1988)

Cleaning disk drives; various short utility programs. (San Fernando Valley, February 1988

Getting the Most From Your Cassette System; Multiplan, part 4; Ramdisks, part 3; TI Writer tip on underlining; Tips for beginners no. 9. (PUG Peripheral, February 1988)

Redefining character sets back to ASCII; hints for ZORK II. (QB Monitor, January 1988)

Setting up Multiplan; Julian dates and a type-in program; error handling tips. (Aloha 99ers, February 1988)

Funnelweb menu flow chart, used for configuring your files. (So. Nevada Users' Group, February 1988)

Review of EZ-KEYS, a help to programmers; tutorial on the Horizon Ram Disk and ROS; a FORTH supercart; creating pictures with Miniwriter II; expanding your expansion system, cheap; a review of Picasso Publisher. (Cleveland Area 99ers, February 1988)

Type-in program to create Valentine's card; Getting the Most From Your Cassette System, #18; a review of Wordwriter II; 32K memory expansion test program for TI card; Tips for beginners no. 12; Pascal/p-code, part 3. (West Penn 99ers, February 1988)

Source code from CRU Access article last month; comments on 1987 new hardware and software; assy. program to do sector comparisons; review of BANNER from Font Writer; complete listing of the L.A. library. (L.A. 99er Computer Group, February 1988)

A new 1987 tax template, for use with Multiplan. Five disks, from $9.95 to $19.95, give a variety of tax forms or schedules. Requires 32K, printer, Multiplan. Write William Chavanne, 4549 English Ave., Ft. Meade, Maryland 20755.

Complete results of Ali Ulgen's TI owner survey; interview of Bud Mills Services, written by our own Gary Bishop; programming in MDOS on the Geneve; review of Disk Utilities V4.0; programming tools available for the Geneve; c99 cryptograms; a type-in Extended Basic game similar to Q*Bert; cleaning the console; trigonometry program in Basic. (MICROpendium, February 1988)

A large list of TI compatible bulletin boards; explanation of the Archiver Format. (Forest Lane TI User Group, Jan/Feb 1988)

A font code listing; who's who in the TI community; debugging tips from Jim Peterson. (Central Iowa, January 1988)

Articles on string handling and sort routines, by Jim Peterson. (Central Iowa, February 1988)

TI Writer tutorial on replace string and control U; machine code programs on the TI. (QB Monitor, February 1988)

SHAREWARE/FAIRWARE

As a newcomer to the TI community,I'd like to share the debt of gratitude I feel toward our SHAREWARE/FAIRWARE developers and encourage all to support them.

At a cost to their energy and time,these generous people provide at minimal cost to us some of the best and latest technologies to access our TI potential.

If every User Group meeting for a year explored only one aspect of the McGoverns' Funnelweb, I believe we still would discover more! It tantalizes me as I keep getting glimpses of its power that I have yet to access as indicated in articles, the documentation,and the mistakes that accidentally give me a preview of what I did not know was there. To me its power is only limited by my inexperience and ignorance.

PLUS! coming out in April adds more to an already strong program as Jack Sughrue adds his own unique assists as well as those of others to give us more practical power in the use of coding,letter and graphic templates,and many other supports making the power of Funnelweb more accessible to those of us without the time, energy, or skill to develop them on our own.

PRINTIT gives an elasticity to banner-making that is limited only by one's unwillingness to experiment with tabbing and the Ascii codes for variety and effect. I can not imagine Rodger Merritt's new PICTURE-IT exceeding the current program's flexibility except possibly for expanded graphics.

Who among us has not read or seen P.C. commercial databases for hundreds of dollars, yet Mark Beck, like most of our Shareware developers, sends word to our User Groups. to get input for improvements on his, a willingness to customize it to TI-specific needs. Can one put a price on such service?

Then there are all the utilities...even program-specific ones which give us a user friendliness while adding flexibility and creativity to existing programs. All this created by the fine,generous minds in the TI community, some of which are not yet twenty years old!

Look at the graphic vistas opening to us as Shareware developers support and expand the reasonable commercial programs, adding flair and style as well as standalones such as TIGRAPHICS by Boyd Shugert. The RLE is yet another story, so too are the many fine games and music.

This is not intended to reflect negatively on any of the fine reasonable commercial programs we enjoy. It is simply an effort to keep our minds open to the fact we owe a lot to these generous people who continue to protect our investment and offer us their best.

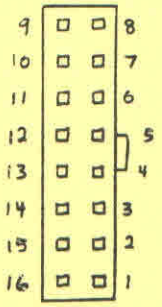
It is a tribute to their talent and their support of the TI-99/4A as they continue to update, gift us with programs comparable to the newest and latest computer developments and make an orphan and its owner future-compatible! Thank you one and all!!!

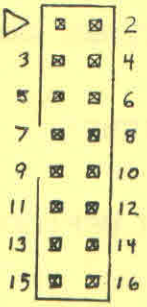
SISTER PAT TAYLOR, B.V.M.

* * *PRINTER CABLES* * *

I recently needed to share my parallel printer between the TI and the IBM clone running in the corner. All I needed was an adapter from the TI PIO connector on the RS232 card to the 25 pin connector on the end of the printer cable. This would allow me to swap printer and cable at the same time. Well, this took some decyphering to understand TI's pin arrangement. In any event, the following schematic works great for the purpose. The hardest part is finding the 16 pin square plug to fit the TI. Radio Shack grab bag may be a source. Good luck!

INCORRECT PIN NUMBER LABELS ON END OF TI PRINTER CABLE.





LOOKING INTO CONNECTOR ON RS 232 CARD

I have a circuit for wiring up an adapter to allow use of an IBM printer cable for parallel printers with the PIO on the RS232 card. The hardest part is finding a square plug to fit into the connector for the PIO. I found mine in a grab bag at Radio Shack. I'm sure there are other more reliable sources.

The schematic is:

	TI PIO (per my drawing)	DB25F CONNECTOR	
Handshake out	1	1	STROBE
D1	2	2	D1
D2	3	3	
D3	4	4	
D4	5	5	
D5	6	6	
D6	7	7	
D7	8	8	
D8	9	9	D8
Handshake in	10	11	BUSY
Logic ground	11	24	
10 pullup	12	NC	
Spare in	13	NC	
Spare out	14	NC	
1K pullup	15	NC	
Logic ground	16	19	GND

I used a 2' length of ribbon cable so the end of the adapter is where it can be easily reached. The hood for the DB25F connector was not tightened all the way down so it makes a nice strain relief on the ribbon cable. Shielding may be necessary if you experience interference with your TV when this is plugged in. Aluminum foil wrapped over the cable works great!

Gary D. Bishop

NEXT MEETING

MONDAY, MARCH 14

7:00 PM --- JA BUILDING

ASSEMBLY LANGUAGE CLASS AND

SOFTWARE REVIEWS!!

VOLUNTEER TO BE AN OFFICER!

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