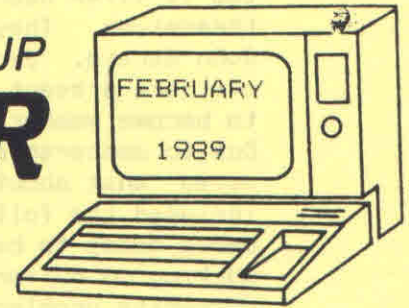


CEDAR VALLEY 99'ER USER GROUP **NEWSLETTER**



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****NEWSLETTER TOPICS****

1. Future Meeting Dates
2. Next Meeting Notes
3. Minutes from the Feb. Meeting
4. Tips from the Tigercub #49
5. List of Exchange User Groups
6. Review of Mechatronics XBII+
7. Tigercub Public Domain Index

****FUTURE MEETING DATES****

Please mark the following dates on your calendar for future meetings:
MARCH 13, APRIL 10, MAY 8, JUNE 12.

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

This month's meeting will be Monday, March 13 at West Music Store, in the Collins Road Square shopping center. Opening is at 6:30 PM. Gary Bishop may be talked into showing the power of his XBII+ module. We will plan our visit to Sister Pat. Other surprises await, so don't miss it!

* MINUTES FROM THE FEBRUARY MEETING *

The February meeting was called to order by President Jerry Canady. There were 14 members in attendance. In addition, two TI 99/4A user guests introduced themselves. They were Paul Wilson and John Strain. Jerry introduced the UG officers present and invited the guests to become members.

Due to membership interest Jim Reiss was asked "What about PRESS?". His answer included the following information. The debug seems to be complete. They are working on buffering now to solve an overwrite problem. His estimate was there would be 3 to 6 weeks before release.

Continuing on with the formal meeting, it was moved, seconded and passed that the January minutes be accepted as printed in the NEWSLETTER.

Bruce read the combined treasurer's report for the last two months. It was moved, seconded and passed that the report be accepted as read.

OLD BUSINESS: 1. Gary reported that the disk drive enclosure, power supply and cable has arrived and awaits the installation of our second drive. Gary will be searching in his bone box for enough good pieces to make up a DS drive to upgrade. 2. Gary also reported that the search for a regulating transformer is over. He has purchased one and will be able to install it for Sister Pat before air conditioning season starts. 3. John reported that he has been able to complete the cataloging of all UG disks and has sent the list to the Chicago UG for comparison with their master file. Just to make his day complete both Gary and Ed turned several more disks from Sister Pat. John turned these over to other members to classify. 4. The possibility of holding a UG meeting at Dubuque was discussed and pronounced workable. A Saturday morning meeting in April was tentatively decided on. No formal business would be conducted, but several demonstrations would be presented. Contacts need to be made to see if a suitable meeting place can be found so that Sister Pat could join us. Car-pooling will be used so plan on being there.

NEW BUSINESS: 1. Jerry reported he received a TI-PD catalog from Tigercub Software. (See letter at the end of this newsletter.) It lists over 200

SS/SD disks of public domain programs from Jim Peterson's library. He is willing to make these available just for his copying costs. Copies of the catalog will be available at the next meeting, or by mail.

DISCUSSION: 1. Gary showed a book he recently purchased - "TI 99/4A Interns" by Heiner Martin. The operating system of the TI 99/4A internal ROM and GROM with commentary and directives for GPL. 2. Jerry announced he has ordered the P GRAM card to eliminate the need for his cartridges. 3. Jim announced some Asgard news. He also answered some questions from our guests about the Geneve 9640. 4. A letter from Sister Pat was passed around. In it, she included a copy of "Pat in TI Land" published in the BVM Newsletter. It tells of her adventures with her TI 99/4A computer and all the new friends she has made. 5. The subject of newsletter exchange again came up. We have a lot of good reading there. See the Editor to reserve a book of them. We currently receive 28 different newsletters. Those available will be published in the next issue. DEMONSTRATION: Jerry showed off the newest Ray Kazmer disk - Valentine.

Submitted by Bill Faeth, Secretary

In addition to the public domain catalog, Jim Peterson has sent us a complete list of other user groups, and some new Tips for future publication. Thanks, Jim! We also have, on disk, the complete listing of the software library of the LA 99er user group. Their software is available to us for a nominal fee. See one of the officers for the listing. -Ed.

(from page 8)

least PROM that has a GROM interface in front of it. I might try to contact John to see if there is a patch. Then again, my version of the MENU is 7.1, and several later versions are available. One of the later versions may fix this problem.

The cartridge is available from TAPE, LTD in Ontario, CA. My rating of it is A+ for value, C- for instruction clarity, B for ease of use.

Gary D. Bishop, Cedar Valley 99ers,
2-28-89

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The entire contents of Tips from the Tigercub Nos. 1 through 14, with more added, are now available as a full disk of 50 programs, routines and files for just \$15.00 postpaid!

Nuts & Bolts is a diskfull of 100 (that's right, 100!) XBasic utility subprograms in MERGE format, ready for you to merge into your own programs. Contents include 13 type fonts, 14 text display routines, 12 sorts and shuffles, 9 data saving and reading routines, 9 wipes, 8 pauses, 6 music, 2 protection, etc., and now also a tutorial on using subprograms, all for just \$19.95 postpaid!

And I have about 140 other absolutely original programs in Basic and XBasic at only \$3.00 each! (plus \$1.50 per order for cassette, packing and postage, or \$3.00 for diskette, PPM) I will send you my descriptive catalog for a dollar, which you can then deduct from your first order.

TIJ
UDS:TDFIFA
BJIF
JDIF
SURS
STSA
SFBF
TRA

The above is a long division problem in the proper format, with each numeral replaced by a letter. Can you solve it?

My program TC-41 Long Division Cryptograms, will generate an infinite number of such puzzles for you, and help you to solve them - and it only costs \$3.00. It took me a week to program, and I've sold 12 copies in 2 years! Doesn't anyone like to exercise their brains anymore?

TIGERCUB CHALLENGE

```
100 FOR J=1 TO 7 :: READ M%
:: PRINT M% :: NEXT J
30000 DATA AAAAAAAAAAAAAAAAAA
AAAAAAAAAA,BBBBBBBBBBBBBB,BB
BBBBBBBBBBBB,CCCCCCCCCCCC,
DDDDDDDDDDDDDD
30010 DATA "TESTING",,,,,,
,,,,,,""TEST
ING""
>RUN
AAAAAAAAAAAAAAAAAAAAAAAAAAAA
BBBBBBBBBBBBBBB,BBBBBBBBBBBBBB
CCCCCCCCCCCCCCC
DDDDDDDDDDDDDDDD
"TESTING"
,,,,,
""TESTING""
$ READY $
```

Can you run this program and get these results? You won't even be able to key in that last DATA item! So, how was this programmed? No, there are no redefined characters!

Do you need something educational? Here is a little routine to give the plural endings for most words. I will leave it to you to develop further - and see if you can teach the computer the plurals of PANTS, TOOTH, MAN, FUNGUS, DATA and the other inconsistencies of the English language.

```
100 REM PLURAL ENDINGS
    by Jim Peterson
110 INPUT W$
120 Z%=SEG$(W$,LEN(W$),1)
130 Y%=SEG$(W$,LEN(W$)-1,2)
140 ON POS("EFHSXYZ",Z%,1)+1
    GOTO 270,150,190,180,250,25
0,220,250
150 IF SEG$(W$,LEN(W$)-2,2)<
>"IF" THEN 270
160 PL%=SEG$(W$,1,LEN(W$)-2)
    &"VES"
170 GOTO 280
180 IF (Y%="CH")+(Y%="SH")TH
EN 250 ELSE 270
190 IF (Y%<>"LF")$(Y%<>"RF")
$(Y%<>"AF")$(W%<>"HOOF")THEN
    270
200 PL%=SEG$(W$,1,LEN(W$)-1)
    &"VES"
210 GOTO 280
220 IF (Y%="AY")+(Y%="EY")+
(Y%="OY")+(Y%="UY")THEN 270
230 PL%=SEG$(W$,1,LEN(W$)-1)
    &"IES"
240 GOTO 280
250 PL%=W%&"ES"
260 GOTO 280
270 PL%=W%&"S"
280 PRINT PL$
290 GOTO 110
```

If you want to turn that into a quiz, change line 110 to READ W\$, change line 280 to PRINT W\$;" PLURAL?":. Add lines -
281 INPUT Q\$
282 IF Q%>PL\$ THEN 285
283 PRINT :;"RIGHT!":
284 GOTO 110
285 PRINT :;"WRONG! PLURAL OF ";W%;" IS ";PL\$:
300 DATA BOX,WATCH,WIFE,BOY
(And as much more as you want)

Just one more optional refinement to my Menu Loader. If you want to use a filename ending in an asterisk for those Basic programs which will not run in XBasic, this change will keep you from loading and crashing them.

```
420 CLOSE #1 :: IF SEG$(PG$(K),LEN(PG$(K)),1)=""$ THEN D
ISPLAY AT(12,1)ERASE ALL:"RE
```

TURN TO BASIC AND LOAD BY:" TYPING OLD DSK1."&PG\$(K):: S TOP

The idea of a program that writes a program has stirred up a little interest, so here's another. This routine will aid you in formatting your screen text into neat 28-column lines, and will save the text in program lines of DATA statements. When you are ready to save, type @@@ and enter as the last line, then NEW and MERGE DSK1.LINEFILE

```
100 !LINewriter
    - by Jim Peterson
130 CALL CLEAR :: OPEN #1:"D
SK1.LINEFILE",VARIABLE 163 :
: LN=30000
140 FOR R=1 TO 24 :: DISPLAY
    AT(R,1)SIZE(1):" " :: ACCEP
T AT(R,0)SIZE(-28):A$ :: IF
A$="@@@" THEN 180 :: B$=B$&C
HR$(200)&CHR$(LEN(A$))&A$
150 X=X+1 :: IF X/4=INT(X/4)
THEN 160 ELSE B$=B$&CHR$(179
):: GOTO 170
160 GOSUB 210 :: LN=LN+10
170 NEXT R :: X=0 :: CALL CL
EAR :: GOTO 140
180 IF B$="" THEN 200 :: IF
SEG$(B$,LEN(B$),1)=CHR$(179)
THEN B$=SEG$(B$,1,LEN(B$)-1)
190 GOSUB 210
200 PRINT #1:CHR$(255)&CHR$(
255):: CLOSE #1 :: END
210 PRINT #1:CHR$(INT(LN/256
))&CHR$(LN-256*INT(LN/256))&
CHR$(147)&B$&CHR$(0):: B$=NU
L$ :: RETURN
```

Here's something for "JET" and Danny and Gene and all the rest of my friends in Alabama - and in all the rest of Dixie. You've never seen fireworks quite like these before!

```
100 CALL CLEAR :: PRINT TAB(
5);"ALABAMA 4th of JULY":  
: : : : : "programmed by  
Jim Peterson" :: FOR D=1 TO
200
110 NEXT D :: RANDOMIZE
120 DIM S$(12),A$(16),S(16),
```

```

MIC
470 DATA LIMB,HAND,SOLO,SEA,
CLOUD,ROAD,BOY,GIRL,CORNCOB,
ARC,TREE,PIG,TANK,BALL,DRUM,
GUN,HARP,CAR,BOOT,SHOE
480 DATA MOTH,SLOTH,MYTH,LAT
H,DEATH
490 !in the next line, key i
n CTRL B before each word
500 DATA CARP, MACKEREL, SU
NFISH, PIKE, SALMON
510 DATA SAW,WINDOW,HOUSE,BA
Y,BUY,TOY,GOAT,CAN,AUTO,TRUC
K,BRA
520 DATA WIFE,LIFE,KNIFE,LOA
F,CALF,HALF,SCARF,ELF,LEAF,W
DLF,PELF,SELF,WHARF,HOOF
530 DATA GAS,MISS,KISS,LASS,
TRUSS,BOSS,GLASS,CLASS,IRIS
540 DATA LATCH,WITCH,BATCH,R
DACH,LEECH,PEACH,ARCH,BRANCH
,BIRCH,MULCH,BROOCH,POUCH
550 DATA SASH,CRASH,FLASH,VA
RNISH,WISH,FETISH,RADISH,BUS
H,RUSH
560 DATA BAY,BOY,DAY,RAY,TRA
Y,HIGHWAY,GUY,ALLOY,BUOY,KEY
,MONKEY,TURKEY
570 !in the next line, key F
CTN V before each word
580 DATA RADIUS, FUNGUS, CA
CTUS, GLADIOLUS, OCTOPUS
590 DATA MAN,WOMAN,FIREMAN,P
OLICEMAN,FOREMAN,CHAIRMAN,PO
STMAN,CHARWOMAN,MIDWIFE
600 DATA LADY,CANDY,BUDDY,BA
BY,ORGY,DOILY,PONY,PUPPY,STO
RY,POSY,PARTY,COVVY
610 DATA TALLY,ARMY,NAVY,FOL
LY,PANSY,ARRAY
620 DATA BOX,FOX,TAX,WAX,SEX
630 DATA SPA,GURU,POTATO,TOM
ATO,ZEBRA,SKI,OPERA,CIRCUS,P
LUS,MINUS,BUS
640 !in the next line, key C
TRL , before each word
650 DATA PANTS, SCISSORS, S
QUID, DEER, SHEEP, SWINE, MO
OSE, BISON, BROUSE, SERIES,
STAIRS
660 !in the next line, key C
TRL A before each word
670 DATA DATUM, MEDIUM, CUR
RICULUM, PLANETARIUM, SOLARI
UM
680 DATA I,WE,HE,THEY,SHE,TH
EY,THIS,THESE,THAT,THOSE,CHI
LD,CHILDREN,TOOTH,TEETH
690 DATA MOUSE,MICE,LOUSE,LI
CE,BOOSE,BESEE,OX,OXEN,FOOT,

```

```

FEET,CRISIS,CRISES,APPENDIX,
APPENDICES
700 DATA ROOF,ROOFS,FIFE,FIF
ES,PROOF,PROOFS,THIEF,THIEVE
S
710 FOR J=1 TO 185 :: READ B
$(J):: NEXT J
720 RESTORE 680 :: FOR J=1 T
O 18 :: READ C$(J,1),C$(J,2)
:: NEXT J
730 FOR J=1 TO 185 :: Z$=Z$%
CHR$(J):: NEXT J :: Y$=Z$ ::
X$=SEG$(Z$,1,18):: DISPLAY
AT(12,1):""
740 RANDOMIZE :: Q=INT(203*R
ND+1):: IF Q<186 THEN 770
750 X=INT(RND*LEN(X$))+1 ::
Y=ASC(SEG$(X$,X,1)):: X$=SEG
$(X$,1,X-1)&SEG$(X$,X+1,255)
:: IF LEN(X$)=0 THEN X$=SEG$
(Z$,1,18)
760 W$=C$(Y,1):: PL$=C$(Y,2)
:: A=16 :: K$(16)="No, this
word has an irregular
plural form. It is "&PL$ ::
GOTO 790
770 RANDOMIZE :: X=INT(RND*L
EN(Y$))+1 :: Y=ASC(SEG$(Y$,X
,1)):: Y$=SEG$(Y$,1,X-1)&SEG
$(Y$,X+1,255):: IF LEN(Y$)=0
THEN Y$=Z$
780 W$=B$(Y):: CALL PLURAL(W
$,PL$,A)
790 DISPLAY AT(12,14-LEN(W$)
/2):W$ :: DISPLAY AT(15,1):"
Type the plural form" :: DIS
PLAY AT(18,1):"" :: ACCEPT A
T(18,14-LEN(W$)/2):Q$
800 IF Q$=PL$ THEN CALL SOUN
D(50,523,5):: DISPLAY AT(20,
1):""::""::"" :: DISPLAY AT(20
,11):"CORRECT!" :: DISPLAY A
T(12,1):"" :: GOTO 740
810 CALL SOUND(200,110,5,-4,
5):: DISPLAY AT(20,1):""::""
"" :: DISPLAY AT(20,1):K$(A)
:: GOTO 790
820 PRINT K$(A):: GOTO 780
830 !@P+
840 SUB PLURAL(W$,PL$,A)
850 GOTO 880
860 Y$,W$,PL$,A
870 !@P-
880 Y$=SEG$(W$,LEN(W$)-1,2):
: IF ASC(W$)=127 THEN PL$=SE
G$(W$,2,LEN(W$)-3)&"I" :: A=
12 :: SUBEXIT
890 IF ASC(W$)=128 THEN PL$=
SEG$(W$,2,255):: A=13 :: SUB
EXIT

```

```

900 IF ASC(W$)=129 THEN PL$=
SEG$(W$,2,LEN(W$)-3)&"A" ::
A=14 :: SUBEXIT
910 IF ASC(W$)=130 THEN PL$=
SEG$(W$,2,255):: A=17 :: SUB
EXIT
920 ON POS("EFHGSXYZN",SEG$(W
$,LEN(W$),1),1)+1 GOTO 930,9
40,960,970,980,980,990,980,1
000
930 PL$=W$&"S" :: A=1 :: SUB
EXIT
940 IF SEG$(W$,LEN(W$)-2,3)=
"IFE" THEN PL$=SEG$(W$,1,LEN
(W$)-2)&"VES" :: A=2 :: SUBE
XIT
950 PL$=W$&"S" :: A=3 :: SUB
EXIT
960 IF Y$="EF" OR Y$="FF" TH
EN PL$=W$&"S" :: A=15 :: SUB
EXIT ELSE PL$=SEG$(W$,1,LEN(
W$)-1)&"VES" :: A=4 :: SUBEX
IT
970 IF (Y$="CH")+(Y$="SH")TH
EN PL$=W$&"ES" :: A=5 :: SUB
EXIT ELSE A=6 :: GOTO 950
980 PL$=W$&"ES" :: A=7 :: SU
BEXIT
990 IF (Y$="AY")+(Y$="EY")+
(Y$="OY")+(Y$="UY")THEN PL$=W
$&"S" :: A=8 :: SUBEXIT ELSE
PL$=SEG$(W$,1,LEN(W$)-1)&"I
ES" :: A=9 :: SUBEXIT
1000 IF SEG$(W$,LEN(W$)-2,3)
<>"MAN" THEN A=10 :: GOTO 93
0 ELSE PL$=SEG$(W$,1,LEN(W$)
-3)&"MEN" :: A=11 :: SUBEXIT
1010 !@P+
1020 SUBEND

Here's another tinygram -

100 CALL CLEAR :: CALL CHAR(
47,"000000007C"):: DISPLAY A
T(2,1):"TIGERCUB ONE-FINGER
FIGURER"
110 DISPLAY AT(4,1):" Add an
d subtract with one":&finger
while the other hand keeps
track in a column - you ca
n type the minus sign withou
t the shift key!"
120 ACCEPT AT(12,10)VALIDATE
(NUMERIC,"/"):A$ :: ON ERROR
130 :: A=VAL(A$):: GOTO 150
130 ON ERROR 140 :: A=-VAL(S
EG$(A$,2,255)):: RETURN 150
140 CALL SOUND(100,110,5,-4,
5):: DISPLAY AT(18,1):"ERRON
EOUS INPUT!" :: RETURN 120

```

```

150 T=T+A :: DISPLAY AT(18,1
):"Total is";T :: GOTO 120
160 DISPLAY AT(18,1):"Total
is";T

The new Super Extended Basic
offers CALL KEY input with
validation. Now you can have
it too. This subprogram will
accept only one of the char-
acters listed, ABCD in this
case, and the value returned
in K will be the position of
the input in the validation
string.

100 CALL KEYVAL(K,"ABCD")::
PRINT SEG$("ABCD",K,1):: GOT
O 100
10000 SUB KEYVAL(K,V$)
10001 CALL KEY(O,K,S):: IF S
=0 THEN 10001 :: K=POS(V$,CH
R$(K),1):: IF K=0 THEN CALL
SOUND(200,110,5,-4,5):: GOTO
10001
10002 SUBEND

CALL FLASH(L,R,C,T,K)where L
is the number of DATA items,
R and C are DISPLAY row and
column, T is the flashing
speed and J is the number of
the item selected, will dis-
play options alternately un-
til a key is pressed.

100 DATA FCTN 7=AID,FCTN 8=S
TART OVER,FCTN 4=QUIT
110 CALL CLEAR :: CALL FLASH
(3,1,8,15,J):: ON J GOTO 120
,130,140
120 PRINT "AID" :: STOP
130 PRINT "START OVER":STOP
140 PRINT "QUIT"
10000 SUB FLASH(L,R,C,T,J)::
FOR J=1 TO L :: READ M$(J):
: NEXT J :: J=1
10001 DISPLAY AT(R,C):M$(J):
: FOR A=1 TO T :: CALL KEY(O
,K,S)
10002 IF S<>0 THEN SUBEXIT
10003 NEXT A :: J=J+1+(J=L)*
L :: GOTO 10001
10004 SUBEND

MEMORY FULL.....

Jim Peterson

```

CLUB 99 MS 1-0 34 FOREST ST ATTLEBORO MA 02703	UG-ROSTER K-TOWN 99/4A GROUP 3506 GARDEN DRIVE KNOXVILLE TN 37918	LEHIGH 99ER U G PO BOX 4837 1501 LEHIGH ST ALLENTOWN PENN 18103
ALOHA 99ER U.G. 99-647 AIEA HEIGHTS DR AIEA HI 96701	SHOALS 99ER U.G. PO BOX 2928 MUSCLE SHOALS AL 35662	ATLANTA 99ER UG PO BOX 19841 ATLANTA GA 30325
L.A. 99ERS U.G. PO BOX 67A79 LOS ANGELES CA 90067	DECATUR 99ERS UG PO BOX 726 DECATUR IL 62525	CLEVELAND AREA 99ERS DEANNA SHERIDAN 20311 LAKE ROAD ROCK RIVER OHIO 44116
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PITTSBURGH USERS GROUP PO BOX 8043 PITTSBURGH PA 15216		

These are the user groups we
exchange newsletters with. See
Jim Green for past issues.

Review of Mechatronics
Extended Basic II+ Module

I have had the XBII+ module from Mechatronics for about a week now, and really haven't had a chance to put the module through all its paces. In that short amount of time, however, I have a good feel for the capability of the module. First, the fundamentals: The module is a replacement for TI's original XB module. It is an officially licensed version of TI's genuine Extended Basic, so all programs that will run with TI's cartridge should run with Mechatronics. So far, this claim has proven true. I have tried it with several types of programs, including Funnelweb, Disku, and others. It performs exactly like the original, as far as I can tell. The module contains quite a few surprises, though. The contents can be thought of as three separate parts: the original TI Extended Basic, Mechatronic enhancements to Extended Basic, and Apesoft graphics capability. Because the Extended Basic is licensed directly from TI, I will not say much more about it. XBII+ also comes with a disk that has some demo programs on it, and the graphic demonstration is very impressive. I will bring it to the next meeting to show you what it looks like. I've only watched it on my feeble old black and white TV, I expect that it will be dazzling on a color monitor.

The enhancements to Extended Basic are very useful and easy to learn. They are summarized below. "S" means the item can be used as a statement in a running Extended Basic program, "C" means the item can be used in the immediate mode without a program running.

CALL BHCOPY - S & C - Its purpose is to produce a hard copy on your printer of anything on your screen, whether the screen was produced by Extended Basic, or any graphics program. It accepts the device name of the printer, along with any software switches, such as .CR or .BA=2400, etc. A setup string can also be specified to put the printer into graphics mode. This allows the capability to use printers other than Epson or Gemini. There are two modes for this command. The printout can be either normal width, or double width. This is a very powerful command, and

runs reasonably fast. It is in machine language (not GPL!).

CALL VPEEK - S & C - This allows peeking at the video memory where the screen characters and color tables reside. It operates like the equivalent function in the Minimemory module. Its use is to read values directly from the screen buffer.

CALL VPOKE - S & C - The opposite of VPEEK, it jams data directly into the screen buffer, sometimes with startling results. Indiscriminate use can cause the system to hang up or go weird. You must VPOKE decimal values, no hex.

CALL GPEEK - S & C - Allow peeking into GROMS. Unless you are into GPL or heavy into assembly, there is not much there. However, it is interesting to see what is inside the XBII+ cartridge or the console GROMS. Data comes back as decimal. Just on a lark, I tried a CALL GPOKE command, but it is not there. Well, I can try, can't I?

CALL ALLSET - S only - Resets the character set back to the original XB set. This is useful when you may be in a graphics mode, or have a bunch of screen characters redefined, and want to run another program from the present one. Normally, the characters are not reset. This statement does the trick. I think its use will be limited, due to the few times one will be in this position. It can be used just to mess around in some programs to set all characters back to normal, just to see what characters were redefined.

CALL WAIT - S & C, although I don't know why you would run this as a command. It accepts a decimal argument from 0 to 16382. Divide the given argument by 50 to find the delay in seconds. Used instead of the for-next loop for creating delays. It just saves a little space and requires little guessing as to how much delay will result. For instance, how long will a program like: FOR I = 1 to 1000 :: NEXT I delay a program? Who knows; WAIT eliminates the guess work.

CALL MOVE - S & C - A very powerful command, this will move data around in memory from one place to another. You

***** R2D2 SOUND EFFECTS *****

For anyone interested, here is a short program to make the TI 99/4A sound like good ol' R2D2 himself. Dave didn't say if the speech synthesizer was necessary, but this program can be used in either Basic or Extended Basic.

```
10 CALL CLEAR
20 PRINT "R2D2 SOUND EFFECT"
30 RANDOMIZE
40 D=INT(10*RND)
50 IF D<1 THEN 30
60 F=INT(RND*5000)
70 IF F<110 THEN 50
80 V=INT(RND*20)
90 CALL SOUND(D,F,V)
100 GOTO 30
```

Dave Dalton

***** MODEM SUPPORT *****

At one of the recent meetings we had a discussion on modems and the ability to transmit graphics and sound. Dave Dalton has located the address for a protocol manual for use with the modem and Terminal Emulator II cartridge that will tell you everything you wanted to know about modems and their use. Write to:

Computer Manuals-Terminal Emulator Protocols
Texas Instruments Incorporated
P.O. Box 53
Lubbock, TX 79408

Or, phone: (806) 741-2000

The cost will be \$5.00 for the manual, and \$2.00 for shipping and handling.

***** SPEECH SYNTHESIZER CHECK *****

Do you want to see if your speech synthesizer is electrically attached to the TI 99/4A, and the chips inside the synthesizer are working properly? Enter the following short program in Extended Basic:

```
10 CALL PEAK(-28672,SP)
20 PRINT SP
30 IF SP THEN CALL SAY ("WORKING")
40 END
```

The address -28672 is part of the speech read/write buffer. If SP is 96 and the computer says "working", your synthesizer is fine, otherwise you had better find a fix-it shop!!

Dave Dalton

***** SOUND EFFECTS *****

For you new users, here is a short program on how to make your computer sound like a car engine trying to start:

```
10 REM ENGINE
20 FOR N=1 TO 8
30 CALL SOUND(60,220,8,-5,0)
40 CALL SOUND(60,220,8,-5,5)
50 NEXT N
60 CALL SOUND(80,220,8,-5,5)
```

Now, if you want the engine to rev up, try this short program:

```
10 FOR F=1000 TO 5000 STEP 20
20 CALL SOUND(-99,111,30,111,30,30,-8,0)
30 NEXT F
```

The last thing we should do is get the engine to slow down. So, try this:

```
10 FOR F=4000 TO 800 STEP -50
20 CALL SOUND(-99,111,30,111,30,F,30,-8,0)
30 NEXT F
40 END
```

***** NEW LIBRARY TO BE FORMED FOR MEMBERS *****

Our education committee recommended last month that the group start a library of books related to the TI 99/4A. The books will be available for checkout at the monthly meetings and must be returned at the following meeting. Jim Trainor volunteered to start the library with some of his personal volumes, but we will need more contributions from other members in order to make it successful. If you have one or more books related to computers and/or the TI, please consider sharing it with your fellow members. Checkout will be on the honor system, and abusers will be subject to loss of group membership. Bring your books to the October 8th meeting, and let's get this new venture off the ground! (Those wishing to check out books will need a valid group membership card.)

Jim Green/Pres.

***** LITERATURE TABLE IS OVERFLOWING *****

Due to the large number of advertising and product brochures the group receives each month, it is difficult for everyone to absorb all the information during our two hour meetings. One member suggested in September that we initiate a check-out system for literature so that he might read particular items at

"GRAFIC" is the main call to set the desired graphic mode. Watch the spelling! There are a couple of innocent errors in the example programs provided in the instruction manual. The translator used the normal English spelling instead of the correct one. The translation of the language may be correct, but the routine burned in the ROMS are not subject to translation. After you have performed your graphic masterpiece using this command, "BYEBYE" returns you to normal screen operation.

"WINDOW" defines what portion of the screen you wish to address with any of the following commands. "CLTBLE" erases inside the dimensions that were made in the previous SETBLE call. An additional screen command is "TABLE", and this can manipulate the contents of the desired table.

"SETCOL" defines the colors on a pixel by pixel basis. "INVERT" flips the background and foreground colors in a desired range. "CLSCRN" is just like the CALL CLEAR from basic.

There are several positioning calls that can be used. "CENTRE" defines where the next pixel will be activated, or the starting point for the drawing commands. Watch the spelling again! I was tripped up several times on this. "SETTO" activates the pixels in a desired range, while "RESET" erases pixels in a desired range. An individual pixel can be interrogated to see if it is set.

"MOVE" will draw a line from the present starting position for the desired length. You do not need to know the ending position to make this work. There is an internal angle that will be used to determine the direction the line will be drawn. This is controlled by "TURN".

"MOVETO" will draw up to seven lines from the given starting and ending points. Many of the previous commands can take multiple arguments, also. "REMOVE" erases pixels along the given path(s).

Now for the drawing commands. "RECT" draws a rectangle between the given corner points, "CLRECT" clears all pixels in the defined rectangle. "CIRCLE" produces a circle with the given radius (or several circles for

given radii), and "CLCRCL" erases circles in the opposite manner. "ARCUS" produces several arcs given the center, radius, and starting angle of the arc. "CLARCS" erases the arcs, if provided with similar information. "ELLIPS" can draw ellipses, and "CLLIPS" will erase along an elliptical path.

I should point out that the draw and clear commands are not linked to the same parameters. For example, the whole screen could be turned green, and if the background color was red, CLCRCL would erase the green pixels in the specified circle to produce a red circle. This occurs because green is on, while red is off.

The present values for the cursor position, pixel reference point, and foreground/background colors can be determined by "VALUES". "AXIS" will draw a perpendicular axis centered anywhere, even off the current screen. The length and number of 'ticks' along each axis can be specified. One of the neatest calls provided is "HSTDIA". This will draw a perspective histogram block for any given height and depth specification. It produces some really neat histograms with only a few simple calls. Combined with axis, the result is very pleasing.

"WRITE" puts characters or strings anywhere on the graphics screen, "DISPLAY", "ACCEPT" work like the Extended Basic DISPLAY AT and ACCEPT AT, but do it on the graphics screen.

The final group of commands has to do with I/O. "GSAVE" saves the screen in memory image format to disks only, while "GLOAD" recalls the screen from disk. "BHCOPY" works in the graphic mode also, and was described previously.

WHEW! Those are a lot of commands for \$23.95+shipping. The only quirk I have discovered, besides some typos in the instruction book, is that John Johnson's MENU program doesn't recognize the cartridge. If you try to select any menu option that requires it, an error message states no Extended Basic has been found. Also, the final selection on the main menu doesn't appear; it is usually "C" for cartridge. The cartridge appears to be all GROM, or at

(cont'd. page 2)

TI-FD CATALOG

Tigercub Software
156 Collingwood Ave.
Columbus, OH 43213

During the past 7 years, a great many programmers have contributed a wealth of material to the public domain. Unfortunately, most of these programs have not been readily available to most of the TI users. Only a few of the user groups have really large public domain libraries, and even these are usually cataloged only by alphabetized abbreviated filenames. The more isolated users have even less access.

I have therefore decided to make the contents of my public domain library available to the TI world, at a copying fee so low that I hope no one will think I am unfairly profiting from the work of others (and I think you will note, in the TI-FD catalog, that I have probably contributed more to the public domain than anyone else!), but if any author objects to my distributing his work I will certainly stop. My catalog contains the author's name for each program, when available, both in order to give due credit and to aid in distinguishing between programs of the same name. Regrettably, many of the IUG programs distributed by Amnion have had the author's name deleted.

Fairware authors may reasonably object to anyone charging to distribute their work. I will therefore not offer any fairware unless I receive the author's express permission. I will not offer anything which bears a copyright notice unless I have definite information that the copyright has been abandoned or was not intended to preclude distribution. It is entirely possible that I may have obtained programs from which a copyright or fairware notice had been deleted, and I would appreciate being informed of any such in my catalog.

I have gone through my library of over 3600 public domain programs and selected enough of the better ones to fill over 200 disks, arranged by category. Each SS/SD disk contains as many programs as I could fit onto it, if

I had enough programs of that category - the number of filled sectors on each disk is indicated in parentheses. All Basic-only programs have been converted to run in Extended Basic (except those which use the TEII speech), and an XBasic loader has been provided for assembly programs whenever possible. Each disk has been provided with an autoloader by full program name, not filename.

I have added instructions to a good many of these programs, and corrected any bugs that I noticed, but I cannot guarantee them in any way, and cannot offer to provide instructions, correct bugs or make modifications. I will of course replace any bad loads, and would appreciate being informed of any program which has serious flaws.

This public domain is offered only as a copying service, not as a sale of computer software, and I take no responsibility other than providing a copy equal to the original.

If I receive a worthwhile response to this offer, I will be adding more public domain and will be asking fairware authors if they want me to distribute their products. I am always willing to make exchanges for worthwhile public domain which is not in my catalog, and am particularly interested in getting more educational software above the primary level.

The 200 TI-FD disks will be available for \$1.50 each POSTPAID in the U.S. and Canada (\$2.00 overseas by airmail). Send SASE for list, or \$1.00 (refundable on first order) for 9-page catalog listing all titles and authors. Be sure to specify TI-FD catalog.

NOTE: Tigercub Software also publishes a catalog of over 120 original copyright entertainment, educational and utility programs at \$1 each, plus full disk collections at \$5, Nuts & Bolts of programmer's utilities, etc., etc. This catalog is \$1, deductible from 1st order (specify Tigercub catalog).

*****MINUTES FROM AUG MEETING*****

The August 11, 1986 meeting was called to order at 7:03 PM by Pres. Jim Green, with 40322 people present. New members were introduced. Welcome to Steve Paxton. Minutes as printed in the previous newsletter were approved. A Treasurer's report was read and approved. Club color monitor purchase has not been made yet, still looking around for a good deal, or an employee discount from Program Chairman Dave Dalton, a touch key professional at Target. Contents of the newsletter were discussed. Hamfest discussed at length. Reports of happenings at the hamfest and opinions were made. The club system was used at the Five Seasons Center. Mike Bonifazi had his MIDI controlled keyboards there, and set-up and used them as demonstrated at a recent meeting. Very impressive! Thank You Mike. Thanks to all those volunteers who helped staff the table during those two days. Mention was made of the short notice for lockup at the Center at 5 PM. Also, our club was left off the fliers handed out at the door under the listing of sponsoring clubs. 2 new keyboards - IBM type - are available, but prices have increased. If you cite the previous advertisements, the old price will be honored until the end of Sept.. For details, see Jim Green. Software is in from the Oklahoma UG. Need help reviewing it all, contact Bruce Winter. Only a small part of it is SSSD, most of it requires DSDD or better. Library costs discussed. Freeware is free from our library, rest is \$1.00 per program. IUG software recently acquired will fall under the \$1.00 per program area, so if you are one of the reviewers, you can sneak a copy of what you have as part of the spoils of the toil for reviewing it all. Discussion of collecting the author's portion of Freeware costs, and then forwarding to the author. This would be done before a program is released from the freeware portion of the library. Not much support for this due to the fact if a person doesn't like or use the software, a refund would be involved. It was felt that the concept of freeware was to try it first, and pay if you like it and then use it. All members were strongly urged to fire off a check to the freeware authors for the programs you feel useful in your possession. Addendum to the software library is available, see Jim Green.

Horse trading: Dave Reinhart had TE-II for \$10, many games \$2 to \$5 each, Cor Comp sidecar dual RS-232 and parallel interface, with PS, \$90, Volksmodem and cable, \$50, or offer anything; Dave Dalton had a disk container \$7, carbonless copy printer paper \$? per roll, external stand alone SSSD Percom Data disk drive with internal controller and power supply, \$210 or offer; Jerry Cerny has a spare silver/black console \$35; Ed Edwards has two silver/black consoles, one complete \$35, one console only, no accessories, \$25.

The program was on TI writer type loaders, with BAWriter and Funlwriter compared. Printer discussions followed, with the differences between how printers handle the CR/LF problem, and how to use PIO.CR and PIO.LF in programs. New Horizons RAM disk assembled/kit was discussed. A good price on a bare board can be had if we can get an order of 5 or more together. This is a board that fits into the PE box and acts exactly; like a disk drive, with continuous battery backup. See Jerry Canady if interested. Finished cost should be about \$45 less than the assembled version if you can handle putting together a kit and can find your own parts.

Door prize was won by Bill Gonda, and he chose 4A Talk. Second prize was won by his wife Phyllis, and she receives her choice of 4 programs from the club library, including media.

A disk labeling and printing program was demonstrated by Ed Edwards, and many examples of what the program can do were passed around the room.

A cassette port modem connection and software are in the works, see Dave Dalton for details. It is rumored that an autodial feature is in process, with a total cost of about \$12.

Meeting adjourned 8:44 PM. Submitted by Gary D. Bishop, Secretary.