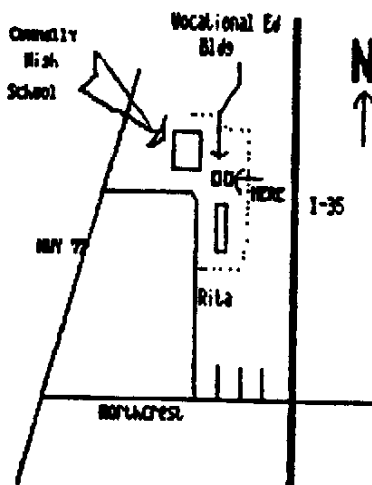***********************************
Group Officers

Amy Bates - President and
            newsletter chairperson
Dr. Jeff Hull - Program Chairman
Dave Eisfeldt - Education
            chairman
Norman & Lelah Beyer -
            Co-librarians
Frank Cross - Flunky
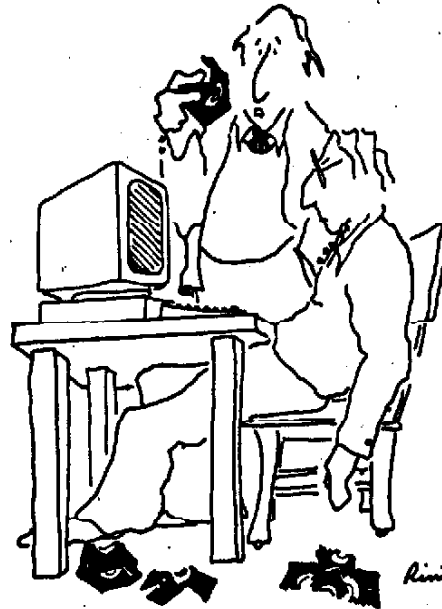***********************************
Group News!

THere has been a recent addition
to the main PEB in the Vocational
room at Connally High School.
Amy Bates has acquired and
installed a Tandon double-sided
disk drive which gives the
ability to the operator, to use
doulble sided disks. Intead of
360 sectors, now there are 720
sectors available. One of the
nice things is to be able to have
Ti-Writer program and files all
on the same disk. Files don't
have to be broken up any more.
If you have double sided disk
drives at home and want to do the
program with your disks, you
don't have to reduce them to
single-sided anymore!
****
This month's mystery!

Someone has borrowed the
cartridge,"Spy's Demise" from the
school's software library. If
you borrowed it, please return it
at the next meeting. Thanks.
****

****
MINUTES OF LAST MEETING

Frank Cross called the meeting to
order and conducted the short
business meeting. The treasury
report was $232.43 with a check
for #81 made to Norman and Lelah
Beyer for stamps. The purchase
of stamps from Safeway saved the
group $9.00. A hearty "thank
you" goes to the beyers' for
getting the stamps. Harold
McNabb gave his demonstration on
"Ti-Planner" following the
meeting.

"I didn't say it was exactly like using a typewriter, Milton."

****
NEXT MEETING!

THE BRAZOS VALLEY 99ERS' WILL
MEET AT CONNALLY HIGH SCHOOL
VOCATIONAL ED. BUILDING ON MAY
23,1989. MEETING TIME IS 7:30
P.M. Amy Bates, President, will
conduct the meeting and give the
program on computer graphics.

73 FILES ON 8 DISKS

FILENAME	DISKNAME	TYPE	SIZE	P
224	GEN/0/A	D/F 80	20	
346-2	GENIE/1/A	D/V 80	7	
374	GEN/0/A	PGM	34	
428	GEN/0/A	D/V 80	52	
ARCHIVER	GENIE/1/A	PGM	32	
BLITZ1	GEN/0/A	PGM	33	P
BLITZ1	GENIE/1/A	PGM	33	P
BLITZ2	GEN/0/A	PGM	29	P
BLITZ2	GENIE/1/A	PGM	29	P
BUTCH 6	GEN/0/A	D/V 80	18	
CALC	GENIE/1/A	D/V163	8	
CAT	GENIE/1/A	PGM	5	
CATALOGER	GENIE/1/A	PGM	27	
CATAPROG	GENIE/4/A	PGM	18	
CATCHY	GEN/0/A	PGM	34	
CATLIB	GENIE/3/B	D/F 80	110	P
CATLIB/DOC	GENIE/3/B	D/V 80	42	
CATLUG	GEN/0/A	PGM	33	P
CATLUG/CAT	GEN/0/A	D/V 80	4	
CATLUG/DOC	GEN/0/A	D/V 80	72	
CATLUH	GEN/0/A	PGM	22	P
CATLUI	GEN/0/A	PGM	26	P
CC512	GENIE/4/A	D/V 80	32	
CHESS/INS	GENIE/0/B	I/V254	53	P
CHESS/INS	GENIE/1/A	I/V254	53	P
CNBL/CHESS	GENIE/1/A	I/V254	54	P
CNBL/CHESS	GENIE/0/B	I/V254	54	P
COLOR	GENIE/1/A	PGM	8	
CONVRT99	GENIE/1/A	PGM	5	
COPY	GENIE/0/B	D/F 80	20	
COPYCC	GENIE/3/B	D/F 80	19	
DAMEN	GENIE/1/A	I/V254	52	
DAMEN	GENIE/0/B	I/V254	52	
DAMENDOCS	GENIE/1/A	D/V 80	8	
DAMENDOCS	GENIE/0/B	D/V 80	8	
DIRECTOR	GENIE/3/A	D/F128	332	P
DM10003/5	GENIE/4/A	D/V 80	21	
DOC	GENIE/4/A	D/V 80	49	
DOMINO	GENIE/1/B	PGM	43	
DOMINO	GENIE/4/A	PGM	43	
FISH	GENIE/1/A	D/V 80	29	
FISHFAC	GENIE/1/B	D/V 80	29	
FLAG	GENIE/3/A	PGM	25	
FROGGER	GENIE/4/A	I/V254	51	
FT/DIALER	GENIE/1/B	PGM	13	
FTF	GENIE/4/A	D/V 80	30	
GEMINICUNT	GENIE/4/B	PGM	17	P
GI-1	GENIE/0/B	PGM	34	
GI-2	GENIE/0/B	D/V 80	10	
JACKET	GENIE/3/B	PGM	32	
JACKEU	GENIE/3/B	PGM	9	
KEYDOCS	GENIE/0/B	D/V 80	21	P
KEYLOAD	GENIE/0/B	PGM	20	P
KEYSOURCE	GENIE/0/B	D/V 80	77	P
KEYSOURCE	GENIE/1/B	D/F128	22	
LABELS	GENIE/4/A	PGM	17	
LIB1	GENIE/1/B	D/V 80	10	
LIB2	GENIE/1/B	D/V 80	34	
LIB3	GENIE/1/B	D/V 80	33	
LIB4	GENIE/1/B	D/V 80	34	
LIB5	GENIE/1/B	D/V 80	14	
LIB6A	GENIE/1/B	D/V 80	7	
LOAD	GENIE/4/A	PGM	27	P
MEMTEST1	GENIE/1/B	PGM	10	
MEMTEST2	GENIE/1/B	PGM	7	
MGCHIPS	GENIE/4/A	D/V 80	12	
MUSHROOMS	GENIE/1/B	PGM	21	
SUPCART	GENIE/4/A	D/F128	347	
SUPERSAVE	GENIE/3/B	D/F 80	27	
TIBBS	GENIE/1/B	D/V 80	35	
TIKEYS	GENIE/3/B	D/F128	117	P
TINY-4"	GENIE/1/B	PGM	9	
UNPACK	GENIE/1/B	PGM	25	

TIPS FROM THE TIGERCUB

#42

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TIGERCUB SOFTWARE
156 Collingwood Ave.
Columbus, OH 43213

Over 130 original programs
in Basic and Extended Basic,
available on cassette or
disk, now reduced to just
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my present stock of blanks
is exhausted.
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Tigercub Full Disk Collec-
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$2 catalog programs, and the
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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
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TUTOR, PROGRAMMER'S UTILI-
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TEASERS, BRAIN BUSTERS!,
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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
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to $15.00 postpaid.
NUTS & BOLTS NO. 2, another
full disk of 100 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.

I'm very sorry about the
error in the BXB routine in
Tips #40. The "program to
write a program" generated
line number 32000 instead of
30002. Here is the correct
line -

```
110 OPEN #1:"DSK1.BYBDATA",V
ARIABLE 163,OUTPUT :: PRINT
#1:CHR$(117)&CHR$(50)&"][\[]
#"&CHR$(190)&CHR$(199)&CHR$(
136)&M$&CHR$(0)
```

The Hyphenated Fill and
Adjust in Tips #41 will
crash if the file contains a
line with one character too
many, which may be only an
unnecessary control charac-
ter. This fix will help -

```
300 IF LEN(M$)<=L THEN 310 :
: CALL SOUND(200,110,0,-4,0)
:: PRINT M$;" is";LEN(M$);"c
haracters long":"Truncated t
o ";SEG$(M$,1,L):"OK? (Y/N)"
305 CALL KEY(3,K,S):: IF S=0
THEN 305 ELSE IF K<>89 THEN
STOP ELSE M$=SEG$(M$,1,L)
310 PRINT #2:M$ :: IF EOF(1)
<>1 THEN 220 ELSE CLOSE #1 :
: CLOSE #2
```

I know that this line is
wrong, but key it in just as
it's printed, and see what
kind of error message you
get -

```
100 !DISPLAY AT(3,1):"Progra
m must be SAVEd in:"MERGE fo
rmat."
```

A friend asked me for a
program to help him solve
the Scram-Lets puzzles in
our local newspaper, so I
rewrote the Anagrammer that
was published way back in
Tips #12. It will print out
all possible combinations of
any 3- to 6-letter word, or
only those which have one or
two letters in specified
positions.

```
100 CALL CLEAR :: DISPLAY AT
(3,5)ERASE ALL:"SCRAM-LETS S
OLVER": :! by Jim Peterson
110 DISPLAY AT(8,1):"OUTPUT
TO? 1":" (1) SCREEN":" (2)
 PRINTER" :: ACCEPT AT(8,12)
VALIDATE("12")SIZE(-1):P ::
P=P-1
120 IF P=1 THEN DISPLAY AT(1
2,1):"PRINTER? PIO" :: ACCEP
T AT(12,10)SIZE(-18):P$ :: O
PEN #1:P$
130 PL(1),PL(2)=0 :: L$(1),L
$(2)="" :: DISPLAY AT(5,1)ER
ASE ALL:"TYPE A 3-,4-,5- OR
6-LETTER WORD " :: ACCEPT A
T(6,6):A$ :: W=LEN(A$):: IF
(W<3)+(W>6)THEN 130
140 DISPLAY AT(14,1):"SEARCH
 FOR COMBINATION WITH":"LETT
ER IN KNOWN POSITION? N" ::
ACCEPT AT(15,27)VALIDATE("YN
")SIZE(-1):Q$ :: IF Q$="N" T
HEN 180
150 DISPLAY AT(17,1):"LETTER
?" :: ACCEPT AT(17,9):L$(1):
: DISPLAY AT(19,1):"POSITION
?" :: ACCEPT AT(19,11):PL(1)
160 DISPLAY AT(21,1):"ANOTHE
R LETTER/POSITION? N" :: ACC
EPT AT(21,26)VALIDATE("YN")S
IZE(-1):X$ :: IF X$="N" THEN
 180
170 DISPLAY AT(21,1):"LETTER
?" :: ACCEPT AT(21,9):L$(2):
: DISPLAY AT(23,1):"POSITION
?" :: ACCEPT AT(23,11):PL(2)
180 PRINT #P :: FOR J=1 TO W
 :: B$(J)=SEG$(A$,J,1):: NEX
T J :: FOR J=2 TO W :: IF B$
(J)>=B$(J-1)THEN 220
190 T$=B$(J):: FOR L=J-1 TO
1 STEP -1 :: B$(L+1)=B$(L)
200 IF B$(L-1)>=T$ THEN 210
:: B$(L)=T$ :: GOTO 220
210 NEXT L
220 NEXT J
230 FOR A=1 TO W :: FOR B=1
TO W :: IF B=A THEN 440
240 FOR C=1 TO W :: IF (C=A)
+(C=B)THEN 430
250 IF W=3 THEN 310
260 FOR D=1 TO W :: IF (D=A)
+(D=B)+(D=C)THEN 420
270 IF W=4 THEN 320
280 FOR E=1 TO W :: IF (E=A)
+(E=B)+(E=C)+(E=D)THEN 410
290 IF W=5 THEN 330
300 FOR F=1 TO W :: IF (F=A)
+(F=B)+(F=C)+(F=D)+(F=E)THEN
 400 ELSE 340
310 W$=B$(A)&B$(B)&B$(C):: I
F W$<=V$ THEN 430 ELSE 350
320 W$=B$(A)&B$(B)&B$(C)&B$(
D):: IF W$<=V$ THEN 420 ELSE
 350
330 W$=B$(A)&B$(B)&B$(C)&B$(
D)&B$(E):: IF W$<=V$ THEN 41
0 ELSE 350
340 W$=B$(A)&B$(B)&B$(C)&B$(
D)&B$(E)&B$(F):: IF W$<=V$ T
HEN 410
350 IF Q$="N" THEN 380
360 IF SEG$(W$,PL(1),1)<>L$(
1)THEN 390
370 IF X$="N" THEN 380 ELSE
IF SEG$(W$,PL(2),1)<>L$(2)TH
EN 390
380 PRINT #P:W$&" ";:: G=G+1
390 V$=W$ :: ON W-2 GOTO 430
,420,410,400
400 NEXT F
410 NEXT E
```

Column 1

```
420 NEXT D
430 NEXT C
440 NEXT B
450 NEXT A
460 PRINT #P: :"  ";B;"TOTAL
 COMBINATIONS.": : :: G=0 ::
 V$="" :: PRINT "PRESS ANY K
EY"
470 CALL KEY(0,K,S):: IF S=0
 THEN 470 ELSE 130
```

And here is a much-improved XBasic version of the Adder-Upper which first appeared in Tips #13. I find it very useful in adding up several categories of figures in one pass.

```
100 CALL CLEAR :: CALL SCREE
N(16):: FOR SET=1 TO 14 :: C
ALL COLOR(SET,5,1):: NEXT SE
T
110 DISPLAY AT(3,4)ERASE ALL
:"TIGERCUB ADDER-UPPER": :"T
o add up several categories"
:"at one time.": :"Input cat
egories - END when":"finishe
d"
120 CALL KEY(3,K,S):: DIM C$
(22),T(22)
130 X=X+1 :: DISPLAY AT(12,1
):"Category #";STR$(X):: ACC
EPT AT(12,13):C$(X):: IF C$(
X)="END" THEN X=X-1 :: GOTO
170
140 A$=SEG$(C$(X),1,1):: IF
POS(F$,A$,1)=0 THEN F$=F$&A$
 :: IF X<17 THEN 130 ELSE 17
0
150 DISPLAY AT(15,1):"Code l
etter ";A$;" already":"used.
":"Pick another code letter"
 :: ACCEPT AT(17,26)SIZE(1):
A$
160 IF POS(F$,A$,1)<>0 THEN
DISPLAY AT(15,1):::::::::::::
GOTO 150 ELSE F$=F$&A$ :: C$
(X)=A$&C$(X):: DISPLAY AT(15
,1):::::::::::: IF X<17 THEN 1
30 ELSE 170
170 CALL CLEAR :: R=2+(X>8):
: FOR J=1 TO X :: DISPLAY AT
(R,1):"(";SEG$(C$(J),1,1);")
";SEG$(C$(J),2,255):: R=R+2+
(X>8):: NEXT J
180 DISPLAY AT(R+2,1):"Categ
ory ";F$ :: DISPLAY AT(R+4,1
):"Amount"
190 DISPLAY AT(24,1):"Use mi
nus value to subtract"
200 ACCEPT AT(R+2,11)SIZE(1)
)SIZE(1)VALIDATE(F$):Z$ :: Y
=POS(F$,Z$,1)
210 ACCEPT AT(R+4,8)VALIDATE
(NUMERIC):A :: T(Y)=T(Y)+A :
: DISPLAY AT(Y*(2+(X>8)),20)
:T(Y):: GOTO 200
```

Can you figure this one out? (I can't!) -

```
100 DISPLAY AT(3,4)ERASE ALL
:"ILLOGICAL COMPUTER!!": :"
       by Tigercub"
110 DISPLAY AT(7,1):"100 IF
A=2 THEN IF B=2 THEN C=4 ELS
E IF A=2 THEN IF B=3 THEN C=
6 ELSE IF A=3 THEN IF B=3 TH
EN C=9 ELSE IF A=3 THEN IF B
=4 THEN C=12 ELSE C=9"
```

Column 2

```
120 DISPLAY AT(14,1):"Why ca
n't you get C to ":"equal 9
or 12 or 99?"
130 DISPLAY AT(18,1):"A? " :
: ACCEPT AT(18,4):A :: DISPL
AY AT(20,1):"B? " :: ACCEPT
AT(20,4):B
140 IF A=2 THEN IF B=2 THEN
C=4 ELSE IF A=2 THEN IF B=3
THEN C=6 ELSE IF A=3 THEN IF
 B=3 THEN C=9 ELSE IF A=3 TH
EN IF B=4 THEN C=12 ELSE C=9
9
150 DISPLAY AT(22,1):"C=";C
 :: GOTO 130
```

This might come in handy to dress up a program -

```
100 CALL CLEAR :: CALL COLOR
(2,5,16):: CALL HCHAR(1,1,42
,768)
110 X=X+1 :: DISPLAY AT(X,9)
:"*************";:: DISPLAY
AT(X+1,9):"PRESS ANY KEY";::
 DISPLAY AT(X+2,10):"TO CONT
INUE";
120 CALL KEY(0,K,S):: ON S+1
 GOTO 110,130
130 !continue program here
```

Or, if you'd rather do it backwards -

```
100 CALL CLEAR :: CALL COLOR
(2,5,16):: CALL HCHAR(1,1,42
,768)
110 FOR X=10000 TO 1 STEP -1
 :: DISPLAY AT(X+2,9):"*****
********";:: DISPLAY AT(X+1,
9):"*TO CONTINUE*";:: DISPLA
Y AT(X,9):"PRESS ANY KEY";
120 CALL KEY(0,K,S):: ON S+1
 GOTO 130,140
130 NEXT X
140 !continue program here
```

You might find this one useful -

```
100 ! PAINT CALCULATOR by Ji
m Peterson
110 CALL CLEAR :: FOR SET=1
TO 12 :: CALL COLOR(SET,2,8)
 :: NEXT SET :: CALL SCREEN(5
):: CALL KEY(3,K,S):: ON WAR
NING NEXT
120 DISPLAY AT(3,7)ERASE ALL
:"PAINT CALCULATOR": :"To de
termine the amount of":"pain
t needed for a room."
130 DISPLAY AT(8,1):"Is the
room a regular square or rec
tangle? Y" :: ACCEPT AT(9,16
)SIZE(-1)VALIDATE("YN")BEEP:
Q$ :: IF Q$="Y" THEN 160
140 DISPLAY AT(11,1):"How ma
ny rectangular areas":"does
the room contain?" :: CALL A
CCEPTER(12,24,A):: IF A=1 TH
EN 160
150 FOR B=1 TO A :: DISPLAY
AT(3,10)ERASE ALL:"AREA #";B
 :: GOTO 170
160 CALL CLEAR
170 DISPLAY AT(5,1):"How hig
h is the ceiling?": "    ft.
 in." :: CALL ACCEPTER(6,2
,HF)
180 CALL ACCEPTER(6,9,HI)::
HI=HI/12 :: H=HF+HI
```

Column 3

```
190 DISPLAY AT(8,1):"How man
y walls?" :: CALL ACCEPTER(8
,17,W):: CALL HCHAR(5,1,32,6
40)
200 FOR J=1 TO W :: DISPLAY
AT(5,10):"WALL #";J: :"Width
    ft    in" :: CALL ACCEPT
ER(7,7,WF)
210 CALL ACCEPTER(7,13,WI)::
 WI=WI/12 :: WW=WF+WI :: SQ=
SQ+H*WW
220 DISPLAY AT(11,1):"How ma
ny doors, windows or":"other
 areas not to be":"painted i
n wall #";J;"?"
230 CALL ACCEPTER(13,19,D)::
 IF D=0 THEN 280
240 FOR L=1 TO D :: DISPLAY
AT(15,1):"AREA NOT TO PAINT
#";L: :"Width ft    in" ::
CALL ACCEPTER(17,10,WDF)
250 CALL ACCEPTER(17,16,WDI)
 :: WDI=WDI/12 :: WD=WDF+WDI
260 DISPLAY AT(19,1):"Height
   ft    in" :: CALL ACCEPTER(
19,11,HDF)
270 CALL ACCEPTER(19,17,HDI)
 :: HDI=HDI/12 :: HD=HDF+HDI
 :: SQ=SQ-WD*HD :: NEXT L
280 NEXT J :: DISPLAY AT(21,
1):"Paint the ceiling?" :: A
CCEPT AT(21,20)SIZE(1)VALIDA
TE("YN"):QQ$ :: IF QQ$="N" T
HEN 320
290 CALL HCHAR(5,1,32,640)::
 DISPLAY AT(5,1):"Ceiling di
mensions": :"   ft    in by
    ft    in" :: CALL ACCEPT
ER(7,2,CWF)
300 CALL ACCEPTER(7,8,CWI)::
 CWI=CWI/12 :: CW=CWF+CWI
310 CALL ACCEPTER(7,17,CLF):
: CALL ACCEPTER(7,23,CLI)::
CLI=CLI/12 :: CL=CLF+CLI ::
SQ=SQ+CW*CL
320 CALL HCHAR(5,1,32,640)::
 IF Q$="Y" THEN 340
330 NEXT B
340 DISPLAY AT(3,1)ERASE ALL
:"Total of";INT(SQ+.5);"squa
re feet."
350 DISPLAY AT(5,1):"How man
y square feet will":"one gal
lon of your paint":"cover?"
360 ACCEPT AT(7,8)SIZE(3)VAL
IDATE(DIGIT)BEEP:SF :: DISPL
AY AT(9,1):"How many coats?"
 :: CALL ACCEPTER(9,17,C)::
G=SQ/SF*C :: G=INT(G+.5)
370 DISPLAY AT(15,1):"You wi
ll need";G;"gallons or";G*4;
"quarts of paint."
380 CALL KEY(0,K,S):: IF S=0
 THEN 380 ELSE STOP
390 SUB ACCEPTER(R,C,Q):: AC
CEPT AT(R,C)SIZE(2)VALIDATE(
DIGIT)BEEP:Q :: SUBEND
```

Memory full! - Jim P.