

# CPUUG NEWSLETTER



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Volume 10 Number 4 99er April, 1991  
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## MINUTES

March 4, 1991

President Tony DeDonatis opened the meeting at 7:30 pm with 14 members present.

The secretary's report was approved as published in the newsletter, motion by Rich Lindway and seconded by Henry Swartz.

Chet Argast gave a concise report of our treasury. Bill Valora moved to accept it; George Reisinger seconded; accepted.

The next matter of business concerned the meeting Rich Lindway had with the Users Groups ACE to feel them out on a combined Computer Show. Their reaction, he reported, was "they loved it!" As a result, Rich will contact other Groups to get their response. He also described in detail the 4 programs on the new disk he has given to our Software Library. He ended his report with an offer for any of our group to go with ACE members on a field trip to Cardinal Inc. in Lancaster on March 30th. This company puts together computer related hardware. Contact Rich later in the week for particulars. Rich also encouraged our members to start going to Ham Fests for real bargains.

Tony announced dates for Computer Fests, used disks for sale by Nick, and notice from William Chavanne of his updated TITAX forms.

The next order of business called for the presentation of officer nominees for the next year. Terry Longenecker chaired the committee but could not be present, so the other member on the committee, Rich Lindway, presented the slate. The only nominations from the floor were for Executive Board and Education committee. Following is a list of nominees:

President:	Rich Lindway
Vice-President:	Francis (Corky) Downey
Secretary:	Dottie Swartz
Treasurer:	Chet Argast
Executive Board:	Nick Varnalis Henry Swartz
Newsletter Editor:	Terry Longenecker
Software Librarian:	Gary Harman
Education:	Amos Myers

Dave Ratcliffe moved to close the nominations; seconded by Nick Varnalis, and all members so approved. The secretary will make up the ballots to be mailed to members in good standing in enough time for them to vote and return the ballots.

Nick offered to give a demo using MIDI at next month's meeting. Agreed - fine idea. It was suggested the secretary use the newspapers for publicity.

After the accepted adjournment, the rest of the time was used copying disks, buying computer "stuff" for sale by members, and comparing notes.

Respectfully submitted,

Dottie Swartz, Secretary

NEXT MEETING; MONDAY, APRIL 1, 1991

MORE RECENT PRODUCTS FOR THE 99/4A AND GENEVE

SPINNER

Similar to Wheel of Fortune

\$16.00

KB Computer Concepts  
c/o Bergman  
634 Parks Tower\*  
3001 West Bancroft St.  
Toledo, OH 43606

WICO PROSTICK II JOYSTICK

\$14.95; 5 year warranty; buy 2, get 1 TI joystick adapter free

Ramcharged Computers  
P.O. Box 81532  
Cleveland, OH 44181  
(800)669-1214

SLIDING BLOCK PUZZLES SERIES 1 (3 games on disk) BY Norman Rokka

SLIDING BLOCK SOLUTIONS SERIES 1 by Norman Rokka

3 puzzles, all challenging

\$7.95 each; \$1 s&h

MS Express Software  
P.O. Box 498  
Richmond OH 43944

USVBA POWER VOLLEYBALL by Gene Hitz

"Realistic true to life action"; needs joystick

\$10

CUTTHROAT CRIBBAGE by Gene Hitz

Fun, fast, friendly

\$7; or a diskful of games for \$10

Arcade Action Software  
4122 N. Glenway  
Wauwatosa WI 53222

FILMLIB by Ken Gilliland

A complete videolog for TIBASE for large collections of films on video-tape: names of stars, directors, years, etc.

\$7; \$1 sh per order

NOTUNG Software  
7647 McGroarty St.  
Tujunga CA 91042

"GETTING THE MOST OUT OF YOUR CASSETTE SYSTEM"(book) by Mickey Schmitt

\$9.95; \$2 s&h

If a User Group buys one copy, she grants rights for group to reproduce it free or to use it as a fund raiser within the group.

Mickey Schmitt  
196 Broadway Ave.  
Lower Burrell Pa 15068

LOGO VIDEO by Eunice Spooner

Demos for learning Logo, step by step

Eunice Spooner  
Webb Road Box 3720 RFD #1  
Waterville ME 04901

NOTE: Not responsible for prices as shown  
Check with vendor.

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NOTICE

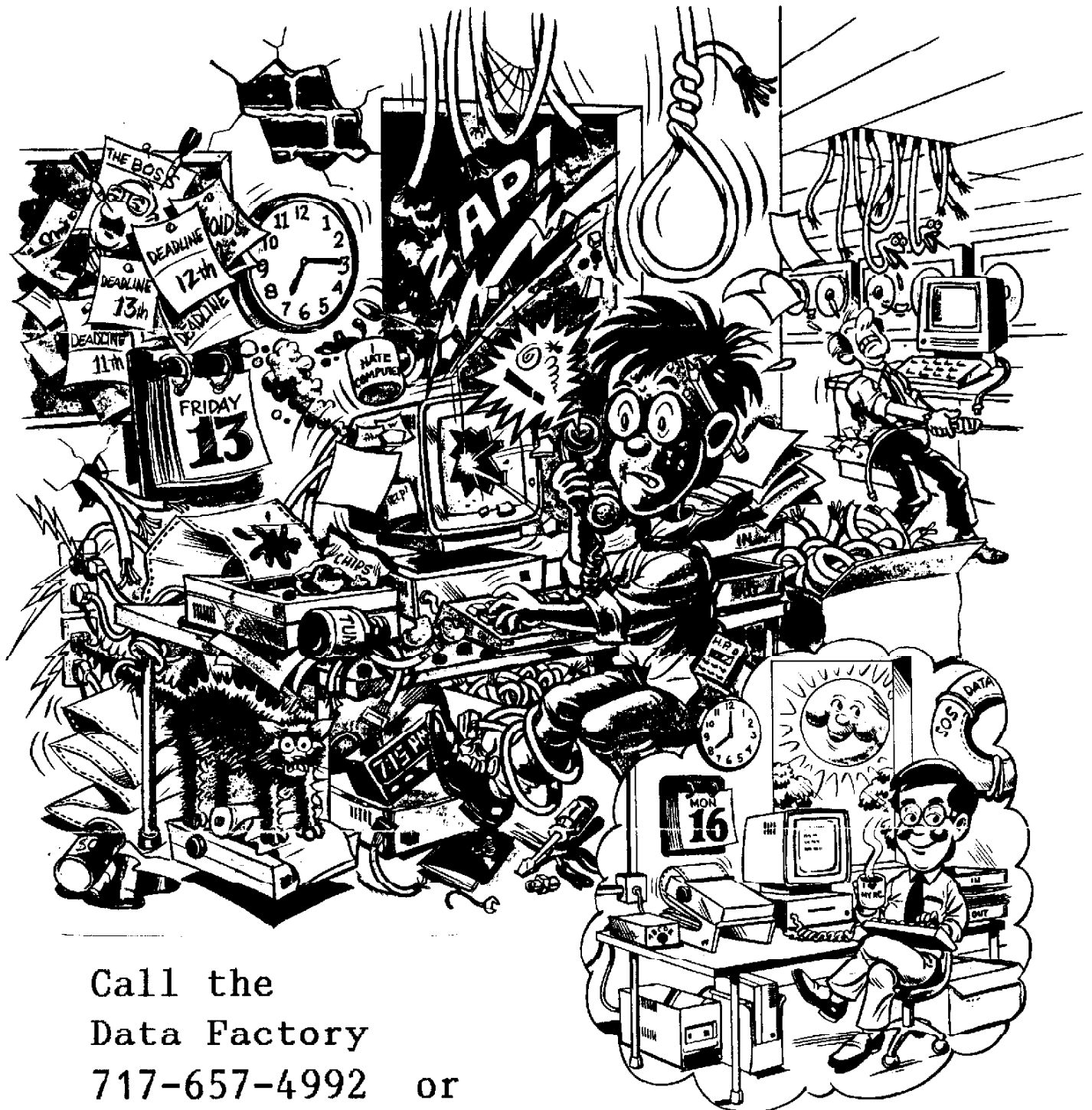
Due to unexpected difficulties (are there any other?) the Asgard EGI has been delayed. HOWEVER, those design problems have been solved, and we are ready to begin manufacturing the device.

Since it has been a while since we originally solicited this peripheral, we are trying to assess whether there is still a market for the item before we begin manufacturing.

If you are still interested in this item, please contact us as soon as possible. We will place this project on hold until we've received enough positive responses. At this point the product can be shipping 6-8 weeks from the date that we initiate the manufacturing process.

To contact us write to Asgard Peripherals, P.O. Box 10697, Rockville, MD 20849, Or call at (703)255-3085(pam-6pm)EST. Thank you.

# Connection Problems?



Call the  
Data Factory  
717-657-4992 or  
717-657-4997  
8N1 12,2400 bps

TIPS FROM THE TIGERCUB

No. 62

Tigercub Software  
156 Collingwood Ave.  
Columbus, OH 43213

Dec. 1990

My stock of Tigercub Software catalogs is depleted and it would not pay me to reprint it. Therefore I have released all copyrighted Tigercub programs, except the Nuts & Bolts Disks, for free distribution providing that no price or copying fee is charged. All of my Tigercub programs have been added to my TI-PD library and are cataloged, by category, in TI-PD catalog #4.

My three Nuts & Bolts disks, each containing 100 or more subprograms, have been reduced to \$5.00. I am out of printed documentation so it will be supplied on disk.

My TI-PD library now consists of 452 disks of fairware (by author's permission only) and public domain, all arranged by category and as full as possible, provided with loaders by full program name rather than filename, Basic programs converted to XBasic, etc. The price is just \$1.50 per disk(!), post paid if at least eight are ordered. TI-PD catalog #4 listing all titles and authors, is available for \$1 which is deductible from the first purchase.

According to Charles Good, running a program containing CALL SAY on a beige console without the speech synthesizer attached will cause a lockup.

On a black and silver console, there is no lockup but program execution can be greatly delayed. To avoid that, CALL PEEK(-28672,@) at

the beginning of the program and add IF @=96 before each CALL SAY (remember that, IF causes program execution to skip to next program line if not true!) or IF @(>)96 THEN to skip over the CALL SAYS.

In Tips #60 I presented a routine to find the lowest power of 7 which contains six 7s in sequence. My version took 24 minutes to find the answer on my TI-99/4A. Several users tried this on a Geneve. The NUTI News of the Nittany U6, Oct 1990 reports that on a 9640 (MDOS 0.97H) with TI XBasic loaded through GPL (speed 5) it ran in 11 min. 33.86 seconds, and with NYARC Advanced Basic V2.99A loaded through GPL it ran in 4 min. 58.62 seconds!

Now, from the TIMES of England, here is a method using a level of math beyond my comprehension that will solve the problem on an ordinary TI in 6 minutes and 17 seconds!

```
100 ! FASTER WAY John Seager
110 CALL CLEAR :: DIM ELEM(26):: ELEM(0)=7 :: POWER,SS=0
:: DISPLAY AT(1,1):"7 TO THE POWER OF"
120 ELM=SS :: SS,CARRY=0 :: POWER=POWER+1
130 DIS%=STR$(ELEM(ELM)):: FOR I=ELM-1 TO 0 STEP -1 :: DIS%=DIS%&RPT$( "0",10-LEN(STR$(ELEM(I))))&STR$(ELEM(I)):: NEXT I
140 DISPLAY AT(1,19):STR$(POWER);"=" :: DIS%
150 FOR I=6 TO LEN(DIS%)STEP 6 :: IF SEG$(DIS%,I,1)<>"7" THEN 190
160 FOR J=I-5 TO I :: IF SEG$(DIS%,J,6)<>"777777" THEN 180 ELSE DISPLAY AT(24,1):"ANY KEY TO CONTINUE"
170 CALL KEY(O,K,S):: IF S=0 THEN 170 :: DISPLAY AT(24,1):: J=I
180 NEXT J
190 NEXT I
```

```
200 ELEM(SS)=ELEM(SS)*7+CARRY
Y :: IF ELEM(SS+1)=0 AND ELEM(SS)<1.E+10 THEN 120
210 CARRY=INT(ELEM(SS)/1.E+10):: ELEM(SS)=ELEM(SS)-CARRY*1.E+10
220 SS=SS+1 :: GOTO 200
```

And if you think that is fast, the Autumn '90 edition of TIMES contains a Mini-memory program to solve the program in 2 SECONDS! And an assembly version that will search to the 10,000 power and find 52 strings of six 7's in an hour and a half!

Here's a puzzler for you. Can you figure out why that 1000-microsecond CALL SOUND is cut short?

```
100 CALL CLEAR
110 DISPLAY AT(12,1):"Filena me? DSK" :: ACCEPT AT(12,14)
BEEP:F#
120 ON ERROR 130 :: OPEN #1:"DSK"&F# :: STOP
130 GOSUB 140 :: RETURN 110
140 CALL SOUND(1000,110,0,-4,0):: DISPLAY AT(24,1):"CAN'T OPEN FILE" :: RETURN
```

I recently programmed a diskfull of gospel songs, and in each one I used this formula to set up an array containing the frequencies for 3 octaves:

```
DIM N(36) :: F=110 :: FOR J=1 TO 36 :: N(J)=INT(F*1.059463094^(J-1)+.5):: NEXT J
```

At the end of each selection I put CALL INIT :: CALL LOAD(-31961,149) I don't remember where I learned that one, but it clears the screen, sets all colors and characters to default, deletes sprites, and looks for a LOAD program on DSK1.

The LOAD program has a routine to play each song one after another, but one song crashed with a BAD VALUE error even though it had previously been OK. I found that this was the only song that actually

used N(1). The value should have been 110 but it had somehow changed to 24263 which the program line multiplied by 2, therefore out of range.

I found that the routine was correctly giving N(1) a value of 110 the first time but after the CALL LOAD it always had the 24263 value. Substituting other values for 110, I found that any value was being multiplied by 220.5727273, rounded off.

Further experimentation revealed that the problem was being caused by the ^ (exponentiation sign, shift 6 on your keyboard, in case someone prints this through the Formatter!). So I wrote this little routine to experiment with:

```
100 FOR J=1 TO 10 :: PRINT 2^J :: NEXT J :: CALL INIT
:: CALL LOAD(-31961,149)
```

I saved that as DSK1.TEST and then wrote another one 100 RUN "DSK1.TEST", saved that as DSK1.LOAD, and then entered RUN "DSK1.TEST".

It printed out the proper values time after time, so I changed the 2^J to read 2^(J-1). The first time around, the first value was 1 as it should be - the computer will consider any number to the power of 0 to have a value of 1. But, the next time around, the first value was F0.57000101!

That was not even a valid numerical representation, so I changed the formula to 2^(J-1)\*2, expecting it to crash. Instead, it gave me a value of 441.140002!

Further experimentation showed that 2^(J-1)+1 gave a value shown as 1(1.570001.

Changing the +1 to +10 gave 1=0.570001 and to +100 gave 2(0.570001!

So, poking a value of 149 into -31961 will cause any number taken to the power of zero to have a value of

220.5727273, which will be represented on screen in some apparently undocumented format - it's not even radix 100. I wonder if the fellows who built this computer could explain that!

ATTENTION all newsletter editors! If you print the above through the Formatter PLEASE transliterate the caret sign!

This one requires the TELL module and the Speech Synthesizer. Want to make the computer so mad it will fuss and fume and cuss and utter? Run this program and answer the prompt with 1.

```
100 CALL CLEAR
110 OPEN #1:"SPEECH",OUTPUT
120 INPUT X
130 PRINT #1:"//"&STR$(X)&"
&STR$(X*3.17)
140 PRINT #1:"THIS IS THE SECRET METHOD OF MAKING THE COMPUTER SPEAK IN A WHISPER"
150 GOTO 120
```

Want to make it whisper to you? Answer the prompt with 0 or -10.

Why did I get an INPUT ERROR when the strings in this routine got too long?

```
100 CALL CLEAR :: X=1
110 X=X#2 :: A$=RPT$("A",X):
B$=RPT$("B",X): C$=RPT$("C",X): D$=RPT$("D",X): PRINT A$:B$:C$:D$
120 OPEN #1:"DSK1.TEST",VARIABLE 254,OUTPUT :: PRINT #1:A$:B$:C$:D$ :: CLOSE #1
130 OPEN #1:"DSK1.TEST",INPUT :: INPUT #1:A$,B$,C$,D$ :: PRINT A$:B$:C$:D$ :: CLOSE #1 :: GOTO 110
```

Thanks to Irwin Hott for the answer to that one. I don't think it's in the books anywhere, but the TI won't input multiple records in a single INPUT if the total number of bytes is too high - less than 154 for two records to less than 144 for

six records.

I still think computers should be fun, so here is a quickie for the kids, or for the kid in you -

```
100 PRINT TAB(9);"QUICK DRAW"
": : : " How good a gunman
ger are:"you?": " Can you
outdraw:"Deadeye Joe?": :
110 PRINT " Match the countd
own from 1:"to 10.": " Wait
for the gun...": " Then
hit any key FAST!! - ": : -
and HOLD IT DOWN": :
120 PRINT " I got down to 20
once - can":you beat that?
": : " Press any key to start
"
```

```
130 CALL KEY(0,K,ST):: IF ST
=0 THEN 130
140 CALL CLEAR :: SE=300 ::
CALL CHAR(58,"009F91919191
9F"):: CALL CHAR(42,"0000FCF
E171F0707")
150 CALL KEY(0,K,ST):: IF ST
=-1 THEN 150
```

```
160 CALL CLEAR :: FOR M=1 TO
10 :: CALL HCHAR(12,16,M+48
):: FOR N=1 TO 100
170 NEXT N :: CALL KEY(0,F,X
):: IF F=70 THEN 330
180 NEXT M :: CALL CLEAR ::
FOR J=1 TO 500
190 NEXT J :: IF F=70 THEN 3
30
```

```
200 CALL KEY(0,K,ST):: IF ST
<> THEN 330
```

```
210 CALL HCHAR(12,16,42):: F
OR D=1 TO SE
```

```
220 NEXT D :: CALL KEY(0,Z,X
):: IF X=0 THEN 240
```

```
230 GOTO 270
240 CALL CLEAR :: PRINT :: P
RINT "YOU'RE DEAD!"
```

```
250 FOR D=1 TO 200
260 NEXT D :: GOTO 160
```

```
270 PRINT "DUCH!" :: IF SE<5
1 THEN 290
```

```
280 SE=SE-50 :: GOTO 320
290 IF SE<31 THEN 310
```

```
300 SE=SE-5 :: GOTO 320
310 SE=SE-1
```

```
320 PRINT SE :: GOTO 250
330 PRINT "YOU CHEATED!" ::
GOTO 150
```

I always wondered about those recipe programs. Does

the cook lug the computer out to the kitchen to read the screen, or use a printer to make a hardcopy of a file that was keyed in from a hardcopy in the first place?

Anyway, some of those programs do convert quantities for different servings, so here is a little program to do that. It provides input and output in fractions instead of decimals, because that is the way recipes are written.

```
100 DISPLAY AT(3,6)ERASE ALL
:"RECIPE CONVERTER"
```

```
110 DISPLAY AT(6,1):"Enter f
ractional quantities separat
ed by a space from whole q
uantities."
```

```
120 DISPLAY AT(9,1):"For ins
tance, to enter threeand one
-half, type 3 1/2"
130 DISPLAY AT(12,1):"Result
s will be rounded to the ne
arest 8th."
```

```
140 DISPLAY AT(24,7):"press
any key" :: DISPLAY AT(24,7)
:"PRESS ANY KEY" :: CALL KEY
(0,K,S):: IF S=0 THEN 140
150 DISPLAY AT(12,1)ERASE AL
L:"TURN PRINTER ON!"
```

```
160 OPEN #1:"PIO" :: PRINT #
1:CHR$(27);"Q" :: CALL CLEAR
170 DISPLAY AT(5,1):"Name of
recipe?" :: ACCEPT AT(7,1):
M$ :: PRINT #1:M$:"":
```

```
180 DISPLAY AT(3,1)ERASE ALL
:"Recipe is for how many
servings?" :: ACCEPT AT(4,
1)VALIDATE(DIGIT)BEEP:R
```

```
190 DISPLAY AT(6,1):"You wan
t to cook how many serving
s?" :: ACCEPT AT(7,1)VALIDA
TE(NUMERIC):S :: X=S/R
200 DISPLAY AT(10,1):"Name o
f ingredient? (just enter
if finished)" :: ACCEPT AT(1
3,1)BEEP:A$ :: IF A$="" THEN
STOP
```

```
210 DISPLAY AT(15,1):"Unit o
f measure?" :: ACCEPT AT(17,
1)BEEP:M$
```

```
220 ON ERROR 310 :: DISPLAY
AT(19,1):"Quantity in recipe
?" :: ACCEPT AT(21,1)BEEP:AX
$ :: A=VAL(AX$)
```

```
230 Q=X#A :: J=INT(Q):: P=Q-
```

```
J :: IF P=0 THEN X$=STR$(J):
: Y$="" :: GOTO 290
```

```
240 IF J=0 AND P<=.0625 THEN
X$="" :: Y$="less than 1/16
" :: GOTO 290 ELSE IF P<=.06
25 THEN X$=STR$(J):: Y$=""
: GOTO 290
```

```
250 IF P>.9375 THEN X$=STR$(
J+1):: Y$="" :: GOTO 290
```

```
260 DATA .8125,7/8,.6875,3/4
,.5625,5/8,.4375,1/2,.3125,3
/8,.1875,1/4,.0625,1/8
270 RESTORE 260
```

```
280 READ M,N$ :: IF P>M THEN
Y$=N$ :: X$=STR$(J)ELSE 280
290 IF J<1 THEN X$=""
```

```
300 PRINT #1:A$&" "&X$&" "&Y
$&" "&M$ :: GOTO 200
```

```
310 P=POS(AX$, " ",1): Q=POS
(AX$, "/",1): IF Q=0 THEN 34
0
```

```
320 ON ERROR 340 :: IF P=0 T
HEN A=0 ELSE A=VAL(SEG$(AX$,
1,P-1))
```

```
330 B=VAL(SEG$(AX$,P+1,Q-1-P
)): C=VAL(SEG$(AX$,Q+1,255)
):: A=A+B/C :: RETURN 230
```

```
340 DISPLAY AT(24,1):"OOPS!
TRY AGAIN" :: CALL SOUND(1,1
10,0,-4,0):: RETURN 220
```

And here is an oldie - a utility to get the bugs out of your programs.

```
100 ! MOSQUITO #2 by Jim Pet
erson from a PEEK by Craig Mi
ller
```

```
110 CALL CLEAR :: CALL SPRIT
E(#1,42,2,100,100)
```

```
115 DISPLAY AT(22,1):"Don't
let the mosquito get":out o
f the TV!:"Press any key -Q
UTICK!"
```

```
120 RANDOMIZE :: CALL PEEK(-
31808,A,B):: CALL MOTION(#1,
A-128,B-128):: CALL KEY(0,K,
S):: IF S=0 THEN 120
```

```
130 CALL CLEAR :: CALL COLOR
(1,2,8):: CALL SCREEN(2):: C
ALL CHAR(32,"FF888888FF8888
88"):: GOTO 120
```

Long live the TI-99/4A!

Jim Peterson

The Tigercub

From: jinbo@ex1.ssd.csd.harris.com (Jim Winters)  
 Star Trek Crossword Puzzle #2: Spock

#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20	#21	#22	#23	#24
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ACROSS

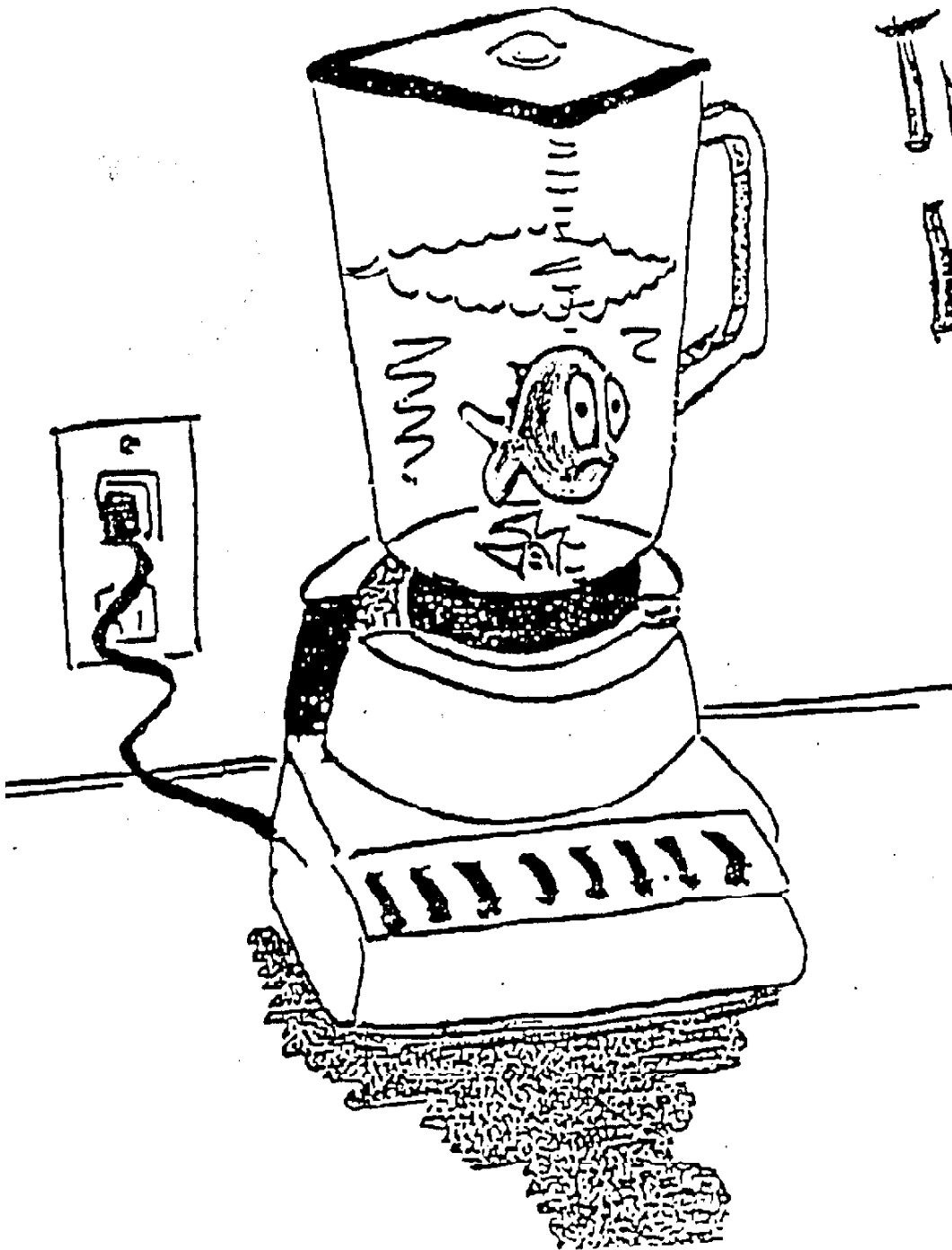
1. Vulcan K.O. (2 words)
4. Word reserved for the unexpected
6. Method of communication with aliens (2 words)
7. Not emotional, but
9. Officiates at his wedding
11. Home planet
14. Best friend
15. officer of the Enterprise
17. His betrothed
20. His are pointed
21. Heads this department
22. Brother
24. His evil twin sports one

DOWN

2. Crewmate who adores him
3. Used spores to ensnare him
5. Detected this whale's pregnancy
8. Rejuvenated on this planet
10. Live long anc
12. Musical instrument
13. He reminds Apollo of this god
16. His father
18. Blood color
19. Game played against the computer
23. Childhood pet with six-inch fangs

AND YOU THINK  
THERE'S STRESS

IN YOUR  
LIFE!



WE'LL LOOK FOR  
YOU  
AT THESE MEETINGS

Circle your Calendar with these meeting dates

JANUARY	7	JULY	1
FEBRUARY	4	AUGUST	5
MARCH	4	SEPTEMBER	7 ** SATURDAY **
APRIL	1	OCTOBER	7
MAY	6	NOVEMBER	4
JUNE	3	DECEMBER	2

All meetings begin at 7PM but the Group equipment will be up and ready for use at approximately 6PM.  
All meetings are held at the CAMP HILL SHOPPING MALL COMMUNITY ROOM.

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CENTRAL PA 99/4A USERS GROUP  
c/o Dorothy Swartz  
5309 Devonshire Road  
HARRISBURG, PA 17112



Dallas TI Home Computer Grp  
P.O. Box 29863  
Dallas TX 75229

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NEXT MEETING: MAY 6ST 1991 at 7pm.

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Data Factory 717-657-4992 or 717-657-4997 24hrs 7 Days-- SYSOP Dave Ratcliffe