THE GUILFORD 99'ER NEWSLETTER

VOL.2 NO.7

JULY

Bob Carmany, President Carl Foster, V. Fres. Andrew Small, Sec./Tres. David Cohen, Program Chmn.

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Joseph Martin, Newsletter Ed. George vonSeth, Program Lib. Sandy Carmany, Education

OUR NEXT MEETING

DATE: July 9, 1985 TIME: 7:00 P.M.

PLACE: Glenwood Recreation Center

2010 S. Chapman St.

JULY AGENDA

First, don't forget that the July meeting date is July 9,1985 due to the holiday the week before. The topic of the JUly meeting is Quiz/Trivia games for the TI. These are not only fun, but they are educational as well. The neat thing about most of the available programs is that you create your own questions and answers. Thus, you can tailor the games to the level of educational purpose desired. Hope to see you on the 9th. 'Til then --- good computing!

COLOR TEXT

This short Basic program will print the TI-assigned numerical code for each of the 16 colors and change the screen to the corresponding color with the "CALL SCREEN" command.

(PROGRAM LISTING ON PAGE 2)

M.U.G.

M.U.G stands for Modem User's Group which is an informal part of the club. It is just getting started and is made up of club members who have modems. So far. some of us have discussed uses for for our modems, tips on BBS's, how to use CompuServe and the Source. as well as attempts to communicate between ourselves using computer and modems. This last part has been a problem for me for some reason but Mike Garrett and I are working on it. Maybe some of you out there have a tip on how to connect our TI's over the telephone Volksmodem have a direct-connect and Mike has a TI Acoustical modem. In any case, the members we have so far in our little subgroup are: Dave Cohen (656-7632), Mac Jones (288-4280), Mike Garrett (674-2318), John Hiatt (282-1464), and George Von Seth If you would like to (292-2035).get in on this with us please call any one of the above or see someone at the meetings. Who knows how far or where this will lead. Do you think there's a way for several of us to link up at the same time with the modems? It will be interesting to experiment with this, to share ideas and learn at the same time!

Dave Cohen.

PRESIDENT'S CORNER

Another month has passed and mid-summer is upon us. Those of you who have been attending our meetings regularly know that we now have a "full" system that is capable of running programs. The club owns a console, monitor (color TV) and we are in the process of purchasing a tape recorder. At the present time, we are not looking to immediately purchase any more equipment.

Everyone should realize that we made an "adjustment" in our dues last year that was effective on January 1st. Effective on that the membership dues were raised to \$12.00 per family per Those of us who were pre-paid had their dues prorated at \$1.00 per month into Unfortunately, some of our members have not gotten around to bringing their dues up to date. Since this is the only source of income that the club has to support newsletter and other purchases, we need to have everyone who is in arrears to bring their dues up to WE date as soon as possible. AFFORD TO SEND LONGER THE NEWSLETTER TO MEMBERS WHO ARE NOT PAID UP!! If you have any questions, please see Andrew Small at THIS MEETING!!

We have gotten the last few disks in from the Raleigh Users' Group and George is in the process of getting them organized for the library. It is a long and tedious process as you can well imagine. We have found the same program listed under several programs that have errors in them. programs with no instructions, and programs that just plain will not run. Our library exists largely through the efforts of George Von Seth and Dave Cohen and I would like to take this opportunity to personally thank both of them for the Herculean effort that they have put forth for the benefit of the Users Group.

While we are on the subject of the library, we would like to solicit your assistance in helping us make the listing more accurate. If you encounter a program that has a bug in it, please make a note of the nature of the error and the line number and give it to either George or myself at the earliest opportunity. If you find that the system requirements listed are in error, please let us know about that also. With close to 1,000 programs available to our members. there are bound to be some errors in there somewhere and we would appreciate your help when you find one.

Joe Martin has asked once again for submissions to the newsletter. We are looking for reviews and short programs that you may have written. Any programming tips would also be appreciated. Send your submissions in to the P.O. Box by the 15th of the month for inclusion in the next month's newsletter.

"Forth Forum" this month The has a couple of Wycove Forth menu screens for those of you who have the Wycove system. As a footnote, T T Software, 109 Tee Circle, Salem called Virginia has a game "Spacestation Pheta" that written in Wycove Forth and runs on Basic, Mini Editor/Assembler or Ti-Writer. Ιt also requires 32K and a disk drive. It was written by a 14 year-old and sells for \$14.95. Amazing!!

It looks like HCM has finally gotten on a regular schedule. My last three issues came when they were supposed to!! The quality of software published in the magazine seems to be of much higher quality and the "De-Bugs" are easier to read in the current format.

Once again this is starting to become a "marathon" column. Until next month

Bob Carmany

SCREEN #67

```
O (Wycove Forth Menu, screen 1 of 2 )
1 : LINE SCREEN-WIDTH SWAP OVER * DUP
2 CURSOR-POS ! SWAP SPACES
3 CURSOR-FOS ! :
4 : SPEECH-CONTROL 48 LOAD ;
5 : SOUND-CONTROL 65 LOAD ;
6 : STRINGS 61 LOAD ;
 : RANDOM-NUMBERS 64 LOAD :
8 : USER-INTERRUPTS 44 LOAD ;
9 : DIGITAL-CLOCK 47 LOAD ;
10 : FILE-CONTROL 11 LOAD ;
11 : PRINTER 14 LOAD :
12 : FLOATING-POINT 16 LOAD ;
13 : GRAPHICS-WORDS 55 LOAD ;
14 : SPRITES(TEXTMODE) 56 LOAD :
15 : ASSEMBLER 36 LOAD ;
16 • TE-II-SPEECH 51 LOAD ;
17 : BIT-MAP 20 LOAD :
18 : SPRITES(BIT-MAP) 28 LOAD ;
19 : BIT-MAP/EDITOR 31 LOAD :
20 : TRACE 70 LOAD ;
21 --
22
23
24
25
```

SCREEN #68

```
O (Wycove Forth Menu, screen 2 of 2 )
1 : MENU CLS GRAPHICS
2 2 LINE ." SPEECH-CONTROL "
3 3 LINE ." SOUND-CONTROL "
4 4 LINE ." STRINGS "
5 5 LINE ." RANDOM-NUMBERS "
6 6 LINE ." USER-INTERRUPTS "
 7 LINE ." DIGITAL-CLOCK "
8 8 LINE ." FILE-CONTROL "
9 9 LINE ." FRINTER "
10 10 LINE ." FLOATING-POINT "
11 11 LINE ." GRAPHICS-WORDS "
12 12 LINE ." SPRITES (TEXTMODE)
13 13 LINE ." ASSEMBLER "
14 14 LINE ." TE-II-SPEECH "
15 15 LINE ." BIT-MAP "
16 16 LINE ." SPRITES(BIT-MAP) "
17 17 LINE ." BIT-MAP/EDITOR "
18 18 LINE ." TRACE "
19 20 LINE ." Enter your choice(s): "
20 ;
21
22
23
24
```

CRUISING BULLETIN BOARD SYSTEMS BY DAVE COHEN

Awhile ago someone at meeting asked about local BBS's and couple of months a00 the newsletter had an article on some of them. Since then I have made an attempt to run down the available ones in this area. For those of you with a modem, a call to a BBS is quite a bit of fun! There are some around that will occupy you for a time. The HEATHKIT Store on W. Market Street runs a RRS on its off hours. All you have to do is register at the store and get the sign on procedure and codes. free and easy to use. Their number is 299-5392.

SOFTWARE CITY, also on W. Market Street, runs a BBS on hours hours when the store is closed. you can sign on to this BBS directly by just calling 852-3107 and following the sign-on procedure. This BBS is new so it is not too extensive yet.

Another BBS is SHADOWTOWER and it runs 24 hours a day. The Sysop requires \$10.00 for ful1 access, although you can get limited access for free. trouble is, however, that this is a very popular BBS and so access is very hard to achieve. I mean you can only listen to a busy signal for so long! The number is 855-3197 and you can sign on directly if you ever get through. Good Luck!

Next is the TORTURE BBS at 275-3081. Again sign on is direct during your first call. TORTURE hours are 11 P.M. to 9 A.M.

Another BBS is is at 375-3276 but I don't know it's name. Sorry! It runs just from 6 to 8 P.M. and seems to be a new one. Try it anyway to see if it is worthwhile.

The last one locally is TACS for "Triad Amateur Computer Society". It's number is 674-7078 and it runs 24 hours a day. Sign up is during your first call and it, like the others unless noted, is free.

I have tried other numbers but without success for reason. I'll list them for you so you can try them, hopefully with luck. If you do get better through, why not write a letter to the newsletter describing the BBS and what you did with it. other numbers are: 274-3305, 272-7811, 855-1825, 674-7912, and 674-7879.

It should be mentioned, of course, that Winston-Salem also has some BBS's you might want to try for the cost of a call. First, is one for the TI itself at (919) 748-8065. It runs all day except 6 to 10 P.M. and is called THE PIPELINE. Others are WORDWORKS at 723-5275, the SCI-FI at 922-3308, THE CPM at 777-1099, and IBM at 996-1604.

I hope this gives you "modem hackers" enough to keep busy for awhile. Please write the newsletter with the results and/or how it went, good tips, messages, or whatever you find worthwile in your hacking. Lots of luck and, above all, have fun!!

Dave

Cohen

COLOR PROGRAM CONTINUED FROM FIRST PAGE

100 CALL CLEAR

110 CALL COLOR(3,16,1)

120 CALL COLOR (4, 16, 1)

130 FOR COLOR=1 TO 16

140 PRINT COLOR

150 CALL SCREEN(COLOR)

160 FOR DELAY=1 TO 500

170 NEXT DELAY

180 CALL CLEAR

190 NEXT COLOR

200 END

Just a quick note to those of you who purchased the "Auto Spell Check" program from Dragonslayer The major flaw in the program (Version 1.0) has been corrected. The new Version 1.1 is now available. The original program took 21 minutes to check a 100 sector document and the new version does the same job in 6.5 minutes. You can exchange your original disk for the newer (and faster) version. Send \$3 and your original disk to Dragonslayer ASC, 2606 Ponderosa Drive, Omaha, Nebraska 48123.

The "GRAPHX" program *Sydney, GRAPHX in Australia continues to get rave reviews in all nf. the magazines newsletters. Ιt has a broad spectrum of applications and the drawings can be SAVEd and used in programs of your own design. available for Mini Memory, Extended Basic, and Editor/Assembler. system requirements are 32K and a disk drive. The retail price is \$50 and it is available from the manufacturer GRAPHX. P.O. C568, Clarence St., Sydney, N.S.W. Australia 2000. Most of the mail-order houses also stock this program.

There are still persistent rumors about the 99/8 clone that is to be introduced at the Summer CES. It is supposed to be compatible with existing 99/40 software and will be expandable through the TI Peripheral Expansion Box. The projected price for the basic model is \$300. That is what HCM says, anyway.

There is a review of a low cost printer interface in the latest (Vol. 5 No.3) issue of HCM. It is called the "Missing Link" and it interfaces with a printer through the joystick port. The retail on this item is about \$35.

Incidently, the June and July 1983 issues of 99°ER Magazine had

a two article series about a do-it-yourself interface called "Joyprint" that is exactly the same item. They included a hardware parts list, detailed instructions for assembly and the machine language program necessary to run the interface.

For those few of you who don't know about it (or haven't heard), Triton has reduced the price on the PEB and contents. The PEB is now \$299.95 (without RS232).

There are also reductions in stand-alone disk drives with power supplies.

There is a variety of expansion packages available on the market. TENEX is offering the CorComp expansion system and stand—alone disk drive for \$499.00 and they also have the Percom Data TX-99 disk drive and controller for \$289.

The bottom has fallen out of the cartridge market with a wide variety of cartridges going for \$4 to \$6. Tex-Comp, TENFX, and Triton Products all have a wide selection of cartridges. Most of them are games but you might be able to pick up something that you want.

You can find lower prices on some of these items in sales catalogues from the various mail-order companies. It appears that the prices on TI items are on the way down.

You also might want to check some of the Radio Shack stores around. Although I haven't looked in this area, Radio Shack bought out TI's stock of keyboards (\$2.99), RF modulators (about \$4), and power supply boards. A trip to Radio Shack might be well worth while.

Also, the game mentioned in the "President's Column" might be of more than a passing interest. If it runs like most Forth games, the quality should be excellent.

CONTINUED ON NEXT PAGE

REVIEW BY HERMAN GESHWIND

TI EDITOR ASSEMBLER

One of the inconsistencies of TI's software pricing certainly is PMH3033 Editor Assembler. The list price for this package is \$39.95 which looks like a steal compared to the price of \$99.95 which is list for Extended Basic.

If you look at the details of what you get for your money it looks even more attractive:

With PHM3055 TI packs the source and object code of PHM3052 Tombstone City which normally lists for \$10.75. With the Editor/Assembler package you can run Tombstone City either as a standalone game with assembler or run it with TI Basic with certain support utilities described below. Quite a bargain in itself.

The Editor/Assembler Package adds certain utilities to TI Basic for which you normally have to spend \$79.95 for Extended Basic. These added keywords are: CALL INIT, CALL LOAD, CALL LINK, CALL PEEK, CALL PEEKV, CALL POKEV, CALL CHARPAT.

The editor part the package should look familiar to anybody who knows TI Writer. Fact is that TI Writer is an adaptation of this editor. Conversely the Editor could easily be used for light word processing with printing supported, but not the Formatter part of TI Writer.

Now, whoever buys PMH3055 buys it primarily as THE programming language for the 99/4A and not for games, Basic support and wordprocessing, so how does it stack up?

Even though the package comes with a 470 (!) page manual, there is no tutorial. TI assumed that whoever buys this package already familiar with TMS9900 Assembler and only needs a reference book. such the manual is about as comprehensive with enough technical details about 99/4A architecture as one may ever wish. Light reading it certainly is not. The saying has it that a warm glass of milk and the TI Assembler manual is the best cure for insomnia.

Ωf So, spite its in relatively low price why would anybody ever bother with assembler? If you might ever plan to write programs that execute with lightning speed and take up a minimum of computer resources, then Assembler you. is for provided Assembler bу i s identical to the one that runs on TI's line of minicomputers and with the exception of only very few Extended Operations has been fully 99/4A. As a ported to the programming language it i s powerful, fact is in many cases the programmer needs to slow things down with dummy loops, that is how Assembler programs to the glacial execute compared slowness of TI Basic.

Fortunately there is a way to combine the best of two worlds and Extended Basic allows the linkage assembler routines within a Basic program. Thus, for the average user a good course of action might be to write computational and resource intensive subroutines in Assembler and link these into a Basic program. In fact, whole packages compiled subroutines commercially available.

Our recommendation: If you want to have a better understanding of what makes the TI-99/4A tick, if you want to have an understanding and appreciation for this wonderful language then

REVIEW: EDITOR/ASSEMBLER (continued)

the \$39.95 or \$32.50 for PHM3055 are a good investment. Remember, though, that Assembler requires a substantial investment in time and effort to accomplish anything. If your time is limited, save your money.

As mentioned, the TI Manual does not contain a tutorial on assembly language programming. Two introductory texts that I am aware of are:

Fundamentals of TI-99/4A Assembly Language by M. S. Morley, TAB Books Inc., Blue Ridge Summit, PA 17214, Text No. 1722. This book is slanted more towards the TI Line-by-Line Assembler, which is a junior version ٥f the Editor/Assembler. However. the fundamental concepts apply to both versions. (310 pages. \$11.50).

Introduction to Assembly Language for the TI Home Computer by Ralph Molesworth. Steve Davis Publishing, PO Box 190831, Dallas, TX 75219. This book is really a compendium to the official Manual which it references extensively. While there are any number of books with Basic program listings, similar publications for are as good non~existing, . Molesworth's book being the exception. He gives a number ۵f listings step-by-step explanations as to what is going on. While programs by themselves are not earthshaking in what they will they are good illustrations of Assembler programming and give the neophyte an opportunity to compile and run something that will not bomb due to errors. (139 pages, \$14.95 plus \$1.50 S&H).

PS: The Assembler cartridge is required to run TI-Forth which we will review at some future time.

PRESIDENT'S CORNER: (continued)

providing us with the facilities for our meetings and handling the monthly publicity releases for us. It sure makes life a lot easier when you can count on a place to meet and not have to worry about getting news releases written to the various media. THANK YOU VERY MUCH, JACKIE!!

Well. I promised Joe Martin that I wouldn't ramble on too long this month but it looks like this is getting out of hand once again. Good-bye for this month---see you at the next meeting!

Bob Carmany ინინინინინინინინინინინინინინინინი

PROGRAM REVIEW: BY JOE MARTIN TI STAR TREK

The Star Trek game from TI is very simular to the arcade version and therefore very confusing. The playing screen is divided into three sections, one section being a radar representation of the space in which you (the Captain of the Enterprise) are located, another being the view from the main (3-D) yiew screen of the Enterprise, and the third showing the levels of power for your shields, warp drive, and photon torpedos.

Playing the game is simpler than it appears, after a little practice. You soon learn to watch your radar screen for the most part, turning to the main view screen only for final targeting.

This game increases in difficulty the further you progress, with enemy ships becoming more numerous and faster, and at higher levels the Klingon cruisers actually ram into the Enterprise, kamakazie style.

All in all I found this game interesting to play as it allows you to progress while still remaining a challenge (by the way, I am a Trekie).

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DRAGON MAZE(XB) PROGRAM REVEIW BY DAVE COHEN

This is one tough maze game! The object is to move your peice (the green dot), to the exit before the dragon (the red dot), gets you. The problem is that once the maze is set up, it goes invisible. You know where a wall is when you or dragon can't get through, although the dragon sometimes gets down and dirty and passes through a wall. The game is obviously tough because of the invisibility of the you walls. Unless have photographic memory and memorize setup, the maze during its challenge any of you to "win" this game.

Besides being hard, the maze takes a long time to set up. This may be a blessing in disguise since it gives you time to study a way out. Also, a little help is provided when the walls "fill in" as you move your dot around. The dot is moved by the arrow keys so the game runs a little slow, however, for a real mind bender this game is recomended.

Dave Cohen

The following program is a self documented for balancing a checkbook.

95 CALL CLEAR

100 PRINT TAB(5); "CHECKBOOK

BALANCE!

102 FOR DELAY=1 TO 300

104 NEXT DELAY

110 CALL CLEAR

120 INPUT "BANK BALANCE? ": BALANCE

130 DISPLAY "ENTER EACH

DUTSTANDING"

140 DISPLAY "CHECK NUMBER AND AMOUNT."

150 DISPLAY

160 DISPLAY "ENTER A ZERO FOR THE"

170 DISPLAY "CHECK NUMBER WHEN

FINISHED."

180 DISPLAY

190 N=N+1

200 INPUT "CHECK NUMBER ?": CNUM(N)

210 IF CNUM(N)=0 THEN 250

220 INPUT "CHECK AMOUNT? ": CAMT(N)

230 CTOTAL=CTOTAL+CAMT(N)

240 GOTO 190

250 DISPLAY "ENTER EACH

OUTSTANDING"

260 DISPLAY "DEPOSIT AMOUNT."

270 DISPLAY

280 DISPLAY "ENTER A ZERO AMOUNT"

290 DISPLAY "WHEN FINISHED."

300 DISPLAY

310 M=M+1

320 INPUT "DEPOSIT AMOUNT?

":DAMT(M)

330 IF DAMT(M)=0 THEN 360

340 DTOTAL=DTOTAL+DAMT(M)

350 GOTO 310

360 NBAL=BALANCE-CTOTAL+DTOTAL

370 DISPLAY "NEW BALANCE= "; NBAL

380 INPUT "CHECKBOOK BALANCE?

":CBAL

390 DISPLAY "CORRECTION=

"; NBAL-CBAL

400 END

TI WRITER TID

Last month we discussed the use of transliterate commands to control printer functions. idea in relation to this was brought up by Larry Spoon at the last meeting. He suggested making a file containing nothing but the trasliterate commands which you most commonly use, then merging this file into the document when needed, or when starting a new document, load the file and write the document directly onto it. Although I've been using this idea for a while, it hadn't occured to me to mention it in the article. sample format file follows, see if you can figure out what they do.

.TL 60:27,52

.TL 62:27,53

.TL 126:182

.TL 124:183

.TL 123:27,45,1

.TL 125:27,45,0

.TL 91:27,69

.TL 93:27,70