CEDAR VALLEY 99'ER USER GROUP
NEWSLETTER

MARCH 1990
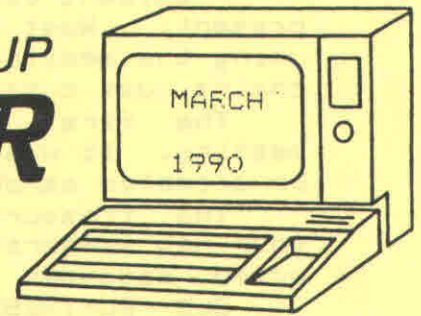
CEDAR RAPIDS/MARION, IOWA

****

OFFICERS

PRESIDENT:
Jerry Canady
6616 Kent Dr. NE
Cedar Rapids Iowa 52402
(319) 377-9382 (Home) or
(319) 395-2494 (Office)

VICE PRESIDENT:
Gary Bishop
3270 28th Ave.
Marion, Iowa 52302
(319) 377-9574

SECRETARY:
Bill Paeth
923 Owen St. NW
Cedar Rapids, Iowa 52405
(319) 396- 6470

TREASURER:
Bruce Winter
702 Fernwood Dr. NE
Cedar Rapids, IA 52402
(319) 393-0610

COMMITTEES

PROGRAM:
Ed Edwards
102 N. Davis St.
Anamosa, Iowa 52205
462-2329

PUBLICITY:
Paul Mortensen
301 Pebble Lane
Hiawatha, Iowa 52233
393-6022

EDUCATION/LIBRARIAN:
John Johnson
398 Forest Dr. SE
Cedar Rapids, Iowa 52403
366-4541

EDITOR:
Jim Green
377 Cambridge Dr. NE
Cedar Rapids, Iowa 52402
377-4073 (Home) or
395-1898 (Office)

****NEWSLETTER TOPICS****

1. Future Meeting Dates
2. Next Meeting Notes
3. Minutes from the February Mtg
4. Support Tigercub Software
5. The Library Blurb
6. Tips from the Tigercub #58.1
7. Programming 4-D Graphics
8. Proposed FCC Regulations
9. Can You Help?
10. INSTOLINK Program from CONNI

****FUTURE MEETING DATES****

Please mark the following dates on
your calendar for future meetings:
MARCH 12, APRIL 9, MAY 14.

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

The regular monthly meeting will be
Monday, March 12, at West Music,
Cedar Rapids, with open discussion
starting at 6:30 PM. Jerry will talk
about how to set up and use FUNNELWEB
while the votes are counted for our
new officers. Come and cast your
ballot!

* MINUTES FROM THE FEBRUARY MEETING *

President Jerry Canady called the meeting to order with thirteen present. West Music was making some changes to their facilities and was using the meeting hall for piano lessons. They set up our table and chairs just outside at the rear of the showroom floor.

The first order of business as usual was the minutes of the last meeting. It was moved, seconded, and passed that the minutes for January be accepted as printed in the NEWSLETTER.

The treasurer then gave his report. This month's report included four new memberships for a total of twenty three members so far. It was moved, seconded and passed that the report be accepted as read.

OLD BUSINESS: 1. John reported that the UG now has its own copy of "RAPID COPY" so he is able to really use his back-up disc as BACK-UP. 2. Ed reported that a first example copy of a disk of the month is available at the meeting. See what you are missing by not attending the meeting! John is still working on his version of a "disk of the winter". Both Ed and John need some answers to the following questions: Where will we get the programs? Who will do the work? Is it really worth the time? Those of you who got the DOM this month, be sure to let them know how you feel about the disk and BE READY TO ASSIST WHEN NECESSARY.

NEW BUSINESS: 1. John reported that a video tape is available for $5.00 that shows how to use FUNNELWEB. It would be a good help to some of the less experienced users. It was moved, seconded that we buy one for the use of the UG. 2. Sr. Pat reported through Gary that she has signed up a new member in Dubuque. Gary and Ed filled us in on the current tests that she is having. We hope that we will be able to meet again with her and with all her friends in Dubuque some time soon. 3. It's that time again folks. Jerry announced that Stewart and Larry will be calling on all of you to serve as an officer in the UG. We will vote on the new slate in March with the winners taking office in May.

DISCUSSION: 1. FUNNELWEB and how to use it beyond writer was discussed for several minutes. There seemed to be several who would like to learn more about it. Jerry said he would try to make a presentation at one of the upcoming meetings. 2. Gary requested copies of the front page of the Cedar Rapids Gazette of February 9, 1990 for a project he is doing. Bring or send them to Gary, please. 3. Larry is having a problem with TI BASE losing files. He is using vsn 2.1. Ed suggested that he look for a newer update.

The meeting was adjourned.

The demo tonight was by Ed and covered the use of modems. He was using a Tandy smart modem at 1200 and 2400 baud. Although he had both of his modems at the meeting, he did not actually hook either up. Instead, he used a video he had made at home to explain.

Submitted by Bill Paath, Secretary

* TIGERCUB NEEDS YOUR SUPPORT *

I recently ordered several disks of public domain software from Jim Peterson, of Tigercub Software, and received both my order and a nice letter in a short time. Each disk has bunches of programs, and at the ridiculous price Jim charges, I came out ahead even if only one or two programs prove to be what I need! Take a second look at Jim's catalog; there is something for everyone. However, apparently not everyone is taking advantage of Jim's efforts. He writes that only 175 orders were

received in 1989! At that pace, he may decide to give up on us and do
something productive. If you are as guilty as I was about ignoring the
Tigercub, then take action today! If you need another copy of Jim's
catalog, we will get one to you.

Jim Green

* THE LIBRARY BLURB *

Once again TIFS has been the hottest item in the library. About eight
people now have gotten it. The library's copy of Rapid Copy has
arrived. So we are square with the world on that matter. Ed Edwards'
trial disk of the month seemed to be a big success at the last meeting.
Including his new programs on that disk, the new programs in the
library are...

1. TI BBS list- A list of 142 TI BBS's around the USA plus one in
   Australia and one in Sweden.

2. Telco Plus- A program to sort the Telco auto dialer lists I think.

3. Tetrus-A game to match shaped pieces falling into a box.

4. Arc303- Barry Boones latest archiver. All us BBS users need this
   one for sure.

5. Frag- Yes. Fraggel rock on your TI.

6. Hallways- A maze game.

7. Major Tom- A game like Jumping Jack or Super Mario brothers.

8. Multicol- Takes a DV80 file and right justifies the printing or
   will also reformat an 80 column file to 40 or what ever you wish.

9. Peek- A list of TI peeks and pokes for peeking and poking around.

That is it for the library. Here are a few concluding thoughts. If
you use any maxisprites with some regular sprites in a program, don't
call delsprite on any of them or the maxisprites will go waco. The
easiest thing to do is to move the sprites you don't want off the
bottom of the screen and leave them there.

I see a lot of backup disks to modules are now available in
Micropendium from Texcomp for cartridges no longer available. This
includes my favoite Video Chess. Lastly, I revised an old XB program
of mine that had some graphics sections. I changed my old display
statements to include RFTs where ever I could and made the whole
routine a subprogram because it was used a couple of times. Nice neat
efficient program coding. Right? Yes, except that after the changes it
took twice as long to bring that graphics screen up. I changed it
back. I suspect we all need to watch that we aren't so code efficient
that we forget to check the results of our labors. EOF
J Johnson CR

Tigercub Software
156 Collingwood Ave.
Columbus OH 43213

I am still offering over 120 original programs at $1 each, or on collection disks at $5 each. The five Tips From The Tigercub disks are reduced to $5 and the three Nuts & Bolts disks are now just $10 each.

My catalog is available for $1, deductable from your first order (specify TIGERCUB catalog).

‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡
TI-PD LIBRARY

I have selected public domain programs, by category, to fill over 300 disks, as full as possible if I had enough programs of the category, with all the Basic-only programs converted to XBasic, with an E/A loader provided for assembly programs if possible, instructions added and any obvious bugs corrected, and with an auto-loader by full program name on each disk. These are available as a copying service for just $1.50 postpaid in U.S. and Canada. No fairware will be offered without the author's permission. Send SASE for list or $1, refundable for 11-page catalog listing all titles and authors. Be sure to specify TI-PD catalog.
‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡

In Tips #55 I published a CHARSUB routine to convert character patterns into assembly source code, and in Tips #55 and #56 I published several routines to manipulate hex codes into new character sets. Those patterns looked fine on my old TV, but when I demo'd

them on a high-resolution monitor I could see too many missing pixels.

So I wrote this CHARFIX program which, when MERGEd into a program and CALLed after any character redefintion is completed, will permit any normal or re-identified character to be viewed on screen and edited and will then write the hex codes of any range of printable characters into an assembly source file which can be assembled, loaded and linked to instantly change character sets.

This routine also reidentifies the common punctuation into the same character sets as the letters, as described in Tips #55. If you do not want this feature, delete lines 29001-29003.

```
29000 SUB CHARFIX
29001 DATA 32,33,34,44,46
29002 RESTORE 29001 :: FOR J
=1 TO 5 :: READ CH :: CALL C
HARPAT(CH,CH$):: CALL CHAR(J
+90,CH$):: CALL CHAR(J+122,C
H$):: NEXT J
29003 CALL CHARPAT(63,CH$)::
 CALL CHAR(64,CH$):: CALL CH
AR(96,CH$)
29004 DISPLAY AT(1,1)ERASE A
LL:"1 2 3 4 5 6 7 8 9 0 : ;"
:" ":"@ A B C D E F G H I J
K L M":" ":"N O P Q R S T U
V W X Y Z [":" ":"\ ] ^ _ a
b c d e f g h i j"
29005 DISPLAY AT(9,1):"k l m
 n o p q r s t u v w x":" ":
"y z { | } ~"
29006 CALL CHAR(128,"FF"&RPT
$("81",6)&RPT$("FF",9)&"FFFF
"&RPT$("C3",4)&"FFFF")):: CAL
L COLOR(13,2,16)
29007 CALL CHARVIEW
29008 SUBEND
29009 SUB CHARVIEW
29010 DISPLAY AT(13,14):"CTR
L V TO VIEW" :: DISPLAY AT(1
4,14):" " :: DISPLAY AT(15,1
4):"CTRL E TO EDIT" :: DISPL
AY AT(17,14):"CTRL S TO SAVE
"
29011 DISPLAY AT(19,14):" "
:: DISPLAY AT(20,14):" "
29012 CALL KEY(0,@,S):: IF S
=0 THEN 29012 ELSE IF @=150
THEN 29015 ELSE IF @=133 THE
N 29014 ELSE IF @=147 THEN 2
9013 ELSE 29012
29013 CALL DELSPRITE(#1):: C
ALL CHARSUB(HX$()):: DISPLAY
 BEEP :: STOP
29014 CALL EDIT(K):: GOTO 29
010
29015 DISPLAY AT(24,1)BEEP:"
"
29016 DISPLAY AT(24,1):"PRES
S A KEY" :: CALL KEY(0,K,S):
: IF S<1 OR K<32 OR K>143 TH
EN 29016
29017 DISPLAY AT(24,1):"" ::
 CALL CHARPAT(K,CH$)
29018 R=13 :: FOR J=1 TO 15
STEP 2
29019 H$=SEG$(CH$,J,1):: CAL
L HEX_BIN(H$,B$)
29020 H$=SEG$(CH$,J+1,1):: C
ALL HEX_BIN(H$,BB$):: FOR L=
1 TO 8 :: C$=C$&CHR$(ASC(SEG
$(B$&BB$,L,1)+80):: NEXT L
29021 DISPLAY AT(R,1):C$:::
DISPLAY AT(R,10):SEG$(CH$,J,
2):::: R=R+1 :: C$="" :: NEXT
 J :: DISPLAY AT(22,1):C$;;
: GOTO 29012
29022 SUBEND
29023 SUB HEX_BIN(H$,B$):: H
X$="0123456789ABCDEF" :: BN$
="0000X0001X0010X0011X0100X0
101X0110X0111X1000X1001X1010
X1011X1100X1101X1110X1111"
29024 FOR J=LEN(H$)TO 1 STEP
 -1 :: X$=SEG$(H$,J,1)
29025 X=POS(HX$,X$,1)-1 :: T
$=SEG$(BN$,X*5+1,4)&T$ :: NE
XT J :: B$=T$ :: T$="" :: SU
BEND
29026 SUB CHARSUB(HX$())
29027 DISPLAY AT(12,1)ERASE
ALL:"Source code filename?":
"DSK" :: ACCEPT AT(13,4)SIZE
(12)BEEP:F$ :: OPEN #1:"DSK"
&F$,OUTPUT
29028 DISPLAY AT(15,1):"LINK
ABLE program name?" :: ACCEP
T AT(16,1)SIZE(6):P$
29029 DISPLAY AT(18,1):"Rede
fine characters from   ASCI
I   to ASCII"
29030 ACCEPT AT(19,7)VALIDAT
E(DIGIT)SIZE(3):F
29031 ACCEPT AT(19,21)VALIDA
TE(DIGIT)SIZE(3):T
29032 PRINT #1:TAB(8);"DEF";
TAB(13);F$ :: PRINT #1:"VMBW
    EQU  >2024" :: PRINT #1:"
STATUS EQU  >837C"
29033 NB=(T-F)*8 :: CALL DEC
_HEX(NB,H$):: A=768+F*8 :: C
ALL DEC_HEX(A,A$)
29034 FOR CH=F TO T :: IF CH
<144 THEN CALL CHARPAT(CH,CH
$)ELSE CH$=HX$(CH)
29035 IF FLAG=0 THEN PRINT #
1:"FONT";;; FLAG=1
29036 FOR J=1 TO 13 STEP 4 :
: M$=M$&">"&SEG$(CH$,J,4)&",
" :: NEXT J :: M$=SEG$(M$,1,
23)&" *"&CHR$(CH)
29037 PRINT #1:TAB(8);"DATA
"&M$ :: M$="" :: NEXT CH
29038 PRINT #1:P$:TAB(8);"LI
 R1,FONT" :: PRINT #1:TAB(
8);"LI  R0,>"&A$ :: PRINT #
1:TAB(8);"LI  R2,>"&H$
29039 PRINT #1:TAB(8);"BLWP
@VMBW":TAB(8);"CLR @STATUS"
:TAB(8);"RT":TAB(8);"END" ::
 CLOSE #1
29040 SUBEND
29041 SUB DEC_HEX(D,H$)
29042 X$="0123456789ABCDEF"
:: A=D+65536*(D<32767)
29043 H$=SEG$(X$,(INT(A/4096
)AND 15)+1,1)&SEG$(X$,(INT(A
/256)AND 15)+1,1)&SEG$(X$,(I
NT(A/16)AND 15)+1,1)&SEG$(X$
,(A AND 15)+1,1):: SUBEND
29044 SUB EDIT(CH)
29045 DISPLAY AT(13,14):"1 T
O TOGGLE" :: DISPLAY AT(14,1
5):"CURSOR" :: DISPLAY AT(15
,14):"E S D X TO MOVE" :: DI
SPLAY AT(17,14):"CTRL A TO A
BORT"
29046 DISPLAY AT(19,14):"CTR
L R TO" :: DISPLAY AT(20,15)
:"REIDENTIFY"
29047 R=13 :: C=3 :: X=128 :
: CALL SPRITE(#1,130,11,R*8-
7,C*8-7):: X$=CHR$(129)&CHR$
(146)
29048 CALL KEY(0,K,S):: IF S
<1 THEN 29048 ELSE ON POS("1
EeSsDdXx"&X$,CHR$(K),1)+1 GO
TO 29048,29049,29050,29050,2
9051,29051,29052,29052,29053
,29053,29055,29056
29049 X=X+1+(X=129)*2 :: GOT
O 29054
29050 R=R-1-(R=13):: GOTO 29
054
29051 C=C-1-(C=3):: GOTO 290
54
```

```
29052 C=C+1+(C=10):: GOTO 29
054
29053 R=R+1+(R=20)
29054 CALL LOCATE(#1,R#8-7,C
#8-7):: CALL HCHAR(R,C,X)::
GOTO 29048
29055 CALL DELSPRITE(#1):: S
UBEXIT
29056 FOR R=13 TO 20 :: FOR
C=3 TO 10 :: CALL GCHAR(R,C,
GH):: CALL LOCATE(#1,R#8-7,C
#8-7):: B$=B$&CHR$(GH-80)::
NEXT C
29057 CALL BIN_HEX(B$,H$)::
DISPLAY AT(R,10):H$::: B$=""
 :: HEX$=HEX$&H$ :: NEXT R :
: DISPLAY AT(22,1):HEX$::: C
ALL CHAR(CH,HEX$):: HEX$=""
29058 CALL DELSPRITE(#1):: F
OR R=13 TO 20 :: DISPLAY AT(
R,14):"" :: NEXT R :: SUBEND
29059 SUB BIN_HEX(B$,H$):: H
X$="0123456789ABCDEF" :: BN$
="0000X0001X0010X0011X0100X0
101X0110X0111X1000X1001X1010
X1011X1100X1101X1110X1111"
29060 L=LEN(B$):: IF L/4<>IN
T(L/4)THEN B$="0"&B$ :: GOTO
 29060
29061 FOR J=L-3 TO 1 STEP -4
 :: X$=SEG$(B$,J,4)
29062 X=(POS(BN$,X$,1)-1)/5
:: T$=SEG$(HX$,X+1,1)&T$ ::
NEXT J :: H$=T$ :: T$="" ::
SUBEND
```

I think that programs, at least non-commercial ones, should be open for anyone to modify for their own use. For that reason, I would not normally publish the following routine. However, I recently received a large number of programs, originally in the IUG library, and found that the author's name had been erased from the title screen or REM of every one of them. I know, because I already had many of the original versions, including some that I wrote myself.

Now, that is inexcusable. If a programmer is willing to share his work, he does deserve credit for it. And if people are going to play that dirty, maybe there is

good reason for protecting programs.

So here is how to do it. Ken Woodcock wrote this ingenious routine and published it in the Tidewater newsletter. I have modified it so that it can be deleted after it has done its work. It is to be MERGEd into any XBasic program(32k required) and RUN, and will change the line length byte of each line to zero, so that the program cannot be LISTed, although it can be loaded and run.

```
1 CALL INIT :: CALL PEEK(-31
952,A,B,C,D):: SL=C#256+D-65
539 :: EL=A#256+B-65536 :: F
OR X=SL TO EL STEP -4
2 CALL PEEK(X,E,F,G,H):: ADD
=G#256+H-65536 :: J=J+1 :: I
F J<4 THEN 3 :: CALL LOAD(AD
D-1,0)
3 NEXT X :: STOP :: !@P-
```

Save that as FIX in MERGE format. Merge it into any program (RESequence first if it has line numbers less than 4) and RUN. Then type 1, FCTN X and FCTN 3 to delete line 1. Delete lines 2 and 3 in the same way. Then SAVE. Now try LISTing it and watch the fireworks.

Ken wrote an even more ingenious UNFIX routine to unprotect the program, but I'm not passing that on!

Now, suppose you have a party game program that you don't want the kids playing with. So, RESequence it to some odd number, such as RES 797. Put in a line just before that 796 STOP . Then merge in FIX, run it, and delete those first 3 lines.

I hope you remember what line number you resequenced it to start from, because now you can only run it by RUN 797 !

In Tips #57 I reported the discovery that printing to the disk from the TI- Writer

Formatter, with the C option, really converted the carriage returns to trailing blank ASCII 32's, and I published a routine to strip them. I have found an easier way. First PF and C DSK... to convert the CRs to blanks. LF DSK... and SF DSK... to strip out those blanks, but that leaves the pestiferous tab line, so LF DSK... and PF DSK... again!

The first few disks of Tips #58 that I sent out had a poor version of this program. This is the corrected version. First key this in –

```
1 DISPLAY AT(12,1)ERASE ALL:
"SKIP INSTRUCTIONS? Y" :: AC
CEPT AT(12,20)SIZE(-1)VALIDA
TE("YNyn"):@Q$ :: IF @Q$="Y"
OR @Q$="y" THEN 8
2 DISPLAY AT(24,5)ERASE ALL:
"PRESS ANY KEY"
3 RESTORE 30721
4 REM
5 FOR J@=1 TO T@ :: READ @$
:: DISPLAY AT(J@,1):@$:" "
6 CALL KEY(0,K@,S@):: IF S@=
0 THEN 6
7 NEXT J@
8 DATA 0
9 RESTORE 8 :: READ N
10 REM
```

Save it by –
SAVE DSK1.D/MERGE,MERGE
Then key this in –

```
100 OPEN #1:"DSK1.D/MERGE",V
ARIABLE 163,INPUT :: OPEN #2
:"DSK1.D/MERGE2",VARIABLE 16
3,OUTPUT :: L=129 :: FOR J=1
TO 10
110 LINPUT #1:M$ :: PRINT #2
:CHR$(0)&CHR$(L+J)&CHR$(156)
&CHR$(253)&CHR$(200)&CHR$(1)
&"1"&CHR$(181)&CHR$(199)&CHR
$(LEN(M$))&M$&CHR$(0):: NEXT
J
120 CLOSE #1 :: PRINT #2:CHR
$(255)&CHR$(255):: CLOSE #2
```

Run it to convert D/MERGE into a merge format file D/MERGE2 on DSK1. Then key

this in. Don't change line numbers.

```
100 CALL CLEAR :: OPEN #1:"D
SK1.@DATA",VARIABLE 163,OUTP
UT :: DEF L$(X)=CHR$(120)&CH
R$(X)
105 PRINT #1:L$(X)&CHR$(161)
&CHR$(200)&CHR$(6)&"@DUMMY"&
CHR$(0)
110 L=L+1 :: X=X+1 :: ACCEPT
AT(L,0):M$ :: IF L=24 THEN
CALL CLEAR :: L=0
120 IF M$<>"END" AND M$<>"en
d" THEN PRINT #1:L$(X)&CHR$(
147)&CHR$(199)&CHR$(LEN(M$))
&M$&CHR$(0):: GOTO 110
130 REM
140 PRINT #1:CHR$(0)&CHR$(4)
&"T@"&CHR$(190)&CHR$(200)&CH
R$(LEN(STR$(X-1)))&STR$(X-1)
&CHR$(0)
141 PRINT #1:L$(X)&CHR$(168)
&CHR$(0)
150 PRINT #1:CHR$(255)&CHR$(
255):: CLOSE #1
```

Enter MERGE DSK1.D/MERGE2 to merge in that file. SAVE the program as DATAWRITER. Then RUN it and try it out by using it to write itself some instructions. Answer the prompts with –
DATAWRITER V1.2
by Jim Peterson
To be used to add instructions to programs.

Type the instructions and format them, centered or hyphenated or right-adjusted just as you want them to appear on screen, and enter each line. They will be written to a D/V163 file named @DATA. When finished, enter END.

Then enter NEW, then MERGE DSK1.@DATA, and RUN to see if everything is OK. If so, load the program needing instructions, make sure its lowest line number is more than 10 and the highest is less than 30721, and enter MERGE DSK1.@DATA.

And enter END, then OLD DSK1.DATAWRITER, then MERGE DSK1.@DATA.

PROGRAMMING 4-DIMENSIONAL GRAPHICS
by Jim Peterson

Those of you who remember your first lesson in geometry are aware that a straight line has only one dimension, that of length. Ignoring the necessary breadth of one pixel, this can be programmed on the TI by CALL HCHAR(12,1,95,32).

Now, if you fix that one-dimensional line at one end and rotate the other, you will describe a circle, which is of course a two-dimensional figure having length and breadth. This too is easily programmed on the TI using its built-in SGN function.

Proceeding in logical sequence, if you fix that two-dimensional circle at two points and rotate it, you will describe a three-dimensional globe having length, width and breadth. The programming of this will require a slightly more complex algorithm and the radius should be limited to 14 units, since the TI-99/4A screen has only 29 planes.

Proceeding further in logical sequence, if you fix this 3-dimensional globe at three points and rotate it, you will obviously describe a four-dimensional figure. The algorithm required here is somewhat beyond the limits of my high-school geometry, so I will leave it to some other programmer. The first one to publish this routine will have performed a valuable service to the TI community.

The more observant among you will have detected an apparent fallacy in my line of reasoning. It is impossible, you say, to fix an object at three points and still be able to rotate it. That is a valid argument, and it is perhaps theoretically impossible to describe a 4-dimensional object having perfect symmetry in all four dimensions.

However, it is not necessary to fix one point of a line in order to rotate the other. You may vary the point of fixing during rotation, alternately fix one point and then the other, move both points simultaneously, etc., and thereby create an infinite variety of two-dimensional objects. You might even rotate both points in a third plane, in either the same or opposite directions, and thereby convert a

single-dimensional line into a three dimensional cylinder or opposing cones.

Similarly, it is not necessary to maintain the two points on a circle in a fixed position while rotating it. Note that it is not even necessary that the points be opposite, nor that they be moved only in a two-dimensional plane. It is only necessary that they maintain their relative distance from each other.

Therefore, the same obviously holds true for the rotation of an object having three dimensions.

I am sure that some young genius will soon take advantage of this technique to create some truly mind boggling graphics on our TI screen.

‡‡‡
FCC IS UP TO ITS OLD TRICKS
‡‡‡

The following article was taken from the Greater Tampa Bay Newsletter, Feb. 1990.

MOBILIZE!========= Two years ago the FCC tried and (with your help and letters of protest), failed to institute regulations that would impose additional costs on modem users for data communications. Now, they are at it again. A new regulation that the FCC is quietly working on will directly affect you as the user of a computer and modem. The FCC proposes that users of modems should pay extra charges for use of the public telephone network which carries their data. In addition, computer network services such as Compuserve, Tymnet, and Telenet would also be charged as much as six dollars per hour per user for use of the public telephone network. These charges would very likely be passed on to the subscribers. The money is to be collectd and given to the telephone companies in an effort to raise funds lost to deregulation. Jim Eason of KGO newstalk radio (San Francisco) commented on the proposal during his afternoon radio program during which he said he learned of the new regulation in an article in the New York Times. Here's what you should do NOW!! Pass this information on. Find other BBS's that are not carrying this information and upload this information to a public message on the BBS, and upload this as a file so others can easily get a copy to pass along. Next,

print out three copies of the letter which follows (or write your own), and send a signed copy to each of the following:

Chairman of the FCC, 1919 M Street N.W., Washington, DC 20554; Chairman, Senate Communication Subcommittee, SH-227 Hart Building, Washington DC 20510; Chairman, House Telecommunication Subcommittee, B-331 Rayburn Building, Washington, DC 20515. Here is the suggested text of the letter to send:

Dear Sir, Please allow me to express my displeasure with the FCC proposal which would authorize a surcharge for the use of modems on the telephone network. This regulation is nothing less than an attempt to restrict the free exchange of information among the growing number of computer users. Calls placed using modems require no special telephone company equipment, and users of modems pay the phone company for use of the network in the form of a monthly bill. In short, a modem call is the same as a voice call and therefore should not be subject to any additional regulation or extra fees. Sincerely, (be sure to sign your name).

It is important that you act now. The bureaucrats already have it in their heads that modem users should subsidize the phone company and are now listening to public comment. PLEASE stand up and make it clear that we will not stand for any government restriction on the free exchange of information.

CAN YOU HELP?

The group recently received the second newsletter from a fairly new user group. Mrs. Eunice Spooner, of Waterville, Maine, is organizing and heading a user group made up of elementary school children. She has managed to find ten computers to share in the classrooms and the meetings, and additional computers are provided by the group members, some of whom are in first grade!

Mrs. Spooner is no longer a teacher, having been confined to a wheel chair by an accident. She is continually looking for basic level software that she can use for teaching BASIC programming to her group (some of whom know more about

the TI than the classroom teachers!).
She also mentioned, at my urging, that
her group does not have a memory
expansion or RS-232 card for their
P-box. Donations would be most welcome,
and I let her know about the generosity
of our members. We helped Sister Pat
grow with her systems; are we ready to
adopt the kids at Oakland School? Let's
talk about it at the next meeting.

Jim Green

♦

This space reserved for your article!

A CONNI USER GROUP ASSEMBLY PROGRAMMER CONTRIBUTION

Here's a great one by our own master assembly programmer, Bud Wright.

```
1 DISPLAY AT(12,1)ERASE ALL:
"SKIP INSTRUCTIONS? Y" :: AC
CEPT AT(12,20)SIZE(-1)VALIDA
TE("YNyn"):@Q$ :: IF @Q$="Y"
OR @Q$="y" THEN 8
2 DISPLAY AT(24,5)ERASE ALL:
"PRESS ANY KEY"
3 RESTORE 30721
4 T@=15
5 FOR J@=1 TO T@ :: READ @$
:: DISPLAY AT(J@,1):@$:" "
6 CALL KEY(0,K@,S@):: IF S@=
0 THEN 6
7 NEXT J@
8 REM
100 ! INSTQLINK
110 ! by Bud Wright
120 DISPLAY AT(1,5)ERASE ALL
:"I N S T A N C E" :: DISPLA
Y AT(3,9):"T O"
130 DISPLAY AT(5,5):"C A L L
   L I N K" :: DISPLAY AT(7,5
):"C O M P I L E R"
140 DISPLAY AT(9,5):"by Bud
Wright"
150 DISPLAY AT(13,1):"Linkna
me: SCRN" :: ACCEPT AT(13,11
)SIZE(-6):LN$
160 DISPLAY AT(15,1):"Instan
ce filename:":"DSK1.INSTANCE
_I" :: ACCEPT AT(16,1)SIZE(-
28):IFN$
170 DISPLAY AT(18,1):"Starti
ng row: 1" :: ACCEPT AT(18,1
5)SIZE(-2)VALIDATE(DIGIT):SR
$ :: SR=VAL(SR$):: IF SR<1 O
R SR>24 THEN 170
180 DISPLAY AT(20,1):"Starti
ng col: 1" :: ACCEPT AT(20,1
5)SIZE(-2)VALIDATE(DIGIT):SC
$ :: SC=VAL(SC$):: IF SC<1 O
R SC>32 THEN 180
190 DISPLAY AT(22,1):"Source
 code filename:":"DSK1.SOURC
E-S" :: ACCEPT AT(23,1)SIZE(
-28):SFN$
200 DISPLAY AT(24,1):"♦ WORK
ING ♦"
210 OPEN #1:IFN$,INPUT :: LI
NPUT #1:A$
220 B=POS(A$,",",1)
230 C=LEN(A$)
240 P=VAL(SEG$(A$,1,B-1))
250 I=VAL(SEG$(A$,B+1,C-B))
260 OPEN #2:SFN$,DISPLAY ,VA
RIABLE 80
270 PRINT #2:"♦ "&LN$
280 S7$=RPT$(" ",7)
290 PRINT #2:S7$&"DEF "&LN$:
" "
300 PRINT #2:"NCOL    EQU "&S
TR$(P)
310 PRINT #2:"NROW    EQU "&S
TR$(I)
320 PRINT #2:"NCHR    EQU NCO
L*NROW"
330 PRINT #2:"SCHR    EQU 143
-NCHR"
340 PRINT #2:"VMBW    EQU >20
24"
350 PRINT #2:"VSBW    EQU >20
20"
360 PRINT #2:"MREG    BSS 32"
370 PRINT #2:"COL     DATA "&
STR$(SC)
380 PRINT #2:"ROW     DATA "&
STR$(SR)
390 PRINT #2:LN$
400 PRINT #2:S7$&"LWPI MREG"
:S7$&"LIMI 0"
410 PRINT #2:S7$&"LI R6,NCOL
"
420 PRINT #2:S7$&"LI R7,NROW
"
430 PRINT #2:S7$&"LI R8,SCHR
"
440 PRINT #2:S7$&"LI R9,NCHR
"
450 PRINT #2:S7$&"MOV R8,R0"
460 PRINT #2:S7$&"SLA R0,3"
470 PRINT #2:S7$&"AI R0,>030
0"
480 PRINT #2:S7$&"LI R1,CHAR
S"
490 PRINT #2:S7$&"MOV R9,R2"
500 PRINT #2:S7$&"SLA R2,3"
510 PRINT #2:S7$&"BLWP @VMBW
"
520 PRINT #2:S7$&"MOV @ROW,R
5"
530 PRINT #2:"A     MOV @COL
,R4"
540 PRINT #2:S7$&"LI R6,NCOL
"
550 PRINT #2:"B     MOV R5,R
0"
560 PRINT #2:S7$&"DEC R0"
570 PRINT #2:S7$&"SLA R0,5"
580 PRINT #2:S7$&"MOV R4,R1"
590 PRINT #2:S7$&"DEC R1"
600 PRINT #2:S7$&"A R1,R0"
610 PRINT #2:S7$&"MOV R8,R1"
620 PRINT #2:S7$&"SWPB R1"
630 PRINT #2:S7$&"AI R1,>600
0"
640 PRINT #2:S7$&"BLWP @VSBW
"
650 PRINT #2:S7$&"INC R4"
660 PRINT #2:S7$&"INC R8"
670 PRINT #2:S7$&"DEC R6"
680 PRINT #2:S7$&"JNE B"
690 PRINT #2:S7$&"INC R5"
700 PRINT #2:S7$&"DEC R7"
710 PRINT #2:S7$&"JNE A"
720 PRINT #2:S7$&"LWPI >83E0
"
730 PRINT #2:S7$&"B @>6A"
740 PRINT #2:"CHARS"
750 FOR I=1 TO P*I
760 LINPUT #1:A$
770 PRINT #2:S7$&"BYTE "&A$
780 NEXT I
790 PRINT #2:S7$&"END"
800 CLOSE #1 :: CLOSE #2 ::
END
30721 DATA "  INSTANCE TO CA
LL LINK"
30722 DATA "         COMPILE
R"
30723 DATA ""
30724 DATA "      by Bud Wri
ght"
30725 DATA ""
30726 DATA "  Allows convers
ion of TI"
30727 DATA "Artist instances
 to runable"
30728 DATA "assembly source
code. To"
30729 DATA "use in your Exte
nded Basic"
30730 DATA "program, just lo
ad the"
30731 DATA "object code (aft
er it has"
30732 DATA "been compiled an
d assembled)"
30733 DATA "and do CALL LINK
s to see"
30734 DATA "your loaded scre
ens. Very"
30735 DATA "fast displays."
```

NEXT MEETING

MONDAY, MARCH 12

6:30 PM --- WEST MUSIC COMPANY

ELECTION OF NEW OFFICERS

MORE HELP WITH FUNNELWEB!

ALSO, A SURPRISE VISITOR!

Cedar Valley 99'er Users Group
377 Cambridge Dr. NE
Cedar Rapids, Iowa 52402

Send To: