


NEXT MEETINGS Nロソ＝ご・ $19 \square 7$ DEC：19：19日フ

BOUFEERNNAIS
MUNICIFAL CENTEER

1 prn $=$ til 4 pm

H3 TL USERS GROUF NEUISLETTER


## FONT OF THE MONTH <br> BY RICK KELLOGG

Here is the first in a series of type fonts that you can use in your programs for a fancier display. Not all the fonts are complete I.E. not all of the characters have been redefined, so feel free to modify or add to the fonts presented.

## FONT NUMBER ONE InUERSE UIDEO

| A | 97 | FFFFC399819999FF |
| :--- | ---: | :--- |
| B | 98 | FFFF83C9C3C983FF |
| C | 99 | FFFFC19F9F9FC1FF |
| D | 100 | FFFF83C9C9C983FF |
| E | 101 | FFFF839F879F83FF |
| F | 102 | FFFF839F879FFFFF |
| G | 103 | FFFFC19F9199C3FF |
| H | 104 | FFFF9999819999FF |
| I | 105 | FFFFC3E7E7ETC3FF |
| J | 106 | FFFFF3F3F393C7FF |
| K | 107 | FFFFC9C3C7C3C9FF |
| L | 108 | FFFFCFCFCFCFC3FF |
| $M$ | 109 | FFFFDB81A59999FF |
| N | 110 | FFFF9989819199FF |
| O | 111 | FFFF8199999981FF |
| $*$ | 36 | FFETC: |


|  | 11 |  |
| :---: | :---: | :---: |
| Q | 113 | FFFFC39B9993C3FD |
| R | 114 | FFFF8399539399FF |
| S | 115 | FFFFC19FC3F983FF |
| T | 116 | FFFF81E7E7ETETFF |
| U | 11 ? | FFFF99999999C3FF |
| U | 118 | FFFF9999C3D3ETFF |
| $\omega$ | 119 | FFFF9999A581 DBFF |
| X | 129 | FFFF99C3E7C399FF |
| Y | 121 | FFFF99C3ETETERFF |
| 2 | $: 22$ | FFFFR1F3ETCF81FF |
|  | 32 | FFFF FFFFFFFFFFF |
| ! | 33 | FFETETETETFFETFF |
|  | 34 | FF939393FFFFFFFF |
| \# | 35 |  |
|  |  | FFGDGRFTEFDGR9FF |

## P-BOX POWER SUPPLY <br> FROM THE CIN-DAY NEWSLETTER

If you have the misfortune of having your power supply quit on you, check the transformer viltage on the primary and secondary sides. If you have the primary voltage and no secondary voltage, then check the fuse that is located inside the transformer. The fuse is located on the opposite side from the wire connections, at the lower part of the transformer. You will have to cut away the insulation (plastic housing) from the unit to expose the fuse, which is an inline type that is soldered to the white wire of the primary side of the transformer. Next check the power supply board, the bottom left-hand side has two, one amp diodes, you will probably find that one or both of have shorted internally. Check them with a meter. If you find the values are at fault, change them.

The procedure can save you from a costly replacement and extended down time of your computer. The transformer and power supply board costs 127.50 from $T I$, no to mention the delay for shipment.

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BAD MEMORY CHIP
by JIM WEITZER
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I recently had a problem with my TI console. I turned it on one day and found garbled characters and the color bars of the first screen were different. I pressed a key to advance to the next screen and was able to make out the numbers but the characters were still garbled. I made my selection and could go no further, because whatever key I used came up with a different character, it was frustrating. I proceeded to take apart the console to expose the TI board. I noticed that the board had been worked on before and that two memory chips (4116) had been replaced. All the memory chips were soldered to the board, so I unsoldered each chip carefully and bought new memory chips and gold sockets. I soldered in the sockets and inserted the new memory chips. It worked great: I then tested each memory chip and found only one bad one. Then I placed the bad chip in each socket to see what it did to the first screen. The following information may be helpful in locating the bad chip:

MEMORY CHIPS 4116
PLACEMENT
] [] [] [] [] [] [] [] [
]1[ $32[$ ]3[ ]4[ ]5[ ]6[ ] 7 [ ]8[
] [] [] [] [] [] [] [] [
Working with the first screen, if the bad chip is in:

1. You will get a red field and most of the characters will be garbled.
2. There will be white bar through the field and some of the characters will be garbled.
3. The color bars will appear normal, the numbers will be correct, and the words will be misspelled.
4. This one will have no characters, but the color bars will be normal.
5. The left quarter of the color bar will be characters and no numbers will be in the field.
6. Right three quarter color bar is good and all characters are different.
7. This will appear as a green field with some characters being correct.
8. Right three quarters of the color bar just characters. Left quarter normal with garbled characters.

I hope this article will cut down on the frustration of memory chips.

## DM1000 CURSOR

From the Charlotte TI 994A U.G. Newsletter
DM1000 works so fast, it gets ahead of most of us. If you have ever had the problem of it going through two menu selections with just one keypress, then make this alteration on a copy of DM1000 cand if you like the result, make the copy your working edition.)

Copy MGR1 to a newly initialized disk. This way MGR1 will begin at sector 22. Call up sector 36. CIf using Disk Fixer, you will type in "R 36".) In this sector, locate the bytes which contain the string "8000A0FFF". 00A0 is the value for the cursor speed. You may change it from any value as low as 00A0 to as high as 07D0. Try something around 0100. One source recommends 010c, Write the edited version of the sector back to the disk. Now run the program with the edited MGR1 file to check your choice.

The GRAMKRACKER -FLEA COLLAR LINK?
By Ken Gladyszewski, NorthCoast 99ers
Well, the truth is finally out, the battery used in the GramKracker is also used in electronic flea collars, or is it the other way around. That is what I learned from the lady at Duracell after I tried to find the DL2430 lithium coin cell battery some two months ago. I called or visited all the large variety and camera stores before calling Duracell and then all the pet supply stores with no luck.

This all came about when my GramKracker lost it's memory after a year. I finally found the battery and was about to divulge my source in this article when I found it in the new 1988 Radio Shack catalog on page 148, Part No. 23-166 for \$1.79. I have also found them recently at mass merchandisers for about a dollar.

## CHRISTMAS CROSSWORD

By Tom Nellis
A few years ago, my daughter brought home a crossword puzzle from school. It was a simple puzzle and after looking. at it, I decided to write a Basic program to do the same thing.

This program was written top-down, that is, I just coded it as I went along. The only preparation for writing the program was to transfer the tree and empty blocks to a piece of graph paper. This was used for row and column numbers I would need in the DATA statements. I chose to write the program in BASIC because the lack of DISPLAY AT and ACCEPT AT would require me to write my own. I also was able to use some "BASIC" commands that I didn't normally use.

The program uses a lot of REM statements. These will hopefully explain what is going on in the program at any given time.

By using CALL SCREEN(2) then printing the screen, then changing the screen to desired color, the screen appears not to scroll. Some other things I discussed when writing this program, "CALL KEY(0,LETTER,S)". ENTER has the value of 13. The "DISPLAY AT" for the printing of the questions can be found in lines 1040 through 1060. The "ACCEPT AT" can be found at lines 1080 through 1180 . The starting row and column were supplied in the data statements lines 120 through 930.

Now, what this program needs are a few features to spruce it up. How about some ornaments on the tree? Onco the puzale has been finished, how about some music or graphics that are Christmas related? The most needed feature is to be able to only answer the questions that are incorrect, erasing the incorrect answer from the screen, redisplaying the question, and positioning the cursor for the correct answer.

I hope you enjoy the puzzle and learn something about basic programming while typing it in.


$100 B \$=" "$
110 C $\$="$
QUEST\$(13), ANS\$(13)
130 REM TITLE SCREEN
140 CALL CLEAR
150 CALL SCREEN(2)
160 PRINT TAB(5);"CHRISTMAS
CROSSUORD"
170 PRINT TAB(10);"BY T.I.N.
180 PRINT ,,,,,,,,,,,,,,,,,
190 CALL SCREEN(10)
200 FOR DELAY $=1$ TO 500
210 NEXT DELAY
220 CALL CLEAR
230 REM SECOND SCREEN
240 CALL SCREEN(2)
250 PRINT "THIS IS A SIMPLE
CROSSWORD"
260 PRINT "FU?ZE WITH CHRIS
TMAS QUEST-
270 PRINT "IOHS AND CHRISTMA
5 ANSWERS"
280 PRINT ""
290 PRINT "IF YOU DON'T KNOW
THE ANSWER'
300 PRINT "JUST PRESS ENTER
AND THE"
310 PRINT "QUESTION WILL BE
AG AGAIN"
FOR ALL"
330 PRINT "TWO WORD ANSWERS
PLEASE"
340 PRINT "OMIT THE SPACE BE
TWEEN THEM."
350 PRINT"
THANK YOU"
360 PRINT "
SANTA"
370 PRINT ,,,,,,,,,,,
380 CALL SCREEN(4)
390 FOR DELAY $=1$ TO 3000
400 NEXT DELAY
410 REM THIRD SCREEN
420 CALL CLEAR
430 CALL SCREEN(2)
440 PRINT "GOT TO GET THE TR
EE"
450 PRINT "AND AS USUAL, THE
TREE TRUNK"
STAND."
470 PRINT
480 PRINT
490 PRINT "HANG ON WHILE I C
UT"
500 PRINT "THE TRUNK DOWN TO
SIZE."
510 PRINT
520 CALL SCREEN(13)
530 FOR DELAY=1 TO 1000
540 NEXT DELAY
550 REM READS QUEST, ANS, AN
D
570 FOR $Z=1$ TO 13
580 READ QUEST\$(Z),ANS\$(Z),F
LAG(2)
590 NEXT Z
600 REM DATA FOR QUEST, ANS,
AND FLAG
610 DATA MAILED GREETING,CAR
D,1,MISTLETOE AND ?,HOLLY, 1 ,
DOOR ORNA:IENT
620 DATA JREATH,1,RUDOLPH,RE
INDEER, 1, FLAKEY WATER, SNOW, 1
, PRESENT,GIFT, 1
630 DATA FOLLOWS NOUEMEER, DE
CEMBER, $1, S T$ NICK,SANTACLAUS,
1
640 DATA PLAYTHINGS,TOYS, $1, H$
ANGS ON TREE,DECORATION, $1, S A$
NTA'S HOME, NORTHPOLE, 1
650 DATA SANTA'S HELPER, ELF,
1, PULLED BY HORSE,SLEIGH,1
660 REM DEFINE CHARACTERS FO
R TREE
670 CALL CHAR (40, "FFFFFFFFFF
FFFFFF")
680 CALL CHAR (125,"FFFFFFFFF
FFFFFFF")
690 CALL COLOF (2, 13, 13)
700 CALL CLEAR
710 REM DISPLAY TREE ON SCRE
EN
720 FOR $G=1$ TO 24
730 READ $A, B, C, D$
740 CALL $\operatorname{HCHAR}(A, B, C, D)$
750 NEXT G
760 REM DATA FOR CHRISTMAS T
REE
770 DATA $1,16,40,2,2,15,40,4$
$, 3,14,40,6,4,13,40,8,5,14,40$
$, 6,6,13,40,8$
780 DATA $7,12,40,10,8,11,40$,
$12,9,12,40,11,10,11,40,13,11$
$, 10,40,14,12,9,40,16$

```
790 DATA 13,10,40,14,14,9,40
,16,15,8,40,18,16,7,40,20,17
,8,40,18,18,7,40,20
800 DATA 19,6,40,22,20,5,40,
24,21,4,40,26,22,16,40,2,23,
16,40,2,24,16,40,2
810 CALL SCREEN(16)
8 2 0 ~ C A L L ~ C O L O R ( 1 2 , 1 6 , 1 6 ) ~
830 REM DISPLAY BLANKS ON TR
EE
8 4 0 ~ F O R ~ G = 1 ~ T O ~ 1 3 ~
850 READ H,I,J
860 CALL HCHAR(H,I,125,J)
870 NEXT G
880 REM DATA FOR BLANKS IN T
REE
890 DATA 8,17,4,9,17,5,10,16
,6,11,15,8,12,17,4,13,14,4,1
4,13,8,15,10,10,16,14,4
900 DATA 18,11,10,19,15,9,20
,17,3,21,15,6
910 REM DATA FOR CURSOR POSI
TION IN TREE
920 DATA 8,17,9,17,10,16,11,
15,12,17,13,14,14,13,15,10,1
6,14
930 DATA 18,11:19,15,20,17,2
1,15,1,1,1,1,1,1
G40 KEM PROGRAM LOGIC
950 X=0
960 IF X=13 THEN 1290
970 READ ROW,COL
980 IF X>=14 THEN 1380
990 X=X+1
1000 IF X>=14 THEN 1380
1010 IF QUEST$(X)=" " THEN }
90
1020 IF X>13 THEN 1380
1030 REM DISPLAY QUESTION A
T BOTTOM OF SCREEN
1040 FOR K=1 TO LEN(QUEST$CX
))
1050 CALL HCHAR(23,K+1,ASC(S
EG$(QUEST$(X),K,1)))
1060 NEXT K
1070 REM ANSWER DISPLAY
1080 CALL KEY(0,LETTER,S)
1090 IF S=0 THEN 1080
1100 REM ENTER PRESSED?
1110 IF LETTER=13 THEN 1200
1120 REM DISPLAY ANSWER ON S
CREEN
1130 CALL HCHAR(ROW,COL,ASCC
CHR$(LETTER)))
1140 COL=COL+1
1150 B$=CHR$(LETTER)
1160 REM CONCATINATE LETTERS
    TO FORM WORD(ANSWER)
1170 C$=C$&B$
1180 GOTO 1080
1190 REM ANSWER CORRECT?
1200 FOR Z=1 TO 13
1210 IF C $=ANS$(Z)THEN 1350
1220 NEXT Z
1230 IF X=13 THEN 1290
1240 B$=""
1250 C$=""
1260 CALL HCHAR(23,1,32,17)
1270 GOTO 970
1280 REM ALL ANSWERS CORRECT
?
1290 FOR ANG=1 TO 13
1300 IF FLAG(ANS)<>0 THEN 13
30
1310 NEXT ANS
1320 GOTO 1400
1330 GOTO 1240
1340 REM SET FLAG TO O IF AN
SWER CORRECT FOR THIS QUESTI
ON
1350 FLAG(Z)=0
1360 GOTO 1220
1370 REM RESTORE CURSOR POSI
1370 REM RESTORE CURSOR POSI
TION IF ANSWER IS INCORRECT
1380 RESTORE 920
1390 GOTO 950
1400 END
```



FROM TITLE SCREEN：
CAIALOG DISK＝DSK1．〈ENTER＞
LOAD FILES：MAX－RLE will laad：
1）DIS／FIX 128 RLE＇s
2）IISIUAR BO RLE＇s
3）GRAPHX files
4）II－ARIIST（U／2）Eiles
ONCE GRAPHIC IS LDADED： SCREEN DUMP TD PRINTER

〈P＞rinter－Default＝PID．CR SAUE FILE TO DISK
＜S＞ave－Default＝GRAPHX Format ＜SPACE BAR＞＝II－ARTIST format ＜SPACE BAR＝DIS／FIX 128 ＜SPACE BAR＞＝DISMAR BO CifANGE GRAPHIC COLORS

| COLOR | FOREGR |  | BACKGROUND ： |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Black | 11 | ！ | SHIFI | 1 | ； |
| Medium Green | 2 | ； | SHIFT |  |  |
| Light Green | 13 | 1 | SHIFT | 3 | ； |
| Dark Blue | 4 | 1 | SHIFT | 4 |  |
| Light Blue | 1 5 | ； | SHIFI | 5 | ， |
| Dark Red | 5 | 1 | SHIFT | 6 |  |
| Cyan | 17 | 1 | SHIFI | 7 | ； |
| Medium Red | 9 | ； | SHIFT | 8 |  |
| Light．Red | 19 | ； | SHIFI | 9 | ； |
| Dark Yellow | a | ； | A |  | ； |
| Light Yellow | $1 \quad b$ | ， | B |  | ， |
| Dark Green | $c$ | ； | C |  | ， |
| Magenta | d d | ； | $\square$ |  | ， |
| Gray | e | ； | E |  |  |
| 以んite | －F | ； | F |  | ， |

## FFEASE COMMANDS

| A Add Fiecory | L Frint Labels |
| :---: | :---: |
| B Eoot Data Ease | N Go to Screen \＃ |
| C Contral Coaes | 0 Frogram Options |
| D Delete Fiecord | F Frint Screen |
| E Edit Fecord | Q Quit FFEASE |
| F Find String | F Frint Feports |
| G Global Search | $S$ Sort Index |
| H Display Commands | $\checkmark$ Use Inde：to Find |
| I Euild New Inde： | $\checkmark$ View Inde： |

FCTN $X$ Scrali to Nest Screen
FCTN E Scroll to Frevious Screen
FCTN D Next Alphabetical Screen
FCTN $S$ Frevious Alphabetical Screen
CTRL X Fiadid Ecrzil Ecreen 1 －End
CTFL E Fapiz Scroli Ecroan End－ 1


CUSTOMILING F．STMRITER
（from ROM Newslatter，FEB．＇87）
It has been said that
FUNELWRITER bay be the nost signaficant prograt written for the Ti．One could argue this point but not easaly dismiss it．

I have been working on getting FBNELKRITER to support the utalities that I noreally use．This is the first of a series on custoaizing FUNNELARITER．

The first thing I wanted to do mas to enable funHelyriter to load Frsi－TERM．Hhen you press 5 on the alan menu，one of the ootions that ccas up for number 2 is MODEA．i sauid not find，however，what file nase mas neeqed．After a bit searching lusing DISK UTILITIES），I found it： MD ．

FAST－TERK cones with two flles named UTILI and UTIL2．You nust rename then（using DMtoou）to HD and ME and then zopy the files ta your runnelarititi disk．inange tile lames before copying because there already 15 a UTLLL on the FUNNELMRITER disk anc you do not want to overwrite it．

When you switen iten 2 to Disk EDIT．Fibite atice ：aads Disk Patch， or h15c土．Sha ： 5 a jare bones disk sector editor．I wanted to loao DIEK UTILITEEs so I reaoved Disco fron ay FUNEELNRITER disk，renamed the two disk utilities files（UTILi anc UTIL2）to DP and DO and cooted then．

I did all of this renaang and coaying on back－up copies．My originals are safg and unaodified． Always keep a naster copy of iaportant prograas．

