E.D.M. 10/88

CHANNEL 99 EXECUTIVE

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EXECUTIVE COMMENTS

By *Tor Hansen*

The end of the summer marked the first meeting of the Executive since the last one in June, just before the summer break.

The main topic of conversation was the departure of Tom Bacolini from our ranks, and what to do about it.

Tom Arnold volunteered to take over the duties of treasurer, and also commented that if there was some interest offered, he would be willing to take over editorship of the Newsletter, while sacrificing his position as president of the Club.

There were no takers at the meeting, but this does continue to be a big possibility.

Anyone out there interested? Or is there someone you would like to volunteer for the job? Don't forget, the Club elections are not that far in the future.

I volunteered to take over the duties of Club Librarian, and in my first night out at the last meeting in September, got a couple of orders from the library, plus a couple of new members to add to the Club lists.

Not a bad start!

As is stated in other parts of this issue, Tom Arnold will not be present for the October or November sessions of this Club, so I will be filling in for him.

WHICH REMINDS ME!!! There seems to be an element of this Club that is in competition with the speaker, usually at the opening comments of each meeting.

To this element... Fair Warning.

If you interrupt me, you will be given an immediate chance to speak at the front in my place to open the meeting.

If the prospect of this dismays you, please hold your comments 'till I yield the floor at the end of my comments.

PLEASE NOTE!! There will only be ONE verbal warning at the next session (the same month that this article appears in). After that, you are on your own... and your best behaviour.

I am indeed looking forward to the next meeting at the Spectator!!

See you there!!

CLUBPAGE

By *Tor Hansen*

The September session was chaired by Tom Arnold (surprisingly, for the last time for a couple of months), and Tom Bacolini's usual position was occupied by a strange (and hairy) face... mine.

There have been some changes around the old club recently. I have taken over as Chief Librarian, replacing the departing Tom Bacolini, and Tom Arnold has taken over as Club Treasurer.

Rick Lilley has assumed the duties of Newsletter co-ordinator for the meetings, and will also be responsible for all the mailings of the publication to our members and Club exchange members.

Please direct any questions on that issue to Mr. Lilley.

At the meeting, Tom announced that he will not be attending the next two sessions, so yours truly will be chairing said meetings.

The rest of the session, not badly attended, by the way, was concluded in a fashion that has to be seen to be appreciated, so I'll say no more.

See you next month.

CLUB NEWS

By *Tor Hansen*

As I mentioned in the previous column, there have been a few changes in the Club recently.

More than ever, we need volunteers from the membership to help out with the various tasks that need to be done to keep this Club a viable, going concern.

Help is solicited for the writing of columns and articles for the Newsletter, and any other offers of help won't be refused, as there are many areas behind the scenes that could do with some extra staffing.

I sometimes don't think that the membership fully understands all the work and time that goes into making the Club and the monthly sessions run as smoothly as they do, nor in all the work that goes on to produce the Newsletter that seems to show up each month, ready for you to pick up and enjoy.

To those of you who show up each month (or maybe don't, but still enjoy this letter by mail), and haven't yet found an urge to volunteer, we feel you are getting something from the Club, since you still belong, how about turning the flow the other way for a while and lend us a hand.

As there are new people joining all the time, many who don't know as much as some of us Old-Timers, maybe we can offer some of these new people the benefit of our years of knowledge.

Come see us at the next meeting and let us know that you want to help. After all, this is YOUR Club.

See you next month.

COPOLA CORNER
by Wayne Anderson

It's been a slow few months again for receiving new programs and Fairware packages. Summers are like that!

However, my biggest problems in finding and organizing stuff for the library have been lack of time and abundance of dust, both arising from the same renovation project at home. Do-it-yourselvers will know how time consuming these jobs can be. Besides that, the job created so much dust thoughout the entire house that I just packed the computer away in a box for most of the summer.

Now that the renovations are nearing completion (tell my wife about it) the amount of time devoted to the computer should increase. But for now the descriptions of additions to the library are less than brief.

Updates to four very popular Faireware packages are now available. Unfortunately, without time to even print out the docs, I can not describe changes and improvements made by the various authors to their work.

The first four programs listed here are intended for use on either the 99/4A or the Geneve. GIF2 runs only from MDOS on the Geneve.

1. c99 Rel 4U	Clint Pulley
2. Disk Utilities 4.1	John Birdwell
3. Archiver 2.4	Barry Boone
4. Funnelweb 4.1	Tony McGovern
5. GIF2	Paul Charlton

CHANGING COLOURS IN DISKU v4.1

By John Van Weelie
Member Channel 99 - Hamilton

At the September monthly meeting I was asked if I knew how to change the foreground and background colours of the screen display for DISKU by Ed Moriarty of our club's executive. At the time I told Ed that I did not know off hand. Well at last I do know how to change the colours which is quite easy to do with a sector editor feature of DISKU.

Firstly I recommend that you copy the file DSKU1 to a newly formatted disk. Always do sector editing on backup copies of your programs to prevent destruction of vital information or programs accidently. Please read the article completely and pay special attention to the warning in the last two paragraphs.

Once you have copied the DSKU1 file to a newly formatted disk with this file as the only file on the disk, editing the file to change the colours is easy. The sector you want to edit will be sector 22 which is the first sector of the DSKU1 file. The String we wish to edit is F4 which gives use white letters (foreground) on a dark blue screen (background). The letter F is the foreground colour and 4 is the background colour.

This HEX string F$ is found at byte 75 or >4B. I recommend using the sector editor in DSKU v4.1. It displays the byte number in the bottom right hand corner as you arrow the cursor aacross the screen. Once at byte 75 you can change the foreground and background colour to your own taste. Two combinations that I have tried are 1B and FC.

I would recommend using you Extended Basic Manual as a reference for choosing colour combinations. Refer to page 200 which give a list of combinations. Once you found the colour combination be sure to use the chart below which which give you the HEX values for the colours to use for changing F4 to you colours. Once you have changed the colours now CTRL W to write the sector to disk and copy back to your working disk.

HEX COLOUR REFERENCE CHART:

```
Ø - Transparent
1 - Black
2 - Medium Green
3 - Light Green
4 - Dark Blue
5 - Light Blue
6 - Dark Red
7 - Cyan
8 - Medium Red
9 - Light Red
A - Dark Yellow
B - Light Yellow
C - Dark Green
D - Magenta
E - Gray
F - White
```

I hope this explains how to change you screen display for DISKU v4.1. If you have any questions please feel free to ask questions. The author of this article assumes no responsibility for any damages incurred by the user in attempting this procedure. The is procedure should only be attempted by persons who understand sector editing and who totally understand how to use DISKU's sector editor.

Caution improper use of a sector editor can wipe out vital sector information on your disk which can render your program none functional. Always do sector editing on backup files.

Review by John Van Weelie
Member - Channel 99

I would first of like to thank Barry Boone for his very worthwhile program and I will be sending him some money for my contribution for his fairwaire program.

ARCHIVING has been a subject of many discussion in the TI community. Many say why archive your programs. Well archiving is one way to back up you programs on disk as in most cases the archived file is smaller than the original program. Another use of archiving is the archive programs for telecommunications. Uploading and downloading of archived files

saves money on long distance bills or bills from the commercial BBS such as Compuserve, Source, Delphi and Genie.

First of all I would like to mention that the author has made a excellent program with the Archiver III version 3.02. He states in the brief documentation file that this version was a total rewrite from scratch. It is still 100% compatible with version 2.4 of Archiver II. Archiver III has added features of file management options and a View Text file option along with the compression routine has been optimized, so you may expect to get slightly higher compression yields over Archiver II version 2.4. Another improvement is the fact that Pack/Compress and Unpack/Decompress steps have been consolidated, which means you can pack and compress simultaneously or unpack and decompress a group of files simultaneously. I find this less cumbersome than in Archiver II v2.4.

Once you load Archiver III v3.02 the first screen you see is information about fairware, authors address and donations. You press any key to get to the main menu.

```
Archiver III - Version 3.02 8/16/88
Copyright 1988 Barry Boone
======================================

            1) Archive Files
            2) Extract Files
            3) Catalog Disk
            4) Catalog ArcFile
            5) File Copy
            6) File Rename
            7) File Delete
            8) File Un/Protect
            9) View Text File
            0) Load FW
```

1) Archive Files is simply the process of taking a group files and placing them in a single file, which takes less space than the original files. Once selected you will be prompted the Source Drive (1-9), Output Drive (1-9), if the output drive is the same as the source drive you will be asked if you wish to swap disk you input Y or N. For those users with only one drive you would answer yes. Next you will be prompted for the Output Filename. You will be asked if you want to PACK ALL the files from the disk in the source drive. You answer Y or N. Then you will be prompted if you want it compressed Y or N. If at the COMPRESSED (Y/N) Prompt you press yes then your output file will be compressed into a file in a I/F 128 format. If you answer N for no than your output file will be packed only into a file in a D/F 128 format. If you answer yes to prompt PACK ALL FILES than all files from disk in source drive will be packed into your single output file. If you wish to chose only certain files from the disk in the source drive than answer N for no and you be prompted to answer Y/N at the INCLUDE FILE and each filename on source disk is display

individually to allow the operator to chose what files go into the archive.

2) Extract Files is simply unpacking and decompressing an archived file. When selected you have the choice of Extracting all files from the Archived Files or selected files from the Archived file.

3. Catalog Disk simply a catalogging routine that allow you to catalog a disk and allows option hardcopy printout to printer.

4. Catalog ArcFile simply allows the operator to catalog a Archived file to see what files are contained in the Archived file. You will prompted for Source drive and source filename and have the option having the catalog printed to your printer.

5. File Copy simply allows you to copy files.

6. File Rename simply allows you to rename files. Protected files have to be unprotected before being renamed.

7. File Delete simply allows you to delete files.

8. File Un/Protect simply prompts the user for source drive and filename and whether to protect or unprotect. By pressing enter will unprotect a protected file or protect and unprotected file.

9. View Text Files allows the operator to view D/V80 text files.

0. Load FW simply loads Funnelweb. I have not been able to load Funnelweb V4.1 with it from disk drive but have been able to load Funnelweb V4.1 from RAMDISK.

Other Points:

- Internal sector buffer increased to 50 sectors.
- Compression of 30-70% is common, depending of types of files.
- Compressed Files - I/F 128 format.
- Packed Files - D/F 128 format.
- Modem users may see upto 50% savings in Long Distance or Commercial BBS Bills.
- Uncompress Archives (D/F 128) formatted files will automatically be write-protected, since most Terminal Programs require that d/f 128 files be protected to work or transfer at acceptable speeds.

- Files that are sufficiently random in nature may not compress. These are rare and most are almost always already compressed in some way. Known offenders are GIF pictures, Infocom Games which both use the same compression technique as Archiver III.
- Speech Synthesizer data tends to be unsqueezable.
- Don't bother trying to compress a file twice, it'll just get bigger the second time.

The Disk Of The Month
by John Van Weelie

The Disk of the Month has several interesting programs which I hope that everyone will enjoy.

FUCAT - is a catalogging program written in assembly which will identify E/A #5 program files from BASIC-Extended Basic programs. It will indicate if any files are fractured. It will print a hardcopy to printer.
PLAGA2 - is an Extended Basic Game. It's a space type adventure.
CH99LOGO - is a program that prints out the Channel 99 Logo to printer.
AIRWOLFP - is an assembly program which allows you to manouver a chopter through the maze.
OVERLAY - this is a OVERLAY printing program which allows you to produce your own overlays for the Keyboard for other programs requiring an overlay. It has several overlays available to choose from to print out as well.
LABLER2 - this is a Graphic Labeller V2.1 from the Ottawa U.G. which allows you to print a graphic and text on a disk label.
EDITOR - This is a GRAPHIC EDITOR v1.2 written by a TIer in Montreal to allow you to edit and design your own graphics to use with the graphic labeller program. It is very easy to use.
VIEWPICS - this program allows you to see all the graphics for Graphic Editor or Graphic Labeller displayed to the screen.

NEWS AND VIEWS
By Tom Arnold

You will note that I have changed the title of this column, I feel this more reflects what I have to say. I might note that most of my information comes from personnel experiences, Micropendium and other User Group Newsletters. The newsletters are my main source of new information, however I also like to repeat experiences that I have had or heard about.

First you will note on the first page that there have been a few changes in the executive. This was caused by the resignation of Tom Baccolini our "Jack of all Trades". Tom has performed yeoman service for at least 4 years and we must all thank him for his efforts. He still has his TI but also has two IBM compatables which he uses more and more in conjunction with his work.

I will be taking over his duties as Treasurer. I can't even tell you what our bank balance is as I have yet to balance the books. We have about $600 at present. I will issue a statment next month. Tor Hansen has assumed the duties of Librarian so if you wish to order any programs from him please do so. Richard Lilley will now be in charge of the newsletter distribution. If you are missing issues or want to place a subscription then you should contact him.

With Tom leaving the executive we are in need of new blood. Why don't you volunteer? It only takes one night a month and some time at home depending on your duties.

At our last meeting I received the latest versions of software for the Geneve from Gary Bowser of Toronto. Although Gary had made a few modifications himself I found them all to be much improved. MDOS is the major improvement, many of the stated features are now working. For example the PRINT SCREEN works in MDOS. A feature I did not know about is getting a directory of specific files. To do this type <DIR 'DV80> and all your DV80 files will be listed. Another nice feature is that if you return to MDOS from GPL the computer does not reboot. Your Ramdisk remains intact also whether you go from MDOS to GPL or vice versa. One draw back, the Ram Disk is smaller due to all the memory used for these features.

I also learned of a feature that I was not aware of. I accidently pressed the Control, Shift and Alt keys all at once. Two lines appeared that I was not aware of. This key combination toggles the Geneve between 24 and 26 lines! This occured at the last meeting and apparently I was the only one there who did not know about this (of the Geneve owners).

Looking for a new source of information? Well I thought I might mention a few that I have read about. For Geneve owners there is a new diskette magazine called 9640 News. This is going to be put out by Beery W. Miller, 1561 Galeston, Memphis, TN 38114. Cost will be $30 for 5 issues for Canadian residents. State whether you are double sided and/or double density. This diskazine will contain news and programs for the Geneve. Sounds very interesting.

Another magazine that I have just heard about is actually one that has been around for some time. It is called TId Bits. It is a bi-monthly magazine put out by Bruce Forbes, Route 2, Box 412, Sumerduck, VA 22742. This is a real bargain in that it costs $8 for 6 issues of hard copy or $12 for 6 issues of disk copy (SSSD flippy). If you like schematics or photos of chip boards then the hard copy is version is your choice. If you like programs then the disk version is best. Many of the articles are on both.

Genial TRAVeLER is another disk based magazine which has been around for some time. However I have not heard of any of our members subscribing to it. This excellant diskazine could keep you busy for hundreds of hours if it was the only source of information that you had. It is put out by Barry Traver, 835 Green Valley Drive, Philadelphia, PA 19128. Cost of this diskazine is $36 for a one year, six disk subscription. The first six disks are still available. They are currently issueing the second six disk set.

Asgard News is a newcomer to the field of TI magazines. This magazine is put out by Asgard Software on a quarterly basis. Cost is $6 for the four issues. I have not see this but would expect that it will be slanted towards their products. This should not pose a problem as I expect that they will have many helpful hints on operating their software.

By the way, if you sit home and don't support these publications then you will surley soon own an orphan. Get off you duff and send in that order. These publications need your support to survive.

I have heard of Turbo Pascal for some time but now it is available. L.L. Connor enterprises of 1521 Ferry St. Lafayette, IN 47904 is now shipping the TI version of Turbo Pascal. This product will run many of the programs that run in the Turbo Pascal mode of PC's. The cost of this package is $59.95 plus $3 shipping. It will operate on either the TI or the Geneve.

New products that have been announced are Column Attack, an arcade-type game in which the Flugalins of the Planet Flugal attack earth. This program is written in Fortran 99 by Chris Bobbitt and runs in either XB, E/A or TIW. Cost is $9.95.

For our adventure people there is a new aventure out called Oliver's Twist. This runs on the adventure cartridge and sells for $9.95 from Asgard Software.

One neat package that I have been reading about is the Disk of Dinosaurs, by Ken Gilliland. This two disk package of dinosaurs graphics stored in Ti-Artist Instance format includes dinosaur pictures, a complete dinosaur alphabet, background scenes, a dinosaur hunting licence and four dinosaur cartoon shorts. This set requires Ti-Artist to use. It sells for $12.95 from Asgard Software.

A new program that has been released is PrEditor. This is a new text editor by Asgard Software. It works on both the TI and the Geneve. It's biggest feature is that it allows you to have two files in memory at once. This allows you to cut and paste between files. It works in 80 columns if you have that capability. Available from Asgard Software, P.O. Box 10306, Rockville, MD 20850.

Do you own a copy of Funnelweb and don't have the TI Writer manual? I have just the answer for you. I have several copies of "The Writers" by Harry Brasher which was written just for you. This 25 page manual has many helpful tips on how to use TI Writer and it's clones. This makes for interesting reading even if you do have the manual. It is available from me at our meetings or if you

wish I can mail it to you. Cost is $3.00 a copy plus $0.50 postage if you want it mailed.

The Chicago Faire is being held on November 12th at the Holiday Inn in Rolling Meadows, Illinois. I have reserved my room and am really looking forward to going. If you want me to pick up some software for you phone me at 385-5576. If I can get several orders we might get a break on price. Generally if you buy more than one copy of software you get a discount. I want your money before I go however.

I finally got around to sending out the faireware money that we have been collecting. I sent John Birdwell $25 CDN ($20US) for his Disk Utilities program. If you haven't seen the latest version get it from our library. It is great. Tony McGovern and his son Will were sent $20CDN ($15US) for their excellent program Funnelweb. Version 4.1 is also available from the library. I also sent Gary Bowser $15CDN for his program TASS which displays RLE pictures. Gary comes out to our meetings quite often. Thanks to all these programmers for their excellent programs. If some of our out of town memebers would like to contribute then I will be happy to pass the monies on. All money order receipts are available at each meeting.

Well that's all for this month, happy computing.

SECTOR EDITING FOR THE NOVICE
by Tom Arnold

If you have a copy of Disk Ultilities version 4.1 by John Birdwell you will have noted that there are several selections which involve sector editing. Many people do not use these options because they 1) do not know how to use them, 2) do not have a use for them. I hopefully will give you reasons for using these as well as how to use them.

First the reasons for using a sector editor. The main purpose of a sector editor is to edit programs or text directly on your disk. Not being an assembly language programmer I do not have the knowledge to alter programs written in that language. I originally had to use a sector editor to alter assembly language programs which had bugs in them. The corrections of these bugs were published in magazines and the only way to make them was to use the sector editor. Eventually I wanted to make changes to the visual display of some programs, usually text. This is my main use of the sector editors. For example I received a copy of Myword in which the last line End of File marker had been altered. It was terribly cluttered and very distracting. I was able to alter it so that it was much neater and easier to work with.

So if you follow my hints you will be able to alter the display or text of some of your assembly language programs.

DEBUGGING

By Debugger

Ho Hum!!
Yet another issue passes that leaves me nothing to write about. At least, that I can check on.
There was a small program in the last issue that initialises a Gemini printer to print out Chinese characters, but I couldn't check it on my printer (for the obvious reason) and I haven't yet modified the program to work on an Epson compatible.
Maybe when I take some time off from writing this stuff, I'll take a stab at it, and share the results with the group.

But that's for another column and issue. The rest of the last issue (aside from some minor spelling errors) seems to be as bug free as the issues are coming these days.
Which makes for easy reading and (if you are the type) easy keying in of the programs presented, leaving the debugging to just your keying errors.
Ah well... there are harder ways to make a living...
See you next month.

DATA

By Tor Hansen

Probably the single most important function of a computer is to both manipulate and store data.
Whether this data is 'program bound' or stored on some storage medium, the computer's ability to deal with the data it is presented with comprise the most complex and best programs we or any other kind of computer owner have available to us.
Programs from TI Writer (and its clones) and Multiplan to any of the several Terminal Emulators that are around are all some form of data manipulator.
With this in mind, for the benefit of some of the novice programmers in the group, it stands to reason that the better the handle we have on how to cope with data, the better the use we can get from our machines.
The tendency most beginning programmers have is to use DATA statements in the body of their programs to contain the information they need to make the program work.
The one advantage to this method is the ease of entry while the program is being written, allowing the author to do any 'tailoring' to his program as necessary to handle his data.
One major disadvantage is the size the program can get to if the data base is of any substantial size. It can get so bad that routines perhaps deemed useful to the program may have to be sacrificed to maintain the data base.

The next step the programmer learns is to eliminate the data from the program and store it on either disk or cassette.
This step takes one large increase in the understanding of data storage by our systems, as it involves device selection, file attributes, file lengths, and other choices that tend to confuse the beginner (I know, I went through that same kind of confusion when I was first trying to learn it).

The final selections, however, are not that bad when you get past the hard-to-read manual.
Once you are past the manual, and finally do have a handle on data storage, you are well on the way to gaing some serious mastery of this system.
Next month, we'll look at how to do some of this transferring, and considerations to keep in mind.
See you then.

1988 CLUB MEETING DATES

Friday 15 January   Friday 13 May
Friday 12 February   Friday 10 June
Friday 11 March   Friday 8 July
Friday 8 April   Friday 12 August

Friday 9 September
Friday 7 October
Friday 11 November
Friday 9 December

All meetings are held from 7 P.M. to 10 P.M.
Hamilton Spectator Building 44 Frid Street

7

```
70 REM ONE TO FIVE
80 REM A PUZZLE GAME
90 REM AUTHOR UNKNOWN
100 CALL CLEAR
110 PRINT TAB(9);"ONE TO FIV
E"
120 PRINT : : :TAB(6);"INSTR
UCTIONS (Y/N)"
130 PRINT : : : : : : : :
:
140 CALL KEY(0,R,S)
150 IF R=89 THEN 1030
160 IF R=78 THEN 170 ELSE 14
0
170 REM
180 RANDOMIZE
190 REM DISPLAY************
200 CALL SCREEN(16)
210 CALL CLEAR
220 CALL COLOR(13,12,2)
230 CALL CHAR(128,"FFC381818
181C3FF")
240 CALL HCHAR(1,1,128,256)
250 CALL HCHAR(17,1,128,288)
260 CALL VCHAR(1,1,128,216)
270 CALL VCHAR(1,25,128,192)
280 M5$="ONE TO FIVE"
290 MESSAGE$=M5$
300 ROW=5
310 COLUMN=11
320 GOSUB 980
330 IL$="234WERASD"
340 FOR T3=0 TO 2
350 FOR T4=0 TO 2
360 CALL HCHAR(T3+10,T4+13,A
SC(STR$(A(T3,T4))))
370 CALL HCHAR(T3+10,T4+19,A
SC(SEG$(IL$,3*T3+T4+1,1)))
380 NEXT T4
390 NEXT T3
400 FOR T1=0 TO 10
410 I=INT(RND*9)+1
420 GOSUB 620
430 NEXT T1
440 M=0
450 P1$="MOVES="
460 MESSAGE$=P1$
470 ROW=15
480 COLUMN=13
490 GOSUB 980
500 REM INPUT************
510 CALL KEY(1,I,STA)
520 IF (I<1)+(I>9)<>0 THEN 5
10
530 IF STA=0 THEN 510
540 M=M+1
550 GOSUB 620
560 ROW=15
570 COLUMN=19
580 MESSAGE$=STR$(M)
590 GOSUB 980
600 GOTO 510
610 REM EXECUTION MOVE******

620 X=INT((9-I)/3+1)
630 Y=((I-1)/3-INT((I-1)/3))
*3+1
640 FOR T2=0 TO 2
650 A(X-1,T2)=A(X-1,T2)+1
660 A(T2,Y-1)=A(T2,Y-1)+1
670 NEXT T2
680 A(X-1,Y-1)=A(X-1,Y-1)-1
690 T=0
700 FOR T3=0 TO 2
710 FOR T4=0 TO 2
720 IF A(T3,T4)<>6 THEN 740
730 A(T3,T4)=0
740 IF A(T3,T4)<>0 THEN 760
750 T=T+1
760 CALL HCHAR(T3+10,T4+13,A
SC(STR$(A(T3,T4))))
770 NEXT T4
780 NEXT T3
790 IF T<9 THEN 800 ELSE 820
800 RETURN
810 REM PROB. SOLVED*******
820 M2$="YOU DID IT"
830 MESSAGE$=M2$
840 ROW=20
850 COLUMN=12
860 GOSUB 980
870 M3$="@PLAY AGAIN Y/N&"
880 MESSAGE$=M3$
890 ROW=22
900 COLUMN=9
910 GOSUB 980
920 CALL KEY(0,R,S)
930 IF R=89 THEN 950
940 IF R=78 THEN 970 ELSE 91
0
950 M=0
960 GOTO 170
970 END
980 FOR B=1 TO LEN(MESSAGE$)
990 CHAR=ASC(SEG$(MESSAGE$,B
,1))
1000 CALL HCHAR(ROW,COLUMN+B
,CHAR)
1010 NEXT B
1020 RETURN
1030 CALL CLEAR
1040 PRINT "ONE TO FIVE IS P
LAYED ON A"
1050 PRINT "BOARD WITH 9 POS
ITIONS SET"
1060 PRINT "OUT LIKE FIGURE
""A"""
1070 PRINT :"1 2 3   5 3 1
0 3 1   2 3 4"
1080 PRINT "4 5 6   4 4 3
5 5 4   W E R"
1090 PRINT "7 8 9   2 0 3
3 0 3   A S D"
1100 PRINT "FIG A   FIG B
FIG C   FIG D"
1110 PRINT :"THE POSITIONS O
N THE BOARD"
1120 PRINT "ARE OCCUPIED BY
A RANDOM"
1130 PRINT "PATTERN OF DIGIT
S BETWEEN 0"
1140 PRINT "& FIVE. IF YOU E
NTER ONE OF"
1150 PRINT "THE POSITIONS(US
ING THE KEY"
1160 PRINT "SHOWN IN FIGURE
D) THE"
1170 PRINT "DIGIT ON THAT PO
SITION, &"
1180 PRINT "ALL THE DIGITS O
N THE HORIZ-"
1190 PRINT "ONTAL & VERTICAL
LINES GOING"
1200 PRINT "THROUGH THAT POS
ITION, ARE"
1210 PRINT "INCREASED BY 1(E
XCEPT 5"
1220 PRINT "WHICH BECOMES 0.
) IF 'W' WAS"
1230 PRINT "ENTERED IN FIG.
B IT WOULD"
1240 PRINT "CHANGE TO FIG. C
"
1250 INPUT "       @PRESS EN
TER&":A$
1260 CALL CLEAR
1270 PRINT "THE PUZZEL IS SO
LVED"
1280 PRINT "WHEN ALL 9 POSIT
IONS ARE"
1290 PRINT "OCCUPIED BY ZERO
S. ie"
1300 PRINT : : : : :
1310 PRINT "      0 0 0"
1320 PRINT "      0 0 0"
1330 PRINT "      0 0 0"
1340 PRINT : : : :
4000 INPUT "       @PRESS EN
TER&":A$
4010 GOTO 170
```

Your first problem is finding the string which you wish to change. The string is the "line of text" as all text is stored as strings. Generally these are just stored one after the other so you will have to avoid overwriting the adjacent strings. If you know which file the string is on then it is a little faster finding the string you wish to change.

For my example I am going to change to "End of File" marker on the current version of Funnelweb version 4.1. This string looks like this: "EoF 1........2 ....3, etc." I will assume you do not know the file which contains this information (it's actually in file ED). At the main menu of DSKU select #3 - Disk Utilities. On the next menu select #3 - Find String. You will now be prompted to select the drive number. Enter the drive your disk is on. You are now prompted to select the sectors you want searched. As you do not know where the string is select "0" (zero) for the first sector. For the last sector select the number indicated as the total number of sectors on the disk. This is shown in Hex at the bottom of the screen. You are now prompted to select ASCII or Hexdecimal. Unless you speak Martian you should select ASCII which will show your text in English. Now you are prompted to enter the string you wish to find. In our example we will be looking for "EoF". A word of warning here. Make sure you have the correct string, proper case, etc. Use a string that is long enough that it identifies the string you wish, but not so long as to be susceptable to spelling errors. Next you are prompted to enter the change, be sure you enter it as you want it.

The program will now start looking for you string. In our example it should find the string at 00EB if you are using the whole Funnelweb disk. If you have copied the ED file to a blank disk then it will be at 0041. When the string is found, you are prompted to replace the string, continue to the next occurence, edit the string, exit. Make sure you have the correct string occurence before you do anything. If you want to edit the sector (which is what I do as I usually do not look for the whole string), then you should know the editing commands.

These are listed in DSKU documentation but are as follows: CTR-A turn display to ASCII, CTL-H turn display to HEX, CTL-N next sector, CTL-B back one sector, CTL-W write changes to sector, CTL-D done, clear screen, enter new sector number, CTL-R read another sector. In addition all arrow keys are usable.

Now that you have found the EoF string, what are you going to write into it? How about your name? underline symbols? user group name? your address? it's up to you. Have fun, but remember to only sector edit on a backup, you may make mistakes!!

As an aside, I like to browse through sectors on a disk to see what I can read. It is here that I spot text that I edit to create special displays for myself.

Fairware or TrI-ware Offering
by John Van Weelie

This month the TrI-ware offering are the following:
1) Star Trek II which is a disk with the theme music from the popular TV series and motion pictures involving Star Trek. Also with this music the author has incorporated graphics.
2) Gee - G is a Graphic language developed by aN AUSTRALIAN chap which allows you to write a program which is like basic to produce some very excellent graphic display. This version of G is not the advanced users program which appearly will be released later. This has been kept simple to allow the users to learn it first.
3) CAT LIB - This is a Library Cataloging program. As most would say who needs another library cataloging program. Most don't but this program used in conjunction with CAT COMM allows a very versatile database of your disk library.
4) CAT COMM - This program uses data files written by CAT LIB which catalogs your library. You use you data files from your library listing to create a database file about your listing. Each file catalogged by CAT LIB when used with CAT COM can have comments added, keywords added, etc. which can allow searchs for programs or files by subject or keyword.

Next Month Look forward to FUN!plus, LOGO DUMP, LOGO Autostart and Tass 2001 v3.0.

FUNNELWEB AND TI-WRITER TUTORIAL

Tor Hansen and Dwayne Verhey

I would like to open this month's column with an apology to our reader for it's prolonged sabatical. Now that the skies are turning grey, our pumpkins are turning orange, and the Olympics are turning our collective stomach, it would appear to be time to return to the keyboard of old faithful, the guaranteed 100% steroid free TI99-4A.

Those of you who attended last month's meeting may have had the opportunity to observe an interesting demonstration of inserting printer control codes into your TI-Writer text, for use by the formatter. Being slightly pre-occupied with my own system last month, I did not have the opportunity to observe the whole demonstration, and the thought occurs that perhaps others missed it too, particularly our out of town members. Without boring those that did see it then, here is a brief synopsis of the procedure that I follow.

First of all, you must know just what codes to use to do what, and this can vary from brand to brand of printer, although the Epson set of codes is very often copied by other manufacturers. For example, my printer is a Roland, but it uses the Epson codes. Now, looking up all those codes every time you wish to load a new print style can be a bit of a bore, so what I do is allow the computer to do it for me. I simply save a small file of all the codes I might want for a particular application, and include it in my main file at the beginning with the IF command. The following is one of those files that I use for correspondence, I named it "LETHEADER", and simply type ".IF DSK1.LETHEADER" at the start of a letter.

```
.FI
.AD
.LF Ø;RM 6Ø
.IN +5
.TL 123:27,52
.CO SETS { TO START ITALICS
.TL 125:27,53
.CO SETS }TO END ITALICS
.TL 91:27,12Ø,Ø,15,27,83,Ø
.CO SETS [ TO START CONDENSED SUPERSCRIT
.TL 93:18,27,12Ø,1,27,84
.CO SETS ] TO END CONDENSED SUPERSCRIPT
.CO SETS LEFT, RIGHT MARGINS, NLQ(PICA),
AUTO JUSTIFICATION
                1117 4[th] Concession W.
                RR[#]2, Waterdown, Ontario.
                LØR 2HØ.
```

Note that the ~, and _ symbols are achieved by first pressing ctl.U and then the appropriate key for the code required as in the keyboard scan chart in your User's guide, then ctl.U again. This procedure must be followed for the ASCII codes Ø through 31. Other codes may be sent merely by typing the symbol that has that code, as per the chart in your Users guide. This method sends the code directly to the printer, and you will notice that I use it to set permanent conditions for the letter, such as the margins.

I have also made use of the Transliterate feature of TI-Writer to control temporary conditions such as print styles that I might want to use to accentuate my text. This is a slightly easier method to master, since the codes listed in your printer's Owner's manual may be typed in directly without looking up ASCII codes, but it does use up some of the characters available for use in your text. You might also notice that, in order to save myself some repetitive typing, I include my address in the same file. The square brackets around the 4 in my address will not be printed, of course, but will cause the 4 to be printed as a condensed superscript instead.

To close this column off, I will include a chart of the keystrokes required for the ASCII codes Ø through 31 to save you the trouble of looking them up. Remember that you must first press ctl.U to access these codes, and then afterwards press ctl.U again in order to access the normal keyboard.

ASCII CODE	KEY PRESS	ASCII CODE	KEY PRESS
Ø	SHIFT 2	1	SHIFT A
2	SHIFT B	3	SHIFT C
4	SHIFT D	5	SHIFT E
6	SHIFT F	7	SHIFT G
8	SHIFT H	9	SHIFT I
10	SHIFT J	11	SHIFT K
12	SHIFT L	13	SHIFT M
14	SHIFT N	15	SHIFT O
16	SHIFT P	17	SHIFT Q
18	SHIFT R	19	SHIFT S
20	SHIFT T	21	SHIFT U
22	SHIFT V	23	SHIFT W
24	SHIFT X	25	SHIFT Y
26	SHIFT Z	27	FCTN R
28	FCTN Z	29	FCTN T
30	SHIFT 6	31	FCTN U

Good luck, and have fun!