Tico Topics

¡\¡

The newsletter of the Oxnard area TI
99/4A User's Group.
Editor Charles McDonald

The TICO Newsletter is published
monthly, and is not affiliated with
Texas Instruments in any way. It is
supported by its subscribers and
members. Subscriptions are free with
paid membership in the TICO User's
Group, and is also distributed free to
any other user's group that wishes to
reciprocate. Articles contained may be
re-printed by other user's group
publications provided credit is given
to the original source of the article.
Comments and letters are welcome, as
is submission of original articles and
programs.
TICO meets the first Wednesday of each
month at 7:30pm at the RED BARON
RESTAURANT in the Oxnard airport, and
all are encouraged to come early and
treat yourself to dinner. which allows
for our "free" use of their banquet
room.
All opinions expressed in this
newsletter are the opinion of the
author and not necessarily the opinion
of the club or this newsletter.
==*=*=*=*=*=*=*=*=*=*=*=*=*=*=*=*=*=

Sitting in this month for Mr. McDonald
is your "old" editor Harley Harlingten
Any opinions expressed by Mr.
Harlingten are his, and may not be the
same as the user group.

Well group here I am this month, and if your editor isn't back next month, I guess I will be here again.

As you may or may not know, I have been away from the TI for a while spending a lot of time at work. While my work requires me to spend a lot of time in a IBM Clone, I seem to always come back to the trusty TI.

Spending hours and hours looking at a monochrome screen, I miss the color. I had the option of having color for my clone [the low end CGA] but chose to keep monochrome because it has a better resolution than the CGA. But neither compares to the TI [at least in my book].

Well on to other things.

in this months edition you will find some articles I have found interesting from other newsletters we have received from other user groups.

I thought I might mention, at this time, a new product that has just been released. The Gramulator. this is a new piece of hardware that plugs into the module port and lets you do such things as dump modules to disk, alter the TI welcome screen and much more. If you really want to know what this is, I suppose it could best be compared to the Gram Kracker, but it has some different features. If you want to get into the "Inner Workings" of your TI, this is for you.

The price seems to be fair at about $185 and is manufactured by:
CaDD Electronics
52 Audubon Road
Haverhill, MA 01830

Here once more someone has taken the time to go out and create something for the TI community which will keep this poor little orphan going for many, many years to come.

You know, I just thought of something, I think Texas Instruments didn't know what they had created. Sure this little machine can not now or ever be able to do some of the things that todays computers do but, none of them have the user friendliness and feel that the TI has. I have said it many times before, I will never abandon my TI, It has never failed or abandoned me.

TIPS FROM THE TIGERCUB

#46

Copyright 1987

TIGERCUB SOFTWARE
156 Collingwood Ave.
Columbus, OH 43213

Distributed by Tigercub
Software to TI-99/4A Users
Groups for promotional
purposes and in exchange for
their newsletters. May be
reprinted by non-profit
users groups, with credit to
Tigercub Software.

Over 130 original programs
in Basic and Extended Basic,
available on cassette or
disk. NOW REDUCED TO JUST
$1.00 EACH!, plus $1.50 per
order for cassette or disk
and PP&M. Minimum order of
$10.00. Cassette programs
will not be available after
my present stock of blanks
is exhausted. The Handy Dan-
dy series, and Color Prog-
ramming Tutor, are no longer
available on cassette.
Descriptive catalogs, while
they last, $1.00 which is
deductable from your first
order.

Tigercub Full Disk Collec-
tions, reduced to $5 post-
paid. Each of these contains
either 5 or 6 of my regular
catalog programs, and the
remaining disk space has
been filled with some of the
best public domain programs
of the same category. I am
NOT selling public domain
programs - they are a free
bonus!
TIGERCUB'S BEST, PROGRAMMING
TUTOR, PROGRAMMER'S UTILI-
TICS, BRAIN GAMES, BRAIN
TEASERS, BRAIN BUSTERS!,
MANEUVERING GAMES, ACTION
REFLEX AND CONCENTRATION,
TWO-PLAYER GAMES, KID'S
GAMES, MORE GAMES, WORD
GAMES, ELEMENTARY MATH, MID-
DLE/HIGH SCHOOL MATH, VOCAB-
ULARY AND READING, MUSICAL
EDUCATION, KALEIDOSCOPES AND
DISPLAYS

NUTS & BOLTS (No. 1), a full
disk of 100 Extended Basic
utility subprograms in merge
format, ready to merge into
your own programs. Plus the
Tigercub Menuloader, a tuto-
rial on using subprograms,
and 5 pages of documentation
with an example of the use
of each subprogram. Reduced
to $15.00 postpaid.
NUTS & BOLTS NO. 2, another
full disk of 108 utility
subprograms in merge format,
all new and fully compatible
with the last, and with 10
pages of documentation and
examples. Also $15 postpaid.

****
* NUTS & BOLTS #3 is now   *
* ready, another full disk *
* of 140 new merge-format   *
* utility subprograms, all *
* compatible with the pre- *
* vious. With 11 pages of   *
* documentation, $15 ppd.   *
****

TIPS FROM THE TIGERCUB, a
full disk containing the
complete contents of this
newsletter Nos. 1 through
14, 50 original programs and
files, reduced to $10 ppd.
TIPS FROM THE TIGERCUB VOL.
2, another diskfull, com-
plete contents of Nos. 15
through 24, over 60 files
and programs, also just $10
TIPS FROM THE TIGERCUB VOL.
3, another 62 programs, tips
and routines from Nos. 25
through 32, $10 postpaid.
TIPS FROM THE TIGERCUB VOL.
4, another 48 programs and
files from issues 33 through
41, also $10 postpaid.

TIGERCUB CARE DISKS #1, #2 &
#3, three full disks of text
files, mostly of lessons on
programming in XBasic, $5
per disk postpaid.

This one is explained in lines 180-190. I think that it will run on any Gemini printer.

```
100 DIM B(25,12),B$(25),CH$(12),L$(12)
110 GOTO 150
120 S,K,T$,C$,V,J,A,CH$(),X,X$,B$(),B(X,J),T,M,Q$,L$(),C,C1$,C2$,L,M$
130 CALL CLEAR :: CALL COLOR :: CALL SCREEN :: CALL CHAR :: CALL KEY :: CALL NUMTH
140 !@P-
150 !SEGMENTED BAR GRAPH
        by Jim Peterson 10/87
160 CALL CLEAR :: FOR S=1 TO 12 :: CALL COLOR(S,2,8):: NEXT S :: CALL SCREEN(5):: DISPLAY AT(3,10):"TIGERCUB" :: DISPLAY AT(5,6):"SEGMENTED BAR GRAPH"
170 CALL CHAR(95,"3C4299A1A199423C"):: DISPLAY AT(7,12):"_ 1987" :: DISPLAY AT(9,2):"For free distribution but no":"price or copying fee may be":"charged."
180 DISPLAY AT(14,2):" Will output to a Gemini":"printer a horizontal bar-":"graph of up to 25 bars, each":"segmented into up to 12"
190 DISPLAY AT(18,1):"values, with a title for":"each and optionally with a":"table of identification of":"the segment symbols."
200 DISPLAY AT(24,8):"" :: DISPLAY AT(24,8):"PRESS ANY KEY" :: CALL KEY(0,K,S):: IF S=0 THEN 200
210 ON WARNING NEXT
220 DISPLAY AT(12,1)ERASE ALL:"GRAPH TITLE?" :: ACCEPT AT(14,1):T$ :: T$=RPT$(" ",17-LEN(T$)/2)&T$ :: C$=CHR$(27)
230 DISPLAY AT(16,1):"HOW MANY SEGMENTS PER BAR?" :: ACCEPT AT(16,27)VALIDATE(DIGIT)SIZE(2):V :: IF V=0 OR V>12 THEN 230
240 !@P+
250 DATA 239,229,168,251,173,175,184,236,169,250,160,207
260 !@P-
270 FOR J=1 TO V :: READ A :: CH$(J)=CHR$(A):: NEXT J
280 DISPLAY AT(3,1)ERASE ALL:"Type END when finished"
290 X=X+1 :: IF X>25 THEN 330
300 CALL NUMTH(X,X$):: DISPLAY AT(12,1):"Title of "&X$&" bar?" :: ACCEPT AT(14,1):B$(X):: IF B$(X)="END" OR B$(X)="end" THEN 330
310 FOR J=1 TO V :: CALL NUMTH(J,X$):: DISPLAY AT(16,1):X$&" segment value?" :: ACCEPT AT(18,1)VALIDATE(NUMERIC):B(X,J):: T=T+B(X,J):: NEXT J
320 M=MAX(M,T):: T=0 :: GOTO 290
330 X=X-1 :: DISPLAY AT(20,1):"Print labels? Y/N" :: ACCEPT AT(20,19)VALIDATE("YN")SIZE(1):Q$ :: IF Q$="N" THEN 350
340 FOR J=1 TO V :: CALL NUMTH(J,X$):: DISPLAY AT(22,1):X$&" label?" :: ACCEPT AT(24,1):L$(J):: NEXT J
350 C=120/M :: C1$=C$&"B"&CHR$(1)&C$&"G"&C$&"E" :: C2$=C$&"B"&CHR$(3)
360 OPEN #1:"PIO",VARIABLE 255 :: PRINT #1:C$&"@" :: PRINT #1:C$&"E"&C$&"G"&C$&"M"&CHR$(6)
370 PRINT #1:CHR$(14)&T$&CHR$(20):"":RPT$(CHR$(229),70):: :: PRINT #1:C$&"3"&CHR$(10)
380 FOR J=1 TO X :: PRINT #1:B$(J)&C2$ :: FOR L=1 TO V :: M$=M$&RPT$(CH$(L),INT(B(J,L)*C+.5)):: NEXT L
390 PRINT #1:RPT$(CHR$(232),LEN(M$)):: PRINT #1:M$ :: PRINT #1:M$ :: PRINT #1:RPT$(CHR$(231),LEN(M$))
400 M$="" :: PRINT #1:C1$:: NEXT J :: IF Q$="N" THEN STOP
410 PRINT #1:"";""
420 FOR J=1 TO V :: PRINT #1:C2$&RPT$(CHR$(232),10):: PRINT #1:RPT$(CH$(J),10)&C1$&" "&L$(J):: PRINT #1:C2$&RPT$(CH$(J),10):: PRINT #1:RPT$(CHR$(231),10):: NEXT J
430 !@P+
440 SUB NUMTH(N,N$):: IF FLAG=1 THEN 520 :: FLAG=1 :: RESTORE 480
450 GOTO 480
```

```
460 J,ONE$(),TEEN$(),TEN$(),
N,N$
470 !@P-
480 DATA first,second,third,
fourth,fifth,sixth,seventh,e
ighth,ninth,tenth
490 DATA eleventh,twelfth,th
irteenth,fourteenth,fifteent
h,sixteenth,seventeenth,eigh
teenth,nineteenth
500 DATA twenty,THIRTY,FORTY
,FIFTY,SIXTY,SEVENTY,EIGHTY,
NINETY
510 FOR J=1 TO 10 :: READ ON
E$(J):: NEXT J :: FOR J=1 TO
 9 :: READ TEEN$(J):: NEXT J
 :: FOR J=2 TO 9 :: READ TEN
$(J):: NEXT J
520 IF N<11 THEN N$=ONE$(N):
: SUBEXIT
530 IF N<20 THEN N$=TEEN$(N-
10):: SUBEXIT
540 IF N/10=INT(N/10)THEN N$
=SEG$(TEN$(N/10),1,LEN(TEN$(
N/10))-1)&"ieth" :: SUBEXIT
550 N$=TEN$(INT(N/10))&"-"&O
NE$((N/10-INT(N/10))*10)
560 !@P+
570 SUBEND


    And  a  little  something
educational -

100 DIM M$(100)
110 GOTO 150
120 S,J,M$(),A$,Z$,K,W$(),X,
Y,ADV$,A,Q$
130 CALL CLEAR :: CALL COLOR
 :: CALL SCREEN :: CALL CHAR
 :: CALL KEY :: CALL ADVERB
 :: CALL SOUND
140 !@P-
150 CALL CLEAR :: FOR S=0 TO
 12 :: CALL COLOR(S,2,8):: N
EXT S :: CALL SCREEN(5):: DI
SPLAY AT(3,2):"ADJECTIVE TO
ADVERB  V.1.3"
160 CALL CHAR(64,"3C4299A1A1
99423C"):: DISPLAY AT(5,6):"
@ Tigercub Software":;:" For
 free distribution with  no
charge or copying fee."
170 FOR J=1 TO 100 :: READ M
$(J):: A$=A$&CHR$(J):: NEXT
J :: Z$=A$ :: CALL KEY(3,K,S
)
180 W$(1)=" If adjective end
s in Y,     change the Y to
ILY." :: W$(2)=" If adjectiv
e ends in C,    add ALLY."
```

```
190 W$(3)=" If adjective end
s in LL,    just add Y."
200 W$(4)=" If adjective end
s in LE,    preceded by a con
sonant,    drop the E and ad
d Y."
210 W$(5)=" If the word ends
 in E       preceded by a con
sonant,    preceded by a vow
el, just    add LY."
220 W$(6)=" This word is an
exception  to the rule - the
 adverb is WHOLLY."
230 W$(7)=" If the adjective
 does not   end in C,E,LL or
Y, always   just add LY."
240 W$(8)=" This is an excep
tion to the rule. The prefer
red adverb  form is DRYLY."
250 W$(9)=" If the adjective
 ends in E  preceded by a vo
wel, drop   the E and add LY
."
260 W$(10)=" If the adjectiv
e ends in E preceded by a co
nsonant     other than L, ad
d LY."
270 RANDOMIZE :: X=INT(RND*L
EN(Z$)+1):: Y=ASC(SEG$(Z$,X,
1)):: Z$=SEG$(Z$,1,X-1)&SEG$
(Z$,X+1,255):: IF LEN(Z$)=0
THEN Z$=A$
280 ACCEPT AT(24,1):M$(Y)
290 CALL ADVERB(M$(Y),ADV$,A
)
300 DISPLAY AT(12,1):" Type
the adverb form of -" :: DIS
PLAY AT(15,1):M$(Y):: DISPLA
Y AT(18,10):"" :: ACCEPT AT(
15,15)BEEP:Q$
310 IF Q$=ADV$ THEN DISPLAY
AT(18,10):"CORRECT!" :: GOTO
 240
320 CALL SOUND(100,110,5,-4,
5):: DISPLAY AT(20,1):W$(A):
"";"" :: GOTO 300
330 !@P+
340 DATA DUE,COOL,SOLE,STOIC
,FRANTIC,COMIC,ABLE,FULL,POO
R,HANDY,SORE,SOCIAL,PENAL,SL
OW,HIGH,LOW
350 !@P-
360 DATA FRISKY,PLAYFUL,HEAL
THY,ROUGH,BUSY,SILLY,SICK,SM
ART,SORE,FAIR,ANGRY,BARE,TIR
ED,WISHFUL,ACTUAL
370 DATA HASTY,LONE,HECTIC,O
FFICIAL,MAGIC,MAGICAL,MATHEM
ATIC,LOGIC,TRAGIC,PATHETIC,T
RAUMATIC
```

```
380 DATA DRAMATIC,AUTOMATIC,
    AROMATIC,EQUAL,SERIAL,BASIC,
    USUAL,FAVORABLE,UNSTABLE,LEG
    IBLE
390 DATA HECTIC,LIVE,WARY,VI
    SIBLE,TERRIBLE,HORRIBLE,VIVI
    D,FANCY,EASY,VILE,WICKED,BLO
    ODY,SHODDY
400 DATA NOBLE,HAPPY,LEGAL,M
    ERRY,JOLLY,CRAZY,CASUAL,CARE
    FUL,FOOLISH,FAMOUS,GAY,GUILT
    Y
410 DATA HOPEFUL,HATEFUL,TIM
    ID,BRAVE,BEAUTIFUL,DRY,NICE,
    LARGE,PAINFUL,SINFUL,SORROWF
    UL,SIMPLE,WILLFUL
420 DATA MENTAL,MORAL,PALE,W
    HOLE,HUNGRY,FINAL,FORMAL,TRU
    E,AMPLE,DOUBLE
430 !@P+
440 SUB ADVERB(M$,ADV$,A)::
    L=LEN(M$):: E$=SEG$(M$,L,1):
    : F$=SEG$(M$,L-1,2):: G$=SEG
    $(M$,L-1,1):: P$=SEG$(M$,1,L
    -1):: H$=SEG$(M$,L-2,1)
450 IF ASC(SEG$(M$,1,1))<97
    THEN A$="ALLY" :: I$="ILY" :
    : L$="LY" :: Y$="Y" :: V$="A
    EIOU" ELSE A$="ally" :: I$="
    ily" :: L$="ly" :: Y$="y" ::
460 IF M$="WHOLE" THEN ADV$=
    "WHOLLY" :: A=6 :: SUBEXIT
470 IF M$="DRY" THEN ADV$="D
    RYLY" :: A=8 :: SUBEXIT ELSE
     IF F$="LL" OR F$="ll" THEN
    ADV$=M$&Y$ :: A=3 :: SUBEXIT
480 IF E$="C" OR E$="c" THEN
     ADV$=M$&A$ :: A=2 :: SUBEXI
    T ELSE IF E$="Y" OR E$="y" T
    HEN ADV$=P$&I$ :: A=1 :: SUB
    EXIT
490 IF E$<>"E" AND E$<>"e" T
    HEN 530
500 IF G$="L" OR G$="l" THEN
     IF POS(V$,H$,1)<>0 THEN ADV
    $=M$&L$ :: A=5 :: SUBEXIT EL
    SE ADV$=P$&Y$ :: A=4 :: SUBE
    XIT
510 IF POS(V$,G$,1)<>0 THEN
    ADV$=P$&L$ :: A=9 :: SUBEXIT
520 IF POS(V$,SEG$(M$,L-2,1)
    ,1)=0 THEN ADV$=M$&L$ :: A=1
    0 :: SUBEXIT ELSE ADV$=M$&L$
     :: A=5 :: SUBEXIT
530 ADV$=M$&L$ :: A=7 :: SUB
    END


100 !MOCKINGBIRD TINYGRAM by
    Jim Peterson. Tap  your
    tune on the 1 to 0 keys
```

```
    (tuned A through C)
110 !Then press any other
    key to hear it repeated
120 DATA 220,247,262,294,330
    ,349,392,440,494,523
130 FOR J=1 TO 10 :: READ N(
    J):: NEXT J :: J=0 :: DIM T(
    50,2)
140 CALL KEY(5,K,S):: IF S=0
     THEN 140
150 ON ERROR 190
160 CALL KEY(5,K,S):: IF K=-
    1 THEN 160 :: K=K-(K=48)*10
    :: T(J,1)=N(K-48):: CALL SOU
    ND(-999,T(J,1),0)
170 IF K=K2 THEN T(J,2)=T(J,
    2)+1 :: GOTO 160
180 K2=K :: J=J+1 :: GOTO 16
    0
190 FOR X=0 TO J-1 :: CALL S
    OUND((T(X,2)+1)*400,T(X,1),0
    ,T(X,1)*1.01,0):: NEXT X ::
    J=0 :: GOTO 140


    A little subprogram to add
a  bit  of  variety  to your
"PRESS ANY KEY" routine.


1 CALL CLEAR :: CALL PRESSKE
Y(24)
30000 SUB PRESSKEY(R)
30001 C=C+1 :: IF C=16 THEN
30002 :: DISPLAY AT(R,1):""
:: DISPLAY AT(R,C):"PRESS AN
Y KEY" :: DISPLAY AT(R,C):"p
ress any key" :: CALL KEY(0,
K,S):: IF S=0 THEN 30001 ELS
E 30003
30002 C=C-1 :: IF C=0 THEN 3
0001 :: DISPLAY AT(R,1):"" :
: DISPLAY AT(R,C):"PRESS ANY
 KEY" :: DISPLAY AT(R,C):"pr
ess any key" :: CALL KEY(0,K
,S):: IF S=0 THEN 30002
30003 DISPLAY AT(R,1):"" ::
SUBEND


    And  a new way to wipe the
screen -


1 CALL CORNERWIPE(30)
29000 SUB CORNERWIPE(CH):: F
OR T=1 TO 24 :: CALL HCHAR(T
,3,CH,T+4):: CALL HCHAR(25-T
,32-T,CH,T):: NEXT T :: CALL
 CLEAR :: SUBEND


        MEMORY FULL

        Jim Peterson
```

This program is used to set your Cor-Comp Clock. I have used it many times in the beginning of a program I have that uses the clock for Time Stamping on printouts.

The reason I wrote this little program is because for some reason the Cor-Comp Clock seems to get screwed up on an occasion and by running this at the beginning of the program, it reminds me to set my clock. If it reads correctly, you can just go by

and continue with the program you will be working with.

If you note line 220, this is where you can put the name of the program you want to run, or, you can simply put END, to stop, if you just want to set the clock.

I have not used this on the Triple-Tech-Card, but I was told that you access the Clock the same way.

I really like my clock but. I have called Cor-Comp a couple of times about this problem but they don't seem to have an answer. The battery is new and good, maybe someone out there has an answer for me.

```
100 CALL SCREEN(16)
110 FOR X=0 TO 14 :: CALL CO
LOR(X,5,16):: NEXT X
120 CALL CLEAR :: ON WARNING
 NEXT
130 OPEN #1:"CLOCK"
140 INPUT #1:A$,B$,C$
150 GOTO 230
160 DISPLAY AT(5,1):"TODAY I
S ";A$
170 GOTO 310
180 DISPLAY AT(7,1):"THE TIM
E IS ";C$
190 DISPLAY AT(9,1):"THE DAT
E IS ";B$
200 DISPLAY AT(12,1):"ANY CH
ANGES?"
210 CALL KEY(0,K,S):: IF S=0
 THEN 200
220 IF K=89 THEN GOSUB 440 E
LSE IF K=78 THEN RUN "DSKx.x
xxx" ELSE 200
230 IF A$=CHR$(49)THEN A$="M
ONDAY" ELSE GOTO 240
240 IF A$=CHR$(50)THEN A$="T
UESDAY" ELSE GOTO 250
250 IF A$=CHR$(51)THEN A$="W
EDNESDAY" ELSE GOTO 260
260 IF A$=CHR$(52)THEN A$="T
HURSDAY" ELSE GOTO 270
270 IF A$=CHR$(53)THEN A$="F
RIDAY" ELSE GOTO 280
280 IF A$=CHR$(54)THEN A$="S
ATURDAY" ELSE GOTO 290

290 IF A$=CHR$(55)THEN A$="S
UNDAY" ELSE GOTO 300
300 GOTO 160
310 IF SEG$(C$,1,2)="13" THE
N C$="1"&SEG$(C$,3,6)&"PM" E
LSE GOTO 320
320 IF SEG$(C$,1,2)="14" THE
N C$="2"&SEG$(C$,3,6)&"PM" E
LSE GOTO 330
330 IF SEG$(C$,1,2)="15" THE
N C$="3"&SEG$(C$,3,6)&"PM" E
LSE GOTO 340
340 IF SEG$(C$,1,2)="16" THE
N C$="4"&SEG$(C$,3,6)&"PM" E
LSE GOTO 350
350 IF SEG$(C$,1,2)="17" THE
N C$="5"&SEG$(C$,3,6)&"PM" E
LSE GOTO 360
360 IF SEG$(C$,1,2)="18" THE
N C$="6"&SEG$(C$,3,6)&"PM" E
LSE GOTO 370
370 IF SEG$(C$,1,2)="19" THE
N C$="7"&SEG$(C$,3,6)&"PM" E
LSE GOTO 380
380 IF SEG$(C$,1,2)="20" THE
N C$="8"&SEG$(C$,3,6)&"PM" E
LSE GOTO 390
390 IF SEG$(C$,1,2)="21" THE
N C$="9"&SEG$(C$,3,6)&"PM" E
LSE GOTO 400
400 IF SEG$(C$,1,2)="22" THE
N C$="10"&SEG$(C$,3,6)&"PM"
ELSE GOTO 410
410 IF SEG$(C$,1,2)="23" THE

N C$="11"&SEG$(C$,3,6)&"PM"
ELSE GOTO 420
420 IF SEG$(C$,1,2)="24" THE
N C$="12"&SEG$(C$,3,6)&"PM"
ELSE GOTO 430
430 GOTO 180
440 CALL CLEAR
450 DISPLAY AT(5,1):"1. MOND
AY":"2. TUESDAY":"3. WEDNESD
AY":"4. THURSDAY":"5. FRIDAY
":"6. SATURDAY":"7. SUNDAY"
460 DISPLAY AT(20,1):"TODAYS
 DAY" :: ACCEPT AT(20,12)SIZ
E(1)BEEP:AA$
470 CALL CLEAR
480 DISPLAY AT(5,1):"INPUT D
ATE"
490 DISPLAY AT(7,1)SIZE(-8):
"MM/DD/YY"
500 ACCEPT AT(7,1)VALIDATE(N
UMERIC)SIZE(-2)BEEP:B1$
510 ACCEPT AT(7,4)VALIDATE(N
UMERIC)SIZE(-2)BEEP:B2$
520 ACCEPT AT(7,7)VALIDATE(N
UMERIC)SIZE(-2)BEEP:B3$
530 BB$=B1$&"/"&B2$&"/"&B3$
540 CALL CLEAR
550 DISPLAY AT(5,1):"INPUT T
IME (IN 12 HOUR MODE)"
560 DISPLAY AT(7,1)SIZE(-8):
"HH:MM AM"
570 ACCEPT AT(7,1)VALIDATE(N
UMERIC)SIZE(-2)BEEP:C1$
580 ACCEPT AT(7,4)VALIDATE(N

UMERIC)SIZE(-2)BEEP:C2$
590 ACCEPT AT(7,7)VALIDATE("
AP")SIZE(-1)BEEP:F$ :: IF F$
="P" THEN GOSUB 650 ELSE 600
600 C3$="00" :: CC$=C1$&":"&
C2$&":"&C3$
610 D$=AA$&","&BB$&","&CC$
620 PRINT #1:D$
630 CLOSE #1
640 GOTO 130
650 IF C1$="01" THEN C1$="13
"
660 IF C1$="02" THEN C1$="14
"
670 IF C1$="03" THEN C1$="15
"
680 IF C1$="04" THEN C1$="16
"
690 IF C1$="05" THEN C1$="17
"
700 IF C1$="06" THEN C1$="18
"
710 IF C1$="07" THEN C1$="19
"
720 IF C1$="08" THEN C1$="20
"
730 IF C1$="09" THEN C1$="21
"
740 IF C1$="10" THEN C1$="22
"
750 IF C1$="11" THEN C1$="23
"
760 IF C1$="12" THEN C1$="24
"
```
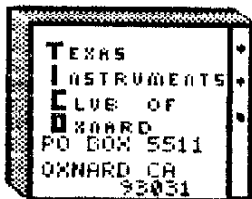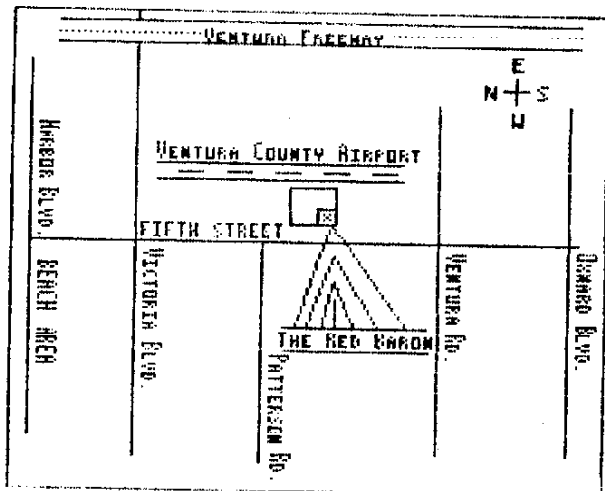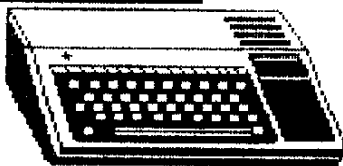
A FIRST LESSON IN EXTENDED BASIC
PROGRAMMING
by Jim Peterson

Extended Basic is nothing more than BASIC with a lot more words added. If you have learned anything about BASIC programming, it will also apply to Extended Basic.

A PROGRAM is just a numbered series of instructions to the computer, written in more-or-less-plain English, telling the computer to perform a certain task. The computer will follow these instructions in the order they are numbered, except when you tell it to GOTO or GOSUB to another part of the program.

The instructions are numbered by LINE NUMBERS. You can type these in, but it is easier to just start out by typing NUM and Enter. The computer will then automatically give you line numbers starting with 100 and advancing by 10 to 110, 120, etc. This is so that you can later squeeze more instructions in between using 105, etc. If you need to get out of automatic numbering, in order to correct a line or insert a line, just press Enter twice. To start automatic numbering again, just type NUM, space, and the next line number you want, such as NUM 130.

In Extended Basic, you can put several instructions under one line number, by putting a double colon (::) between them. But, while you are still learning, please DON'T! Why not? Well, when you tell the computer to do something it can't do, or can't understand, it will give you an ERROR message, either when you Enter the line or when you run the program, and it will tell you the line number that is causing the problem - but if you have several instructions under that line number, you won't know which one is wrong! The first instruction we will learn is PRINT. This tells the computer to print something on the bottom line of the screen, and then scroll up one line. Try entering NUM, then -

```
100 PRINT 1
110 PRINT 2
120 PRINT 3 - and RUN it.
Now try -
100 PRINT A
110 PRINT B
120 PRINT C - and RUN it.
```

It printed a 0 three times, didn't it? Why? When you tell the printer to print anything other than a numeric digit (or a math symbol or decimal combined with a number) it thinks that you are telling it to print the VALUE of a VARIABLE. And if you haven't previously told it otherwise, that value is zero. Try this

```
100 A=10
110 PRINT A
```

So what is a VARIABLE? If you suffered through high school algebra, you may recall equations such as - S x T = D, where S equals speed and T equals time and D equals distance. You could give S and T any values you wanted to, in order to calculate how far something would go at a certain speed in a certain time. T and S and D are VARIABLES. We use them a great deal in programming and

you will soon see why.

Now, suppose you really wanted to print the letter A. That's easy, just put it in quotation marks and the computer will know what to do.

```
100 PRINT "A"
```

In either Basic or Extended Basic, the instruction DISPLAY works just like PRINT.

```
100 DISPLAY 999
110 DISPLAY "HELLO"
```

Text scrolling up from the bottom looks rather "cheap", compared to those computers which display text from the top of the screen downward. In Extended Basic we can put the display wherever we want by using DISPLAY AT followed by a row and column number in parentheses. There are 24 rows on the screen and 28 columns when you are using PRINT or DISPLAY.

```
100 CALL CLEAR
110 DISPLAY AT(1,1):1
120 DISPLAY AT(24,1):24
130 GOTO 130
```

We slipped in a couple of new instructions there. CALL CLEAR just erases everything on the screen (actually it fills the screen with the blank space you get by hitting the space bar). GOTO tells the computer to go to another line number. In this case, it goes back to itself over and over and keeps the program running so it will not print READY and scroll that first line off the screen. Use FCTN 4 to get out of it.

Try experimenting with DISPLAY AT to put different numbers, words or phrases wherever you want them on the screen. You will find that if you specify a row number greater than 24, the computer will just subtract 24 until it gets down to a number within range.

```
100 DISPLAY AT(25,35):"WHERE?"
```

In some programs you may see PRINT followed by # and a number or variable. This is an instruction to print to a printer, to a disk, a speech synthesizer, or whatever. Actually you can print to the screen by -

```
100 PRINT #0:"SEE?"
```

but there is usually no reason to do so.

Now, a few words about print separators. Try this -

```
100 PRINT 1:2:3
110 PRINT 1,2,3
120 PRINT 1;2;3
130 PRINT "A";"B";"C"
```

See what happens? The colon (:) causes the computer to skip to the beginning of the next line before printing again. The comma (,) causes it to jump half the width of the screen before printing again. And the semi-colon causes it to print one item right after another EXCEPT that numbers are always printed with a blank space before and after them (a negative number has a minus sign (-) instead of a blank before it). Now try -

```
100 PRINT 1:2:3:
110 PRINT 1,2,3,
120 PRINT 4
130 PRINT 1;2;3;
140 PRINT 4
```

The colon after the 3 in line 100 was useless

Have I got some deals for you this month.

It seems that some TI owners want to liquidate their systems. The prices are right and these deals should not last long.

First:

A complete PE Box with one disk drive, disk drive controller, 32k memory expansion, console, modulator, and a Axiom Printer Interface.
Software includes, Extended Basic, TI Count Business Software, including:
1. General Ledger
2. Accounts Receivable
3. Accounts Payable
4. Inventory System
Other Misc. Software.

All this for only $200 cash and carry. UPGRADE TODAY!!!
Contact: Harley Harlingten
P.O.Box 5511
Oxnard, Ca. 93031
(805) 984-3391
Second:

PE Box, with RS232 one disk drive and controller, 32k memory expansion, console.
Software includes, Extended Basic, TI Writer, AM List, Other Misc. Books and Software.
All for only $250

Contact:
John Thompson
1530 Ramona Dr.
Camarillo, Ca. 93010
(Also a Panasonic Monitor for $95)

One more time:

PE Box with Disk Drive, Disk Controller, RS232, (I think)32k memory, Joystick, TI console

Software includes:
Extended Basic, TI Writer, modules and

books
ONLY,$250 Contact:
John Kalench
1188 N. Bedford Dr.
Camarillo, Ca. 93010
(805)482-2200
(Also a computer table (metal)for $75)

I am sending this letter to some of the past members that I still have an address for in hopes that maybe they will make it to a meeting. We would love to have you attend and maybe let us know, for whatever reason, why you stopped coming. We would really like to hear from you. If for some reason you are unable to attend a meeting, just drop me a note at:
H. Harlington
PO BOX 5511
Oxnard, Ca. 93031

If you simply lost intrest, come and see what you have been missing and where the TI is now !!!

In this months newsletter I have included a simple little program for setting the Cor-Comp Clock. You can include this in the beginning of any program (Basic, ExBasic) to set your clock. This will set both the clock in the Triple-Tech card and in the Stand Alone Unit, so if your program uses the clock, you can be sure that it is set correctly. You could even set it to POST-DATE.

Included in this months newsletter are some bits from around the country which were taken from the newsletters we exchange with. I hope you enjoy them.

Be a contributor to the newsletter. Have your article published with your own Bi-Line. Just submit your articles to the PO Box listed on the front, and wait for your article to appear. Write about ANYTHING, even what you did on vacation, we don't care, just send it and the editor will do his best to include it in the next months newsletter. Remember you can't be published if you don't send in that article !

GOOD NEWS, GOOD NEWS, GOOD NEWS !!!!!!

That programming genius Jim Peterson of the Tigercub has sent us some new articles in TIPS FROM THE TIGERCUB #s 46 to 54. And along with this he has sent his newest catalog. Come to the meeting and see what he has to offer, his prices have been reduced, and there are lots and lots of really neat things to use. But you will miss out on these if you don't come to the meeting.

I would like to take this time to propose that every user group that has had the great fortune to have the Tigercub grace their pages, send Jim a monitary thank-you so as to encourage him to keep sending out these Gems.
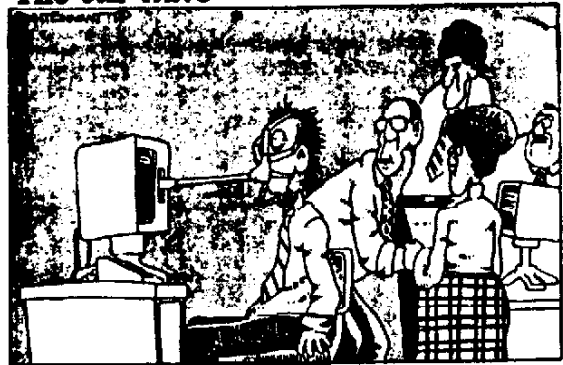
Thanks again Jim, keep up the good work !!!
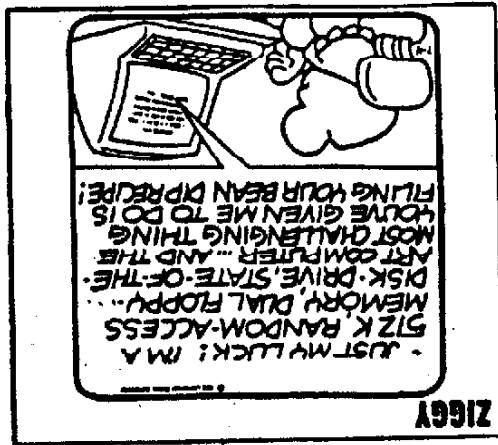My Memory's Empty

I just recently visited Tex-Comp and while I was there I picked up a limited supply of their newest catalog. Come to the meeting and get yours, first come first served.
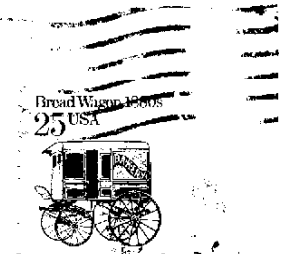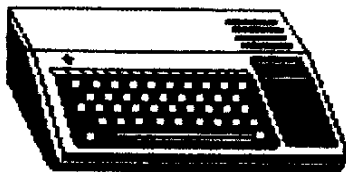
because the computer would advance to the next line anyway. The comma after the 3 in line 110 caused line 120 to print half a screen width after the 3. And the semi-colon after the 3 in line 130 caused line 140 to print immediately after the 3.

Do a lot of experimenting with this, until you know just what the print separators will do. Try -
100 PRINT "A","BCDEFGHIJKLMNOPQ"
See what happens when the item after the comma is more than half a screen in length? Now try this -
100 PRINT 1; : : : :2
And try this -
100 CALL HCHAR(1,1,42,768)
110 DISPLAY AT(5,1):"TEST"
120 DISPLAY AT(7,1)SIZE(4);"TEST"
130 DISPLAY AT(9,1):"TEST";
Line 100 just fills up the screen with something so I could show you that DISPLAY AT erases the remainder of the line unless you specify the length of what you will print with SIZE or, much easier, put a semicolon after the text.

The 5th Wave — **Richard Tennant**

"ALRIGHT, STEADY EVERYONE. MARGO, GO OVER TO TOM'S COMPUTER AND PRESS 'ESCAPE'...VERY CAREFULLY!"

ZIGGY

- JUST MY LUCK! I'M A
512K RANDOM-ACCESS
MEMORY, DUAL FLOPPY
DISK-DRIVE, STATE-OF-THE-
ART COMPUTER... AND THE
MOST CHALLENGING THING
YOU'VE GIVEN ME TO DO IS
FILING YOUR BEAN DIP RECIPE!

TEXAS
INSTRUMENTS
CLUB OF
OXNARD
P.O. BOX 5511
OXNARD, CA.
93031

OXNARD, CA
SEP 5
PM
1988
93030

Bread Wagon 1880s
25 USA

DALLAS TI COMPUTER

P.O. BOX 29863
DALLAS TX 75229