

Hartig, Jochen (1983): Hinterhalt. In: HC – Mein Home-Computer, Ausg. 12/1983 (Dezember), S. 43.

Hinterhalt

Eine Spielfigur geht auf Reisen. Sie will möglichst weit herumkommen, muß aber Hinterhalte vermeiden. Das Programm läuft auf einem Spectrum mit 16-KByte-Speicher.

Die Bewegung der Spielfigur übernehmen die Richtungstasten "5" bis "8". Bei jedem Schritt erscheint vor, hinter oder neben ihr ein Hinterhalt (rotes Feld), der nicht betreten werden darf. Ist die Spielfigur völlig ein-

gekreist, ist die Reise bald zu Ende, denn ein Hinterhalt ist unausweichlich. Sie kann nur noch ihre nähere Umgebung abgehen. Ein Schrittzähler informiert zum Schluß über die zurückgelegte Strecke.

Jochen Hartig

```

5 REM # Jochen Hartig / 1983
6 REM
10 RANDOMIZE
15 BORDER 2: CLS
20 LET y=INT (RND*12)+5
30 LET x=INT (RND*22)+5
40 PRINT INK 2; "
50 FOR q=1 TO 20: PRINT INK 2;
AT q,0; "■"; AT q,31; "■": NEXT q
70 PRINT INK 2; "
90 LET p=-1
150 PRINT AT y,x; "+"
160 LET p=p+1

```

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170 IF INKEY$("<>") THEN GO TO 17
180 LET a$=INKEY$
190 IF a$="5" OR a$="8" THEN GO
TO 180
200 PRINT AT y,x; " "
210 IF a$="5" THEN LET x=x-1
220 IF a$="6" THEN LET y=y+1
230 IF a$="7" THEN LET y=y-1
240 IF a$="8" THEN LET x=x+1
250 IF ATTA (y,x)=58 THEN GO TO
400
270 PRINT AT y,x; "+"
300 LET c=INT (RND*4)+1
310 LET x1=x+(c=1)-(c=2): LET y
1=y+(c=3)-(c=4)
320 IF ATTA (y1,x1)=58 THEN GO
TO 300
330 PRINT AT y1,x1; INK 2; "■"
350 GO TO 160
400 PRINT AT 0,1; PAPER 2; INK
7:P
405 FOR q=60 TO -25 STEP -1
410 BEEP .02,q
420 NEXT q
450 INPUT a$
460 RUN

```

br. (1984): Vier gewinnt. In: HC – Mein Home-Computer, Ausg. 1/1984 (Januar), S. 37f.

„Vier gewinnt“ für den Spectrum

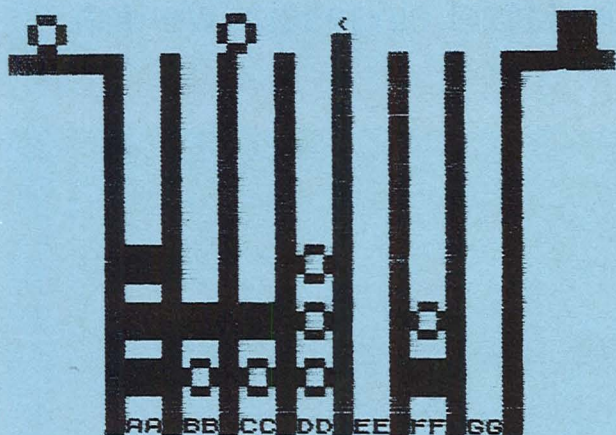
Zwei Spielpartner benutzen den Rechner als Spielgerät, das die einzelnen Züge auf Gültigkeit prüft und Gewinnstellungen erkennt. Die Stärke dieser Version liegt in der grafischen Ausführung der Züge

Die Chips warten zunächst rechts beziehungsweise links neben den sieben Schächten auf einem Podest. Nach einer Zugeingabe bewegt sich der jeweilige Chip auf den gewähl-

ten Schacht zu. Auf dem ersten Teil seiner Strecke schleppt er einen zweiten Chip hinter sich her, der sich dann aber abkoppelt und auf dem Platz seines Vorgängers in Be-

reichtsstellung verharrt. Wenn der andere Chip seinen Schacht erreicht hat, fällt er den Schacht hinunter. Der Absturz wird dabei akustisch begleitet.

Zum Schluß ertönt eine Siegesmelodie und der Gewinner-Chip auf dem Podest führt einen Freudentanz aus. Danach beginnt sofort ein neues spannendes Spiel. br



```

2 GO TO 900
3 CLEAR
4 SAVE "vg"
5 GO TO 900
100 PRINT z$(1,2);TAB 28;z$(2,2);
TAB 0;z$(1,3);TAB 28;z$(2,3);k
$(1 TO 5);i$;k$(1 TO 5)
102 FOR i=3 TO 20
105 PRINT TAB 5;i$
110 NEXT i
115 PRINT TAB 5;j$
160 DIM f(7,6)
170 FOR g=1 TO 21
181 FOR h=1 TO 2
183 LET i=INT (7*AND)+1
184 IF f(i,1) THEN GO TO 183
185 LET ink=6-2*h
191 LET i=CODE INKEY$-96
192 IF i<1 OR i>7 THEN GO TO 19
193 IF f(i,1) THEN GO TO 191
194 LET j=3*i+8-3*h
195 PRINT AT 0,3*i+8-3*h;CHR$ (
58+2*h);AT 1,3*i+8-3*h;CHR$ 143
196 FOR j=0 TO 3*(i+18-2*i AND
h=2))+2
197 LET k=j+(28-2*j AND h=2)
198 BEEP 0.05,30
199 PRINT INK ink;AT 0,k;z$(h,2);
AT 1,k;z$(h,3)
200 LET k=(31-j AND h=2)
201 LET l=1+(3-j AND h=1)

```

```

202 LET m=4-(3-j AND h=2)
203 IF j<4 THEN PRINT INK ink;A
T 0,k;z$(h,2)(l TO m);AT 1,k;z$(
h,3)(l TO m)
204 IF j<4 THEN BEEP 0.30,42
205 NEXT j
206 FOR j=0 TO 5
207 IF f(i,j+1) THEN GO TO 227
208 FOR k=0 TO 2
210 FOR l=1 TO 3
212 PRINT INK ink;AT 3*j+k+l-1,
3*i+3;z$(h,l,2 TO 3)
218 NEXT l
220 NEXT k
221 BEEP 0.02,26-4*j
225 NEXT j
227 IF j THEN LET f(i,j)=h
229 FOR i=0 TO 1
230 FOR j=1 TO 7-i
231 LET z=0
232 FOR k=1 TO 6+i
234 LET z=(z+1 AND f(j-(j-k)*i,
k+(j-k)*i)=h)
235 NEXT k
236 IF z>=4 THEN GO TO 265
237 NEXT j
238 NEXT i
240 FOR i=0 TO 1
241 FOR j=1+3*i TO 4+3*i
242 FOR k=1 TO 3
243 LET z=0
244 FOR l=0 TO 3
245 LET z=(z+1 AND f(j+l-2*i,
k+l)=h)
249 NEXT l
250 IF z>=4 THEN GO TO 265
251 NEXT k
252 NEXT j
253 NEXT i
255 NEXT h
260 NEXT g
265 BEEP 0.3,13: BEEP 0.6,10: P
AUSE 25: BEEP 0.3,10: BEEP 0.3,1
1: BEEP 0.3,13: BEEP 0.6,22: BEE
P 0.6,22: BEEP 0.6,18
270 LET a=h
272 LET b=28*a-28
274 FOR i=1 TO 20
276 PRINT AT 0,b;" ";AT 1,b;" "
278 PAUSE 5
280 PRINT INK 6-2*a;AT 0,b;z$(a,3
2);AT 1,b;z$(a,3)
282 PAUSE 10
284 NEXT i
290 CLS
300 GO TO 100
900 BORDER 7: PAPER 7: CLS
905 LET i$=CHR$ 143

```


Sinclair-Praxis

```
906 LET J#=I$
907 LET K$=""
910 FOR J=0 TO 6
912 LET I#=I$+" "+CHR$ 143
914 LET J#=J#+CHR$ (65+J)+CHR$
(65+J)+CHR$ 143
915 LET K#=K#+CHR$ 143
918 NEXT J
920 DIM Z$(2,3,4)
```

```
922 LET Z$(1,2,2 TO 3)=CHR$ 137
+CHR$ 134
924 LET Z$(1,3,2 TO 3)=CHR$ 134
+CHR$ 137
926 LET Z$(2,2,2 TO 3)=I$1 TO 2
)
928 LET Z$(2,3)=Z$(2,2)
999 GO TO 100
```


bez. (1985): Horror Caves. Dieses Spiel bringt Ihnen den absoluten HORROR!!!
In: Computronic, Ausg. 3-4/1985, S: 71-75.

HORROR CAVES

Dieses Spiel bringt Ihnen den absoluten HORROR!!!

Die metallverarbeitende Industrie ist in Schwierigkeiten geraten: ihre Rohstoffvorräte gehen zur Neige, und neue Quellen müssen erschlossen werden. Doch die umgehend angestellten Bodenanalysen ergeben, daß in den Pyrenäen ein reicher Vorrat an Eisenerz lagert, der nur darauf wartet, abgetragen zu werden. Sofort wird ein erfahrener Mann mit dieser Aufgabe betraut, doch ihre Durchführung gestaltet sich schwieriger, als man erwartet hatte . . .

Denn in den Höhlen der Pyrenäen lauern blutrünstige Geister auf den nichtsahnenden Bergbauspezialisten, und mit dieser Ausgeburt des Bösen ist wahrlich nicht zu spaßen. Doch nicht nur diese Geister machen das Einsammeln der so wichtigen Erze zu einer lebensgefährlichen Aufgabe; erschwerend kommt noch hinzu, daß bei der Arbeit „Untertage“ nureinknapper Vorrat an Sauerstoff zur Verfügung steht und daß man sich nur allzu leicht in den unterirdischen Höhlen verirren kann! (bez.)

Einige wichtige Tips:

Sie können den Schwierigkeitsgrad des Spiels bestimmen (Profi, Amateur, Anfänger); dies wirkt sich sowohl auf die Geschwindigkeit der Geister als auch auf die Höhe Ihres Luftvorrates aus. Haben Sie das Minimum der zum Überleben wichtigen Luftreserven erreicht, so werden Sie durch einen Piepston gewarnt. Sie können neue Luft tanken, wenn Sie bis dahin schon 300 Punkte gesammelt und die Kontroll-

Taste (CTRL) und „Q“ gedrückt haben. Wenn der Geist Ihnen zu nahe „auf die Pelle rückt“, können Sie ihm durch schlagartige Kursänderung ausweichen.

m,o	- Variablen für Spielbewegung
x,y,g	- Variablen für Geistersteuerung und Geschwindigkeit
ba	- Variablen für Bildschirm-aufbau und Graphik
a,b,c	- Variablen für Graphik
k,t,l,m	- Variable zur Bestimmung von Bildschirmteilen
a\$,n\$,w	- Tastaturabfrage
Lu,Pu	- Variablen für Luft und Punkte
ae,ab	- Zufallsvariablen für Position des Erzes.
Grafik und Musik werden mit Hilfe von „Read“ und „Data“ erstellt.	

Und noch eins:

Wenn Sie einen der Gänge verlassen wol-

Schneider CPC 464



len, müssen Sie den Spieler bis zum Ende des Ganges bewegen und kommen dann automatisch in den nächsten Gang. Gesteuert wird das Spiel mittels Cursor-Tasten.

PS: Wenn ihnen das Spiel zu leicht werden sollte, müssen Sie nur in den Zeilen 890 und 900 „x=m and“ herausnehmen.

HORROR CAVES

DAS LISTING

```

10 REM *****
20 REM ***      HORROR-CAVES      ***
30 REM ***
40 REM ***  WRITTEN AND DESIGNED  ***
50 REM ***
60 REM ***      BY...            ***
70 REM ***
80 REM ***      UDO BREHMER      1985 ***
90 REM *****
100 REM
110 REM ++++++
120 REM ++++  Spieleinleitung  ++++
130 REM ++++++
140 REM
150 INK 0,0:INK 1,24:INK 2,2:INK 3,6:BOR
DER 1:MODE 1
160 CLS:PEN 1:PRINT "Sind Sie : "
170 PRINT:PRINT "Anfaenger...../ 1 /"
180 PRINT:PRINT "Amateur...../ 2 /"
190 PRINT:PRINT "Profi...../ 3 /"
200 PRINT:PEN 2:INPUT "Ihre Wahl";w
210 IF w<1 OR w>3 THEN 200

```

```

220 INK 3,6:GOSUB 2720
230 SYMBOL AFTER 32
240 SYMBOL 207,239,231,219,53,204,138,23
5,236
250 SYMBOL 224,24,60,102,126,199,187,255
,126
260 SYMBOL 143,96,156,68,72,38,18,44,112
270 SYMBOL 251,184,28,72,124,20,24,104,2
4
280 SYMBOL 250,26,56,18,62,40,24,22,24
290 SYMBOL 248,186,124,40,56,16,40,40,10
8
300 SYMBOL 249,56,56,108,186,16,40,40,10
8
310 DIM LA(40,25):M=25:O=22:lu=200
320 SPEED KEY 1,1
330 ON BREAK GOSUB 340:GOTO 350
340 SPEED KEY 20,2:CLS:PEN 1:END
350 GOSUB 2210
360 GOTO 1020
370 REM

```




```

380 REM ++++++
390 REM ++++++ Haupttroutinen ++++++
400 REM ++++++
410 REM
420 INK 1,24:INK 2,2:INK 3,6:INK 0,0:LOC
ATE m,o:PRINT CHR$(249)
430 GOSUB 2600
440 LOCATE 1,24:PRINT"Punkte:";pu
450 IF LA(M,O)=0 THEN 680
460 IF LA(M,O)=1 THEN M=2:GOTO 1120
470 IF LA(M,O)=2 THEN O=2:GOTO 1300
480 IF LA(M,O)=3 THEN O=23:GOTO 1020
490 IF LA(M,O)=4 THEN M=38:GOTO 1220
500 IF LA(M,O)=5 THEN M=3:GOTO 1300
510 IF LA(M,O)=6 THEN O=2:GOTO 1680
520 IF LA(M,O)=7 THEN O=23:GOTO 1300
530 IF LA(M,O)=8 THEN M=38:GOTO 1600
540 IF LA(M,O)=9 THEN M=3:GOTO 1680
550 IF LA(M,O)=10 THEN M=3:GOTO 1780
560 IF LA(M,O)=11 THEN M=38:GOTO 1680
570 IF LA(M,O)=12 THEN O=2:GOTO 2060
580 IF LA(M,O)=13 THEN M=2:GOTO 1880
590 IF LA(M,O)=14 THEN M=38:GOTO 1780
600 IF LA(M,O)=15 THEN O=23:GOTO 1500
610 IF LA(M,O)=16 THEN O=2:GOTO 1880
620 IF LA(M,O)=17 THEN M=38:GOTO 1400
630 IF LA(M,O)=18 THEN M=2:GOTO 1500
640 IF LA(M,O)=19 THEN O=23:GOTO 1120
650 IF LA(M,O)=20 THEN O=2:GOTO 1400
660 IF LA(M,O)=21 THEN M=38:GOTO 1020
670 IF LA(M,O)=22 THEN O=23:GOTO 1780
680 IF LA(M,O)=23 THEN M=38:GOTO 1980
690 IF LA(M,O)=24 THEN M=3:GOTO 2060
700 REM
710 REM ++++++
720 REM ++++++ Spielerbewegung ++++++
730 REM ++++++
740 REM
750 A$=INKEY$
760 IF A$=CHR$(242) AND LA(M-1,O)<>50 TH
EN M=M-1:LOCATE M,O:PRINT CHR$(251):LOCA
TE M+1,O:PRINT " "
770 IF A$=CHR$(243) AND LA(M+1,O)<>50 TH
EN M=M+1:LOCATE M,O:PRINT CHR$(250):LOCA
TE M-1,O:PRINT " "
780 IF A$=CHR$(240) AND LA(M,O-1)<>50 TH
EN O=O-1:LOCATE M,O:PRINT CHR$(248):LOCA
TE M,O+1:PRINT " "
790 IF A$=CHR$(241) AND LA(M,O+1)<>50 TH
EN O=O+1:LOCATE M,O:PRINT CHR$(249):LOCA
TE M,O-1:PRINT " "
800 IF la(m,o)=40 THEN la(m,o)=0:GOSUB 2
660
810 REM
820 REM ++++++
830 REM ++++++ Geister ++++++
840 REM ++++++
850 REM
860 g=g+1:IF g=4-w THEN g=0:GOTO 870 ELS
E GOTO 1010
870 IF x>m AND la(x-1,y)=0 THEN x=x-1:LO
CATE x,y:PRINT CHR$(224):LOCATE x+1,y:PR
INT " "
880 IF x<m AND la(x+1,y)=0 THEN x=x+1:LO
CATE x,y:PRINT CHR$(224):LOCATE x-1,y:PR
INT " "

```

```

890 IF y<o AND m=x AND la(x,y+1)=0 THEN
y=y+1:LOCATE x,y:PRINT CHR$(224):LOCATE
x,y-1:PRINT " "
900 IF y>o AND m=x AND la(x,y-1)=0 THEN
y=y-1:LOCATE x,y:PRINT CHR$(224):LOCATE
x,y+1:PRINT " "
910 IF m=x AND o=y THEN SPEED KEY 20,2:S
OUND 1,500,50,4,2,2,28:FOR t=1 TO 3000:N
EXT:RUN
920 REM
930 REM ++++++
940 REM ++++++ Luftabnahme ++++++
950 REM ++++++
960 REM
970 lu=lu-w:LOCATE 1,23:PRINT"Luft:";lu
980 IF lu<60 THEN SOUND 1,300,4,4:BORDER
3
990 IF INKEY(67)=128 AND pu>=300 THEN lu
=200:pu=pu-300:BORDER 0:GOSUB 2690
1000 IF lu<1 THEN FOR t=1 TO 3000:NEXT:R
UN
1010 GOTO 450
1020 REM *****1
1030 ERASE LA:DIM LA(40,25)
1040 CLS:PEN 2
1050 x=21:y=11
1060 FOR BA=25 TO 10 STEP-1:LOCATE 20,BA
:PRINT CHR$(207):LA(20,BA)=50:NEXT
1070 FOR BA=25 TO 15 STEP-1:LOCATE 30,BA
:PRINT CHR$(207):LA(30,BA)=50:NEXT
1080 FOR BA=20 TO 40:LOCATE BA,10:PRINT
CHR$(207):LA(BA,10)=50:NEXT
1090 FOR BA=30 TO 40:LOCATE BA,15:PRINT
CHR$(207):LA(BA,15)=50:NEXT
1100 FOR BA=11 TO 14:LA(40,BA)=1:NEXT:FO
R BA=20 TO 30:LA(BA,25)=2:NEXT
1110 PEN 1:GOTO 420
1120 REM *****2
1130 ERASE LA:DIM LA(40,25)
1140 CLS:PEN 2
1150 x=29:y=11
1160 FOR BA=1 TO 30:LOCATE BA,10:PRINT C
HR$(207):LA(BA,10)=50:NEXT
1170 FOR BA=1 TO 20:LOCATE BA,15:PRINT C
HR$(207):LA(BA,15)=50:NEXT
1180 FOR BA=10 TO 25:LOCATE 30,BA:PRINT
CHR$(207):LA(30,BA)=50:NEXT
1190 FOR BA=15 TO 25:LOCATE 20,BA:PRINT
CHR$(207):LA(20,BA)=50:NEXT
1200 FOR BA=11 TO 14:LA(1,BA)=21:NEXT:FO
R BA=21 TO 29:LA(BA,25)=20:NEXT
1210 PEN 1:GOTO 420
1220 REM *****3
1230 ERASE LA:DIM LA(40,25)
1240 CLS:PEN 3
1250 x=5:y=14
1260 FOR BA=4 TO 40:LOCATE BA,10:PRINT C
HR$(207):LOCATE BA,15:PRINT CHR$(207):LA
(BA,10)=50:LA(BA,15)=50:NEXT
1270 FOR BA=10 TO 15:LOCATE 3,BA:PRINT C
HR$(207):LA(3,BA)=50:NEXT
1280 FOR BA=11 TO 14:LA(40,BA)=5:NEXT
1290 PEN 1:GOTO 420
1300 REM *****4
1310 ERASE LA:DIM LA(40,25)

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```
1320 CLS:PEN 3
1330 x=25:y=20
1340 FOR BA=1 TO 25:LOCATE 30,BA:PRINT C
HR$(207):LA(30,BA)=50:NEXT
1350 FOR BA=1 TO 10:LOCATE 20,BA:PRINT C
HR$(207):LA(20,BA)=50:NEXT
1360 FOR BA=1 TO 20:LOCATE BA,10:PRINT C
HR$(207):LOCATE BA,15:PRINT CHR$(207):LA
(BA,10)=50:LA(BA,15)=50:NEXT
1370 FOR BA=15 TO 25:LOCATE 20,BA:PRINT
CHR$(207):LA(20,BA)=50:NEXT
1380 FOR BA=11 TO 14:LA(1,BA)=4:NEXT:FOR
BA=21 TO 29:LA(BA,1)=3:LA(BA,25)=6:NEXT
1390 PEN 1:GOTO 420
1400 REM *****5
1410 ERASE LA:DIM LA(40,25)
1420 CLS:PEN 3
1430 x=21:y=19
1440 FOR BA=1 TO 20:LOCATE 20,BA:PRINT C
HR$(207):LA(20,BA)=50:NEXT
1450 FOR BA=1 TO 15:LOCATE 30,BA:PRINT C
HR$(207):LA(30,BA)=50:NEXT
1460 FOR BA=20 TO 40:LOCATE BA,20:PRINT
CHR$(207):LA(BA,20)=50:NEXT
1470 FOR BA=30 TO 40:LOCATE BA,15:PRINT
CHR$(207):LA(BA,15)=50:NEXT
1480 FOR BA=21 TO 29:LA(BA,1)=19:NEXT:FO
R BA=16 TO 19:LA(39,BA)=18:NEXT
1490 PEN 1:GOTO 420
1500 REM *****6
1510 ERASE LA:DIM LA(40,25)
1520 CLS:PEN 3
1530 x=29:y=16
1540 FOR BA=1 TO 30:LOCATE BA,15:PRINT C
HR$(207):LA(BA,15)=50:NEXT
1550 FOR BA=1 TO 20:LOCATE BA,20:PRINT C
HR$(207):LA(BA,20)=50:NEXT
1560 FOR BA=20 TO 25:LOCATE 20,BA:PRINT
CHR$(207):LA(20,BA)=50:NEXT
1570 FOR BA=15 TO 25:LOCATE 30,BA:PRINT
CHR$(207):LA(30,BA)=50:NEXT
1580 FOR BA=16 TO 19:LA(1,BA)=17:NEXT:FO
R BA=21 TO 29:LA(BA,25)=16:NEXT
1590 PEN 1:GOTO 420
1600 REM *****7
1610 ERASE LA:DIM LA(40,25)
1620 CLS:PEN 2
1630 x=11:y=16
1640 FOR BA=10 TO 40:LOCATE BA,15:PRINT
CHR$(207):LOCATE BA,20:PRINT CHR$(207):L
A(BA,15)=50:LA(BA,20)=50:NEXT
1650 FOR BA=16 TO 19:LOCATE 10,BA:PRINT
CHR$(207):LA(10,BA)=50:NEXT
1660 FOR BA=16 TO 19:LA(40,BA)=9:NEXT
1670 PEN 1:GOTO 420
1680 REM *****8
1690 ERASE LA:DIM LA(40,25)
1700 CLS:PEN 2
1710 x=20:y=19
1720 FOR BA=1 TO 40:LOCATE BA,20:PRINT C
HR$(207):LA(BA,20)=50:NEXT
1730 FOR BA=1 TO 20:LOCATE BA,15:PRINT C
HR$(207):LA(BA,15)=50:NEXT
1740 FOR BA=15 TO 1 STEP-1:LOCATE 20,BA:
PRINT CHR$(207):LOCATE 30,BA:PRINT CHR$(
```

```
207):LA(30,BA)=50:LA(20,BA)=50:NEXT
1750 FOR BA=30 TO 40:LOCATE BA,15:PRINT
CHR$(207):LA(BA,15)=50:NEXT
1760 FOR BA=21 TO 29:LA(BA,1)=7:NEXT:FOR
BA=16 TO 19:LA(1,BA)=8:LA(40,BA)=10:NEX
T
1770 PEN 1:GOTO 420
1780 REM *****9
1790 ERASE LA:DIM LA(40,25)
1800 CLS:PEN 2
1810 x=20:y=19
1820 FOR BA=1 TO 40:LOCATE BA,15:PRINT C
HR$(207):LA(BA,15)=50:NEXT
1830 FOR BA=1 TO 20:LOCATE BA,20:PRINT C
HR$(207):LA(BA,20)=50:NEXT
1840 FOR BA=20 TO 25:LOCATE 20,BA:PRINT
CHR$(207):LA(20,BA)=50:LOCATE 30,BA:PRIN
T CHR$(207):LA(30,BA)=50:NEXT
1850 FOR BA=30 TO 40:LOCATE BA,20:PRINT
CHR$(207):LA(BA,20)=50:NEXT
1860 FOR BA=16 TO 19:LA(1,BA)=11:LA(40,B
A)=13:NEXT:FOR BA=20 TO 30:LA(BA,25)=12:
NEXT
1870 PEN 1:GOTO 420
1880 REM *****10
1890 ERASE LA:DIM LA(40,25)
1900 CLS:PEN 2
1910 x=29:y=19
1920 FOR BA=1 TO 30:LOCATE BA,20:PRINT C
HR$(207):LA(BA,20)=50:NEXT
1930 FOR BA=1 TO 20:LOCATE BA,15:PRINT C
HR$(207):LA(BA,15)=50:NEXT
1940 FOR BA=1 TO 15:LOCATE 20,BA:PRINT C
HR$(207):LA(20,BA)=50:NEXT
1950 FOR BA=20 TO 1 STEP-1:LOCATE 30,BA:
PRINT CHR$(207):LA(30,BA)=50:NEXT
1960 FOR BA=16 TO 19:LA(1,BA)=14:NEXT:FO
R BA=21 TO 29:LA(BA,1)=15:NEXT
1970 PEN 1:GOTO 420
1980 REM *****11
1990 ERASE LA:DIM LA(40,25)
2000 CLS:PEN 3
2010 x=11:y=19
2020 FOR BA=10 TO 40:LOCATE BA,15:PRINT
CHR$(207):LOCATE BA,20:PRINT CHR$(207):L
A(BA,15)=50:LA(BA,20)=50:NEXT
2030 FOR BA=16 TO 19:LOCATE 10,BA:PRINT
CHR$(207):LA(10,BA)=50:NEXT
2040 FOR BA=16 TO 19:LA(40,BA)=24:NEXT
2050 PEN 1:GOTO 420
2060 REM *****12
2070 ERASE LA:DIM LA(40,25)
2080 CLS:PEN 3
2090 x=29:y=19
2100 FOR BA=1 TO 30:LOCATE BA,20:PRINT C
HR$(207):LA(BA,20)=50:NEXT
2110 FOR BA=1 TO 20:LOCATE BA,15:PRINT C
HR$(207):LA(BA,15)=50:NEXT
2120 FOR BA=15 TO 1 STEP-1:LOCATE 20,BA:
PRINT CHR$(207):LA(20,BA)=50:NEXT
2130 FOR BA=20 TO 1 STEP-1:LOCATE 30,BA:
PRINT CHR$(207):LA(30,BA)=50:NEXT
2140 FOR BA=21 TO 29:LA(BA,1)=22:NEXT:FO
R BA=16 TO 19:LA(1,BA)=23:NEXT
2150 PEN 1:GOTO 420
```



```

2160 REM
2170 REM ++++++
2180 REM +++++ Graphik +++++
2190 REM ++++++
2200 REM
2210 CLS
2220 PLOT 20,300,0
2230 FOR ba=1 TO 54
2240 READ a,b,c
2250 DRAW a,b,c
2260 SOUND 1,50,1,7:SOUND 1,0,2,0
2270 NEXT
2280 DATA 0,-100,3,0,150,3,0,-80,3,50,0,
3,0,-150,3,0,200,3
2290 DATA 28,-50,0,-25,-40,3,25,-40,3,25
,40,3,-25,40,3
2300 DATA 28,0,0,0,-80,3,0,60,3,50,20,3,
3,0,0,0,-80,3,0,60,3,50,20,3,3,0,0
2310 DATA 3,0,0,-25,-40,3,25,-40,3,25,40
,3,-25,40,3,28,0,0,0,-80,3,0,60,3,50,20,
3,3,-40,0,20,2,3,20,-3,3,10,1,3
2320 DATA 60,100,0,-50,-100,3,80,-120,3,
-20,160,0,-40,-40,3,40,-40,3,0,80,3,0,-8
0,3,10,0,3
2330 DATA 3,80,0,25,-80,3,25,80,3,5,-20,
0,40,0,3,-20,20,3,-20,-20,3,30,-60,3
2340 DATA 53,80,0,-40,-26,3,40,-26,3,-40
,-26,3
2350 SPEED INK 20,20
2360 INK 3,0,26:INK 0,0:BORDER 0
2370 LOCATE 9,24:PRINT"Press any key to
play"
2380 REM
2390 REM ++++++
2400 REM +++++ Musik +++++
2410 REM ++++++
2420 REM
2430 RESTORE 2500
2440 FOR mu=1 TO 98
2450 READ k,t,1
2460 SOUND k,t,1.1*1,7:SOUND 1,0,2,0
2470 a$=INKEY$:IF a$<>" " THEN RETURN
2480 NEXT
2490 RESTORE 2500:GOTO 2440
2500 DATA 1,239,25,1,239,25,1,239,25,1,2
39,12.5,1,239,12.5,1,239,12.5,1,239,12.5
,1,239,12.5,1,239,12.5,1,239,25
2510 DATA 1,319,25,1,284,25,1,268,25,1,2
53,12.5,2,358,12.5,1,253,12.5,2,358,12.5
,1,284,12.5,2,358,12.5,1,319,12.5,2,358,
12.5
2520 DATA 1,253,12.5,2,358,12.5,1,253,12
.5,2,358,12.5,1,284,12.5,2,358,12.5,1,31
9,12.5,2,358,12.5
2530 DATA 1,239,12.5,2,379,12.5,1,239,12
.5,2,379,12.5,1,284,12.5,2,379,12.5,1,31
9,12.5,2,379,12.5,1,239,12.5,2,379,12.5,
1,239,12.5,2,379,12.5,1,284,12.5,2,379,1
2.5,1,319,12.5,2,379,12.5
2540 DATA 1,253,25,1,284,12.5,1,319,25,1
,284,12.5,1,319,12.5,1,319,12.5,1,284,25
,1,319,12.5,1,379,25,1,0,12,1,319,12.5
2550 DATA 1,253,12.5,2,358,12.5,1,253,12
.5,2,358,12.5,1,284,12.5,2,358,12.5,1,31
9,12.5

```

```

2560 DATA 2,358,12.5,1,253,12.5,2,358,12
.5,1,253,12.5,2,358,12.5,1,284,12.5,2,35
8,12.5,1,319,12.5,2,358,12.5
2570 DATA 1,239,12.5,2,379,12.5,1,239,12
.5,2,379,12.5,1,284,12.5,2,379,12.5,1,31
9,12.5,2,379,12.5,1,239,12.5
2580 DATA 2,379,12.5,1,239,12.5,2,379,12
.5,1,284,12.5,2,379,12.5,1,319,12.5,2,37
9,12.5
2590 DATA 1,253,25,1,284,12.5,1,319,25,1
,284,12.5,1,319,12.5,1,358,12.5,1,379,25
,1,426,12.5,1,478,25,1,0,80
2600 REM *****
2610 FOR e=1 TO 10
2620 ae=INT(RND(1)*39)+1
2630 ab=INT(RND(1)*24)+1
2640 IF 1a(ae,ab)<>50 THEN LOCATE ae,ab:
PRINT CHR$(143):1a(ae,ab)=40 ELSE 2620
2650 NEXT:RETURN
2660 REM *****
2670 SOUND 1,200,10,4
2680 pu=pu+100
2690 LOCATE 1,24:PRINT "Punkte: ";pu
2700 RETURN
2710 REM
2720 REM *****
2730 REM *** Spielanleitung ***
2740 REM *****
2750 REM
2760 SPEED KEY 20,2:CLS
2770 LOCATE 1,2:INPUT "Name";n$
2780 PRINT "Einen Moment.....":FOR t=1
TO 2000:NEXT
2790 PEN 3:PRINT n$:PEN 1
2800 PRINT "In unserem Archiv haben wir
gesehen,dass Sie der faehigste Mann sind
,um diesen Auftrag auszufuehren !!"
2810 PEN 2:PRINT:PRINT"Ihre Aufgabe:":PE
N 3
2820 PRINT"-----":PEN 1
2830 PRINT:PRINT:PRINT" Uns gehen langsa
m, aber sicher die Vor-raete an Metallen
aus! Deshalb sammeln Sie in den Hoehle
n der Pyrenaeen Erze, um uns die Metall
industrie aufrecht zu erhalten."
2840 PEN 3:PRINT:PRINT"Verlieren Sie nic
ht die Orientierung !!!":PEN 1
2850 PRINT:PRINT"Viel Glueck !!!"
2860 LOCATE 9,24:PRINT "Press any key to
go on"
2870 a$=INKEY$:IF a$<>" " THEN RETURN ELS
E 2870

```

CHECK V1:PRUEFSUMMEN:

ZEILENNR.: SUMMEN

10-	20:	41506
30-	40:	32487
50-	60:	14405
70-	80:	26282
90-	100:	22444
110-	120:	50076
130-	140:	18970
150-	160:	34404
170-	180:	39282
190-	200:	39002
210-	220:	27050
230-	240:	37655
250-	260:	51074
270-	280:	33226
290-	300:	39770
310-	320:	60376
330-	340:	11915

350-	360:	2210
370-	380:	21593
390-	400:	52871
410-	420:	1773
430-	440:	21810
450-	460:	67191
470-	480:	88911
490-	500:	87438
510-	520:	85274
530-	540:	87301
550-	560:	96288
570-	580:	84637
590-	600:	100605
610-	620:	90241
630-	640:	93507
650-	660:	96135
670-	680:	99863
690-	700:	41447
710-	720:	45517
730-	740:	16519

750-	760:	37418
770-	780:	68330
790-	800:	48522
810-	820:	18970
830-	840:	38281
850-	860:	24738
870-	880:	61020
890-	900:	108252
910-	920:	51045
930-	940:	43956
950-	960:	18970
970-	980:	75372
990-	1000:	46907
1010-	1020:	23502
1030-	1040:	12763
1050-	1060:	64364
1070-	1080:	91226
1090-	1100:	63490
1110-	1120:	25070
1130-	1140:	12763



1150- 1160: 41366
1170- 1180: 69510
1190- 1200: 65728
1210- 1220: 25102
1230- 1240: 12768
1250- 1260: 18697
1270- 1280: 72211
1290- 1300: 25134
1310- 1320: 12768
1330- 1340: 43591
1350- 1360: 43203
1370- 1380: 72877
1390- 1400: 25166
1410- 1420: 12768
1430- 1440: 42858

1450- 1460: 70115
1470- 1480: 65220
1490- 1500: 25198
1510- 1520: 12768
1530- 1540: 41811
1550- 1560: 69340
1570- 1580: 66081
1590- 1600: 25230
1610- 1620: 12763
1630- 1640: 25813
1650- 1660: 79139
1670- 1680: 25262
1690- 1700: 12763
1710- 1720: 42303

1730- 1740: 74874
1750- 1760: 75061
1770- 1780: 25294
1790- 1800: 12763
1810- 1820: 41933
1830- 1840: 56491
1850- 1860: 89882
1870- 1880: 25223
1890- 1900: 12763
1910- 1920: 42226
1930- 1940: 65744
1950- 1960: 80179
1970- 1980: 23897
1990- 2000: 12768

2010- 2020: 25858
2030- 2040: 80218
2050- 2060: 23928
2070- 2080: 12768
2090- 2100: 42226
2110- 2120: 84050
2130- 2140: 78631
2150- 2160: 2764
2170- 2180: 37307
2190- 2200: 18970
2210- 2220: 1709
2230- 2240: 16895
2250- 2260: 16354
2270- 2280: 60637

2290- 2300: 91081
2310- 2320: 87953
2330- 2340: 81298
2350- 2360: 7642
2370- 2380: 40719
2390- 2400: 35739
2410- 2420: 20260
2430- 2440: 10024
2450- 2460: 50201
2470- 2480: 22351
2490- 2500: 4118
2510- 2520: 69804
2530- 2540: 88653
2550- 2560: 70449
2570- 2580: 71898

2590- 2600: 59459
2610- 2620: 26360
2630- 2640: 84726
2650- 2660: 8034
2670- 2680: 14665
2690- 2700: 22738
2710- 2720: 21100
2730- 2740: 50128
2750- 2760: 2964
2770- 2780: 73990
2790- 2800: 42896
2810- 2820: 35318
2830- 2840: 52822
2850- 2860: 56207
2870- : 28368

GESAMTCHECKSUMME: 41005

Mitchell, Craig (1986): Pak Caverns.

In: Amstrad Computer User, Ausg. 1/1986 (January), S. 53-54, 56, 79f.

PAK

CAVERNS

Pak Caverns is a game of strategy and skill, it involves guiding your muncher through ten lethal caverns eating apples and avoiding dangerous objects. Full playing instructions are included in the loader program.

The game is designed to be fun, addictive and not require any great speed from BASIC. Machine code routines have been kept to a minimum.

Due to the length of the program it has been split into two sections, one of which loads after the other. The first program to load contains instructions, graphics and machine code. This is just over 13K in length. After the program is completed the next program on tape automatically loads. This is the main game and is about 35K in length.

Note that all references to the fire button refer to the button on the joystick or the large enter key on the keyboard. I have been as devious as possible in designing the various levels and although some of the levels are extremely difficult to complete I assure you that all are possible. Practice makes perfect.

Typing Instructions:

Type in the first loader program and when it is working correctly, save it using SAVE 'PAK CAVERNS'

Now type in the second program and when that is working correctly, save it using SAVE 'PAKMAIN'

IMPORTANT NOTE:

It is necessary to have had the loader program running before the main program as it uses routines that are set up by the loader program.

MAIN PROGRAM:

```

10-90      Initialise.
100-200    Begin new game.
210-480    Main loop.
490-670    Practice mode level selector.
680-700    Laser interrupt subroutine 1.
710-730    Laser interrupt subroutine 2.
740-830    Practice mode or start
           game selection.
840-1170   Play drum roll.
1180-1240  Define sound envelopes.
1250-1540  Set up title screen tune arrays.
1550-1580  Set up high score arrays.
1590-1920  Display title screen.
1930-2050  Demonstration routine.
2060-2430  Play title screen tune.
2440-2480  Print mess$ in double height
           at cursor position.
           Blank top section of screen.
2490-2510  Pause routine.
2520-2570  Lose a life routine.
2580-2620  Game over routine.
2630-2670  Level completion bonus routine.
2680-2820  Practice mode continue or exit?
2830-2910  Free life routine.
2920-2960  Mystery bonus routine.
2970-3020  Level printing subroutines.
3030-4990  Mega-bonus routine.
5000-5150  Play Game Over routine.
5160-5430  Enter high scorers name.
5440-5780  Display high scores.
5790-5830  Play high score tune.
5840-6130  Draw fancy border.
6140-6150  Data for demonstration.
6160-6200

```

```

10 *****
20 * PAK CAVERNS LOADER PROGRAM *
30 * BY CRAIG MITCHELL 1985 *
40 *****
50 MODE 1: BORDER 0: INK 0: INK 1,26: INK
  2,6,3: INK 3,8,4: SPEED INK 20,20
60 LOCATE 15,12: PEN 3: PAPER 0: PRINT "PLEA
  SE WAIT": LOCATE 13,24: PEN 2: PRINT "DO
  NOT STOP TAPE"
70 GOSUB 400: GOSUB 810
80 SL: H+189: SR: H+231: AD: HIMEM+140
90 POKE SL+1,128: POKE SL+2,199: POKE SR+1
  ,48: POKE SR+2,199
100 AS="" INSTRUCTIONS (Y/N) ?
110
120 W=31: B=10: PEN 1: PAPER 0
130 FOR F=1 TO 30: POKE AD+5,ASC(MID$(AS,
  6,1)): CALL AD: LOCATE 1,24: PRINT CHR$(
  254): POKE AD+5,ASC(MID$(AS,6,1)): C
  ALL AD: LOCATE 40,25: PRINT CHR$(255):
130 CALL SR: CALL SL: W=W-1: B=B+1: NEXT
140 FOR F=1 TO 12: LOCATE 1,25: PRINT CHR$(
  10): NEXT
150 FOR F=450 TO 640 STEP 32: MOVE F,0: D
  RAWR 400,400,1: MOVE 639-F,0: DRAWR 4
  00,400: NEXT: WINDOW 10,31,11,14: CLS: W
  INDOW 1,40,1,25: LOCATE 11,12: MESS$=""
  INSTRUCTIONS (Y/N) ?": GOSUB 2510
160 INK 2,1: INK 3,0: FOR F=0 TO 16 STEP 2
  : MOVE F,F: DRAW 639-F,F: ((F/2) MOD 2)
  +2: DRAW 639-F,399-F: DRAW F,399-F: DRA
  W F,F: NEXT
170 EVERY 5 GOSUB 500: I=2: C=2
180 WHILE AS<>"N" AND AS<>"Y": PEN I: I=I+
  1: IF I=4 THEN I=2
190 LOCATE 9,10: PRINT CHR$(210): FOR F=10
  TO 31: LOCATE F,10: PRINT CHR$(143): I=
  EXT: LOCATE 32,10: PRINT CHR$(211)
200 FOR F=11 TO 14: LOCATE 32,F: PRINT CHR$(
  143): I=EXT: LOCATE 32,15: PRINT CHR$(
  208): FOR F=31 TO 10 STEP -1: LOCATE F
  ,15: PRINT CHR$(143): NEXT: LOCATE 9,15
  : PRINT CHR$(209): FOR F=14 TO 11 STEP
  -1: LOCATE 9,F: PRINT CHR$(143): NEXT
210 INK 1,C: C=C+1: IF C=25 THEN C=1
220 KS=LOWERS(INKEY$): WEND
230 FOR F=128 TO 328 STEP 2: MOVE F,160: D
  RAWR 0,100,0: MOVE 639-F,160: DRAWR 0,
  100: NEXT

```

```

240 IF AS="Y" THEN GOSUB 1750
250 RE=REMAIN(0): SOUND 135,0,0,1
260 CLS: BORDER 6: INK 0,6: INK 2,2: INK 3,0
270 C1=3: C2=1: X=3: Y=4: M$="PROGRAM AND DE
  SIGN BY CRAIG MITCHELL": GOSUB 340

```

```

280 X=2: Y=6: M$="MAPLE LEAF RAG ARRANGED
  BY C.MITCHELL": GOSUB 340
290 C1=1: C2=2: X=4: Y=9: M$="ENOLA GAY AND
  OTHER TUNES ARRANGED": GOSUB 340
300 X=14: Y=11: M$="BY PETER YOUNG": GOSUB
  340
310 X=2: Y=15: C1=2: C2=1: M$="PAK CAVERNS I
  S NOW LOADING. PLEASE WAIT": GOSUB 340
320 X=5: Y=17: C1=1: C2=3: M$="LOADING TIME
  IS APPROX 8 MINUTES": GOSUB 340
330 RUN "PAKMAIN"
340 PRINT CHR$(23): CHR$(3): TAG
350 XP=((X-1)*16)-2: YP=((Y-1)*16): PLOT
  800,800,C1
360 FOR F=YP TO YP-4 STEP -2: FOR G=XP TO
  XP+4 STEP 2: MOVE G,F: PRINT M$: NEXT
  G,F
370 TAGOFF
380 PRINT CHR$(23): CHR$(0): CHR$(22): CHR$(1)
  :
390 LOCATE X,Y: PEN C2: PRINT M$: CHR$(22): C
  HR$(0): RETURN
400 tempo=9: ENV 1,15,-1,10
410 DIM A(219,1), B(138,1), C(86,1): RESTOR
  E 540
420 F=0
430 READ N,D: IF N<>-1 THEN A(F,B)=N: A(F,
  1)=D: tempo=F+1: GOTO 430
440 F=F+1
450 READ N,D: IF N<>-1 THEN B(F,B)=N: B(F,
  1)=D: tempo=F+1: GOTO 450
460 F=F+1
470 READ N,D: IF N<>-1 THEN C(F,B)=N: C(F,
  1)=D: tempo=F+1: GOTO 470
480 note1=0: note2=0: note3=0

```

```

490 RETURN
500 IF NOT SQ(1) AND 1 THEN SOUND 1,A(CNO
  500 IF NOT SQ(1) AND 1 THEN SOUND 1,A(CNO
  te1,B),A(note1,1),ABS(A(note1,0)<>0)
  +15,ABS(A(note1,0)<>0): note1=note1+
  1: IF note1=220 THEN note1=0: note2=0:
  1: IF note1=220 THEN note1=0: note2=0:
  note3=0: SOUND 135,0,0,1
510 IF NOT SQ(2) AND 1 THEN SOUND 2,B(CNO
  te2,B),B(note2,1),ABS(B(note2,0)<>0)
  +15,ABS(B(note2,0)<>0): note2=note2+
  1
520 IF NOT SQ(3) AND 1 THEN SOUND 3,C(CNO
  te3,B),C(note3,1),ABS(C(note3,0)<>0)
  +15,ABS(C(note3,0)<>0): note3=note3+1
530 RETURN
540 DATA 119,4,119,4,119,4,119,4,119,2,1
  59,2,142,2,190,2,159,2,142,6,239,2,2
  13,2,201,2,239,2,213,2,198,2,239,2,2
  13,2,198,2,239,2,213,4,239,4,198,2,1
  59,2
550 DATA 119,4,119,4,119,4,119,4,119,2,1
  59,2,142,2,190,2,159,2,142,6,239,2,2
  13,2,201,2,239,2,213,2,198,2,239,2,2
  13,2,198,2,239,2,213,4,239,4,198,2,1
  59,2
560 DATA 127,2,80,2,127,2,106,2,84,4,127
  ,2,89,2,127,2,106,2,95,4,159,2,106,2
  ,159,4,198,2,119,2,190,2,159,2,142,4
  ,198,2,119,2,190,2,159,2,142,4,198,2
  ,142,6

```

```

570 DATA 159,2,127,2,213,2,179,2,142,4,1
  59,2,127,2,213,2,179,2,142,4,179,2,1
  42,6,198,2,119,2,198,2,159,2,142,4,1
  90,2,119,2,198,2,159,2,142,4,198,2,1
  42,6,127,2,80,2,127,2,106,2,84,4,127
  ,2
580 DATA 89,2,127,2,106,2,95,4,159,2,106
  ,2,159,4,198,2,119,2,190,2,159,2,142
  ,4,198,2,119,4,119,4,127,4,134,6,284
  ,2,225,2,198,2,142,2,190,2,239,2,284
  ,4,284,2,213,2,179,2,142,4,179,4,198
  ,4,198,6,213,4,319,4
590 DATA 239,2,198,2,159,2,119,8,119,4,1
  42,4,119,4,142,4,119,4,106,2,95,4,10
  6,2,119,2,142,2,159,2,142,4,198,12,1
  59,2,142,2,198,2,159,2,142,4,198,2,1
  59,4,142,2,213,12
600 DATA 179,2,142,2,213,2,179,2,142,4,1
  90,4,159,2,142,2,198,2,159,2,142,4,1
  90,4,159,2,142,2,198,2,159,2,142,4,1
  59,2,119,4,142,4,119,4,142,4,119,4,1
  06,2,95,4,106,2,119,2,142,2
610 DATA 119,4,142,4,159,2,119,4,198,4,1
  59,2,142,2,198,2,159,2,142,4,239,4,2
  13,2,239,4,239,4,213,2,239,4,213,2,1
  90,2,239,2,213,2,198,4,239,4,213,2,1
  90,2,239,4,213,4,319,2,239,2,159,2,1
  19,40
620 DATA -1,-1
630 DATA 201,4,201,4,201,4,201,4,198,4,3
  19,4,638,4,319,4,536,4,338,4,638,4,3
  19,4,284,4,253,4,379,8
640 DATA 201,4,201,4,201,4,201,4,198,4,3
  19,4,638,4,319,4,536,4,338,4,638,4,3
  19,4,284,4,253,4,379,8

```

```

650 DATA 426,4,179,4,638,4,179,4,426,4,1
  79,4,638,4,586,4,478,4,319,4,638,4,3
  19,4,478,4,319,4,478,4,451,4
660 DATA 426,4,253,4,638,4,253,4,426,4,2
  53,4,426,4,402,4,379,4,239,4,638,4,3
  19,4,478,4,319,4,478,4,451,4,426,4,1
  79,4,638,4,179,4
670 DATA 426,4,179,4,638,4,253,4,478,4,3
  19,4,638,4,319,4,239,4,239,4,253,4,2
  68,4,568,8,451,8,426,8,358,8,239,8,2
  53,4,638,4
680 DATA 478,8,478,8,142,4,179,4,142,4,1
  79,4,142,16,190,6,239,38,253,12
690 DATA 426,4,253,4,638,4,586,4,478,4,3
  19,4,638,4,319,4,478,4,319,4,426,4,3
  79,4,142,4,179,4,142,4,179,4,142,4,2
  84,4,426,4,402,4
700 DATA 159,4,198,4,198,8,478,4,319,4,6
  38,4,319,4,284,4,358,4,602,4,338,4,6
  38,4,319,4,638,4,602,4,568,4,358,4,6
  38,4,358,4,379,2,638,2,159,40
710 DATA -1,-1
720 DATA 338,16,638,4,379,8,379,8,402,8,
  379,4,586,4,358,4,478,8
730 DATA 338,16,638,4,379,8,379,8,402,8,
  379,4,379,4,358,4,478,12
740 DATA 253,8,253,8,253,16,379,8,379,8,
  379,16
750 DATA 319,8,319,8,319,16,319,8,379,8,
  379,16,253,8,253,8
760 DATA 253,16,379,8,379,4,478,4,478,4,
  586,4,536,4,1136,8,982,8,851,8,716,8
  338,8,319,24

```

```

770 DATA 358,4,284,4,284,4,478,4,358,4,2
  84,4,426,4,402,4,379,4,319,4,319,4,6
  38,4,478,4,319,4,638,4,451,4,426,4,3
  58,4,638,4,451,8
780 DATA 179,16,379,8,379,8,379,12,358,4
  ,284,4,284,4,478,4,358,16
790 DATA 379,4,319,4,319,4,638,8,379,8,3
  79,8,478,8,478,8,379,16,426,16,956,4
  0
800 DATA -1,-1
810 IF PEEK(HIMEM+1)<>821 THEN SYMBOL AF
  TER 32: MEMORY HIMEM+280: H=HIMEM+1: AD
  DR=H: TOT=0: RESTORE 810 ELSE H=HIMEM+
  1: RETURN
820 FOR F=0 TO 274: READ BYTES: BYTES=VAL("
  "&BYTES): POKE ADDR, BYTES: ADDR=ADDR+1
  : TOT=TOT+BYTES: NEXT F
830 IF TOT<>2725 THEN CLS: PRINT CHR$(7)
  "CHECKSUM ERROR": MEMORY HIMEM+280: E
  ND
840 CALL H
850 SYMBOL 48,124,182,206,246,198,204,12
  0,0
860 SYMBOL 49,24,120,24,24,24,126,0
870 SYMBOL 50,124,198,182,12,48,182,252,
  0
880 SYMBOL 51,124,198,6,60,6,198,124,0
890 SYMBOL 52,6,14,38,54,127,6,6,12
900 SYMBOL 53,254,198,192,124,6,198,124,
  0
910 SYMBOL 54,124,238,96,124,198,198,124
  ,0
920 SYMBOL 55,126,198,12,126,24,48,96,96
930 SYMBOL 56,124,238,182,124,198,198,12
  4,0
940 SYMBOL 57,124,238,182,62,6,284,128,0
950 SYMBOL 65,48,120,236,254,198,198,182
  ,6
960 SYMBOL 66,124,238,182,252,198,198,12
  4,0
970 SYMBOL 67,60,182,284,192,192,198,124
  ,0
980 SYMBOL 68,124,246,182,182,182,204,24
  8,0
990 SYMBOL 69,60,182,192,248,192,198,124
  ,0
1000 SYMBOL 70,60,182,96,120,96,96,192,1
  92
1010 SYMBOL 71,60,182,96,204,198,182,62,
  6
1020 SYMBOL 72,238,182,182,126,182,198,2
  0,192
1030 SYMBOL 73,124,216,24,24,48,48,128,0
1040 SYMBOL 74,126,198,6,12,12,24,216,11
  2
1050 SYMBOL 75,238,182,188,120,188,182,2
  50,6
1060 SYMBOL 76,48,248,48,96,96,198,252,0
1070 SYMBOL 77,195,231,127,107,99,99,103
  ,192
1080 SYMBOL 78,238,182,118,126,118,182,1
  02,192

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```

1090 SYMBOL 79,124,182,198,198,204,1
  28,0
1100 SYMBOL 80,248,108,182,124,96,96,96,
  192
1110 SYMBOL 81,124,182,198,198,222,204,1
  26,6
1120 SYMBOL 82,124,238,188,120,128,188,1
  02,192
1130 SYMBOL 83,62,99,198,112,28,198,124,
  0

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LISTING

1140 SYMBOL 84, 126, 216, 24, 24, 24, 24, 68
1150 SYMBOL 85, 102, 230, 102, 102, 198, 198, 1
24, 0
1160 SYMBOL 86, 108, 230, 102, 102, 54, 60, 24,
0
1170 SYMBOL 87, 99, 227, 99, 107, 127, 119, 99,
112
1180 SYMBOL 88, 204, 102, 60, 24, 60, 102, 204,
0
1190 SYMBOL 89, 102, 230, 102, 60, 12, 24, 48, 2
24
1200 SYMBOL 90, 126, 198, 12, 24, 48, 102, 254,
0
1210 SYMBOL 227, 60, 126, 255, 255, 255, 255, 1
26, 60
1220 SYMBOL 230, 62, 111, 248, 224, 224, 248, 1
27, 62
1230 SYMBOL 231, 124, 246, 31, 7, 31, 254, 12
4
1240 SYMBOL 232, 66, 195, 195, 231, 167, 255, 1
26, 60
1250 SYMBOL 233, 60, 126, 255, 229, 231, 195, 1
95, 66
1260 SYMBOL 234, 60, 126, 239, 255, 240, 255, 1
26, 60
1270 SYMBOL 235, 60, 126, 247, 255, 15, 255, 1
6, 60
1280 SYMBOL 236, 52, 118, 247, 247, 223, 255,
26, 60
1290 SYMBOL 237, 60, 126, 255, 251, 239, 239,
10, 44
1300 SYMBOL 238, 60, 255, 62, 89, 82, 72, 36, 0
1310 SYMBOL 239, 0, 60, 255, 62, 89, 82, 72, 36
1320 SYMBOL 240, 0, 0, 60, 255, 62, 89, 82, 72
1330 SYMBOL 241, 0, 0, 0, 60, 255, 62, 89, 82
1340 SYMBOL 242, 0, 0, 0, 0, 60, 255, 62, 89

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1350 SYMBOL 243,0,0,0,0,0,60,255,62
1360 SYMBOL 244,0,0,0,0,0,0,60,255
1370 SYMBOL 245,0,0,0,0,0,0,60
1380 SYMBOL 246,236,0,187,0,238,0,187
1390 SYMBOL 247,68,40,148,81,57,166,80,1
        6
1400 SYMBOL 248,255,127,62,30,20,12,8,2
1410 SYMBOL 249,255,255,220,206,102,36,1
        12,216
1420 SYMBOL 250,4,8,60,78,94,126,60,0
1430 SYMBOL 251,255,255,102,204,153,51,1
        02,255
1440 SYMBOL 252,100,140,148,148,148,148,
        148,99
1450 SYMBOL 253,95,68,68,68,68,68,132
        :SYMBOL 200,255,255,254,254,252,248
        240,192:SYMBOL 209,255,255,127,127
        ,63,31,15,3:SYMBOL 210,3,15,31,63,1
        27,127,255,255:SYMBOL 211,192,240,2
        48,252,254,254,255,255
1460 RETURN
1470 DATA 21,e1,e9,22,30,00,f7,eb
1480 DATA 21,77,00,19,4e,23,64,79
1490 DATA b0,20,15,e5,60,69,19,e5
1500 DATA 4e,23,46,60,69,19,44,4d
1510 DATA e1,71,23,70,e1,23,18,e4
1520 DATA 01,2a,00,21,66,00,c3,d1
1530 DATA bc,2f,00,c3,37,00,f7,45
1540 DATA 54,43,48,61,d2,00,f8,02
1550 DATA 20,1e,dd,0e,02,dd,66,03
1560 DATA e5,dd,46,00,0e,00,c5,cd
1570 DATA b7,bb,c1,cd,60,bb,e1,77
1580 DATA 9f,3c,23,77,cd,b7,bb,c9
1590 DATA 21,6a,00,7e,23,cd,5a,bb
1600 DATA 1e,0a,20,f7,c9,00,00,00
1610 DATA 00,42,61,64,20,43,6f,6d
1620 DATA 60,61,6e,64,00,0a,22,00
1630 DATA 25,00,2a,00,2d,00,5a,00
1640 DATA 00,00,00,00

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```

1650 DATA cd,00,b9,f5,3e,00,cd,a5,bb,dd,
    21,32
1660 DATA 90,06,08,7e,dd,77,00,dd,77,01,
    23,dd,23,dd
1670 DATA 23,10,f2,f1,cd,0c,b9,3e,fe,21,
    32,90,cd
1680 DATA a8,bb,3e,ff,21,3a,90,cd,a8,bb,
    c9
1690 DATA 21,00,c7,06,08,cd,19,bd,f3,c5,
    e5,56,23,5e,d5
1700 DATA 23,06,0e,7e,2b,2b,77,23,23,23,
    10,f7,2b,d1,73,2b
1710 DATA 72,e1,01,00,05,09,c1,10,e1,fb,
    c9
1720 DATA 21,00,c7,01,4f,00,09,06,08,cd,
    19,bd,f3,c5,e5,56
1730 DATA 2b,5e,2b,d5,06,4e,7e,23,23,77,
    2b,2b,2b,10,17,d1,23,73,23,72,e1
1740 DATA 01,00,08,09,c1,10,e1,fb,c9
1750 BORDER 3:INK 0,3:INK 1,18:INK 2,15:
    INK 3,24:PAPER 0:MODE 1
1760 PEN 3:message="P A K C A V E R N S":
    LOCATE 11,1:GOSUB 2510:PEN 1:LOCATE
    10,3:PRINT STRINGS(22,154)
1770 LOCATE 1,6:PEN 2:PRINT"GUIDE F
    ODDISH [":PEN 3:PRINT CHR$(230):P
    EN 2:PRINT[": THROUGH 10 LETHAL"
1780 PRINT"CAVERNS, COLLECTING APPLES [":
    PEN 1:PRINT CHR$(250):PEN 2:PRINT
    "13 AND THEN"

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1790 PRINT:PRINT"ESCAPING THROUGH THE GA
TWAYEY [ "CHR$(252)CHR$(253)" ] INTO
"
1800 PRINT"THE NEXT CAVERN."
1810 PRINT:PEN 1:PRINT TAB(17)STRINGS(8,
154)
1820 PEN 3:PRINT:PRINT"YOU CAN ONLY PASS
THROUGH THE GATEWAY":PRINT:PRINT"W
HEN IT IS FLASHING. IT ONLY FLASHES
"
1830 PRINT:PRINT"WHEN A CERTAIN NUMBER O
F APPLES HAVE":PRINT:PRINT"BEEN EAT
EN."
1840 GOSUB 2450
1850 CLS:INK 1,6:INK 2,26:INK 3,2

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1860 PEN 3:PRINT"AT THE START OF EACH SC
REEN YOU HAVE AN":PRINT:PRINT"EMERG
Y LEVEL OF 100%. EVERY TIME YOU HIT
"
1870 PRINT"EITHER A WALL [":PEN 2:PEN
1:PRINT STRINGS(5,246):PEN 3:PAPE
R B:PRINT"] , A GIRDER [":PEN 2:PR
INT STRINGS(5,251):PEN 3:PRINT"]"
1880 PRINT"A FLOOR [":PEN 1:PRINT STRIN
GS(5,249):PEN 3:PRINT"] OR PART OR
YOUR TRAIL"
1890 PRINT:PRINT["":PEN 2:PRINT STRINGS
(5,227):PEN 3:PRINT"] YOUR ENERGY
DROPS BY 10%."
1900 PRINT:PRINT"ALLOWING YOUR ENERGY LE
VEL TO REACH 0%":PRINT:PRINT"LOSES
YOU A LIFE."
1910 PEN 1:PRINT:PRINT TAB(17)STRINGS(8,
154)
1920 PEN 2:PRINT:PRINT"THERE ARE ALSO PO
ISONOUS OBJECTS WHICH":PRINT:PRINT"
ARE INSTANTLY FATAL, THESE ARE KILL
ING"
1930 PRINT:PRINT"BUSHES [":PEN 3:PRINT
CHRS(247):PEN 2:PRINT"] AND VENOMO
US SPIKES [":PEN 1:PRINT CHRS(248)
]:PEN 2:PRINT"]."
1940 PRINT:PRINT"AVOID THESE AT ALL COST
$ !!"
1950 GOSUB 2450
1960 CLS:INK 1,16:INK 2,11:INK 3,18,3:SP
EED INK 20,60
1970 PEN 1:PRINT"COLLAPSING FLOORS I
3 MAY ALSO BLOCK"
1980 PEN 2:LOCATE 20,1:PRINT STRINGS(5,2
38):PEN 1
1990 PRINT:PRINT"YOUR PATH BUT YOU CAN E
AT THROUGH THESE,":PRINT"HOWEVER IM
DOING SO SOME ENERGY IS LOST."
2000 PEN 3:PRINT:PRINT TAB(17)STRINGS(8,
154):PEN 2
2010 PRINT:PRINT"LASER BEAMS MAY ALSO FI
RE AT REGULAR"
2020 PRINT:PRINT"INTERVALS, DO NOT ENTER
THE BEAMS WHEN"
2030 PRINT:PRINT"THEY ARE FIRING."

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2040 PEN 3:PRINT:PRINT:PRINT TAB(17)ST
NGS(20,154):FOR #=18 TO 22:LOCATE
  1,1:PRINT CHR$(149):NEXT
2050 PEN 1:LOCATE 31,17:PRINT CHR$(246)
  LOCATE 10,17:PRINT CHR$(246):LOCAT
  31,23:PRINT CHR$(246)
2060 PEN 1:LOCATE 16,20:mes$="LASER BE
  MS":GOSUB 2510
2070 GOSUB 2450
2080 CLS:INK 1,13:INK 2,19:INK 3,7
2090 LOCATE 17,1:PEN 2:mes$="SCORING:":
  GOSUB 2510
2100 PEN 1:LOCATE 16,3:PRINT STRING$(10,
  154)
2110 PRINT:PEN 3:mes$="APPLES
  : 10 POINTS":GOSUB 2510:PRINT
2120 PRINT:mes$="FLASHING APPLES : 50 P
  OINTS":GOSUB 2510
2130 PRINT:PRINT:PRINT:PEN 1:mes$="LEVE
  L BONUS=LEVEL NO. x ENERGY REMAININ
  G":GOSUB 2510
2140 PRINT:PRINT:PEN 2:mes$="MEGA-BONUS
  =5000 POINTS ON COMPLETION OF:GOSUB
  B 2510:PRINT:PRINT:mes$="LEVEL TEN
  .":GOSUB 2510
2150 PEN 1:PRINT:PRINT:PRINT:mes$="BONU
  S LIFE AT 5000 POINTS, THEN EVERY":
  GOSUB 2510:PRINT:PRINT:mes$="10000
  POINTS AFTER THAT.":GOSUB 2510
2160 PEN 3:PRINT:PRINT:PRINT:PRINT TAB(1
  2)"MYSTERY BONUS = ??"
2170 GOSUB 2450
2180 CLS:INK 1,8:INK 2,26:INK 3,24
2190 PEN 2:LOCATE 16,1:mes$="CONTROLS :
  ":GOSUB 2510
2200 PEN 1:LOCATE 6,5:PRINT"JOYSTICK":PE
  N 3:LOCATE 24,5:PRINT"KEYBOARD"
2210 PRINT:PEN 1:PRINT TAB(9)"UP":PRINT:
  PRINT TAB(8)"DOWN":PRINT:PRINT TAB(
  8)"LEFT":PRINT:PRINT TAB(8)"RIGHT":
  PRINT:PRINT TAB(8)"FIRE"
2220 PEN 3:LOCATE 27,7:PRINT"P":LOCATE 2
  7,9:PRINT"L":LOCATE 27,11:PRINT"Z":
  LOCATE 27,13:PRINT"X":LOCATE 25,15:
  PRINT"ENTER"

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2230 PEN 2:FOR #=7 TO 15 STEP 2:LOCATE 1
      B,f:PRINT"-----":NEXT
2240 LOCATE 1,19:PEN 1
2250 PRINT"PRESSING FIRE PAUSES THE GAME
      UNTIL IT IS PRESSED AGAIN."
2260 PEN 3:PRINT:PRINT"CTRL & TAB RESTAR
      T THE GAME."
2270 GOSUB 2450
2280 CLS:INK 1,23:INK 2,14:INK 3,2
2290 LOCATE 14,1:PEN 3:mes$="PRACTICE M
      ODE":GOSUB 2510:PEN 1:LOCATE 13,3:
      PRINT STRINGS(16,154)
2300 PRINT:PEN 2:PRINT"IN PRACTICE MODE
      YOU CAN CHOOSE TO START":PRINT"ON A
      NY OF THE 10 LEVELS, HOWEVER YOU DO
      "
2310 PRINT:PRINT"NOT RECEIVE ANY LEVEL B
      ONUSES, FREE":PRINT:PRINT"LIVES, MY
      STERY BONUSES OR THE MEGA-BONUS":PR
      INT"FOR COMPLETING LEVEL 10."
2320 PRINT:PEN 3:PRINT"IF YOU SUCCESSFUL
      LY COMPLETE A SCREEN":PRINT:PRINT"Y
      OU ARE GIVEN THE CHOICE OF CONTINUI
      NG"
2330 PRINT:PRINT"ON THE NEXT LEVEL OR EX
      ITING PRACTICE":PRINT:PRINT"MODE. I
      F YOU CONTINUE YOU GET 3 LIVES":PRI
      NT:PRINT"AND YOUR SCORE IS RESET."
2340 GOSUB 2450
2350 CLS
2360 PEN 1:PRINT"IF YOU LOSE ALL 3 LIVES
      YOU ARE GIVEN":PRINT:PRINT"THE SAM
      E 2 CHOICES AS BEFORE EXCEPT THAT"
2370 PRINT"CONTINUING RESTARTS YOU ON TH
      E SAME":PRINT:PRINT"LEVEL AS BEFORE
      "
2380 LOCATE 18,9:mes$="HINTS":PEN 2:GO
      SUB 2510:PEN 1:LOCATE 17,11:PRINT $
      TRINGS(8,154)
2390 PEN 3:PRINT:PRINT"* PLAN YOUR ROUTE
      CAREFULLY AND BE":PRINT" CAREFUL
      NOT TO TRAP YOURSELF OR ANY":PRINT"
      APPLES IN WITH YOUR TRAIL."

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2400 PRINT:PRINT* KEEP AN EYE ON YOUR E
    NERGY LEVEL.":PRINT" REMEMBER, EAT
    ING THROUGH COLLAPSING":PRINT" FLO
    OWS REQUIRES ENERGY."
2410 PRINT:PRINT* ANTICIPATE THE FIRING
    OF THE LASERS.":PRINT:PRINT* PRAC
    TICE !!"
2420 GOSUB 2450
2430 CLS
2440 RETURN
2450 PEN 1:LOCATE 9,25:PRINT STRING$(24,
    238):a$="PRESS SPACE TO CONTINUE.":
    FOR f=1 TO 1000:NEXT
2460 FOR f=1 TO 24:PEN 1:FOR g=238 TO 24
    5:LOCATE f+8,25:PRINT CHR$(g):NEXT
    g:LOCATE f+8,25:PEN 2
2470 PRINT MID$(a$,f,1):NEXT f
2480 WHILE INKEYS<>"":WEND
2490 WHILE INKEYS<>"":WEND
2500 RETURN
2510 ad=HIMEM+140:FOR i=1 TO LEN(mess$)
2520 POKE ad+5,ASC(MID$(mess$,i,1)):CALL
    ad
2530 PRINT CHR$(254)CHR$(10)CHR$(8)CHR$(
    25)CHR$(177);
2540 NEXT i
2550 RETURN

```

Main Program

```

10 *****
20 * PAK CAVERNS,GAME & DESIGN BY *
30 * CRAIG MITCHELL - APPROX. 34K *
40 *****
50 DEFINT a-z:RANDOMIZE TIME:KEY DEF 74,
    0,122,122,122:KEY DEF 75,0,120,120,12
    0:KEY DEF 72,0,112,112,112:KEY DEF 73
    ,0,108,108,108:KEY DEF 76,0,13,13,13
60 KEY 139,CHRS(13)+ "paper @pen 1:ink 0
    ,13:ink 1,0:border 13:mode 2:speed ke
    y 30,1:left"+CHRS(13):SPEED KEY 255,2
    55
70 PRINT CHRS(23)CHRS(0)CHRS(22)CHRS(0):
80 GOSUB 1180:GOSUB 6100
90 GOTO 1590
100 BORDER 0:FOR f=0 TO 15:INK f,0:NEXT:
    level=1:sc=0:men=3:MODE @:WINDOW 1,2
    0,1,20:WINDOW #1,1,20,21,25:b=1:ORD
    ER @:CLS:apsc=10:freeman=3000:mo=0:p
    a=1
110 FOR f=0 TO 15:INK f,0:NEXT:PAPER #1,
    0:PAPER 5:CLS:CLS#1:PEN#1,1:mes$=""S
    CORE:"!LOCATE #1,2,1:WINDOW SWAP 0,1
    :GOSUB 2440:LOCATE 2,4:mes$=""MEN":
    GOSUB 2440:LOCATE 12,4:mes$=""LEVEL":
    :GOSUB 2440
120 IF prac THEN PEN 5:LOCATE 4,3:PRINT"
    PRACTICE MODE"
130 IF demo THEN PEN 5:LOCATE 4,3:PEN 5:
    PRINT"SPACE TO START"

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```

080 PEN 9:mes$=CHR$(230)+" "+CHR$(230)+
  " "+CHR$(230):LOCATE 6,4:GOSUB 2440:
  LOCATE 15,1:PEN 1:PRINT"ENERGY"
150 IF demo THEN mes$="DEMO.":LOCATE 6,
  4:PEN 9:GOSUB 2440
160 WINDOW SWAP 0,1
170 INK 9,6:INK 0,6:INK 1,20:INK 2,22
180 IF prac THEN level=praclev
190 PLOT 800,800,2:TAGOFF#1:aten=0:WIND
  OW SWAP 0,1:PEN 2:LOCATE 17,4:mes$=
  STR$(level):GOSUB 2440:PEN 9:LOCATE
  20,2:mes$="2":GOSUB 2440:WINDOW SWA
  P 1,0:PEN #1,2:LOCATE #1,16,2:PRINT#
  1," 100"
200 SPEED INK 15,5
210 SOUND 135,0,1,0
220 IF prac THEN level=praclev:IF level=
  11 THEN level=7:praclev=1:LOCATE #1,
  17,4:PRINT#1," " "LOCATE #1,17,5:PR
  INT#1," " ":GOTO 190
230 energy=100:OW level GOSUB 3030,3100,
  3300,3500,3710,3840,4060,4290,4560,4
  770,5000:IF level=11 THEN level=1:GO
  TO 190
240 x=x+1:y=y
250 xd=0:yd=0:aten=0:low=0
260 frame=0:WHILE INKEY$<" " :WEND
270 IF laser$=1 THEN lc1=0:lc2=1:AFTER L
  on1 GOSUB 680:AFTER lon2,T GOSUB 710
280 FOR f=1 TO 40:NEXT f:k=LOWERS(INKE
  Y$):IF k1$=CHR$(13) AND aten=0 THEN
  GOSUB 2520
290 SOUND 2,150+low,10,15,0,2
300 IF INKEY(60)=128 THEN re=REMAIN(0):r
  e=REMAIN(1):GOTO 1590
310 IF demo THEN pa=pa+1:IF pa=0 THEN pa
  =(mo):k1$=a$:(mo)=mo+1
320 IF demo AND k1$=" " THEN 740
330 IF k1$="0" THEN xd=x:yd=y-1:pac=232
340 IF k1$="1" THEN xd=x+1:yd=y:pac=233
350 IF k1$="2" THEN xd=x-1:yd=y:pac=231
360 IF k1$="4" THEN xd=x:yd=y:pac=238
370 hit=0:hit1=0:ox=x:oy=y:x=x+xd:y=y+yd
  :LOCATE x,y:IGETCHAR,whit,0:PAPER 14
  :IGETCHAR,whit1,0:PAPER 5
380 IF hit=247 OR hit=248 THEN 2500
390 IF hit=154 AND lc1=1 THEN 2500
400 IF hit=149 AND lc2=1 THEN 2500
410 IF hit=250 THEN SOUND 4,50,-1,10,3,5
  :atenate=1:sc=x+c:apsc1:AG#1:MOVE 226
  ,70:PRINT#1,sc:TAGOFF#1:IF aten=appl
  es THEN INK 15,26,8:aten=1:SOUND 1,
  10,-1,15,5,4:INK 7,aff,aff2:apsc=apsc
  +5
420 low=0:IF hit=246 OR hit=227 OR hit=
  249 OR hit=251 OR (chit=252 OR hit=2
  53) AND eaten=0 OR (hit=211 AND hit<
  216) OR hit=143 THEN x=x+xy:ener
  gy=energy-10:LOCATE #1,16,2:PRINT#1,
  energy/low*50:IF energy<=0 THEN 2500
430 IF (hit=253 OR hit=252) AND eaten=1
  THEN 2600
440 IF hit=237 AND hit=246 THEN energye
  nergy-2:LOCATE #1,16,2:PRINT#1,energ
  y:IF energy<=0 THEN 2500
450 IF hit=237 AND hit=246 THEN chhit+1:
  IF c=246 THEN c=32
460 IF hit=237 AND hit=246 THEN LOCATE x
  ,y:PEN 10:PRINT CHR$(c):x=x+1:y=y+1:
  GO TO 450

```

```

470 LOCATE x,y:PRINT CHR$(227):LOCATE x,y:PRINT CHR$(frame+ASC
):frame=frame+4:IF frame=8 THEN fram
e=0
480 GOTO 280
490 BORDER 10:INK 0,10:INK 1,2:INK 2,7:INK 3,26:INK 4,6:INK 5,18:INK 6,8:PAPER 0:INK 7,15:INK 8,26:INK 9,20:INK 10,7,17:MODE 0
500 PAPER 1:WINDOW 2,10,7:CLS:PAPER 2:WINDOW 2,19,10,14:CLS:WINDOW 8,14,15,18:CLS:WINDOW 1,20,1,25
510 PAPER 0:PEN 6:LOCATE 3,8:PRINT STRINGS(10,207):FOR f=2 TO 8:LOCATE 19,f:PRINT CHR$(219):NEXT
520 PEN 6:LOCATE 3,15:PRINT STRINGS(5,207):LOCATE 9,19:PRINT STRINGS(6,207):LOCATE 15,15:PRINT STRINGS(5,207)
530 FOR f=11 TO 15:LOCATE 20,f:PRINT CHR$(219):NEXT:FOR f=16 TO 19:LOCATE 15,f:PRINT CHR$(219):NEXT
540 PEN 3:PAPER 1:message="PRACTICE MODE":LOCATE 4,2:GOSUB 240
550 message="LEVEL SELECTOR":LOCATE 3,5:GOSUB 240
560 PEN 5:PAPER 2:LOCATE 3,11:PRINT"USE LEFT & RIGHT":LOCATE 3,12:PRINT"TO SELECT LEVEL":LOCATE 3,13:PRINT"THEN PRESS FIRE"
570 PEN 10:PAPER 2:LOCATE 8,16:message=">":GOSUB 240:LOCATE 14,16:message="<":GOSUB 240
580 MOVE 32,59:DRAW 540,0,7:DRAW 0,-110:DRAW -540,0:DRAW 0,110
590 MOVE 32,254:DRAW 574,0,8:DRAW 0,-78:DRAW -160,0:DRAW 0,-64:DRAW -220,0:DRAW 0,64:DRAW -192,0:DRAW 0,78

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LISTING

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600 praclev=1:pract1
610 PEN 9:LOCATE 11,16:mess$="1":GOSUB 2
440
620 ks=LOWERS(INKEY$):IF ks<"x" AND ks<
>"x" AND ks<CHR$(13) THEN 620
630 IF ks="x" THEN praclev=praclev+1:IF
praclev=0 THEN praclev=10
640 IF ks="x" THEN praclev=praclev+1:IF
praclev=11 THEN praclev=1
650 IF ks=CHR$(13) THEN 100
660 LOCATE 10,16:mess$=STR$(praclev)+" "
:GOSUB 2440
670 GOTO 620
680 lc1=lc1+1:IF lc1=2 THEN lc1=0
690 IF lc1=0 THEN INK 3,b:AFTER loff1 GO
SUB 680 ELSE INK 3,link:AFTER lon1 G
OSUB 680
700 RETURN
710 lc2=lc2+1:IF lc2=2 THEN lc2=0
720 IF lc2=0 THEN INK 4,b:AFTER loff2,1
GOSUB 710 ELSE INK 4,link:AFTER lon2
,1 GOSUB 710
730 RETURN
740 BORDER 0:INK 0,0:INK 1,1:INK 2,18:IN
K 3,11:PAPER 0:MODE 1:demo=0
750 WINDOW 11,29,6,12:PAPER 1:CLS:WINDOW
10,30,16,19:CLS
760 WINDOW 1,40,1,25
770 PEN 1:PAPER 0:LOCATE 12,13:PRINT STR
INGS(19,207):LOCATE 11,20:PRINT STRI
NG$(21,207)
780 FOR f=7 TO 12:LOCATE 30,f:PRINT CHR$(
207):NEXT:FOR f=17 TO 19:LOCATE 31,
f:PRINT CHR$(207):NEXT
790 PAPER 1:PEN 2:mess$="1 - PRACTICE MO
DE":LOCATE 12,7:GOSUB 2440
800 mess$="2 - START GAME":LOCATE 12,10:
GOSUB 2440
810 PEN 3:mess$="PLEASE PRESS 1 OR 2":LO
CATE 11,17:GOSUB 2440
820 MOVE 160,318:DRAW 302,0,3:DRAW 0,-
110:DRAW -302,0:DRAW 0,110
830 MOVE 144,158:DRAW 334,0,2:DRAW 0,-
62:DRAW -334,0:DRAW 0,62
840 SOUND 135,0,1,0
850 s=1
860 FOR t=1 TO 4
870 IF s>2 THEN s=1
880 IF s=1 THEN ch=1
890 IF s=2 THEN ch=4
900 FOR y=1 TO 3
910 FOR o=0 TO 200:NEXT o
920 ton=(t+4)*54
930 GOSUB 1150:ON k GOTO 490,100
940 SOUND ch,ton,6,0,6,5,1
950 NEXT
960 s=s+1:NEXT:ch=5:s=1
970 FOR t=0 TO 180:NEXT
980 GOSUB 1150:ON k GOTO 490,100
990 SOUND 2,0,150,15,7,0,1
1000 FOR p=1 TO 3
1010 SOUND ch,486,6,15,6,5,1
1020 FOR t=0 TO 720:NEXT
1030 SOUND ch,500,6,0,6,7,1
1040 FOR t=0 TO 360:NEXT
1050 SOUND ch,300,6,0,6,7,1
1060 FOR t=0 TO 360:NEXT
1070 SOUND ch,486,6,15,6,7,1
1080 FOR t=0 TO 720:NEXT
1090 SOUND ch,300,6,0,6,7,1
1100 GOSUB 1150:ON k GOTO 490,100
1110 IF p<3 THEN FOR t=0 TO 720:NEXT
1120 SOUND 2,150,10,15,4,2,1:IF p=3 THEN F
OR t=0 TO 480:NEXT
1130 NEXT p
1140 GOTO 860
1150 ks=INKEY$:IF ks<"1" AND ks<"2"THE
N k=0:RETURN
1160 IF ks="1"THEN k=1 ELSE k=2
1170 RETURN
1180 RESTORE 1180:ENV 1,5,1,3,15,-1,10
1190 ENV 2,5,1,1,15,-1,6
1200 ENV 3,5,1,1,3,-1,5
1210 ENV 4,15,-1,2:ENT -1,10,-1,1,10,1,1
:ENT 2,80,-0,1:ENT -3,5,-3,1,5,3,1
ENV 5,10,0,10,10,-1,20:ENT -4,10,5,
1,1,-40,1
1220 ENT -5,1,-127,1,5,24,1:ENV 6,1,15,
1,5,-3,2:ENV 7,15,-1,10
1230 ENV 8,5,1,1,15,-1,1:ENV 9,5,1,2,15,
-1,2:ENV 10,5,1,1,15,-1,2:ENV 11,5,
1,10,15,-1,15
1240 ENV 12,5,1,1,15,-1,50:ENV 13,5,1,1,
15,-1,10

```

[illegible]

```

1790 LOCATE 2,10:PRINT STRINGS(10,207):L
   LOCATE 32,10:PRINT STRINGS(9,207):LO
   LOCATE 2,25:PRINT STRINGS(39,207)::FO
   R f=21 TO 24:LOCATE 40,f:PRINT CHR$
   (207):NEXT
1800 FOR f=2 TO 10:LOCATE 11,f:PRINT CHR
   $(207):LOCATE 40,f:PRINT CHR$(207):
   NEXT
1810 PAPER 2
1820 PEN 3:LOCATE 2,2:mes$="PROGRAM":GO
   SUB 2440:LOCATE 5,5:PRINT"BY":LOCAT
   E 1,7:mes$="C.MITCHELL":GOSUB 2440
1830 LOCATE 33,2:mes$="MUSIC":GOSUB 244
   0:LOCATE 35,5:PRINT"BY":LOCATE 32,7
   :mes$="P.YOUNG":GOSUB 2440
1840 LOCATE 11,20:mes$="PRESS SPACE TO
   START":GOSUB 2440

1850 LOCATE 9,23:mes$="W A I T F O R
   D E M O.":GOSUB 2440
1860 MOVE 0,399:DRAW 150,0:DRAW 0,-1
   44:DRAW -150,0:DRAW 0,144
1870 MOVE 479,399:DRAW 144,0:DRAW 0,-1
   44:DRAW -144,0:DRAW 0,144
1880 MOVE 0,96:DRAW 622,0:DRAW 0,-80:D
   RAW -622,0:DRAW 0,80
1890 EVERY 20 GOSUB 2410
1900 prc=0
1910 k=2:demo=0:GOSUB 2060:re=REMAIN(0):
   IF demo=1 THEN 1930
1920 SOUND 135,0,1,0:GOTO 740
1930 BORDER 0:FOR f=0 TO 15:INK f,0:NEXT
   :MODE 0:b=0
1940 WINDOW 1,20,1,20:WINDOW #1,1,20,21,
   25
1950 PAPER 5:CLS:PAPER #1,0:CLS#1
1960 WINDOW SWAP 0,1:PEN 1:mes$="DEMONS
   TRATION":LOCATE 5,1:GOSUB 2440
1970 PEN 2:mes$="SPACE TO START.":LOCAT
   E 4,4:GOSUB 2440
1980 WINDOW SWAP 0,1:LOCATE #1,1,1:PEN #
   1,9:PRINT#1,"LEV."
1990 SPEED INK 20,20:INK 0,6:INK 1,14:IN
   K 2,26:INK 9,24
2000 FOR L=1 TO 10:ON L GOSUB 3030,3180,
   3360,3500,3710,3840,4060,4290,4560,
   4770,5000
2010 PEN #1,9:LOCATE #1,1,2:PRINT#1,L
2020 IF l=9 THEN 1 THEN INK 3,link,b:INK 4
   ,b,link
2030 FOR f=1 TO 1000:k$=LOWERS(INKEY$)
2040 IF k$=" " THEN 740 ELSE NEXT f:CLS:
   NEXT L
2050 demo=1:GOTO 100
2060 GOSUB 2160:GOSUB 2230:GOSUB 2160:GO
   SUB 2230:GOSUB 2160:GOSUB 2290:GOSU
   B 2160:GOSUB 2350
2070 SOUND 2,478,20,10,3
2080 SOUND 2,478,20,10,3
2090 SOUND 2,536,20,10,3
2100 SOUND 2,536,20,10,3

2110 SOUND 2,568,20,10,3:SOUND 2,568
   10,3
2120 SOUND 2,638,20,10,3
2130 demo=1
2140 SOUND 2,716,320,10,1
2150 RETURN
2160 SOUND 1,0,1200
2170 FOR a=1 TO 64
2180 SOUND 4,0(A),20,10,2
2190 SOUND 2,E(A),20,10,3
2200 IF k<2 THEN 1920
2210 NEXT
2220 RETURN
2230 FOR a=1 TO 64:IF b(a)<>0 THEN SOU
   1,F(a),G(a),10,1
2240 SOUND 4,0(A),20,10,2
2250 SOUND 2,E(A),20,10,3
2260 IF k<2 THEN 1920
2270 NEXT A
2280 RETURN
2290 FOR a=1 TO 64:IF b(a)<>0 THEN SOU
   1,b(a),c(a),10,1
2300 SOUND 4,0(A),20,10,2
2310 SOUND 2,E(A),20,10,3
2320 IF k<2 THEN 1920
2330 NEXT
2340 RETURN
2350 FOR a=1 TO 51:IF b(a)<>0 THEN SOUN
   1,b(a),c(a),10,1
2360 SOUND 4,0(A),20,10,2
2370 SOUND 2,E(A),20,10,3
2380 IF k<2 THEN 1920
2390 NEXT
2400 RETURN
2410 k$=LOWERS(INKEY$):IF k$=""THEN RETU
   RN
2420 IF k$=" " THEN re=REMAIN(0):k=0:RET
   URN
2430 RETURN
2440 ad:=HIMEM+140:FOR i=1 TO LEN(mes$)
2450 POKE ad+i,ASC(MID(mes$,i,1)):CAL
   L ad:
2460 PRINT CHR$(254)CHR$(10)CHR$(0)CHR$
   (255)CHR$(11);

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2490 FOR f=3 TO 8:INK f,b:NEXT
2500 FOR f=10 TO 15:INK f,b:NEXT
2510 RETURN
2520 01:WINDOW SWAP 0,1:SOUND 135,100,
      5:SOUND 7,150,10,5:PEN 9:LOCATE
      4:mes$="" PAUSED " :GOSUB 2440
2530 k$=INKEY$:IF k$<>CHR$(13) THEN 25
2540 PEN 1:LOCATE 1,4:mes$="" MEN:
      :GOSUB 2440:mes$=CHR$(230):PEN 9:
      OR f=1 TO men:LOCATE f*2+4,4:GOSUB
      2440:NEXT f
2550 PEN 2:WINDOW SWAP 0,1:SOUND 7,100,
      0,5:SOUND 7,150,10,5:FOR f=1 TO 80
      :NEXT f:SOUND 135,0,1,0
2560 EI
2570 RETURN
2580 CALL @BCA7:re=REMAIN(0):re=REMAIN(
      1):SOUND 2,200,-1,15,5,2,20:SPEED IN
      K 1,1
2590 LOCATE x,y:PEN 2:PRINT CHR$(227):LO
      CATE 0x,0y:PRINT CHR$(227)
2600 SOUND 5,300,-1,10,1,0:apac=10
2610 FOR f=1 TO 25:FOR g=4 TO 91:BOARD
      f,0:OUT 0,7f00,5:OUT 0,7f00,0:OUT 0,7f0
      0,16:OUT 0,7f00,0:NEXT g,f:BOARD 0
2620 a=4:men=23:LOCATE #1,a,4:PRINT#1,"
      "LOCATE #1,a,5:PRINT#1," "men=me
      n-1:IF men<0 THEN CLS:GOTO 190
2630 IF prc THEN 2830
2640 PAPER 5:CLS:WINDOW 6,17,9,14:PAPER
      6:CLS:WINDOW 5,16,8,13:PAPER 7:CLS:
      WINDOW 1,20,1,20
2650 PEN 15:INK 5,0:BOARD 0
2660 INK 15,0,20:INK 6,1:INK 7,2:SPEED I
      NK 10,20:LOCATE 6,70:mes$="GAME 0
      VER":GOSUB 2440
2670 GOTO 3100
2680 apac=10:re=REMAIN(0):re=REMAIN(1):I
      F prc THEN 2830
2690 a=80:FOR f=320 TO 0 STEP -4:MOVE f,
      80:DRAW 0,310,5:MOVE 640,f,80:DRAW
      R 0,310:MOVE 0,a:DRAW 640,0:MOVE 0
      ,480-a:DRAW 640,0:a=a+2:SOUND 2,f,
      10,5,7:NEXT:IF demo THEN 1500
2700 PAPER 14:PEN 13
2710 FOR f=1 TO 10:LOCATE f,7:PRINT CHR$
      (246):LOCATE 21-f,7:PRINT CHR$(246)
      :LOCATE f,12:PRINT CHR$(246):LOCAT
      E 21-f,12:PRINT CHR$(246):NEXT
2720 FOR f=0 TO 11:LOCATE 1,f:PRINT CHR$
      (246):LOCATE 20,f:PRINT CHR$(246):
      NEXT
2730 a$="" BONUS:="STR$(energy)+" X"+ST
      RS(level)+" " :cframe=230
2740 mes$=CHR$(230)
2750 PAPER 5:FOR f=2 TO 10:LOCATE f,9:PE
      N 9:mes$=CHR$(cframe):SOUND 7,150,1
      0,15,0,2:GOSUB 2440:FOR g=1 TO 200:
      NEXT g:LOCATE f,9:mes$=MID$(a$,f,1
      ):PEN 1:GOSUB 2440:frame=cframe+4:IF
      frame=230 THEN frame=230
2760 NEXT f
2770 a$="TOTAL "+STR$(energy+level):a=L
      EN(a$):LOCATE (20-a)/2+1,14:PEN 0:P
      RINT STRING$(a,230)
2780 c=1:FOR f=(20-a)/2+1 TO (20-a)/2+a:
      SOUND 1,f+20,-1,15,4,1:SOUND 4,f+40
      ,-1,15,4,1:PEN 0:FOR g=230 TO 245:LO
      CATE f,14:PRINT CHR$(g):FOR i=1 TO
      50:NEXT i,g:LOCATE f,14:PEN 2:PRIN
      T MID$(a$,c,12):c=c+1:NEXT f
2790 TAG1:PLOT 800,800,2:a=20:FOR f=1
      TO energy+level STEP (energy+level)
      /50:MOVE 226,70:PRINT#1,CINT(f)+sc
      ):SOUND 1,a,10,15,0,1:a=a+2:SOUND 4
      ,a,10,10,15,0,1:NEXT
2800 sc=sc+(energy+level):MOVE 226,70:PR
      INT#1,sc
2810 TAGOFF#1
2820 level+level=1:IF sc>=freeman THEN 2
      920 ELSE CLS:GOTO 190
2830 CLS:WINDOW 4,18,2,5:PAPER 14:CLS:WI
      NDOW 1,20,1,20:PEN 13:mes$="PRACTI
      CE MODE":LOCATE 5,13:GOSUB 2440
2840 TAG1:MOVE 226,70:PRINT#1," " :
      TAGOFF#1
2850 PAPER 5:SPEED INK 10,10
2860 PEN 9:LOCATE 7,8:mes$="1 : EXIT":G
      OSUB 2440:LOCATE 5,12:mes$="2 : CO
      NTINUE":GOSUB 2440
2870 LOCATE 1,19:PEN 8:INK 8,26,0:PRINT"
      PLEASE SELECT 1 OR 2"
2880 k$=INKEY$:IF k$="2" AND men<0 THEN
      prclev=prclev+1:INK 9,6:men=3:sc
      =0:CLS:WINDOW SWAP 1,0:GOTO 140
2890 IF k$="2" THEN CLS:INK 9,6:men=3:sc
      =0:WINDOW SWAP 0,1:GOTO 140
2900 IF k$="1" THEN 90
2910 GOTO 2880
2920 IF men=3 THEN 2970 ELSE LOCATE 4,18
      :mes$=CHR$(231)+" " :PEN 9:GOSUB 24
      40:PEN 1:mes$="FREE LIFE":GOSUB 2
      440:PEN 9:mes$="" "+CHR$(230):GOSUB
      2440
2930 freeman=freeman+10000

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2940 men=men+1:SOUND 1,18,-1,15,5,4:SOUND
D 2,50,-1,15,5,4:SOUND 4,100,-1,15,
5,4
2950 WINDOW SWAP 0,1:PEN 9:mes$=CHR$(23
0):FOR f=1 TO men:LOCATE f+4,4:GO
SUB 2440:NEXT WINDOW SWAP 1,0
2960 FOR f=1 TO 800:LOCATE 1,18:PRINT CHR$(
f MOD 6:NEXT INK 5,6:LOCATE 1,18:PRINT
GOTO 190
2970 LOCATE 1,18:DO=(CINT(RND*5)+100)+40
B:mes$="MYSTERY BONUS "+STR$(B)
:PEN 9:GOSUB 2440
2980 sc=sc+bo:freeman=freeman+10000
2990 FOR f=300 TO 0 STEP -10:FOR g=f TO
11 STEP -10:SOUND 1,9,1,15:SOUND 2,
g,f,1,15:NEXT g:bor=RND*20:INK 5,bo
R:LOCATE bor,NEXT f
3000 INK 5,6:LOCATE 1,18:PRINT
3010 TAG$=PLOT 800,800,2:MOVE 226,70:PR
INT1,sc:TAGOFF1:CLS
3020 GOTO 190
3030 GOSUB 2490
3040 PEN 13:PAPER 14:PRINT STRINGS(20,24
6):LOCATE 1,20:PRINT STRINGS(20,24
6):
3050 FOR f=2 TO 19:LOCATE 1,f:PRINT CHR$(
246):LOCATE 20,f:PRINT CHR$(246):N
EXT
3060 LOCATE 5,12:PRINT STRINGS(15,246):L
OCATE 5,16:PRINT STRINGS(15,246)
3070 FOR f=4 TO 11:LOCATE 5,f:PRINT CHR$(
246):LOCATE 13,f:PRINT CHR$(246):N
EXT
3080 LOCATE 13,2:PRINT CHR$(246):LOCATE
16,7:PRINT STRINGS(4,246):FOR f=4 TO
9:LOCATE 9,f:PRINT CHR$(246):NEXT
3090 PAPER 5:PEN 7
3100 FOR f=3 TO 19 STEP 2:LOCATE f,18:PR
INT CHR$(250):LOCATE f,15:PRINT CHR$(
250):LOCATE f,13:PRINT CHR$(250):
NEXT
3110 FOR f=3 TO 11 STEP 2:LOCATE 3,f:PR
INT CHR$(250):LOCATE 7,f:PRINT CHR$(
250):LOCATE 11,f:PRINT CHR$(250):N
EXT
3120 FOR f=15 TO 18 STEP 3:LOCATE f,3:PR
INT CHR$(250):LOCATE f,5:PRINT CHR$(
250):LOCATE f,10:PRINT CHR$(250):N
EXT:LOCATE 19,18:PRINT " "
3130 LOCATE 9,11:PRINT CHR$(250)
3140 PEN 15:LOCATE 18,8:PRINT CHR$(252):
CHR$(253)
3150 INK 5,8:INK 7,18:INK 9,24:INK 13,6:
INK 14,26:INK 15,15
3160 sx=19:sy=18:lasers=0:apples=48:pac=
231:b=0:LOCATE 0
3170 RETURN
3180 GOSUB 2490
3190 PAPER 14:PEN 13:LOCATE 1,1:PRINT ST
RINGS(20,246):LOCATE 1,20:PRINT STR
INGS(20,246):FOR f=2 TO 19:LOCATE
1,f:PRINT CHR$(246):LOCATE 20,f:PR
INT CHR$(246):NEXT
3200 FOR f=5 TO 13:LOCATE 10,f:PRINT CHR$(
246):LOCATE 12,f:PRINT CHR$(246):
NEXT
3210 FOR f=3 TO 9:LOCATE 16,f:PRINT CHR$(
246):NEXT:LOCATE 15,3:PRINT CHR$(
246)
3220 PEN 12:PAPER 5:LOCATE 13,13:PRINT S
TRINGS(5,249)
3230 PEN 11:LOCATE 5,7:PRINT STRINGS(12
,251):LOCATE 10,18:PRINT CHR$(251):
CHR$(251)
3240 FOR f=13 TO 16:LOCATE 5,f:PRINT CHR$(
251):NEXT
3250 PEN 6:LOCATE 8,5:PRINT CHR$(247):CHR$(
247):LOCATE 17,15:PRINT CHR$(247)
:LOCATE 2,19:PRINT CHR$(247):LOCATE
19,19:PRINT CHR$(247)
3260 PEN 8:LOCATE 17,2:PRINT STRINGS(3,2
48):LOCATE 8,7:PRINT CHR$(248):CHR$(
248)
3270 PEN 15:LOCATE 8,6:PRINT CHR$(252):CH
R$(253)
3280 PEN 7:FOR f=7 TO 19 STEP 2:LOCATE f
,14:PRINT CHR$(250):LOCATE f,16:PR
INT CHR$(250):NEXT
3290 FOR f=12 TO 16:LOCATE f,18:PRINT CHR$(
250):NEXT:FOR f=4 TO 12 STEP 2:LO
CATE 19,f:PRINT CHR$(250):NEXT:FOR
f=2 TO 12 STEP 2:LOCATE 14,f:PRINT
CHR$(250):NEXT
3300 FOR f=2 TO 8 STEP 2:LOCATE 11,f:PR
INT CHR$(250):NEXT f
3310 FOR f=5 TO 9 STEP 2:LOCATE 17,f:PR
INT CHR$(250):NEXT:LOCATE 17,12:PR
INT CHR$(250):LOCATE 3,6:PRINT CHR$(2
50) "CHR$(250):LOCATE 3,9:PRINT CH
R$(250) "CHR$(250):LOCATE 3,11:PR
INT CHR$(250) "CHR$(250)
3320 LOCATE 3,14:PRINT CHR$(250):LOCATE
3,17:PRINT CHR$(250)
3330 INK 5,3:INK 6,18:INK 7,2:INK 8,16:
INK 9,24:INK 11,23:INK 12,7:INK 13,6
:INK 14,3:INK 15,15
3340 BORDER 1:b=1:pac=232

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3350 lasers=0:sx=11:sy=18:apples=46:RETU
RN
3360 GOSUB 2490
3370 PEN 8:LOCATE 2,1:PRINT STRINGS(18,2
48):PEN 6:LOCATE 2,20:PRINT STRINGS(
18,247):LOCATE 9,17:PRINT STRINGS(
3,247):LOCATE 9,18:PRINT CHR$(247) "
CHR$(247)
3380 PAPER 14:PEN 13:FOR f=1 TO 20:LOCAT
E f,1:PRINT CHR$(246):LOCATE 20,f:P
RINT CHR$(246):NEXT:LOCATE 17,10:P
RINT CHR$(246):CHR$(246):CHR$(246)
3390 PAPER 5:PEN 10:LOCATE 3,4:PRINT STR
INGS(15,238):LOCATE 3,17:PRINT STRI
NGS(15,238):LOCATE 6,7:PRINT STRI
NGS(9,238):LOCATE 6,14:PRINT STRINGS(
9,238)
3400 FOR f=5 TO 16:LOCATE 3,f:PRINT CHR$(
238):LOCATE 17,f:PRINT CHR$(238):N
EXT:FOR f=8 TO 13:LOCATE 6,f:PRINT
CHR$(238):LOCATE 14,f:PRINT CHR$(23
8):NEXT
3410 PEN 7:FOR f=4 TO 16 STEP 6:LOCATE f
,5:PRINT CHR$(250):LOCATE f,16:PR
INT CHR$(250):NEXT:FOR f=9 TO 12 STEP
3:LOCATE 4,f:PRINT CHR$(250):LOCAT
E 16,f:PRINT CHR$(250):NEXT
3420 LOCATE 18,9:PRINT CHR$(250):CHR$(250)
3430 LOCATE 7,8:PRINT STRINGS(7,250):LOC
ATE 7,13:PRINT STRINGS(7,250):FOR f
=9 TO 12:LOCATE 7,f:PRINT CHR$(250)
:LOCATE 13,f:PRINT CHR$(250):NEXT

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3440 PAPER 14:PEN 13:LOCATE 17,10:PRINT
CHR$(246)
3450 PEN 15:PAPER 5:LOCATE 18,19:PRINT C
HR$(252):CHR$(253)
3460 lasers=0:sx=10:sy=18:pac=232:b=9:BO
RDER 9
3470 apples=34
3480 INK 5,9:INK 6,18:INK 7,16:INK 8,5:
INK 9,24:INK 10,26:INK 13,17:INK 14,
18:INK 15,15
3490 RETURN
3500 GOSUB 2490
3510 PEN 11:PAPER 5:LOCATE 1,1:PRINT STR
INGS(20,251):LOCATE 1,20:PRINT STRI
NGS(20,251):
3520 PEN 12:PAPER 14:FOR f=2 TO 19:LOCAT
E f,1:PRINT CHR$(246):LOCATE 20,f:P
RINT CHR$(246):NEXT
3530 PEN 13
3540 LOCATE 4,3:PRINT STRINGS(5,246):LOC
ATE 4,4:PRINT STRINGS(5,246):LOCATE
3,5:PRINT STRINGS(7,246):LOCATE 3,
6:PRINT STRINGS(7,246):LOCATE 8,7:P
RINT CHR$(246):CHR$(246):LOCATE 8,8:
PRINT CHR$(246):CHR$(246)
3550 FOR f=7 TO 12:LOCATE 3,f:PRINT CHR$(
246):CHR$(246):NEXT:LOCATE 8,11:PR
INT CHR$(246):CHR$(246):LOCATE 8,12:P
RINT CHR$(246):CHR$(246)
3560 LOCATE 3,13:PRINT STRINGS(7,246):LO
CATE 3,14:PRINT STRINGS(7,246):LOCA
TE 4,15:PRINT STRINGS(5,246):LOCATE
4,16:PRINT STRINGS(5,246)
3570 FOR f=5 TO 16:LOCATE 11,f:PRINT CHR$(
246):CHR$(246):LOCATE 16,f:PRINT C
HR$(246):CHR$(246):NEXT:FOR f=5 TO 1
0:LOCATE 13,f:PRINT CHR$(246):LOCAT
E 14,f:PRINT CHR$(246):LOCATE 15,
f:PRINT CHR$(246):NEXT:LOCATE 12,4:
PRINT CHR$(246)
3580 LOCATE 16,4:PRINT CHR$(246):LOCATE
9,19:PRINT CHR$(246):PAPER 5:PEN 10
:LOCATE 12,3:PRINT CHR$(238):LOCATE
16,3:PRINT CHR$(238):LOCATE 18,7:P
RINT CHR$(238):CHR$(238)
3590 PEN 6:LOCATE 2,19:PRINT CHR$(247):L
OCATE 19,19:PRINT CHR$(247)

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3600 PEN 8:LOCATE 3,15:PRINT CHR$(248):L
OCATE 9,15:PRINT CHR$(248):LOCATE 15,11:P
RINT CHR$(248)
3610 PEN 7:FOR f=2 TO 18 STEP 2:LOCATE f
,2:PRINT CHR$(250):LOCATE 2,f:PR
INT CHR$(250):NEXT:LOCATE 4,18:PRINT C
HR$(250) "CHR$(250):FOR f=8 TO 18
STEP 2:LOCATE f,17:PRINT CHR$(250):
NEXT
3620 LOCATE 14,15:PRINT CHR$(250):LOCATE
5,7:PRINT CHR$(250) "CHR$(250):LO
CATE 5,12:PRINT CHR$(250) "CHR$(25
0):LOCATE 18,10:PRINT CHR$(250):LO
CATE 18,14:PRINT CHR$(250)

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3630 FOR f=5 TO 9 STEP 2:LOCATE f,9:PR
INT CHR$(250):LOCATE f,10:PRINT CHR$(
250):NEXT
3640 FOR f=11 TO 15 STEP 2:LOCATE 10,f:P
RINT CHR$(250):NEXT:FOR f=4 TO 8 ST
EP 2:LOCATE 10,f:PRINT CHR$(250):N
EXT
3650 LOCATE 18,4:PRINT CHR$(250):LOCATE
14,4:PRINT CHR$(250)
3660 PEN 15:LOCATE 18,19:PRINT CHR$(252)
CHR$(253)
3670 LOCATE 12,2:PRINT " "
3680 lasers=0:sx=14:sy=13:pac=233:apples
=46
3690 BORDER 3:INK 5,3:b=3:INK 6,18:INK 7
,13:INK 8,6:INK 9,24:INK 10,1:INK 1
1,4:INK 13,9:INK 14,21:INK 15,26
:INK 12,26:0:SPEED INK 25,25
3700 RETURN
3710 GOSUB 2490
3720 PAPER 14:PEN 13:LOCATE 1,1:PRINT ST
RINGS(20,246):LOCATE 1,20:PRINT STR
INGS(20,246):FOR f=2 TO 19:LOCATE
1,f:PRINT CHR$(246):LOCATE 20,f:PR
INT CHR$(246):NEXT
3730 PAPER 5:PEN 12:LOCATE 2,4:PRINT STR
INGS(18,249)
3740 PEN 15:LOCATE 10,4:PRINT CHR$(252):
CHR$(253)
3750 PEN 6:mes$=CHR$(247):LOCATE 3,2:GO
SUB 2440:LOCATE 18,2:GOSUB 2440
3760 PEN 8:LOCATE 5,2:mes$="BONUS SHEE
T":GOSUB 2440
3770 PEN 7
3780 c=2:FOR z=1 TO 40
3790 LOCATE RND*17+2,RND*11+7:GETCHAR,c
,0:IF c=250 THEN 3790
3800 PRINT CHR$(250):NEXT z
3810 apples=10:lasers=0:sx=2:sy=19:pac=2
30:b=12:af1=2:af2=1:LOCATE 12
3820 INK 5,12:INK 6,18:INK 7,23:INK 8,
8,17:INK 9,24:INK 12,6:INK 13,0:INK
14,10:INK 15,26
3830 RETURN
3840 GOSUB 2490
3850 PAPER 14:PEN 13:LOCATE 1,1:PRINT ST
RINGS(20,246):LOCATE 1,20:PRINT STR
INGS(20,246):
3860 FOR f=2 TO 19:LOCATE 1,f:PRINT CHR$(
246):LOCATE 20,f:PRINT CHR$(246):N
EXT
3870 PEN 12:PAPER 5:LOCATE 2,18:PRINT ST
RINGS(16,249):LOCATE 19,18:PRINT CH
R$(249)
3880 PEN 11:LOCATE 12,14:PRINT STRINGS(8
,251):LOCATE 12,11:PRINT STRINGS(6,
251)

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3890 PEN 10:LOCATE 2,15:PRINT STRINGS(8,
238):LOCATE 2,3:PRINT CHR$(238):CHR$(
238):LOCATE 4,2:PRINT CHR$(238):LO
CATE 19,19:PRINT CHR$(238)
3900 PEN 8:LOCATE 10,15:PRINT CHR$(248):
CHR$(248):LOCATE 2,11:PRINT STRINGS(
10,248)
3910 PEN 3:LOCATE 2,17:PRINT STRINGS(18,
154):LOCATE 4,6:PRINT STRINGS(5,154)
3920 PEN 4:FOR f=2 TO 10:LOCATE 6,f:PR
INT CHR$(149):LOCATE 9,f:PRINT CHR$(1
49):LOCATE 13,f:PRINT CHR$(149):LO
CATE 17,f:PRINT CHR$(149):NEXT
3930 FOR f=5 TO 10:LOCATE 3,f:PRINT CHR$(
149):NEXT
3940 PEN 7
3950 LOCATE 4,17:PRINT CHR$(250):LOCATE
7,17:PRINT CHR$(250):FOR f=13 TO 17
STEP 2:LOCATE f,17:PRINT CHR$(250)
:NEXT
3960 FOR f=5 TO 11 STEP 2:LOCATE f,13:PR
INT CHR$(250):NEXT:FOR f=13 TO 19 S
TEP 2:LOCATE f,12:PRINT CHR$(250):N
EXT
3970 FOR f=4 TO 10 STEP 2:LOCATE 19,f:PR
INT CHR$(250):NEXT
3980 FOR f=3 TO 9 STEP 2:LOCATE 4,f:PR
INT CHR$(250):LOCATE 8,f:PRINT CHR$(2
50):LOCATE 11,f:PRINT CHR$(250):LO
CATE 15,f:PRINT CHR$(250):NEXT
3990 PEN 15:LOCATE 2,2:PRINT CHR$(252):CH
R$(253)
4000 PEN 13:PAPER 14:LOCATE 10,17:PRINT
CHR$(246):CHR$(246):LOCATE 3,6:PR
INT CHR$(246):LOCATE 6,6:PRINT CHR$(24
6):LOCATE 9,6:PRINT CHR$(246):PAPER
5
4010 apples=33:lasers=1:sx=2:sy=19:pac=2
30
4020 lon1=10:loff1=100:lon2=10:loff2=80:
Link=26
4030 BORDER 4:b=4
4040 INK 3,4:INK 4,4:INK 5,4:INK 7,6:INK
8,0:INK 9,24:INK 10,13:INK 11,18:
INK 12,23:INK 13,1:INK 14,14:INK 15,
15
4050 RETURN
4060 GOSUB 2490

```

```

4070 PEN 11:LOCATE 1,1:PRINT STRINGS(20,
251):PEN 6:LOCATE 1,20:PRINT STRENG
S(20,247):FOR f=7 TO 14:LOCATE 3,f
:PRINT CHR$(247):NEXT
4080 FOR f=2 TO 19:LOCATE 7,f:PRINT CHR$(
247):LOCATE 20,f:PRINT CHR$(247):N
EXT
4090 PEN 11:LOCATE 7,5:PRINT STRINGS(9,2
57):LOCATE 5,15:PRINT STRINGS(13,25
7)
4100 PEN 13:PAPER 14:FOR f=7 TO 13:LOCAT
E f,1:PRINT CHR$(246):LOCATE 15,f:P
RINT CHR$(246):NEXT:FOR f=8 TO 1:LO
CATE 5,12+f:PRINT CHR$(246):LOCATE
10,8+f:PRINT CHR$(246):LOCATE 12,8+f
:PRINT CHR$(246):LOCATE 18,11+f:PR
INT CHR$(246):LOCATE 12,11+f
4110 PRINT CHR$(246):LOCATE 17,12+f:PR
INT CHR$(246):NEXT
4120 LOCATE 7,16:PRINT CHR$(246):LOCATE
13,16:PRINT CHR$(246):LOCATE 7,18:P
RINT CHR$(246):LOCATE 15,18:PRINT C
HR$(246):LOCATE 6,7:PRINT CHR$(246)
:LOCATE 16,7:PRINT CHR$(246)

```

```

4130 PAPER 5
4140 PEN 8:LOCATE 15,19:PRINT CHR$(248)
4150 PEN 10:LOCATE 10,17:PRINT CHR$(238)
4160 PEN 3:LOCATE 2,4:PRINT STRINGS(10,1
54)
4170 PEN 4:FOR f=6 TO 14:LOCATE 9,f:PR
INT CHR$(149):LOCATE 13,f:PRINT CHR$(
149):NEXT
4180 FOR f=16 TO 19:LOCATE 5,f:PRINT CHR$(
149):CHR$(149):NEXT
4190 PEN 7:FOR f=3 TO 19 STEP 2:LOCATE f
,2:PRINT CHR$(250):NEXT
4200 FOR f=8 TO 14 STEP 2:LOCATE 4,f:PR
INT CHR$(250):LOCATE 6,f:PRINT CHR$(
250):LOCATE 16,f:PRINT CHR$(250):LO
CATE 18,f:PRINT CHR$(250):NEXT
4210 LOCATE 5,7:PRINT CHR$(250):LOCATE 1
,7:PRINT CHR$(250):LOCATE 17,7:PR
INT CHR$(250):LOCATE 8,10:PRINT CHR$(
250):LOCATE 14,10:PRINT CHR$(250):
LOCATE 11,13:PRINT CHR$(250)
4220 LOCATE 10,16:PRINT CHR$(250):LOCATE
15,16:PRINT CHR$(250):LOCATE 17,17
:PRINT CHR$(250):LOCATE 19,18:PRINT
CHR$(250)
4230 PEN 15:LOCATE 18,19:PRINT CHR$(252)
CHR$(253)
4240 apples=35:sx=11:sy=10:pac=232
4250 lasers=1:lon1=15:loff1=90:lon2=5:lo
ff2=50:Link=18
4260 b=10:LOCATE 0
4270 INK 3,10:INK 4,10:INK 5,10:INK 6,8:
INK 7,23:INK 8,16:INK 9,24:INK 10,3
:INK 11,6:INK 13,9:INK 14,13:INK 15
,15
4280 RETURN
4290 GOSUB 2490
4300 PAPER 14:PEN 13:PRINT STRINGS(14,24
6):LOCATE 1,20:PRINT STRINGS(19,246
):FOR f=2 TO 19:LOCATE 1,f:PRINT CH
R$(246):NEXT:PAPER 5
4310 PEN 10:LOCATE 15,1:PRINT CHR$(214):S
TRINGS(5,143):FOR f=2 TO 5:LOCATE 1
5,f:PRINT STRINGS(6,143):NEXT
4320 FOR f=6 TO 10:LOCATE 10,f+10:f:PR
INT CHR$(214):STRINGS(f,143):NEXT
4330 LOCATE 10,11:PRINT STRINGS(11,143):
LOCATE 15,12:PRINT STRINGS(6,143):F
OR f=13 TO 14:LOCATE 19,f:PRINT CHR$(
143):CHR$(143):NEXT
4340 FOR f=15 TO 17:LOCATE 15,f:PRINT ST
RINGS(6,143):NEXT
4350 LOCATE 19,18:PRINT CHR$(213):CHR$(14
3):FOR f=19 TO 20:LOCATE 20,f:PRINT
CHR$(143):NEXT
4360 PAPER 11:PEN 12:LOCATE 16,5:PRINT "F
0":LOCATE 17,6:PRINT "D":PAPER 5
4370 PEN 6:FOR f=5 TO 7:LOCATE (7-f)+9,f
:PRINT CHR$(247):NEXT
4380 LOCATE 5,17:PRINT STRINGS(5,247)
4390 LOCATE 5,18:PRINT STRINGS(2,247)
4400 LOCATE 8,19:PRINT STRINGS(2,247)
4410 PEN 14:LOCATE 2,2:PRINT CHR$(212):L
OCATE 4,4:PRINT CHR$(212)
4420 PEN 3:LOCATE 3,2:PRINT STRINGS(12,1
54):LOCATE 5,4:PRINT STRINGS(10,154)
4430 PEN 4:FOR f=3 TO 19:LOCATE 2,f:PR
INT CHR$(149):NEXT:FOR f=5 TO 19:LO
CATE 4,f:PRINT CHR$(149):NEXT
4440 FOR f=12 TO 19:LOCATE 11,f:PRINT CH
R$(149):NEXT
4450 PEN 7:FOR f=10 TO 16 STEP 2:LOCATE
f,19:PRINT CHR$(250):LOCATE f+1,18:
PRINT CHR$(250):NEXT
4460 FOR f=10 TO 19 STEP 3:LOCATE 3,f:PR
INT CHR$(250):LOCATE 6,f:PRINT CHR$(
250):NEXT
4470 FOR f=8 TO 18 STEP 2:LOCATE f,14:PR
INT CHR$(250):NEXT
4480 FOR f=12 TO 14 STEP 2:LOCATE f,12:P
RINT CHR$(250):NEXT:FOR f=2 TO 8 ST
EP 2:LOCATE f,8:PRINT CHR$(250):N
EXT

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LISTING

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449B FOR f=5 TO 8:LOCATE (8-f)+10,f:PRINT
CHR$(250):NEXT:FOR f=3 TO 11 STEP
4:LOCATE f,5:PRINT CHR$(250):NEXT
450B FOR f=5 TO 9 STEP 4:LOCATE f,2:PRINT
CHR$(250):NEXT:LOCATE 13,3:PRINT
CHR$(250)
451B PEN 15:LOCATE 17,13:PRINT CHR$(252)
CHR$(253)
452B apples=31:lasers=1:lon1=10:loff1=60
:lon2=15:loff2=80:link=25
453B b=0:BORDER 0:INK 5,0:INK 3,0:INK 4,
0:INK 6,6:INK 7,23:INK 9,24:INK 10,
16:INK 11,14:INK 12,11,14:INK 13,10
:INK 14,21:INK 15,2
454B af1=16:af2=13:sx=19:sy=19:pac=231
455B RETURN
456B GOSUB 249B
457B PAPER 14:PEN 13:FOR f=5 TO 17 STEP
4:LOCATE f,10:PRINT CHR$(246):LOCAT
E f,14:PRINT CHR$(246):NEXT:FOR f=2
TO 4:LOCATE 4,f:PRINT CHR$(246):NE
XT:LOCATE 3,4:PRINT CHR$(246):LOCAT
E 19,5:PRINT CHR$(246)
458B PAPER 5:PEN 8:LOCATE 2,1:PRINT STRI
NG$(18,248)
459B LOCATE 11,6:PRINT CHR$(248):LOCATE
10,9:PRINT CHR$(248)" "CHR$(248):LO
CATE 3,11:PRINT CHR$(248):LOCATE 3,
13:PRINT CHR$(248)
460B PEN 11:LOCATE 9,5:PRINT STRING$(5,2
51):LOCATE 4,7:PRINT CHR$(251)CHR$(
251)" "CHR$(251)CHR$(251):LOCATE 15
,7:PRINT CHR$(251)CHR$(251)" "CHR$(
251)
461B PEN 12:FOR f=1 TO 15:LOCATE 1,f:PRINT
CHR$(249):LOCATE 20,f:PRINT CHR$(
249):NEXT
462B LOCATE 3,17:PRINT CHR$(249)CHR$(258
)CHR$(249)" "STRING$(3,249)CHR$(258
)" "CHR$(249)" "CHR$(249)CHR$(258)
CHR$(249)" "CHR$(249)CHR$(258)
463B LOCATE 3,12:PRINT CHR$(258)
464B PEN 6:LOCATE 11,5:PRINT CHR$(247):
LOCATE 9,8:PRINT CHR$(247)CHR$(247):
"CHR$(247)CHR$(247):LOCATE 11,17:
PRINT CHR$(247)

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```

465B LOCATE 1,20:PRINT STRINGS(20,247);
      FOR f=16 TO 19:LOCATE 1,f:PRINT CHR
$(247):LOCATE 20,f:PRINT CHR$(247)
      NEXT
466B FOR f=18 TO 19:LOCATE 5,f:PRINT CHR
$(247):LOCATE 11,f:PRINT CHR$(247);
      LOCATE 16,f:PRINT CHR$(247):NEXT
467B PEN 3:LOCATE 5,5:PRINT STRINGS(14,7
54):FOR f=6 TO 14 STEP 4:LOCATE f,14
      0:PRINT STRINGS(3,154):LOCATE f,14:
      PRINT STRINGS(5,154):NEXT
468B PEN 4:FOR f=5 TO 17 STEP 4:FOR q=11
      TO 13:LOCATE f,q:PRINT CHR$(149):N
      EXT q,f
469B PEN 7:LOCATE 2,2:PRINT CHR$(250)CHR
$(250):LOCATE 2,3:PRINT CHR$(250)CHR
$(250):FOR f=6 TO 16 STEP 5:LOCATE
      f,2:PRINT CHR$(250):LOCATE f,4:PRI
      NT CHR$(250):NEXT
470B LOCATE 17,7:PRINT CHR$(250):LOCATE
      18,10:PRINT CHR$(250):LOCATE 7,12:P
      RINT CHR$(250):LOCATE 15,12:PRINT C
      HR$(250):FOR f=11 TO 13:LOCATE 11,f
      :PRINT CHR$(250):NEXT

```

```

4710 LOCATE 3,19:PRINT CHR$(250):LOCATE
7,19:PRINT CHR$(250):LOCATE 9,18:PR
INT CHR$(250):LOCATE 13,18:PRINT CH
RS(250):LOCATE 15,19:PRINT CHR$(250
):LOCATE 18,19:PRINT CHR$(250)
4720 PEN 15:LOCATE 18,2:PRINT CHR$(252):
CHR$(253)
4730 lsnrs=1:lon1=10:loff1=100:lon2=15:
loff2=0:link=14
4740 apples=17:af1=0:af2=2:sx=4:sy=9:pac
=233
4750 b=15: BORDER 15:INK 5,15:INK 3,15:IN
K 4,15:INK 6,18:INK 7,7:INK 8,23:IN
K 9,24:INK 10,1:INK 11,6:INK 12,1:
INK 13,0,1:INK 14,12:INK 15,26
4760 RETURN
4770 GOSUB 2490
4780 LOCATE 1,1:PEN 15:PAPER 14:PRINT ST
RINGS(20,246):FOR f=2 TO 19:LOCATE
1,f:PRINT CHR$(246):LOCATE 20,f:PR
INT CHR$(246):NEXT:LOCATE 1,20:PRINT
STRINGS(20,246);
4790 FOR f=5 TO 8:LOCATE 6,f:PRINT CHR$(
246):NEXT:LOCATE 6,9:PRINT STRINGS(
4,246):LOCATE 9,10:PRINT STRINGS(2,
246):FOR f=11 TO 13:LOCATE 10,f:PR
INT CHR$(246):NEXT
4800 FOR f=4 TO 8:LOCATE 11,f:PRINT CHR$(
246):NEXT:LOCATE 12,5:PRINT STRING
$(4,246):LOCATE 15,6:PRINT CHR$(246
):LOCATE 12,8:PRINT CHR$(246):LOCAT
E 12,9:PRINT STRINGS(5,246)

```

```

4810 PAPER 5:LOCATE 12,11:PRINT CHR$(214)
      STRINGS(3,143)CHR$(215):FOR f=12 TO
      0 13:LOCATE 12,f:PRINT CHR$(143):LO
      CATE 16,f:PRINT CHR$(143):NEXT:LOCA
      TE 12,14:PRINT CHR$(213)" "CHR$(2
      12)
4820 PEN 14:FOR f=12 TO 14:LOCATE (12-f)
      +9,f:PRINT CHR$(214):LOCATE (12-f)+
      9,f+1:PRINT CHR$(212):LOCATE (12-f)
      +4,f+1:PRINT CHR$(214):LOCATE (12-f)
      +4,f+2:PRINT CHR$(212):NEXT
4830 FOR f=13 TO 14:LOCATE f+8,f:PRINT C
      HRS(215):LOCATE f-8,f+1:PRINT CHR$(
      213):NEXT
4840 PEN 12:LOCATE 4,7:PRINT CHR$(249):L
      OCATE 4,18:PRINT STRINGS(5,249):LOC
      ATE 11,17:PRINT STRINGS(6,249)
4850 PEN 8:LOCATE 8,2:PRINT CHR$(248):LO
      CATE 9,3:PRINT CHR$(248):LOCATE 14,
      3:PRINT STRINGS(3,248):LOCATE 6,18:
      PRINT CHR$(248)
4860 PEN 6:LOCATE 2,4:PRINT CHR$(247):LO
      CATE 12,4:PRINT CHR$(247):LOCATE 17,
      7:PRINT STRINGS(2,247):LOCATE 19,1
      8:PRINT CHR$(247):LOCATE 9,11:PRINT
      CHR$(247):LOCATE 14,13:PRINT CHR$(
      247):LOCATE 2,19:PRINT CHR$(247):LO
      CATE 18,18:PRINT STRINGS(2,247)
4870 PEN 7:FOR f=11 TO 19 STEP 2:LOCATE
      f,2:PRINT CHR$(250):NEXT:FOR f=4 TO
      8 STEP 2:LOCATE 19,f:PRINT CHR$(25
      0):NEXT:FOR f=2 TO 11 STEP 3:LOCATE
      2,f:PRINT CHR$(250):NEXT
4880 FOR f=4 TO 7 STEP 2:LOCATE 8,f:PRIN
      T CHR$(250)" "CHR$(250):LOCATE 7,f+
      1:PRINT CHR$(250)" "CHR$(250):NEXT:
      LOCATE 8,8:PRINT CHR$(250)" "CHR$(2
      50)
4890 FOR f=13 TO 15 STEP 2:LOCATE f,4:PR
      INT CHR$(250):LOCATE f,8:PRINT CHR$(
      250):NEXT
4900 FOR f=12 TO 16 STEP 2:LOCATE f,7:PR
      INT CHR$(250):NEXT:LOCATE 13,6:PRIN
      T CHR$(250):LOCATE 16,5:PRINT CHR$(
      250)
4910 LOCATE 4,2:PRINT CHR$(250)CHR$(250)
      " "CHR$(250):LOCATE 5,6:PRINT CHR$(
      250):LOCATE 8,18:PRINT CHR$(250):LO
      CATE 2,13:PRINT CHR$(250):LOCATE 4,
      12:PRINT CHR$(250):LOCATE 6,13:PRIN
      T CHR$(250)CHR$(250)
4920 FOR f=12 TO 16 STEP 2:LOCATE 19,f:P
      RINT CHR$(250):NEXT:FOR f=11 TO 17
      STEP 3:LOCATE f,18:PRINT CHR$(250):
      NEXT:LOCATE 11,13:PRINT CHR$(250):L
      OCATE 13,12:PRINT CHR$(250)" "CHR$(
      250):LOCATE 13,14:PRINT CHR$(250)"
      "CHR$(250)
4930 FOR f=11 TO 15 STEP 2:LOCATE f,16:P
      RINT CHR$(250):LOCATE f+1,18:PRINT
      CHR$(250):NEXT:FOR f=3 TO 9 STEP 2:
      LOCATE f,17:PRINT CHR$(250):LOCATE
      f+1,19:PRINT CHR$(250):NEXT
4940 PEN 10:PAPER 14:LOCATE 18,19:PRINT"
      LAST SHEET"
4950 PAPER 5:PEN 15:LOCATE 18,9:PRINT CH
      RS(252)CHR$(253)
4960 lasers=0:apples=60:a=1:l=a*2=3
4970 sx=9:sy=2:pac=250
4980 SPEED INK 58,58:b=16:BDORER 16:INK
      5,16:INK 6,16,25:INK 7,26:INK 8,11,
      16:INK 9,24:INK 18,2,6:INK 12,28:INK
      K 13,9:INK 14,1:INK 15,18

```

```

0990 RETURN
0000 c=3: SOUND 135,0,0,1: LOCATE #1,20,2:
PRINT#1, " ": LOCATE #1,20,3: PRINT#1,
" ": LOCATE #1,6,4: PRINT#1, " ":
LOCATE #1,6,5: PRINT#1, " ": LOCA
TE #1,17,4: PRINT#1, " ": LOCATE #1,
17,5: PRINT#1, " "
5010 BORDER 0: FOR f=3 TO 15: INK f,0: NEXT
5020 L=640:h=320:x=0:0: FOR f=0 TO 320 STE
P 4: PLOT f,x,c: DRAW L,0: DRAW 0,h:
DRAW -L,0: DRAW 0,-h: L=L-8:h=h-4: x
=x+2: c=c+1: IF c=16 THEN c=3
5030 NEXT
5040 FOR i=1 TO 100 STEP 4
5050 FOR f=15 TO 3 STEP -1: INK f,26: CALL
8BD19: INK f,0: NEXT f
5060 SOUND 7,i+20,20,7,0,4: NEXT i
5070 CLS
5080 INK 3,7: INK 4,26,13: INK 6,2,24
5090 LOCATE 3,1: PEN 5: mess$="CONGRATUL
IONS!": GOSUB 2440
5100 PEN 4: LOCATE 4,8: mess$="MEGA - BONU
S ": GOSUB 2440
5110 LOCATE 5,11: PEN 6: mess$="5000 POINT
S!": GOSUB 2440
5120 TAG#1: PLOT 800,800,2: FOR f=0 TO 500
0 STEP 50: MOVE 226,70: PRINT#1,sc+f:
: SOUND 7,(5000-f)/5,1,15,0,4: NEXT:s
c=sc+5000

```

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5150 TAGOFF#1
5160 INK 9,24:WINDOW SWAP 0,1:mess$=CHR$
(230):PEN 9:FOR f=1 TO men:LOCATE (
f+2)+4,4:GOSUB 2440:NEXT:LOCATE 20,
2:mess$="X":GOSUB 2440:PEN 2:WINDOW
SWAP 0,1:b=0:CLS
5150 RETURN
5160 RESTORE 5160:CALL @DCA7
5170 FOR a=1 TO 16:READ a1(a),b1(a):NEXT
a
5180 DATA 95,30,100,30,106,30,119,120,11
9,30
5190 DATA 106,30,95,60,89,150
5200 DATA 127,30,134,30,142,30,159,120,1
59,30
5210 DATA 119,30,106,60,95,150
5220 FOR a=1 TO 16:READ c1(a),d1(a):NEXT
a
5230 DATA 239,210,190,30,0,0,0,0
5240 DATA 213,210,284,30,0,0,0,0
5250 DATA 319,210,273,30,0,0,0,0
5260 DATA 239,240,0,0,0,0,0,0
5270 FOR a=1 TO 16:READ e1(a):NEXT a
5280 DATA 60,60,60,60,45,45,45,63,63,
63,63,60,60,60,60
5290 FOR a=1 TO 16
5300 SOUND 1,a1(a),b1(a)/1.5,10,13
5310 IF c1(a)<0 THEN SOUND 4,c1(a),d1(a
)/1.5,10,12
5320 SOUND 2,e1(a),40,10,13
5330 NEXT
5340 FOR a=1 TO 16:READ a1(a),b1(a):NEXT
a
5350 DATA 95,30,100,30,106,30,119,120,11
9,30
5360 DATA 106,30,95,60,89,150
5370 DATA 127,30,134,30,142,30,159,120,0
,0
5380 DATA 0,0,63,30,119,180
5390 FOR a=1 TO 16
5400 IF b1(a)<0 THEN SOUND 1,a1(a),b1(a
)/1.5,10,13
5410 IF c1(a)<0 THEN SOUND 4,c1(a),d1(a
)/1.5,10,12
5420 SOUND 2,e1(a),40,10,13
5430 NEXT
5440 IF sc<hi(9) THEN STEP 5790
5450 FOR f=1 TO 1000:NEXT
5460 INK 0,0:ORDER 0:MODE 1:INK 1,0:INK
2,0:INK 3,26:WINDOW 1,40,1,13:PAPE
R 2:CLS
5470 WINDOW 1,40,1,25:PEN 1:PRINT CHR$(2
3)CHR$(1);
5480 FOR f=0 TO 0 STEP -1:IF sc>hi(f) TH
EN NEXT
5490 f=f+1
5500 FOR g=0 TO f+1 STEP -1:hi(g)=hi(g-1
):hi$ (g)=hi$ (g-1):NEXT
5510 hi$ (f)=SPACES(20):hi$ (f)=sc
5520 FOR g=0 TO 9:LOCATE 5,g+3:PRINT g+1
:LOCATE 9,g+3:PRINT hi$ (g):LOCATE 3
0,g+3:PRINT hi$ (g):NEXT
5530 FOR g=0 TO 639 STEP 4:MOVE g,192:DR
AWR 0,200,2:MOVE 639-g,192:DRAW 0,
200:NEXT
5540 INK 1,1:INK 2,11
5550 PAPER 1:LOCATE 9,f+3:PRINT hi$ (f):;
hi$ (f)=""
5560 LOCATE 1,18:PAPER 2:PEN 1:PRINT"WEL
L DONE YOU HAVE ONE OF TODAY'S HIGHE
ST SCORES. PLEASE ENTER YOUR NAME US
ING THE LEFT, RIGHT AND FIRE CO
NTROLS. "
5570 PAPER 1:PEN 2:LOCATE 1,25:a$="ABCDE
FGHIJKLMNOPQRSTUVWXYZ. SPC RUB END
":PRINT LEFT$(a$,20):PEN 3:PRINT R
IGHT$(a$,12);
5580 $1=HIMEM+190:$r1=HIMEM+232:POKE $1
+1,128:POKE $1+2,199:POKE $r1+1,1
28:POKE $r1+2,199
5590 LOCATE 20,23:PEN 3:PAPER 0:PRINT CH
R$(231)
5600 p=20:d=0:pac=231:frame=0
5610 l1=INKEY(71):l2=INKEY(74):r1=INKEY(
63):r2=INKEY(75):f1=INKEY(18):f2=IN
KEY(76)
5620 LOCATE 20,23:PRINT CHR$(pac+(frame=
4)):frame=(1-frame)
5630 IF r1<>-1 OR r2<>-1 THEN CALL $1:L
OCATE 20,23:pac=230:p=p+1:IF p>40 T
HEN p=1
5640 IF l1<>-1 OR l2<>-1 THEN CALL $r1:p
ac=231:p=p-1:IF p<1 THEN p=40
5650 IF f1<>-1 OR f2<>-1 THEN S680
5660 FOR g=1 TO 100:NEXT
5670 GOTO 5610
5680 SOUND 7,150,10,15,0,2:IF p>27 THEN
5690 ELSE e$=MID$(a$,p,1)
5690 hi$ (f)=hi$ (f)+e$

```

```
5700 LOCATE 9,f+3:PAPER 1:PEN 2:PRINT hi  
      $({)SPACES(20-LEN(hi$({)})):PAPER 0  
      :PEN 3:IF LEN(hi$({)})=20 THEN 5770  
5710 FOR g=1 TO 100:NEXT  
5720 GOTO 5610  
5730 IF p<52 THEN e$=" ":GOTO 5600
```

```

5740 IF p>31 AND p<56 AND h1$(f)<>" THE
      N h1$(f)=LEFT$(h1$(f),LEN(h1$(f))-1
      ):LOCATE 9,f+3:GOTO 5700
5750 IF p>55 THEN 5770
5760 LOCATE 0,5710
5770 LOCATE 9,f+3:PRINT h1$(f)SPACES(20-
      LEN(h1$(f))):WINDOW 1,40,13,25:CLS:
      WINDOW 1,40,1,25
5780 GOTO 5820
5790 INK @,0: BORDER @:MODE 1:INK 1,0:INK
      2,0:INK 3,26:WINDOW 1,40,1,13:PAPER
      2:CLS
5800 WINDOW 1,40,1,25:PEN 1:PRINT CHR$(2
      3)CHR$(1);
5810 FOR q=0 TO 9:LOCATE 5,q+3:PRINT q+1
      :LOCATE 9,q+3:PRINT h1$(q):LOCATE 3
      0,q+3:PRINT h1$(q):NEXT q:FOR g=0 TO 6
      9 STEP 4:MOVE g,192:DRAWR @,200,2:
      MOVE 639-g,192:DRAWR @,200:NEXT:INK
      1,1:INK 2,11
5820 PRINT CHR$(23)CHR$(@)::PAPER @:FOR
      f=1 TO LOCATE 1,1:PRINT CHR$(11):
      NEXT
5830 LOCATE 10,23:PEN 3:PRINT"PRESS FIRE
      TO CONTINUE"
5840 RESTORE 5840
5850 ENV 1,10,-1,10
5860 ENV 2,5,1,1,15,-1,20
5870 ENV 3,15,-1,4
5880 FOR a=1 TO 88:READ a(a):NEXT a
5890 DATA 602,501,602,501,602,301,602,30
      1,602,501,602,301,602,301,602,501,6
      02,301,602,301,602,501,602,301,716,
      358,716,358,716,358,716,358,804,402
      ,804,402,804,402,804,402,902,451,90
      2,451,902,451,902,451,902,451,902,4
      51,902,451,902,451,602,301,602,301,
      602,5
900 DATA 602,501
910 DATA 956,478,956,478,956,478,956,47
      8,716,358,716,358,716,358,716,358,8
      04,402,804,402,804,402,804,402,804,402
920 FOR a=1 TO 88:READ b(a),c(a):NEXT
      a
930 DATA @,25,119,25,119,12.5,119,25,11
      9,37.5,134,25,159,25,150,25,0,0,179
      ,75,201,150,0,0,0,0,0,0,0,0,0,0,0,0
940 DATA @,0,119,25,119,12.5,119,25,119
      ,37.5,134,25,159,25,150,25,0,0,159,
      75,179,150,0,0,0,0,0,0,0,0,0,0,0,0
950 DATA @,0,150,25,150,12.5,150,25,150
      ,37.5,150,25,159,25,150,25,0,0,159,
      75,179,275,0,0,0,0,0,0,0,0,201,25,2
      25,25

```

```

060 DATA 239,150,0,0,0,0,0,0,0,0,22
5,25,213,25
070 DATA 201,150,0,0,0,0,0,0,0,0,0,17
9,25,159,25
080 DATA 150,150,0,0,0,0,0,0,0,0,0,15
9,25,150,25
090 DATA 134,194,0,0,0,0,0,0,0,0,0,0,0
0,0,0
000 DATA 0,0,0,0,0,0,0,0,0,0,0,0
010 FOR a=1 TO 88:READ d1(a):NEXT a
020 DATA 75,0,0,0,0,0,0,0,75,0,0,0,0,0
0,0,75,0,0,0,0,0,0,80,0,0,0,0,0
0,100,0,0,0,0,0,0,115,0,0,0,0,0
0,0,115,0,0,0,0,0,0,75,0,0,0,0,0
0,0,110,0,0,0,0,0,0,89,0,0,0,0,0
0,0,100,0,0,0,0,0,0
030 WHILE INKEYS<"":WEND
040 INK T,RND*26:INK 2,RND*26:FOR f=0 TO
0 TO 8 STEP 2:MOVE f,f:DRAW 639-f,f,1
:DRAW 639-f,399-f:DRAW f,399-f:DRAW
f,f:NEXT
050 PLOT 639,0,2:FOR f=1 TO 40:GOSUB 61
40:NEXT:MOVE 639,383:FOR f=1 TO 40:
GOSUB 6140:NEXT
060 MOVE 0,14:FOR g=1 TO 2:FOR f=1 TO 4
0:DRAWR 0,4:DRAWR 16,0:DRAWR 0,4:DR
AWR -16,0:NEXT:MOVE 623,14:NEXT
070 FOR b=1 TO 2:FOR a=1 TO 88
080 SOUND 1,a1(a),25,15,3
090 IF c1(a)<0 THEN SOUND 2,b1(a),c1(a
),10,2
100 IF d1(a)<0 THEN SOUND 4,d1(a),200,
12,1
110 KS=INKEYS: IF KS=CHR$(13) THEN CALL
&BCAT:ENV 1,5,1,3,75,-1,10:ENV 2,3
,1,1,15,-1,4:ENV 3,5,3,1,3,-1,5:GOT
O 1590
120 NEXT a,b
130 GOTO 6040
140 DRAWR 0,16:DRAWR -16,0:DRAWR 0,-12:
DRAWR 0,0:DRAWR 0,4:DRAWR -4,0:DRAW
R 0,4:DRAWR 0,0:DRAWR 0,-12:DRAWR -
16,0
150 RETURN
160 RESTORE 6200
170 DIM m$(15),m(15)
180 FOR f=0 TO 15:READ m$(f),m(f):NEXT
190 RETURN
200 DATA 2,16,p,3,x,16,p,2,x,16,p,10,x,
4,l,8,x,4,p,0,x,7,l,2,p,0,x,3,x,3,p

```


Fischermann, Thomas (1985): The Castle. In: HC – Mein Home-Computer, Ausg. 7/1985 (Juli), S. 82-85.

The Castle

Mit großen Steinen versucht Ritter Eduard, seine Burg gegen die Eindringlinge zu schützen (Atari 800XL)

Ritter Eduard, der letzte Bewohner einer Ritterburg, muß seinen Wohnsitz gegen heranstürmende Krieger verteidigen, die die Burg erobern wollen. Als die Gegner beginnen, mit Hilfe von großen Leitern die Mauern zu erklettern, bleibt Eduard nur noch eine Möglichkeit:

Er muß große Steine herunterwerfen, damit die getroffenen Gegner von ihren Leitern fallen und wieder neu anfangen müssen hochzuklettern.

Zu Eduards Leidwesen kann er aber nur jeweils einen der schweren Steine

gleichzeitig tragen; nach jedem heruntergeworfenen Stein muß er wieder einen neuen von dem Steinhaufen holen, der hinter der linken Burgzinne versteckt ist – das kostet Zeit.

Hat Eduard 150 Zeiteinheiten (links oben angezeigt) lang verhindert, daß einer der Angreifer die Oberkante der Mauer erreicht, kommt er in den nächsten Spiel-Level; die Angreifer klettern nun schneller.

Erst wenn Ritter Eduard 6 Level durchgestanden hat, geben die Krieger auf und



das Spiel ist gewonnen. Mit der START-Taste kann man das Spiel jederzeit abbrechen. Beim Abtippen muß darauf geachtet werden, daß PLR \$ die erste Variable ist, die eingegeben wird, sonst läuft nämlich gar nichts an dem Spiel korrekt.

Am besten ist es, wenn man vor dem Abtippen einen Kaltstart durchführt und dann eingibt:

PRINT PLR \$.

Es erscheint ein Error; nun kann das Programm eingegeben werden.

Thomas Fischermann

ZEILEN	KOMMENTAR
1— 9	Programmkopf
10— 70	Programmvorbereitung
80— 120	Hauptschleife, von der aus bestimmte Subs angesprungen werden
130— 210	Bewegung von Ritter Eduard
220— 250	Bewegung der Angreifer
260— 390	ein Stein wird heruntergeworfen
400— 770	die beiden Zeichensätze werden umdefiniert
780— 820	PLR \$ wird gepointet
830— 930	Player-Shapes einlesen
940— 1010	VBI-Musik vorbereiten
1020— 1190	Playfield zeichnen
1200— 1340	Die Angreifer erscheinen
1350— 1420	Ritter Eduard erscheint
1430— 1530	Level gewonnen
1540— 1630	alle Level gewonnen
1640— 1710	Spiel verloren
1720— 1830	Titel

Programmstruktur

VARIABLE	BEDEUTUNG
PLR \$	wird in die PM-Area gepointet
S, V, OFF P1 \$, p2 \$, ST \$, F \$	werden zum Pointen von PLR \$ gebraucht Shapes
LVL	Level
TIME	übrige Zeiteinheiten
SCORE	Punktstand
G ()	y-Position der Angreifer
XP	x-Position von Ritter Eduard
STONE	Flagwert (0: kein Stein; 1: Stein geholt)
CH, CH1, CH2	Character-Setadressen
PM	Page (Hibyte) für PM-Area
PB	Startadresse für die PM-Area
DL	Startadresse der Display-List
LO, HI	werden gebraucht, um einen 16-bit-Wert in zwei 8-bit-Werte umzuwandeln
I1, I2, I3	Schleifen
LL \$, FF, B, A, LL	Hilfsvariablen

Variablenliste

```

10 REM *** Preparation ***
20 DIM PLR$(1024),LL$(20),G(17)
30 FF=3:LVL=1:TIME=150:SCORE=0
40 GOSUB 400:GOSUB 780:GOSUB 830
50 GOSUB 940
60 FOR I1=3 TO 17 STEP 2:G(I1)=21:NEXT
  I1
70 GOSUB 1020:GOSUB 1200:GOSUB 1350
80 REM *** Main Loop ***
90 GOSUB 220:FOR I1=1 TO 8-LVL:GOSUB 1
  30:NEXT I1
100 TIME=INT(TIME-2+LVL/5):IF TIME<1 T
  HEN POSITION 6,1:? #6;0:GOSUB 1430
110 SCORE=SCORE+LVL*10:POSITION 6,1:?
  #6;TIME;" ":POSITION 19-LEN(STR$(SCORE
  )),1:? #6;SCORE
120 GOTO 90
130 REM *** Player Movement ***
140 IF PEEK(53279)=6 THEN FF=3:LVL=1:T
  IME=150:SCORE=0:GOTO 60
150 IF STICK(0)=15 THEN 190
160 SOUND 0,255,10,4:SOUND 0,0,0,0
170 XP=XP+8*(STICK(0)=7 AND XP<189)-8*
  (STICK(0)=11 AND XP>71)
180 POKE 53248,XP:POKE 53249,XP
190 IF STRIG(0)=0 AND STONE AND (XP-48
  )/16<>INT((XP-48)/16) THEN GOSUB 260
200 IF XP=64 AND STONE=0 THEN STONE=1:
  FOR I2=1 TO 20:SOUND 0,20,10,4:SOUND 0
  ,0,0,0:NEXT I2
210 RETURN
220 REM *** Movement ***
230 POKE 756,CH1+2*(PEEK(756)=CH1):FF=
  FF+2*INT(RND(0)*4):IF FF>17 THEN FF=3
240 POSITION FF,G(FF):? #6;"&":G(FF)=G
  (FF)-1:IF G(FF)=8 THEN POP:GOTO 1640
250 POSITION FF,G(FF):? #6;CHR$(136):R
  ETURN
260 REM *** A Stone is thrown ***
270 STONE=0:POKE 623,1
280 POKE 53278,0:POKE 53250,XP
290 FOR I1=100 TO 210 STEP 4:PLR$(512+

```

```

  I1,524+I1)=ST$
300 IF PEEK(53254)>7 THEN 330
310 NEXT I1
320 GOTO 370
330 FOR I2=100 TO 200 STEP 10:SOUND 0,
  I2,12,15:NEXT I2:SOUND 0,0,0,0
340 FOR I1=G((XP-48)/8)+1 TO 21:POSITI
  ON (XP-48)/8,I1-1:? #6;"&"
350 IF G((XP-48)/8)<>21 THEN POSITION
  (XP-48)/8,I1:? #6;CHR$(136):NEXT I1:FO
  R I2=1 TO 5:NEXT I2:G((XP-48)/8)=21
360 POSITION (XP-48)/8,21:? #6;CHR$(13
  6)
370 PLR$(512)=CHR$(0):PLR$(768)=CHR$(0
  ):PLR$(513)=PLR$(512)
380 POKE 53250,0:POKE 623,0
390 RETURN
400 REM *** High Scores ***
410 POKE 106,PEEK(106)-24:GRAPHICS 0
420 GOSUB 1720
430 CH1=(PEEK(106)+16)*256:CH2=CH1+512
  :CH=PEEK(756)*256
440 FOR I1=12*8 TO 62*8:POKE CH1+I1,PE
  EK(CH+I1):POKE CH2+I1,PEEK(CH+I1):NEXT
  I1
450 RESTORE 460
460 DATA 0,0,0,0,0,0,0,0
470 DATA 253,253,253,0,223,223,223,0
480 DATA 0,6,31,63,127,127,127,127
490 DATA 63,30,12,0,0,0,0,0
500 DATA 0,0,96,240,248,248,248,240
510 DATA 224,192,0,0,0,0,0,0
520 DATA 165,165,189,36,165,165,189,36
530 DATA 221,247,190,111,253,183,238,1
  23
540 DATA 56,56,56,80,56,20,104,12
550 DATA 56,56,56,16,120,20,40,68
560 DATA 56,56,56,84,56,16,40,68
570 DATA 56,56,56,16,124,16,108,0
580 DATA 56,56,56,16,84,56,16,16
590 DATA 16,16,16,16,16,16,16,16
600 FOR I1=0 TO 14*8:READ B:POKE CH1+I

```



```

1,B:NEXT I1
610 RESTORE 620
620 DATA 0,0,0,0,0,0,0,0
630 DATA 253,253,253,0,223,223,223,0
640 DATA 0,6,31,63,127,127,127,127
650 DATA 63,30,12,0,0,0,0,0
660 DATA 0,0,96,240,248,248,248,240
670 DATA 224,192,0,0,0,0,0,0
680 DATA 165,165,189,36,165,165,189,36
690 DATA 221,247,190,111,253,183,238,1
23
700 DATA 56,56,56,20,56,80,44,96
710 DATA 56,56,56,18,60,80,24,48
720 DATA 56,56,56,84,56,16,40,68
730 DATA 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
740 DATA 16,16,16,16,16,16,16,16
750 FOR I1=0 TO 14*8:READ B:POKE CH2+I
1,B:NEXT I1
760 CH1=CH1/256:CH2=CH2/256
770 RETURN
780 REM *** Point PLR$ to PM-RAM ***
790 PM=PEEK(106):PB=PM*256
800 S=PEEK(140)+256*PEEK(141):V=PEEK(1
34)+256*PEEK(135)
810 OFF=PB+1024-S:HI=INT(OFF/256):LO=O
FF-HI*256
820 POKE V+2,LO:POKE V+3,HI:RETURN
830 REM *** Prepare Player ***
840 DIM P1$(12),P2$(12),ST$(14),F$(14)
850 RESTORE 850:DATA 56,124,84,124,56,
16,56,68,0,0,0,108
860 FOR I1=1 TO 12:READ B:P1$(I1)=CHR$
(B):NEXT I1
870 RESTORE 870:DATA 0,0,0,0,0,0,56,84
,16,56,40,108
880 FOR I1=1 TO 12:READ B:P2$(I1)=CHR$
(B):NEXT I1
890 RESTORE 890:DATA 0,0,0,0,28,62,62,
62,62,28,0,0,0,0
900 FOR I1=1 TO 14:READ B:ST$(I1)=CHR$
(B):NEXT I1
910 RESTORE 910:DATA 127,127,81,81,119
,119,81,81,93,93,81,81,127,127
920 FOR I1=1 TO 14:READ B:F$(I1)=CHR$(
B):NEXT I1
930 RETURN
940 REM *** Prepare Music ***
950 RESTORE 970:FOR I=1536 TO 1646:REA
D A:POKE I,A:NEXT I
960 POKE 550,0:POKE 551,6:POKE 1554,16
3:POKE 1577,6
970 DATA 104,72,174,46,6,189,47,6,141,
6,210,24,105,1,141,4,210,169,174,141,5
,210
980 DATA 141,7,210,238,46,6,173,46,6,2
01,64,208,5,169,0,141,46,6,169,10,141,
24,2,96
990 DATA 0,108,129,162,216,193,172,162
,216,108,129,162,216,193,172,162,216,1
08,129,162,216,162,216,81,145,81,86
1000 DATA 97,216,108,216,108,129,108,1
15,122,216,122,216,122,216,108,122,129
,216,129,216,129,216,122,129,145,216
1010 DATA 145,216,172,216,172,216,145,
216,162,216,162,162,162
1020 REM *** Setup Playfield ***
1030 GRAPHICS 17:POKE 559,0
1040 SETCOLOR 0,0,6:SETCOLOR 1,0,14:SE
TCOLOR 2,12,6:SETCOLOR 3,3,6
1050 POSITION 1,0:? #6;"THE CASTLE IC
1984"
1060 POSITION 1,1:? #6;"TIME:";TIME;"
5C:00000"
1070 COLOR 45:PLOT 10,3:DRAWTO 10,6
1080 POSITION 4,3:? #6;CHR$(2);CHR$(4)
1090 POSITION 4,4:? #6;CHR$(3);CHR$(5)
1100 POSITION 15,4:? #6;CHR$(2);CHR$(4
)
1110 POSITION 15,5:? #6;CHR$(3);CHR$(5
)
1120 POSITION 2,7:? #6;"! ! ! ! ! !
! !":POSITION 2,8:? #6;"! ! ! ! ! !
! !"
1130 FOR I1=9 TO 21:POSITION 2,I1:? #6
;"!!!!!!!!!!!!!!!!":NEXT I1
1140 POSITION 1,22:? #6;"!!!!!!!!!!!!
!!!!!!!!":REM 19*CHR$(167)
1150 POSITION 1,23:? #6;"!!!!!!!!!!!!
!!!!!!!!":REM 5.0.
1160 PLR$(1)=CHR$(0):PLR$(1024)=CHR$(0
):PLR$(2)=PLR$
1170 PLR$(768+57,768+71)=F$:POKE 53259
,1:POKE 53251,131:POKE 707,118
1180 POKE 756,CH1
1190 RETURN
1200 REM *** The enemy comes ***
1210 POKE 1554,165:POKE 1577,9:POKE 53
6,1:SOUND 0,0,0,0
1220 SETCOLOR 4,8,12:POKE 559,62:POKE
53277,2:POKE 54279,PM
1230 FOR I1=4 TO 18 STEP 2:FOR I2=19 T
O I1 STEP -1:POKE 756,CH1+2*(PEEK(756)
=CH1)
1240 LOCATE I2,21,LL:POSITION I2,21:?
#6;CHR$(137)
1250 SOUND 0,100,10,4:SOUND 0,0,0,0:FO
R I3=1 TO 10:NEXT I3:POSITION I2,21:?
#6;CHR$(LL);
1260 NEXT I2:POSITION I2,21:? #6;CHR$(
138);:FOR I2=1 TO 5:NEXT I2
1270 NEXT I1
1280 FOR I1=1 TO 50:NEXT I1
1290 FOR I1=20 TO 9 STEP -1:FOR I2=3 T
O 17 STEP 2
1300 POSITION I2,I1:? #6;CHR$(38):NEXT
I2:FOR I2=1 TO 10:NEXT I2
1310 NEXT I1
1320 POSITION 3,23:? #6;"START TO BEG
IN"
1330 IF PEEK(53279)<>6 THEN 1330
1340 POSITION 3,23:? #6;"!!! LEVEL:1
!!!":RETURN
1350 REM *** Setup Player ***
1360 POKE 53248,0:POKE 53249,0
1370 POKE 704,42:POKE 705,118:POKE 706
,6:POKE 623,8
1380 PLR$(92,104)=P1$:PLR$(256+92,256+
104)=P2$
1390 FOR I1=64 TO 136 STEP 2:XP=I1:POK
E 53248,XP:POKE 53249,XP:SOUND 0,I1,10
,4:NEXT I1:SOUND 0,0,0,0
1400 FOR I1=1 TO 10:NEXT I1
1410 POKE 536,1
1420 RETURN
1430 REM *** Level won ***
1440 POKE 536,0:SOUND 2,0,0,0:SOUND 3,
0,0,0
1450 POSITION 4,23:? #6;" ";LVL;"LEVE
L WON "

```



```

1460 FOR I1=3000 TO 0 STEP -50
1470 SOUND 0,I1,10,I1/250
1480 NEXT I1:SOUND 0,0,0,0
1490 FOR I1=1 TO 40:NEXT I1
1500 LVL=LVL+1:TIME=150:POSITION 6,1:?
#6;TIME
1510 IF LVL>6 THEN POP :GOTO 1540
1520 POSITION 3,23:? #6;"*** LEVEL:";L
VL;"***"
1530 POKE 1577,10-LVL:POKE 536,1:SOUND
0,0,0,0:RETURN
1540 REM *** All Levels Won ***
1550 POKE 559,0:POKE 53277,0:GRAPHICS
18:POSITION 2,3:? #6;"CONGRATULATIONS!"
"
1560 DL=PEEK(560)+256*PEEK(561):POKE D
L+11,6:POKE DL+12,6:POKE DL+13,6
1570 POSITION 0,6:? #6;"*****
*****":POSITION 1,7:? #6;"Do won***
10v015 ***"
1580 POSITION 0,8:? #6;"*****
*****"
1590 FOR I1=250 TO 20 STEP -2:SOUND 0,
I1,10,10:SOUND 1,I1+3,10,6
1600 IF I1/8=INT(I1/8) THEN POKE 708,1
4*(PEEK(708)<>14)
1610 NEXT I1:SOUND 0,0,0,0:SOUND 1,0,0
,0
1620 FOR I1=1 TO 30:NEXT I1
1630 FF=3:LVL=1:TIME=150:SCORE=0:GOTO
60
1640 REM *** Game Ends ***
1650 POKE 756,CH1:POKE 536,0:SOUND 2,2
55,12,15:SOUND 3,0,0,0:POSITION FF,8:?
#6;CHR$(138)
1660 POKE 707,38:FOR I1=1 TO 50:NEXT I
1:SOUND 2,0,0,0
1670 POSITION 0,23:? #6;" YOU LOST THI
S GAME ";
1680 FOR I1=1 TO 10:POSITION FF,8:? #6
;CHR$(139):FOR I2=1 TO 20:NEXT I2
1690 POSITION FF,8:? #6;CHR$(138):FOR
I2=1 TO 20:NEXT I2:NEXT I1
1700 FOR I1=1 TO 300:NEXT I1
1710 GOTO 1630
1720 REM *** Title ***
1730 POKE 710,0:POKE 752,1:? :DL=PEEK(
560)+256*PEEK(561):POKE DL+11,6:POKE D
L+12,6
1740 POSITION 5,6:? #6;"the castle":?
:?
1750 RESTORE 1750:DATA 65,110,32,201,2
30,244,229,242,230,225,227,229,32
1760 DATA 211,239,230,244,247,225,242,
229,32,80,114,111,100,117,99,116,155,1
55
1770 DATA 32,32,32,32,32,32,32,32,32,3
2,32,32,49,57,56,52,32,98,121,155
1780 DATA 32,32,32,32,32,32,84,104,111
,109,97,115,32,70,105,115,99,104,101,1
14,109,97,110,110,-1
1790 POKE 82,5:?
1800 READ B:IF B=-1 THEN 1830
1810 IF B>32 THEN SOUND 0,8,8,10:SOUND
0,0,0,0
1820 PUT #6,B:GOTO 1800
1830 ? :? :? :? :? :? :? :? :? "
Please wait !":RETURN

```