# MOMENUENE: <br> <br>  

 <br> <br> }

## 

## WELCOME! !

We have no new members to reoort this month. However, our Open House is coming up on December 2, and we should all turn out to welcome prospective members.

## ACTING PRESIDENTS MESSAAGE

A nominating committee for prospective club officers will be in place by the December 2; Open House. Flease be thinking about who you would like to see nominated to run the club for the coming year.
Also, a suggestion box will be available for submitting ideas on future meeting agende that you would like to see or hear about. The suggestions can be anonymous if you wish. (No "drop dead" suggestions please). I would also encourage you to bring your Computers: other hardware, favorite software, etc. to the Open House. See you there! DON.

## EDITORS NOTES

As Newsletter Editor: I receive a good deal of mailings, most of which are made available to club members at each meeting. Lately these materials have taken on a very optimistic note for the TI-99/4A; Third Farty programmers are beginning to be competitive in price, quality, and function; new hardware is being made available that offers a choice in peripherals: 7\%'er User Groups are getting stronger and are taking a more active roll in assuring the continuity of the $99 / 4 A$. Yes $I$ thinl: there is "good-news" ahead. How can our Club share in the good-news? Well I sure like the Tri-City area, however: when it comes to shopping around for new hardware and software for the TI, there just isn't any local commercial support. The nearest city were you can see demonstrations of new stuff is Seattle or Fortland.

The only way we can get 三tuff for demonstration is for some member to take a flyer, buy it and hope, it performs as advertised: and agree to demonstrate it for the Club. While I agree this works, it's very slow, risky, and people don't jump at the chance on a क50 flyer. What's the answer? Glad you asked! I think: we need a strong Frogrem Committee that will contact hardware and software suppliers and make arrangements for loans for Club demonstrations. For example, I contacted Larry Hughes who is owner of QUALITY 90 SOFTWARE, and made an arrangement to obtain a new software package called "Draw "N Flot" See details elsewhere in this letter) for Club demonstration. So! you will be able to see one of the new graphics packages if.. (1) the package arrives: (2) I have time to learn how to use it and (3) you come to the Open House. See you there! MEL

## WHO'S ON FORTH

FORTH is a computer language one etep above (or is it below? Assembly language. It is fast (within about a factor of 2 of Assembly), all major home computers can use Forth and, have nearly the same "words" (Instruction, commands, subroutines, etc.) In fact one gover User Group reported that a program written for the IEM Forth version was run on the TI-90-4A with very minor changes. If you want to learn a computer language that is applicable to most computers: Forth is for you. Like all good things "It an"t free". Actually it is free since the Club Has a copy of TI-Forth, with manual, that you can copy for your very own. However , learning to use Forth takes a lot of time. Needless to say your Editor now has the forth Eug (In the very early novicestage, so it may be catching). Come to the Open-House and see a very elementary demonstration.

The following EASIC program comes from the Summit Jesers Group of Ohio via MICRDpendium. It was originally called Mini Organ and was created by $J$. Canning. Just type: FUN: \& push keys.

```
1OO OFTION BASE 0
110 DIM NOTE (20)
120 FOR A=0 T0 20
130 FEAD NOTE(A)
140 NEXT A
150 DATA 40000, 220,247,262,
294,350, 349,302,440,494,52S
,587,65%,698,794,880,088,10
47,1175,1319.1397
160 CALL KEY(1,K1,5)
170 CALL KEY (2,K2,S)
180 K1=k1+1
100 K2=F2+1
200 CALL SOUND (-1000,NOTE(K
1):0,NOTE (K2),0)
210 GOTO 160
```


## LITTLE GEMS

The following "gems" come from the Edmonton 9 P'er User group of Canada. If you have ever tryed to produce a solid horizontal line but only got broken ones, try this in your program:

CALL CHAR (OS, OOFF)
This changes the underline character (FCTN U) to be a solid line when more than one character is typed. To change the position of the line vertically, add or remove pairs of zeros: to make the line heavier, add pairs of F's. SSee your Eeginner"s Easic Manual, Chapter 5 for other ideas ED).

This item comes from the Central Iowa 99'ers User Group. A new TI publication called SUFEF 99 MONTHLY contains 12 pages published monthly at a cost of $\$ 12$. For further information, write to:

Bytemaster Computer Services
171. Mustang Street

Sulphur: LA 70663

## TELECOMM NEWS

For those members that have modems or are considering getting such equipment, there is also good news for you.

What you need to get into this field isa modem. SSuggest you consider the Volksmodem by Anchor), An FSge2 Gard with the Expansion Eox or a stand alone unit, a TE II (Terminal Emulator Module) or a simular card like the new TE-1200, and a telephone.
The December issue of COMFUTEF SHOFFEF: contains over 25 listings of TIBES (TI Bullet:in Board Systems) that can be called free for the long distance charge. Many of these Boards have "Downlaad" capability (meaning that you can copy programs directly from the Board). The following is a listing of Western area Boards that I downloaded from the San Francisco TIBBS:

| San Fran CA 24 hrs | $415-355-3092$ |
| :--- | :--- |
| Houston TX HUG TIEBS | $713-600-207 \Xi$ |
| Fontana CA Feter Covert | $714-550-8589$ |
| Fedwood City Bay Cities | $415-364-8617$ |
| Oakland CA | $415-658-5159$ |
| San Diego CA Irish Input | $619-276-3173$ |
| Gresham 0f Mike Werstlein $503-661-0408$ |  |
| Most of these TIEBS operate 24 hours, but |  |
| it's better to call at night and besides. |  |
| the rates are better. |  |

## QUALITY 99 SOFTWARE

Draw 'N Plot
Create and print drawings, graphs, designs, and illustrations. Draw any image on the screen with pixel accuracy and Assembly Language speed! The only limitation is your imagination! Simple enough for children powerful enough for experts! Uses bit-map mode. Save the image to disk. Mix text and graphics, set background color and line color, draw circles, FILL, ERASE. Print image on an Epson or Gemini 10X compatible printer. Menu driven. Also, plot your data and equations, quickly and easily, on the screen or printer, with 8 plotting commands.
Req: Disk, 32K, Ex. BASIC,
joystick...................................only \$39.95!

 THE
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Distributed by Tigercub Software to users groups for promotional purposes and in exchance for their newsletters．

Tigercub Sottware， $15 b$ Collinawood Âve．，Columbus 0H10 43213，has over 130 griginal progras available at only W．RO Each．Wy catalog is availahle for \＄1．t0 which way de deducted from your first arder．

It has come to my attention that the menter 5 of 50 ene u5ers groups have never heard of wy kitchen－table enterprise， silthough their group has been receiving ny newsletter for several months，It appers that many users grous have no nethod of making available to their members the information from newsletters which they receive in exchange．

My software business is a failure，and oy Tips are a complete failure as a prosotional effort．During the wonth of July 1 received a total of 31 requests for ay catalog，of which only 9 were the result of newsletter publicity．I do not want to discontinue these tips，because of the many interesting newsletters that I receive in exchange．However，I can no Ionger afford to distribute the to those groups which never give any indi－ cataon that my Tips are reaching their members．

You may have observed that the Tigercub now possesses a Gemini $10 x$ printer．The only fault 1 could find with it was that it wouldn＇t print Chinese， 50 I remedied that defect with this little progran．

100 ！THIG ROUTINE INITIALIEE S THE GEMINI IOX TO PRINT＇C HINESE UNTIL IT IS TURNED O FF－by Jin Peterson 110 DFEN \＃1：＂FIO＂

120 FRINT \＃1：CHF：$\$(27)$ ） CHK （4
2）：CHFS（0）：：CALL CLEAF
130 FOR CH＝65 TO 90 ：：PRINT
＂HORKING．．．＂：：FOR J＝1 TO
7 ：：FOR $L=1$ TO 9 ：：RANDOMI
ZE：：IF（INT（3＊FND＋1）（3）+16
L〉1）：（D（J，L－1）ン011THEN 150
140 D（J，L），$D(J, 10-L)=\{1+A B S($
J〉1）${ }^{\text {A }}$
150 NEXT L
160 NEXT J
170 FOR L＝1 T0 9 ：：FDR J＝1
107： 7 ：$(\mathrm{L})=x(L)+D(J, L):$ ：$N$
EXT J：：HEXT L
184 FKIHT \＃1：CHR\＄（27）：CHR\＄（4
2）；CHF\＄（1）；CHF $\$($ CH）；CHE $\$(1)$ ；
CHE $\$(x(1))$ ；CHF $\$(x(2))$ ；CHFS（X
（3））：CHF\＄（X（4））；CHF\＄（X（5））； C

8））CHF $\$(\times(9))$
190 FOR J＝1 TO $7:$ FOR $L=1$
T0 $9:$ ： $\mathrm{D}(\mathrm{J}, \mathrm{L})=0:$ ：NEXT L ： ：MEXT 3
200 FOR L＝1 T0 $9:$ ：$\times(L)=1$ ：
：NEXT L ：：NEXT CH
210 FFINT \＃1：CHF $\$(27):$ CHF $\$(3$ b）；CHR\＄（1）；
220 FRINT \＃1：CHF\＄（27）：CHF\＄18 7）：CHE\＄（1）
230 FRINT \＃1：CHR\＄（27）：CHR\＄17 1）
240 STOF

Now，without turning of $f$ the printer， type LIST＂PIO＂or run any prooram that puts out text to the printer．It won＇t fool a Chinaman but it ainht impress your friends．

Here＇s a little sonething for you who own the Tereinal Emulator II and the Speech Synthesizer．Maybe our
Congressmen could use it to help them discuss the national debt．

100 CALL CLEAK
110 PRINT TAB（7）；＂NUMEER SPE
AXER＂：：：＂by Jim Feterson＂：
＊of Tigercub Software＂
：：：
120 PFINT＂Thas progran wil
1 print any＂：＂nuaber of les
5 than 67＂：＂digits in number
5 and in＂
130 FFINT＂hords，and will s
peak the＂：＂words．＂：：：：＂R
equires Terainal Emulator＊：
II and Speech Synthesmeer．＂： ：：
140 CALL CHAR139，＂0000000b00 301020＂）

160 01M HIEH（21），ans（23）
170 data one，Tho，thfee，four，
FIVE，SIX，SEVEN，EIGHT，NINE
180 DATA TEN，ELEVEN，TWELVE，T HIRTEEN，FOURTEEA，FIFTEEN，SIX
TEEN，GEVENTEEN，EIGHTEEN，HINE
TEEN
190 EATA TWENTY，THIFTY，FDETY
，FIFTY，GIXTY，GEVENTY，EIEHTY， HINETY
2 CO DATA THDUSAND，MLLLIDN，EI
LLIDN，TRILLION，QUAOEILLION，O
UINTILLION，SEXTHLICN，EEFTIL
LION，OCTILLION，NOHILLION
219 DATA UECILLION，bNEECILLI
ON，DUODECILLION，TREDECILLION
，Quat Tudrdecillicn，guindecil
LION，SEXTEDECILIDN
228 DATA CEFTENDECILLION，OCT
ODECILLION，NOVEMDECILLION，VI
GINTILLION
230 FOR $\mathrm{J}=1$ T0 9
240 READ ONE $\$(\mathrm{~d})$
250 NEXT J
265 FOF $1=1$ TO 10
270 FEAD TEENS（J）
280 NEXT J
290 FOR $J=1$ T0 8
300 FEAD TEM $\$(\mathrm{~J})$
310 NEXT J
320 FOR $\quad 3=17021$
330 READ HIEH（J）
340 NEXT J
350 PFINT ：：：
360 FFINT \＃：＂NUMEER＂
370 INFUT＂NUMEER？＂： K
380 L＝LEN（A）
390 FOR $\mathrm{J}=1 \mathrm{~T} 0 \mathrm{~L}$
406 IF FOS（＂0123456789＊，SEE $\$$
（ $\mathbf{N} \$, \mathrm{~J}, 11,1)=0$ THEN 360
410 NEXT J
420 IF（VAL（N）$)(1)+$（VAL（N） 3 ）
＞INT（UAL（NS））ITHEN 3 So
430 IF L＜67 THEN 470
440 PFINT＂HEY！I CAN ONLY C
OUNT TO A＂：＂YIGINTILLION！＂：
：
450 PRINT \＃1：＂HAY I CAN ONLY COUNT TO A VIEINTILLION＂
4606070360
470 IF VAL（N） $1 \times 0$ THEN 510
480 FRINT ：：＂ZEFQ＂：：
490 PRINT 1：＂IERO＂
500 60TO 360
510 （F L／3＝3NT（L／3）THEN 540
$52 \mathrm{~N}={ }^{\mathrm{K}} \mathrm{OH} \mathrm{EN}$
5306070380
$540 \quad \mathrm{x}=\mathrm{L} /$ ？
550 FOR J＝1 TO L STEP 3
$560 \mathrm{Jj}=\mathrm{JJ}+1$


550 IF J＞1 THEN 6IB

6026010620 － 2
$610 \mathrm{~F} \$=\mathrm{F} 54^{4}$＂NNS（12］）
220 NEXT J
6TVFFINT：：：P\％：：：
340 FOR J＝1 T0 $x$
E50 GUSUE 676
66060701150
670 IF VAL（NNS（J））＜ 10 THEN 7
10
tEA $A=*$
$599 \mathrm{FLGG}=1$
78 EOTO 1140
716 Fíg $6=0$
$720 \mathrm{H}=\mathrm{VaL}(5 \mathrm{E}$（\＄（NN $\$(1), 1,1))$
73 T＝VAL\｛SE6\＄（NN\＄\｛J），2，2））
740 TT＝VAL（SEES（NNま（J），2，1））
－1
750 VV＝VAL $\{$ SEE $\$(N N \$(J), 3,1) 1$
760 IF T＝0 THEN 1008
770 IF TV9 THEN 818
780 ASOONE $\$(T)$
$756 \mathrm{gF} \$=\mathrm{At}$
GOO GOTO 1000
810 IF T\19 THEN 880
220 A $\$=\operatorname{TEEN}(T-9)$
ETB IF T〈〉IG THEN E6A
940 5F $\$=$＂NINE TEEN＂
85060701000
2AC SF $\$=A$
87960701200
SRO IF WVく THEN 950
EGG A\＄＝TEN：（TT）
900 IF TTく〉8 THEN 930
910 SF $\$=$＂NINE TEE＂
920 60T0 1000
934 SF\＄＝A\＄
940 EUTO 1000

900 IF TT〈》 THEN 990
970 5F $\$=$＂NINE TEE＂\＆ONE $\$$（VU）
98050701000
990 §F
1000 IF $H=0$ THEN 1080
1010 IF T＝0 THEN 1050
1020 A $\$=0 \mathrm{NE} \$(\mathrm{H}) \&{ }^{*}$ HUNDRED \＆
＂ 4 As
103D SPS＝ONE $\$(H) \& "$ HUNDRED \＆
＂\＆5Ps
104060701140
1050 A $\$=0 \mathrm{NE}$ \＄（H）：＂HUNDRED＂
10 1 EP $5=\mathrm{A} \$$
107060501140
1080 IF $(J(X)+(T=0)+($ VAL（N $\$ 1$
（10b）THEN 1140

1100 IF（TTS＞8）$(T\rangle 19)$ THEN
1130
1110 5Fs＝＂\＆＂ 85 5
$112060 T 01140$
1130 SFs＝A

1140 RETURN
1150 FRICTA A
1160 IF FLAG＝1 THEN 1206
1178 PRINT \＃1：SF\＄
1180 PRINT HIGH\＄（X－J）
1190 FRINT \＃1：HIGH？（X－J）
120960508 679
1210 NEXT J
1220 FRINT B
120 A $\$=4$
1240 $\mathrm{J}=0$
$1250 \mathrm{E}=* *$

1270 FDR $D=1$ T0 590
1280 NEXT D
$129060 T 0350$

I hope you noticed that all those 2 eros were neatly slashed 50 that you wouldn＇t mistake them for 0＇s．Here＇s a little routine that will set up your printer to slash the b＇s until you turn it off．

100 OPEN \＃1：＂FID＂
110 PRINT \＃1：CHR\＄（27）；CHF\＄（4
2）： CHR （ ${ }^{(B): ~}$
120 PRINT \＃1：CHR\＄（27）；CHR\＄（4
2）；CHF\＄（1）；CHF\＄（48）；CHF\＄（B）；
CHF $\$$（92）；CHF（34）；CHR\＄（81）； C
HR $\$(8)$ ：CHF $\$(69)$ ；CHF $\$(2)$ ：CHR
（65）：CHF\＄（34）；CHF\＄（28）
130 FKINT \＃1：CHF\＄（27）；CHF\＄13
b）：CHE\＄（1）
140 STOP

And，somebody might get mad if 1 don＇t
include a little music－

100 REM－EELL MUSIC program
med by Jim Feterson
110 CALL CLEAR ：：CALL SCREE
N（5）：：RANDOMIIE
120 FOR CH＝96 TO 136 STEF 4
：：FOR L＝1 TO 4 ：： $\mathrm{X} \$=$ SEG $\$ 1^{*}$
0918243C425A667E日199A5RDC3DE
E7FF＂，INT（16tFND＋1）：2－1，2）：：

T L
 1
140 CALL CH：AR（CH， $2 \$$ ）：E $\$$ ． $\mathrm{C} \$$
，2\＄＝NUL\＄：：CALL MAGNIFY（4）：
：CALL SFRITE（ACH／4－23，CH，IN
T（151RND +2$), 255,255):$ ：NEXT
CH
142 FOR $\mathrm{J}=1$ TD 10 STEP 2 ：：
$x=9 \mathrm{FRND}-9 \mathrm{ARND}:$ ：Y＝9tFND－9＊R
ND ：：CALL MOTION（ $H, X, Y, \# J+$
1， $\mathrm{X}, \mathrm{Y}$ ：：：NEXT J
150 FOR $\mathrm{J}=$ ！TO 20

155 CALL COLOR（IINT（IOAFND＋1
1，（NTM（15＊RND＋2））
160 FOR $V=01016$ STEP 4
170 DN J 60SuE $250,270,290,3$
$10,330,350,370,390,410,430,4$
$10,390,370,350,370,310,290,2$
$70,250,270,270,310,330,350$
160 NEXY V
190 FEAD X
200 FOF D＝1 To $x \neq 5$
210 NEXT D
220 NEXT J
230 fiscture
2406010150
250 CALL SOUND $1-999,131,4,52$
$3, V, 131 / 2,30,-4, V)$
260 FETURN
278 CALL SOUND $(-999,165, V, 16$
7.21

280 RETURN
290 CALL SOUND $\{-999,196, V, 19$
$9, V)$
309 RETURN
310 CALL SOUND $(-999,262, V, 26$
$5, V)$
320 RETURN
330 CALL SOUND $(-999,337, V, 33$
3，V）
340 PETURN
35 CALL SOUND $(-999,392, V, 37$
4，V）
350 RETUEN
370 CALL 5DUND $(-999,523, V, 39$
$2, V, 330, V)$
300 RETLFN
390 CALL SOUND $(-999,659, V, 66$
b，V）
400 FETURN
410 CALL SOUND（－999，784，V， 79
$2, V)$
420 RETURN
430 CALL SOUND $1-999,1047, V, 1$
D57，VI
440 RETUFN
450 DATA $16,16,2,16,8,16,4,4$
，16，2，16，4，16，8，8，16，2，2，16，
4，2，8，16
Just about MEMORY FULL，so Happy hackin＇

Jis Petersan

a NEXI

NEXT J
230－

URN

SOFTHARE SHEUFTIST

## 99'ers Computer Club

Cassettes:
Arithmetic Teacher
Exchange Series i-10 (some $X B$ )
Gamespaik 1-4 (4 in XB)

* King of the Castle (Assembly)

Outer Spelling
Teach Yourself Basic
Trails West/Tic-Tac-Toe/Loan Amortization
SAMS 51 Fun \& Educational Programs

Di 2k:
Education
Gamespak 1-4 (4 in $X B$ )
Home Computer Magazine Games

* King of the Castle (Assembly)

Teach Yourself Extended Besic
TI Public Programs III
SAMS 51 Fun \& Educational Programs
TI Writer \& Multiplan Finhancements
Utilities (some XB)
10 Basic Games

* Quick Copyer (XB)

Pasazines: (Copies of Tables of Contents kept in separate book)
99'er/Home Computer (Hov. 182-Nov. 183)
Enthusiast 99 Magazines (May-Nov. 183)
Computer Shopper (Feb. 84 - . )
BYTE (1982)
Micropendium (April 184- )
Enter (March 184 - )

## Other:

Atlanta 99'ers Software Library Listing
Mini Memory Module Manual

* TI FORTH Manual (includes disk, source code)

TI 99/4A Schematics
$X B=$ Extended Basic * Requires special equipment
NOTE: Members may borrow from the library on the condition each item is returned to the library by the next meeting. Abuse of this rule will result in suspension of borrowing privileges. Replacement costs for lost or damaged items will be the responsibility of the borrower.

## NEXT MEETING

As you already know by this time, the next meeting will be our TI-99/4A User Group Open House. This event will start at 1 FM on Decenber 2, 1984 (Thats a Sunday in case you didn't know). It's at our regular location at Apollo Hall on Apollo Lane in Fichland. In addition to special demonstrations, funs and games. there will be TI herdware and software for sales Such as:

## Hardware

Speech Synthesizer
Remote Controllers
Fs2E2 Card (Fits in Expansion Eox)
TI-Frinter (Epson MX-B0)
Software-Business
Fersonal Fec Keep
Personal Real Estate
Tan-Inv Fecord Keep
Extended Basic
Data Ease 700
Compactor Flus
Multiplan

## Software-Games

## Tunnelsi of Doon

## Arter Fackage:

Froggy, krasy Funhouse, fong: etc.
Tomestone City
Farsec
Donkey kong
Yahtzee
Othello
Munchman
TI Invaders
Alpiner
Footbal 1
The Attact

## Elasto

## LIBRARY NEWS

Your Library will soon have two new additions. The Eook "Innermost Secrets" should be here anyday now, and the Board has approved purchasing the TI "Touch Typing Tutor" for the Library. SUE
$11 / 18 / 84$

Address all correspondence to:
TRI-CITIES 97er COMFUTER GROUF
MEL FAUGHT
2011 W FAlLE AVETUE KENNEWICK, WA 993S6

