# TFI CITIEE $\because$ TER CDMFWTEF GFDUF <br> FEEFSLAFY 1 PGG NEMSLETTEF 

## 

## WELCOME!!

We have four new members who joined the club in January:

Fobert and Judy Riggers, Eenton City
Charles and Loretta Anderson, Richland Flease welcome them at our next meeting.

## TRI CITY 99er OFFICERS

| President........Mike Sandvig | $627-4185$ |
| :--- | :--- |
| Vice-Fresident. Don Farquhar | $967-9798$ |
| Secretary.......Mel Faught | $783-6220$ |
| Treasure...........aul Randleman | $735-3131$ |

## CDMMITTEE CHAIRPERSDNS

Librarian.......Sue Carver 943-547日
Publicity........Gary Clevel and 735-7211
Programs......... Don Farquhar 967-9798
Refreshments....Eugene Walter 946-8004
Meeting Room....Duane Dustin 375-6272
Recruitment..... (open)
Newsletter.......Mel Faught 783-6220

## meeting location \& time

Apollo Hall
40 Apollo Lane Richland, Wa.

Third Wednesday each month at 7:00 PM

## NEWSLETTER EXCHANGE

The Tri Cities 99er Computer Group is participating in a Newsletter exchange program with other TI Users Groups. This exchange is made with the understanding that, with proper credits: other user groups may reprint articles from this Newsletter and we may reprint articles from other user group newsletters.

We are currently exchanging news with ten other groups, three publications and two TI software support businesses.

## PRESIDENTS MESSAGE

Learning to use my TI-99 computer has been an educational experience. The term "Home Computer" seems to indicate that it is not a sophisticated piece of gear. This is far from the truth as one can get. Not too many years ago, the same computer may have taken up entire rooms and performed the same functions. This doesn't mean that the computer needs to be difficult to operate. Most problems making the 99/4 do its job is a matter of learning the "secrets".
However: if you do not know where to find them, you have a problem. for a home computer, it usually means it's not used, except for cartridge games. This is the reason for our User's Group. We can all share information, which can unlock the "secrets", and keep us wondering how. Eacti user haz an experience hat is of value to all.
My goals for '95 include educational programs aimed at all levels of users, no matter how much equipment you own. After all, many of our members own no more than a console and a tape recorder. My second goal is to get more participation from the membership. Learning about comouters is a doing affair. Thr who listen, then do, will retain thr "crets" alci longer. This learning: on magically unlock other "secrets:- xearning can take place many wayit one method discussed was Saturday workshops. These workshops could be aimed directly at certain areas of using the TI. This is just a start and one idea. Anyone having another, let us here from you. Contact any officer or bring it up at the meetings. Your help on these projects is also needed.

## TNO JQYSTICK PROGRAMS

The first program comes from the Fuget Sound 99ers by Tom and Chuck Waynne. This program written for EXEasic also indicates which pins of the Jovstick are shorted to produce the screen movement:

100 CAL' SCREEN(5)
110 CALL CLEAF
120 DISPLAY AT (24, E): "FELEAS
E ALFHA LOCK" : : DISFLAY AT ( 1,5): "JOYSTICE CHECK PROGRAM 1

130 DISFLAY AT (3,21): "PINS"
: : DISFLAY AT (4,20):"SHORTED
"
140 DISFLAY AT $(5,1):$ "CALL KE $Y(1, V, W) ":$ DISPLAY AT $(14,1$ ): "CALL KEY $(2, X, Y)$ "
150 CALL JOYST ( $1, K, Y$ )
160 CALL JOYST ( $2, v, W$ )
170 CALL KCY(1,FK,SS)
180 IF KK=18 THEN DISFLAY AT
 AND 4" ELSE DISFLAY AT 6,20
):" "
190 CALL KEY(2,LL,MM)
200 IF LL=18 THEN DISFLAY AT (15,20):"""FIFE""": TAB(20):" 2 AND 4" ELSE DISFLAY AT(15, 20):" "
$210 \mathrm{IF} K=0$ AND $Y=4$ THEN $A \neq="$ UP
220 IF $V=0$ AND $W=4$ THEN $E \$="$ UF $\quad 2$ AND $3 "$
250 IF $K=4$ AND $Y=4$ THEN $A \$="$ UF PIGHT $7: 3$ AND $9^{\prime \prime}$
240 IF $V=4$ AND $W=4$ THEN $B \$="$ UP RIGHT 2,3 AND $9^{\prime \prime}$ 250 IF $K=4$ AND $Y=0$ THEN $A \$="$ RIGHT 7 AND $9^{\prime \prime}$ 260 IF $v=4$ AND $W=0$ THEN E $\ddagger="$ RIGHT 2 AND $9^{\prime \prime}$
270 IF $K=4$ AND $Y=-4$ THEN $A=$ "DOWN RIGHT 7:8 AND 9 "
280 IF $V=4$ AND $W=-4$ THEN $\mathrm{Q} q=$ "DOWN RIGHT 2,8 AND 9 "

290 IF $K=0$ AND $Y=-4$ THEN $A \$=$ "DOWN

7 AND 8"
300 IF $v=0$ AND $W=-4$ THEN B $\$=$ "DOWN 2 AND 8 "
310 IF $K=-4$ AND $Y=-4$ THEN A ${ }^{(1)}$ $=" D O W N$ LEFT 7.5 AND
8 "
320 IF $V=-4$ AND $W=-4$ THEN $E \neq$ $=$ "DOWN LEFT 2.5 AND
8"
330 IF $K=-4$ AND $Y=0$ THEN $A=$ "LEFT 7 AND 5" 340 IF $V=-4$ AND $W=0$ THEN $E=$ "LEFT

2 AND 5"

SEO IF K $=-4$ AND $Y=4$ THEN $A 末=$ "UF LEFT 7,3 AND 5 "
360 IF $V=-4$ AND $W=4$ THEN $E \$=$ "UP LEFT $2: 3$ AND 5
"
370 IF $V=0$ AND $W=0$ THEN $B \$="$ CENTEFED"
380 IF $K=0$ AND $Y=0$ THEN $A \$="$ CENTEFED"
300 DISFLAY AT $(6,1):$ "JOY $1=$ ": Ki y
400 DISFLAY AT $(15,1)$ : "JOY $2=$ ": ViW
410 DICFLAY AT (7,2):A $\$$
420 DISFLAY AT (16, 2):B\$
430 GOTO 150
The second joystict: program (Basic or ExBasic) come for the Compute Magazine, January issue and it demonstrates moving two figures around the sereen using two joysticks. The color of the figures can be changed using the fire buttom:

10 FEM TWO JOYSTICE DEMO
20 REM COMPUTE MAG. $1 / 85$
30 CALL CHAF (47,"1818423C183
C4242")
40 CALL CHAF (48, "00SC7E7E7E7
E7E Cl' $^{\prime \prime}$
$50 X(1)=15$
$60 Y(1)=11$
$70 \quad Y(2)=11$
$80 \times(2)=17$
$70 C(1)=15$
$100 \mathrm{C}(2)=14$
$\because 10$ CALL COLOF $(2, C(1), 1)$
CALL COLOR ( $3, C(2), 1)$
$\therefore$ CALL CLEAF
140 CALL SCREEN(15)
150 FOF I=1 TO 2
160 CALL JOYST (I, DX, DY)
170 CALL $K E Y(I, K, S)$
180 IF K $>18$ THEN 210
$190 \mathrm{C}(\mathrm{I})=\mathrm{C}(\mathrm{I})+1+(\mathrm{C}(\mathrm{I})=16)$
$200 \mathrm{CALL} \mathrm{COLOF}(I+1, \mathrm{C}(\mathrm{I}), 1)$
210 CALL $\operatorname{HCHAR}(Y(I), X(I), 32)$
$220 Y(I)=Y(I)-D Y / 4$
$230 X(I)=X(I)+D X / 4$
$240 X(I)=I N T(32 *((X(I)-1) / 32$
$-I N T((X(I)-1) /(2)))+1$
$250 Y(I)=I N T(24 *((Y(I)-1) / 24$
$-\operatorname{INT}((Y(I)-1) / 24)))+1$
260 CALL $\operatorname{HCHAF}(Y(I), X(I), 46+$
I)

270 NEXT I
280 GOTD 150

- TIPS FROM THE TIGERCUB


## \#18

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156 Collinamood Ave., Colundus UH 43213

Distributed oy Iiqercub software to T1-99/4A Users broups for promotional purdoses and in exchange for their newsletters. May be reprinted by non-arofit Users' broups, with sredit to Tigercub Sotimare.

My new catalog 15 now avalabie for 51.00 , minch is deductable tron your tirst order. It contains over 130 oroorams in Basic and Extended basic at only 53.00 each Colus $\$ 1.50$ per order for casette; packing and postage, or $\$ 3.00$ for diskette, F́F(M).

The entire contents of Tips from the Tiaercub Nos. 1 through 14, with eore added, are now available as a full disk of 50 proorass, routines and tiles for only $\$ 15.00$ postpada.

Nuts \& bolts 15 a olskfull of 100 (that's right, $100!1$ xbasic utility sudproerdes in MERGE format, ready for you to aerge into your own oroarans. Contents incluode is type fonts, 14 text oisoiay routines, sorts and shuffles, 9 data savin! reading routnes, 9 wipes, 6 p E' $^{-}$

- nusic, 2 brotection, etc., é., all for just 516.45 postoanc!

New orograss this nonth -
TCX-1058 SCRUM, now avallable in Extended Basic. I' told that thas challenging puzzle-oane nas oeen propraned for other conputers under the name herlin. I haven't seen it, but I don't tnank you can beat ar version - $1 t^{\prime} 5511$ puzzies in one!

ICX-1137 SOUNDHAKER, a very versatale utility progran to develop sound effects, then save the in the fors of actual prograe lines. Kequires Extended Basic; disk only.

I sust first thank all those newsletter editors and otner users' group otticers mo are trying so haro
to help ae keep ay kitchen
tadie enterprise alive. Une users aroup reprinced iy metire catalog in their newsletter, another 15 putting it on thear byb. another made ae an honorary lite eenoer, many others have eentioned and recomended ay sotware in their nemsletters.

Unfortunatedy, all that support hasn't heloed yery euch. Fron reading the editorials in any newsietters, I can easily see that most users grouns consist of a tew dedicated hard-working individuals and a lot of.....well, frankly, treeloaders. And freeloaders don't Duy 50ftware!

To borrow a few quotable quotes fron the newsletters, "too eany oetters and not enougn giver $5^{*}$, and "users are users!". That is why users groups are tading away. software producers are going out of business, and the $11-99 / 4 \mathrm{~A}$ wll die before its tiae.

In the last lios. I eentionart the one remanang dug in ty 28 -Colum Converter. I have tound a tix for 14. Ine version puthished in has\#15 was a horrible example of sloppy proarameing, so l have rewritten it entirely -
 : "28-COLUMN CONVEKTER": : DI jFLay all3,12):"dy Jin Feter ? $\mathrm{min}^{4}$
110 DISFLAY AT( 5,1 ): " lo con vert a orogras, saved":"witn LIST "DSKL.FILENAME":": "1 nto $28-c 0 l u$ n forat when": can be aerged anto the text -
120 DISPLay AI (9,1);"butfer of II-writer."
130 DISPLAY AI(11,1): "Optio nally with transhter-: *ate
 nting fron formatter": "aode. -
140 DISPLAY All(16, 1): Progr an should be kes 1n": "steps of 10 starting at $100^{\prime \prime}$ : beto re LISTING to 015k." 150 display alizo.1):* do yo $u$ want to orint the": "file f ron the": " (E)ditor?*: (F) rnatter?

160 ACCEPT A1124,1/VALIDAIE: "EF") beEF:
$170 \mathrm{LN}=100$ : : Call CLear ::
IMPUT "what 15 the FILENAME?
DSK1.":FN: : FNS = 0 US
K!."4FNS: : PRINT: :
180 Impli "what 15 the new $F$ ILENGME? DSK1.*:HNS: : PN\$ ="DSK1."\&PNS :: OFEN $11: F N S$, DISFLAY , VARIAELE 80,INFUT : : DPEN $\ddagger 2$ :PN\$, DISHLAY, VARIA ELE 80, OUTFUT
190 IF 日\$="E" THEN $200:$ : PR INT E2: ". TL 126:94;": : PRIN T $\$ 2$ : $^{\prime \prime}$ IL 123:64;": : Pkint *2:". IL 125:38:' : : PRINT 12
 . IL 92:46;": PKINT $12:^{*}$.NF -
200 IF LOF (1)=1 THEN 300 : : LINPUT $11: A 5$
210 IF LEN(A\$) $B 0$ THEN LN $=L N$ +10: 6010 260
220 LIAPUT $11: \mathrm{Bs}$ : : IF POS B \$, STR $\$(L N), 1)=1$ INEN FLAG $6=1$ $: \quad L N=L M+10:$ : 6 UTO $2 E 0$
 of THEN LN=LN+L0: $: 6010200$ 240 LIAFUY $1: 65:$ iF POSIB \$,SIG $\$(L N), 1)=1$ IMEN FLAG=1
:: LM=LN+10: : b07Ŭ 260

$260 \mathrm{~S}=1$
270 L $5=5 E 65(1 \$, 5,28)::$ If 65
="E" THEN $280:$ : G0SUB 320
280 IF LSC)" THEN 290 : $:$ IF
FLAGG=1 THEN FLAG=0: : A $=\bar{B}$
: 6010210 : ELSE 601020 0

290 FRINT 2:L5: : $5=5+28:$ : 6070270
300 IF Qs=*E*THEN $310:$ : Fh
INT 12:'.FI:BL; ${ }^{\prime}$
310 CLOSE $11:$ CLOSE $2:$ : ERD
320 DATA (see instructions below!)
330 kESTURE $30: 5$ for $\mathrm{m}=1 \mathrm{~T}$
$05::$ Kital CHs.hs
$340 x=F U S(L S, C H \$, 1):$ : IF $x=0$ THEN 360

s(LS, X+1, LEN(L5)): : 6070340
360 NEAI $W$ : : KETUKN
The UAia elenents to be typed in lane 320 , separateo by conads, are the 'at" 5lan adove the 2 , the lett brace on the tront of the $F$ ker, the
anpersand above the 7 ，the right brace on the front of the $b$ ，the carat sian above the 6 ，the talde on the front of the $W$ ，the asterisk above the $B$ ，the matsit？on the tront of the $A$ ，the period，and the backslash on the front of the $l$ ．If you don＇t want to revert to FILL and ADJUST，delete the second statement in line 300.

Beware the Ab bug！The asterisk in the above proqran 15 transliterated because of an odd quirk of HI－Mriter whach causes it to change al250 into po！It happened to ae，and l＇ve seen it in two puohshed prograns．

It gy futoloader gives you a couple of asterisks instead of the number of sectors，it＇s because you nave files over 99 sectors long．you can chanqe the ianae in line 170 to if\＃if you want to．

Here 15 probady the last word on the thallence to write a l－line abasic proaram mich woulo scramble the nuboers 1 to 255 into a randoa sequence mithout dupiscation．This one runs in 17 seconos！

100 ！FFiOA T150Ft（BELGIUM）
HENSLEIEK V． 6 ： 4 JULY－SEFT
84－anghymous
110 DlN K（255）：：FOK $1=010$
255：：K（1）＝1：NEXT ！：：F
OR I＝0 10255 ：：RANDOMIE ：

J）：$: k(J)=R(1):$ ：$k(1)=k:: N$
EXI I
120 FUF $\mathrm{j}=0$ TU 255 ：：FFINT
R（J）：：NEXT J
1 belleve that Cras Maller is oue the creast for publishing the HEEK used in that routine．He also found a FEEK to qet two randon nusbers，which $I$ fooled around with until I olscovered I hao a mosquito trapped benino ar IV screen．

```
100 ! Ausuul10 oy da freter
son troe a FEEk by Crasg Mil
ler.
110 call Cleak :: chll Shhll
E(11,42,2,100,100)
```

120 KANDOMLIE ：：CALL FEEKI－ 31808，A，B）：：CALL MOTION（11． A－128，5－128）：： 6070 120

If you＇re worried about the nosquito getting out，you can put a screen on the mindaw oy adding a statement to line 110 －Call Char（S2，＂FF8日8884FF884888＂）

Here＇s one for the kiodies－
100 hen－dancing stickman d
rooraned by Jin Feterson
IlU call llear
120 DIM S（Lab），lloul，NNibu）
：30 FOR LH＝48 TO WO Step e
140 CALL Char（Lh，＂000028107C
1028＂）
150 NEAT CH
100 busub 540
170 FOF SET＝3 507
180 LALL COLUR 1 SET， 1,11
190 NEXI SEJ
200 data＂$H$ UUOU $\mathrm{P}^{*, " ~ H}$
$000 \mathrm{~F}^{\prime \prime}, * \mathrm{H} 0 \mathrm{~F}^{*},{ }^{\prime \prime} 10$
juOU000＂，＂y 000 壁，＂8
000 e＂
210 DATA－ 88000 E世＂，H

 （6＂，＂ 8 迫＂，＂ 888
Eeq．
Z20 FFiNi－dancing stac
kan＂：：：：
230 fiFs TOKt． 200
240 FUR $\mathrm{J}=11014$
250 FEAD A $\$$
200 ffitiot thigiol： H
270 NEXI J
280 LALL CULUF $(3,10,5)$
290 CaLL CULOK $14,16,71$
300 Call CULUF $(5,5,16)$
3106010 byo
320 UN INICBKNOTHOUSUB 340
，400，460
jou heturn
340 Call LULUh $14,1,1$ ）
350 lall CULUR（6，10，5）
360 605ub 500
570 Call dulukio，1， 11
380 Call COLOk（4，16，7）
340 KETUNA
900 CALL COLOK $(5,1,1)$
410 Call Culuk $(7,10,7)$
420 busuk 560


440 CALL CULOF（5．7，10）
450 hetuín
460 CALL CULUA $(4,1,1)$
470 Lall CuLur（ $5,1,1$ ）
480 CALL CULOK $(6,16,5)$
490 CaLL CULUR $17,16,71$
500 605UB 560
510 Call culufi（o，1，1）
520 Call CULUR $17,1,1$ ）
530 CALL CULUR $(4,10,1)$
540 CaLL COLUK（ $5,5,10$ ）
550 KETUKN
560 FUK $D=1$ T0 30
570 NEXT D
580 HELUKN
$540 F=\% 02$
600 FOK $N=1$ TU 2
4！ 5 S
1
620 NEXT N
$6305(26)=40000$
640 KESTORE 740
650 FOR $\mathrm{J}=1$ TO 60
660 READ T（J），NN（J）
670 NEXI J
680 RETUKN
690 FOR $J=15060$
700 CALL SOUND（TW）IDU．STNN
（J） $1,0,5(\mathrm{NN}(\mathrm{J}))+5.5)$
710 60sub 320
720 NEXI J
7306010 a 40
740 DAIA $4,6,4,13,4,13,4,15$ ．
$4,17,4,13,4,17,4,15,4,12,4,1$
$3,4,15,4,15,4,17,8,13,9,12$
750 DRTA $4,8,4,: 3,4,13,4,15$ ，
$4,17,4,16,4,1 /, 4,15,4,12,4,1$
$2,4,8,4,10,4,12,6,13,4,13,4$ ．
26
700 unin $4,10,4,12,4,10,4,5$,
$4,10,4,12, \dot{6}, 13,4,4,4,10,4,8$,
$4,6,4,5,4,6,6,6$
770 UAIA $4,10,4,12,4,10,4,4$,
$4,10,4,12,4,13,4,10,4,6,4,13$
， $4,12,4,15,8,13,4,13,4,26$

1 used to sign oft with＊happy
nackin＇${ }^{\prime \prime}$ ，but the vandals and theves have ade nacking a olsreputable mord， 50

## neeomm

The ligercub
Jia feterson

## LIBRARY ADDITIONS

We have two new software additions to the Library this month. The first is a screen dump program written in assembly language by Danny Michael of Flarence Al. Danny' 3 program requires: either ExBasic, or the Mini Memory or the Ed/As module, and memory expansion and a disk drive. This sereen dump can be called from your program or, with an interrupt switch installed, can be initiated at any time thus allowing you to dump a cartridge screen to a printer (Sorry, it wan't work with Farsec since this program is in Bit Graphics) . Danny's program is formatted for the Gemini/Epson printer. It can be adapted ta other printers, but you would need to consult with Danny on this matter. Some special features are that print-outs can be: (1) Double size (It: is rotated 90 degrees ta fit the page). (2) Tabs may be set for positioning the screen on the page, and (3) Dumps may be inverted (white on blacki). After the dump: control is returned to your program. Danny has put his program in public domain and it is available for copying from our Library.

The second addition is the Super Bugger produced by Navarone, but made available to TI User Groups from TI. This program is very useful, far those into assembly languages in program debuging (as you may have concluded from the title). Since AL is not my bag, na further comment. Good documentation is provided for each of the above programs. so. ve to the next meating and look ther

At the last Board mi your officers voted to purchase ths $\mathbb{C}$ monthly ON-TAFE programs for our Library. This will provide all TI-g9/4A "type-in" programs published in the Home Computer Magazine.

## BUY,SWAP, DR SELL TABLE

If you have any thing to sell or swap, bring it to the next meeting. A table will be setup for this purpose. Currently wanted are an Expansion Box: and a Terminal Emulator II module.
For sale is a TI(MX-80) printer, and assorted software. Come to the next meeting and look things over.

## MORE ON BULLETIN BOARDS

A counlo. of new BES numbers are listed here:

1. Online is a toll-free bulletin board. It is an electronic catalog of computer gear (all types of computers). Call:

800-458-2438 MTHT 5FM-1AM
FSS SFM-5AM
SThis one is quite busy but you have a chance between 10 to 12 FM .
2. The Lehigh oier Group reports that a BBS "Top of Indiana" is tops. Call: 219-854-4787 apen 24 hours
B. A EBS in Wichit三 Falls, KS is advertising a circuit board that plugs inta the $T I F E B$ and contains an $A / D$ converter, and a real time clock.
They are selling the bare board which you stuff with chipsete., from instructions provided. If you are interested, give them a call and let me know more about it. Call:

## RANDY'S SECTETS

There is another new addition to our Library, It's "The Innermost Secrets of tne fivifat". Lineck it out: If you want your awn copy see bel aw:

## RANDY TELLSALL "THE INNERMOST SECRETS OF THE T.I. 99/4A"

 4By popular demand, COMPUTER SHOPPER has compiled Randy Holcomb's series, "The Irnermost Secrets of the T.I. 99/4A" into book form. We are offering our readers the opportunity to purchase this "must have" book for 99 users.
Over the past several months, Randy has explored the TI 99/4A in detail. He explained the innerworkings of the 99 , the architecture of the TMS 9900 microprocessor, gives assembly language programming tips and much more.
Hundreds of requests have come into the office for reprints of these information packed articles. Use these "secrets" to expand your T.I. 99/4A. Order the book "Innermost Secrets of the T.I. 99/4A" by mailing the coupon below to our offices today!

YES, rush me my copy of Randy Holcomb's "Innermost Secrets of the T.I. 99/4A" for $\$ 5.95$ a copy.
[ I have enclosed a check or money order for $\$ 5.95$. Please bill my $\square$ Mastercard, $\square$ VISA.

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y.

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## NEXT MEETING

The next meeting of the Tri City 99er Computer Club will be held on FEBRUAFY 20, 1985. Mike Sandivg will bring his equipment and will present and demonstrate same techniques for converting programs from Console Basic to Extended Easic. In addition, all adventure fans are encourged to bring their favarite adventure game( $\equiv$ ). Al $\equiv 0$ remember, if you are having problems with any of vour computer equipment, that it would be a good idea to bring it to the meeting and discuss your problem with ather menturs of tee aco. Thats how we all learn about computer $\equiv$.

FEMINDEF: Check your mailing label, if it has been more than one year since you payed your dues, this will probably be your last newsletter unless your get to Fial Fandeman with your $\$ 12$ before 3/1/85.


2/1/85

