January 1984 An independent magazine published by ECC Publications 95p

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Instructions for graphics characters are printed in lower-case letters in our listings. They are enclosed by brackets and separated by colons to distinguish them and the brackets and colons should not be entered.

Inverse characters are represented by the letter "i" and graphics characters by "g". Thus an inverse W would be represented by "iw", a graphics W by "gw", and an inverse graphics W by "igw".

Spaces are represented by "sp" and inverse spaces by "isp". Whenever any character is to be used more than once, the number of times it is to be used is shown before it, together with a multiplication sign. Thus "6*isp" means six inverse spaces and "(g4:4*i4:g3)" would be entered as a graphic four, followed by an inverse four repeated four times, followed by a graphics three.

Where whole words are to be written in inverse letters they appear in the listings as lower-case letters. Letters to be entered in graphics mode on the Spectrum are underlined.

Inverse characters may be entered on the ZX-81 by changing to graphics mode and then typing the appropriate characters and on the Spectrum by changing to inverse video and typing the appropriate letters. Graphics characters may be entered on the ZX-81 by changing to graphics mode and then pressing symbol shift while the appropriate characters are entered. On the Spectrum graphics characters may be obtained by changing to graphics mode and then pressing the appropriate character. User-defined graphics will appear as normal letters until the program has been RUN.

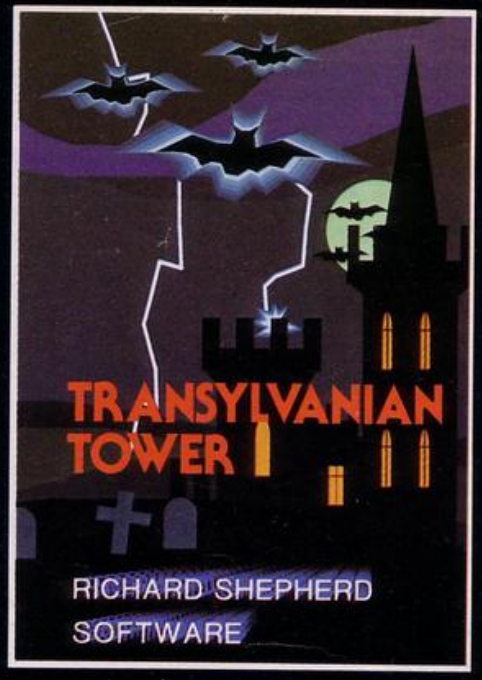
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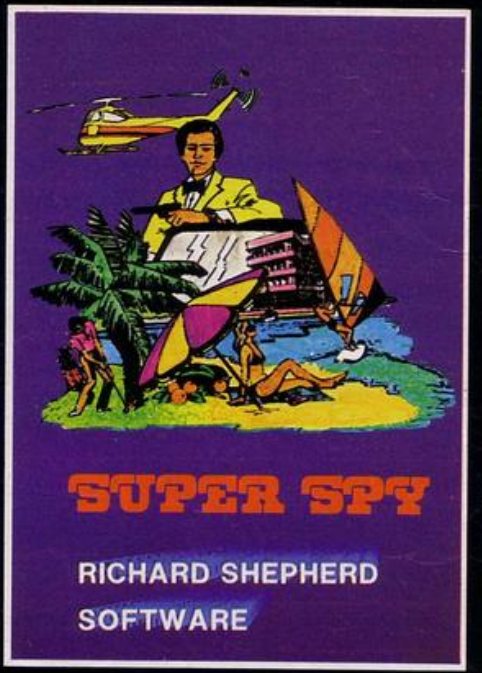
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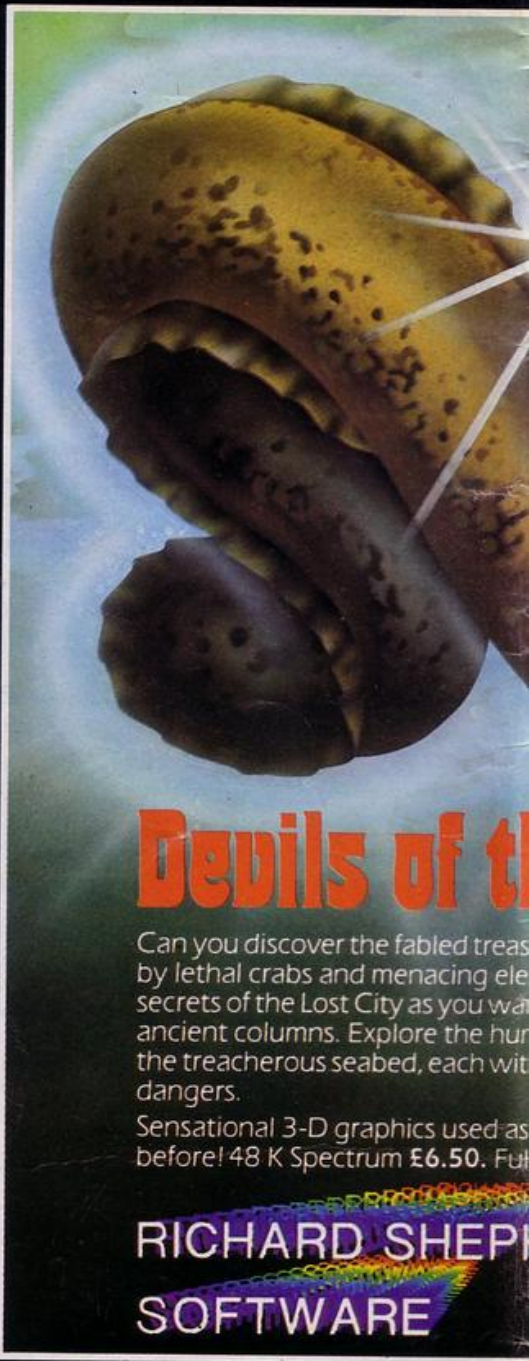


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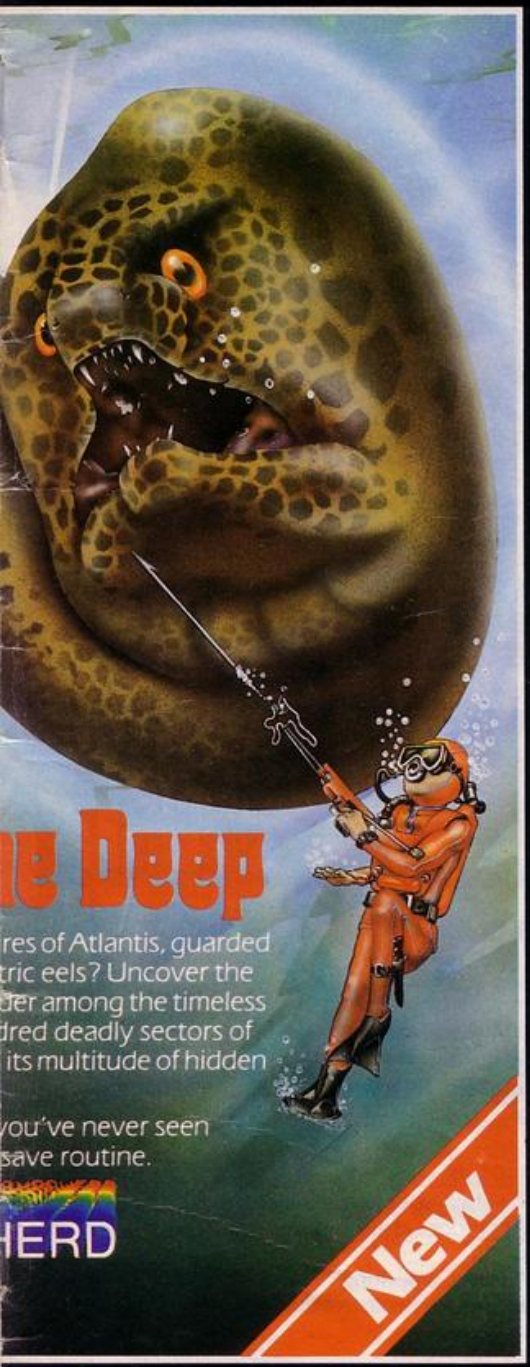
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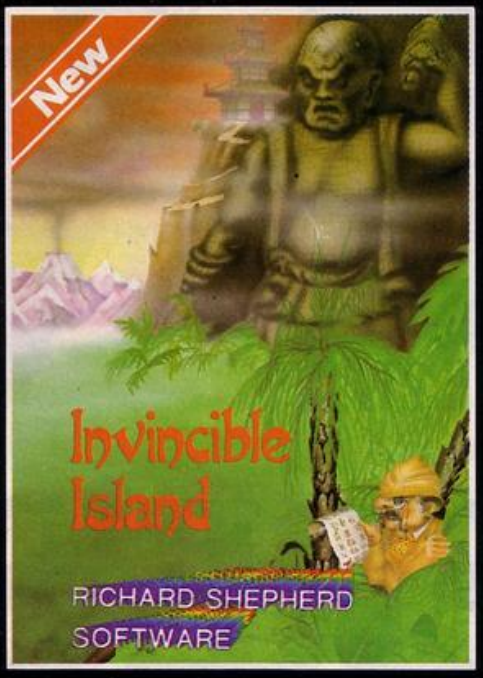
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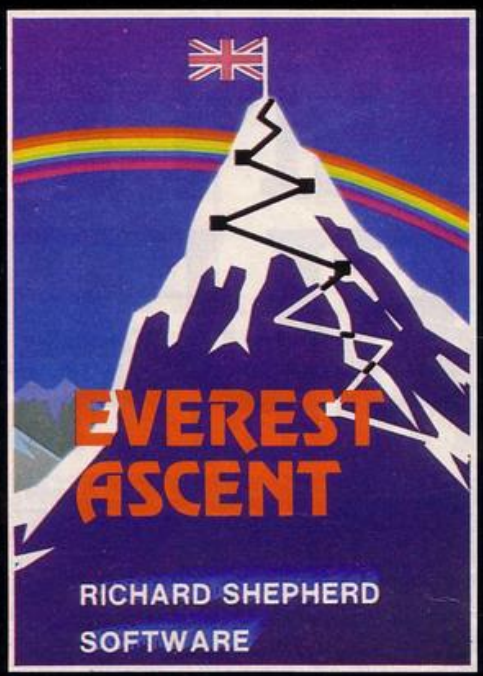




Invincible Island
by Peter Cooke

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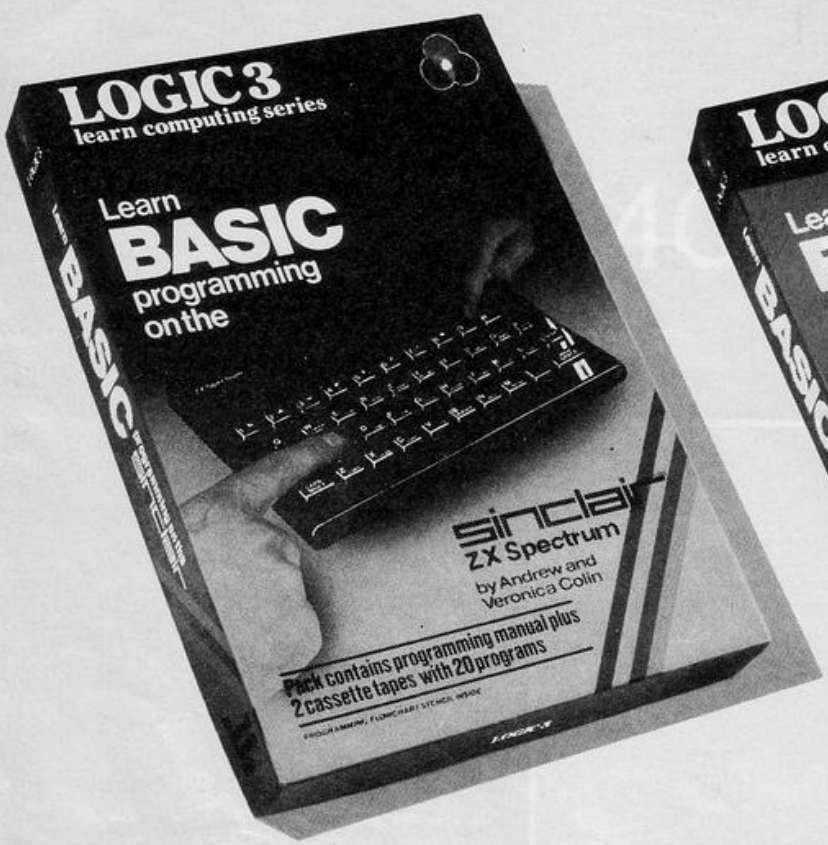
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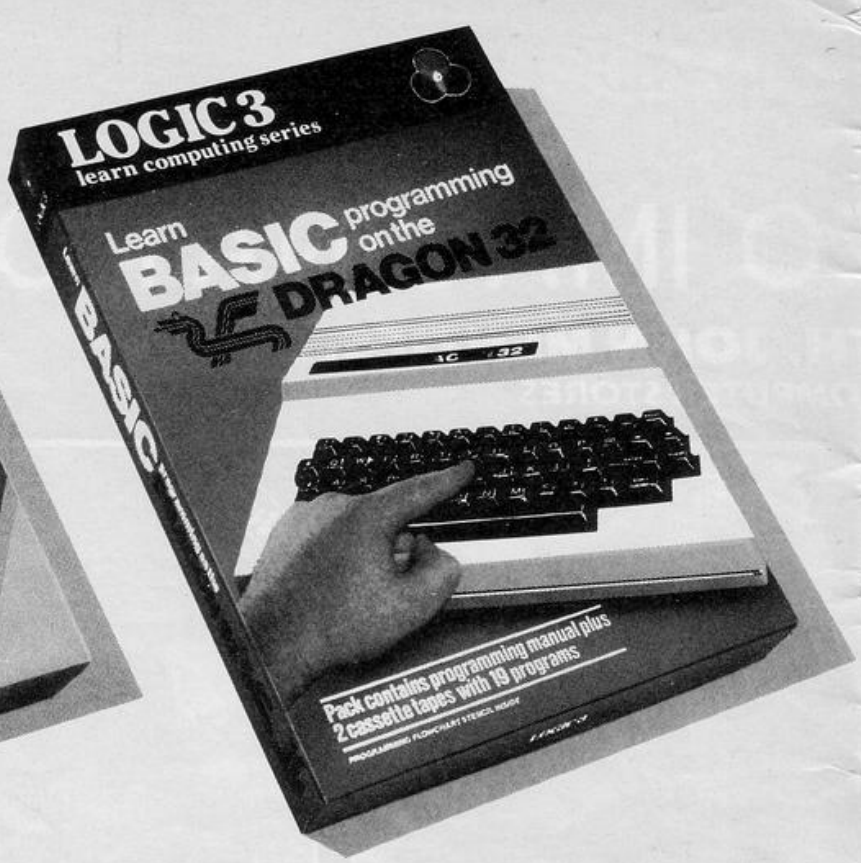
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SP1/84

LETTERS

ON BEHALF of all your readers, thank you for publishing a wonderful magazine. In my second breath I implore you to publish fortnightly. That would satisfy everyone and would prevent the agony of waiting. Of course I am speaking feelingly as I am more than 70 years old. This is my only pastime and it takes me about two weeks to try all the programs. There have been several times a program has not run, but a letter to you soon solves any problems.

I was interested in the letter from Allisoun Fern; I did not know there were different models of the Spectrum. There is nothing in the manual which states the model or how to identify from other models, so your reply was of great interest; the IN statments are now committed to my memory bank. I bought my Spectrum in June. Is there anything about this model on which you could enlighten me?.

I have all the time in the world to enter any program so I know everything I enter is exactly as printed. For instance, two programs — Slalom and Quasimodo — in the November issue failed to run; are they not reading the data?. Could that have anything to do with the model, or do you think some part of the computer is faulty?

I know you must be up to your necks in letters. Could you set up a telephone answering service, since the questions would be mainly about errors? A set of ready-made answers could be ready.

There must be many programs you have published which newcomers do not know about. Could you reprint them? When you come to the financial part, your magazine proves the cheapest and, as far as programs go, they surpass all the opposition. I would not mind if you raised the price so long as you increased the number of programs and added some interesting features.

Why not increase the number of readers' letters? Many computer thumpers would be over the moon to see theirs printed. As I have seen in your letters page, items and information other readers have to offer are extensive.

That would lead to us learning the computer to become more capable and, in time, repay you by sending programs we have composed. What a happy world if this could happen.

C Fowler,
Sheffield.

Record Breaker?

I AM writing about a program in the July issue of *Sinclair Programs,* Alphabet Time. On my first attempt on the program I got 120 units. I would like to know if anyone else has written to say they have beaten my record.

Andrew Lamb, aged 11,
Edgbaston, Birmingham.

Werewolf's Lair Changes

IN THE OCTOBER edition in the game Werewolf Lair a few mistakes were made. The peeks which make sure that you or the monster do not go through the walls of the maze are set up for the wrong graphics. To solve this you can either change all the graphic Hs in the maze plot to graphic As or change the 8 in lines 370, 570 and 630 to 136. With the second method you must also change the graphic As in lines 90 and 290 to graphics Hs.

I found this a very enjoyable game and have managed to achieve a high score of 753.

Tom Liptrot,
Burscough,
Lancashire.

ZX-81-to-Spectrum Conversion

I AM a newcomer to computers and I own a Spectrum 48K machine. I find your magazine very helpful but I have one problem which you could solve for me.

In the ZX-81 listings there are certain commands which are foreign to me — i.e., FAST, SLOW, g.w., g.a. Could you supply me with a list of Spectrum commands to replace them in the listings so I can make full use of your magazine? Perhaps the listing could be printed in the magazine for the benefit of other Spectrum owners.

M Gibson,
Stoke-on-Trent.

Letter not Figure

IN PRINTING my letter in the October issue of *Sinclair Programs* you made a small mistake which made nonsense of the letter. The last part should read: Line 135 IF n=10 and y=16 THEN PRINT AT 13,17; "*":PAUSE 7*(4−*l*)+10: PRINT AT 13,17; " "

A Ferguson,
Middlesbrough.

Mark Three Defender

YOU RECENTLY sent me a reply to my letter concerning a fault in the Defender program published in the July issue of *Sinclair Programs.*

You said in your letter that a number of your readers had experienced the same fault i.e., failure of 'Cap Shift' and 'Z' keys to move the spacecraft up and down.

I have delved into this fault and have come up with a solution to the problem. If line 2020 of the program is amended as shown, all will be well.

My amended program now works perfectly.

I hope that this information will be of use to you and your readers and that it will be published in *Sinclair Programs* in due course.

C A Bailey,
Ely,
Cambs.

Readers with Model 3 Spectrums who have experienced problems with the DEFENDER program may find this amendment useful.

```
2020 LET op=dp: LET n=0: LET a=2
54+256*(255-2*h): LET l=IN a: LE
T dp=op+2*(l=109 AND op<39)-2*(l
=100 AND dp>7): IF a<>3 AND INKE
Y$="s" THEN OVER 1: PRINT AT op,
4; INK 5; "IIIIIIIIIIIIIIIIIIIII
IIII": PRINT AT op,27-USR 65057
; INK 6;"LLLLLLLLLLLLLLLLLLLLLL
LLLL": OVER 0: INVERSE 1: PLOT 3
2,170-op*8: DRAW 223,0: INVERSE
0: IF op<>d THEN GO TO 2300
```

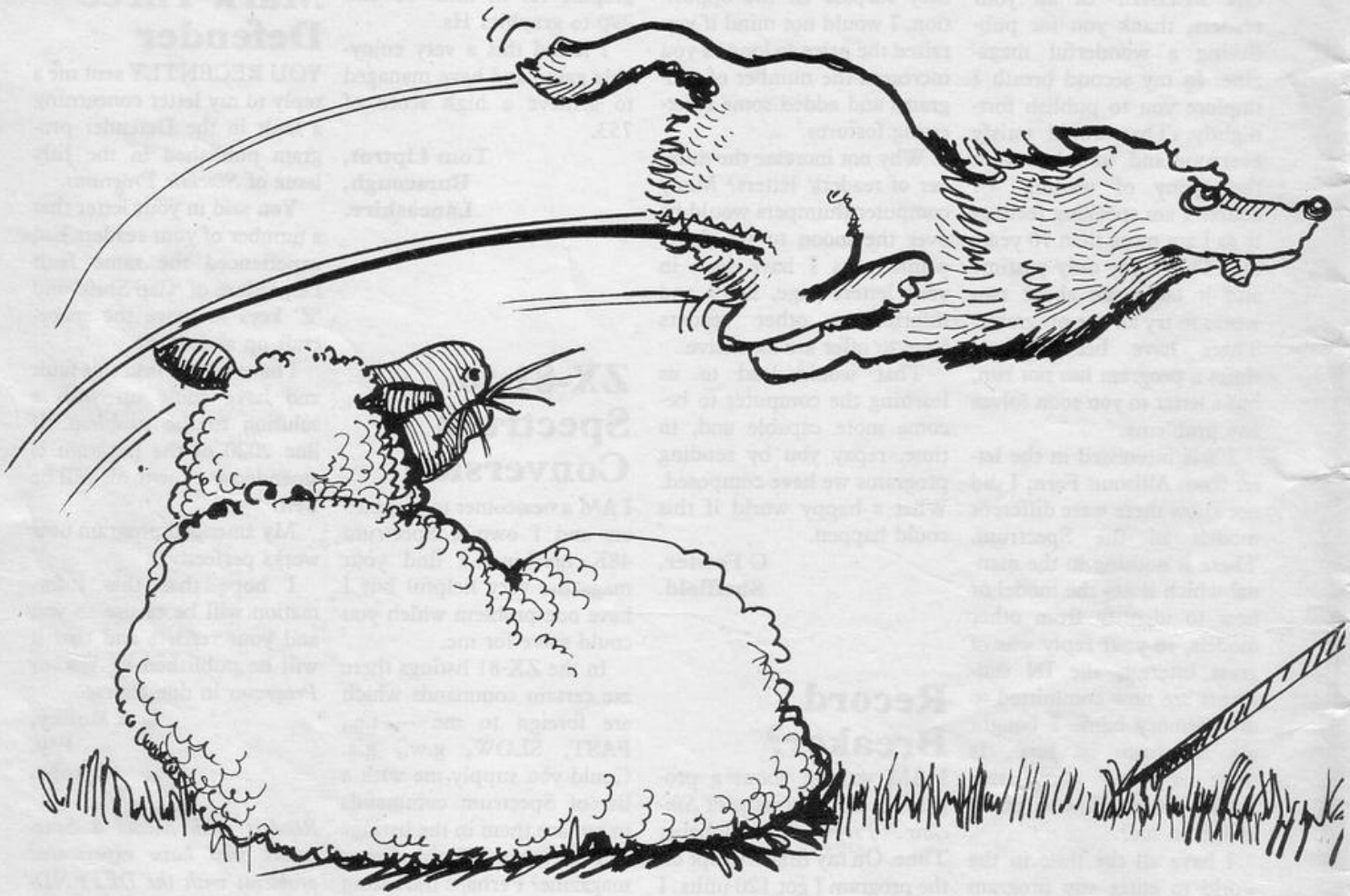
More Graphics Programs

THANK YOU for your programs like Contour, Mirror Patterns and other good graphics wonders in November *Sinclair Programs.*

I hope you will try to have one or more each month, as they can be only a few lines but be very good.

Bjorn Jonnor,
Reykjavik,
Iceland.

SHEEP DOG

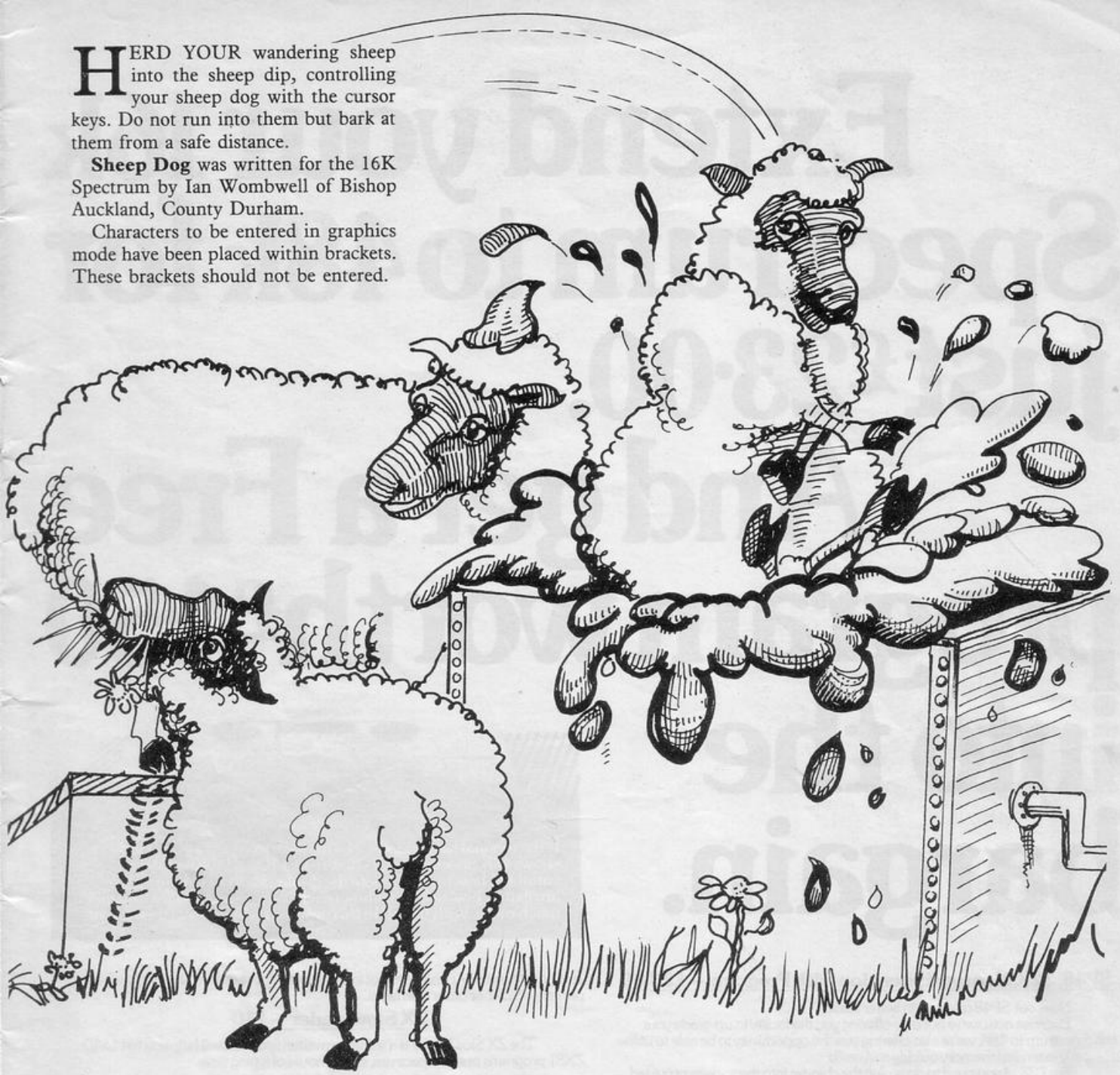


```
  10 REM "SHEEP  DOG"
  20 DIM a(4): DIM b(4): DIM c(4
): FOR n=1 TO 4: LET a(n)=INT (R
ND*31)+1: LET c(n)=0: LET b(n)=I
NT (RND*20)+1: NEXT n
  30 LET x=10: LET y=10
  40 LET t=0
  50 LET a$="( i)"
  60 LET l=3
  70 LET b$="( o)"
  80 INPUT "DO WANT PASTURE OR D
ESERT P/D";s$: IF s$="P" THEN  P
APER 4
  90 IF s$="d" THEN  PAPER 6
  95 IF s$="" THEN  PAPER 6
  97 BORDER 1: CLS
 100 FOR n=0 TO 7: READ q: POKE
USR "P"+n,q: NEXT n: DATA BIN 0,
BIN 10000000,BIN 10000100,BIN 11
000111,BIN 01111111,BIN 01111100
,BIN 01000100,BIN 01000100
 110 FOR n=0 TO 7: READ q: POKE
USR "o"+n,q: NEXT n: DATA BIN 0,
BIN 0,BIN 0000010,BIN 01111111,B
IN 01111110,BIN 01000100,BIN 010
00100,BIN 01000100
 120 FOR n=0 TO 7: READ q: POKE
USR "i"+n,q: NEXT n: DATA BIN 0,
BIN 00000001,BIN 00100001,BIN 11
100011,BIN 11111110,BIN 00111110
,BIN 00100010,BIN 00100010
 130 FOR n=0 TO 7: READ q: POKE
USR "u"+n,q: NEXT n: DATA BIN 0,
BIN 0,BIN 01000000,BIN 11111110,
BIN 01111110,BIN 00100010,BIN 00
100010,BIN 00100010
 140 FOR n=0 TO 7: READ q: POKE
USR "T"+n,q: NEXT n: DATA BIN 0,
BIN 00000000,BIN 00000100,BIN 11
000111,BIN 11111111,BIN 11111100
,BIN 01000100,BIN 01000100
 180 PLOT 103,88: DRAW 32,0: DRA
W 0,8: DRAW -32,0: DRAW 0,-8: PR
INT AT 10,15;" ": PLOT 120,80: D
RAW 0,8: PLOT 128,80: DRAW 0,8
 190 PRINT  INK 0;AT 0,0;"(32*is
p)"; INK 6; PAPER 0;AT 0,24;"DOG
S=(ppp)"
 200 FOR n=1 TO 4
 220 PRINT AT x,y;" "
 230 IF INKEY$="7" AND x>1 THEN
 LET a$="( i)": LET x=x-1: BEEP
.001,35: BEEP .003,55
 240 IF INKEY$="6" AND x<21 THEN
  LET a$="( i)": LET x=x+1: BEEP
 .001,25: BEEP .003,45
 250 IF INKEY$="8" AND y<31 THEN
  LET a$="( p)": LET y=y+1: BEEP
 .001,15: BEEP .003,35
 260 IF INKEY$="5" AND y>0 THEN
 LET a$="( i)": LET y=y-1: BEEP
.001,5: BEEP .003,25
 263 PRINT  INK 1;AT x,y;a$
 265 IF c(n)=1 AND n<4 THEN  NEX
T n
 267 IF c(n)=1 AND n>=4 THEN  GO
 TO 710
 270 PRINT AT b(n),a(n);" "
 280 IF a(n)>y AND a(n)<21 THEN
 LET a(n)=a(n)+1: LET b$="( o)":
 GO TO 350
 290 IF b(n)>x AND b(n)<21 THEN
 LET b(n)=b(n)+1: LET b$="( o)":
 GO TO 350
 300 IF b(n)<x AND b(n)>1 THEN
LET b(n)=b(n)-1: LET b$="( u)":
GO TO 350
 310 IF a(n)<y AND a(n)>0 THEN
LET a(n)=a(n)-1: LET b$="( u)":
GO TO 350
 320 IF a(n)=0 THEN  LET a(n)=a(
n)+1
 330 IF a(n)=31 THEN  LET a(n)=a
(n)-1
 340 IF b(n)=21 THEN  LET b(n)=b
(n)-1
 345 IF b(n)=1 THEN  LET b(n)=b(
```

HERD YOUR wandering sheep into the sheep dip, controlling your sheep dog with the cursor keys. Do not run into them but bark at them from a safe distance.

Sheep Dog was written for the 16K Spectrum by Ian Wombwell of Bishop Auckland, County Durham.

Characters to be entered in graphics mode have been placed within brackets. These brackets should not be entered.



```
n)+1
 350 PRINT  INK 0;AT b(n),a(n);b
$
 360 IF a(n)=15 AND b(n)=11 THEN
  LET c(n)=1: LET a(n)=n+12: LET
 b(n)=10: PRINT AT 11,15;" ": PR
INT AT b(n),a(n);"( o)": BEEP .0
1,10: BEEP .005,60: BEEP .03,20
 380 IF x=b(1) AND y=a(1) OR x=b
(2) AND y=a(2) OR x=b(3) AND y=a
(3) OR a(4)=y AND b(4)=x THEN  L
ET l=l-1: PRINT AT 0,29+l;"(i$P)

": LET x=10: LET y=10: BEEP .1,-
30: BEEP .05,0: BEEP .3,-10: IF
l<=0 THEN  GO TO 900
 700 NEXT n
 710 PLOT 103,88: DRAW 32,0: DRA
W 0,8: DRAW -32,0: DRAW 0,-8: PR
INT AT 10,15;" ": PLOT 120,80: D
RAW 0,8: PLOT 128,80: DRAW 0,8
 720 FOR m=1 TO 4: IF c(m)=1 THE
N  PRINT  PAPER 0; INK 7;AT 0,12
;"SHEEP=";AT 0,17+m;"( o)": PRIN
T AT b(m),a(m);"( o)"

 740 IF c(1)=1 AND c(2)=1 AND c(
3)=1 AND c(4)=1 THEN  GO TO 1000
 741 NEXT m

 745 LET t=t+1: PRINT  PAPER 0;
INK 5;AT 0,3;"TIME=";t

 750 GO TO 200
 800 GO TO 200
 900 PRINT AT 10,10;"you're dead"
 910 PRINT  FLASH 1; PAPER 2; IN
K 5;AT 11,3;"Keep away from the
sheep": PAUSE 70: PRINT  INVERSE
 1; INK 1;AT 12,8;"PRESS ANY KEY
": IF INKEY$="" THEN  GO TO 910
 920 RUN

1000 PRINT  FLASH 1; PAPER 0; IN
K 5;AT 0,3;"TIME=";t
1010 PRINT AT 10,10;"Game Over";
 PAPER 1; INK 6;AT 11,7;"YOU CAM.
E ";INT (t/30);" PLACE"
1020 IF INT (t/25)<=3 THEN  LET
b$="!!!EXCELLENT!!! 100%": GO TO
 1100

1030 IF INT (t/25)<=4 THEN  LET
b$="GREAT!! 80%": GO TO 1100
1040 IF INT (t/25)<=5 THEN  LET
b$="GOOD! 70%": GO TO 1100
1050 IF INT (t/25)<=6 THEN  LET
b$="AVERAGE 60%": GO TO 1100
1060 IF INT (t/25)<=7 THEN  LET
b$="FAIR 45%": GO TO 1100

1070 IF INT (t/25)<=8 THEN  LET
b$="SLOW! 30%": GO TO 1100
1080 IF INT (t/25)<=10 THEN  LET
 b$="NOT AT ALL GOOD 20%": GO TO
 1100
1090 IF INT (t/25)>10 THEN  LET

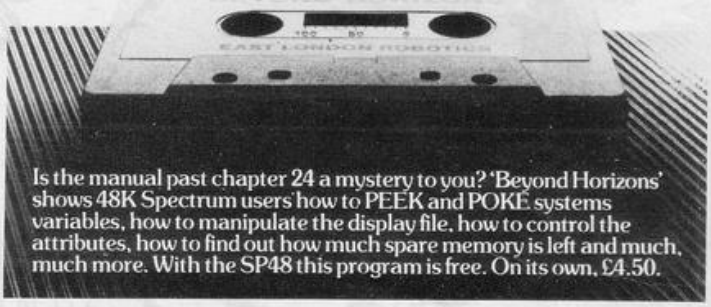
b$="A LOAD OF !!!! 10%": GO TO 1
100
2000 PRINT  INK 7; PAPER 2;"YOU

ARE ";b$;
2010 FOR n=1 TO 21: PAUSE 5: PRI
NT AT 18,15;"( p)";AT 18,13;"( p
)";AT 18,17;"( p)": BEEP .001,10
: BEEP .01,20: PAUSE 5: PRINT AT
 18,15;"( t)";AT 18,13;"( t)";AT
 18,17;"( t)": BEEP .001,0: NEXT
 n
2100 INPUT "Another go Y/N";b$:
IF b$="y" THEN  RUN

2111 LET a=0: LET b=50: LET c=-1
2200 BEEP a/10000,b: LET a=a+1:
BORDER INT (RND*7): IF a=20 THEN
  LET a=10: LET b=b+1

2210 IF b=60 THEN  LET b=0
2220 GO TO 2200
```

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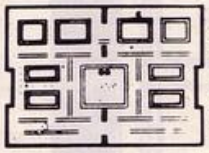
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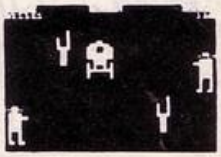
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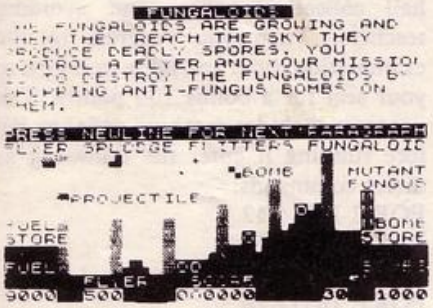


GUNFIGHT (machine code)



INVADERS (machine code)





GALAXY INVADERS (machine code)
Fleets of swooping and diving alien craft to fight off.

SNAKEBITE (machine code)
Eat the snake before it eats you. Variable speed. (very fast at top speed).

LIFE (machine code)
A ZX81 version of the well known game.

3D TIC-TAC-TOE (Basic)
Played on a 4 × 4 × 4 board, this is a game for the brain. It is very hard to beat the computer at it.

7 of the 8 games are in machine code, because this is much faster than Basic. (Some of these games were previously available form J. Steadman).

CASSETTE 5 **8 games for 16k ZX81** **£6**

BYTE-MAN (machine code)
(previously available from Mindseye)



BREAKOUT (machine code)



PLANETOIDS (machine code)
Rotate, move, fire and hyperspace controls. Wide range of choice of speed and difficulty.

DODGEMS (machine code)
Dodge the computer's car while eating the dots.

SPACE RESCUE (machine code)
(previously available from Mindseye)



BLITZ (machine code)



DRAUGHTS (machine code)
Three skill levels.

MERCHANT (Basic)
Make your fortune on trading voyages in the Mediterranean and beyond.

7 of the 8 games are in machine code because it is much faster than Basic.

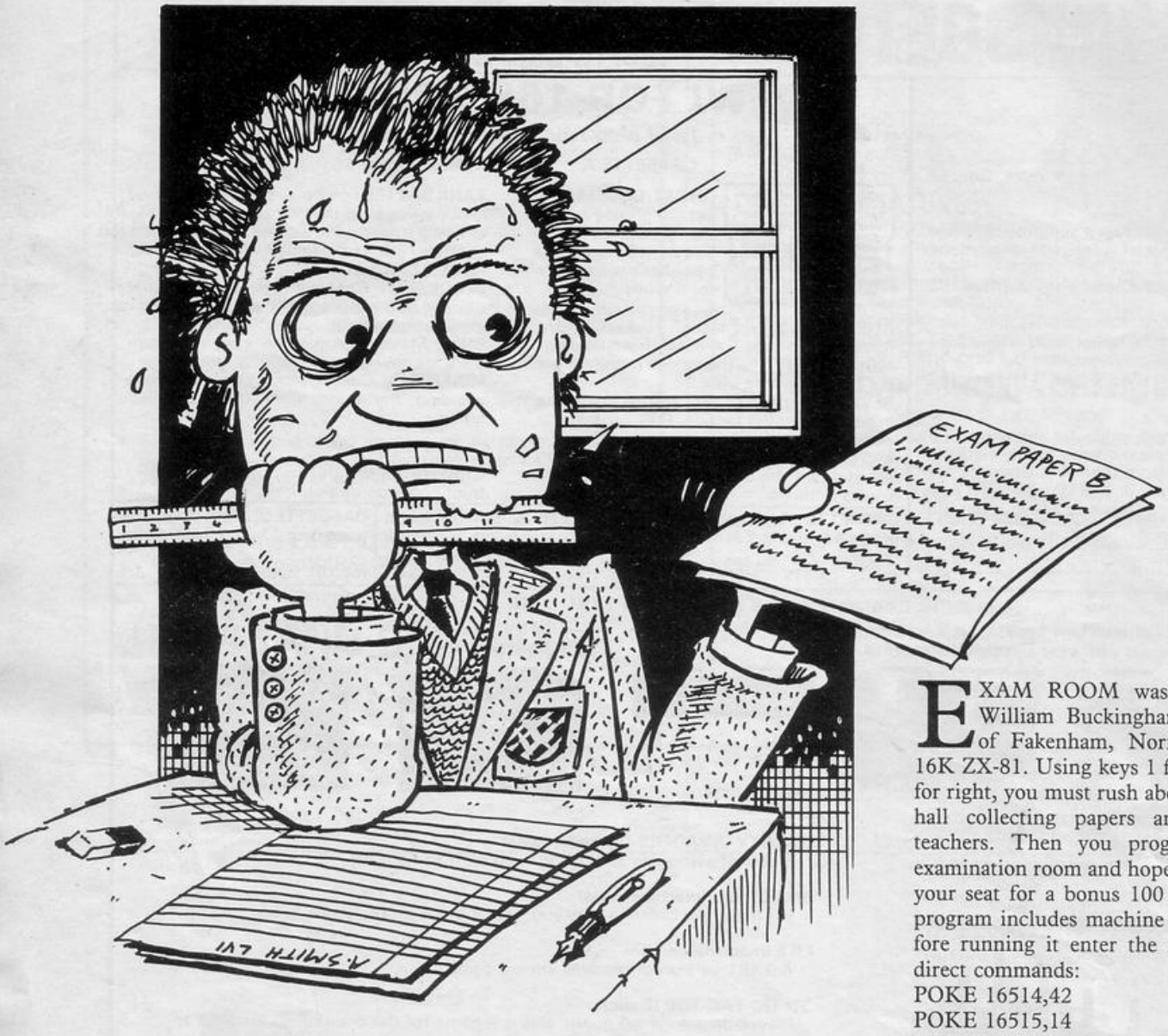
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EXAM ROOM

EXAM ROOM was written by William Buckingham, aged 12, of Fakenham, Norfolk for the 16K ZX-81. Using keys 1 for left and 0 for right, you must rush about the main hall collecting papers and avoiding teachers. Then you progress to the examination room and hope to return to your seat for a bonus 100 points. The program includes machine code, so before running it enter the following as direct commands:

POKE 16514,42
POKE 16515,14
POKE 16516,64
POKE 16517,78
POKE 16518,6
POKE 16519,0
POKE 16520,201
POKE 16510,0

```
  1 REM 1234567
  2 CLS
 10 LET S=0
 20 LET X=19
 25 LET Y=30
 30 LET T=-1
 31 FAST
 35 PRINT AT 0,0;"(15*SP:exam roo
m:5*15*SP:main hall:8*15*SP)"
 40 FOR F=1 TO 19
 45 PRINT AT F,0;"(15*SP:30*SP:15
*SP)"
 50 NEXT F
 55~PRINT AT 20,0;"(32*15*SP)"
 56 GOSUB 1000
 61 PRINT AT X,Y;"0";AT X-1,Y;"
";AT X-2,Y;" ";AT X-3,Y;" "
 62 FOR F=1 TO 50
 63 NEXT F
 70 PRINT AT X,Y;" "
 80 LET X=X+T
100 LET Y=Y+(INKEY$="0")-(INKEY
100~LET Y=Y+(INKEY$="0")-(INKEY
$="1")
101 IF X=1 AND Y=1 THEN GOTO 20
00
110 PRINT AT X,Y;
120 LET L=USR 16514
130 IF L>=128 THEN GOTO 500
140 IF L=23 THEN GOTO 300
150 PRINT "0"
180 GOTO 70
300 LET S=S+1
310 LET T=-T
340 GOTO 70
500 PRINT AT X,Y;CHR$ L
505 PRINT AT 18,5;"ANOTHER GAME
? (Y/N)"
510 PRINT AT 21,0;"YOUR SCORE:
";S
515 INPUT A$
520 IF A$="Y" THEN RUN
530 GOTO 500
1020 FOR F=1 TO 110

1030~PRINT AT INT (RND*18)+1,INT
 (RND*30)+1;"*"
1040 NEXT F
1050 FOR F=1 TO 20
1060 PRINT AT INT (RND*18)+1,INT
 (RND*30)+1;"(i'')"
1070 NEXT F
1075 PRINT AT 10,0;"(7*15*SP:i'':SP
:i'':15*SP)"
1076 PRINT AT 1,1;"(9h)          "
;AT 2,1;" "
1080 FOR F=1 TO 9
1090 PRINT AT F,10;" (15*SP)"
1095 NEXT F
1096 PRINT AT 9,8;"  ";AT 11,8;"
  "
1100 SLOW
1105 RETURN
2000 FOR F=1 TO 20
2010 PRINT AT 1,1;"(10)";AT 1,1;
"(9h)"
2020 NEXT F
2030 LET S=S+100
2040 PRINT AT 21,0;"BONUS 100.YO
UR SCORE: ";S
2045 PAUSE 4E4
2050 CLS
2060 GOTO 20
9998 SAVE "EXAm"
9999 RUN
```



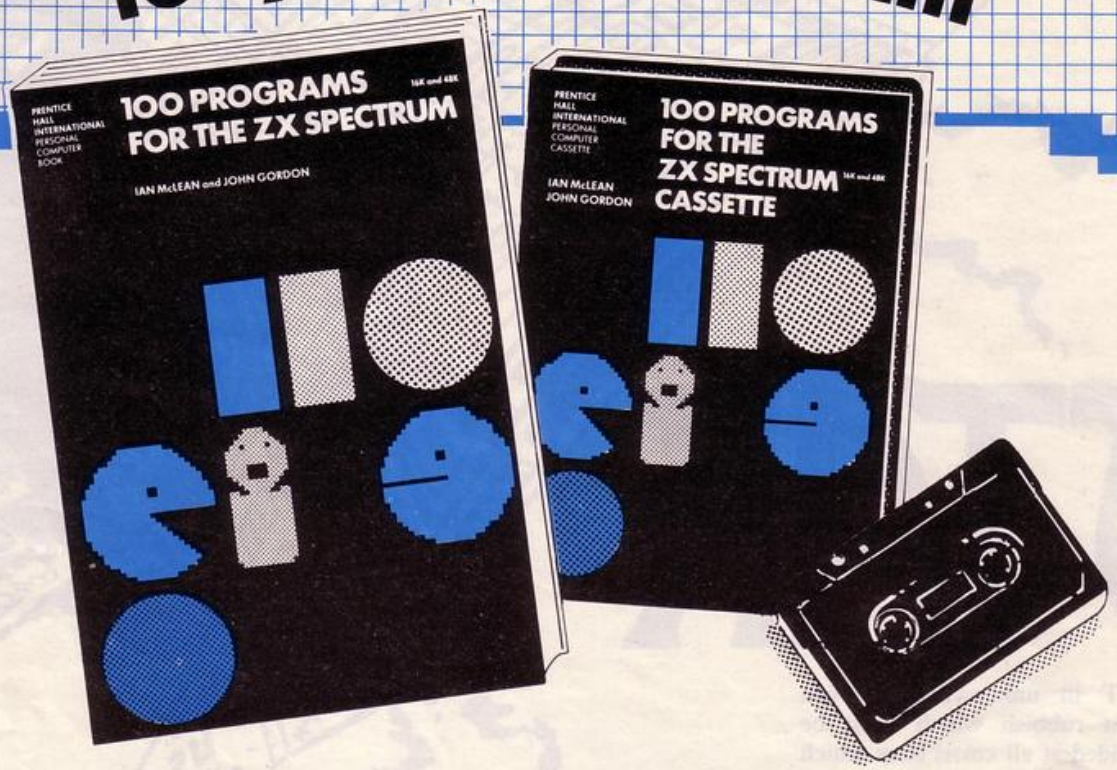
STAR

LOST in unknown space you meet rubbish which must be avoided at all costs, stars which you must not touch, a black hole the sides of which you must not touch, coloured fuel dumps which you must try to hit, and red booby-trapped fuel dumps which you must also avoid. Steer left with 5 and right with 8.

Star was written for the 16K Spectrum by P Loach of Hadleigh, Suffolk.

```
  10 GO SUB 9000
  20 FOR f=1 TO 20
  30 FOR g=1 TO 22: GO SUB scrol
l: NEXT g: GO SUB 1000+1000*INT
(RND*4): NEXT f
  40 INK 1: PAPER 5: FLASH 1: CL
S : FOR f=1 TO 50: BEEP .05,f: B
ORDER f/7: NEXT f: PRINT#0;"
     YOU SAVED EARTH": BEEP 1,10
  50 PRINT AT 1,5; FLASH 1;"Anot
her game ?"'''' FLASH 0;"  You s
cored ";s'"  & reached adventure
 ";f
  60 IF INKEY$="y" OR INKEY$="Y"
 THEN  RUN
  70 IF INKEY$="n" OR INKEY$="N"
 THEN  GO TO 9999
  80 GO TO 60
 500 POKE 23692,20: PRINT AT 21,
0'': RETURN
 600 BEEP .01,0: LET x=x+(INKEY$
="8" AND x<30)-(INKEY$="5" AND x
>1): RETURN
 650 IF SCREEN$ (1,x)>"" THEN  R
ETURN
 660 GO TO 710
 700 IF ATTR (1,x)<8 THEN  RETUR
N
 710 INK 6: PAPER 2: FLASH 1: CL
S
 720 FOR g=1 TO 30: BEEP .05,g:
BORDER g/7: CLS : NEXT g: GO TO
50
1000 LET p=15
1010 FOR g=1 TO 100: GO SUB scro
ll: PRINT AT 0,x; INK 6;"s"
1020 PRINT AT 21,0; PAPER RND*5+
1;"
    ";AT 21,p; PAPER 0;"     ";: G
O SUB move: GO SUB hit: LET s=s+
1: LET p=ABS (p+INT (RND*3)-1-(p
=25)): NEXT g: RETURN
2000 INK 3: FOR g=1 TO 100: LET
s=s+1: IF RND>RND THEN  PLOT 8*I
NT (RND*27),7: DRAW 39,0
2010 GO SUB scroll: PRINT AT 0,x
; INK 6;"s": GO SUB move: GO SUB
 hit1: NEXT g: RETURN
3000 INK 7: FOR g=1 TO 100: LET
s=s+1: GO SUB scroll: PRINT TAB
RND*31; BRIGHT 1;"*";AT 0,x; INK
 6;"s";AT 21,x; BRIGHT 1;"*" AND
 RND>.3: GO SUB hit: GO SUB move
: NEXT g: RETURN
4000 INK 0: CLS : FOR g=1 TO 100
: LET a=ATTR (1,x): LET i=INT (R
ND*5+1): GO SUB scroll: PRINT TA
B RND*31; INK i; FLASH i=2;"■";A
T 0,x; INK 6;"s": IF a>127 THEN
 GO TO 710
4010 LET s=s+2*a: BEEP a/20,0: G
O SUB move: NEXT g: RETURN
9000 FLASH 0: BRIGHT 0: BORDER 0
: PAPER 0: INK 2: CLS
9010 LET hit1=650: LET x=15: LET
 scroll=500: LET move=600: LET h
it=700: LET s=0
9020 PRINT  INK 6;TAB 9;"SPACE V
OYAGE"''" You are lost in unknow
n space"'" During your voyage yo
u will "'" meet some space rubbi
sh"''"You must avoid this at all
 cost"'"Also you may meet a blac
k hole"'"& inside you must not t
ouch the"'"sides.Also you must a
void all"'"stars.Finally you 9ai
n fuel by"'"crashing into the co
loured fuel"'"dumps (■) but bewa
re,the red "'"dumps are booby tr
apped"
9030 PAUSE 1: PAUSE 0: RESTORE 9
030: FOR f=0 TO 7: READ g: POKE
USR "s"+f,VAL ("BIN "+STR$ g): N
EXT f: RETURN : DATA 11111111,10
0100,111100,1100011,1111110,1111
1111,9,1111110
9999 BORDER 7: PAPER 7: INK 0: F
LASH 0
```

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SP1

```
  1 LET H=0
  5 PRINT AT 20,0;"(32*isP)"
 10 LET S=0
 20 LET D=10
 25 LET K=0
 40 LET B=2
 50 LET A=INT (RND*26)+3
 55 PRINT AT 0,0;S
 56 PRINT AT 0,30;H
 60 PRINT AT 19,D;" (92:96:91)
"
 70 LET D=D+(INKEY$="8" AND D<2
8)-(INKEY$="5" AND D>1)
 80 PRINT AT B,A;"*"
 85 PRINT AT B-1,A;" "
 90 LET B=B+1
 92 IF A=D+2 AND B=19 THEN GOTO
 110
 95 IF B=21 THEN GOTO 150
100 GOTO 60
110 LET S=S+1
120 PRINT AT 18,D+2;" "
130 GOTO 40
150 LET K=K+1
160 IF K=3 THEN GOTO 180
170 GOTO 40
180 CLS
181 PRINT "YOU HAVE FAILED TO S
AVE ALL THE  PEOPLE"
182 PRINT
185 LET H=S
190 PRINT "YOU SAVED ";S;" LIVE
S"
200 PRINT
210 PRINT "ANOTHER GO?"
220 INPUT F$
222 IF F$="N" THEN STOP
225 CLS
230 GOTO 5
240 SAVE "RESCUe"
250 CLS
260 PRINT "ANY KEY TO START"
270 PAUSE 4E4
275 CLS
280 RUN
```



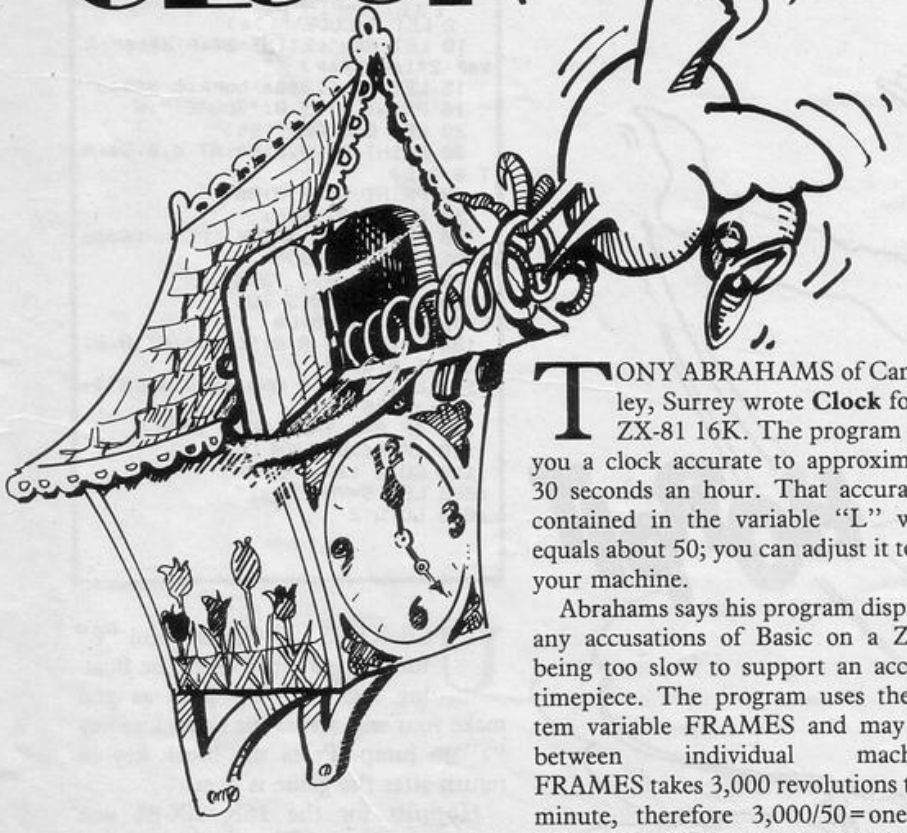
RIVER RESCUE

USE KEYS 5 and 8 to move the boat at the bottom of the screen to catch the people falling from the sky. When three people have drowned your score is given.

River Rescue was written by Julian North of Pontefract, West Yorkshire.

BEGINNER

CLOCK

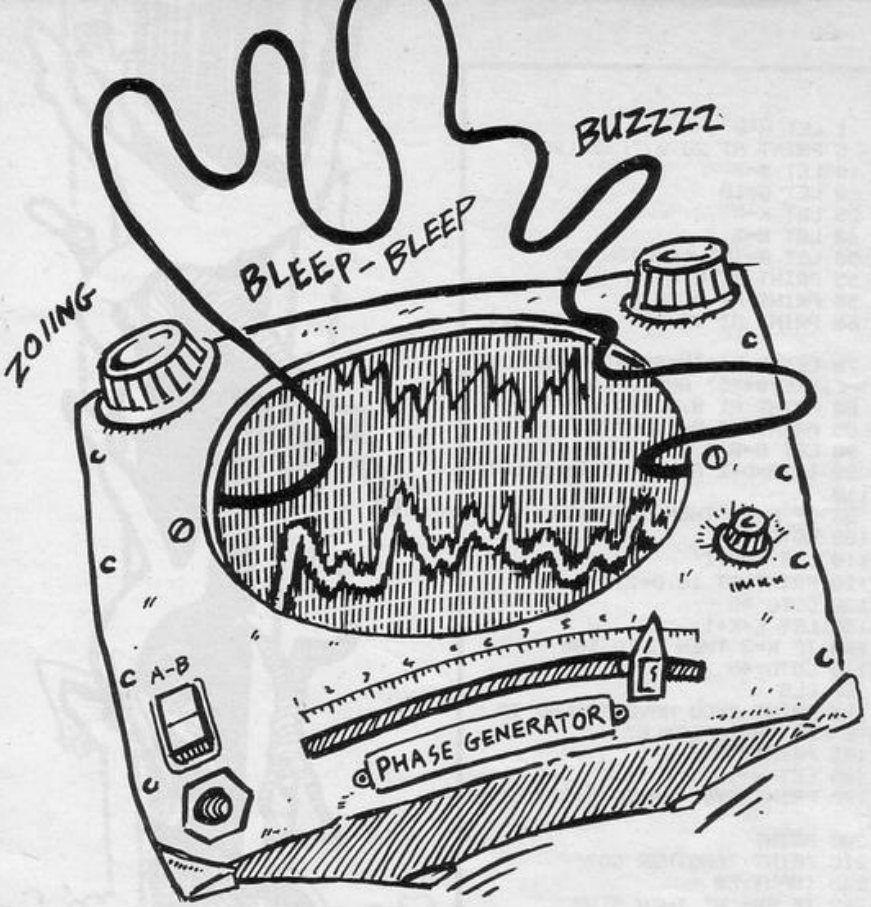


TONY ABRAHAMS of Camberley, Surrey wrote **Clock** for the ZX-81 16K. The program gives you a clock accurate to approximately 30 seconds an hour. That accuracy is contained in the variable "L" which equals about 50; you can adjust it to suit your machine.

Abrahams says his program disproves any accusations of Basic on a ZX-81 being too slow to support an accurate timepiece. The program uses the system variable FRAMES and may vary between individual machines. FRAMES takes 3,000 revolutions to the minute, therefore 3,000/50=one second. The clock may jump variables according to variable "L".

```
 10 PAUSE 0
 11 LET L=49.277
 20 PRINT "INPUT THE TIME IN FO
RM ""HH MM""  WHERE H=HOUR(1 TO
12) AND M=    MINUTE(0 TO 60)"
 21 INPUT A$
 23 LET H=VAL A$(1 TO 3)
 30 LET M=VAL A$(4 TO )
 35 PRINT "PRESS KEY TO START C
LOCK AT      ";H;":";M;":00"
 36 LET A$=INKEY$
 37 IF A$="" THEN GOTO 36
 45 CLS
 46 PRINT AT 9,9;"(10*isP)";TAB
 9;"(10*isP)";TAB 9;"(10*isP)"
 50 PAUSE 0
 61 LET A=(PEEK 16436+256*PEEK
16437)
 71 LET S=INT (ABS ((PEEK 16436
+256*PEEK 16437)-A)/L)
 81 IF S>=60 THEN GOTO 111
 91~PRINT AT 10,10;H;":";M;":";
S
101 GOTO 71
111 LET M=M+1
121 CLS
131 IF M=60 THEN LET H=H+1
141 IF H>12 THEN LET H=1
151 IF M=60 THEN LET M=0
171 LET A=(PEEK 16436+256*PEEK
16437)
175 PRINT AT 9,9;"(10*isP)";TAB
 9;"(10*isP)";TAB 9;"(10*isP)"
181 GOTO 71
191 SAVE "TIMe"
201 RUN
202 REM aPProx 1 bytes
```

```
   1 PRINT AT 10,5;"Phase lead a
nd lag"
   2 PAUSE 100
   3 CLS
   4 PRINT AT 5,0;"This Programm
e will help you to understand  A
.C. theory and the study of wave
s. It Plots graPhs of sinusoidal
 functions for      various Phase
 angles"
   5 PAUSE 300
   8 CLS
  10 INPUT "If y=aSIN (wt+&) typ
e angle  &  in multiples of PI r
adians       eg 0,.5,1,-.5 etc an
d ENTER",a
  11 IF a=0 THEN  PRINT "SIN (wt
+&),&=";a: GO TO 15
  14 PRINT "SIN (wt+&),&=";a;"PI
"
  15 FOR n=0 TO 255
  20 PLOT n,88+50*SIN (n/128*PI+
a*PI)
  30 NEXT n
  40 INPUT "type cl to clear scr
een or any  letter to continue";
a$
  50 IF a$="cl" THEN  GO TO 7
  60 IF a$<>"cl" THEN  GO TO 10
```



PHASE

BEGINNER

PHASE is a useful program for anyone studying physics, as it demonstrates the idea of phase lead and lag. It plots graphs of sinusoidal functions for various phase angles. It was written by G W Davies of Ammanford, Dyfed for the 16K Spectrum.




```
   1 LET S=PI-PI
   2 LET A=CODE "(9a)"
  10 LET A$="(2*isP:2*sP:2*isP:2
*sP:2*isP:2*sP)  "
  15 LET B$="(3*9a:hoPPit:3*9a)"
  16 PRINT AT 9,0;"SCORE:";S
  20 LET B=CODE "(9t)"
  30 PRINT AT 0,0;B$;AT 4,0;B$;A
T 8,0;B$
  40 PRINT AT 2,0;A$
  50 PRINT AT A,B;
  60 LET P=VAL "PEEK (PEEK 16398
+256*PEEK 16399)"
  70 LET C$=A$( TO 2)
  80 LET A$=A$(3 TO )
  90 LET A$=A$+C$
 100 PRINT AT A,B;"(i )";AT A,B;
" ";AT 6,0;A$
 101 LET A=A-(2 AND INKEY$="8")-
(INKEY$="5")
 103 IF A=0 THEN GOTO 1000
 110 IF P<>0 THEN GOTO 30
 120 GOTO 120
1000 LET S=VAL "S+1"
1010 GOTO 2
```

USE KEYS "5" for left and "8" for right to move on to the floating logs and lily pads as you make your way across the river. Use key "7" to jump. Press the break key to return after the game is over.

Hoppitt for the 16K ZX-81 was written by Mark McLeod of Aylesbury, Bucks.

CAVEMAN



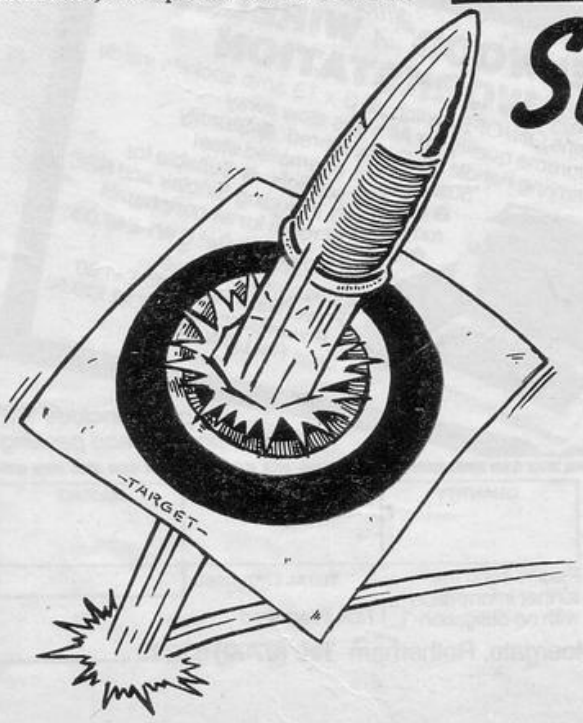
CAVEMAN is for the 1K ZX-81 by A Chetwode of Ramsbury, Wilts. You are a caveman hunting in the woods for supper. You throw stones at birds passing overhead with key "P". Twenty-five birds fly overhead at different angles and your score is shown.

```
  1 LET S=0
  2 LET A=0
  3 RAND
  4 FOR A=1 TO 25
  5 CLS
 40 LET M=18
 92 LET F=2*(INT (RND*8))
 95 FOR B=0 TO 20
100 PRINT AT F,B;"=D"
125 PRINT AT 18,14;"T"
126 PRINT AT 19,15;"|"
127 PRINT AT 20,14;"/ \"
130 IF M<F THEN LET M=18
140 IF INKEY$="P" OR M<18 THEN
PRINT AT M,16;"."
150 IF B=15 AND M=F THEN GOTO 1
500
155 IF B=14 AND M=F THEN GOTO 1
500
160 IF INKEY$="P" OR M<18 THEN
GOSUB 1000
300 PRINT AT F,B;"   "
370 NEXT B
500 NEXT A
700 PRINT AT 20,16;S
1000 PRINT AT M,16;" "
1010 LET M=M-2
1020 RETURN
1500 PRINT AT M-1,B;"\=/"
1555 PRINT AT M,B;"D=--"
1556 PRINT AT M+1,B;"/ \"
1557 PRINT AT M,B;"..*.."
1558 PRINT AT M+1,B;"....."
1559 PRINT AT M-1,B;"....."
1560 PRINT AT M-2,B;"....."
1570 PRINT AT M+2,B;"....."
1700 PAUSE 50
1750 LET S=S+1
1800 NEXT A
2000 PRINT AT 20,16;S
```

BEGINNER

THE OBJECT of **Sniper-Fire** is to destroy the target on your right as many times as possible. You select your range, then control your aim with "A"=UP, "Z"=DOWN and "NEWLINE"=FIRE.

It was written by James Knowles of Aldershot, Hampshire for 16K ZX-81.



SNIPER FIRE

```
 10 LET M=0
 20 PRINT AT 0,0;"WHAT RANGE 5-
30"
 30 INPUT E
 40 IF E>=31 OR E<=4 THEN GOTO
20
 45 CLS
 50 LET A=10
 60 LET B=24
 70 LET C=0
 80 LET D=0
 90 PRINT AT 5,21;"MISSES...";C
100 PRINT AT 7,21;"HITS.....";D
110 PRINT AT 3,21;"RANGE....";E
120 PRINT AT 10,21;"HIGH.....";
M
130 PLOT 0,A
140 PLOT E,B
150 UNPLOT 0,A
160 UNPLOT E,B
170 IF INKEY$=CHR$ 118 THEN GOT
O 220
180 LET F=INT (RND*2)
190 IF F=0 THEN LET B=B+1
200 IF F=1 THEN LET B=B-1
210 LET A=A+(INKEY$="A")-(INKEY
$="Z")
215 GOTO 130
220 FOR N=1 TO E
225 PLOT E,B
230 PLOT N,A
240 UNPLOT N,A
250 IF N=E AND A=B THEN GOTO 28
0
260 IF N=E AND A<>B THEN GOTO 3
40
270 NEXT N
280 FOR N=1 TO 5
290 PRINT AT 0,0;"hit"
300 PRINT AT 0,0;"   "
310 NEXT N
320 LET D=D+1
330 GOTO 90
340 FOR N=1 TO 5
350 PRINT AT 0,0;"miss"
360 PRINT AT 0,0;"    "
370 NEXT N
380 LET C=C+1
390 IF C=4 THEN GOTO 410
400 GOTO 90
410 IF D>M THEN LET M=D
420 CLS
430 GOTO 20
```

BEGINNER

KELWOOD ADD-ITS FOR SINCLAIR ADDICTS

WEAR SAVERS

● Cuts out wear and tear on plugs and sockets ● Switching for SAVE/LOAD and 9 volts ON/OFF.
Spectrum Ref **WSS** £9.95
ZX81 Ref **WSZX** £9.75

SENSATIONAL KELWOOD POWER BASE COMPLETES YOUR COMPUTER

It's so good, Clive should have thought of it!!

● ON/OFF switch for instant screen clearing ● LOAD/SAVE switch ● All wires included ● Angled for easier use ● Saves wear and tear on connections ● Real value for money
Spectrum Ref **PBS1** £13.50 ZX81 Ref **PBZX1** £13.00.



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The compact way to work
● Room for all essential peripherals ● Ideal for use in restricted spaces ● Allows the computer etc to be moved around with the minimum of effort
Ref. **MS** £7.50



BACKPACKS



Six versions of this indispensable unit complete your computer. All have SAVE/LOAD and ON/OFF switching and a housing for the transformer. **MICRODRIVE compatible**

Ref **BP1** – Fully variable sound amp – 3 x 13 amp sockets, switch and neon indicator – cable and plug	£27.50
Ref. **BP2** – as BP1 but no sockets, cable and plugs. Has room to fix your own 'Duraplug' sockets	£19.50
Ref. **BP3** – as BP1 but no sound	£21.50
Ref. **BP4** – as BP1 but no sound or sockets	£13.05
Ref. **BP5** – ZX81 version inc. sockets, mains switch neon, cable and plug	£20.85
Ref. **BP6** as BP5 but no cable or sockets	£12.85

AND ALSO SOUND POWER BASE GET REAL SOUND FROM YOUR SPECTRUM!

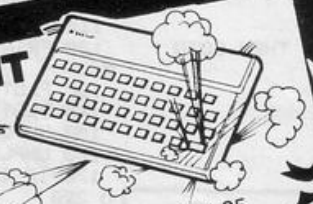
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The great Spectrum sound improver

SUPER SOUND SPEC-AMP

● Fully adjustable Spectrum Sound Amplifier ● Simply plugs into mic. socket
Ref **SSS** ONLY £7.00 (PP3 Battery included)

COOL-IT UNIT



Takes the heat out of your computer.
Lets your Spectrum or ZX81 run much cooler.

Separate Cool-it Unit
ZX81 Ref **ZXC** £11.65 Spectrum Ref **SC** £11.85

Other Kelwood add-its with Cool-it unit built in

Power Base (Spectrum)	Ref **PBSIC** £18.55
Power Base (ZX81)	Ref **PBZXIC** £19.35
Sound Power Base (Spectrum only)	Ref **SPBIC** £25.00
Back Pack 1	Ref **BP1C** £32.55
Back Pack 2	Ref **BP2C** £24.55
Back Pack 3	Ref **BP3C** £26.55
Back Pack 4	Ref **BP4C** £18.60
Back Pack 5	Ref **BP5C** £26.90
Back Pack 6	Ref **BP6C** £18.90
Wearsaver (Spectrum)	Ref **WSSC** £16.00
Wearsaver (ZX81)	Ref **WSZC** £15.80

ZX81 RAM-PACK WOBBLE?

SOLVE IT WITH A **KELWOOD WOBBLE STOPPER**

● Firmly clamps Ram-Pack to computer ● No glue ● No solder ● Easily removed
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Extra long for printer – Flat: Ref **LW** £5.75. Tilted: Ref **LTW** £6.75

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Accessories for above
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Power Base Ref **PBZX2** £10.50
Legs Ref **LCW** £11.00



All prices include VAT and postage and packing

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_____ SP1

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QUANTITY	REF	AMOUNT
	TOTAL ENCLOSED	

Please send me further information with no obligation ☐ *Tick if required*

KELWOOD COMPUTER CASES Downs Row, Moorgate, Rotherham **Tel: (0709) 63242**

```
  1 REM ****COCONUT CLIMBER****
  5 REM ***set up variables***
  6 POKE 23658,8
 10 PAPER 6: BORDER 6: CLS
 20 FOR a=0 TO 7: READ b: POKE
USR "a"+a,b: NEXT a
 30 DATA 24,24,255,24,24,36,66,
0
 40 LET X=5: LET Y=31
 50 LET C=5: LET D=31
 60 LET SC=0
 62 GO SUB 400
 65 PRINT AT 14,3;"ENTER YOUR S
KILL LEVEL(1-3)"
 70 PAUSE 0: LET J=VAL INKEY$
 75 IF J<1 OR J>3 THEN  GO TO 6
5
 80 LET J=J*15
 90 CLS
100 REM *****Print screen*****
110 PRINT AT 0,0; INK 4;"(sP:ig
2:3*ig8:ig1:sP:ig2:3*ig8:ig1:sP:
ig2:3*ig8:ig2:sP:ig2:3*ig8:ig1:s
P:ig2:3*ig8:ig1:sP)"
120 PRINT AT 1,0; INK 0;" @ @ @
@ @ @ @ @ @ @ @ @ @ @"
130 PRINT AT 17,0; INK 0;"-----
--------------------------"
140 FOR a=18 TO 21
150 PRINT AT a,0; PAPER 1;"
                          "
160 NEXT a
190 PRINT AT C,D;" "
200 PRINT AT X,Y;"a"
202 PRINT AT 0,0; INK 4;"(sP:ig
2:3*ig8:ig1:sP:ig2:3*ig8:ig1:sP:
ig2:3*ig8:ig2:sP:ig2:3*ig8:ig1:s
P:ig2:3*ig8:ig1:sP)"
203 PRINT AT 21,0; PAPER 1; INK
7;"NUMBER OF COCONUTS= ";SC
205 LET C=X: LET D=Y
210 LET X=X+1
220 IF X<16 OR X<-16 THEN  GO S
UB 300
225 PAUSE 4
230 IF X=17 THEN  GO SUB 320
240 IF X=20 THEN  GO TO 900
250 IF X=1 OR X=-1 THEN  GO SUB
340
259 IF SC=0 THEN  GO TO 262
260 LET G=SC/15: IF G=INT G THE
N  PRINT AT 1,0;" @ @ @ @ @ @ @
@ @ @ @ @ @ @ @ @"
261 LET G=SC/J: IF G=INT G THEN
  PRINT AT 17,0;"---------------
----------------"
270 IF Y<0 THEN  LET Y=0
280 IF Y>31 THEN  LET Y=31
290 GO TO 190
300 LET Y=Y+(INKEY$="P")-(INKEY
$="Q")
310 RETURN
320 IF SCREEN$ (X,Y)="-" THEN
LET X=-X
330 RETURN
340 IF SCREEN$ (X,Y)="@" THEN
LET SC=SC+1
350 RETURN
400 PRINT "          INSTRUCTIONS
"
410 PRINT '"          COCONUT CL
IMBER"
420 PRINT "                  BY N
IGEL HURST"
430 PRINT '" YOU HAVE TO COLLEC
T COCONUTS BYBOUNCING UP AND DOW
N ON THE     STEPING STONES.YOU
GET A NEW SET OF COCONUTS WHEN Y
OU CLEARED"
440 PRINT "THE SCREEN.THE STONE
S DISAPEAR  AS YOU BOUNCE ON THE
M ,BUT YOU  GET NEW STONES EVERY
 SO OFTEN   DEPENDING ON YOUR SK
ILLL."
450 RETURN
900 PRINT AT 10,10; FLASH 1; BR
IGHT 1;"YOU DROWNED"
```



coconuts

COLLECT as many **Coconuts** as possible by bouncing on the stepping stones. The stones disappear as you bounce on them but new ones appear at intervals, depending on your skill level. Bounce left with P and move right with Q.

Written for the 16K Spectrum by Nigel Hurst of Upper Hartfield, East Sussex.

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"The whole game mechanism makes for a very Addictive Program, and one that remains a firm favourite with many Adventurers."
Popular Computing Weekly. June 1983.

For the 48K Spectrum or ZX-81 16K @ £5.00

DEVIL RIDES IN



THE DEVIL RIDES IN

I uttered the last incantations as the clock struck thirteen. All fell silent except for a faint rustling in the corner. From out of the shadows they came, all Hell's fury against me but I was not defenseless until the Angel of Death, astride a winged horse, joined the battle. Avoiding his bolts of hell fire, I took careful aim. My chances were slim, but my luck held . . .

(Fast moving, machine code, all action, Arcade game)

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The first born has been destroyed. The Black Crystal of Beroth has been banished. The alliance of Evil has been defeated by the armies of Lord Fendal. So ends the Third Age. Now we invite you to write your name in the history of the Fourth Age of the Third Continent.

You will meet friends and enemies, old and new, in the long awaited sequel to Volcanic Dungeon. Using high resolution graphics and combining the best qualities of "Black Crystal" and "Volcanic Dungeon", we will allow you to become part of this tale of revenge.

"The Wrath of Magra" comes as three, 48K programmes on cassette, boxed with instruction manual and book detailing the history of the Third Continent and the many spells you will be using throughout the game. For the 48K Spectrum @ £12.50.

NOTE: "The Wrath of Magra" is a complete adventure. You need not buy "Volcanic Dungeon" or "Black Crystal" to play it.

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NEW



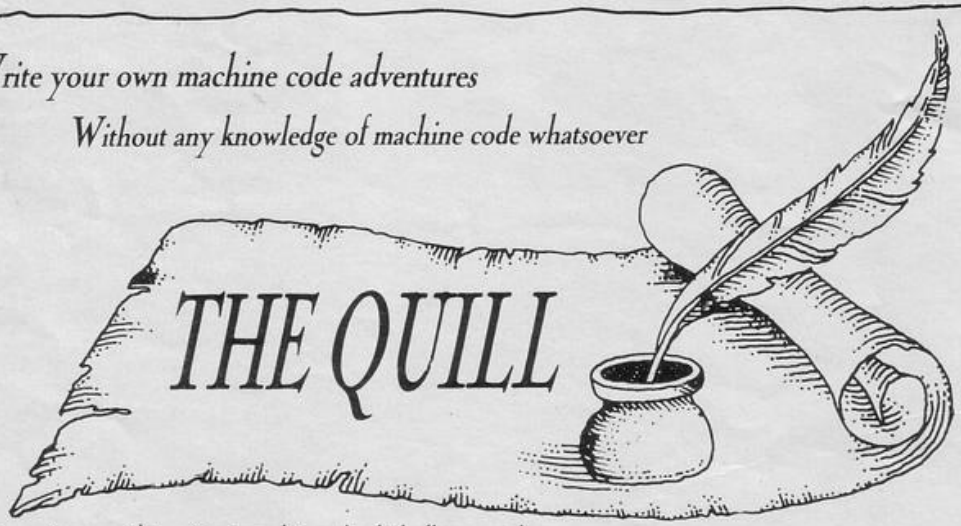
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Without any knowledge of machine code whatsoever



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Using a menu selection system you may create well over 200 locations, describe them and connect routes between them. You may then fill them with objects and problems of your choice. Having tested your adventure you may alter and experiment with any section with the greatest of ease . A part formed adventure may be saved to tape for later completion. When you have done so*THE QUILL* will allow you to produce a copy of your adventure which will run independently of the main *QUILL* editor, so that you may give copies away to your friends.

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Design by Portland Artists

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Please send me ☐ Death Cruiser/s

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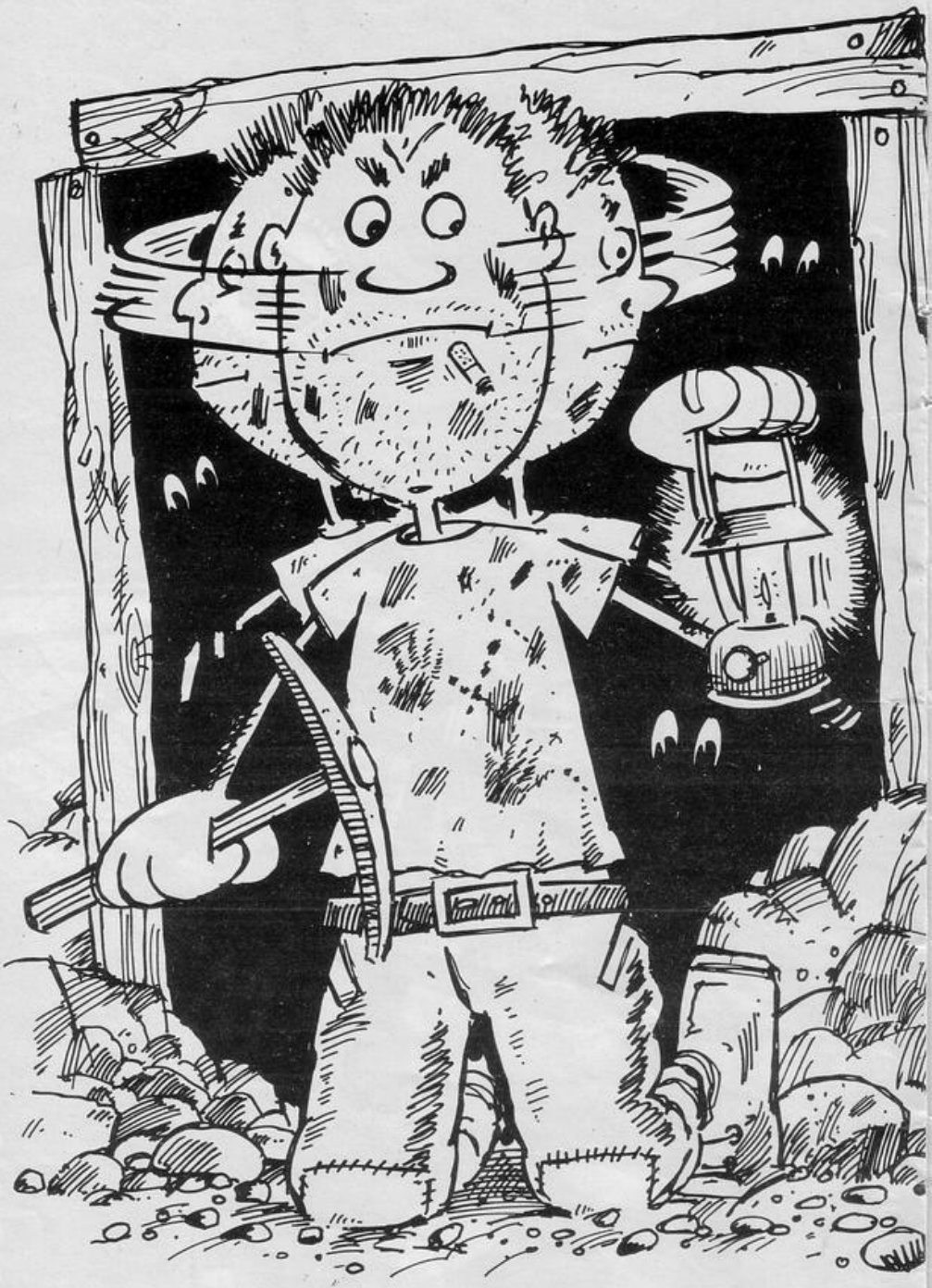
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NHS



BUILD

USE THE CURSOR keys to climb the ladders, slide down the mine shafts and avoid the monsters, the escaped pit trucks, the rotting planks, and the mysterious moving wall. Collect the gold and the picks and then proceed to the bottom right-hand corner to move to the next level.

To enter, type-in the first program, RUN it, then type CLEAR. Type 'SAVE' "Builder" LINE 1', VERIFY it and then type NEW. Enter the second program, save it with SAVE "Builder" line 9999 and VERIFY it. **Builder** can then be LOADed as one program.

Written for the 16K Spectrum by Ian McNair of Kingston-upon-Thames, Surrey.

```
    1 BORDER 1: PAPER 1: INK 7: C
LEAR : PRINT AT 10,9; FLASH 1;"P
LEASE  WAIT"
   10 DATA "A",187,187,0,238,238,
0,119,119
   15 DATA "B",56,60,25,126,152,6
0,36,36
   20 DATA "C",20,164,170,116,88,
92,124,56
   25 DATA "E",0,112,28,48,120,12
4,60,24
   30 DATA "F",0,255,171,213,255,
0,0,0
   35 DATA "G",0,0,0,255,255,255,
126,60
   40 DATA "H",66,126,66,66,66,12
6,66,66
   45 DATA "I",76,88,120,120,88,7
6,64,64
   50 DATA "L",126,62,14,6,6,14,6
2,126
   55 DATA "U",30,6,2,0,0,2,6,30
  100 FOR F=1 TO 10: RESTORE 5+5*
F: READ F$: FOR N=0 TO 7: READ A
: POKE USR F$+N,A: NEXT N: NEXT
F
  110 BORDER 0: PAPER 0: INK 7: C
LEAR
  120 LOAD ""
9998 REM FOR MAIN PROGRAM TYPE .
   CLEAR : SAVE "BUILDER" LINE 99
99
9999 CLEAR : SAVE "BUILDER" LINE
 1
```

```
  1 PAPER 0: BORDER 0: INK 3: C
LS : DIM z(6): DIM z$(6,10): FOR
 f=1 TO 6: LET z(7-f)=100+100*f:
 LET z$(f)="SPECTRUM": NEXT f
  10 DIM o(2): DIM p(2): LET o(1
)=13: LET p(1)=5: LET o(2)=8: LE
T p(2)=27: CLS : LET she=1: LET
 s=0: FOR m=3 TO 1 STEP -1: CLS :
 OVER 0: PRINT AT 5,5;"  MEN:";m
;"   ";AT 6,5;"  SCORE:";s;"  ";
AT 7,5;"  SHEETS:";she;"  ";AT 1
0,4;" PRESS  ANY  KEY TO PLAY "
  20 IF INKEY$<>"" THEN  GO TO 2
0
  30 IF INKEY$="" THEN  GO TO 30
 100 BORDER 0: INK 7: OVER 0: CL
S : PRINT #\;TAB 9;"By  Ian  McN
air": BORDER 1: RESTORE 9990: RE
AD a: FOR f=1 TO a: READ b,c,9:
PRINT AT b,c;;: FOR h=1 TO 9: PR
INT  INK 2;"a";: NEXT h: NEXT f
 101 INK 6: RESTORE 9992: READ a



: FOR f=1 TO a: READ b,c,9: FOR
h=1 TO 9: PRINT AT b,c;"h": LET
b=b+1: NEXT h: NEXT f
 102 INK 5: RESTORE 9994: READ a
: FOR f=1 TO a: READ b,c: PRINT
AT b,c;"e": NEXT f
 103 INK 2: RESTORE 9996: READ a
: FOR f=1 TO a: READ b,c: PRINT
AT b,c;"a": NEXT f
 104 INK 4: RESTORE 9998: READ a
: FOR f=1 TO a: READ b,c: PRINT
AT b,c;"i": NEXT f
 109 FOR o=1 TO 2: PRINT AT o(o)
,p(o); OVER 1; INK 8;"c": NEXT o

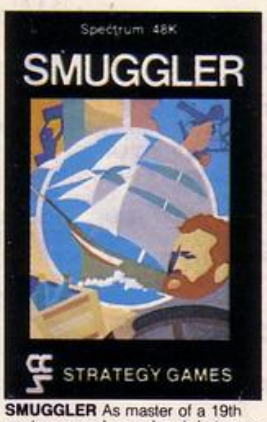


: FOR f=3 TO 18: PRINT AT f,1;"!
": NEXT f: FOR f=8 TO 17: PRINT
AT f,26;"!": NEXT f
 110 INK 2: PLOT 0,0: DRAW 255,0
: DRAW 0,175: DRAW -255,0: DRAW
0,-175: LET bon=0: LET sta=4: LE
T axe=0: LET x=1: LET dr=0: LET
y=29: INK 5: PRINT AT x,y;"b";AT
 21,14; INK 4;"MEN:";m;" SCORE:"
;s
 199 FOR f=19 TO 21: PRINT AT f,
30; INK 6;"h": NEXT f
 200 FOR v=40 TO 0 STEP -2: PRIN
T AT 0,2; OVER 0;"TIME:";INT v;"
 ": FOR f=14 TO 28: PRINT AT 19,
f; OVER 1; BRIGHT 1; INK 6;"g";A
T 16,-12+f;"g"
 201 OVER 1: GO SUB 300: PRINT A
T 6,23;"BONUS:";bon;AT 7,23;"PIC
KS:";axe: IF INKEY$="0" THEN  IF
 ATTR (x,y)=5 THEN  LET bon=bon+
10: PRINT  OVER 1;AT x,y; INK 6;
"e"
 202 IF INKEY$="0" THEN  IF ATTR
(x,y)=4 THEN  LET axe=axe+1: PR
INT  OVER 1; INK 6;AT x,y;"i"
 205 IF x=19 AND y=f OR x=16 AND
y=-12+f THEN  GO TO 9690
 252 GO SUB 9500: PRINT AT 16,-1
2+f; OVER 1; INK 6;"g";AT 19,f;"
g"
 260 NEXT f: LET v=v-2: PRINT AT
 0,2; OVER 0;"TIME:";INT v;" ":
FOR f=28 TO 14 STEP -1: PRINT AT
 19,f; OVER 1; INK 7; BRIGHT 1;"
g";AT 16,-12+f;"g"
 265 IF x=19 AND y=f OR x=16 AND
y=-12+f THEN  GO TO 9690
 289 OVER 1: GO SUB 300: PRINT A
T 6,23;"BONUS:";bon;AT 7,23;"PIC
KS:";axe: IF INKEY$="0" AND ATTR
(x,y)=5 THEN  LET bon=bon+10: P
RINT  OVER 1;AT x,y; INK 7;"e"
 290 IF INKEY$="0" AND ATTR (x,y
)=4 THEN  LET axe=axe+1: PRINT
OVER 1;AT x,y; INK 7;"i"
 299 PRINT AT 19,f; OVER 1; INK
6;"g";AT 16,-12+f;"g": GO SUB 95
00: NEXT f: NEXT v: GO TO 9690
 300 PRINT AT x,y; BRIGHT 8; PAP
ER 8; INK 8;"b": LET x=x+(1 AND
ATTR (x+1,y)=7): IF INKEY$="" TH
EN  GO TO 310
 301 LET x=x+(INKEY$="6" AND ATT
R (x+1,y)=6)-(INKEY$="7" AND ATT
R (x-1,y)=6): LET y=y+(INKEY$="8
" AND ATTR (x,y+1)<>2)-(INKEY$="
5" AND ATTR (x,y-1)<>2)
 310 IF ATTR (x,y)<4 THEN  GO TO
 9690
 311 IF (x=15 AND y=13) OR (x=15
 AND y=18) THEN  LET x=x+1
 312 PRINT  OVER 1;AT x,y; INK 8
; PAPER 8; BRIGHT 8;"b": OVER 0:
 IF INKEY$="8" THEN  IF x=19 THE
N  IF y=29 THEN  GO TO 9800
 313 IF x=19 AND y=28 AND axe>0
THEN  IF INKEY$="0" THEN  LET ax
e=axe-1: GO SUB 9750
 320 GO SUB 500: RETURN
 500 FOR o=1 TO 2: LET di=RND: P
RINT AT o(o),p(o); OVER 1; INK 8
; BRIGHT 0;"c": LET o(o)=o(o)+(d
i>.7 AND ATTR (o(o)+1,p(o))=6)-(
di<.45 AND ATTR (o(o)-1,p(o))=6)
 501 LET p(o)=p(o)+(di>.65 AND y
>p(o) AND ATTR (o(o),p(o)+1)<>2)
-(di<=.5 AND p(o)>y AND ATTR (o(
o),p(o)-1)<>2): IF ATTR (o(o)+1,
p(o))=7 THEN  LET o(o)=o(o)+1
 550 PRINT AT o(o),p(o); OVER 1;
 INK 8;"c": IF o(o)=x AND y=p(o)
 THEN  GO TO 9690
 570 NEXT o: RETURN
9500 IF RND>.5 THEN  RETURN
9505 OVER 0: LET rd=INT (RND*2)+
1: IF rd=2 THEN  PRINT AT 9,25;
INK 3; BRIGHT 1;"f";AT 11,25;"f"
;AT 8,7;"f";AT 10,25; INK 7; BRI
GHT 0;" ";AT 15,13;" ";AT 14,13;
 INK 3; BRIGHT 1;"f";AT 16,28;"f
";AT 6,7;"f";AT 6,5; BRIGHT 0; I
NK 7;" ";AT 7,15;" ";AT 8,10;" "
;AT 20,7;" ";AT 20,11; INK 2;"a"
9510 IF rd=1 THEN  PRINT AT 9,25
; INK 7;" ";AT 11,25;" ";AT 8,7;
" "; BRIGHT 1; INK 3;AT 10,25;"f
";AT 15,13;"f"; BRIGHT 0; INK 7;
AT 14,13;" ";AT 16,28;" ";AT 6,7
;" "; INK 3; BRIGHT 1;AT 6,5;"f"
;AT 7,15;"f";AT 8,10;"f"; INK 7;
 BRIGHT 0;AT 20,11;" ";AT 20,7;
INK 2;"a"
9530 OVER 1: RETURN
9600 CLS : FOR f=1 TO 6: PRINT A
T 0+f*2,2;f;"..";z(f);".By..";z$
(f): NEXT f: FOR f=1 TO 6: IF s<
z(f) THEN  NEXT F
9601 IF F>6 THEN  LET F=6
9602 IF S>Z(F) THEN  GO TO 9640
9603 NEXT F
9604 FOR f=0 TO 400: NEXT f: GO
TO 9700
9640 LET FF=F
9641 IF S=Z(FF) THEN  GO TO 9604
9650 PRINT AT FF*2,4; OVER 1; FL
ASH 1;"                    ": INPU
T "NAME ....";z$(FF): IF LEN z$(
FF)>10 THEN  GO TO 9650
9651 BEEP .5,0: LET z(FF)=s: GO
TO 9604
9690 PRINT AT x,y; FLASH 1; PAPE
R 2; INK 6;"b": FOR f=0 TO 100:
BEEP .05,50-f: NEXT f: BEEP .05,
-50: NEXT m
9700 OVER 0: PRINT AT 15,9; FLAS
H 1;"GAME   OVER": FOR f=0 TO 40
9700 OVER 0: PRINT AT 15,9; FLAS
H 1;"GAME   OVER": FOR f=0 TO 40
0: NEXT f: PRINT AT 17,6;" PRESS
 :- ";AT 19,6;" P...PLAY. ";AT 2
0,6;" A...ABONDON. ";AT 21,6;" S
...SCORE TABLE": PAUSE 0: PAUSE
0: IF INKEY$="s" OR INKEY$="S" T
HEN  GO TO 9600
9701 PAUSE 0: LET a$=INKEY$: IF
a$="p" OR a$="P" THEN  GO TO 10
9702 IF a$="a" OR a$="A" THEN  R
ANDOMIZE USR 0
9703 IF a$="s" OR a$="S" THEN  G
O TO 9600
9710 GO TO 9701
9750 IF sta=4 THEN  PRINT AT 19,
29;"l"
9753 IF sta=3 THEN  PRINT AT 19,
29;"u"
9754 IF sta=2 THEN  PRINT AT 19,
29;"_"
9755 IF sta=1 THEN  PRINT AT 19,
29;" "
9756 LET sta=sta-1: RETURN
9800 OVER 0: FOR f=6 TO 15: PRIN
T AT f,6;"                  ": NEXT
 f: OVER 1: FOR f=7 TO 0 STEP -.
4: BORDER f: BEEP .15,f: PRINT A
T 10,7;"  WELL  DONE  ";AT 13,7;
"  BONUS:";bon: NEXT f: LET s=s+
bon*2: OVER 0: PRINT AT 7,8; FLA
SH 1;" SCORE :";s: FOR f=-50 TO
50: BEEP .05,f: NEXT f: LET she=
she+1
9810 DATA 1,0,0,1,0,1: RESTORE 9
815: FOR f=1 TO 3: BEEP .2,1: PR
INT  OVER 1;AT x,y; INK 8;"b": R
EAD n,m: LET y=y+n: LET x=x+m: P
RINT  OVER 1; INK 8;AT x,y;"b":
BEEP .3,f: NEXT f
9820 GO TO 20
9990 DATA 20,7,16,5,11,4,8,10,5,
5,13,0,13,12,27,5,11,14,12,13,13
,7,15,19,3,16,22,9,19,0,13,18,18
,14,17,0,19,15,0,17,20,14,50,4,2
2,10,9,20,12,4,0,18,2,26,6,6,1,1
3,8,1,13
9991 REM
9992 DATA 19,19,23,2,16,16,4,18,
3,3,18,13,3,14,19,4,16,8,3,15,6,
2,13,29,3,11,27,5,12,22,4,9,8,4,
10,12,3,5,14,6,3,6,3,7,2,6,3,21,
6,3,18,4,8,30,4,1,25,3
9993 REM
9994 DATA 12,3,28,20,2,20,6,20,9
,20,12,7,3,9,6,10,10,8,28,10,21,
10,23,14,7
9995 REM
9996 DATA 4,3,23,16,18,19,29,19,
31
9997 REM
9998 DATA 4,3,2,7,6,12,19,13,28
9999 BORDER 0: PAPER 0: INK 5: C
LS : FOR f=0 TO 40: BEEP .009,f:
 BEEP .009,f+5: NEXT f: RUN
```

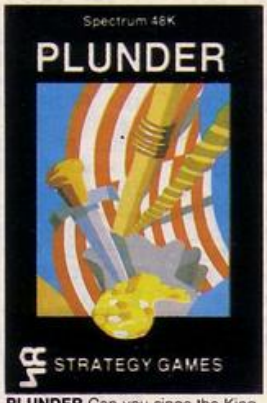
PLANE SAILING



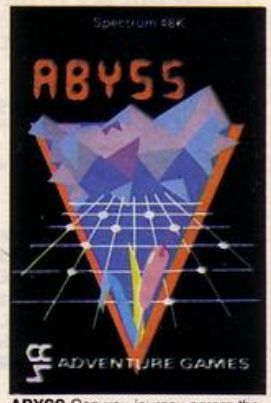
AIRLINE A wing and a prayer will not be enough to turn your £3 million to £30 million in the time allowed, but your financial wizardry will enable you to take over British Airways, or will it? Runs on ZX81 16K — £5 and Spectrum 16K/48K — £6.



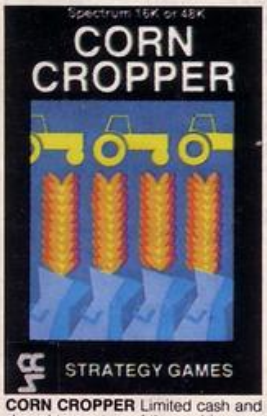
SMUGGLER As master of a 19th century vessel you plough between England and the continent visiting ports to buy and sell your cargo, but beware the customs men, pirates and gale force winds can all run you aground. Runs on Spectrum 48K — £6.



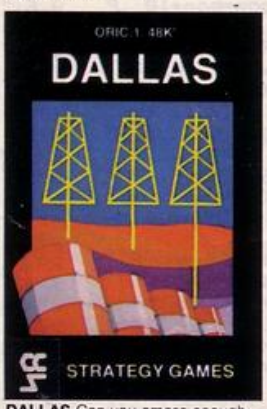
PLUNDER Can you singe the King of Spain's beard. Engage the Spanish ships on the high seas survive their broadsides and plunder the gold destined for the Armada and you might get your Knighthood before Francis Drake. Runs on Spectrum 48K — £6.



ABYSS Can you journey across the long-forgotten Abyss and outwit the evil monsters that lurk in the shadows awaiting the foolhardy and careless adventurer. There are many bridges and many monsters. Will you be the one to make the Abyss safe to cross again. Runs on Spectrum 48K — £5.



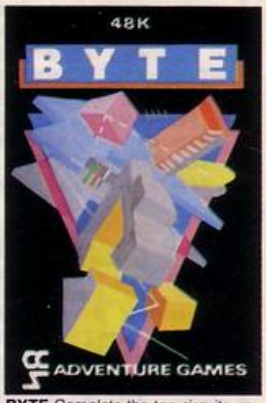
CORN CROPPER Limited cash and droughts are two of the problems facing the farmer. Planting fertilizing and harvesting must all be done economically if you are to reap the rewards offered in corn cropper. Runs on ZX81 16K — £5 and Spectrum 16K/48K — £6.



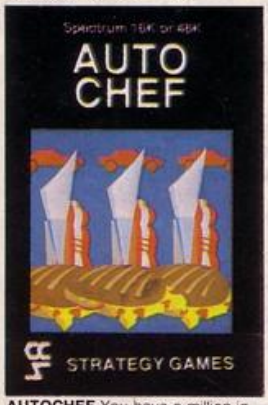
DALLAS Can you amass enough petro dollars to take over the Euing empire. Cut throat business and an eye for the main chance may get you there but you'll need nerves of steel to become the oil king of Dallas. Runs on ZX81 16K — £5 and Spectrum 16K/48K — £6.



GANGSTER Are you cold hearted and callous enough to warrant the title of Don. You need to be if you are to rise to the top of the pile. A quick trigger finger and an even quicker brain are needed to control the mobs and their rackets. Runs on Spectrum 48K — £6.



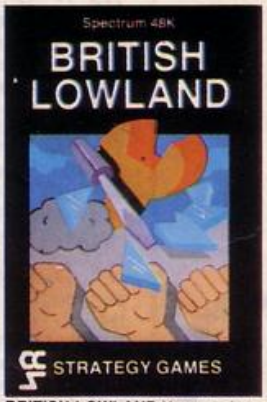
BYTE Complete the ten circuits you need to build your computer system then return home. Easy. Byte has sent its electronic monsters to harry you through this three dimensional maze of circuitry, if any of them catch you . . . Runs on Spectrum 48K — £5.



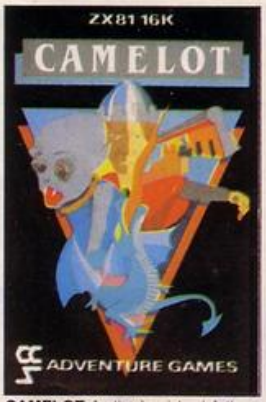
AUTOCHEF You have a million in capital and need to increase this to £25 million in the shortest time possible. Inflation, strikes, sluggish markets are only some of the hazards to overcome. Runs on ZX81 16K — £5 and Spectrum 16K/48K — £6.



PRINT SHOP In print shop are scheduling, staffing, purchasing and quoting within this time limit will test your business acumen to the full and weekly balance sheets will prove the quality of your decision making. Runs on ZX81 16K — £5 and Spectrum 16K/48K — £6.



BRITISH LOWLAND You are given a racing start for your small sports car company but you have an overdraft to repay and a workforce to be kept happy. Steer your way to success with careful management and industrial relations. Runs on Spectrum 48K — £6.



CAMELOT As the banished Arthur Pendragon you must find seven treasures without falling prey to the Brigands, Dragons and Evil Magicians that stand in your way and make a triumphant return to Camelot to be crowned King. Runs on ZX81 16K — £5 and Spectrum 48K — £5.

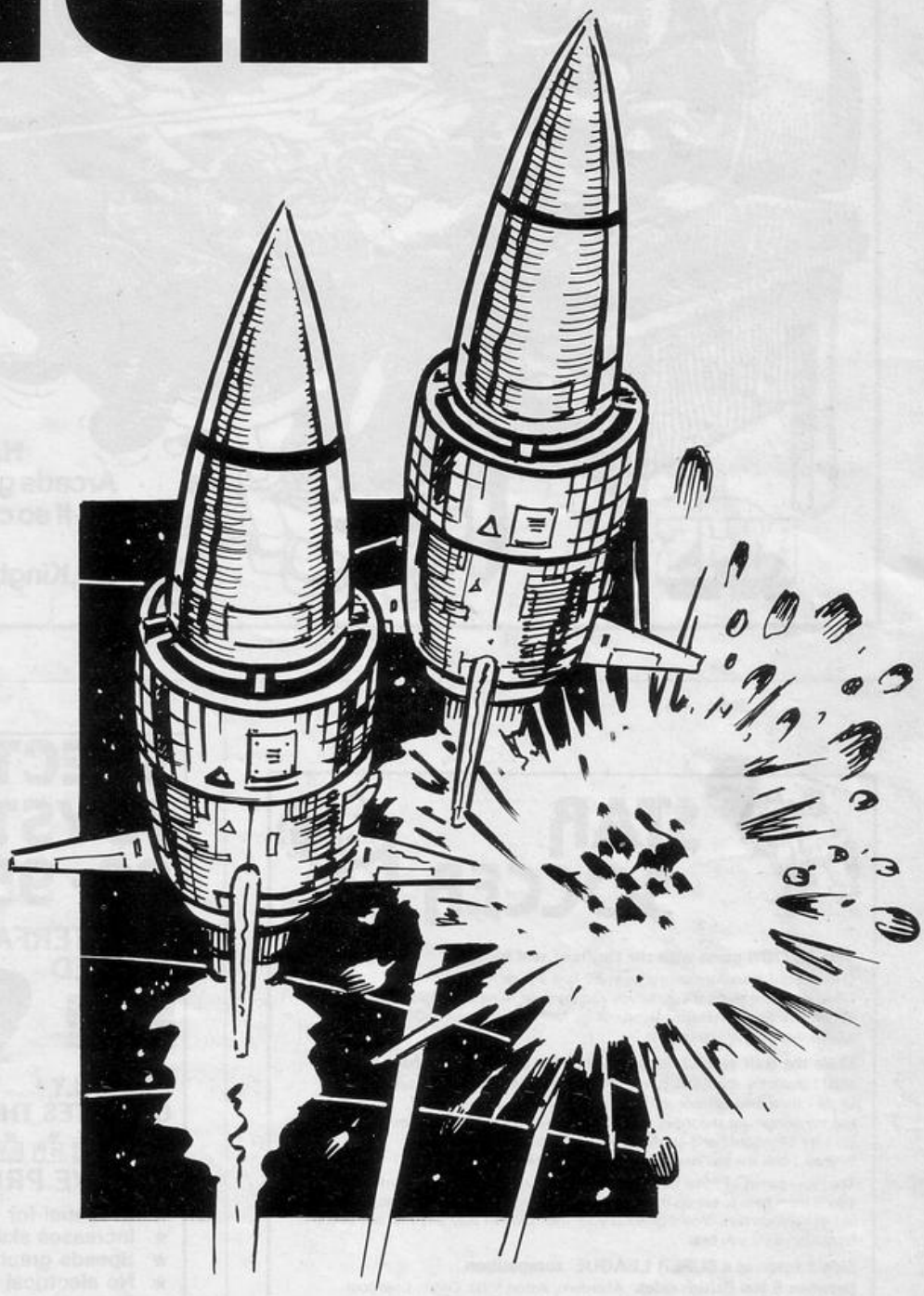
Available from W H Smith, Boots, Rumbelows and all good computer shops or Cases Computer Simulations Ltd., 14 Langton Way, London SE3 7TL.

Strategy Games. They're no pushover

FLITE

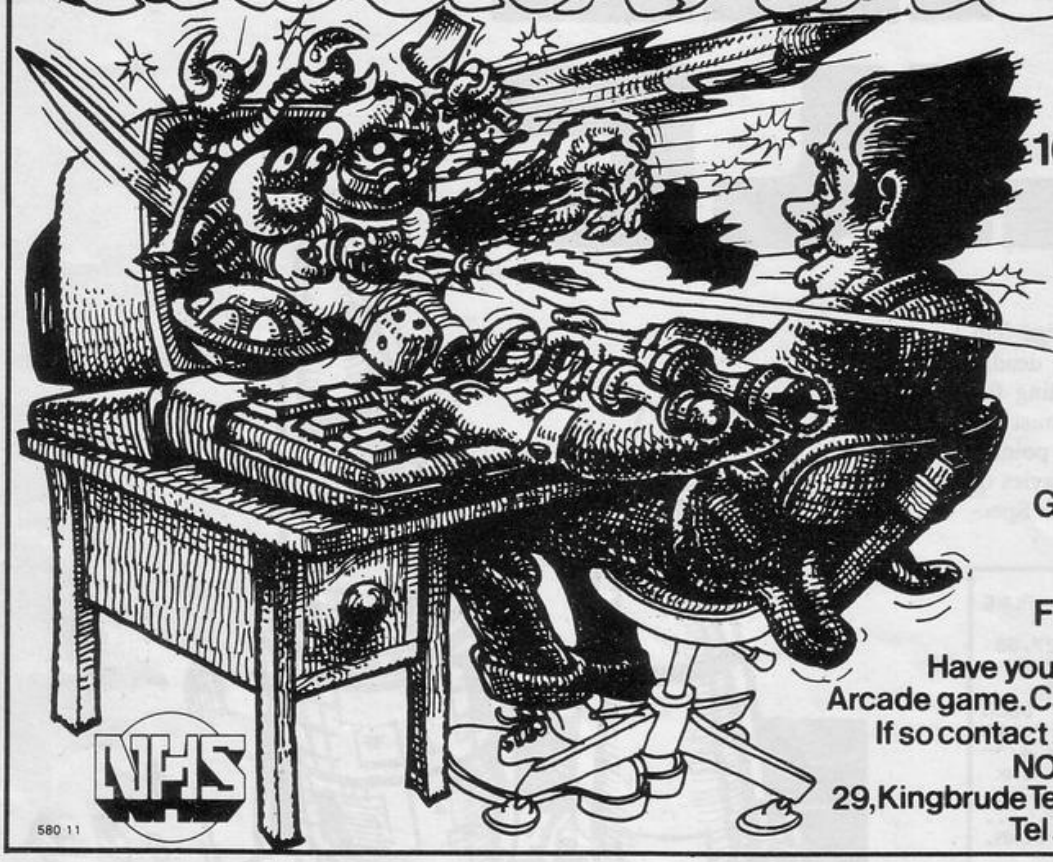
FLITE is an addictive dodge 'em game. You must avoid the deadly heat-seeking missiles heading for you and at the same time you must try and hit an enemy target to gain points.

Flite was written by Peter Davies of Streatham, London for the 16K Spectrum.



```
  10 FOR n=0 TO 15: READ a: POKE
 USR "a"+n,a: NEXT n
  20 DATA 0,62,85,127,85,127,85,
62,0,62,127,127,127,127,127,62
  25 BORDER 1: PAPER 6: CLS
  30 PRINT  INK 9;"          DODG
ER"'''''"Dodge the "; INK 5;"(9a)
"; INK 9;"'s and the "; INK 4;"^
"; INK 0;"'s"'''"Hit the "; INK
2;"(9b)"; INK 0;"'s to score Poi
nts"'''"Control Keys     UP.....
..~1~"'''"                DOWN.
....~z~"
  40 LET hs=0: LET mx=INT (RND*2
0)+6: LET my=20
  44 PRINT AT 21,0; INK 0;"  PRE
SS ANY KEY TO START": PAUSE 1e3
  45 CLS : LET s=0: LET l=3
  50 FOR n=1 TO 100
  55 LET x=1+INT (RND*31): LET y
=1+INT (RND*20)
  60 IF SCREEN$ (y,x)="" THEN  G
O TO 55
  70 PRINT AT y,x; INK 2;"(9a)":
 NEXT n
  80 FOR n=1 TO 20
  85 LET x=1+INT (RND*31): LET y
=1+INT (RND*20)
  90 IF SCREEN$ (y,x)="" THEN  G
O TO 85
 100 PRINT AT y,x; INK 5;"(9a)":
 NEXT n
 110 PRINT AT 21,0;"SCORE ";s;AT
 21,12;"LIVES >>>";AT 21,23;"Hi
";hs
 115 PRINT AT 21,18+l;"  "
 120 LET x=0: LET y=0
 130 IF SCREEN$ (y,x)="" THEN  G
O TO 200
 150 PRINT AT y,x;">"
 155 GO SUB 400
 160 IF INKEY$="z" THEN  LET y=y
+(y<20): LET z=1: GO TO 190
 170 IF INKEY$="1" THEN  LET y=y
-(y>0): LET z=0: GO TO 190
 180 LET x=x+1: IF x=32 THEN  LE
T x=1: PRINT AT y,31;" ": GO TO
130
 185 LET z=2
 190 PRINT AT y+(z=0)-(z=1),x-(z
=2);" ": GO TO 130
 200 IF ATTR (y,x)=48 THEN  GO T
O 150
 205 IF ATTR (y,x)<>50 THEN  GO
TO 210
 206 LET s=s+10: IF s/1000=INT (
s/1000) THEN  GO TO 300
 207 PRINT AT 21,6;s: BEEP .01,2
0: GO TO 150
 210 PRINT  FLASH 1;AT y,x;"(9a)
": FLASH 0: PRINT AT 21,17+l;" "
: LET l=l-1: IF l=0 THEN  GO TO
240
 220 BEEP .01,0: GO TO 120
 240 IF hs<s THEN  LET hs=s
 250 PRINT AT 21,26;hs
 260 PRINT AT 11,8; FLASH 1; INK
 3;"Another Go ?  (y/n)"
 270 IF INKEY$="y" THEN  GO TO 4
5
 275 IF INKEY$="n" THEN  STOP
 280 GO TO 270
 300 RESTORE 320: FOR n=1 TO 16:
 READ a: BEEP .1,a: NEXT n
 310 CLS : GO TO 50
 320 DATA 0,12,2,10,3,8,4,7,7,4,
8,3,10,2,12,0
 400 IF my<20 THEN  PRINT AT my+
1,mx;" "
 401 IF SCREEN$ (my,mx)=">" THEN
  GO TO 210
 405 IF SCREEN$ (my,mx)="" THEN
 LET mx=RND*20+6: BEEP .01,40: L
ET my=20: RETURN
 410 PRINT AT my,mx; INK 4;"^":
LET my=my-1
 420 IF my=0 THEN  PRINT AT my+1
,mx;" ": LET mx=RND*20+6: LET my
=20: RETURN
 430 RETURN
```

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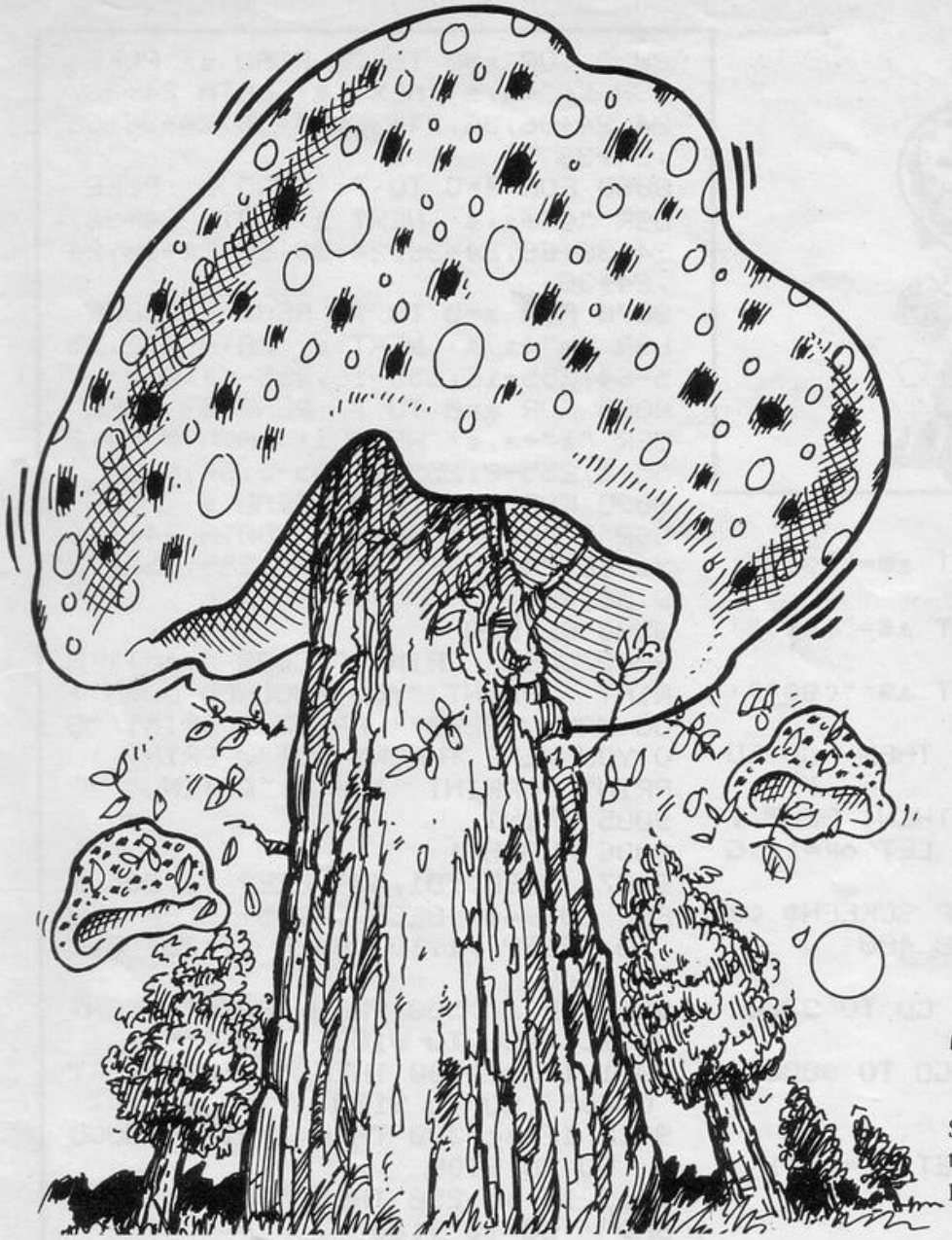
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TREE EATERS

TREE EATERS for the 16K Spectrum was written by A Beardmore of Stoke-on-Trent, Staffs. Stop the Martians eating our forests for the vital resources they lack on their planet.

```
  1 BORDER 0: PAPER 0: INK 6: C
LS
  2 PRINT "YOU(9P) MUST KILL TH
E MARTIAN    TREE EATERS "; INK
2;"9P"; INK 6;" AT ALL COSTS": P
RINT "BUT DON'T KNOCK DOWN THE T
REES": PRINT : PRINT "O=UP. K=DO
WN. S=RIGHT. A=LEFT. ": PRINT :
PRINT "BUT CAREFUL YOU HAVE NO B
RAKE"
  3 PRINT AT 21,0;"PRESS ANY KE
Y TO START GAME"
  15 GO SUB 8000: PAUSE 0
  16 FOR a=0 TO 21: INK 2
  17 PRINT AT a,0;"
                  ": NEXT a
  20 PRINT AT 1,1; INK 6;"(30*9a
)";AT 21,1;"(30*9b)"
  21 INK 6
  25 FOR a=2 TO 20: PRINT AT a,0
;"(9c)";AT a,31;"(9d)": NEXT a
  29 LET a=0
  30 PRINT AT INT (RND*19)+2,INT
 (RND*30)+1; INK 4;"(9e)": LET a
=a+1: IF a<80 THEN  GO TO 30
  40 PRINT AT 9,14;"(9a)";AT 9,1
6;"(9a)";AT 12,14;"(3*9b)"
  50 FOR a=10 TO 11: PRINT AT a,
13;"(9c)";AT a,17;"(9a)": NEXT a
: PRINT AT 8,14; INK 2;"    "
  55 PRINT AT 0,1;"SCORE:=0
TREES KILLED:=0 "
  60 LET x=0
  65 LET sc=0: LET tr=0
  70 LET a$="(99)"
  80 LET op=0: LET a=11: LET s=1
5
  85 LET q=INT (RND*19)+2: LET w
=INT (RND*30)+1
  86 PRINT AT q,w; INK INT (RND*
3)+1;"(9P)"
 100 PRINT AT a,s;a$
 120 IF INKEY$="a" THEN  LET x=1
 130 IF INKEY$="s" THEN  LET x=2
 140 IF INKEY$="o" THEN  LET x=3
 150 IF INKEY$="k" THEN  LET x=4
 155 PRINT AT a,s; INK 2;" "
 170 IF x=1 THEN  LET a$="(9h)":
```



```
 LET s=s-1
 171 IF x=2 THEN  LET a$="(9i)":
 LET s=s+1
 172 IF x=3 THEN  LET a$="(9f)":
 LET a=a-1
 173 IF x=4 THEN  LET a$="(99)":
 LET a=a+1
 175 IF ATTR (a,s)=6 THEN  GO SU
B 410: LET oP=1
 176 IF a=9 AND s=w THEN  BEEP .
05,40: LET sc=sc+10: LET oP=1: G
O SUB 500: GO TO 85
 177 IF oP=0 THEN  IF SCREEN$ (a
,s)<>" " THEN  GO SUB 400
 178 LET oP=0
 180 IF sc>500 THEN  GO TO 9700
 200 PRINT AT a,s;a$
 210 IF tr>15 THEN  GO TO 9000
 250 LET oP=0
 300 GO TO 100
 405 BEEP .09,-20: LET tr=tr+1:
GO SUB 500
 406 RETURN
 410 IF x=1 THEN  LET s=s+1
 411 IF x=2 THEN  LET s=s-1
 412 IF x=3 THEN  LET a=a+1
 413 IF x=4 THEN  LET a=a-1
 420 PRINT AT a,s;a$: RETURN
 500 PRINT AT 0,8;sc;AT 0,28;tr
 510 RETURN
8000 FOR a=0 TO 7: READ s: POKE
USR "a"+a,s: NEXT a: DATA 0,0,0,
0,24+36,128+64+3,255,255
8010 FOR a=0 TO 7: READ s: POKE
USR "b"+a,s: NEXT a: DATA 255,25
5,128+64+3,24+36,0,0,0,0
8020 FOR a=0 TO 7: READ s: POKE
USR "c"+a,s: NEXT a: DATA 7,7,11
,11,11,11,7,7
8030 FOR a=0 TO 7: READ s: POKE
USR "d"+a,s: NEXT a: DATA 128+64
+32,128+64+32,128+64+16,128+64+1
6,128+64+16,128+64+16,128+64+32,
128+64+32
8040 FOR a=0 TO 7: READ s: POKE
USR "e"+a,s: NEXT a: DATA 24,24+
36+2,24+36+66,255-129,24+36,24,2
4,24
8050 FOR a=0 TO 7: READ s: POKE
USR "f"+a,s: NEXT a: DATA 24+36,
24,24+36,36,24+36,24+36,24+36+66
,24+36
8060 FOR a=0 TO 7: READ s: POKE
USR "g"+a,s: NEXT a: DATA 24+36,
24+36+66,24+36,24+36,36,24+36,24
,24+36
8070 FOR a=0 TO 7: READ s: POKE
USR "h"+a,s: NEXT a: DATA 0,2,25
5-64,255-16,255-16,255-64,2,0
8080 FOR a=0 TO 7: READ s: POKE
USR "i"+a,s: NEXT a: DATA 0,64,2
55-2,255-8,255-8,255-2,64,0
8090 FOR a=0 TO 7: READ s: POKE
USR "p"+a,s: NEXT a: DATA 24,24+
36+66,24+36+66,255-36,255,255-12
9,36,36
8500 RETURN
9000 CLS : PRINT "SCORE ";sc: P
RINT : PRINT "YOU KNOCKED DOWN T
OO MANY TREES": PRINT : PRINT "S
O YOU WERE THROWN OUT": PRINT :
PRINT : PRINT  INK 7;"RATING"
9005 PRINT
9006 FLASH 1
9007  BEEP .01,40: BEEP .1,20: B
EEP .02,40: BEEP .1,15: BEEP .03
,40: BEEP .1,10: BEEP .1,20: BEE
P .1,40
9010 IF sc>500 THEN  PRINT "FANT
ASTIC": GO TO 9100
9011 IF sc>400 THEN  PRINT "VERY
 GOOD": GO TO 9100
9012 IF sc>300 THEN  PRINT "GOOD
": GO TO 9100
9013 IF sc>250 THEN  PRINT "NOT
BAD": GO TO 9100
9014 IF sc>200 THEN  PRINT "BAD"
: GO TO 9100
9015 IF sc>150 THEN  PRINT "VERY
 BAD": GO TO 9100
9016 IF sc>100 THEN  PRINT "OLD
GRANNY": GO TO 9100
9017 IF sc>=0 THEN  PRINT "FORGE
T IT": GO TO 9100
9100 GO TO 9500
9500 FLASH 0: PRINT AT 21,0;"ANO
THER GO(Y/N)"
9600 IF INKEY$="" THEN  GO TO 95
00
9610 IF INKEY$="y" THEN  RESTORE
 : GO TO 1
9620 IF INKEY$="n" THEN  GO TO 9
999
9630 GO TO 9500
9700 CLS : BEEP .05,40: BEEP .05
,30: BEEP .05,50: BEEP .1,30: BE
EP .1,40: BEEP .1,20: PRINT "YOU
 HAVE KILLED ALL THE          MAR
TIAN TREE EATERS..WELL DONE..":
BEEP .01,30: BEEP .01,30: BEEP .
01,30: GO TO 9500
```

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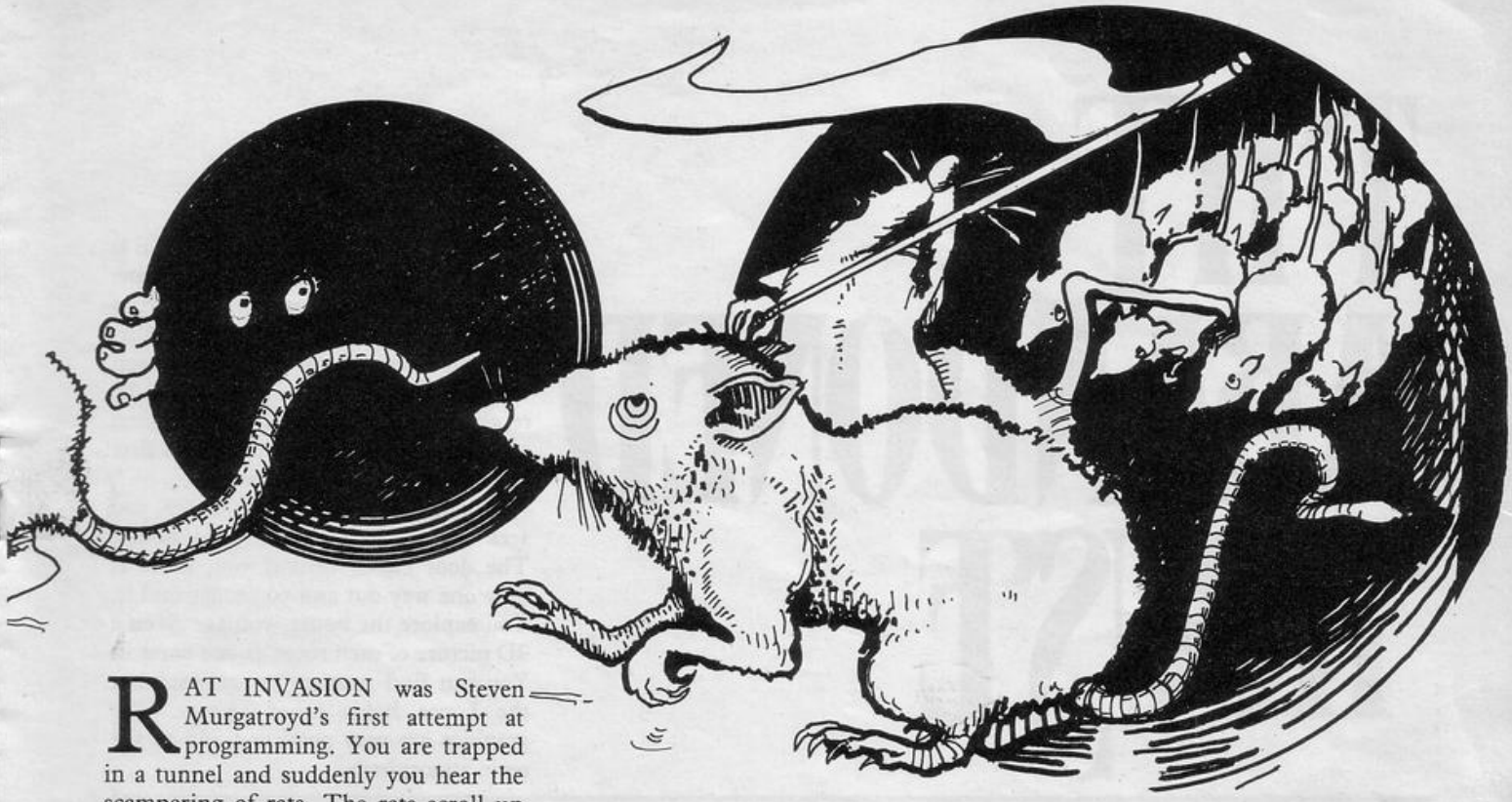
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RAT INVASION was Steven Murgatroyd's first attempt at programming. You are trapped in a tunnel and suddenly you hear the scampering of rats. The rats scroll up the screen and your job is to dodge them for as long as possible. Murgatroyd of Wanton, Oxon wrote **Rat Invasion** for the 16K ZX-81. Underlined letters are to be entered in graphic mode.

RAT INVASION

```
  10 PRINT AT 0,8;"RAT INVASION"
  11 PRINT AT 1,8;"(12*9)"
  12 PRINT AT 4,0;" YOU ARE TRAP
PED IN A DARK CAVE AND YOU HEAR
THE FOOTSTEPS OF   SMALL ANIMALS
... rats.YOU HAVE  NO WEAPONS YO
U MUST TRY TO GET  BY WITHOUT BE
ING KILLED."
  14 PRINT AT 14,0;"USE KEYS:",,
"5 LEFT",,"8 RIGHT"
  15 PRINT AT 20,0;"ANY KEY.....
....................."
  16 PAUSE 9999
  18 CLS
  50 LET E=15
  60 FOR F=1 TO 100000
  70 PRINT AT 15,RND*30;"(3*(SP)
"
  80 SCROLL
 100 PRINT AT 15,0;"(9:30*96:99
)"
 110 PRINT AT 16,0;"(31*(SP)"
 120 PRINT AT 17,0;"(12*(SP:rat
invasion:8*(SP)"
 130 PRINT AT 18,0;"fafafafafafa
fafafafafafafafafafafa"
 140 PRINT AT 19,0;"(14*(SP:i=
..:i=14*(SP)"
 150 PRINT AT 20,0;"(14*(SP:92:
91:14*(SP)"
 160 PRINT AT 21,0;"(14*(SP:97:
97:14*(SP)"
 210 PRINT AT 12,E;
 220 IF PEEK (PEEK 16398+256*PEE
K 16399)=128 THEN GOTO 500
 230 PRINT "V"
 240 PRINT AT 12,E;" "
 250 IF INKEY$="5" THEN LET E=E-
1
 260 IF INKEY$="8" THEN LET E=E+
1
 270 NEXT F
 500 PRINT AT 16,12;"score:";F
 510 PAUSE 999
 520 CLS
 530 PRINT AT 11,2;"PRESS ANY KE
Y TO TRY AGAIN"
 565 PAUSE 4E4

 566 GOTO 18
 570 SAVE "RAT INVASIOn"
 580 RUN
```

THE ABANDONED HOUSE

THE ABANDONED HOUSE is a 16K ZX-81 adventure game and is this month's program of the month. The author is Stephen Murgatroyd, aged 14, of Wantage, Oxon who has been programming since he received his ZX-81 in July. He is keen on adventure games and this is his first attempt at this type of game.

Caught in a fierce electric storm, you seek shelter in an abandoned house. The door closes behind you, there is only one way out and you must find it. You explore the house, you are given a 3D picture of each room as you enter it. You can find treasure or weapons but the house holds other secrets. The graphics are very good and add to the eerie atmosphere.

```
   1 REM "ESCAPE"
   2 FOR F=1 TO 22
   3 PRINT "
"
   4 NEXT F
   5 PRINT AT 10,8;"
"
   6 PRINT AT 11,7;"
"
   7 PRINT AT 12,6;"
"
   8 PRINT AT 13,7;"
"
   9 PRINT AT 14,7;"
"
  10 PRINT AT 15,7;"
"
  11 PRINT AT 16,7;"
"
  12 PRINT AT 17,7;"
"
  13 PRINT AT 18,7;"
"
  14 PRINT AT 19,7;"
"
  15 PAUSE 100
  16 PRINT AT 0,30;" "
  17 PRINT AT 1,29;" "
  18 PRINT AT 2,28;" "
  19 PRINT AT 3,27;" "
  20 PRINT AT 4,26;" "
  21 PRINT AT 5,25;" "
  22 PRINT AT 6,24;" "
  23 PRINT AT 7,23;" "
  24 PRINT AT 8,22;" "
  25 PAUSE 15
  26 CLS
  28 FAST
  29 FOR F=1 TO 22
  30 PRINT "
"
  31 NEXT F
  32 PRINT AT 6,6;"STEPHEN MURGA
TROYD"
  33 PRINT AT 8,9;"PRESENTS"
  34 PRINT AT 12,3;"
"
  35 PAUSE 200
  40 CLS
  50 SLOW
  55 PRINT AT 0,5;"ESCAPE"
  56 PRINT AT 1,5;"
"
  60 PRINT AT 2,0;" YOU ARE TRAP
PED IN AN ENORMOUS STORM,AND YOU
R CAR HAS BROKEN   DOWN.YOU WALK
 ALONG A ROAD LOOK-ING FOR A HOU
SE."
  65 PRINT AT 6,0;" FINALLY YOU
FIND ONE AND KNOCK ON THE DOOR..
.....
  80 PRINT AT 18,0;"PRESS ANY KE
Y"
  85 IF INKEY$="" THEN GOTO 85
  86 CLS
  90 PRINT AT 0,0;"THE DOOR OPEN
S YOU ENTER         THERE IS NO T
URNING BACK........"
  91 PRINT AT 4,0;"THERE IS MAGI
C GOLD IN THE HOUSEWHICH WILL HE
LP YOU ESCAPE."
  92 PRINT AT 7,0;"FIND THE WEAP
ONS FOR THEY WILL  HELP YOU SURV
IVE."
  95 PRINT AT 10,0;"THE HOUSE IS
 FILLED WITH MANY   HORRORS.YOU
MUST TRY TO ESCAPE"
  96 PRINT AT 14,0;" THE GOLD AN
D WEAPONS ARE WORTH SOME MONEY S
O LOOK AFTER THEM."
 100 PRINT AT 18,0;"PRESS ANY KE
Y TO BEGIN"
 105 IF INKEY$="" THEN GOTO 105
 109 CLS
 300 LET S=100
 310 LET G=0
 320 LET W=0
 500 CLS
 505 SCROLL
 506 SCROLL
 510 LET A$="A LIBRARY."
 520 LET B$="A HALL."
 530 LET C$="A LOUNGE."
```



```
531 LET D$="A KITCHEN."
532 LET E$="A CELLER."
533 LET G$="A KITCHEN."
534 LET H$="A BEDROOM."
540 LET A=INT (RND*7)+1
550 IF A=1 THEN LET F$=B$
560 IF A=2 THEN LET F$=A$
570 IF A=3 THEN LET F$=C$
580 IF A=4 THEN LET F$=D$
582 IF A=5 THEN LET F$=E$
584 IF A=6 THEN LET F$=G$
586 IF A=7 THEN LET F$=H$
595 GOSUB 659
600 SCROLL
602 SCROLL
610 IF F$=A$ THEN GOSUB 700
620 IF F$=B$ THEN GOSUB 800
630 IF F$=C$ THEN GOSUB 900
631 IF F$=D$ THEN GOSUB 800
632 IF F$=E$ THEN GOSUB 700
634 IF F$=G$ THEN GOSUB 900
636 IF F$=H$ THEN GOSUB 700
640 SCROLL
650 SCROLL
659 FAST
660 CLS
661 PRINT AT 5,5;"▛▀▀▀▀▀▀▀▀▀▀▀▀▀▀▀▀▀▀▜"
662 PRINT AT 19,5;"▙▄▄▄▄▄▄▄▄▄▄▄▄▄▄▄▄▄▄▟"
663 FOR Z=0 TO 4
664 PRINT AT Z,Z;"▚"
665 NEXT Z
666 LET X=0
667 FOR Z=29 TO 25 STEP -1
668 PRINT AT X,Z;"▞"
669 LET X=X+1
670 NEXT Z
671 LET X=4
672 FOR Z=20 TO 21
673 PRINT AT Z,X;"▞"
674 LET X=X-1
675 NEXT Z
676 LET X=25
677 FOR Z=20 TO 21
678 PRINT AT Z,X;"▚"
679 LET X=X+1
680 NEXT Z
681 FOR Z=6 TO 18
682 PRINT AT Z,5;"▌";AT Z,24;"▐"
683 NEXT Z
684 PRINT AT 20,8;"YOU ARE FACING ";AT 21,8;F$
685 SLOW
686 PAUSE 100
690 RETURN
700 PRINT "(1) EXPLORE (2) LOOK FOR TRAPS"
710 INPUT V
720 IF V=1 THEN GOSUB 1000
730 IF V=2 THEN GOSUB 1100
735 SCROLL
736 SCROLL
740 GOTO 510
800 PRINT "(1) EXPLORE (2) LEAVE"
810 INPUT E
820 IF E=1 THEN GOSUB 1000
830 IF E=2 THEN GOSUB 1300
833 SCROLL
836 SCROLL
840 GOTO 510
900 PRINT "(1) EXPLORE (2) REST (3) LEAVE"
910 INPUT O
920 IF O=1 THEN GOSUB 1000
930 IF O=2 THEN GOSUB 1400
940 IF O=3 THEN GOSUB 1300
943 SCROLL
946 SCROLL
950 GOTO 510
1000 SCROLL
1005 SCROLL
1010 LET A=INT (RND*4)+1
1020 IF A=1 THEN GOSUB 1500
1030 IF A=2 THEN GOSUB 1600
1040 IF A=3 THEN GOSUB 1700
1041 IF A=4 THEN GOSUB 1320
1042 SCROLL
1043 SCROLL
1050 RETURN
1100 SCROLL
1101 LET A=INT (RND*2)+1
1103 IF A=1 THEN PRINT "THERE ARE NO TRAPS HERE."
1104 IF A=2 THEN GOSUB 1107
1105 PAUSE 80
1106 RETURN
```

```
1107 PRINT "YOU FIND ONE WHICH L
EADS TO"
1108 SCROLL
1110 PRINT "ANOTHER ROOM."
1111 PAUSE 80
1112 SCROLL
1114 SCROLL
1120 RETURN
1300 SCROLL
1310 RETURN
1315 SCROLL
1320 PRINT "THERE IS NOTHING HER
E."
1330 PAUSE 80
1340 RETURN
1400 SCROLL
1401 LET A=INT (RND*2)+1
1402 IF A=1 THEN PRINT "YOU REST
 AND THEN MOVE ON."
1403 IF A=2 THEN GOSUB 1406
1404 PAUSE 80
1405 RETURN
1406 PRINT "WHILE RESTING A THIE
F COMES BY"
1407 SCROLL
1408 PRINT "AND TAKES YOUR GOLD
AND WEAPONS."
1409 LET G=G-G
1410 LET W=W-W
1411 PAUSE 80
1413 SCROLL
1414 SCROLL
1420 RETURN
1500 GOSUB 659
1501 SCROLL
1510 PRINT "YOU HAVE FOUND SOME
GOLD"
1511 PRINT AT 14,8;"
1512 PRINT AT 15,8;"
1513 PRINT AT 16,8;"
1514 PRINT AT 17,8;"
1515 PRINT AT 18,6;"
"
1516 PAUSE 100
1520 LET G=G+20
1530 LET S=S+10
1531 IF S>350 THEN GOTO 1800
1532 SCROLL
1534 SCROLL
1540 RETURN
1600 FAST
1610 CLS
1615 LET A=INT (RND*3)+1
1620 IF A=1 THEN LET M$="
                  WEREWO
LF "
1630 IF A=2 THEN LET M$="
                  VAMPIR
E "
1640 IF A=3 THEN LET M$="
```




```
RAT "
1645 PRINT "YOU HAVE MET A ";M$
1648 PAUSE 80
1650 CLS
1651 SLOW
1655 PRINT "HAVE YOU A WEAPON ?"
1656 IF W=0 THEN GOTO 2115
1660 IF W<1 THEN GOTO 1660
1665 PRINT "YES"
1670 LET W=W-1
1675 PRINT "YOU HAVE KILLED IT"
1680 GOTO 510
1700 GOSUB 659
1701 SCROLL
1710 PRINT "YOU HAVE FOUND A WEA
PON"
1711 PRINT AT 9,14;"
1712 PRINT AT 10,14;"
1713 PRINT AT 11,14;"
1714 PRINT AT 12,14;"
1715 PRINT AT 13,14;"
1716 PRINT AT 14,14;"
1717 PRINT AT 15,14;"
1718 PRINT AT 16,14;"
1719 PRINT AT 17,14;"
1720 PRINT AT 18,14;"
1725 LET W=W+1
1730 LET S=S+10
1740 IF S>350 THEN GOTO 1800
1745 SCROLL
1750 SCROLL
1760 RETURN
1800 CLS
1820 PRINT AT 5,10;"YOU HAVE"
1830 PRINT AT 8,0;"
                  "
1840 PAUSE 100
1845 CLS
1850 PRINT AT 5,0;" WELL DONE YO
U HAVE FINALLY AND THANKFULLY ES
CAPED FROM THE      HOUSE AND ITS
 MONSTERS.";AT 8,0;" DURING YOUR
 ESCAPE YOU TOOK £";G*5;",000 WO
RTH OF GOLD AND £";W*5;",000 WOR
TH OF WEAPONS."
1851 PRINT AT 14,0;"WOULD YOU LI
KE TO BECOME EVEN
   RICHER?          "
1855 PAUSE 9999
1860 IF INKEY$="N" THEN GOTO 190
0
1870 IF INKEY$="" THEN GOTO 1850
   IF INKEY$="Y" THEN GOTO 20
 0
1900 CLS
1910 PRINT "A WISE DECISION."
1920 STOP
2000 CLS
2010 PRINT "GREEDY THING."
2012 PAUSE 50
2015 CLS
2020 GOTO 510
2100 CLS
2115 PRINT "BAD LUCK.YOU HAVE FA
ILED TO      ESCAPE"
2120 STOP
2130 SAVE "ESCAPE"
2140 GOTO 1
```

MAZEMAN

LOST IN a large maze, your only hope is to find the exit which is somewhere on the top left of the maze. All you can see in the darkness are the glowing sides of the passage. Move using the cursor keys.

Mazeman was written for the 16K Spectrum by P Loach of Hadleigh, Suffolk.

```
9  10 GO SUB 9000
  20 LET x=INT (RND*l+1): LET y=
INT (RND*w+1): IF m$(y,x)="(isP)
" OR x<l/2 THEN  GO TO 20
  30 LET e=INT (RND*(w-2)+2): IF
 m$(e,2)="(isP)" THEN  GO TO 30
  35 LET m$(e,1)=""
  40 IF x=1 AND m$(y,x)=" " THEN
  GO TO 8e3
  50 GO SUB 7000
  60 BEEP .1,RND*20: LET i$=INKE
Y$: IF i$<"5" OR i$>"8" THEN  GO
 TO 60
  70 LET a=(i$="8")-(i$="5"): LE
T b=(i$="6")-(i$="7"): IF m$(y+b
,x+a)=" " THEN  LET x=x+a: LET y
=y+b: GO TO 40
  80 PRINT #0; FLASH 1; INK 2; P
APER 6;"YOU WALKED INTO A WALL":
 FOR F=1 TO 200: OUT 254,F: OUT
254,255: NEXT F: INPUT "": OUT 2
54,0: GO TO 60
7000 CLS : LET a=y-le: IF a<1 TH
EN  LET a=1
7010 LET b=y+le: IF b>w THEN  LE
T b=w
7020 LET c=x-le: IF c<1 THEN  LE
T c=1
7030 LET d=x+le: IF d>l THEN  LE
T d=l
7040 FOR e=a TO b: PRINT m$(e,c
TO d): NEXT e: PRINT AT y-a,x-c;
 FLASH 1;" ": RETURN
8000 FOR F=1 TO 50: PAPER RND*7:
 OUT 254,RND*7: OUT 254,255: CLS
 : NEXT F: BORDER 7: PAPER 7: IN
K 0: CLS
8010 PRINT AT 9,6; FLASH 1;"YOU
FOUND THE EXIT": PRINT £0;"ANOTH
ER GO ? "
8020 IF INKEY$="Y" OR INKEY$="y"
 THEN  RUN
8030 IF INKEY$="N" OR INKEY$="n"
 THEN  GO TO 9999
8040 GO TO 8020
8999 REM MAZE & INSTRUCTIONS
9000 PAPER 5: INK 0: BORDER 5: C
LS : RESTORE 9e3: READ l,w
9010 PRINT TAB 7;"MAZEMAN"'''" Yo
u are lost in a large maze."'" Y
our only hope of escape is to fi
nd the exit,which is hidden  so
mewhere in the left hand"'"corne
r.All you can see in the  dark
passages is the glowing  corne
rs of the tunnel."'"To move,use
 the cursor keys."
9020 DIM m$(w,l): FOR f=1 TO w:
READ m$(f): NEXT f: INK 6: PAPER
 0
9030 INPUT "Enter level 1-9 (9 i
s easiest) ";le: IF le<1 OR le>9
 OR le>INT le THEN  GO TO 9030
9040 LET le=le+1: BORDER 0: CLS
 : RETURN : DATA 32,24,"(32*isP)"
9050 DATA "(isP:7*sP:isP:6*sP:10
*isP:2*sP:5*isP)"
9060 DATA "(isP:5*sP:isP:sP:isP:
sP:isP:sP:isP:2*sP:3*isP:9*sP:2*
isP:2*sP:isP)"
9070 DATA "(isP:5*sP:isP:3*sP:is
P:sP:isP:3*sP:5*isP:6*sP:2*isP:2
*sP:isP)"
9080 DATA "(isP:sP:13*isP:2*sP:4
*isP:10*sP:isP)"
9090 DATA "(isP:sP:isP:17*sP:isP
:6*sP:isP:3*sP:isP)"
9100 DATA "(isP:sP:isP:2*sP:3*is
P:sP:10*isP:sP:isP:6*sP:5*isP)"
9110 DATA "(3*isP:2*sP:isP:6*sP:
2*isP:13*sP:isP:3*sP:isP)"
9120 DATA "(isP:sP:isP:2*sP:3*is
P:sP:2*isP:sP:2*isP:3*sP:2*isP:s
P:isP:10*sP:isP)"
9130 DATA "(isP:sP:isP:2*sP:isP:
3*sP:isP:7*sP:2*isP:4*sP:isP:5*s
P:3*isP)"
9140 DATA "(isP:sP:isP:6*sP:isP:
sP:4*isP:2*sP:5*isP:2*sP:2*isP:4
*sP:isP:sP:isP)"
9150 DATA "(isP:sP:8*isP:sP:isP:
2*sP:isP:2*sP:4*isP:2*sP:2*isP:4
*sP:isP:sP:isP)"
9160 DATA "(isP:13*sP:isP:14*sP:
isP:sP:isP)"
9170 DATA "(12*isP:2*sP:16*isP:s
P:isP)"
9180 DATA "(isP:10*sP:isP:2*sP:5
*isP:12*sP:isP)"
9190 DATA "(isP:sP:8*isP:sP:isP:
12*sP:3*isP:4*sP:isP)"
9200 DATA "(isP:3*sP:3*isP:2*sP:
isP:sP:isP:2*sP:isP:3*sP:7*isP:s
P:isP:4*sP:isP)"
9210 DATA "(isP:8*sP:3*isP:2*sP:
isP:sP:isP:sP:isP:5*sP:isP:sP:is
P:4*sP:isP)"
9220 DATA "(isP:sP:6*isP:sP:isP:
4*sP:isP:sP:isP:sP:isP:12*sP:isP
)"
9230 DATA "(isP:8*sP:isP:4*sP:is
P:3*sP:isP:sP:8*isP:3*sP:isP)"
9240 DATA "(4*isP:sP:5*isP:21*sP
:isP)"
9250 DATA "(isP:2*sP:isP:8*sP:6*
isP:4*sP:7*isP:2*sP:isP)"
9260 DATA "(isP:8*sP:6*isP:7*sP:
2*isP:7*sP:isP)"
9270 DATA "(32*isP)"
```



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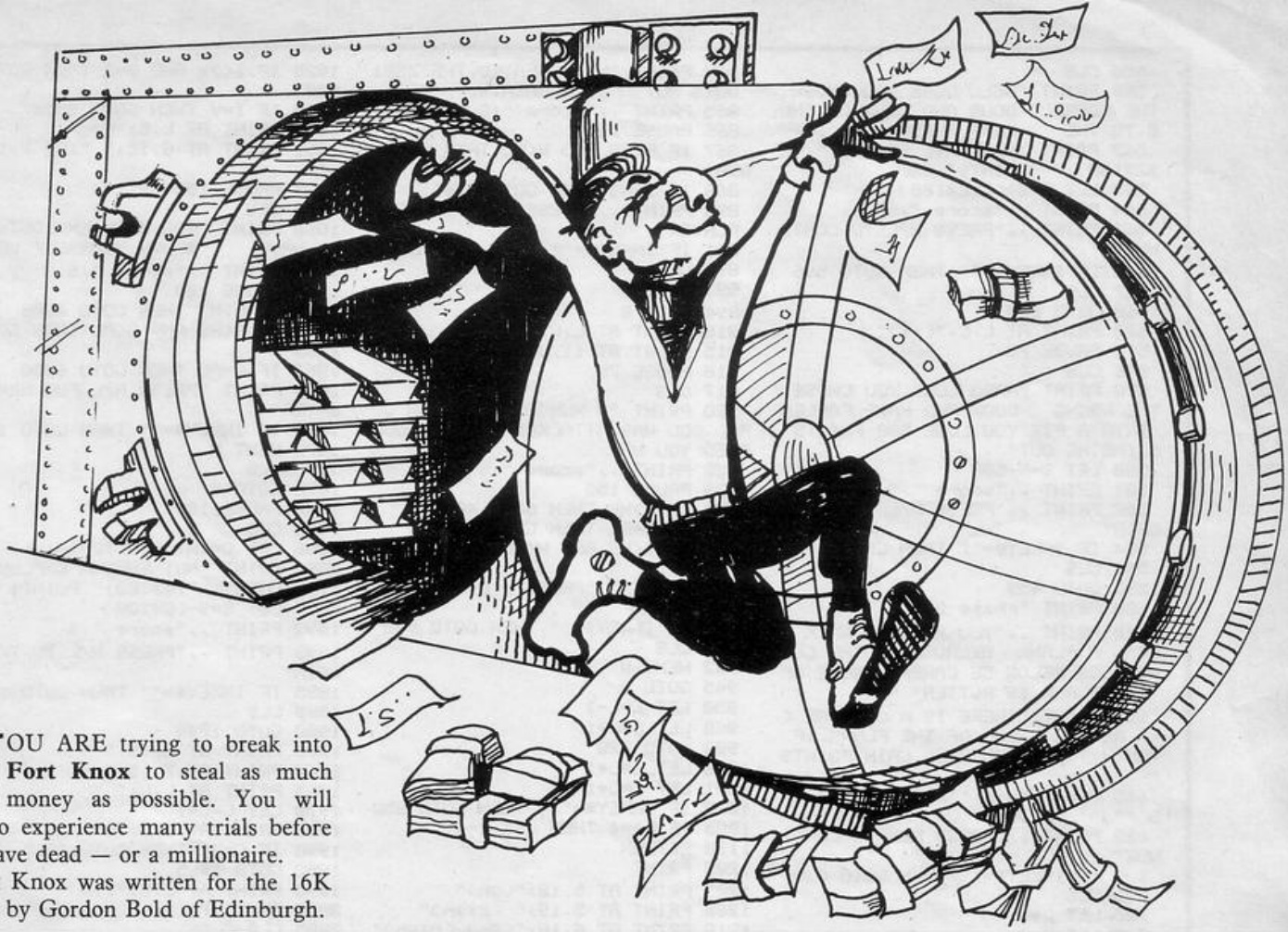
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This guarantee covers only advance payment sent in direct response to an advertisement in this magazine (not, for example, payment made in response to catalogues etc, received as a result of answering such advertisements). Classified advertisements are excluded.



YOU ARE trying to break into **Fort Knox** to steal as much money as possible. You will have to experience many trials before you leave dead — or a millionaire.

Fort Knox was written for the 16K ZX-81 by Gordon Bold of Edinburgh.

FORT KNOX

```
   2 LET AG=0
   3 LET HS=0
   4 LET N$="          "
   5 GOSUB 5000
   6 PRINT "HOW MANY PLAYERS?"
   7 INPUT PL
   8 LET S=0
   9 FOR W=1 TO PL
  10 PRINT ,,"Player ";W
  11 LET S=0
  12 PAUSE 75
  13 CLS
  14 PRINT "fort knox 11"
  15 PRINT AT 0,14;"high score=";HS
  17 PRINT AT 1,14;"name:- ";N$
  18 PRINT AT 2,14;"age=";AG
  22 PRINT AT 5,7;"INSTRUCTIONS? (Y/N)"
  23 INPUT I$
  24 IF I$="N" THEN GOTO 108
  25 IF I$="Y" THEN GOTO 30
  30 PRINT AT 5,7;"instructions
          "
  33 PRINT ,,"YOU ARE TRYING TO BREAK INTO A  SPECIAL BANK WHICH  CONTAINS OVER£100,000,000.YOU WILL HAVE TO "
  34 PRINT "OVERCOME MANY DANGERS ON YOUR   WAY TO THE VAULT.DURING THE GAMEYOU GAIN AND LOSE POINTS."
  35 PRINT "YOU ARE REPRESENTED BY AN ""O"""
  40 PRINT "IF YOU COMPLETE A TASK          SUCCESSFULLY YOU WILL CHANGE TO AN ((io)).IF NOT YOU  WILL CHANGE TO AN ((i*))."
  80 PRINT ,,"PRESS N/L TO CONTINUE"
  90 IF INKEY$="" THEN GOTO 90
 108 CLS
 109 LET A=INT (RND*3)+1
 110 PRINT "Phase 1"
 120 PRINT "THERE ARE 3 PASSAGES  WHICH LEAD TO THE VAULT.1 OF THE PASSAGES  HAS AN ALARM"
 140 PRINT "TYPE IN WHICH PASSAGE (1 TO 3)"
 150 INPUT C
 170 PRINT
 180 PRINT AT 7,0;"(8*99:1SP:SP:1SP:2*99:1SP:SP:1SP:11*99)"
 182 FOR F=1 TO 7
 184 PRINT "(8*9h:1SP:SP:1SP:2*9h:1SP:SP:1SP:2*9h:1SP:SP:1SP:11*9h)"
 185 NEXT F
 186 PRINT AT 15,0;"(8*9f:1SP:SP:1SP:2*9f:1SP:SP:1SP:2*9f:1SP:SP:1SP:11*9f)"
 190 IF C=1 THEN LET Y=9
 200 IF C=2 THEN LET Y=14
 210 IF C=3 THEN LET Y=19
 220 LET X=6
 230 PRINT AT X,Y;" "
 240 LET X=X+1
 250 IF X=15 THEN GOTO 300
 255 IF X=10 AND C=A THEN GOTO 350
 260 PRINT AT X,Y;"O"
 270 GOTO 230
 300 PRINT AT X,Y;"(io)"
 302 PAUSE 75
 305 CLS
 306 LET Q=INT (RND*30)+10
 308 PRINT "YOU HAVE ELUDED THE ALARM AND "
 310 PRINT "HAVE  GAINED ";Q*100;" POINTS"
 330 GOTO 400
 350 PRINT AT X,Y;"(i*)"
 352 PAUSE 75
 354 CLS
 355 PRINT "YOU HAVE BEEN ARRESTED BY A"
 360 PRINT "POLICEMAN.YOU LOSE 500 POINTS   AFTER BRIBING HIM"
 365 LET S=S-500
 368 PRINT ,,"score ";S
 370 PRINT ,,"PRESS N/L TO TRY AGAIN"
 380 IF INKEY$="" THEN GOTO 380
 390 GOTO 105
 400 LET S=S+(Q*100)
 405 PRINT ,,"score ";S
 410 PRINT ,,"PRESS N/L TO CONTINUE"
 420 IF INKEY$="" THEN GOTO 420
 430 CLS
 440 PRINT "Phase 2"
 450 LET Z=INT (RND*6)+1
 455 PRINT ,,"YOU HAVE FOUND A KEY AND MUST   PUT IT INTO 1 OF THE DOORS ((id)). USE THE CURSOR KEYS TO MOVE     AROUND"
 456 PRINT ,,"PRESS N/L TO CONTINUE"
 457 IF INKEY$="" THEN GOTO 457
 458 CLS
 459 LET L=6
 460 LET C=4
 461 LET X=INT (RND*5)
 462 LET Y=INT (RND*5)
 464 PRINT AT X,Y;"(id)"
 470 LET A=INT (RND*5)
 472 LET B=INT (RND*5)
 474 PRINT AT A,B;"(id)"
 475 PRINT AT L,C;" "
 477 LET L=L+(INKEY$="6")-(INKEY$="7")
 478 LET C=C+(INKEY$="8")-(INKEY$="5")
 480 IF L=X AND C=Y THEN GOTO 550
 485 IF L=A AND C=B THEN GOTO 570
 490 PRINT AT L,C;"O"
 500 GOTO 475
 550 PRINT AT L,C;"(io)"
 555 PAUSE 75
```

```
 556 CLS
 560 PRINT "WELL DONE YOU CHOSE
THE CORRECT DOOR AND CAN CONTINU
E TO THE    NEXT PHASE"
 562 PRINT "YOU HAVE SCORED ";(Z
*Z*100);"  POINTS"
 563 LET S=S+(Z*Z*100)
 564 PRINT ,,"score ";S
 565 PRINT ,,"PRESS N/L TO CONTI
NUE"
 566 IF INKEY$="" THEN GOTO 566
 567 CLS
 568 GOTO 600
 570 PRINT AT L,C;"(i*)"
 575 PAUSE 75
 576 CLS
 578 PRINT "HARD LUCK.YOU CHOSE
THE WRONG   DOOR AND HAVE FALLEN
 INTO A PIT YOU LOSE 500 POINTS
CLIMBING OUT"
 580 LET S=S-500
 581 PRINT ,,"score ";S
 582 PRINT ,,"PRESS N/L TO TRY A
GAIN"
 584 IF INKEY$="" THEN GOTO 584
 586 CLS
 590 GOTO 459
 600 PRINT "Phase 3"
 610 PRINT ,,"YOU HAVE TO WALK A
LONG A PLANK  BECAUSE OF THE GUA
RD DOGS BELOW BE CAREFUL,SOME OF
 THE PLANK IS ROTTEN"
 612 PRINT "THERE IS A CROWBAR (
+) AT THE   END OF THE PLANK.IF
YOU HIT IT  YOU WILL GAIN POINTS
"
 615 PRINT "USE ""W"" TO WALK AN
D ""J"" TO JUMP"
 620 PRINT ,,"PRESS N/L TO CONTI
NUE"
 630 IF INKEY$="" THEN GOTO 630
 640 CLS
 700 LET L=4
 705 LET C=0
 710 PRINT AT 5,0;"(97:2*sP:2*97
:sP:97:sP:2*97:4*sP:97:2*sP:2*97
)"
 712 PRINT AT 12,0;"(19*9a)"
 715 PRINT AT 4,17;"+"
 720 PRINT AT L,C;" "
 730 IF INKEY$="W" THEN LET C=C+
1
 735 IF L=4 AND C=1 OR L=4 AND C
=2 OR L=4 AND C=5 OR L=4 AND C=7
 OR L=4 AND C=10 OR L=4 AND C=11
 OR L=4 AND C=12 OR L=4 AND C=13
 OR L=4 AND C=15 OR L=4 AND C=16
 THEN GOSUB 900
 737 IF INKEY$="J" AND L=L+1 AND
 C=C+1 THEN GOTO 850
 740 IF INKEY$="J" THEN GOSUB 95
0
 745 IF INKEY$<>"J" AND L<4 THEN
 GOSUB 1000
 747 IF INKEY$="J" AND L=L+1 AND
 C=C+1 THEN GOTO 850
 750 PRINT AT L,C;"O"
 760 IF L=4 AND C=18 THEN GOTO 1
200
 765 IF C>19 THEN GOTO 802
 766 IF C>=18 AND L<>4 THEN GOTO
 802
 770 IF C=19 AND L=4 THEN GOTO 1
500
 775 LET Z=INT (RND*20)+1
 780 IF L=4 AND C=17 THEN LET S=
S+(Z*20)
 800 GOTO 720
 802 PRINT AT L,C;"(i*)"
 803 PAUSE 100
 804 CLS
 805 PRINT "YOU HAVE JUMPED OUT
OF THE BANK"
 810 PRINT "YOU LOSE 1000 POINTS
."
 812 LET S=S-1000
 814 PRINT ,,"score ";S
 815 PRINT ,,"PRESS N/L TO TRY A
GAIN."
 820 IF INKEY$="" THEN GOTO 820
 825 CLS
 830 GOTO 700
 850 PRINT AT L,C;"(i*)"
 855 PAUSE 75
 860 CLS
 862 PRINT "YOU CHEATED.THE ZX81
 DOES NOT   LIKE CHEATS."
 865 PRINT ,,"score ";S
 866 PAUSE 120
 867 IF S<HS AND W<PL THEN GOTO
890
 868 IF S>HS THEN GOTO 4005
 890 PRINT ,,"PRESS N/L FOR NEXT
 PLAYER"
 891 IF INKEY$="" THEN GOTO 891
 892 CLS
 893 NEXT W
 894 GOTO 8
 910 PRINT AT L,C;" "
 915 PRINT AT 11,C;"(i*)"
 916 PAUSE 75
 917 CLS
 920 PRINT "A HUNGRY ALSATIAN GU
ARD DOG HAS ATTACKED YOU AND GOB
BLED YOU UP"
 922 PRINT ,,"score ";S
 923 PAUSE 150
 925 IF S>HS THEN GOTO 4005
 926 IF W=PL THEN GOTO 6000
 930 IF S<HS AND W<PL THEN GOTO
934
 934 PRINT ,,"PRESS N/L FOR NEXT
 PLAYER"
 935 IF INKEY$="" THEN GOTO 935
 940 CLS
 942 NEXT W
 945 GOTO 8
 950 LET L=L-1
 960 LET C=C+1
 980 GOTO 720
1000 LET L=L+1
1001 LET C=C+1
1002 IF INKEY$="J" THEN GOTO 850
1005 IF L>=4 THEN LET L=4
1130 RETURN
1200 PRINT
1205 PRINT AT 5,18;"(9h)"
1206 PRINT AT 5,19;" (8*9h)"
1210 PRINT AT 6,18;"(9h) (8*9h)"
1220 PRINT AT 7,18;"(9h) (8*9h)"
1230 PRINT AT 8,18;"(9h) (8*9h)"
1240 PRINT AT 9,18;"(9h) (8*9h)"
1250 PRINT AT 10,18;"(9f)
  "
1260 PRINT AT 11,18;"(9f)
  "
1270 PRINT AT 12,18;"(10*9f)"
1280 GOTO 720
1500 PRINT AT 4,19;" "
1505 LET L=11
1506 LET C=19
1510 PRINT AT L,C;" "
1511 LET C=C+1
1512 IF C=27 THEN GOTO 1515
1513 PRINT AT L,C;"O"
1514 GOTO 1507
1515 PRINT AT L,C;"(io)"
1520 PAUSE 150
1530 CLS
1535 LET X=INT (RND*100)+1
1540 PRINT "WELL DONE.YOU HAVE G
AINED ";X*100;"  POINTS FOR FIND
ING THE CORRIDOR"
1550 LET S=S+(X*100)
1560 PRINT ,,"score ";S
1600 PRINT ,,"PRESS N/L TO CONTI
NUE"
1610 IF INKEY$="" THEN GOTO 1610
1620 CLS
1700 PRINT "Phase 4"
1720 PRINT ,,"THERE IS A STEEL D
OOR IN THE    CORRIDOR.YOU MUST
INPUT THE     AMOUNT OF EXPLOSIV
ES TO BE USED"
1725 PRINT "(1 OR 2) TONS."
1730 PRINT ,,"PRESS N/L TO CONTI
NUE"
1735 IF INKEY$="" THEN GOTO 1735
1740 CLS
1745 PRINT AT 5,0;"(32*9h)"
1750 PRINT AT 8,0;"(32*9h)"
1755 LET L=7
1756 LET C=14
1760 PRINT AT L,C;"O"
1770 PRINT AT 6,15;"(1sP)"
1780 PRINT AT 7,15;"(1sP)"
1800 LET V=INT (RND*2)+1
1810 INPUT I
1820 IF I<>V AND V=1 THEN GOTO 1
850
1825 IF I<>V AND V=2 THEN GOTO 1
880
1840 IF I=V THEN GOTO 1950
1850 PRINT AT L,C;"(i*)"
1851 PRINT AT 6,15;" ";AT 7,15;"
 "
1855 PAUSE 100
1858 CLS
1860 PRINT "TOO MUCH EXPLOSIVE.Y
OU HAVE     BLOWN YOURSELF UP"
1862 PRINT ,,"score ";S
1863 PAUSE 120
1865 IF S>HS THEN GOTO 4005
1866 IF S<HS AND W<PL THEN GOTO
1869
1867 IF W=PL THEN GOTO 6000
1869 PRINT "PRESS N/L FOR NEXT P
LAYER"
1870 IF INKEY$="" THEN GOTO 1870
1872 NEXT W
1875 CLS
1878 GOTO 8
1880 PAUSE 100
1885 CLS
1886 LET Q=INT (RND*20)+1
1888 PRINT "NOT ENOUGH EXPLOSIVE
.YOU LOSE   ";Q*100;" POINTS"
1889 LET S=S-(Q*100)
1890 PRINT ,,"score ";S
1893 PRINT ,,"PRESS N/L TO TRY A
GAIN"
1895 IF INKEY$="" THEN GOTO 1895
1898 CLS
1900 GOTO 1740
1950 PRINT AT 6,15;" "
1960 PRINT AT 7,15;" "
1965 PRINT AT L,C;" "
1970 LET C=C+1
1980 PRINT AT L,C;"O"
1990 IF C=31 THEN GOTO 1995
1992 GOTO 1965
1995 PRINT AT L,C;"(io)"
2000 PAUSE 75
2005 CLS
2010 PRINT "WELL DONE.YOU HAVE G
OT THROUGH  THE STEEL DOOR AND H
AVE GAINED  2000 POINTS"
2015 LET S=S+2000
2020 PRINT ,,"score[";S
2030 PRINT ,,"PRESS N/L TO CONTI
NUE"
2040 IF INKEY$="" THEN GOTO 2040
2050 CLS
2100 PRINT "Phase 5"
2110 PRINT ,,"YOU ARE IN A LARGE
 ROOM AND THE FLOOR WILL BECOME
ELECTRIFIED"
2120 PRINT "AFTER 100 SECONDS.YO
U MUST FIND THE HIDDEN SWITCH BE
FORE"
2130 PRINT "YOUR TIME RUNS OUT"
2132 PRINT "IF YOU TURN IT OFF I
N TIME A    CORRIDOR IS PRINTED"
2133 PRINT "IF YOUR TIME RUNS OU
T THE SWITCHIS PRINTED"
2135 PRINT "USE THE CURSOR KEYS
TO MOVE     AROUND"
2140 PRINT ,,"PRESS N/L TO CONTI
NUE"
2150 IF INKEY$="" THEN GOTO 2150
2160 CLS
2175 LET T=100
2194 LET L=7
2196 LET C=0
2200 PRINT AT 5,0;"(7*9h:10*sP:9
h)"
2210 PRINT AT 8,0;"(7*9h:10*sP:9
h)"
2220 PRINT AT 4,6;"(9h:10*sP:9h)
"
2230 PRINT AT 3,6;"(9h:10*sP:9h)
"
2235 PRINT AT 6,6;"(11*sP:9h)"
2240 PRINT AT 2,6;"(9h:10*sP:9h)
"
2245 PRINT AT 7,6;"(11*sP:9h)"
2250 PRINT AT 1,6;"(9h:10*sP:9h)
"
2260 PRINT AT 0,6;"(12*9h)"
2270 PRINT AT 9,6;"(9h:10*sP:9h)
"
2280 PRINT AT 10,6;"(9h:10*sP:9h
)"
2290 PRINT AT 11,6;"(9h:10*sP:9h
)"
```

```
2300 PRINT AT 12,6;"(9h:10*sP:9h
)"
2310 PRINT AT 13,6;"(9h:10*sP:9h
)"
2320 PRINT AT 14,6;"(12*9h)"
2325 LET X=INT (RND*12)+1
2326 LET Y=INT (RND*9)+7
2330 PRINT AT L,C;" "
2333 PRINT AT X,Y;"="
2335 LET T=T-1
2340 LET L=L+(INKEY$="6")-(INKEY
$="7")
2350 LET C=C+(INKEY$="8")-(INKEY
$="5")
2355 IF L<=0 THEN LET L=1
2356 IF L>=14 THEN LET L=13
2357 IF C>=17 THEN LET C=16
2358 IF L<>7 AND C<=6 THEN LET C
=7
2360 IF L=X AND C=Y THEN GOTO 25
00
2365 IF C>6 THEN PRINT AT 6,6;"(
9h)";AT 7,6;"(9h)"
2370 IF T=-1 THEN GOTO 2600
2380 PRINT AT L,C;"O"
2390 PRINT AT 0,22;"time ";T;" "
2400 GOTO 2330
2500 PRINT AT L,C;" "
2501 PRINT AT 14,8;"   "
2502 PRINT AT 15,7;"(9h:3*sP:9h)
"
2503 PRINT AT 16,7;"(9h:3*sP:9h)
"
2504 PRINT AT 17,7;"(9h:3*sP:9h)
"
2505 PRINT AT 18,7;"(9h:3*sP:9h)
"
2506 PRINT AT 19,7;"(9h:3*sP:9h)
"
2507 PRINT AT 20,7;"(9h:3*sP:9h)
"
2508 LET L=15
2509 LET C=9
2510 PRINT AT L,C;" "
2511 LET L=L+1
2512 IF L=20 THEN GOTO 2515
2513 PRINT AT L,C;"O"
2514 GOTO 2510
2515 PRINT AT L,C;"(io)"
2519 PAUSE 120
2520 CLS
2530 PRINT "YOU TURNED OFF THE S
WITCH IN    TIME.YOU SCORED ";T*
100;"  POINTS"
2535 LET S=S+(T*100)
2540 PRINT ,,"score ";S
2550 PRINT ,,"PRESS N/L TO CONTI
NUE"
2560 IF INKEY$="" THEN GOTO 2560
2565 CLS
2570 GOTO 2700
2600 PRINT AT L,C;"(i*)"
2605 PRINT AT X,Y;"="
2610 PAUSE 100
2620 CLS
2630 PRINT "YOU HAVE BEEN ELECTR
IFIED."
2640 PRINT ,,"score ";S
2642 PAUSE 120
2645 IF S>HS THEN GOSUB 4005
2650 IF S<HS AND W<PL THEN GOTO
2659
2655 IF W=PL THEN GOTO 6000
2659 PRINT ,,"PRESS N/L FOR NEXT
 PLAYER"
2660 IF INKEY$="" THEN GOTO 2660
2670 CLS
2672 NEXT W
2680 GOTO 8
2700 PRINT "Phase 6"
2710 PRINT ,,"YOU HAVE FINALLY R
EACHED THE    VAULT.THE COMBINAT
ION WILL BE   PRINTED FOR A FEW"
2720 PRINT "SECONDS.YOU MUST REM
EMBER IT ANDTYPE IT IN WHEN YOU
ARE TOLD"
2725 PRINT "IF YOU INPUT THE WRO
NG          COMBINATION THE CORR
ECT ONE WILLBE PRINTED"
2730 PRINT "GOOD LUCK."
2740 PRINT ,,"PRESS N/L TO CONTI
NUE"
2750 IF INKEY$="" THEN GOTO 2750
2760 CLS
2770 LET L=15
2780 LET C=9
2790 PRINT AT L,C;" "
2800 PRINT AT 10,6;"(9h:5*sP:9h)
"
2801 PRINT AT 11,6;"(9h:5*sP:9h)
"
2802 PRINT AT 12,6;"(9h:5*sP:9h)
"
2803 PRINT AT 13,6;"(9h:5*sP:9h)
"
2804 PRINT AT 14,6;"(9h:5*sP:9h)
"
2805 PRINT AT 15,6;"(9h:5*sP:9h)
"
2810 PRINT AT 16,6;"(9h:5*isP:9h
)"
2811 PRINT AT 17,6;"(9h:5*sP:9h)
"
2812 PRINT AT 18,6;"(9h:5*sP:9h)
"
2813 PRINT AT 19,6;"(9h:5*sP:9h)
"
2814 PRINT AT 20,6;"(9h:5*sP:9h)
"
2820 PRINT AT L,C;"O"
3000 LET M=INT (RND*21000)+10000
3010 PRINT AT 17,7;M
3020 PAUSE 25
3025 PRINT AT 17,7;"     "
3027 PRINT AT 0,0;"TYPE IN COMBI
NATION"
3028 PAUSE 75
3029 PRINT AT 0,0;"
                "
3030 INPUT T
3040 IF T=M THEN GOTO 3500
3050 IF T<>M THEN GOTO 3750
3500 PRINT AT 16,8;"   "
3510 PRINT AT L,C;" "
3520 LET L=L+1
3530 IF L=20 THEN GOTO 3545
3535 PRINT AT L,C;"O"
3540 GOTO 3510
3545 PRINT AT L,C;"(io)"
3546 PAUSE 100
3550 CLS
3551 FOR F=1 TO 21
3552 PRINT "(32*i£)"
3553 NEXT F
3554 PAUSE 100
3555 CLS
3558 LET K=INT (RND*500)+100
3560 PRINT "WELL DONE.YOU HAVE O
PENED THE   VAULT AND ARE A VERY
 RICH PERSON"
3565 PRINT "YOU SCORED ";K*100;"
   POINTS"
3570 LET S=S+(K*100)
3575 PRINT ,,"score ";S
3578 PAUSE 100
3580 IF S>HS THEN GOTO 4005
3585 IF S<HS THEN PRINT ,,"PRESS
 N/L FOR ANOTHER GO."
3590 IF INKEY$="" THEN GOTO 3590
3595 CLS
3600 GOTO 5
3750 PRINT AT L,C;"(i*)"
3770 PRINT AT 15,7;"=>";AT 15,10
;"<="
3780 PRINT AT 17,7;M
3790 PAUSE 150
3800 CLS
3810 PRINT "YOU HAVE BEEN STABBE
D BY TWO    PIKES.WHAT A PITY YO
U WERE"
3820 PRINT "SO CLOSE TO THE £100
,000,000."
3830 PRINT "NEVER MIND."
3840 PRINT ,,"score ";S
3841 PAUSE 150
3842 IF S<HS AND W<PL THEN GOTO
3850
3844 IF S>HS THEN GOTO 4005
3846 IF W=PL THEN GOTO 6000
3850 PRINT ,,"PRESS N/L FOR NEXT
 PLAYER"
3860 IF INKEY$="" THEN GOTO 3860
3870 CLS
3872 NEXT W
3880 GOTO 8
4005 CLS
4006 IF S>HS THEN LET HS=S
4008 PRINT "YOU HAVE THE HIGH SC
ORE"
4010 PRINT "INPUT NAME (1 TO 12
LETTERS)"
4015 INPUT N$
4020 IF LEN N$>12 THEN GOTO 4005
4025 IF LEN N$<=12 THEN GOTO 402
6
4026 PRINT ,,N$
4027 PRINT ,,"INPUT AGE"
4028 INPUT AG
4029 PRINT ,,AG
4031 PRINT ,,"OK? (Y/N)"
4032 PAUSE 20
4033 INPUT I$
4034 IF I$="Y" THEN GOTO 4036
4035 IF I$="N" THEN GOTO 4005
4036 IF W<PL THEN GOTO 4040
4037 IF W=PL THEN GOTO 6000
4040 PRINT ,,"PRESS N/L FOR NEXT
 PLAYER"
4045 IF INKEY$="" THEN GOTO 4045
4050 CLS
4052 NEXT W
4055 GOTO 8
5000 PRINT AT 0,4;"(4*isP:3*sP:4
*isP:3*sP:4*isP:3*sP:3*isP)"
5010 PRINT AT 1,4;"(isP:6*sP:isP
:2*sP:isP:3*sP:isP:2*sP:isP:4*sP
:isP)"
5020 PRINT AT 2,4;"(2*isP:5*sP:i
sP:2*sP:isP:3*sP:4*isP:4*sP:isP)
"
5030 PRINT AT 3,4;"(isP:6*sP:isP
:2*sP:isP:3*sP:isP:sP:isP:5*sP:i
sP)"
5040 PRINT AT 4,4;"(isP:6*sP:4*i
sP:3*sP:isP:sP:isP:5*sP:isP)"
5050 PRINT AT 7,2;"(isP:2*sP:isP
:4*sP:isP:3*sP:isP:3*sP:4*isP:3*
sP:isP:3*sP:isP)"
5060 PRINT AT 8,2;"(isP:sP:isP:5
*sP:2*isP:2*sP:isP:3*sP:isP:2*sP
:isP:4*sP:isP:sP:isP)"
5070 PRINT AT 9,2;"(2*isP:6*sP:i
sP:sP:isP:sP:isP:3*sP:isP:2*sP:i
sP:5*sP:isP)"
5080 PRINT AT 10,2;"(isP:sP:isP:
5*sP:isP:2*sP:2*isP:3*sP:isP:2*s
P:isP:4*sP:isP:sP:isP)"
5090 PRINT AT 11,2;"(isP:2*sP:is
P:4*sP:isP:3*sP:isP:3*sP:4*isP:3
*sP:isP:3*sP:isP)"
5100 PRINT AT 14,9;"(3*isP:2*sP:
3*isP)"
5101 PRINT AT 15,9;"(sP:isP:4*sP
:isP)"
5102 PRINT AT 16,9;"(sP:isP:4*sP
:isP)"
5103 PRINT AT 17,9;"(sP:isP:4*sP
:isP)"
5104 PRINT AT 18,9;"(3*isP:2*sP:
3*isP)"
5106 FOR F=1 TO 3
5107 PRINT "       BOLDIE    SOFT
WARE       "
5108 NEXT F
5109 PAUSE 150
5110 CLS
5150 RETURN
6000 CLS
6010 PRINT "WELL DONE ";N$
6011 PRINT "            YOU SCORE
D THE MOST  POINTS AND HAVE WON
THE GAME."
6012 PRINT "YOU SCORED ";HS
6020 PRINT ,,"PRESS N/L TO HAVE
ANOTHER GO"
6030 IF INKEY$="" THEN GOTO 6030
6040 CLS
6050 GOTO 5
```

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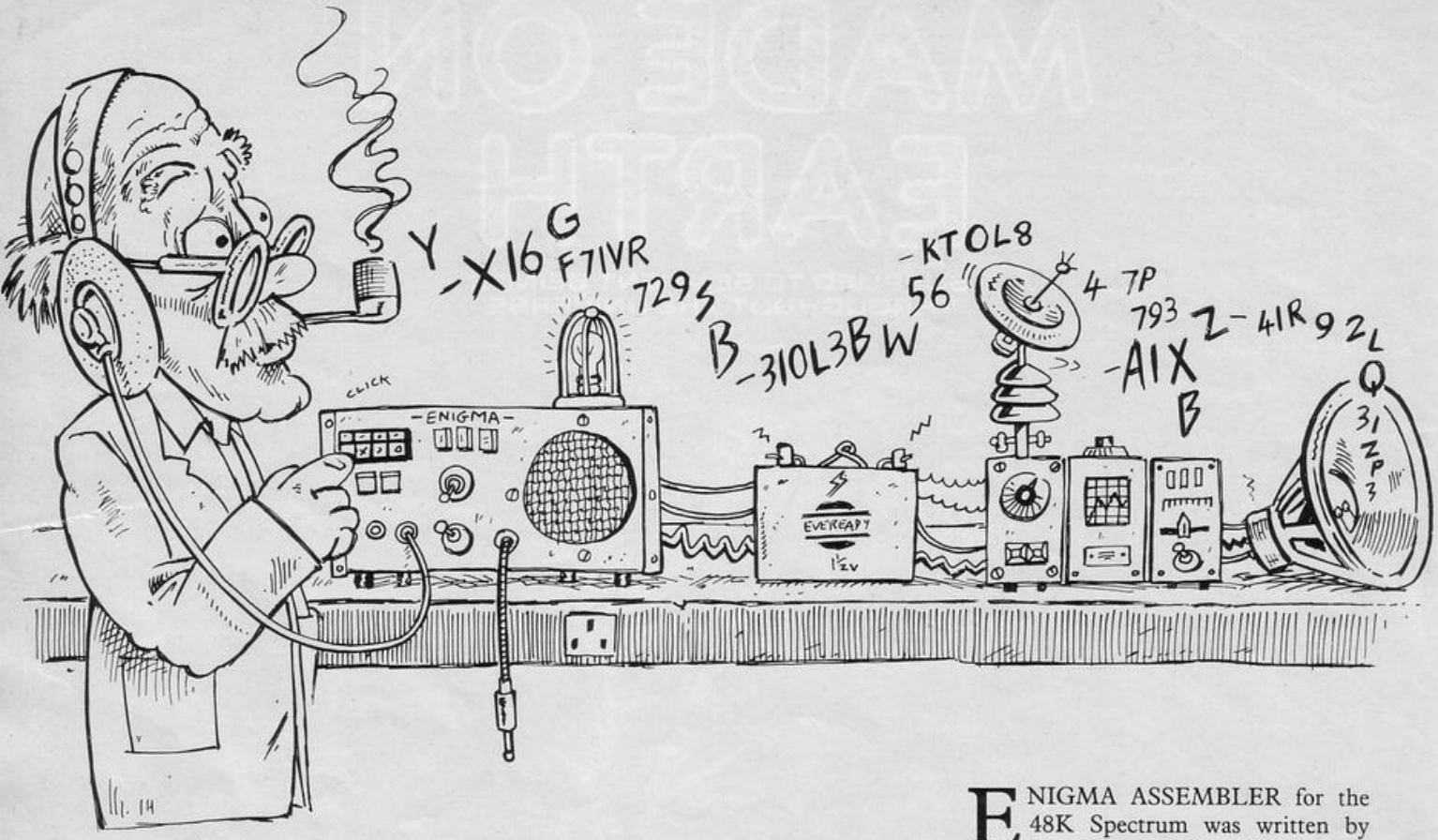
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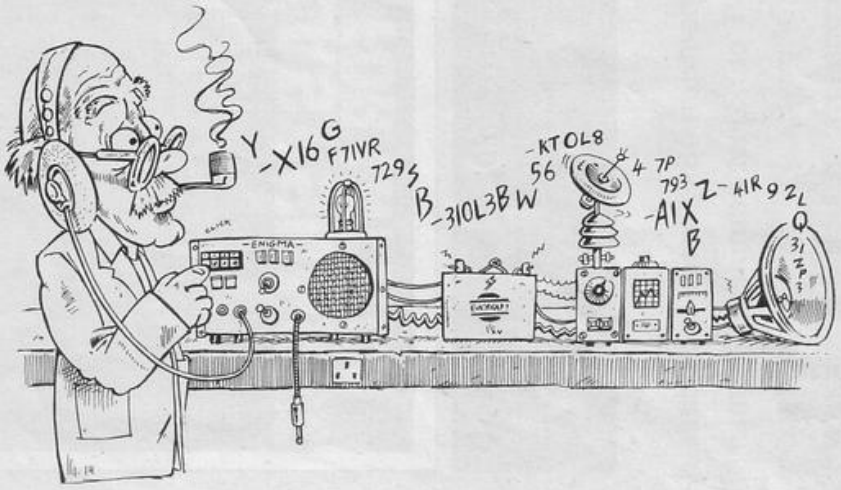


ENIGMA ASSEMBLER

ENIGMA ASSEMBLER for the 48K Spectrum was written by Max Berle of Geel, Belgium. It will convert assembly language code, such as LD A, ZZ, into machine code, a list of numbers which can be understood by the computer. Assembly language is easier to understand from the users' point of view.

```
   1 DIM a(252): DIM a$(252,12)
   2 INK 0: PAPER 7: BORDER 7: C
LS : PRINT AT 11,0; FLASH 1;"
   Please wait a moment       "
  50 GO SUB 8000
 110 CLS
 120 PRINT TAB 10;"Options";TAB
10;"_______"
 130 PRINT : PRINT : PRINT : PRI
NT
 131 BRIGHT 1
 140 PRINT TAB 2;"1......Write";
TAB 2;"2......Look";TAB 2;"3....
..Run";TAB 0
 145 PRINT AT 15,2;: INK 3: PLOT
 7,43: DRAW 0,17: DRAW 190,0: DR
AW 0,-17: DRAW -190,0
 147 INK 0
 150 PRINT #0; FLASH 1;"Please s
elect"
 160 PAUSE 0: IF INKEY$<"1" OR I
NKEY$>"3" THEN  GO TO 160
 165 BRIGHT 0
 170 GO TO (2000 AND INKEY$="1")
+(4000 AND INKEY$="2")+(5000 AND
 INKEY$="3")
2000 REM       Write
2010 CLS : INPUT "Start address:
 ";st
2015 PRINT AT 0,0;"Address: ";st
: PRINT : PRINT : PRINT : PRINT
2020 INPUT "Code: ";y$
2022 IF y$="stop" THEN  GO TO 10
0
2025 IF LEN y$<>12 THEN  GO TO 2
050
2030 FOR f=1 TO 252: IF y$=a$(f)
 THEN  GO TO 2100
2040 NEXT f
2050 PRINT  INVERSE 1;£0; FLASH
1;"Wrong input": PAUSE 100: PRIN
T £0;"
  ": GO TO 2020
2100 PRINT TAB 3;y$
2120 POKE st,a(f)
2121 FOR f=1 TO LEN y$
2122 IF y$(f TO f)="N" THEN  GO
TO 2125
2123 NEXT f
2124 GO TO 2130
2125 INPUT "NN: ";s
2126 IF s>255 THEN  GO TO 2125
2127 LET st=st+1: POKE st,s: PRI
NT TAB 0;"N="; INVERSE 1;s
2130 LET st=st+1: GO TO 2020
4005 LET w=0
4010 CLS : INPUT "Start address:
 ";rt
4015 PRINT AT 0,0; INVERSE 1;"Ad
resse: ";rt;£0; INVERSE 1;"
       'M' menu            "
4020 PRINT : PRINT : PRINT : PRI
NT
4021 FOR f=1 TO 252: IF PEEK (rt
)=a(f) THEN  GO SUB 4500
4022 NEXT f
4023 IF w=1 THEN  LET rt=rt+1: P
RINT TAB 0;"N="; INVERSE 1;PEEK
(rt): LET w=0
4035 IF INKEY$="m" THEN  GO TO 1
00
4040 LET rt=rt+1: GO TO 4021
4500 PRINT TAB 3;a$(f)
4510 FOR e=1 TO LEN a$(f)
4520 IF a$(f,e TO e)="N" THEN  L
ET w=1: RETURN
4530 NEXT e: RETURN
5010 CLS
5020 INPUT "Start address: ";d
5030 CLS : PRINT USR d: PRINT  F
LASH 1;£0;"Press any key"
5050 PAUSE 0: GO TO 100
8000 RESTORE
8010 FOR f=1 TO 252
8020 READ a$(f),a(f)
8030 NEXT f
9010 DATA "noP",0,"ld bc,NN",1,"
ld (bc),a",2,"inc bc",3,"inc b",
4,"dec b",5,"ld b,N",6,"rlca",7,
"ex af,af'",8,"add hl,bc",9,"ld
a,(bc)",10,"dec bc",11,"inc c",1
2,"dec c",13,"ld c,N",14,"rrca",
15,"djinz DIS",16,"ld de,NN",17,
"ld (de),a",18,"inc de",19,"inc
d",20,"dec d",21,"ld d,N",22,"rl
a",23,"jr DIS",24,"add hl,de",25
,"ld a,(de)",26,"dec de",27,"inc
 e",28,"dec e",29,"ld e,N",30,"r
ra",31,"jr nz,DIS",32,"ld hl,NN"
,33,"ld (NN),hl",34,"inc hl",35,
"inc h",36,"dec h",37
9020 DATA "ld h,N",38,"daa",39,"
jr z,DIS",40,"add hl,hl",41,"ld
hl,(NN)",42,"dec hl",43,"inc l",
44,"dec l",45,"ld l,N",46,"cpl",
```

```
47,"jr nc,DIS",48,"ld sP,NN",49,
"ld (NN),a",50,"inc sP",51,"inc
(hl)",52,"dec (hl)",53,"ld (hl),
N",54,"scf",55,"jr c,DIS",56,"ad
d hl,sP",57,"ld a,(NN)",58,"dec
sP",59,"inc a",60,"dec a",61,"ld
 a,N",62,"ccf",63,"ld b,b",64,"l
d b,c",65,"ld b,d",66,"ld b,e",6
7,"ld b,h",68,"ld b,l",69,"ld b,
(hl)",70,"ld b,a",71,"ld c,b",72
,"ld c,c",73,"ld c,d",74,"ld c,e
",75,"ld c,h",76,"ld c,l",77,"ld
 c,(hl)",78,"ld c,a",79,"ld d,b"
,80,"ld d,c",81
9030 DATA "ld d,d",82,"ld d,e",8
3,"ld d,h",84,"ld d,l",85,"ld d,
(hl)",86,"ld d,a",87,"ld e,b",88
,"ld e,c",89,"ld e,d",90,"ld e,e
",91,"ld e,h",92,"ld e,l",93,"ld
 e,(hl)",94,"ld e,a",95,"ld h,b"
,96,"ld h,c",97,"ld h,d",98,"ld
h,e",99,"ld h,h",100,"ld h,l",10
1,"ld h,(hl)",102,"ld h,a",103,"
ld l,b",104,"ld l,c",105,"ld l,d
",106,"ld l,e",107,"ld l,h",108,
"ld l,l",109,"ld l,(hl)",110,"ld
 l,a",111,"ld (hl),b",112,"ld (h
l),c",113,"ld (hl),d",114,"ld (h
l),e",115,"ld (hl),h",116,"ld (h
l),l",117,"halt",118,"ld (hl),a"
,119,"ld a,b",120,"ld a,c",121,"
ld a,d",122,"ld a,e",123,"ld a,h
",124,"ld a,l",125
9040 DATA "ld a,(hl)",126,"ld a,
a",127,"add a,b",128,"add a,c",1
29,"add a,d",130,"add a,e",131,"
add a,h",132,"add a,l",133,"add
a,(hl)",134,"add a,a",135,"adc a
,b",136,"adc a,c",137,"adc a,d",
138,"adc a,e",139,"adc a,h",140,
"adc a,l",141,"adc a,(hl)",142,"
adc a,a",143,"sub b",144,"sub c"
,145,"sub d",146,"sub e",147,"su
b h",148,"sub l",149,"sub (hl)",
150,"sub a",151,"sbc a,b",152,"s
bc a,c",153,"sbc a,d",154,"sbc a
,e",155,"sbc a,h",156,"sbc a,l",
157,"sbc a,(hl)",158,"sbc a,a",1
59,"and b",160,"and c",161,"and
d",162,"and e",163,"and h",164,"
and l",165,"and (hl)",166,"and a
",167,"xor b",168,"xor c",169
9050 DATA "xor d",170,"xor e",17
1,"xor h",172,"xor l",173,"xor (
hl)",174,"xor a",175,"or b",176,
"or c",177,"or d",178,"or e",179
,"or h",180,"or l",181,"or (hl)"
,182,"or a",183,"cP b",184,"cP c
",185,"cP d",186,"cP e",187,"cP
h",188,"cP l",189,"cP (hl)",190,
"cP a",191,"ret nz",192,"PoP bc"
,193,"JP nz,NN",194,"JP NN",195,
"call nz,NN",196,"Push bc",197,"
add a,N",198,"rst 0",199,"ret z"
,200,"ret",201,"JP z,NN",202,"ca
ll z,NN",204,"call NN",205,"adc
a,N",206,"rst 8",207,"ret nc",20
8,"PoP de",209,"JP nc,NN",210,"o
ut (N),a",211,"call nc,NN",212,"
Push de",213
9060 DATA "sub N",214,"rst 16",2
15,"ret c",216,"exx",217,"JP c,N
N",218,"in a,(N)",219,"call c,NN
",220,"sbc a,N",222,"rst 24",223
,"ret Po",224,"PoP hl",225,"JP P
o,NN",226,"ex (sP),hl",227,"call
 Po,NN",228,"Push hl",229,"and N
",230,"rst 32",231,"ret Pe",232,
"JP (hl)",233,"JP Pe,NN",234,"ex
 de,hl",235,"call Pe,NN",236,"xo
r N",238,"rst 40",239,"ret P",24
0,"PoP af",241,"JP P,NN",242,"di
",243,"call P,NN",244,"Push af",
245,"or N",246,"rst 48",247,"ret
 m",248,"ld sP,hl",249,"JP m,NN"
,250,"ei",251,"call m,NN",252,"c
P N",254,"rst 56",255
9999 RETURN
```




```
   1 FOR A=0 TO 7: READ B: POKE
USR "(9a)"+A,B: NEXT A
   2 FOR A=0 TO 7: READ B: POKE
USR "(9b)"+A,B: NEXT A
   3 FOR A=0 TO 7: READ B: POKE
USR "(9c)"+A,B: NEXT A
   4 LET sc=0: LET v=0
   5 LET y=21: LET x=15: LET s=2
0: LET r=15
  10 LET a=INT (RND*32): LET b=2
  20 PRINT AT b,a; INK 2;"(9a)"
  30 PRINT AT y,x; INK 4;"(9b)"
  35 PRINT AT s+1,r-1;"   ": PRI
NT AT s,r;"(9c)"
  36 BEEP .01,s: LET S=S-1
  38 PRINT AT 0,6;"SCORE ";sc
  39 PRINT AT 0,21;"MISSILES ";v
  40 LET c$=INKEY$
  50 IF c$="5" THEN  LET r=r-1
  62 IF c$="8" THEN  LET r=r+1
  70 IF s=1 THEN  GO TO 150
  80 IF r=a AND s=b THEN  GO TO
160
  90 IF sc=20 THEN  GO TO 1000
  95 IF v=25 THEN  GO TO 2000
 110 GO TO 20
 150 CLS : LET v=v+1: GO TO 5
 160 PRINT AT 0,0; INK 1; FLASH
1;"BANG!"
 163 FOR a=30 TO 33: BEEP .05,a:
 NEXT a
 170 LET sc=sc+1
 180 GO TO 10
1000 CLS : PRINT "YOU MADE IT WI
TH ";25-v;" MISSILES LEFT"
1005 FOR j=1 TO 32: BEEP .05,j
1020 NEXT j
1030 GO TO 1005
2000 CLS
2001 PRINT "YOU HAVE JUST USED U
P ALL YOUR  MISSILES BUT THERE A
RE STILL    SOME INVADERS LEFT"
2010 BEEP .5,0: BEEP .5,-2: BEEP
 .5,-4
2020 GO TO 2010
3000 DATA 28,62,42,62,127,99,65,
65
3010 DATA 24,24,24,60,60,126,255
,255
3020 DATA 24,60,126,24,24,126,12
6,24
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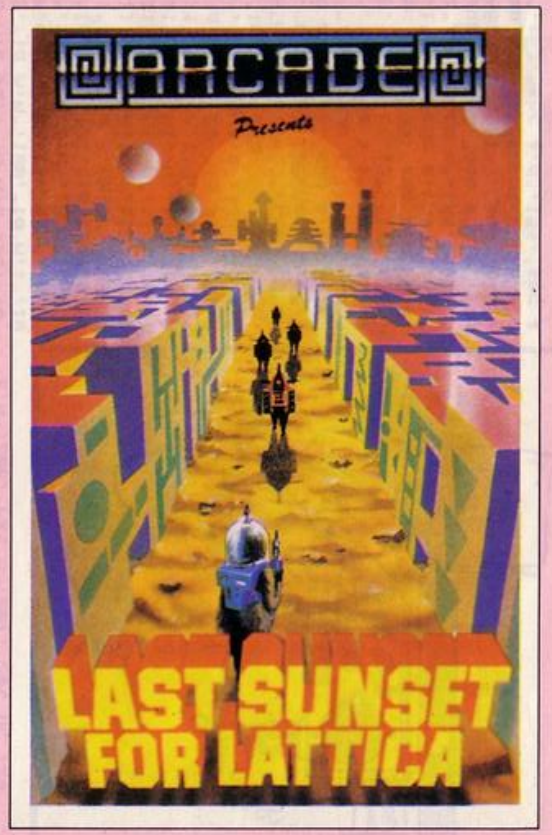
MISSILE for the 16K Spectrum was written by Tim Rose of Amisfield, Dumfries. Guide your missile with keys 5 and 8 towards the intruder. You have 25 missiles and 20 intruders to shoot.

THE ARCADE COLLECTION

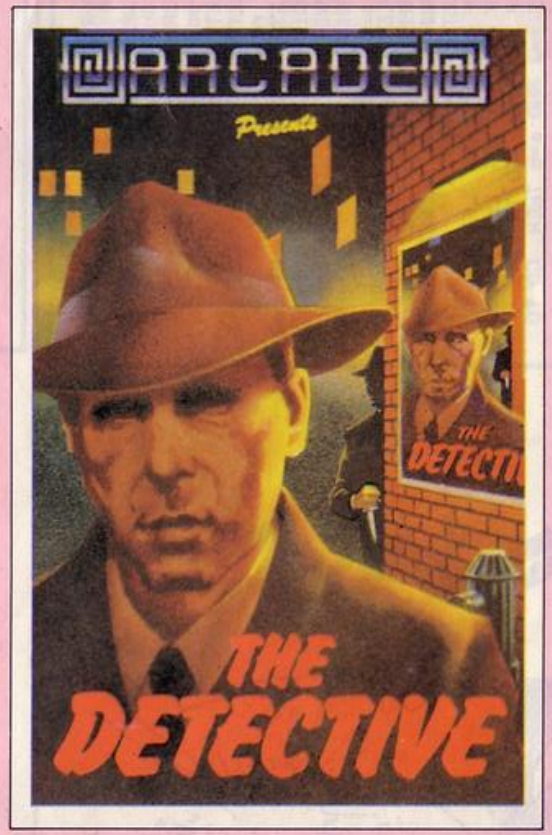


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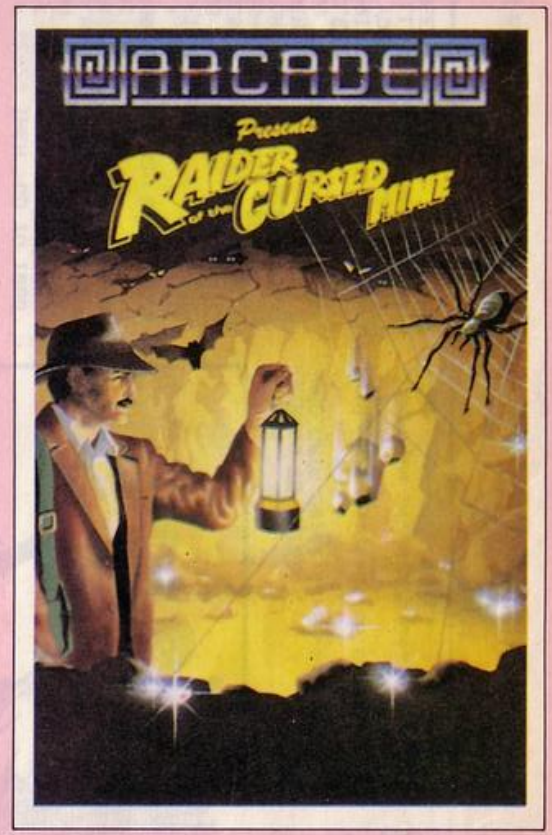
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LAST SUNSET FOR LATTICA (Original) is a true graphical adventure game in real time. Your aim is to defuse a bomb hidden somewhere in a highly complicated maze avoiding many well armed androids along the way. Extra lives are there for the taking, so are the keys to take you to the next level and all the while time is running out for the little Planet of Lattica. REF. SUN.



THE DETECTIVE (Original) You thought it was just another "Take the secrets from a Safe and Run" job but the mob thought differently. They will try everything to stop you this time, if madmen, lasers, bombs, dynamite, daggers, barrels, blister bombs, crates, helicopters, jets and fourteen other levels do not get you, you might just make it. Opening the safe has its pitfalls too. Fast moving, m/c game with excellent graphics and sound. A very addictive game. REF. DET.



RAIDER OF THE CURSED MINE (Original) Greed drove you down into the old diamond mine, sheer determination and luck is the only way out again. Lifts help you, so do lamps, and diamonds can be worth a fortune but beware of the evils that lurk deep in the mine. Trolls who throw boulders at you, spiders who eat you, ghosts who show no mercy and bats who steal things, add to this a time bonus and you have an exciting Arcade quality game. Reach level 32 and escape to the big outside world. REF. RAID.

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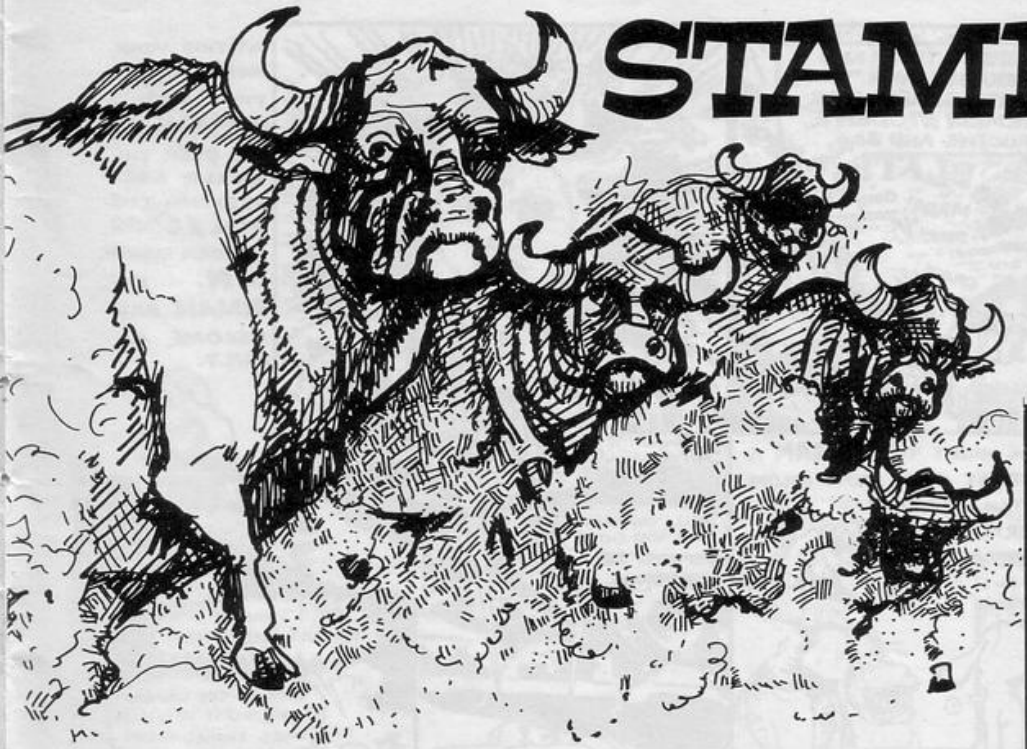
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SP

STAMPEDE



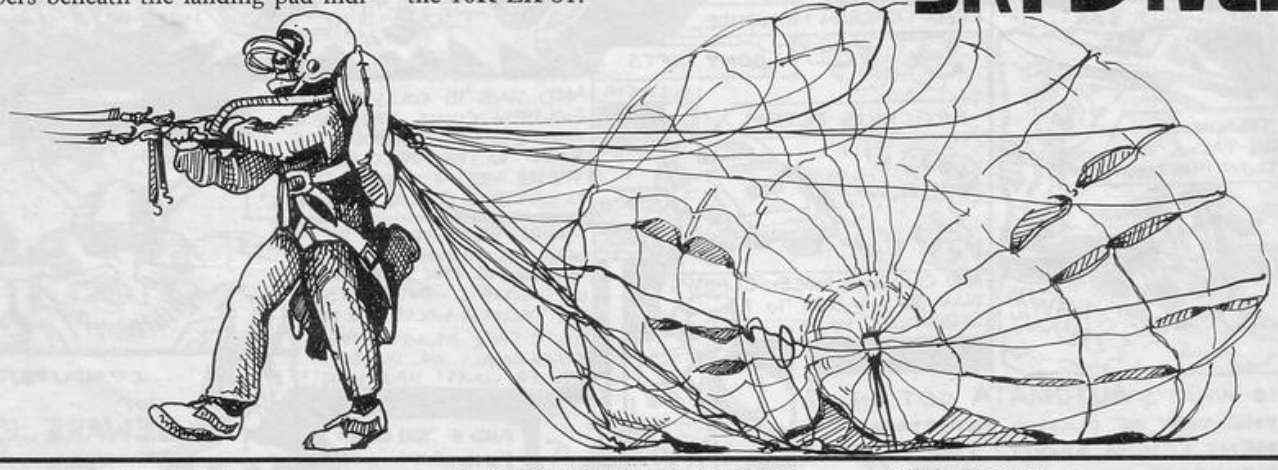
IT IS the law of the jungle — kill or be killed — as you drive your truck over the scrub straight into a stampede of wild buffalo. If you are within range you can fire with "." or you must dodge the wild beasts using "6" for down, "7" for up and "M" for overdrive. If you hit five buffalo, you must stop to repair your vehicle; stop with "1".

Stampede was written for the 1K ZX-81 by A Chetwode of Ramsbury, Wilts.

```
  2 LET A$="▗▄▖"
  3 LET S=0
  5 LET F=1
100 LET A=12
110 LET C=20
120 LET B=2
130 LET D=INT (RND*27)+2
160 LET G=1
170 LET S=S+1
500 PRINT AT 19,D;A$
503 SCROLL
520 PRINT AT A,F;"=)-"
525 PRINT AT A,F;"   "
530 LET F=F+1
540 IF F>=27 THEN LET F=1
541 IF A=1 THEN LET A=2
542 IF A=20 THEN LET A=19
550 IF INKEY$="." THEN GOSUB 60
00
551 IF INKEY$="7" THEN LET A=A-
1
552 IF INKEY$="6" THEN LET A=A+
1
553 IF INKEY$="5" THEN LET F=F-
1
554 IF INKEY$="M" THEN LET F=F+
3
555 IF INKEY$="1" THEN GOTO 200
0
600 GOTO 130
2000 PAUSE 1
3000 PRINT "SCORE ";S
4000 PAUSE 500
4500 CLS
5000 RUN
6000 PRINT AT A,F+2;"--------"
6001 PRINT AT A,F+2;"        "
6002 RETURN
```

SKY DIVER

RELEASE your parachutist using key "0" to make a controlled landing on the landing pad. The numbers beneath the landing pad indicate the points you score if you land accurately. **Sky Diver** was written by Jeremy Bell of Tuffley, Gloucester for the 16K ZX-81.



```
  1 REM "SKY DIVER"
  5 LET HS=0
 10 CLS
 15 LET S=0
 20 LET L=10
 30 LET A=INT (RND*21)+1
 40 LET D=INT (RND*7)+2
 41 LET G=D+1
 42 LET K=0
 44 PRINT AT 0,9;"**SKY DIVER**
";AT 1,3;"SCORE=";S;AT 1,14;"HIG
HEST SCORE=";HS;AT 21,0;"JUMPS="
;L
 50 PRINT AT 19,A;"(3*9a:2*1sP:
3*9a)"
 60 PRINT AT 20,A+1;"5";AT 20,A
+3;"10";AT 20,A+6;"5"
 70 FOR C=0 TO 28
 75 PRINT AT D,C;"(9w:9f:96)"
 77 IF INKEY$="0" THEN LET K=1
 80 IF K=1 THEN PRINT AT G,C+1;
"(9d)";AT G+1,C+1;"Y"
 81 IF G=17 AND C+1>=A AND C+1<
A+3 OR G=17 AND C+1>A+4 AND C+1<
A+8 THEN GOTO 300
 82 IF G=17 AND C+1=A+3 OR G=17
 AND C+1=A+4 THEN GOTO 350
 85 IF G=18 THEN GOTO 400
 131 PRINT AT G,C+1;" ";AT G+1,C
+1;" "
 132 IF K=1 THEN LET G=G+1
 140 PRINT AT D,C;"    "
 141 IF C=28 THEN LET C=0
 150 NEXT C
 160 STOP
 300 LET S=S+5
 320 GOTO 400
 350 LET S=S+10
 400 CLS
 401 IF S>=HS THEN LET HS=S
 410 LET L=L-1
 420 IF L=0 THEN GOTO 500
 430 GOTO 30
 500 CLS
 510 PRINT AT 10,3;"DO YOU WANT
ANOTHER GO?";AT 11,12;"(Y/N)?"
 520 IF INKEY$="Y" THEN GOTO 10
 530 IF INKEY$="N" THEN GOTO 550
 540 GOTO 520
 550 CLS
 560 PRINT AT 10,6;"HIGHEST SCOR
E=";HS
 570 STOP
```


THE STORY SO FAR...
AUTOMATA UK LTD
PUT SOME TING IN COMPUTING! IN 1981 THEY WERE THE FIRST TO PUT FREE MUSIC TRACKS ON COMPUTER CASSETTES. IN 1982 THEY WERE THE FIRST WITH BIG PRIZE GAMES. IN '83 IT WAS COMIC STRIP ADS. THIS IS THEIR STORY.
ONCE UPON A TIME (AND A MISERABLE TIME 'TWAS), COMPUTER GAMES WERE EXTREMELY VIOLENT, DESTRUCTIVE AND BORING
BLAT!
ZOT
FDRNBY!
MAIM!
THEN AUTOMATA CREATED...
PIMANIA
HOORAY!
HALLELUJA!
AT THIS VERY MOMENT, THOUSANDS OF PIMANIACS ALL OVER THE WORLD, ARE SEEKING THE REAL £6000 GOLDEN SUNDIAL OF PI. THE PIMAN HAS BECOME A CULT.
THE CRITICS GO WILD! PIMANIA IS HAILED AS AN
ALL-TIME CLASSIC!
LATE ONE NIGHT THE PIMAN IS DISTURBED BY A VISITOR FROM THE DISTANT GALAXY OF MORRIS MINOR.
CORKS!
I'VE GOT A SAUP OUTSIDE YOU JUST WON'T BE ABLE TO RESIST!
HOW MUCH?
WELL, 'OW MUCH 'AVE YOU GOT?
A POGO-STICK, A SAXOPHONE AND A CAN OF WORMS
WELL THAT'S 'OW MUCH IT IS! SIGN HERE, HERE AN' HERE!
TATTAH MUGGINS!
OH! I THOUGHT I'D JUST BOUGHT THAT!
LOOK AT THE LOG-BOOK! IT IS I YOU'VE PAID YOUR HARD-EARNED WORMS FOR! BEEP!
EH, WOT?
WHAT DO YOU KEEP STOPPING FOR?
BEEP! CAR SICKNESS!
CAR PARK
SKEEE
LEMME OUTTA HERE, YA BUM!
TELEPORT BEAM
NOW TO RETRIEVE MORRIS SO THAT I CAN SELL HIM TO SOME OTHER MUG! GO, MY PHANTOM PHREAKY BIKERS!
I'M FREE! TAKEEEE!!
TOO LATE! THE MAD BIKERS BLAZE IN, LIKE GHOSTS THROUGH THE BRICK WALL...
THIS IS IT
MORRIS meets the Bikers
WATCH OUT FOR.....
...TREACHEROUS TIN-TACKS THAT SLOW HIM DOWN...
HSSSS
YOW!
CREEPY CARBON MONOXIDE...
LOONY LIFTS
ELEVATOR
PRECIOUS PETROL
GRRR!
AND CLINGING WHEEL CLAMPS THAT BRING HIM TO A GRINDING HALT...
AND HAS TO COLLECT TEN GOLDEN COINS BEFORE HE CAN ESCAPE THROUGH THE EXIT TO THE NEXT SCREEN. THERE ARE 9 SCREENS ALTOGETHER, BEFORE HE IS FREE!
MAYBE WE DON'T LIKE THE NOISE HIS HORN MAKES, AN' MAYBE WE CAN'T GET HIM IN THE LIFTS - BUT WE CAN FLY THROUGH WALLS, AN WE DON'T CARE ABOUT NO HAND-SIGGERNALS OR DOUBLE-HELLER LINES! HAR HAR!!
SO WHAT'S AUTOMATA GOT IN THE WAY OF CLASSIC ENTERTAIN-MENT? HOW ABOUT THE DIFINITIVE VERSION OF THAT BOARD GAME!
GO TO JAIL
HEH HEH...
..COMPUTER!
BUT BEWARE...
AND IF YOU CAN'T FIND ANY HUMANS TO PLAY AGAINST, WE DARE YOU TO PLAY YOUR..
IT MAY WELL WIN!!
* 2 TO 5 PLAYERS
* LARGE SIZE MOVING BOARD DISPLAY
* SAVE-GAME FACILITY.
* STATE OF PLAY AT THE TOUCH OF A BUTTON
* YOUR COMPUTER AS 'HONEST BANKER'
GO TO JAIL!



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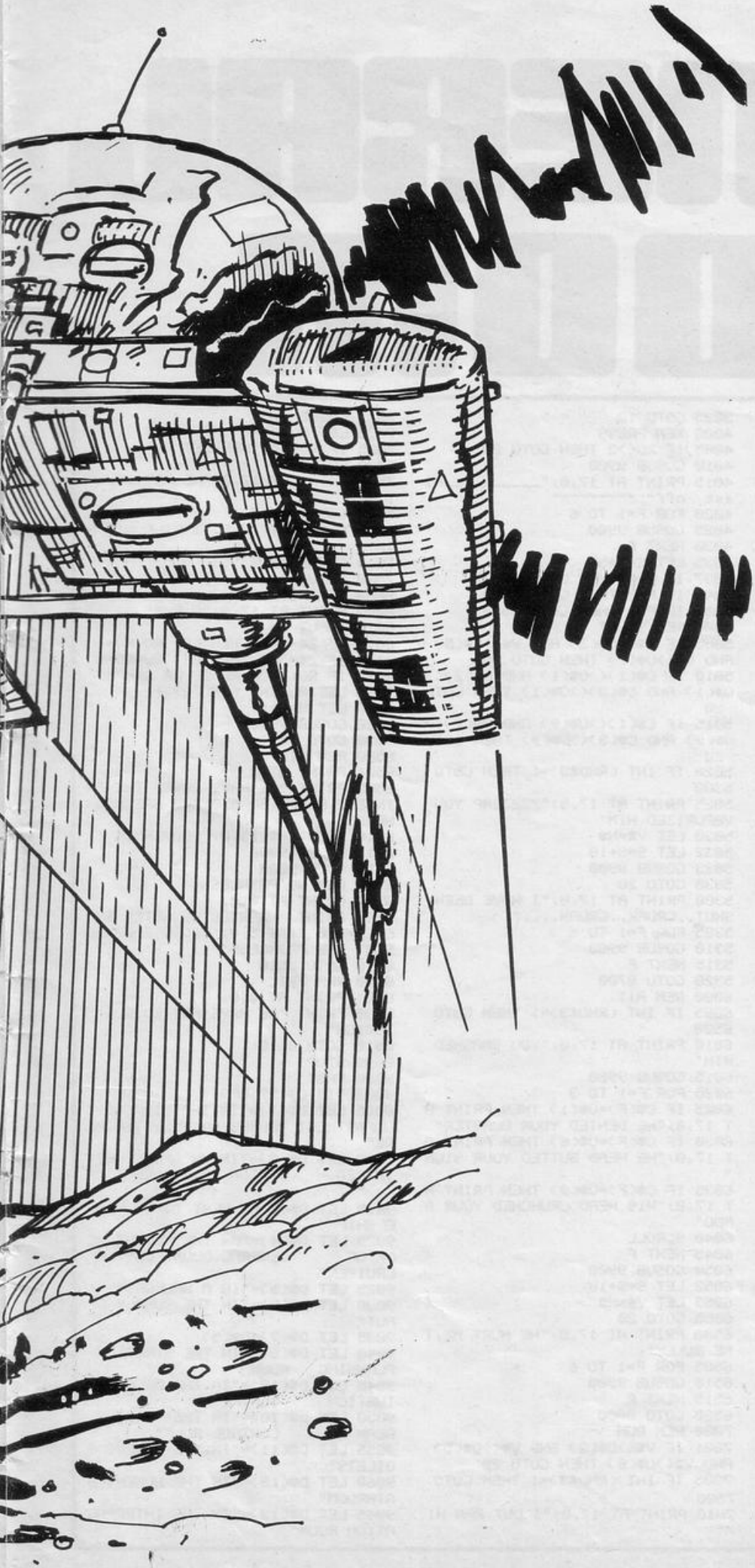
SP

CHOPPER SQUAD



AS A helicopter pilot you must destroy all the enemy bases. A variety of points can be gained for the different types of buildings and firing needs expert timing. **Chopper Squad** was written for the 16K Spectrum by R Davidson and P Watts of Seamills, Bristol.

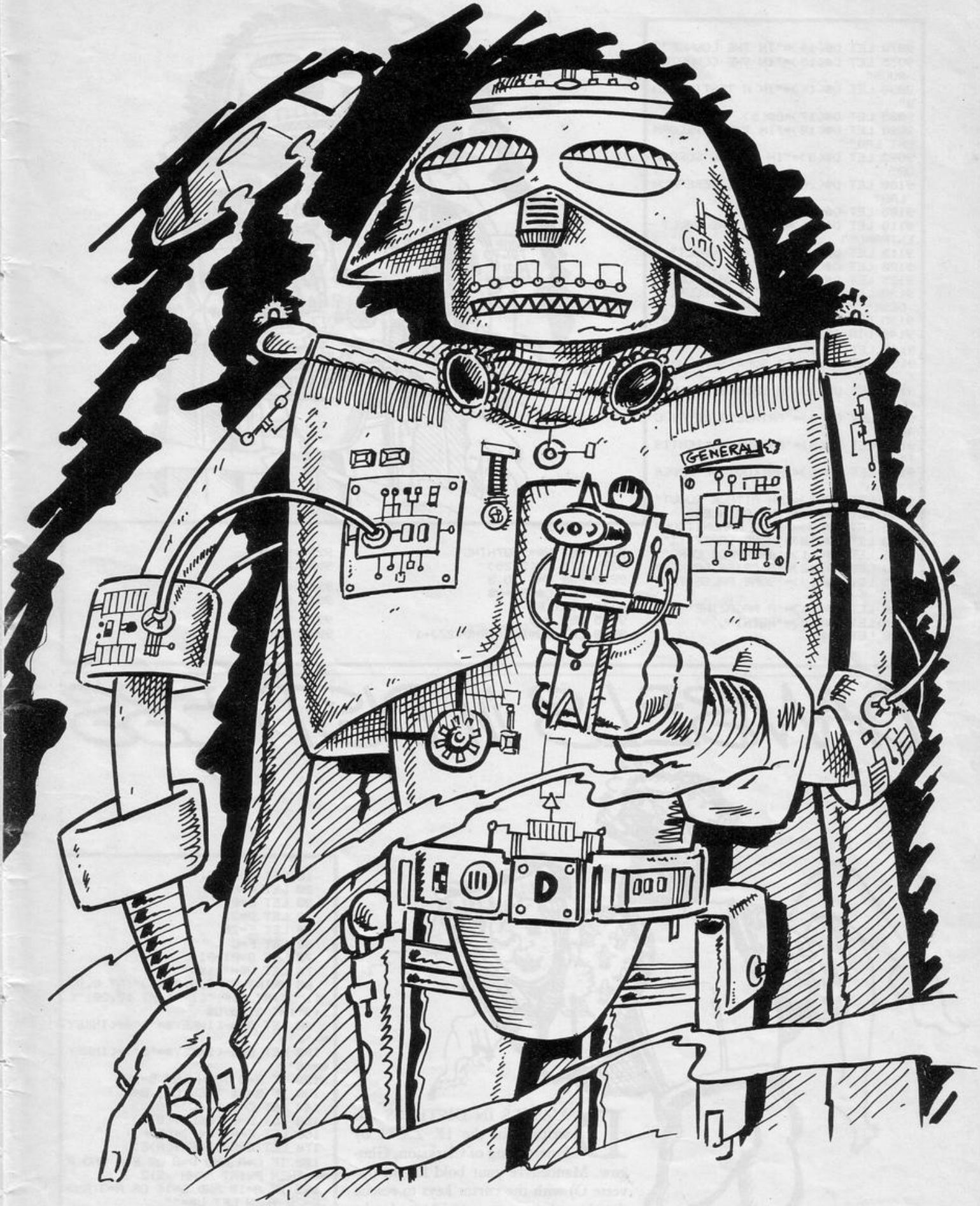
```
  1 LET HS=0: CLS : GO SUB 301: GO SUB 1000
  2 LET SC=0: LET SHOT=14: LET z=RND/100: LET x=RND*50
  3 INK 4: BORDER 1: CLS : FOR n=0 TO 20: BEEP z,x: PRINT AT n,31;"(isP)": NEXT n
  4 FOR n=0 TO 20: BEEP z,x: PRINT AT n,0;"(isP)": NEXT n: FOR n=0 TO 31: BEEP z,x: PRINT AT 20,n;"(isP)": NEXT n: FOR n=0 TO 31: BEEP z,x: PRINT AT 0,n;"(isP)": NEXT n
  5 INK 0: PRINT AT 19,1; INK 1; FLASH 1;"a": PRINT AT 19,3;"a": PRINT AT 19,4;"f": PRINT AT 19,7;"a": PRINT AT 19,9;"a": PRINT AT 19,10;"a": PRINT AT 19,11;"a"
  6 PRINT AT 19,13;"f": PRINT AT 19,14;"f": PRINT AT 19,16;"a": PRINT AT 19,19;"a": PRINT AT 19,20;"a": PRINT AT 19,24;"a"
  7 INK 1: PRINT AT 2,2;"999999  999    99   9 99"
  8 PRINT AT 3,3;"99 9 9    9 9  99   9 9 "
  9 FOR n=0 TO 5: INK 2: CIRCLE 240,160,n: NEXT n: INK 0
 10 LET a=4: LET b=1
 20 PRINT AT 21,17;"SHOTS LEFT= ";shot: PRINT AT 21,0;"SCORE= ";sc: PRINT AT a,b;" cd": BEEP .003,40
 21 IF sc=0 THEN  PRINT AT 21,8;"    ": PRINT AT 21,0;"SCORE= ";sc
 22 IF sc>=1000 THEN  GO TO 6000
 23 IF SC=-50 THEN  PRINT AT 21,10;" "
 24 IF SHOT=9 THEN  PRINT AT 21,30;" "
 25 IF SC=50 THEN  PRINT AT 21,10;" "
 30 LET b=b+1
 40 FOR z=0 TO 5: IF b=25 THEN  LET b=1: LET a=4: PRINT AT 4,25;"    "
 50 IF INKEY$="D" OR INKEY$="d" THEN  LET shot=shot-1: PRINT AT a,b;"    ": GO TO 99
 60 GO TO 20
 99 IF shot=0 THEN  PRINT  INVERSE 1; FLASH 1;AT 11,10;"GAME OVER": FOR N=0 TO 500: NEXT N: GO TO 6000
100 PRINT AT a,b;" ": LET a=a+1: BEEP .05,A+5
101 PRINT AT a,b;"e": FOR z=0 TO 5: NEXT z
104 IF a=19 AND b=1 THEN  PRINT AT a,b; FLASH 1; INK 2;"b": LET sc=sc+200: GO TO 10
105 IF a=19 AND b=3 THEN  PRINT AT a,b; FLASH 1; INK 2;"b": LET sc=sc+50: GO TO 10
106 IF a=19 AND b=4 THEN  PRINT AT a,b; FLASH 1; INK 2;"b": LET sc=sc+100: GO TO 10
107 IF a=19 AND b=7 THEN  PRINT AT a,b; FLASH 1; INK 2;"b": LET sc=sc+50: GO TO 10
108 IF a=19 AND b=9 THEN  PRINT AT a,b; FLASH 1; INK 2;"b": LET sc=sc+50: GO TO 10
109 IF a=19 AND b=10 THEN  PRINT AT a,b; FLASH 1; INK 2;"b": LET sc=sc+50: GO TO 10
110 IF a=19 AND b=11 THEN  PRINT AT a,b; FLASH 1; INK 2;"b": LET sc=sc+50: GO TO 10
111 IF a=19 AND b=13 THEN  PRINT AT a,b; FLASH 1; INK 2;"b": LET sc=sc+100: GO TO 10
112 IF a=19 AND b=14 THEN  PRINT AT a,b; FLASH 1; INK 2;"b": LET sc=sc+100: GO TO 10
113 IF a=19 AND b=16 THEN  PRINT AT a,b; FLASH 1; INK 2;"b": LET sc=sc+50: GO TO 10
114 IF a=19 AND b=19 THEN  PRINT AT a,b; FLASH 1; INK 2;"b": LET sc=sc+50: GO TO 10
115 IF a=19 AND b=20 THEN  PRINT AT a,b; FLASH 1; INK 2;"b": LET sc=sc+50: GO TO 10
116 IF a=19 AND b=24 THEN  PRINT AT a,b; FLASH 1; INK 2;"b": LET sc=sc+100: GO TO 10
119 IF a>18 THEN  PRINT  INK 3; FLASH 1;AT a,b;"e": BEEP .1,.2: BEEP .1,1: BEEP .2,.1: BEEP .05,.1: PAUSE 10: PRINT AT a,b;" ": LET sc=sc-200: GO TO 10
300 GO TO 100
301 POKE USR "a",BIN 00011010
302 POKE USR "a"+1,BIN 00111110
303 POKE USR "a"+2,BIN 01111111
304 POKE USR "a"+2,BIN 01111110
305 POKE USR "a"+3,BIN 10011001
306 POKE USR "a"+4,BIN 11111111
307 POKE USR "a"+5,BIN 11111111
308 POKE USR "a"+6,BIN 11100111
309 POKE USR "a"+7,BIN 11100111
310 POKE USR "b",BIN 00101010
```



```
 311 POKE USR "b"+1,BIN 10011000
 312 POKE USR "b"+2,BIN 10011010
 313 POKE USR "b"+3,BIN 00100010
 314 POKE USR "b"+4,BIN 01010101
 315 POKE USR "b"+5,BIN 11101000
 316 POKE USR "b"+6,BIN 11000110
 317 POKE USR "b"+7,BIN 10100101
 318 POKE USR "c",BIN 10001001
 319 POKE USR "c"+1,BIN 01010000
 320 POKE USR "c"+2,BIN 00111111
 321 POKE USR "c"+3,BIN 01010011
 322 POKE USR "c"+4,BIN 10001000
 323 POKE USR "c"+5,BIN 00000000
 324 POKE USR "c"+6,BIN 00000000
 325 POKE USR "c"+7,BIN 00000000
 326 POKE USR "d",BIN 11111111
 327 POKE USR "d"+1,BIN 00010000
 328 POKE USR "d"+2,BIN 11111100
 329 POKE USR "d"+3,BIN 11111110
 330 POKE USR "d"+4,BIN 11111110
 331 POKE USR "d"+5,BIN 00111100
 332 POKE USR "d"+6,BIN 00010001
 333 POKE USR "d"+7,BIN 11111110
 334 POKE USR "e",BIN 00000000
 335 POKE USR "e"+1,BIN 00011000
 336 POKE USR "e"+2,BIN 00111100
 337 POKE USR "e"+3,BIN 00011000
 338 POKE USR "e"+4,BIN 00011000
 339 POKE USR "e"+5,BIN 00100100
 340 POKE USR "e"+6,BIN 00111100
 341 POKE USR "e"+7,BIN 00011000
 342 POKE USR "f",BIN 11111111
 343 POKE USR "f"+1,BIN 10011001
 344 POKE USR "f"+2,BIN 11111111
 345 POKE USR "f"+3,BIN 10011001
 346 POKE USR "f"+4,BIN 11111111
 347 POKE USR "f"+5,BIN 10011001
 348 POKE USR "f"+6,BIN 11100111
 349 POKE USR "f"+7,BIN 11100111
 350 POKE USR "g",BIN 00111000
 351 POKE USR "g"+1,BIN 00111100
 352 POKE USR "g"+2,BIN 01000001
 353 POKE USR "g"+3,BIN 10000001
 354 POKE USR "g"+4,BIN 01000011
 355 POKE USR "g"+5,BIN 01000001
 356 POKE USR "g"+6,BIN 00100100
 357 POKE USR "g"+7,BIN 00000000
 900 RETURN
1000 LET A$="************@ 1983
************
                          ~CHOPPER CO
NTROL~          YOU ARE IN CONTRO
L OF A          HELICOPTER IN WHI
CH YOU MUST     DESTROY ALL THE E
NEMY BASES      ................
............    POINTS RATIO---
                a=50 f=100 (flash
ing a=200)      YOUR CHOPPER cd
                MUST BOMB e (with
 the d key)     ALL THE BASES a f
                TO MAKE THEM EXPL
ODE b           GOOD LUCK!!"
1001 LET O=0: LET P=0: LET G=LEN
 A$
1002 FOR N=1 TO G
1003 IF P<32 THEN  GO TO 1005
1004 LET O=O+1: LET P=0
1005 PRINT AT O,P; INK 1;"  cd"
1006 BEEP RND/50,RND*50
1007 PRINT AT O,P;A$(N): LET P=P
+1
1008 NEXT N
5000 RETURN
6000 CLS : IF SC>HS THEN  PRINT
"WELL DONE! YOU HAVE TODAYS
          HIGH SCORE"
6001 PRINT AT 6,0;"DO YOU WANT T
O PLAY AGAIN Y/N?"
6002 INPUT A$
6005 IF A$="Y" OR A$="y" THEN  C
LS : GO TO 2
6006 STOP
```

GENERAL DOOM

```
   5 GOSUB 9000
  10 LET V$=O$(INT (RND*15)+1)
  15 LET V$=O$(INT (RND*15)+1)
  17 IF V$=O$(8) AND P=1 THEN GO
TO 15
  20 PRINT AT 17,0;"I CAN SEE ";
V$
  25 GOSUB 9900
  30 PRINT AT 17,0;"I AM ";S$
  35 GOSUB 9900
  40 PRINT AT 17,0;"I AM CARRYIN
G:-"
  45 FOR F=1 TO 3
  50 PRINT C$(F)
  55 NEXT F
  60 GOSUB 9900
  65 GOSUB 9900
  70 PRINT AT 17,0;"WHAT NOW"
  75 INPUT A$
  78 GOSUB 9900
  80 IF A$="T" THEN GOTO 1000
  85 IF A$="D" THEN GOTO 2000
  90 IF A$="O" THEN GOTO 3000
  95 IF A$="P" THEN GOTO 4000
 100 IF A$="S" THEN GOTO 5000
 105 IF A$="H" THEN GOTO 6000
 110 IF A$="R" THEN GOTO 7000
 115 IF A$="M" THEN GOTO 8000
 120 GOTO 70
1000 REM TAKE
1005 IF V$=O$(2) OR V$=O$(5) OR
V$=O$(7) OR V$=O$(10) THEN GOTO
20
1010 IF C$(1,1 TO 7)<>N$ AND C$(
2,1 TO 7)<>N$ AND C$(3,1 TO 7)<>
N$ THEN GOTO 20
1015 IF C$(1,1 TO 7)=N$ THEN GOT
O 1030
1020 IF C$(2,1 TO 7)=N$ THEN GOT
O 1040
1025 IF C$(3,1 TO 7)=N$ THEN GOT
O 1050
1030 LET C$(1)=V$
1035 GOTO 1070
1040 LET C$(2)=V$
1045 GOTO 1070
1050 LET C$(3)=V$
1070 PRINT AT 17,0;"O.K."
1072 IF V$=O$(3) THEN LET S=S+5
1073 IF V$=O$(8) THEN LET S=S+50
1074 IF V$=O$(8) THEN LET P=1
1075 GOSUB 9900
1077 LET V$=N$
1080 GOTO 20
2000 REM DROP
2005 PRINT AT 17,0;"DROP WHAT(1,
2,3)"
2010 INPUT DR
2015 IF DR<1 OR DR>3 THEN GOTO 2
010
2017 IF C$(DR)=O$(3) THEN LET S=
S-5
2020 LET C$(DR)=N$
2025 GOSUB 9900
2030 GOTO 20
3000 REM QUIT
3005 FAST
3010 CLS
3015 SLOW
3020 STOP
3025 GOTO 10
4000 REM PRESS
4005 IF RO<>2 THEN GOTO 20
4010 GOSUB 9900
4015 PRINT AT 17,0;"_________bl
ast  off~~~~~~~~~~"
4020 FOR F=1 TO 6
4025 GOSUB 9900
4030 NEXT F
4035 LET S=S+50
4037 IF P=0 THEN LET S=S-30
4040 IF P=0 THEN GOTO 8700
4050 IF P=1 THEN GOTO 8500
5000 REM SHOOT
5005 IF V$<>O$(2) AND V$<>O$(5)
AND V$<>O$(7) THEN GOTO 20
5010 IF C$(1)<>O$(1) AND C$(2)<>
O$(1) AND C$(3)<>O$(1) THEN GOTO
 20
5015 IF C$(1)<>O$(9) AND C$(2)<>
O$(9) AND C$(3)<>O$(9) THEN GOTO
 20
5020 IF INT (RND*3)=1 THEN GOTO
5300
5025 PRINT AT 17,0;"ZZZZZAP YOU
VAPORIZED HIM"
5030 LET V$=N$
5032 LET S=S+10
5033 GOSUB 9900
5035 GOTO 20
5300 PRINT AT 17,0;"I HAVE BEEN
SHOT..CROAK..GROAN...."
5305 FOR F=1 TO 6
5310 GOSUB 9900
5315 NEXT F
5320 GOTO 8700
6000 REM HIT
6005 IF INT (RND*3)=1 THEN GOTO
6500
6010 PRINT AT 17,0;"YOU SMASHED
HIM"
6015 GOSUB 9900
6020 FOR F=1 TO 3
6025 IF C$(F)=O$(1) THEN PRINT A
T 17,0;"HE DENTED YOUR BLASTER"
6030 IF C$(F)=O$(6) THEN PRINT A
T 17,0;"HE HEAD BUTTED YOUR SIGN
"
6035 IF C$(F)=O$(9) THEN PRINT A
T 17,0;"HIS HEAD CRUNCHED YOUR A
MMO"
6040 SCROLL
6045 NEXT F
6050 GOSUB 9900
6052 LET S=S+10
6053 LET V$=N$
6055 GOTO 20
6500 PRINT AT 17,0;"HE HURT ME,T
HE BULLY"
6505 FOR F=1 TO 6
6510 GOSUB 9900
6515 NEXT F
6520 GOTO 8900
7000 REM RUN
7001 IF V$<>O$(2) AND V$<>O$(5)
AND V$<>O$(8) THEN GOTO 20
7005 IF INT (RND*3)=1 THEN GOTO
7500
7010 PRINT AT 17,0;"I OUT RAN HI
M"
7015 GOSUB 9900
7020 LET RO=RO+2
7025 IF RO>27 THEN LET RO=1
7030 GOTO 10
7500 PRINT AT 17,0;"HE HAS CAUGH
T ME"
7505 GOSUB 9900
7510 PRINT AT 17,0;"I WILL HIT H
IM"
7515 GOSUB 9900
7520 GOTO 6000
8000 REM MOVE
8005 PRINT AT 17,0;"F/B/S"
8010 INPUT Z$
8015 IF Z$="F" THEN LET RO=RO+1
8020 IF Z$="B" THEN LET RO=RO-1
8025 IF RO<1 OR RO>27 OR Z$="S"
THEN LET RO=INT (RND*27)+1
8027 LET S=S+1
8028 GOSUB 9900
8030 GOTO 10
8500 REM WIN
8501 PRINT AT 0,0;
8505 PRINT "WE HAVE SAVED THE PR
INCESS AND ";AT 5,0;"WE ARE NOW
HEROS"
8510 PRINT AT 15,0;"SCORE=";S
8515 PAUSE 9000
8520 GOTO 3000
8700 REM NO PRINCESS
8701 PRINT AT 0,0;
8705 PRINT "WE WILL BE HATED BY
EVERYONE ";AT 5,0;"BECAUSE WE FO
RGOT THE PRINCESS"
8710 GOTO 8510
8900 REM FAIL
8901 PRINT AT 0,0;
8905 PRINT "WE HAVE FAILED OUR M
ISSION"
8910 GOTO 8510
8999 STOP
9000 FAST
9002 DIM D$(27,60)
9005 LET D$(1)="IN THE STORAGE C
OMPARTMENT THERES AN ELEVATOR HE
RE"
9010 LET D$(2)="IN MY SPACE SHIP
,A RED      BUTTON SAYS<<BLAST OF
F>>"
9015 LET D$(3)=" NEXT TO MY SPAC
E SHIP"
9020 LET D$(4)="ON THE FLIGHT DE
CK OF      GENERAL DOOMS BATTLE
CRUISER"
9025 LET D$(5)="IN A HALLWAY"
9030 LET D$(6)="IN THE SUPPLY DE
POT"
9035 LET D$(7)=D$(5)
9040 LET D$(8)="IN THE STRATEGY
PLANNING   ROOM"
9045 LET D$(19)="IN THE DECONTAM
INATION      CENTRE"
9050 LET D$(10)="IN THE TRACTOR
BEAM         CONTROL ROOM"
9055 LET D$(11)="IN THE WOMENS T
OILETS"
9060 LET D$(12)="IN THE WOMENS B
ATHROOM"
9065 LET D$(13)="IN THE INTERROG
ATION ROOM"
```



WICKED GENERAL DOOM has captured Princess Leya. Your mission is to find her and take her to safety in your spaceship. Commands to use are T(take), D(drop), Q(quit), P(press), S(shoot), H(hit), R(run), M(move). Once you have entered M you will be asked F/B/S? (forward, backward, sideways).

You can shoot only when you have a blaster and some ammunition. You can carry only three things at a time, including the princess.

Written for the 16K ZX-81 by Jonathan Huffer of Walsall, West Midlands.

```
9070 LET D$(14)="IN THE LOUNGE"
9075 LET D$(15)="IN THE COMPUTER
 ROOM"
9080 LET D$(16)="IN A TESTING LA
B"
9085 LET D$(17)=D$(5)
9090 LET D$(18)="IN THE DEVELOPM
ENT LAB"
9095 LET D$(9)="IN A LONG CORRID
OR"
9100 LET D$(20)="IN THE RESEARCH
 LAB"
9105 LET D$(23)="LOST"
9110 LET D$(21)="NEAR THE VAULT
ENTRANCE"
9115 LET D$(22)="IN THE VAULT"
9120 LET D$(24)="IN THE JAIL"
9125 LET D$(25)="IN A JAIL CELL"
9130 LET D$(26)="AT THE SECURITY
 DESK"
9135 LET D$(27)="IN AN ELEVATOR"
9140 DIM O$(15,25)
9145 LET O$(1)="A BLASTER"
9150 LET O$(2)="A SUPRISED GUARD
"
9155 LET O$(3)="A RHINESTONE NEC
KLACE"
9160 LET O$(4)="PRINCESS LEYAS C
APE"
9165 LET O$(5)="AN EVIL SCIENTIS
T"
9170 LET O$(6)="AN<<OUT OF ORDER
>>SIGN"
9175 LET O$(7)="AN ATTACK ROBOT"
9180 LET O$(8)="THE PRINCESS"
9185 LET O$(9)="SOME AMMUNITION"
9190 LET O$(10)="SOME GRAFFITI"
9195 LET O$(11)="AN APPLE CORE"
9200 LET O$(12)="A CRISP PACKET"
9205 LET O$(13)="SOME FALSE TEET
H"
9210 LET O$(14)="A MAGAZINE"
9215 LET O$(15)="NOTHING"
9220 LET S=0
9222 LET N$="NOTHING"
9225 DIM C$(3,25)
9230 FOR F=1 TO 3
9235 LET C$(F)=N$
9240 NEXT F
9245 LET P=0
9250 LET RO=INT (RND*27)+1
9255 SLOW
9500 RETURN
9900 SCROLL
9910 SCROLL
9915 SCROLL
9999 RETURN
```



DAMSELS in DISTRESS



DAMSELS IN DISTRESS was written for the 1K ZX-81 by Stuart Lang of Clarkston, Glasgow. Manoeuvre your bold knight (inverse O) with the cursor keys to rescue the damsel (inverse asterisk) and take her to the castle (inverse +). To make it easier you can run off one side of the screen and you will re-appear on the other. You must avoid the dragons (inverse ") which guard her.

```
  10 LET A=PI/PI
  20 LET B=A
  30 LET C=B
  40 LET D=31
  50 LET E=20
  60 LET F=C
  70 LET S=PI-PI
  75 LET U$="(i*)"
  80 PRINT AT A,B;"(iO)";AT C,D;
"(i")";AT E,F;"(i")";AT 17,28;"(
i+)";AT 3,28;U$
  90 LET A=A-(INKEY$="7")+(INKEY
$="6")
 100 LET B=B-(INKEY$="5")+(INKEY
$="8")
 120 IF B=0 THEN LET B=30
 130 IF B=31 THEN LET B=0
 140 LET C=C-(A<C)+(A>C)
 150 LET D=D-(B<D)+(B>D)
 160 LET F=F-(B<F)+(B>F)
 170 LET E=E-(A<E)+(A>E)
 180 IF C=A AND D=B OR E=A AND F
=B THEN PRINT "AHH";S;Z
 185 IF A=10 AND B=16 OR A=3 AND
 B=28 THEN LET U$=""
 190 IF A=17 AND B=28 AND U$=""
THEN GOTO 350
 200 CLS
 300 GOTO 80
 350 LET S=S+1
 360 GOTO 75
```

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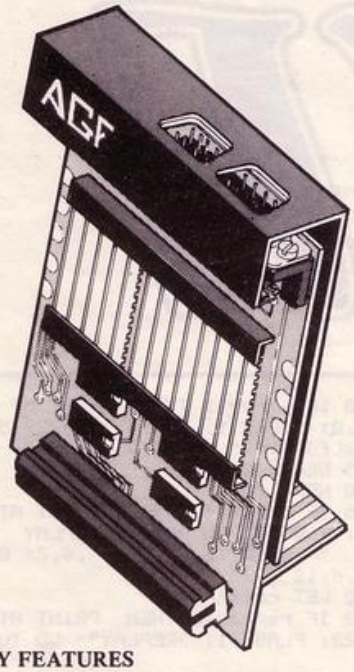
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LEAVE-ONE

LEAVE-ONE is a form of Solitaire. The object is to clear the board of all the white pieces to leave only one in the central position.

Leave-one was written by John Aries, aged 14, of Dunstable, Bedfordshire for the 16K Spectrum.

```
  10 FOR f=USR "a" TO USR "h"+7:
 READ a: POKE f,a: NEXT f
  15 GO SUB 1000
  20 DATA 255,128,128,128,128,12
8,128,128
  21 DATA 255,1,1,1,1,1,1,1
  22 DATA 128,128,128,128,128,12
8,128,255
  23 DATA 1,1,1,1,1,1,1,255
  24 DATA 255,128,135,143,159,19
1,191,191,255,1,225,241,249,253,
253,253,191,191,191,159,143,135,
128,255,253,253,253,249,241,225,
1,255
  30 DATA 1,1,1,1,1,1,1,1,1,1,1,
1,1,1,1,1,1,1,0,0,0,0,1,1,1,1,0,
0,0,0,1,1,1,1,0,0,0,0,1,1,1,1,0,
0,0,0,1,1,1,1,1,1,1,1,1,1,1,1,1,
1,1,1,1,1
  40 BORDER 0: PAPER 0: INK 7: B
RIGHT 1: CLS
  50 PLOT 175,87: DRAW 57,0: DRA
W 0,9: DRAW -57,0: DRAW 0,-9
  60 PRINT AT 10,22; PAPER 3;"
     "
  70 LET f1=0: LET replay=0: LET
 rc=1
  80 DIM p(47): DIM q(47): DIM r
(47): DIM s(47)
 100 DIM x(64): DIM y(64): DIM o
(64)
 110 RESTORE 30: LET a=1: LET b=
3: FOR f=1 TO 64: READ o(f)
 120 IF a=17 THEN  LET a=1: LET
b=b+2
 130 LET x(f)=b: LET y(f)=a
 140 LET a=a+2
 150 IF o(f)=0 THEN  PRINT AT x(
f),y(f);"(9a:ab)";AT x(f)+1,y(f)
;"(9c:9d)"
 160 IF o(f)=1 THEN  PRINT AT x(
f),y(f);"(9e:9f)";AT x(f)+1,y(f)
;"(99:9h)"
 170 IF x(f)=3 THEN  PRINT AT 2,
y(f); PAPER 1; INK 4;y(f)/2+.5;"
 "
 180 IF y(f)=11 THEN  PRINT AT x
(f),0; PAPER 1; INK 4;x(f)/2-.5;
AT x(f)+1,0;" "
 185 BEEP .01,b+a
 190 NEXT f
 195 IF replay=1 THEN  PRINT AT
0,0;"NOW FOR AN ACTION REPLAY
     ": BEEP .6,0: BEEP .6,7: BE
EP .6,12
 200 LET count=0
 209 IF replay=1 THEN  PRINT AT
10,22; FLASH 1;">REPLAY": GO TO
255
 210 FOR f=1 TO 4
 211 LET a$=INKEY$: LET i=CODE a
$-48
 212 IF i=33 OR i=65 THEN  GO TO
410
 213 PRINT AT 10,20+f*2; FLASH 1
;" ": IF i>8 OR i<1 THEN  GO TO
211
 214 IF f=1 THEN  LET d=1
 215 IF f=2 THEN  LET c=1
 216 IF f=3 THEN  LET d1=1
 217 IF f=4 THEN  LET c1=1
 218 PRINT  PAPER 3;AT 10,20+(f*
2); INK 0;i; IF f=2 THEN  PRINT
  PAPER 3; INK 7;"-";
 219 BEEP .2,16: NEXT f
 220 IF c<c1 THEN  IF c+2<>c1 TH
EN  GO TO 280
 230 IF c>c1 THEN  IF c1+2<>c TH
EN  GO TO 280
 240 IF d<d1 THEN  IF d+2<>d1 TH
EN  GO TO 280
 250 IF d>d1 THEN  IF d1+2<>d TH
EN  GO TO 280
 254 IF replay=0 THEN  GO TO 256
 255 FOR v=1 TO rc-1: LET d=p(v)
: LET c=q(v): LET d1=r(v): LET c
1=s(v)
 260 LET f=((c-1)*8)+d
 262 LET g=((c1-1)*8)+d1
 263 LET e=c1: LET t=d1
 266 IF c1>c THEN  LET e=c1-1
 267 IF c1<c THEN  LET e=c-1
 268 IF d1<d THEN  LET t=d-1
 269 IF d1>d THEN  LET t=d1-1
 270 LET l=((e-1)*8)+t
 275 IF o(f)=1 AND o(g)=0 AND o(
l)=1 THEN  GO TO 300
 280 BEEP .2,-12: PRINT AT 10,22
; PAPER 3;"        ": GO TO 210
 300 REM move peice
 310 IF replay=0 THEN  LET p(rc)
=d: LET q(rc)=c: LET r(rc)=d1: L
ET s(rc)=c1: LET rc=rc+1
 360 PRINT AT x(f),y(f);"(9a:9b)
";AT x(f)+1,y(f);"(9c:9d)": BEEP
 .2,36: PRINT AT x(g),y(g);"(9e:
9f)";AT x(g)+1,y(g);"(99:9h)"
 370 PRINT AT x(l),y(l);"(9a:9b)
";AT x(l)+1,y(l);"(9c:9d)"
 380 LET count=count+1: IF repla
y=0 THEN  PRINT AT 10,22; PAPER
3;"        "
 385 IF count>=47 AND f1=0 THEN
 GO TO 409
 390 LET o(l)=0: LET o(f)=0
 400 LET o(g)=1
 405 IF replay=0 THEN  GO TO 210
 406 IF replay=1 THEN  NEXT v: F
OR f=0 TO 7: BEEP .1,f: BEEP .01
,f: BEEP .05,f+f: BEEP .1,f*f: B
EEP .01,f*f: BEEP .05,f*f+f: NEX
T f: GO TO 430
 408 GO TO 410
 409 GO SUB 600
 410 PRINT AT 21,0;"YOU MADE ";c
ount;" MOVE"; LET f1=1: IF coun
t<>1 THEN  PRINT "S"
 411 BEEP .1,36
 420 LET replay=1: GO TO 90
 430 PRINT £0;"PRESS ANY KEY TO
PLAY AGAIN     "
 440 IF INKEY$<>"" THEN  GO TO 4
0
 450 BEEP .1,36: PAUSE 10: GO TO
 440
 600 LET a$="
            **CONGRATULATIONS Y
OU FINISHED**"
```



```
 610 FOR f=0 TO 32
 620 PRINT AT 0,0;a$( TO 32)
 630 LET a$=a$(2 TO )+a$(1)
 640 BEEP .01,CODE a$(f+32)/3
 650 NEXT f
 660 BEEP .5,36: RETURN
1000 BORDER 2: PAPER 1: BRIGHT 1
: INK 6: CLS
1010 PRINT "__________LEAVE-ONE
__________"
1020 PRINT TAB 10; INK 4;"(11*19
3)"
1030 PRINT : PRINT TAB 2;"  Leav
e-one is a version of      Solita
ire. The object of the     game i
s to jump over pieces      horizo
ntally, vertically or      diagon
ally, until only one       piece
remains."
1040 PRINT : PRINT "  DON'T CHEA
T...the SPECTRUM           will reco9
nise any illegal           move and
19nore you."
1050 PRINT : PRINT "  To make a
move you type the          number of
the column then            the number
 of the row. You           do this tw
ice once for the           piece you
wish to move and           then to th
e place you wish           to jump it
 to."
1060 PRINT £0; PAPER 1;"PRESS AN
Y KEY                     "
1070 IF INKEY$<>"" THEN  GO TO 1
090
1080 BEEP .1,0: PAUSE 100: GO TO
 1070
1090 FOR f=1 TO 3: BEEP .1,0: BE
EP .1,19: BEEP .1,24: BEEP .1,7:
 NEXT f: BEEP .1,0
1100 DIM z$(640): PRINT AT 2,0;
PAPER 1;z$: PRINT AT 6,0;"  If y
ou find yourself in the    Posi
tion that you cannot       jump
 another piece you must    pres
s "9".This will abort      the
9ame and you will see      an a
ction replay of your       move
s. If you succeed the      SPEC
TRUM will know and you     will
 be congratulated.        "
1130 IF INKEY$="" THEN  GO TO 11
30
1140 FOR f=1 TO 3: BEEP .24,0: B
EEP .1,19: BEEP .1,12: BEEP .1,1
9: NEXT f: BEEP .1,24
1150 RETURN
9999 SAVE "LEAVE-ONE" LINE 10
```

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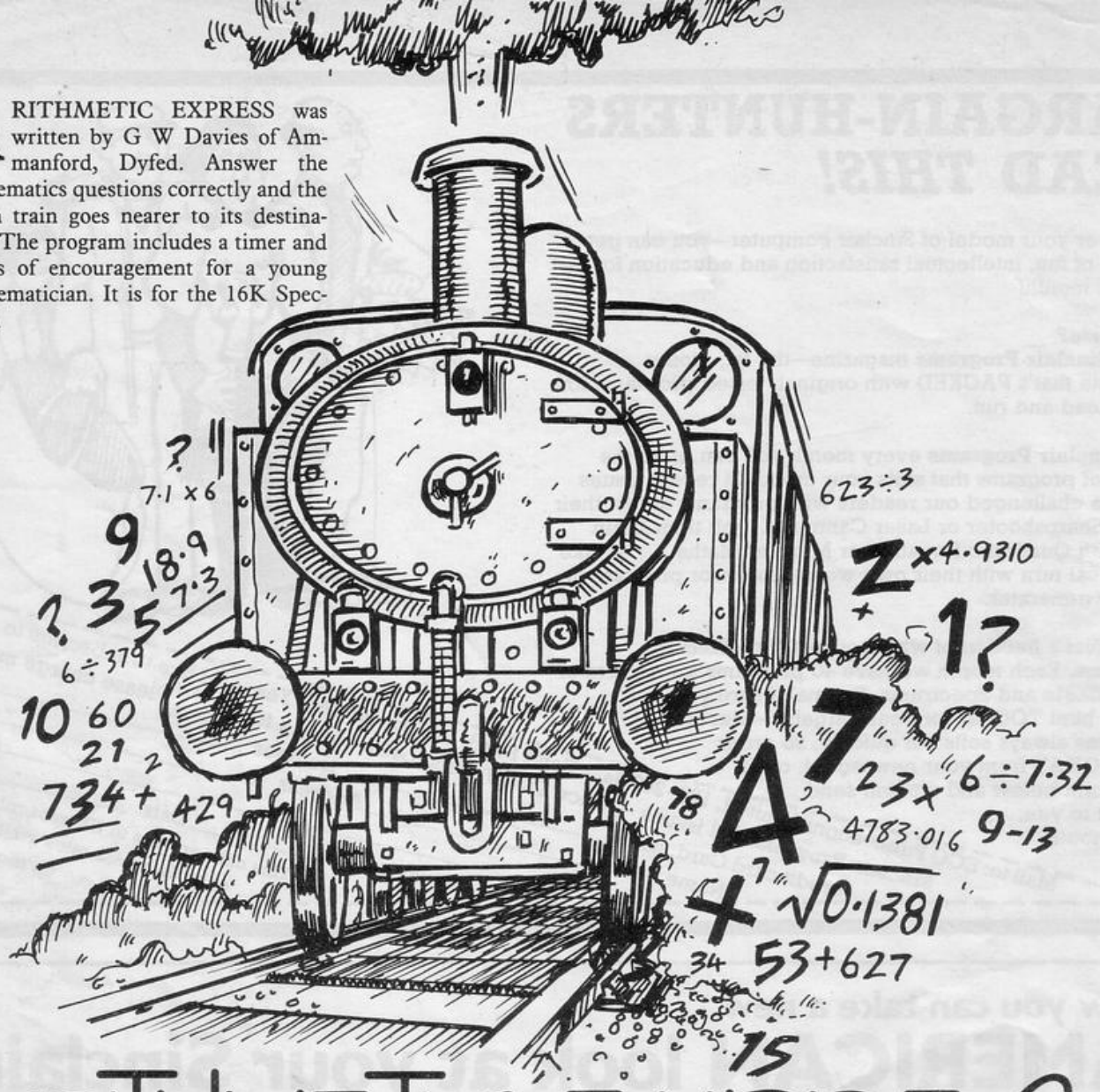
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ARITHMETIC EXPRESS

```
  1 GO SUB 305
  2 PRINT AT 6,0;"PLEASE TYPE Y
OUR NAME AND PRESS ENTER"
  4 INPUT N$
  5 CLS
  6 PRINT TAB 2;"HELLO,";N$
 10 LET Y=10
 20 LET X=0
 30 PRINT AT 3,0;"SKILL 1,2 OR
3?"
 40 INPUT A$
 50 LET A=INT (RND*10)
 60 LET B=INT (RND*10)
 70 LET C=INT (RND*10)
 80 LET D=INT (RND*10)
 85 LET E=INT (RND*10)
 87 LET F=INT (RND*10)
 90 CLS
100 PRINT AT Y,X;"(197;194; 195
)"
110 PRINT AT Y+1,X;"(195;3*ISP)
"
120 PRINT AT Y+2,X;"(197;94;ISP
;193;94)"
130 PRINT AT 13,0;"------------
------------------"
140 PRINT AT 0,0;"GET TO THE EN
D"
150 IF A$="1" THEN  PRINT AT 5,
0;A;"+";B
160 IF A$="2" THEN  PRINT AT 5,
0;C;"*";D
165 IF A$="3" THEN  PRINT AT 5,
0;E;"-";F
170 LET H=A+B
180 LET K=C*D
185 LET M=E-F
190 INPUT Z
200 IF A$="1" AND Z=H THEN  GO
TO 250
210 IF A$="2" AND Z=K THEN  GO
TO 250
215 IF A$="3" AND Z=M THEN  GO
TO 250
218 FOR J=1 TO 3: BEEP .1,-30:
NEXT J
220 PRINT AT 15,0;"WRONG"
225 LET X=X-1
226 IF X<0 THEN  CLS : GO TO 10
230 PAUSE 100
240 GO TO 50
250 PRINT AT 9,X+2;"(ISP:93)"
252 IF A$="1" AND Z=H THEN  PRI
NT AT 5,3;"=";H
253 IF A$="2" AND Z=K THEN  PRI
NT AT 5,3;"=";K
254 IF A$="3" AND Z=M THEN  PRI
NT AT 5,3;"=";M
255 LET X=X+1
265 IF X=10 OR X=13 OR x=15 THE
N  PRINT AT 15,3;"Good ";N$
266 IF X=10 OR X=12 OR X=15 THE
N  PRINT AT 16,3;"keep going"
270 IF X<24 THEN  GO TO 300
272 BEEP .4,19: BEEP .2,10
275 PRINT AT 12,29;"(95)"
278 PRINT AT 13,29;"(95)"
280 PRINT AT 14,15;" WELL DONE
"
285 PRINT AT 15,15;N$
286 LET t=FN t( )
288 PRINT AT 20,5;"Time taken =
";t-t1;"seconds"

290 STOP
300 PAUSE 50
302 GO TO 50
305 PRINT AT 7,11;"ARITHMETIC"

306 PRINT AT 9,11;"EXPRESS"
307 PAUSE 300
308 CLS
311 PRINT AT 0,3;"The train is
now waiting for the driver"
312 PRINT
313 PRINT "You must obtain corr
ect answers to move the train"

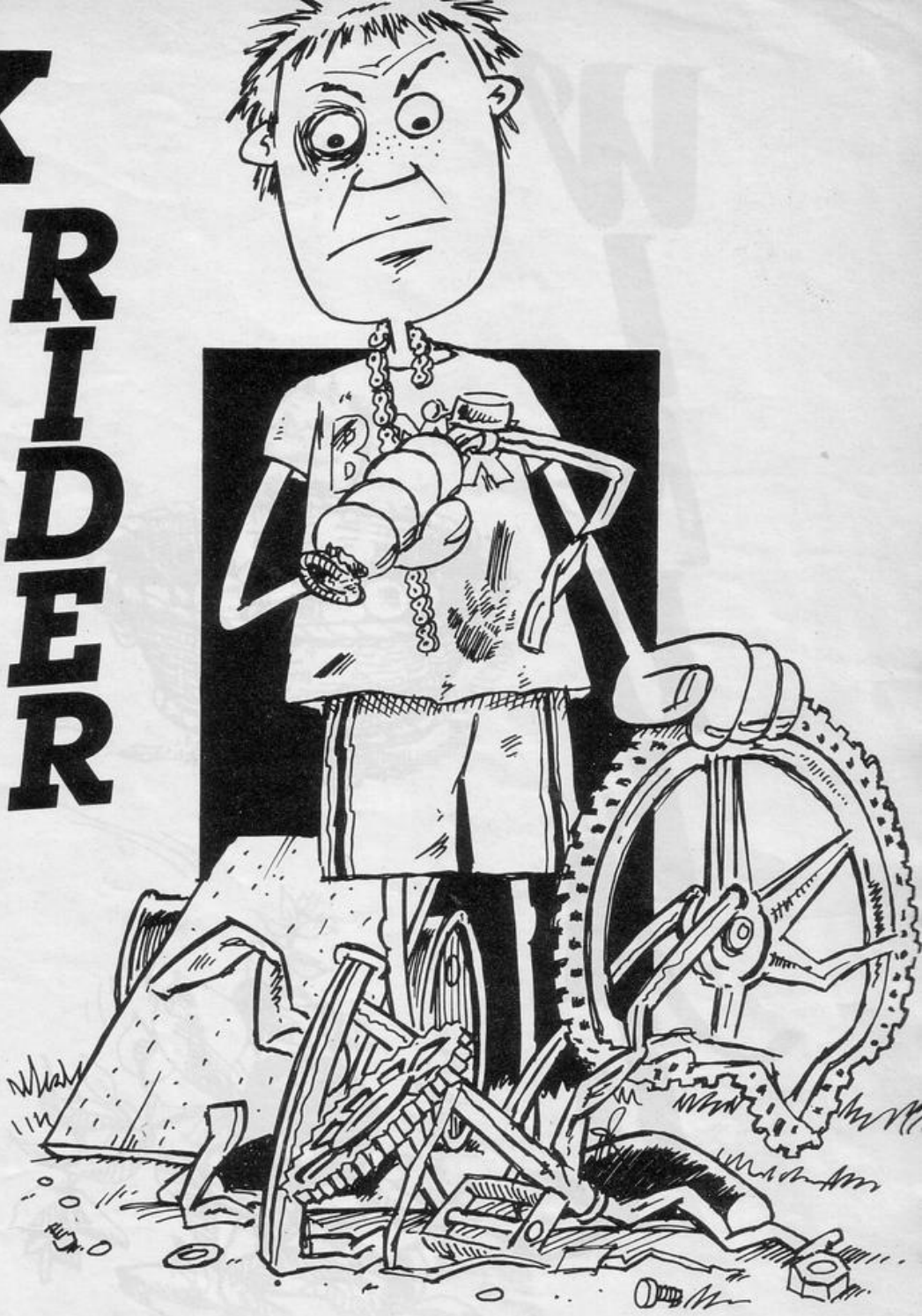
314 PRINT
315 PRINT "Wrong answers put th
e train into reverse"
316 PRINT : PRINT "You should t
ry to improve your  time  of  ar
rival"

317 PRINT
318 PRINT "Time taken is shown
on arrival"
319 PAUSE 800: CLS
320 DEF FN t( )=(65536*PEEK 2367
4+256*PEEK 23673+PEEK 23672)/50:

REM secs since start
325 LET t1=FN t( )
350 RETURN
```

BMX RIDER

BECOME a fully-fledged **BMX Rider** in Ian Drake's program for the 48K Spectrum. The game requires skill, as you must judge the correct speed to jump to clear the ramps as they appear before you.



```
 100 CLS
 110 PRINT AT 0,10;"(9a: BMX:9d)
"
 120 PRINT AT 2,0;" The object o
f the game is to     jump 7 death
 defin9 ramps.You    control your
 BMX with keys '8'   to 9o right
and increse your     speed by 2 a
nd '5' to 9o left    and decrease
 your speed by 1.    You must hit
 the ramp at the     right speed
to clear it.Each     time you cle
ar it the ramp       increases in
 len9ht.If you       clear all 7
ramps you become a   BMX rider.Go
od luck!!!"
 130 PRINT AT 18,2;"Press any ke
y to start"
 240 PAUSE 0
1001 CLS
1005 LET s=10
1010 LET j=1
1015 LET sc=0
1025 PRINT AT 0,0; FLASH 1;"SPEE
D:";s
1030 PRINT AT 0,12; FLASH 1;"SCO
RE:";sc
1035 PRINT AT 0,22; FLASH 1;"JUM
P:";j
1045 PLOT 0,95: DRAW 255,0
1050 PLOT 0,94: DRAW 255,0
1060 LET b$="(9b:93:9c)c"
1065 PRINT AT 9,15;b$
1070 PAUSE 50: BEEP .08,10: BEEP
 .01,-2 : BEEP .5,3: BEEP .08,10
2005 LET a=0
2010 LET b=9
2015 LET a$=" (9a) ": IF INKEY$=
"5" THEN  LET a$=" (9d) "
2020 LET a=a+(INKEY$="8" AND a<2
9)-(INKEY$="5" AND a>0)
2025 PRINT AT b,a;a$
2035 IF INKEY$="8" THEN  LET s=s
+2: IF s>99 THEN  LET s=99
2040 IF INKEY$="5" THEN  LET s=s
-1: IF s<10 THEN  LET s=10
2045 PRINT AT 0,0; FLASH 1;"SPEE
D:"; s
2050 IF j=1 THEN  GO TO 6000
2055 IF j=2 THEN  GO TO 6000
2060 IF j=3 THEN  GO TO 6000
2065 IF j=4 THEN  GO TO 6000
2070 IF j=5 THEN  GO TO 6000
2075 IF j=6 THEN  GO TO 6000
2080 IF j=7 THEN  GO TO 6000
2100 GO TO 2015
3005 PRINT AT b,a;"  "
3010 LET b=8: LET a=a+1
3015 PRINT AT b,a;a$
3020 FOR a=14 TO j+16
3025 PRINT AT b,a;a$: PAUSE 3
3030 NEXT a
3035 PRINT AT b,a;"   "
3040 LET b=9
3045 PRINT AT b,a;a$
3050 LET j=j+1: LET sc=sc+10: LE
T s=10
3055 PRINT AT 0,22; FLASH 1;"JUM
P:";j: PRINT AT 0,12; FLASH 1;"S
CORE:";sc
3060 IF j=2 THEN  LET b$="(9a:2*
93:9c)"
3065 IF j=3 THEN  LET b$="(9b:3*
93:9c)"
3070 IF j=4 THEN  LET b$="(9b:4*
93:9c)"
3075 IF j=5 THEN  LET b$="(9b:5*
93:9c)"
3080 IF j=6 THEN  LET b$="9b:6*9
3:9c)"
3085 IF j=7 THEN  LET b$="(9b:7*
93:9c)"
3086 IF j=8 THEN  GO TO 8000
3095 PRINT AT b,a;"   "
3100 GO TO 1065
4005 PRINT AT b,a;"   "
4010 LET b=8
4015 LET a=a+1
4020 PRINT AT b,a;a$
4025 FOR a=14 TO 15
4030 PRINT AT b,a;a$: PAUSE 10
4035 NEXT a
4040 PRINT AT b,a;"   "
4045 LET b=9
4050 PRINT AT b,a;"(9a)"
4055 PAUSE 50
4060 GO TO 7000
6000 IF a=12 AND s<=sc+32 OR a=1
2 AND s>=sc+40 THEN  GO TO 4000
6005 IF a=12 AND s>=sc+40 OR a=1
2 AND s<=sc+50 THEN  GO TO 3000
6010 GO TO 2015
7005 CLS
7015 FOR a=1 TO 9
7020 PRINT AT 3,a;" (9a:YOU CRAS
HED:9d)": PAUSE 10
7025 NEXT a
7030 PRINT AT 9,10;"YOU SCORED:"
;sc
7040 PRINT AT 15,1;"PRESS ANY KE
Y FOR ANOTHER GAME"
7050 PAUSE 0
7060 RUN
8005 CLS
8010 PRINT AT 5,1;"YOU HAVE JUMP
ED ALL THE RAMPS       YOU ARE NO
W A BMX RIDER                WELL
 DONE!!!!"
8020 GO TO 7030
9000 FOR z=USR "a" TO USR "d"+7
9010 READ user: POKE z,user
9020 NEXT z
9030 DATA 48,56,48,127,118,153,1
53,102
9040 DATA 0,0,7,15,31,63,127,255
9050 DATA 0,0,224,240,248,252,25
4,255
9060 DATA 12,28,12,254,110,153,1
53,102
9070 RETURN
```

WINDFALL



CATCH the apples in your basket as the windfalls fall from the trees. Beware, because Farmer Haynes is on the prowl and if he catches you he will have your guts for garters.

Windfall was written for the 16K ZX-81 by Nicky Thorpe, aged 14, of Ashford, Kent.

```
  1 REM "APPLE"
  2 LET Y=13
  3 LET Z=0
 10 PRINT AT 0,10;"  (4*isP)  "
 20 PRINT AT 1,10;" (6*isP) "
 30 PRINT AT 2,10;"(8*isP)"
 40 PRINT AT 3,10;" (6*isP) "
 50 PRINT AT 4,10;"  (4*isP)  "
 60 PRINT AT 5,10;"   (2*isP)
"
 70 PRINT AT 6,10;"   (2*isP)
"
 80 PRINT AT 7,10;"   (2*isP)
"
 90 PRINT AT 8,10;"   (2*isP)
"
 95 PRINT AT 8,0;"(32*9h)"
 96 PRINT AT 21,0;"(32*isP)"
110 PRINT AT 4,11;"*"
120 PRINT AT 4,16;"*"
130 PRINT AT 3,10;"*"
140 PRINT AT 3,17;"*"

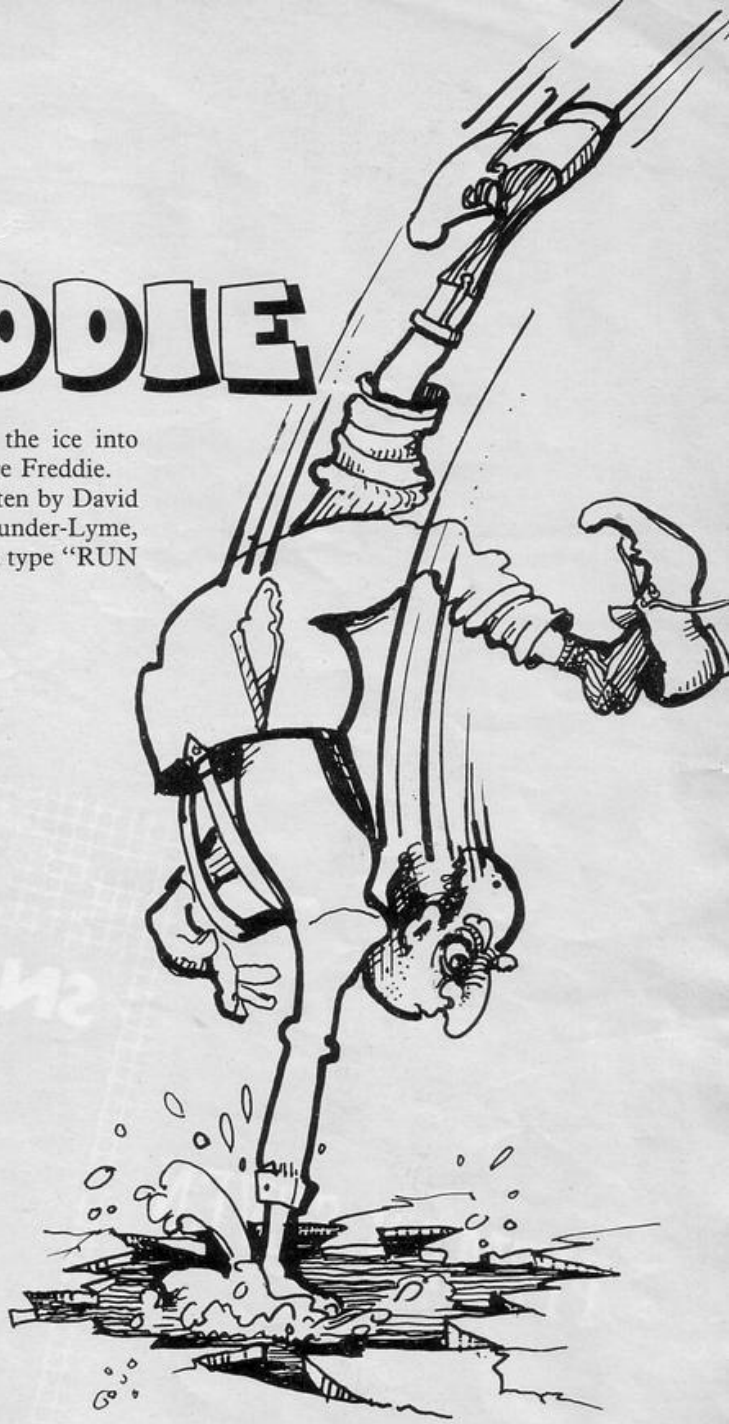
141 PRINT AT 9,0;"(isP:30*sP:is
P)"
142 PRINT "(isP:30*sP:isP)"
143 PRINT "(isP:30*sP:isP)"
144 PRINT "(isP:30*sP:isP)"
145 PRINT "(isP:30*sP:isP)"
146 PRINT "(isP:30*sP:isP)"
147 PRINT "(isP:30*sP:isP)"
148 PRINT "(isP:30*sP:isP)"
149 PRINT "(isP:30*sP:isP)"
150 LET X=20
151 PRINT "(isP:30*sP:isP)"
152 PRINT "(isP:30*sP:isP)"
153 PRINT "(isP:30*sP:isP)"
154 LET A=INT (RND*10+8)
156 LET B=10
157 PRINT AT B,A;"*";AT B-1,A;"
"
158 LET B=B+1
170 IF INKEY$="5" THEN LET Y=Y-
1
180 IF INKEY$="8" THEN LET Y=Y+


185 IF B=X AND A=Y+1 THEN GOTO
300
186 IF B=X AND A=Y+2 THEN GOTO
300
190 IF Y<1 THEN LET Y=Y+1
192 PRINT AT 19,8;"
  "
200 IF Y>26 THEN LET Y=Y-1
205 IF B=21 THEN GOTO 400
210 PRINT AT X,Y;" (9:99:) "
220 GOTO 157
300 LET Z=Z+5
305 PRINT AT 0,0;"SCORE=";Z
310 GOTO 154
400 CLS
410 PRINT "YOU DROPPED AN APPLE
"
411 PRINT "AND THE FARMER GOT Y
OU."
413 PRINT
415 PRINT "YOU SCORED ";Z
420 PRINT
430 PRINT "DO YOU WISH TO PLAY
AGAIN ?"
435 PRINT
437 PRINT "  (Y) OR (N)  "
440 IF INKEY$="Y" THEN GOTO 500
450 IF INKEY$="N" THEN GOTO 600
460 IF INKEY$<>"" THEN GOTO 440
470 GOTO 440
500 CLS
510 GOTO 1
600 CLS
610 PRINT AT 10,10;"ok Goodbye"
620 STOP
```

SAVE FREDDIE

POOR OLD FREDDIE has fallen from an aeroplane on a cold winter day without his parachute. Guide Freddie using keys 5 and 8 towards a lake which will break his fall. Unfortunately the lake is frozen but there is a small break in the ice into which you must manoeuvre Freddie.

Save Freddie was written by David Knight of Newcastle-under-Lyme, Staffs. To run the program type "RUN 300" then NEWLINE.

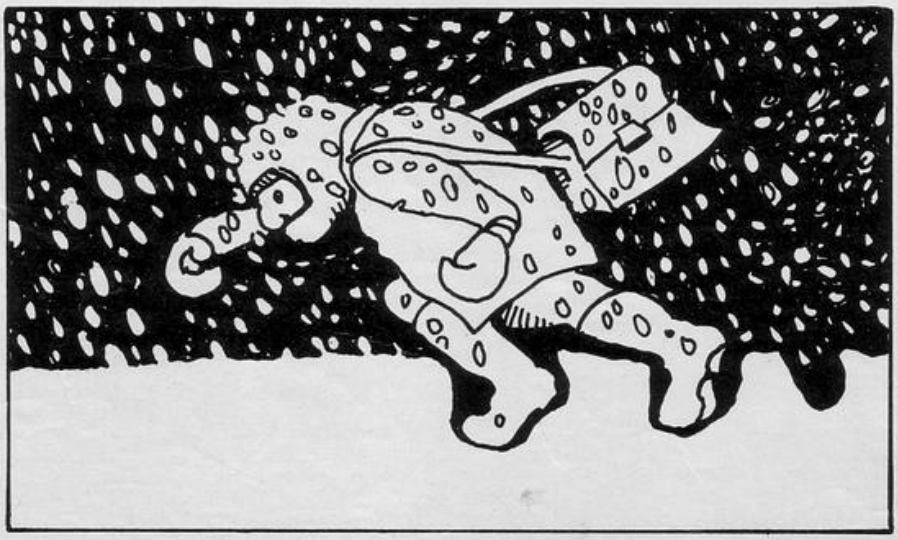


```
  50 PRINT AT X,Y;"A"
  60 LET Y=Y-(INKEY$="5")+(INKEY
$="8")
  70 LET X=X+X/X
  80 PRINT AT X,Y;"(i")"
  90 IF X<>L THEN GOTO 50
 100 IF Y<>Q THEN GOTO 500
 150 PRINT "BRRR,ITS COLD IN HER
E..."
 160 LET T=T+L/L
 170 PAUSE L*L
 180 CLS
 190 LET X=L/L
 200 PRINT T
 210 LET Y=INT (RND*L)+L/L
 220 LET Q=INT (RND*L)+L/L
 230 PRINT AT L,Q-Q;"(isp:21*9h:
isp)"
 240 PRINT AT L,Q;" "
 250 GOTO 50
 300 LET L=19
 310 LET T=L-L
 320 GOTO 180
 500 PRINT "SPLATTO"
```

IT'S SNOWING AGAIN

JOHN WEST, aged 11, of Mumbles, Swansea wrote **It's snowing again** for the 1K ZX-81.

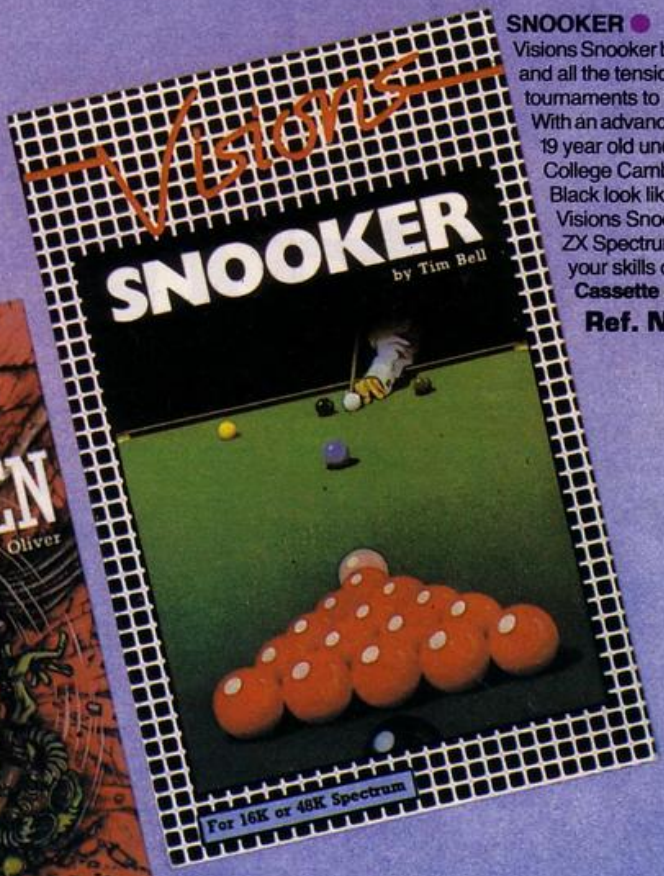
Dodge the superfast snowflakes heading straight for you as you rush home from school, late for your dinner. Use keys 5 and 8 to escape a soaking. You receive 10 points for every snowflake which misses you.



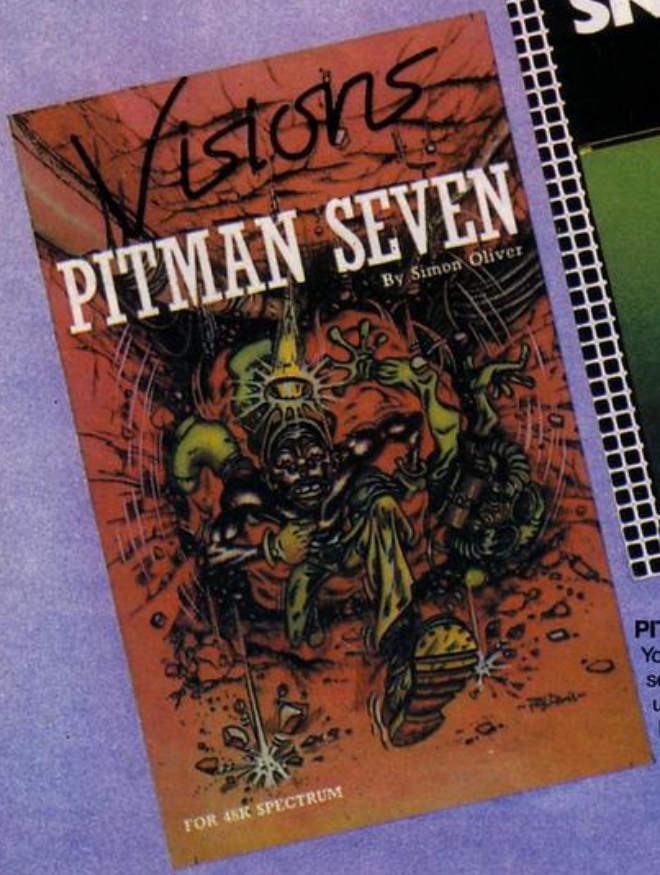
```
   10 LET A=11
  20 LET S=0
  30 PRINT AT 21,INT (RND*26);"*
***"
  40 PRINT AT 0,A;
  50 IF PEEK (PEEK 16398+256*PEE
K 16399)=23 THEN GOTO 120
  60 PRINT "V"
  70 SCROLL
  80 IF INKEY$="5" THEN LET A=A-
1
  90 IF INKEY$="8" THEN LET A=A+
1
 100 LET S=S+10
 110 GOTO 30
 120 PRINT AT 0,0;S
```

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