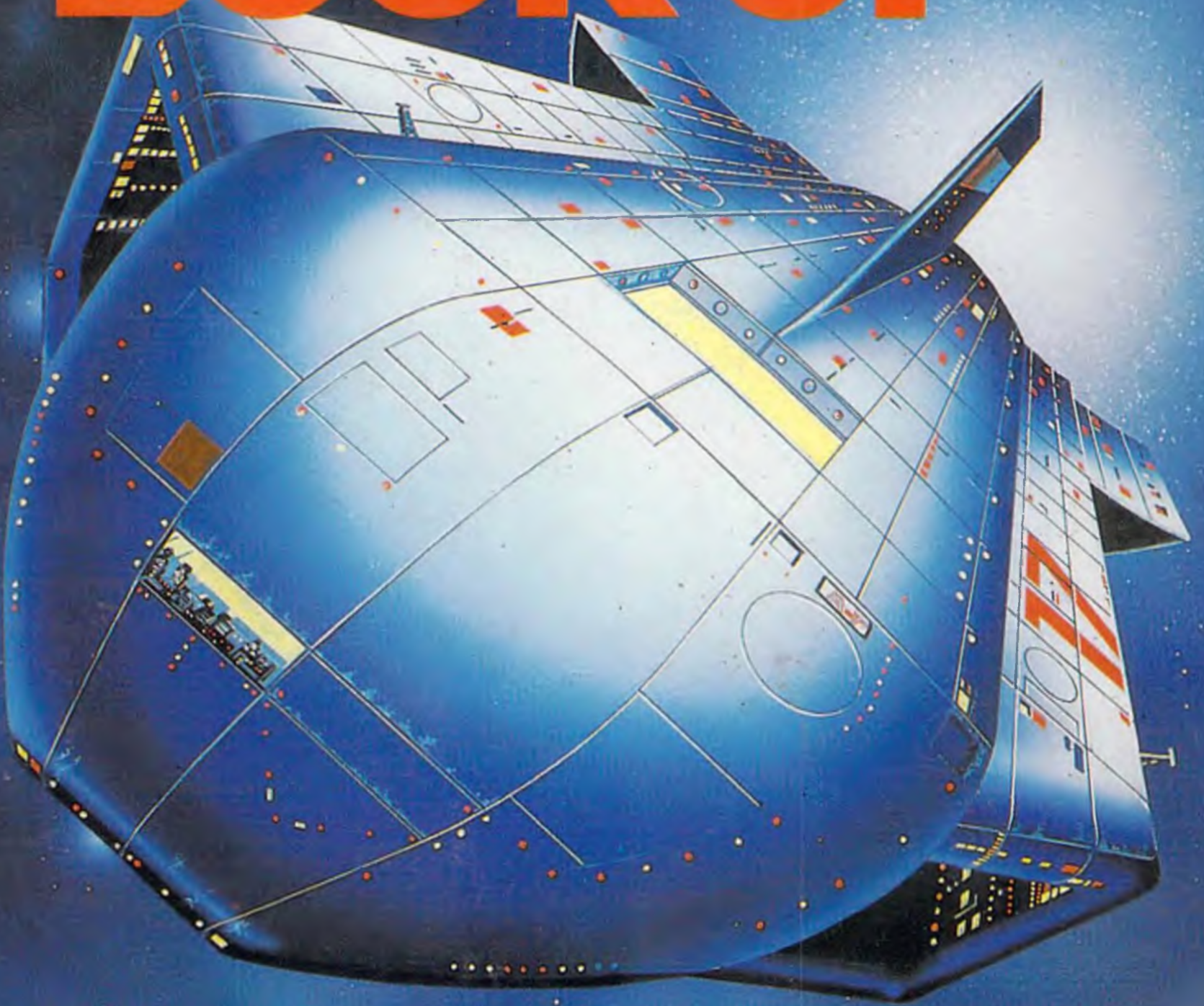


IP

THE

BIG FAT BOOK OF



COMMODORE 64 GAMES

Tim Hartnell & Brett Hale

THE
BIGFAT
BOOK OF
COMMODORE 64
GAMES

Tim Hartnell & Brett Hale

INTERFACE 
PUBLICATIONS

London and Melbourne

First published 1984

Interface Publications
62 Fulton Street
Clayton Victoria 3168

9-11 Kensington High Street
London W8 5NP

Copyright © Tim Hartnell, 1983

ISBN 0 907563 95 3

The programs in this book have been included for their instructional value. They have been tested with care but are not guaranteed for any particular purpose. Whilst every care has been taken, the publishers cannot be held responsible for any running mistakes which may occur.

ALL RIGHTS RESERVED

No use whatsoever may be made of the contents of this volume — programs and/or text — except for private study by the purchaser of this volume, without the prior written permission of the copyright holder.

Reproduction in any form or for any purpose is forbidden.

Books and software published by Interface Publications are distributed in Australia by:

Pitman Publishing/Computer Reporting Services,
Level 12 Town Hall House, 452 Kent Street,
Sydney, 2000; (02) 267 1066

And in the UK by:

WHS Distributors, St John's House, East Street,
Leicester, LE1 6NE (0533) 551 1196

Designed by Brian Shorrocks

Printed in Australia
by Brown Prior Anderson

CONTENTS

HEXPERTY	1
QUEST FOR RIEMANNIAN	14
DETECTIVE Q	52
KLONDIKE BILL	64
RED SEDAN II	72
THE ORE-SEEKERS	78
SQUISHER AND SQUASHER	92
MAGICIAN'S MAZE	99
CPU PRISONER	110
REFLEX BOWLING ALLEY	118
TELEPATHY TESTER	125
INVISIBLE BRICKLAYER	132
CHOP AND CHANGE	170
POWER PLAY	175
BUNCO	181
STARBASE 2000	188
SECRET AGENT	204
SCAT BIKES	213
THE VOYAGES OF MAGELLAN	220
DISASTER FLIGHT	237
TO TAKE OFF	241
TOWERS OF NEPTUNE	266
SEA WOLF	273
FIRST BULL RUN	288
GETTYSBURG DICE	301
ALIEN ATTACK	311
MARRAN RACE	321
HALVING THE TON	326
CUBE OF ELEUSIS	331
BIG BLUE ELEPHANTS	339

ALPHABETICA	349
BURSTING CLOUDS	357
GO FISH	368
FOUR SQUARE	376
IMPERIAL CASTLE	384
SPRITE CREATION	403
BIBLIOGRAPHY	408

BASIC CONVERSION CHART

AS YOU MAY ALREADY KNOW, THE COMMODORE 64 HAS MANY UNIQUE CHARACTERS. NOT MANY PRINTERS CAN HANDLE THESE CHARACTERS, SO THEY USE SUBSTITUTE CHARACTERS. ALL OF THE LISTINGS IN THIS BOOK ARE DONE IN THIS WAY.

BELOW IS A TABLE THAT CONVERTS PRINTED CHARACTERS TO COMMODORE 64 CHARACTERS. FOR EXAMPLE, IF YOU FOUND AN A IN A LISTING YOU WOULD TYPE A SHIFTED 'A' ON YOUR COMPUTER.

(SHIFT MEANS USE THE SHIFT KEY,
COMMODORE MEANS USE THE COMMODORE KEY.)

@	SHIFT *
A	SHIFT A
B	SHIFT B
C	SHIFT C
D	SHIFT D
E	SHIFT E
F	SHIFT F
G	SHIFT G
H	SHIFT H
I	SHIFT I
J	SHIFT J
K	SHIFT K
L	SHIFT L
M	SHIFT M
N	SHIFT N
O	SHIFT O
P	SHIFT P
Q	SHIFT Q
R	SHIFT R
S	SHIFT S

T	SHIFT	T
U	SHIFT	U
V	SHIFT	V
W	SHIFT	W
X	SHIFT	X
Y	SHIFT	Y
Z	SHIFT	Z
[SHIFT	+
]	SHIFT	-
>	SHIFT	#
:	SHIFT	@
Ø	COMMODORE	A
?	COMMODORE	B
<	COMMODORE	C
,	COMMODORE	D
1	COMMODORE	E
;	COMMODORE	F
%	COMMODORE	G
4	COMMODORE	H
"	COMMODORE	I
5	COMMODORE	J
!	COMMODORE	K
6	COMMODORE	L
'	COMMODORE	M
*	COMMODORE	N
9	COMMODORE	O
/	COMMODORE	P
+	COMMODORE	Q
2	COMMODORE	R
.	COMMODORE	S
#	COMMODORE	T
8	COMMODORE	U
>	COMMODORE	V
3	COMMODORE	W
=	COMMODORE	X
7	COMMODORE	Y
-	COMMODORE	Z
\$	COMMODORE	@
&	COMMODORE	+
\	COMMODORE	-
<	COMMODORE	#
_	COMMODORE	*

HEXPERTY

Bert lives on a planet, in a galaxy far away. He has been captured by the evil witch Spotack, and has been forced to play on her '3-D Grid'.

Bert has to try and change the top faces of the crosses to yellow. If he does this, he can escape. Spotack throws rubber balls down the grid to crush Bert. To make things even harder, her pet snake, Coiles, chases Bert around the grid.

Bert has two disks on which he can jump to try and lure young Coiles to death. Once all the faces have been painted yellow, Bert is forced to start all over again.

Your controls:

A - to move up/left
Z - to move down/right
K - to move up/right
M - to move down/left

```
1 POKE2040,196:POKE2041,194:POKE2042,195
:POKE2043,194:POKE2044,197
2 FORX=194TO197
3 FORY=0TO63:READA:POKEX*64+Y,A:NEXT:NEX
T
9 DIMS(21):LI=3
10 PRINT"{CLR}":POKE53280,0:POKE53281,0
11 INPUT"HOW MANY SCREENS";RS
12 IFRS>10THENPRINT:PRINT"NOW COME ON, L
ETS BE REASONABLE!":GOTO11
13 IFRS<1THENPRINT:PRINT"NOT MUCH OF A C
HALLENGE!":GOTO11
20 SR=0
190 S=0:TR=0:RT=0:NM=0:GH=0:QW=0
191 POKEV+16,0
195 DI(1)=0:DI(2)=0:FORTH=1TO21:S(TH)=0:
NEXT
```



```

200 C$="{BLU} {CYN}{RVS ON} {RVS OFF}{B
LU} {RVS ON}{CUR DN}{CUR L}{CUR L}{CUR L
}{CUR L}{CYN} {CUR DN}{CUR L}{CUR L}{
CUR L}{CUR L}{BLU} {CYN} {BLU} {CUR DN}
{CUR L}{CUR L}{CUR L}{CUR L} {LT BLU} {
BLU} {CUR DN}{CUR L}{CUR L}{CUR L}{CUR L
} {LT BLU} {BLU} {CUR DN}{CUR L}{CUR L}
{CUR L}{CUR L}{RVS OFF}" +CHR$(223)
205 C$=C$+"{RVS ON}{LT BLU} {BLU}{RVS O
FF}" +CHR$(169)
210 D$="{RVS ON}{CYN} {CUR DN}{CUR L}{
CUR L}{CUR L} {CUR DN}{CUR L}{CUR L}{
CUR L}{CUR L}{BLU} {CYN} {BLU} {CUR DN}
{CUR L}{CUR L}{CUR L}{CUR L} {LT BLU} {
BLU} {CUR DN}{CUR L}{CUR L}{CUR L}{LT BL
U} {CUR DN}{CUR L}{CUR L} "
220 PRINT"{CLR}{CUR DN}{CUR DN}{CUR DN}{
CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{
CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{
CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{
CUR DN}{CUR DN}"
230 L$="{CUR UP}{CUR UP}{CUR UP}{CUR UP}
{CUR UP}{CUR UP}{CUR UP}{CUR UP}{CUR L}"
240 F$="{CUR UP}{CUR UP}"
250 PRINTC$L$D$F$C$L$D$F$C$L$D$F$C$L$D$F
$C$L$D$F$C$
260 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}"
270 L$="{CUR UP}{CUR UP}{CUR UP}{CUR UP}
{CUR UP}{RVS OFF} "
280 PRINTSPC(6)D$L$D$L$D$L$D$
290 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
"
300 PRINTSPC(9)D$L$D$L$D$
310 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}"
320 PRINTSPC(12)D$L$D$
330 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN}
"SPC(15)D$
340 DI$="{GRN}{RVS ON}" +CHR$(169) + " " +C
HR$(223) + "{CUR DN}{CUR L}{CUR L}{CUR L}{
CUR L}" +CHR$(205) +CHR$(175) +CHR$(175)

```

```

345 DI$=DI$+CHR$(206)+"{CUR DN}{CUR L}{C
UR L}{CUR L}{CUR L}{RVS OFF}"+CHR$(223)+
"{LT GRN}{RVS ON} {RVS OFF}{GRN}"+CHR$(
169)
350 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN} "DI$
360 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}"SPC(28)DI$
1000 REM *****
1010 REM MAIN ROUTINE
1020 REM *****
1030 PRINT"{HOME}{CUR DN}{CUR DN}{RED}LI
VES"LI
1070 V=53248:POKEV+21,15
1080 X=150:Y=120:A=150:B=0:POKEV+39,11:P
OKEV+40,9:Q=175:W=70:TS=1:POKEV+41,2
1085 N=150:M=35:POKEV+42,9:ZC=1:ZV=1
1090 POKEV,X:POKEV+1,Y:POKEV+2,A:POKEV+3
,B:POKEV+4,Q:POKEV+5,W
1091 POKEV+6,N:POKEV+7,M
1096 IFXZ>HSTHENHS=XZ
1098 PRINT"{HOME}{PUR}SCORE"XZ:PRINTSPC(
25)"{CUR UP}{YEL}HIGH"HS
1100 L=PEEK(V+30)AND1
1101 IFDI>0THEN1150
1102 GETA$
1110 IFA$="A"THENY=Y-25:X=X-25:GOSUB9100
1120 IFA$="Z"THENY=Y+25:X=X+25:GOSUB9100
1130 IFA$="K"THENX=X+25:Y=Y-25:GOSUB9100
1140 IFA$="M"THENY=Y+25:X=X-25:GOSUB9100
1150 IFX>255THENX=15:POKEV+16,1
1160 IFX<0ANDPEEK(V+16)=1THENX=250:POKEV
+16,0
1170 IFDI(1)=0ANDX=50ANDY=120ORDI>0THENG
OSUB8500
1171 IFDI(2)=0ANDX=250ANDY=120ORDI>0THEN
GOSUB8500
1172 IFDI(2)=0ANDX=250ANDY=120ORDI>0THEN
GOSUB8500
1173 POKEV,X:POKEV+1,Y:GOSUB7000
1174 IFS>FGTHENXZ=XZ+50:IFXZ>HSTHENHS=XZ
1175 PRINT"{HOME}{PUR}SCORE"XZ:PRINTSPC(

```

```

25) "{CUR UP}{YEL}HIGH"HS
1176 IFS=21THEN8100
1200 IFTS=1THEN1490
1300 REM*****
1310 IFW=170ANDQ<50ORW=170ANDQ>250THENGOSUB8000
1320 IFW=145ANDQ<75ORW=145ANDQ>225THENGOSUB8000
1330 IFW=120ANDQ<100ORW=120ANDQ>200THENGOSUB8000
1340 IFW=95ANDQ<125ORW=95ANDQ>175THENGOSUB8000
1350 IFW=70ANDQ<150ORW=70ANDQ>150THENGOSUB8000
1360 IFW>192THENGOSUB8000
1490 IFFL<>0THEN1550
1491 IFPEEK(V+16)=1THEN4000
1495 IFY>195THEN9600
1500 IFA<=XANDB<=YTHENFL=4:GH=1:GOTO2000
1510 IFA=>XANDB=>YTHENFL=1:GOTO2000
1530 IFA=>XANDB<=YTHENFL=3:GH=1:GOTO2000
1540 IFA<=XANDB=>YTHENFL=2:GH=1:GOTO2000
1550 IFRT<>0THEN1600
1560 IFQ<=XANDB<=WTHENRT=4:QW=1:GOTO2000
1570 IFQ=>XANDW=>YTHENRT=1:QW=1:GOTO2000
1580 IFQ=>XANDW<=YTHENRT=3:QW=1:GOTO2000
1590 IFQ<=XANDW=>YTHENRT=2:QW=1:GOTO2000
1600 IFTR<>0THEN2000
1610 IFN<=XANDM<=YTHENRT=4:NM=1:GOTO2000
1620 IFN=>XANDM=>YTHENRT=1:NM=1:GOTO2000
1630 IFN=>XANDM<=YTHENRT=3:NM=1:GOTO2000
1640 IFN<=XANDM=>YTHENRT=2:NM=1:GOTO2000
2000 IFFL=0ORZV=1ORDI>0THEN3000
2002 IFFL>1THEN2060
2010 IFGH=1THENB=B-15:GH=2:GOSUB9250:GOTO2050
2020 IFGH=2THENA=A-10:B=B-30:GH=3:GOTO2050
2030 IFGH=3THENA=A-10:B=B+10:GH=4:GOTO2050
2040 IFGH=4THENA=A-5:B=B+10:FL=0:G=0:H=0:GH=0:GOSUB9250
2050 POKEV+2,A:POKEV+3,B:GOTO3000

```



```

2060  IF FL > 2 THEN 2150
2070  IF GH = 1 THEN B = B - 15 : GH = 2 : GOSUB 9250 : GOT
02140
2080  IF GH = 2 THEN A = A + 10 : B = B - 30 : GH = 3 : GOT 021
40
2090  IF GH = 3 THEN A = A + 10 : B = B + 10 : GH = 4 : GOT 021
40
2100  IF GH = 4 THEN A = A + 5 : B = B + 10 : FL = 0 : G = 0 : H = 0
: GH = 0 : GOSUB 9250
2140  POKE V + 2, A : POKE V + 3, B : GOT 03000
2150  IF FL > 3 THEN 2220
2160  IF GH = 1 THEN A = A - 10 : B = B - 5 : GH = 2 : GOSUB 92
50 : GOT 02200
2170  IF GH = 2 THEN A = A - 10 : B = B + 5 : GH = 3 : GOT 0220
0
2180  IF GH = 3 THEN A = A - 2 : B = B + 12 : GH = 4 : GOT 0220
0
2190  IF GH = 4 THEN B = B + 13 : A = A - 3 : FL = 0 : GH = 0 : G =
0 : H = 0 : GOSUB 9250
2200  POKE V + 2, A : POKE V + 3, B
2210  GOT 03000
2220  IF FL < > 4 THEN 3000
2221  IF GH = 1 THEN A = A + 10 : B = B - 5 : GH = 2 : GOSUB 92
50 : GOT 02300
2230  IF GH = 2 THEN A = A + 10 : B = B + 5 : GH = 3 : GOT 0230
0
2240  IF GH = 3 THEN A = A + 2 : B = B + 12 : GH = 4 : GOT 0230
0
2250  IF GH = 4 THEN A = A + 3 : B = B + 13 : FL = 0 : G = 0 : H = 0
: GH = 0 : GOSUB 9250
2300  POKE V + 2, A : POKE V + 3, B : GOT 03000
3000  IF RT = 0 OR TS = 1 THEN 3500
3001  IF RT > 1 THEN 3060
3010  IF QW = 1 THEN W = W - 15 : QW = 2 : GOSUB 9250 : GOT
03050
3020  IF QW = 2 THEN Q = Q - 10 : W = W - 30 : QW = 3 : GOT 030
50
3030  IF QW = 3 THEN Q = Q - 10 : W = W + 10 : QW = 4 : GOT 030
50
3040  IF QW = 4 THEN Q = Q - 5 : W = W + 10 : QW = Q : RT = 0 : GO
SUB 9250
3050  POKE V + 4, Q : POKE V + 5, W : GOT 03500
3060  IF RT > 2 THEN 3150
3070  IF QW = 1 THEN W = W - 15 : QW = 2 : GOSUB 9250 : GOT

```

```

03140
3080 IFQW=2THENQ=Q+10:W=W-30:QW=3:GOTO31
40
3090 IFQW=3THENQ=Q+10:W=W+10:QW=4:GOTO31
40
3100 IFQW=4THENQ=Q+5:W=W+10:QW=0:RT=0:GO
SUB9250
3140 POKEV+4,Q:POKEV+5,W:GOTO3500
3150 IFRT>3THEN3220
3160 IFQW=1THENQ=Q-10:W=W-5:QW=2:GOSUB92
50:GOTO3200
3170 IFQW=2THENQ=Q-10:W=W+5:QW=3:GOTO320
0
3180 IFQW=3THENQ=Q-2:W=W+12:QW=4:GOTO320
0
3190 IFQW=4THENW=W+13:Q=Q-3:RT=0:QW=0:GO
SUB9250
3200 POKEV+4,Q:POKEV+5,W
3210 GOTO3500
3220 IFRT<>4THEN3500
3221 IFQW=1THENQ=Q+10:W=W-5:QW=2:GOSUB92
50:GOTO3300
3230 IFQW=2THENQ=Q+10:W=W+5:QW=3:GOTO330
0
3240 IFQW=3THENQ=Q+2:W=W+12:QW=4:GOTO330
0
3250 IFQW=4THENQ=Q+3:W=W+13:RT=0:QW=0:GO
SUB9250
3300 POKEV+4,Q:POKEV+5,W
3500 IFTR=0ORZC=1ORDI>0THEN4000
3501 IFTR>1THEN3560
3510 IFNM=1THENM=M-15:NM=2:GOSUB9250:GOT
03550
3520 IFNM=2THENN=N-10:M=M-30:NM=3:GOTO35
50
3530 IFNM=3THENN=N-10:M=M+10:NM=4:GOTO35
50
3540 IFQW=4THENN=N-5:M=M+10:NM=0:TR=0:GO
SUB9250
3550 POKEV+6,N:POKEV+7,M:GOTO4000
3560 IFTR>2THEN3620
3570 IFNM=1THENM=M-15:NM=2:GOSUB9250:GOT
03610
3580 IFNM=2THENN=N+10:M=M-30:NM=3:GOTO36

```

```

10
3590 IFNM=3THENN=N+10:M=M+10:NM=4:GOTO36
10
3600 IFNM=4THENN=N+5:M=M+10:NM=0:TR=0:GO
SUB9250
3610 POKEV+6,N:POKEV+7,M:GOTO4000
3620 IFTR>3THEN3690
3630 IFNM=1THENN=N-10:M=M-5:NM=2:GOSUB92
50:GOTO3670
3640 IFNM=2THENN=N-10:M=M+5:NM=3:GOTO367
0
3650 IFNM=3THENN=N-2:M=M+12:NM=4:GOTO367
0
3660 IFNM=4THENM=M+13:N=N-3:TR=0:NM=0:GO
SUB9250
3670 POKEV+6,N:POKEV+7,M
3680 GOTO4000
3690 IFTR<>4THEN4000
3700 IFNM=1THENN=N+10:M=M-5:NM=2:GOSUB92
50:GOTO3740
3710 IFNM=2THENN=N+10:M=M+5:NM=3:GOTO374
0
3720 IFNM=3THENN=N+2:M=M+12:NM=4:GOTO374
0
3730 IFNM=4THENN=N+3:M=M+13:TR=0:NM=0:GO
SUB9250
3740 POKEV+6,N:POKEV+7,M
4000 POKEV,X:POKEV+1,Y:IFPEEK(V+16)=1THE
N4040
4030 L=PEEK(V+30)AND1:IFL=1THENGOSUB8300
4040 IFTS=1THENGOSUB8050
4050 IFZV=1THENGOSUB9500
4060 IFZC=1THENGOSUB9540
4090 GOTO1090
5000 REM *****
5010 REM SPRITE DATA
5020 REM *****
5030 DATA0,255,0,1,255,128,3,255,192,7,1
27,224,14,127,240,28,127,248,56,255,252
5040 DATA121,255,254,254,255,255,255,255
,255,255,255,255,255,255,223,255,255
5050 DATA127,255,254,63,255,252,31,255,2
48,15,255,240,7,255,224,3,255,192
5055 DATA1,255,128,0,255,0,0

```



```

5060 DATA31,224,0,31,248,0,25,252,0,31,1
59,0,31,15,0,0,63,0,0,252,0,3,248,0
5070 DATA3,192,0,7,128,0,15,128,0,15,0,0
,14,0,0,14,15,248,14,15,248,14,0,28
5080 DATA15,0,12,7,128,12,3,255,252,1,25
5,248,0,255,240,0
5090 DATA0,0,0,3,248,0,7,252,0,7,255,0,1
4,63,192,28,127,192,56,127,192,120,255,0
5100 DATA121,254,112,127,252,248,127,253
,252,127,253,252,127,252,254,63,254,122
5110 DATA31,255,54,15,255,28,8,112,0,7,1
43,0,7,207,128,3,239,192,1,231,192,0
5120 DATA0,62,0,1,255,128,3,117,128,7,64
,96,7,117,240,3,192,120,3,117,248
5130 DATA1,255,248,0,123,240,0,61,224,0,
59,128,0,126,0,0,252,0,1,240,0,3,192,0
5140 DATA3,0,0,0,0,0,0,0,0,00,0,00,0,0,0
,0,0,0,0
7000 REM *****
7001 POKEV,X:POKEV+1,Y
7002 IFY>195THEN9600
7003 IFDI>0THEN7007
7004 IFY=70ANDX>150THEN9600
7005 IFY=70ANDX<150THEN9600
7006 IFY<70ANDDI<1THEN9600
7007 FG=S
7010 D$="{HOME}{CUR DN}{CUR DN}{CUR DN}{
CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{
CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{
CUR DN}{CUR DN}{CUR DN}{CUR DN}"
7020 A$="{YEL}{RVS ON} {CUR DN}{CUR L}{
CUR L}{CUR L} {CUR DN}{CUR L}{CUR L}{
CUR L} {RVS OFF}"
7030 IFY=70ANDS(1)=0THENPRINTLEFT$(D$,4)
SPC(16)A$:S=S+1:S(1)=1:RETURN
7050 IFY=95THEN7150
7060 IFY=120THEN7180
7070 IFY=145THEN7230
7080 IFY=170THEN7300
7090 IFY=195THEN7400
7100 RETURN
7150 IFX=125ANDS(2)=0THENPRINTLEFT$(D$,7

```

```

) SPC (13) A#: S=S+1: S(2)=1: RETURN
7160 IFX=175ANDS(3)=0 THEN PRINT LEFT$(D$, 7
) SPC (19) A#: S=S+1: S(3)=1: RETURN
7165 IFX<125ORX>175 THEN 9600
7170 RETURN
7180 IFX=100ANDS(4)=0 THEN PRINT LEFT$(D$, 1
0) SPC (10) A#: S=S+1: S(4)=1: RETURN
7190 IFX=150ANDS(5)=0 THEN PRINT LEFT$(D$, 1
0) SPC (16) A#: S=S+1: S(5)=1: RETURN
7200 IFX=200ANDS(6)=0 THEN PRINT LEFT$(D$, 1
0) SPC (22) A#: S=S+1: S(6)=1: RETURN
7215 IFX<100ORX>200 THEN 9600
7220 RETURN
7230 IFX=75ANDS(7)=0 THEN PRINT LEFT$(D$, 13
) SPC (7) A#: S=S+1: S(7)=1: RETURN
7240 IFX=125ANDS(8)=0 THEN PRINT LEFT$(D$, 1
3) SPC (13) A#: S=S+1: S(8)=1: RETURN
7250 IFX=175ANDS(9)=0 THEN PRINT LEFT$(D$, 1
3) SPC (19) A#: S=S+1: S(9)=1: RETURN
7260 IFX=225ANDS(10)=0 THEN PRINT LEFT$(D$,
13) SPC (25) A#: S=S+1: S(10)=1: RETURN
7265 IFX<75ORX>225 THEN GOSUB 9600
7270 RETURN
7300 IFX=50ANDS(11)=0 THEN PRINT LEFT$(D$, 1
6) SPC (4) A#: S=S+1: S(11)=1: RETURN
7310 IFX=100ANDS(12)=0 THEN PRINT LEFT$(D$,
16) SPC (10) A#: S=S+1: S(12)=1: RETURN
7320 IFX=150ANDS(13)=0 THEN PRINT LEFT$(D$,
16) SPC (16) A#: S=S+1: S(13)=1: RETURN
7330 IFX=200ANDS(14)=0 THEN PRINT LEFT$(D$,
16) SPC (22) A#: S=S+1: S(14)=1: RETURN
7340 IFX=250ANDS(15)=0 THEN PRINT LEFT$(D$,
16) SPC (28) A#: S=S+1: S(15)=1: RETURN
7345 IFX<50ORX>250 THEN 9600
7350 RETURN
7400 IFX=25ANDS(16)=0 THEN PRINT LEFT$(D$, 1
9) SPC (1) A#: S=S+1: S(16)=1: RETURN
7410 IFX=75ANDS(17)=0 THEN PRINT LEFT$(D$, 1
9) SPC (7) A#: S=S+1: S(17)=1: RETURN
7420 IFX=125ANDS(18)=0 THEN PRINT LEFT$(D$,
19) SPC (13) A#: S=S+1: S(18)=1: RETURN
7430 IFX=175ANDS(19)=0 THEN PRINT LEFT$(D$,
19) SPC (19) A#: S=S+1: S(19)=1: RETURN
7440 IFX=225ANDS(20)=0 THEN PRINT LEFT$(D$,

```

```

19)SPC(25)A$:S=S+1:S(20)=1:RETURN
7450 IFX=15ANDS(21)=0THENPRINTLEFT$(D$,1
9)SPC(31)A$:S=S+1:S(21)=1:RETURN
7455 IFPEEK(V+16)=0ANDX<25THEN9600
7456 IFPEEK(V+16)=1ANDX>15THEN9600
7460 RETURN
8000 REM *** COILY'S DEATH ***
8001 IFW>190THEN8007
8002 IFQ>150THENQ=Q+20:IFQ>255THENQ=255
8003 IFQ<150THENQ=Q-20:IFQ<5THENQ=5
8004 POKEV+4,Q:POKEV+5,W
8005 IFQ>150THENQ=Q+25:IFQ>255THENQ=255
8006 IFQ<150THENQ=Q-25:IFQ<5THENQ=5
8007 POKEV+4,Q:POKEV+5,W
8010 POKEV+41,14:TS=1
8015 GOSUB9000
8016 TY=W+65:IFTY>255THENTY=200
8017 FORTT=WTOTY:POKEV+5,TT:NEXT:POKEV+4
,0:POKEV+5,0:POKEV+41,2
8020 RT=0:QW=0
8030 Q=175:W=50:POKEV+4,Q:POKEV+5,W
8040 XZ=XZ+1000:RETURN
8050 REM *** COILY'S DECENT ***
8060 W=W+5:POKEV+5,W
8070 IFW=95THENTTS=0
8080 RETURN
8100 REM *** COMPLETE SCREEN ***
8110 POKEV+21,0:PRINT"{CLR}"
8120 SR=SR+1:PRINT:PRINT"{WHT}WELL DONE.
"
8130 PRINT:PRINT"{LT BLU}LIVES"LI:PRINTS
PC(10)"{CUR UP}{OR}SCREENS LEFT"RS-SR
8140 PRINT:PRINT"{RED}{RVS ON} {RVS OFF}
-----{RVS ON} {RVS OFF}"
8150 PRINT" {YEL}BONUS 3000{RED}{RVS ON}
{RVS OFF}"
8160 PRINT"{RVS ON} {RVS OFF}-----{
RVS ON} {RVS OFF}"
8170 XZ=XZ+3000:PRINT:PRINT"{PUR}SCORE"X
Z
8180 IFXZ>HSTHENHS=XZ:PRINT:PRINT"{CYN}Y
OU HAVE THE HIGH SCORE"
8190 PRINT:PRINT"{LT GRN}HIGH"HS
8195 IFSR=RSTHENPRINT:PRINT"{CYN}YOU HAV

```



```

E NO SCREENS LEFT. WELL DONE!!"
8200 PRINT:PRINT "{WHT}HIT ANY KEY"
8210 GETG$:IFG$="" THEN8210
8220 IFSR=RSTHEN8400
8230 GOTO190
8300 REM *** LOSE A LIFE ***
8305 POKEV+21,31:POKEV+23,16:POKEV+29,16
8306 IFX>=246THENQZ=X:X=245
8307 IFX<246THENQZ=X
8310 LI=LI-1:POKEV+43,1:POKEV+8,X+10:POKEV+9,Y-20:GOSUB9200
8320 X=QZ:QZ=0:A=150:B=0:Q=175:W=70:TS=1:N=150:M=35:ZC=1:ZV=1
8330 RT=0:QW=0
8340 PRINT "{HOME}{CUR DN}{CUR DN}{RED}LIVES"LI
8345 FORNX=1TO700:NEXT
8350 IFLI=0THEN8400
8360 POKEV+2,A:POKEV+3,B:POKEV+6,N:POKEV+7,M
8370 POKEV+21,15:POKEV+8,0:POKEV+9,0
8380 RETURN
8400 REM *** END OF GAME ***
8410 POKEV+21,0:PRINT "{CLR}"
8420 PRINT "{WHT}YOU SCORED@"XZ
8430 PRINT:PRINT "{OR}AND THE HIGH SCORE IS"HS
8440 PRINT:PRINT "{PUR}WOULD YOU LIKE ANOTHER GAME ON THE GRID?"
8450 GETG$:IFG$="" THEN8450
8460 IFG$="N"THENPRINT "{CLR}{LT BLU}":POKE53281,6:POKE53280,14:END
8470 IFG$<>"Y"THEN8450
8480 POKEV+16,0:XZ=0:LI=3:GOTO10
8500 REM *** MOVE DISK ***
8501 XZ=XZ+100
8502 IFXZ>HSTHENHS=XZ
8503 PRINT "{HOME}{PUR}SCORE"XZ:PRINTSPC(25)"{CUR UP}{YEL}HIGH"HS
8510 D$="{HOME}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}"
8511 DD$="{CUR DN}{CUR L}{CUR L}{CUR L}{CUR L}{CUR L}{CUR L}{CUR L}{CUR DN}{CUR L}{CU

```

```

R L}{CUR L}{CUR L}{CUR L}      "
8520 IFX=250ORDI>15THEN8700
8525 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}      "DD$
8526 IFDI>0THEN8550
8530 DI=3:DI(1)=1
8540 K=10
8550 X=X+9:Y=Y-10
8560 PRINTLEFT$(D$,K)SPC(DI)DD$
8570 K=K-1:DI=DI+1
8580 PRINTLEFT$(D$,K)SPC(DI)DI$:POKEV,X:
POKEV+1,Y
8590 IFK=1THEN8600
8595 RETURN
8600 PRINTLEFT$(D$,K)SPC(DI)DD$:K=0:DI=0
8610 X=150:Y=70:POKEV,X:POKEV+1,Y
8620 IFDI(1)=0THENPRINT"{HOME}{CUR DN}{C
UR DN}{CUR DN}{CUR DN}{CUR DN}{C
UR DN}{CUR DN}{CUR DN}{CUR DN}      "DI$
8630 IFDI(2)=0THENPRINT"{HOME}{CUR DN}{C
UR DN}{CUR DN}{CUR DN}{CUR DN}{C
UR DN}{CUR DN}{CUR DN}{CUR DN}"SPC(28)DI
$
8640 RETURN
8700 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}"SPC(28)DD$
8705 IFDI>0THEN8730
8710 DI=28:DI(2)=1
8720 K=10
8730 X=X-8:Y=Y-10
8740 PRINTLEFT$(D$,K)SPC(DI)DD$
8750 K=K-1:DI=DI-1
8760 PRINTLEFT$(D$,K)SPC(DI)DI$:POKEV,X:
POKEV+1,Y
8770 IFK=1THEN8600
8780 RETURN
9000 REM ***MUSIC***
9010 REM *** FALLEN OFF GRID ***
9020 POKE54276,0:POKE54296,15:POKE54273,
37:POKE54277,134:POKE54276,129
9040 RETURN

```

```

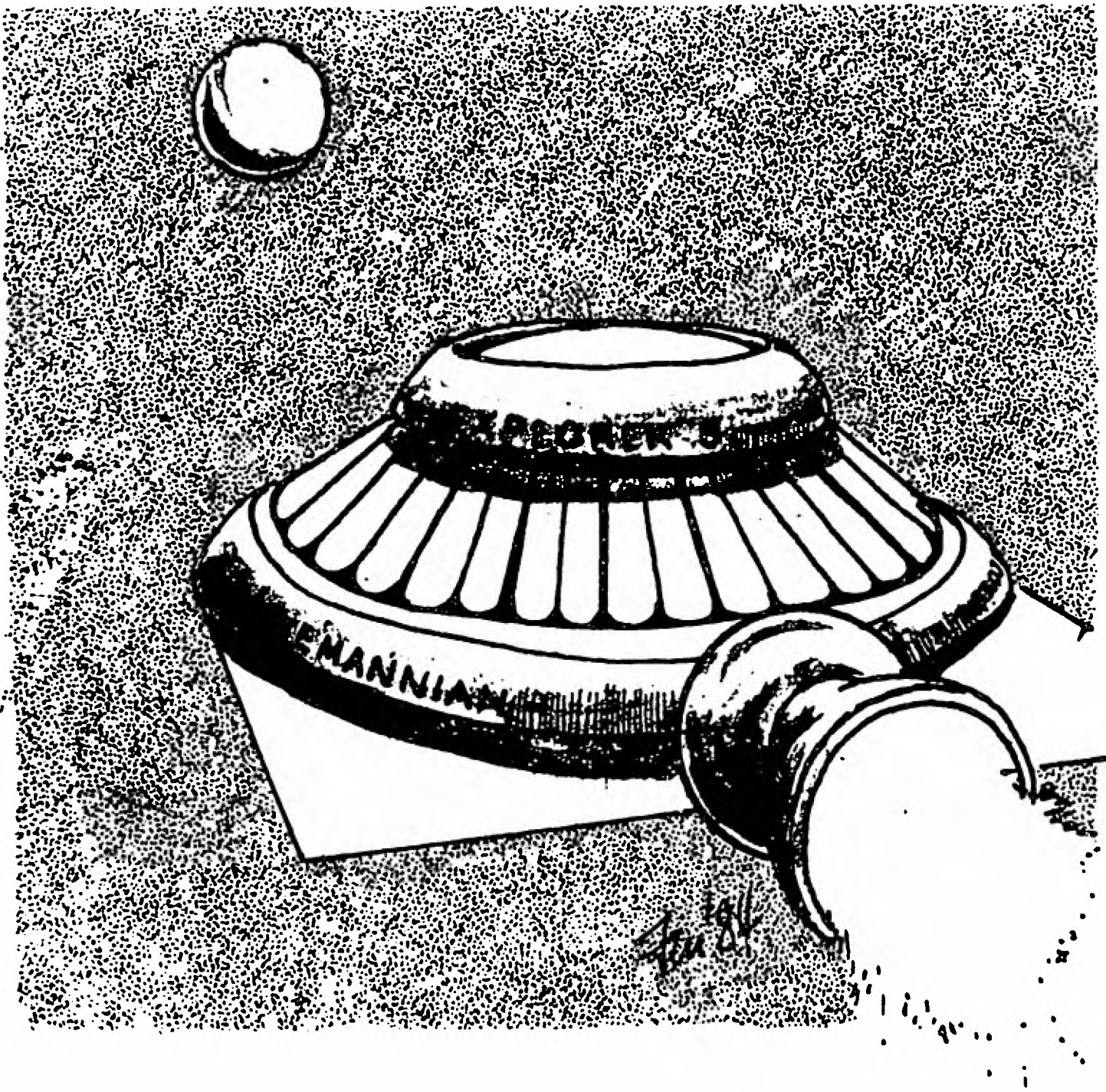
9050 RETURN
9100 REM *** BOUNCE ***
9110 POKE54276,0:POKE54296,15:POKE54273,
7:POKE54277,134:POKE54276,33
9120 RETURN
9200 REM *** CAUGHT ***
9210 FORFG=15TO0STEP-1:POKE54276,0:POKE5
4296,FG:POKE54276,129:POKE54277,15
9220 POKE54273,40:POKE54272,200:NEXT
9230 POKE54276,0:POKE54277,0
9240 RETURN
9250 REM *** BOUNCE BALL ***
9260 POKE54283,0:POKE54296,15:POKE54280,
24:POKE54284,134:POKE54283,33
9270 RETURN
9500 REM *** BALLS DECENT ***
9510 B=B+5:POKEV+3,B
9520 IFB=75THENZV=0:FL=0:GH=0
9530 RETURN
9540 M=M+5:POKEV+7,M
9550 IFM=75THENZC=0
9560 RETURN
9600 REM *** YOU FALL OFF GRID ***
9610 IFX<150THENX=X-25:IFX<20THENX=20
9620 IFX>150THENX=X+25:IFX>255THENX=255
9670 POKEV,X:POKEV+1,Y
9680 GOSUB9000
9700 TY=Y+65:IFTY>255THENTY=200
9710 FORTT=YTOTYSTEP2:POKEV+1,TT:NEXT:PO
KEV,0:POKEV+1,0
9720 GOTO8400

```

READY.

QUEST FOR RIEMANNIAN

Science fiction seems to occupy a niche in the mind of modern man which was in earlier ages filled with tales of witches and werewolves.



Science fiction stories are an underlying myth of our age. This explains, in part, the popularity of computer games based on science fiction backgrounds which are now part of the accumulated information we carry in our heads. Television programs, like Paramount Picture's perennial classic 'STAR TREK', and movies such as STAR

WARS have spawned a huge number of popular games, and novels of writers like Asimov and Heinlein have given game creators flesh to fill out the relatively bare Trekkers' universe. Who would not gladly take on the training to become a Jedi knight?

QUEST FOR RIEMANNIAN steps into the same arena, making assumptions about 'future history' background that will be understood and accepted by anyone who has visited such exotic locations as Niven's RINGWORLD.

At the start of your mission, you tell the computer your name, and enter the name of your ship:

PLEASE ENTER YOUR NAME? TIM

NOW THE NAME OF YOUR SHIP? STAR-SEEKER

Your task is to go boldly where millions of men have gone before, into the busy sectors of Known Space. You start off on Earth (in, of course, the Terran Sector Of The Galaxy) and have to ensure your craft and crew stay together long enough to make it through the galaxy, and back to earth.

It seems that, a long time ago (around 2048, on the Old Calendar) a particularly benovelent alien race landed on earth, and gave us an enormous, all-wise computer to help us out. Being essentially lazy, humankind gave more and more responsibility to the computer, until eventually it was running everything of importance on the planet.

There was one thing the benevolent aliens forgot to mention. As it operated, the computer used up atoms of a rare and precious metal called Riemannian. From time to time, the supply of Riemannian must be replenished. There is little Riemannian in Known Space, and your task is to find some, mine it, and bring it back for the computer.

Your report screen will give you a picture like the following after you've named your ship:

+++++

YOU ARE IN THE TERRA
SECTOR OF THE GALAXY

+++++

FUEL: 84.25 MONEY RESERVES: 80
OXYN: 60.5 RIEMANNIAN: 0
PROV: 72 STARDATE: 1

+++++

+++++

+++++

YOU'RE APPROACHING A TRADING POST PLANET

+++++

IT IS THE PLANET ASIMOV III

+++++

THE INHABITANTS OF ASIMOV III
WISH TO BUY RIEMANNIAN, AND WILL SELL
YOU PROVISIONS, FUEL AND OXYGEN

+++++

As Riemannian is in demand on other planets, you'll find people everywhere are desperate to buy it. If your money reserves run low, you may well have to sell off some of your hard-won metal, just to buy such luxuries as food and oxygen.

You'll discover the game makes very tough demands on your management abilities. Although finding Riemannian and getting it back to earth is the prime purpose of your mission, simply surviving quickly becomes your highest day to day priority.

You can trade with 'trading post planets' if you like:

++++
THE INHABITANTS OF ASIMOV III
WISH TO BUY RIEMANNIAN, AND WILL SELL
YOU PROVISIONS, FUEL AND OXYGEN
++++

ENTER YOUR CHOICE:

- 1 - TO SELL RIEMANNIAN
- 2 - TO BUY PROVISIONS
- 3 - TO BUY FUEL
- 4 - TO BUY OXYGEN
- 5 - TO CONTINUE FLIGHT 1

++++
YOU HAVE NONE TO SELL!
++++

PLEASE ENTER NEW CHOICE

2

++++
YOU HAVE 80 CREDITS
++++

THE TRADERS ARE SELLING PROVISIONS
AT 13 CREDITS PER UNIT

HOW MANY UNITS DO YOU WANT TO BUY? 2
> THE SALE HAS BEEN MADE <

++++
YOU ARE IN THE MIRA
SECTOR OF THE GALAXY
++++

You need to keep your fuel tanks topped up as well:

+++++
YOU ARE APPROACHING REFUELING ORBITING
STATION NUMBER 4

+++++
YOUR CURRENT BANKS HOLD 25

+++++

PRESS 1 TO ATTEMPT LANDING
OR 2 TO CONTINUE FLIGHT
FOLLOW THE CO-ORDINATE LANDING
SEQUENCE FOR A SAFE TOUCHDOWN...

- 1 - PRESS THE '2' KEY
- 2 - PRESS THE '9' KEY
- 3 - PRESS THE '2' KEY
- 4 - PRESS THE '8' KEY
- 5 - PRESS THE '6' KEY
- 6 - PRESS THE '6' KEY
- 7 - PRESS THE '3' KEY
- 8 - PRESS THE '7' KEY
- 9 - PRESS THE '2' KEY
- 10 - PRESS THE '4' KEY

+++++
YOU MANAGED TO COMPLETE THE SEQUENCE..
YOU ARE NOW CLEARED FOR LANDING...

HERE ON STATION 4 THE COST
OF FUEL SUITABLE FOR THE STAR-SEEKER
IS 15 PER UNIT

+++++
YOU HAVE 228 CREDITS

HOW MUCH FUEL DO YOU WANT TO BUY? 10

YOUR TANKS NOW HOLD 35

AND YOU HAVE 78 CREDITS

Of course, not everyone in Known Space is necessarily as peace-loving and friendly as we are on earth:

YOUR NAVIGATION COMPUTER SIGNALS THAT
AN ALIEN CRAFT HAS BEEN SPOTTED
APPROACHING YOUR SHIP...IT HAS NOT YET
BEEN ABLE TO IDENTIFY IT. IS IT FRIEND
OR FOE?

++++
COMPUTER IDENTIFIES SHIP ORIGINATES IN
THE KEOIMUMI SYSTEM

ALLIANCE NOT YET DETERMINED...
>>> STAND BY <<<

++++
THE ALLIANCE OF THE KEOIMUMI IS

WITH OUR EMPIRE...ALLOW THEM TO BOARD

++++
THE KEOIMUMINS OFFER YOU EITHER

1 - FUEL
OR 2 - OXYGEN

WHICH ONE DO YOU WANT?

++++
> FUEL IT IS <

You were lucky that time!

It is important not to forget, in the hurly-burly of day to day survival out there in space, that you're leading this mission primarily to get hold of the elusive Riemannian:

++++
YOU ARE IN THE CITA
SECTOR OF THE GALAXY

++++
FUEL: 93 MONEY RESERVES: 54
OXYN: 50 RIEMANNIAN: 0
PROV: 67 STARDATE: 4

++++
++++
YOU LAND THE STAR-SEEKER ON
THE MINING ASTEROID DRACONIS II

YOUR ORE DETECTING COMPUTER GENERATES
TWO NUMBERS, LESS THAN 10. IF YOU CAN
CORRECTLY PREDICT A FACT ABOUT THE
THIRD CO-ORDINATE, YOU'LL BE ABLE TO
MINE FOR THE PRECIOUS RIEMANNIAN

++++
FIRST TWO CO-ORDINATES ARE 5 AND 9

ENTER 3RD CO-ORDINATE PREDICTION:
A - IS BETWEEN 5 AND 9
B - IS EQUAL TO 5 OR 9
C - IS GREATER THAN 9
? A

THIRD CO-ORDINATE IS 3

COMPUTER REPORTS YOU ARE UNABLE TO
MINE FOR RIEMANNIAN ON DRACONIS II

Failing as a miner is not the only humiliation which awaits you:

THE STAR-SEEKER IS UNDER ATTACK FROM A
FLEET OF HERTZSPRUNG SHIPS
TO DEFEAT THE DREADED HERTZSPRUNG
YOU HAVE TO CONFUSE THEIR CONTROL
COMPUTER BY SENDING A CODE SIGNAL
WHICH THE COMPUTER WILL INTERPRET AS
MEANING YOU ARE ALSO A HERTZSPRUNG
SHIP.....STAND BY TO SEE THE CODE.....
ONCE IT VANISHES FROM YOUR SCREEN, YOU
MUST SEND IT BACK TO THE HERTZSPRUNGS

STAND BY...
THE CODE IS > 694202

SEND THAT CODE BACK TO CONFUSE THEM
? 649202

OH NO...YOU WERE WRONG!
YOU SIGNALLED 649202 AND
THE CODE WAS 694202

THE HERTZSPRUNGS ATTACK...

THEIR FIRE HAS HIT OUR SHIELDS

DRAINING ENERGY FROM OUR RESERVES

+++++

Eventually, though, if you manage to make at least a few correct decisions, you'll see our fair planet appear on your holographic display. However, if you run out of such things as oxygen, fuel or provisions the game will end, giving you a report on your competence:

+++++
YOU ARE NOW IN PLEIDES
ON YOUR WAY HOME
+++++
FUEL: 25.5 MONEY RESERVES: 22
OXYN: 0 RIEMANNIAN: 12.25
PROV: 32 STARDATE: 18
+++++
ALL OXYGEN TANKS EXHAUSTED

NOW WE WILL SEE HOW WELL YOU DID ON
THAT TRIP!
YOU MANAGED TO MINE 12.25 TONS
OF RIEMANNIAN

YOUR RATING, CAPTAIN TIM,
FOR THIS RUN IN THE STAR-SEEKER IS:

- RATING AFTER FACTOR 1 IS 0
- RATING AFTER FACTOR 2 IS 76
- RATING AFTER FACTOR 3 IS 208
- RATING AFTER FACTOR 4 IS 881
- RATING AFTER FACTOR 5 IS 881
- RATING AFTER FACTOR 6 IS 1882

+++++
YOUR FINAL RATING IS 1945
+++++

The game is reasonably complicated, but you'll find you'll be able to play it without too much trouble because the computer only presents you with one major problem at a time, and (so long as you keep an eye on your oxygen and other vital supplies) you will only have to deal with that single problem before being brought face to face with another one.

Because certain regions of Known Space have not been accurately mapped, I've taken on the responsibility of naming many sectors, planets and alien races. Most of the names used in this simulation come from real people who are, or have been, connected with research into space.

For example, the metal Riemannian is named after the mathematician Bernhard Riemann, who has devised a geometry which deals with the complexities of space which can not be described in the standard, three-dimensional Euclidean manner. This geometry, called Riemannian Geometry, is fiendishly complex, but quite happily describes such things as the Klein bottle (which has only one surface, with the outside and the inside being the same!) and the effects of gravitation as one body approaches another.

One of our alien races is called the Herzsprung, named after the Swedish astronomer Ejnar Hertzsprung who with American astronomer Henry Norris Russell discovered in 1914 a way to determine the distance of stars from earth by examining their brightness, and spectral class. Another race, the Lallemand, is named after French astronomer Andre Lallemand who worked out the theory which made it possible to take electron photographs (rather than light photographs) of dim, distant stars, using a device called the electronographic camera.

The space sectors names follow earth names for stars and constellations, although I've moved them around a bit. The trading post planets represent a glittering group of individuals:

ASIMOV III - Named, of course, after the good doctor himself

GALILEO IV - I'm sure you know who he is

BARNARD'S REST - Presumably, this planet orbits Barnard's star, the closest star to earth (1.8 parsecs, or 5.9 light years away) discovered in 1916 by American astronomer Edward Emerson Barnard. The dim red star is considered likely to have a planetary system

PRAESEPE - A group of stars, in the constellation of Cancer

I'll leave it up to you to find out how the other trading post planets were named.

```
10 REM QUEST FOR RIEMANNIAN
20 GOSUB 5390: REM INITIALISE
30 OX=OX-3.5: IFOX<1 THEN OX=0
40 FU=FU-4.75: IFFU<1 THEN FU=0
50 PR=PR-2.45: IFPR<1 THEN PR=0
60 TE=TE+1
70 PL=PL+1
80 GOSUB 290: REM PRINTOUT
90 IFOX<1 AND OX>0 THEN PRINT "{LT RED}**{WHT}
OXYGEN LEVEL NEEDS ATTENTION{LT RED}
**"
100 IFOX=0 THEN PRINT "{WHT}ALL OXYGEN TANK
S EXHAUSTED": GOTO 430
110 IF PL=24 THEN PRINT "{WHT}YOU HAVE ARRIV
ED SAFELY BACK ON EARTH": GOTO 430
120 IF PR<1 AND PR>0 THEN PRINT "{LT RED}@@ {
WHT}SUPPLIES MUST BE SUPPLEMENTED{LT RED
} @@"
130 IF PR=0 THEN PRINT "{WHT}YOU HAVE RUN OU
T OF PROVISIONS": GOTO 430
140 IFFU<1 AND FU>0 THEN PRINT "{WHT}>> WARN
ING - FUEL IS LOW <<"
150 IFFU=0 THEN PRINT "{WHT}YOUR FUEL HAS B
EEN EXHAUSTED": GOTO 430
160 PRINT "{CYN}+++++
+++++"
170 IFRND(1)>.5 THEN 230
180 IFRND(1)>.82 THEN GOSUB 700: REM HOSTILE
ALIENS
190 IFRND(1)>.6 THEN GOSUB 1350: REM RIEMANN
IAN RESERVES
```



```

200 IFRND(1)>.7THENGOSUB1980:REM REFUEL
STATION
210 IFRND(1)>.6THENGOSUB2520:REM FRIENDL
Y ALIENS
220 IFRND(1)>.97THENGOSUB2990:REM BLACK
HOLE
230 IFRND(1)>.6THENGOSUB3320: REM TRADIN
G POST
240 IFRND(1)>.9THENGOSUB4270:REM MEETING
WITH LEGENDARY 'SPACE ARK'
250 IFRND(1)>.851THENGOSUB4850:REM SPACE
ATTACK
260 GOSUB5720
270 GOTO30
280 REM *****
290 REM PRINT OUT
300 PRINT"{CLR}"
310 L$=""
320 PRINT
330 PRINT"{CYN}+++++
+++++"
340 IFPL<13THENPRINT"{YEL}YOU ARE IN THE
";A$(PL):PRINTTAB(5);"SECTOR OF THE GAL
AXY"
350 IFPL>12THENPRINT"{YEL}YOU ARE NOW IN
";A$(25-PL):PRINT"ON YOUR WAY HOME"
360 PRINT"{CYN}+++++
+++++"
370 PRINT"{OR}FUEL:{WHT}"FU,"{OR}MONEY R
ESERVES:{WHT}"WE
380 PRINT"{OR}OXYN:{WHT}"OX,"{OR}RIEMANN
IAN:{WHT}"RI
390 PRINT"{OR}PROV:{WHT}"INT(PR),"{OR}ST
ARDATE:{WHT}"TE
400 PRINT"{CYN}+++++
+++++"
410 RETURN
420 REM *****
430 REM END OF QUEST
440 IFPL=24THENPRINT"{YEL}WELL DONE!!"
450 PRINT:PRINT"{GRN}NOW WE WILL SEE HOW
WELL YOU DID ON"
460 PRINT"THAT TRIP!{PUR}"

```

```

470 PRINT"YOU MANAGED TO MINE"RI"TONS":P
RINTTAB(7);"OF RIEMANNIAN"
480 IFRI=0THENPRINT"YOU FAILED IN YOUR P
RIME OBJECTIVE"
485 IFRI=0THENPRINT"WHICH WAS TO MINE RI
EMANNIAN"
490 GOSUB5720
500 PRINT"{YEL}YOUR RATING, CAPTAIN ";N$
;","
510 PRINT"FOR THIS RUN IN THE ";S$;" IS:
"
520 PRINT
530 X=0:PQ=0
540 GOSUB660
550 PQ=PQ+3*FU:GOSUB660
560 PQ=PQ+4*PR:GOSUB660
570 PQ=PQ+55*RI:GOSUB660
580 PQ=PQ+12*OX:GOSUB660
590 PQ=PQ+45.5*WE:GOSUB660
600 PQ=PQ-2*HA+4*RS+5*FA-2*SA+3.4*TP
610 PRINT:PRINT
620 PRINT"{CYN}+++++
+++++"
630 PRINT"{YEL}YOUR FINAL RATING IS"INT(
PQ)
640 PRINT"{CYN}+++++
+++++"
650 END
660 X=X+1:PRINT"{WHT}RATING AFTER FACTOR
"X"IS"INT(PQ)
670 GOSUB5720
680 RETURN
690 REM *****
700 REM HOSTILE ALIENS
710 HA=HA+1:IFHA>2THENRETURN
720 R$="SAURONIAN"
730 Y=INT(RND(1)*8)
740 IFY=1THENR$="HARADRIM"
750 IFY=2THENR$="NEBULIAN"
760 IFY=3THENR$="SPROUL"
770 IFY=4THENR$="ARECIBO"
780 IFY=5THENR$="HERTZSPRUNG"
790 IFY=6THENR$="LALLEMAND"
800 IFY=7THENR$="COUNTERMIXIAN"

```

```

810 PRINT "{GRN}THE ";S$;" IS UNDER ATTAC
K FROM A"
820 PRINT "FLEET OF ";R$;" SHIPS"
830 GOSUB5720
840 CO=INT((RND(1)*10000)*100+(RND(1)*10
0))
850 PRINT:PRINT "{PUR}TO DEFEAT THE DREAD
ED ";R$
860 PRINT "YOU HAVE TO CONFUSE THEIR CONT
ROL"
870 PRINT "COMPUTER BY SENDING A CODE SIG
NAL"
880 PRINT "WHICH THE COMPUTER WILL INTERP
RET AS"
890 PRINT "MEANING YOU ARE ALSO A ";R$
900 PRINT "SHIP.....STAND BY TO SEE THE C
ODE....."
910 PRINT "ONCE IT VANISHES FROM YOUR SCR
EEN, YOU"
920 PRINT "MUST SEND IT BACK TO THE ";R$;
"S"
930 PRINT:PRINT "STAND BY...."
940 FORT=1TO1400+RND(1)*400
950 NEXT T
960 PRINT "THE CODE IS>"CO
970 FORT=1TO500:NEXT T
980 PRINT "{CLR}"
990 GETA$: IFA$<>" " THEN990
1000 PRINT:PRINT
1010 PRINT "SEND THAT CODE BACK TO CONFUS
E THEM"
1020 INPUTQ
1030 GOSUB5720
1040 PRINT:PRINT
1050 IFQ=CO THEN1230
1060 PRINT "OH NO...YOU WERE WRONG!"
1070 PRINT "YOU SIGNALLED"Q" AND"
1080 PRINT "THE CODE WAS"CO
1090 GOSUB5720
1100 PRINT:PRINT
1110 PRINT "THE ";R$;"S ATTACK..."
1120 GOSUB5720
1130 IFRND(1)>.5 THENPRINT "THEY HAVE RUPT
URED AN OXYGEN TANK!":OX=INT(3*OX/4):GOT

```

```

1140 Q=INT(RND(1)*3)
1150 IFQ=0THENY$="SHIELDS"
1160 IFQ=1THENY$="HULL"
1170 IFQ=2THENY$="ENGINES"
1180 PRINT"THEIR FIRE HAS HIT OUR ";Y$
1190 PRINT:PRINT"DRAINING ENERGY FROM OUR RESERVES"
1200 FU=INT(3*FU/4)
1210 GOSUB5720
1220 RETURN
1230 PRINT:PRINT"{WHT}YOU HAVE BEEN SUCCESSFUL..."
1240 PRINTTAB(8);"IN REPELLING THEIR ATTACK"
1250 PRINT:PRINT"THE ";R$;" ARE LEAVING THE"
1260 PRINT"SPACE SECTOR AROUND THE ";S$
1270 GOSUB5720
1280 PRINT"CONGRADULATIONS, CAPTAIN ";N$
1290 GOSUB5720
1300 PRINTTAB(8);"CONTINUING WITH FLIGHT"
1310 GOSUB5720
1320 RETURN
1330 RETURN
1340 REM *****
1350 REM RIEMANNIAN RESERVES
1360 Q=INT(RND(1)*5)
1370 IFQ=0THENY$="TAU III"
1380 IFQ=1THENY$="ERIDANI IV"
1390 IFQ=2THENY$="DRACONIS II"
1400 IFQ=3THENY$="HERMU II"
1410 IFQ=4THENY$="HYDRI VIX"
1420 PRINT"YOU LAND THE ";S$;" ON"
1430 PRINT"THE MINING ASTEROID ";Y$
1440 GOSUB5720
1450 PRINT:PRINT
1460 PRINT"{OR}YOUR ORE DETECTING COMPUTER GENERATES"
1470 PRINT"TWO NUMBERS, LESS THAN 10. IF YOU CAN"
1480 PRINT"CORRECTLY PREDICT A FACT ABOUT THE"

```

```

1490 PRINT"THIRD CO-ORDINATE, YOU'LL BE
ABLE TO"
1500 PRINT"MINE FOR THE PRECIOUS RIEMANN
IAN"
1510 GOSUB5720
1520 PRINT"{CYN}+++++
+++++"
1530 Q1=INT(RND(1)*9)+1
1540 Q2=INT(RND(1)*9)+1
1550 IFQ2<=Q1THEN1530
1560 Q3=INT(RND(1)*9)+1
1570 PRINT"FIRST TWO CO-ORDINATES ARE"Q1
"AND"Q2
1580 GOSUB5720
1590 PRINT:PRINT"{WHT}ENTER 3RD CO-ORDIN
ATE PREDICTION:"
1600 PRINTTAB(3);"A @ IS BETWEEN"Q1"AND"
Q2
1610 PRINTTAB(3);"B @ IS EQUAL TO"Q1"OR"
Q2
1620 PRINTTAB(3);"C @ IS GREATER THEN"Q2
1630 INPUTT$
1640 IFT$<"A"ORT$>"C"THEN1630
1650 PRINTTAB(6);"THIRD CO-ORDINATE IS"Q
3
1660 IFT$="A"ANDQ3>Q1ANDQ3<Q2THEN1740
1670 IFT$="B"AND(Q3=Q1ORQ3=Q2)THEN1740
1680 IFT$="C"ANDQ3>Q2THEN1740
1690 GOSUB5720
1700 PRINT:PRINT"COMPUTER REPORTS YOU AR
E UNABLE TO"
1710 PRINT"MINE FOR RIEMANNIAN ON ";Y$
1720 GOSUB5720
1730 RETURN
1740 PRINT:PRINT"COMPUTER REPORTS YOU AR
E NOW ABLE"
1750 PRINT"TO MINE FOR RIEMANNIAN ON ";Y
$
1760 GOSUB5720
1770 PRINT"THE SPEED WITH WHICH YOU HIT
THE"
1780 PRINT"INDICATED LETTER WILL DETERMI
NE HOW"
1790 PRINT"MUCH RIEMANNIAN YOU CAN MINE"

```

```

1800 FORT=1T0400+RND(1)*400
1810 NEXT T
1820 M=INT(RND(1)*26)+65:M$=CHR$(M)
1830 GETA$:IFA$<>" "THEN1830
1840 PRINT:PRINT
1850 TX=0
1860 PRINTTAB(8);"{LT GRN}HIT THE ' ";M$;
"' KEY"
1870 TX=TX+1
1880 GETP$
1890 IFP$<>M$THEN1870
1900 TX=(400-TX)/20:IFTX<1THENTX=.25
1910 PRINT:PRINT"YOU HAVE MINED"TX"TONS"
1920 GOSUB5720
1930 PRINT:PRINT"NOW WE'LL RETURN TO OUR
FLIGHT..."
1940 RI=RI+TX
1950 GOSUB5720
1960 RETURN
1970 REM *****
1980 REM REFUEL STATION
1990 RS=RS+1
2000 PRINT"{CYN}+++++
+++++"
2010 PRINT"{YEL}YOU ARE APPROACHING REFU
ELING ORBITING"
2020 PRINTTAB(11);"STATION NUMBER"RS
2030 PRINT"{CYN}+++++
+++++"
2040 PRINT"{OR}YOUR CURRENT BANKS HOLD{W
HT}"FU
2050 GETA$:IFA$<>" "THEN2050
2060 PRINT"{CYN}+++++
+++++"
2070 GOSUB5720
2080 PRINT"{PUR}PRESS 1 TO ATTEMPT LANDI
NG"
2090 PRINT" OR 2 TO CONTINUE FLIGHT"
2100 GETT$
2110 IFT$<>"1"ANDT$<>"2"THEN2100
2120 IFT$="2"THENRETURN
2130 PRINT"FOLLOW THE CO-ORDINATE LANDIN
G"

```



```

2140 PRINT"SEQUENCE FOR A SAFE TOUCHDOWN
... "
2150 GOSUB5720
2160 J=1
2170 GETA$: IFA$<>" " THEN2170
2180 K$=STR$(INT(RND(1)*9)+1)
2190 K$=RIGHT$(K$,1)
2200 TR=0
2210 PRINTJ"- PRESS ' ";K$; "' KEY"
2220 PRINT
2230 GETT$
2240 TR=TR+1
2250 REM
2260 IFTR>110THENPRINT"YOU TOOK TOO LONG
!":GOSUB5720:RETURN
2270 IFT$="" THEN2230
2280 IFT$<>K$THENPRINTT$;" IS WRONG":GOS
UB5720:RETURN
2290 IFJ<10THENJ=J+1:GOTO2180
2300 PRINT"{CYN}++++++++++++++++
++++++++++++++++"
2310 PRINT"{YEL}YOU MANAGED TO COMPLETE
THE SEQUENCE.."
2320 PRINT"YOU ARE NOW CLEARED FOR LANDI
NG..."
2330 GOSUB5720
2340 CO=13+INT(RND(1)*8)
2350 PRINT"HERE ON STATION"RS"THE COST"
2360 PRINT"OF FUEL SUITABLE FOR THE ";S$
2370 PRINTTAB(9);" IS"CO"PER UNIT"
2380 PRINT"{CYN}++++++++++++++++
++++++++++++++++"
2390 PRINT"{PUR}YOU HAVE"WE"CREDITS"
2400 IFWE<CO THENPRINT"SO YOU CAN'T EVEN
AFFORD ONE UNIT":GOSUB5720:RETURN
2410 PRINT:PRINT"HOW MUCH FUEL DO YOU WA
NT TO BUY"
2420 INPUTNE
2430 IFNE*CO>WETHENPRINT"YOU DON'T HAVE
SUFFICIENT CREDITS":GOTO2410
2440 FU=FU+NE
2450 WE=WE-CO*NE
2460 GOSUB5720
2470 PRINT:PRINT"YOUR TANKS NOW HOLD"FU

```

```

2480 PRINT:PRINT"AND YOU HAVE"WE"CREDITS
2490 GOSUB5720
2500 RETURN
2510 REM *****
2520 REM FRIENDLY ALIENS
2530 FA=FA+1:IFFA>3THENRETURN
2540 PRINT"{CYN}+++++
+++++"
2550 M=INT(RND(1)*7)
2560 IFM=0THENY$="HE'IDANI"
2570 IFM=1THENY$="BETA LEPOIIS"
2580 IFM=2THENY$="GAMRA GARMA"
2590 IFM=3THENY$="KEOIMUMI"
2600 IFM=4THENY$="DRACONMH"
2610 IFM=5THENY$="TUU EPSONI"
2620 IFM=6THENY$="YYDRONICA"
2630 PRINT"{LT GRN}YOUR NAVIGATION COMPU
TER SIGNALS THAT"
2640 PRINT"AN ALIEN CRAFT HAS BEEN SPOTT
ED"
2650 PRINT"APPROACHING YOUR SHIP...IT HA
S NOT YET"
2660 PRINT"BEEN ABLE TO IDENTIFY IT. IS
IT FRIEND"
2670 PRINTTAB(13);"OR FOE?"
2680 GOSUB5720
2690 PRINT"{CYN}+++++
+++++"
2700 PRINT"{GRN}COMPUTER IDENTIFIES SHIP
ORINATES IN"
2710 PRINTTAB(5);"THE ";Y$;" SYSTEM"
2720 GOSUB5720
2730 PRINT"ALLIANCE NOT YET DETERMINED..
."
2740 PRINTTAB(8);"{WHT}>>> STAND BY <<<"
2750 GOSUB5720
2760 PRINT"{CYN}+++++
+++++"
2770 PRINT"{YEL}THE ALLIANCE OF THE ";Y$
;" IS"
2780 GOSUB5720
2790 IFRND(1)>.4THEN2950

```

```

2800 PRINT"WITH OUR EMPIRE...ALLOW THEM
  TO BOARD"
2810 GOSUB5720
2820 PRINT"{CYN}+++++
+++++"
2830 PRINT"{LT RED}THE ";Y$;"NS OFFER YO
U EITHER"
2840 PRINTTAB(9);"1 - FUEL"
2850 PRINTTAB(6);"OR 2 - OXYGEN"
2860 GETA$:IFA$<>" THEN2860
2870 PRINTTAB(6);"{OR}##{WHT} WHICH ONE
DO YOU WANT?{OR} ##{LT BLU}"
2880 GETT$
2890 IFT$<>"1"ANDT$<>"2"THEN2880
2900 PRINT"{CYN}+++++
+++++"
2910 IFT$="1"THENPRINTTAB(12);"> FUEL IT
  IS! <":FU=FU+INT(RND(1)*20)+19
2920 IFT$="2"THENPRINTTAB(12);"> OXYGEN
  IT IS! <":OX=OX+INT(RND(1)*30)+2
2930 GOSUB5720
2940 RETURN
2950 PRINT"AGAINST THE EMPIRE...FLEE!!"
2960 L$=Y$
2970 GOTO5220
2980 REM *****
2990 REM BLACK HOLE
3000 FORJ=1TO12
3010 PRINTTAB(J);"> DANGER!! <"
3020 FORT=1TO200:NEXT T
3030 PRINTTAB(13-J);"> DANGER!! <"
3040 FORT=1TO200:NEXT T
3050 NEXT J
3060 GOSUB5720
3070 PRINT"{CLR}"
3080 GOSUB5720
3090 PRINT:PRINT
3100 PRINT"{WHT}THE ";S$;" IS BEING SUCK
ED"
3110 PRINTTAB(9);"INTO A BLACK HOLE!"
3120 GOSUB5720
3130 PRINT"{CLR}"
3140 GOSUB5720
3150 FORK=1TO7

```

```

3160 FORJ=1TO10
3170 PRINTTAB(J+2*K); "{OR}DRAGGING US IN
... "
3180 NEXT J
3190 NEXTK
3200 PRINT "{CLR}"
3210 GOSUB5720
3220 FORJ=1TO5
3230 FORK=1TO5
3240 PRINTTAB(J); "ALL COMMUNICATIONS HAV
E STOPPED!"
3250 NEXTK
3260 NEXTJ
3270 GOSUB5720
3280 PRINT "{CLR}"
3290 GOSUB5720
3300 END
3310 REM *****
3320 REM TRADING POST
3330 TP=TP+1
3340 IFTP>15THENTP=15
3350 PRINT "{CYN}+++++
+++++"
3360 PRINT "{YEL}YOU'RE APPROACHING A TRA
DING POST PLANET"
3370 PRINT "{CYN}+++++
+++++"
3380 GOSUB5720
3390 PRINT "{GRN}IT IS THE PLANET ";X$(TP
);
3400 IFTP=15THENPRINTRND(1)*6+1
3405 IFTP<>15THENPRINT
3410 PRINT "{CYN}+++++
+++++"
3420 PRINT "{LT GRN}THE INHABITANTS OF ";
X$(TP)
3430 PRINT"WISH TO BUY RIEMANNIAN, AND W
ILL SELL"
3440 PRINT"YOU PROVISIONS, FUEL AND OXYG
EN"
3450 PRINT "{CYN}+++++
+++++"
3460 GOSUB5720

```

```

3470 GETA$: IFA$<>" " THEN 3470
3480 PRINT "{WHT} ENTER YOUR CHOICE: ": PRINT
3490 PRINTTAB(5); "{OR} 1 @ TO SELL RIEMAN
NIAN"
3500 PRINTTAB(5); "2 @ TO BUY PROVISIONS"
3510 PRINTTAB(5); "3 @ TO BUY FUEL"
3520 PRINTTAB(5); "4 @ TO BUY OXYGEN"
3530 PRINTTAB(5); "5 @ TO CONTINUE FLIGHT
"
3540 GETT$
3550 IFT$<" 1" OR T$>" 5" THEN 3540
3560 IFT$<>" 1" THEN PRINT "{CLR}"
3570 IFT$=" 5" THEN RETURN
3580 PRINT "{CYN}+++++
+++++"
3590 IFT$=" 2" THEN 3810
3600 IFT$=" 3" THEN 3960
3610 IFT$=" 4" THEN 4110
3620 IFT$=" 1" THEN 3640
3630 GOTO 3540
3640 IF RI<1 THEN PRINT "{WHT} YOU HAVE NONE
TO SELL!!": GOSUB 5720
3645 IF RI<1 THEN PRINTTAB(5); "PLEASE ENTER
NEW CHOICE": GOTO 3540
3650 PRINT: PRINT "{PUR} YOU HAVE "RI" RIEMAN
NIAN"
3660 PRINT "{LT GRN} HOW MANY TON DO YOU W
ANT TO SELL"
3670 INPUT SE
3680 IF SE>R THEN 3670
3690 PR=50+INT(RND(1)*50)
3700 PRINT "{OR} THE TRADER OFFERS "PR" PER
TON"
3710 PRINT "{WHT} DO YOU ACCEPT THIS (Y OR
N)"
3720 INPUT U$: IF U$<>"Y" AND U$<>"N" THEN 3720
3730 IF U$="Y" THEN 3760
3740 IF U$="N" AND RND(1)>.7 THEN PR=PR+INT(R
ND(1)*6)+3: PRINT "THEY NOW OFFER "PR: GOTO 3
710
3750 PRINT "THEY DON'T WANT TO HAGGLE": GO
SUB 5720: RETURN
3760 PRINT "IT'S A DEAL!"

```

```

3770 GOSUB5720
3780 WE=WE+SE*PR
3790 RI=RI-SE
3800 RETURN
3810 REM ** BUY PROVISIONS **
3820 PRINT "{OR}YOU HAVE"WE"CREDITS"
3830 Y=INT(RND(1)*9)+6
3840 PRINT:PRINT "{YEL}THE TRADERS ARE SE
LLING PROVISIONS"
3850 PRINT "AT"Y"CREDITS PER UNIT"
3860 IFY>WETHENPRINT "SO YOU CANNOT AFFOR
D A SINGLE UNIT":GOTO3460
3870 PRINT:PRINT "HOW AMNY UNITS DO YOU W
ANT TO BUY"
3880 INPUTAM
3890 IFAM=0THEN3460
3900 IFAM*Y>WETHENPRINT "YOU CANNOT AFFOR
D"AM:GOSUB5720:GOTO3880
3910 PRINTTAB(5);"> THE SALE HAS BEEN MA
DE <"
3920 GOSUB5720
3930 WE=WE-Y*AM
3940 PR=PR+AM
3950 RETURN
3960 REM ** BUY FUEL **
3970 PRINT "{WHT}YOU HAVE"WE"CREDITS"
3980 Y=INT(RND(1)*8)+16
3990 PRINT:PRINT "{YEL}THE TRADERS ARE SE
LLING FUEL"
4000 PRINT "AT"Y"CREDITS PER UNIT"
4010 IFY>WETHENPRINT "SO THE PRICE IS TOO
HIGH FOR YOU":GOTO3460
4020 PRINT:PRINT "{LT RED}HOW MANY UNITS
DO YOU WANT TO BUY"
4030 INPUTAM
4040 IFAM=0THEN3460
4050 IFAM*Y>WETHENPRINT "{WHT}YOU CANNOT
AFFORD"AM:GOSUB5720:GOTO4030
4060 PRINTTAB(5);"> THE FUEL IS NOW YOUR
S <"
4070 GOSUB5720
4080 WE=WE-Y*AM
4090 FU=FU+AM
4100 RETURN

```



```

4110 REM ** BUY OXYGEN **
4120 PRINT "{WHT}YOU HAVE "WE"CREDITS"
4130 Y=INT(RND(1)*6)+25
4140 PRINT:PRINT "{YEL}THE TRADERS ARE SE
LLING OXYGEN"
4150 PRINT "AT"Y"CREDITS PER TANK"
4160 IF Y>WETHENPRINT "SO YOU CANNOT BUY R
IGHT NOW"L:GOTO3460
4170 PRINT:PRINT "{OR}HOW MANY TANKS DO Y
OU WANT TO BUY"
4180 INPUTAM
4190 IFAM=0THEN3460
4200 IFAM*Y>WETHENPRINT "{WHT}YOU CANNOT
AFFORD"AM:GOSUB5720:GOTO4180
4210 PRINTTAB(3)"> OXYGEN IS NOW IN YOUR
EXO-WEBS <"
4220 GOSUB5720
4230 WE=WE-Y*AM
4240 OX=OX+AM
4250 RETURN
4260 REM *****
4270 REM MEETING WITH 'SPACE ARK'
4280 SA=SA+1:IFSA>1THENRETURN
4290 FORJ=1TO3
4300 PRINTTAB(J*3); "STAND...":GOSUB5720:
PRINTTAB(J*3+5); "...BY"
4310 GOSUB5720
4320 NEXTJ
4330 PRINT:PRINT
4340 PRINT "{LT GRN}IT SEEMS IMPOSSIBLE T
O BELIEVE BUT YOUR"
4350 PRINT "CENTRAL COMPUTER SAYS THAT AN
OBJECT"
4360 PRINT "RESEMBLING THE LEGENDARY 'SPA
CE ARK' OF"
4370 PRINT "LONG, LONG AGO, IN A GALAXY F
AR AWAY"
4380 PRINT "{CYN}+++++
+++++"
4390 PRINT "{YEL}COMPUTER TO CAPTAIN ";N$
4400 GOSUB5720
4410 PRINTTAB(8); "CHECKING IDENTIFICATI
ON..."

```

```

4420 PRINT "{CYN}+++++
+++++"
4430 GOSUB5720
4440 PRINT "{PUR}IDENTIFICATION CONFIRME
D. CRAFT IS THE"
4450 PRINT "NASMYTH FOCUS, WHICH VANISHED
  200 YEARS"
4460 PRINT "AGO IN WHAT BECAME KNOWN AS T
HE"
4470 PRINT "FIRST TEMPORAL DISPLACEMENT.
."
4480 GOSUB5720
4490 PRINT "{CYN}+++++
+++++"
4500 PRINT "{GRN}WARNING....";:GOSUB5720:
PRINT "WARNING...."
4510 GOSUB5720
4520 PRINT "THE NASMYTH LATER BECAME KNOW
N AS THE"
4530 PRINT "SPACE ARK. IT IS SUPPOSED TO
APPEAR TO"
4540 PRINT "SHIPS JUST BEFORE DISASTER IS
DUE TO"
4550 PRINT "STRIKE THEM....":GOSUB5720
4560 PRINT "{CYN}+++++
+++++"
4570 PRINT "{LT RED}THE TEMPORAL FLUX ARO
UND THE NASMYTH IS"
4580 PRINT "AFFECTING THE FORCE WARP HOLD
ING OUR"
4590 PRINT "EXHOLD OXYGEN WEB...."
4600 GOSUB5720
4610 PRINT "{CYN}+++++
+++++"
4620 N=0
4630 GETA$: IFA$<>" "THEN4630
4640 PRINT "{PUR}PRESS THE 'J' KEY ON YOU
R CONTROLS"
4650 PRINT "TO ESCAPE THE TEMPORIAL FLUX.
."
4660 GETP$
4670 N=N+1
4680 IFP$="J" THEN4770
4690 IFN<99 THEN4660

```

```

4700 PRINT"YOU TOOK TOO LONG...."
4710 GOSUB5720
4720 PRINT"{CYN}+++++
+++++"
4730 PRINT"{YEL}THE FLUX HAS CAUGHT OUR
'02' WEB!"
4740 GOSUB5720
4750 OX=INT(3*(OX/4))
4760 RETURN
4770 PRINT:PRINT"WELL DONE! YOUR REFLEXE
S ARE"
4780 PRINT"EXCELLENT, CAPTAIN ";N$
4790 GOSUB5720
4800 PRINT"{CYN}+++++
+++++"
4810 PRINT"{WHT}WE CAN NOW CONTINUE ON O
UR FLIGHT..."
4820 GOSUB5720
4830 RETURN
4840 REM *****
4850 REM SPACE ATTACK
4860 AT=AT+1:IFRND(1)<AT/7THENRETURN
4870 IFAT>3THENRETURN
4880 PRINT"{CYN}+++++
+++++{GRN}"
4890 PRINT"LKJS 8907843":GOSUB5720
4900 PRINT"CAGT#IN ";N$;", TJERM ^S"
4910 PRINT"SOM*THIN% WRO$G #ITH OU& SYST
9M&..."
4920 GOSUB5720
4930 PRINT"WE ARE B&^NG JAM!ED IN SOM' O
DX WVY..."
4940 GOSUB5720
4950 PRINT"JAGMIN8 D7VIC* B#INJ OP!!ATED
BU ALI@V"
4960 PRINT"CJAFT %N VECJOR 9Q37-231A"
4970 GOSUB5720
4980 PRINT"{CYN}+++++
+++++"
4990 Y=INT(RND(1)*8)
5000 IFY=0THENL$="LEXO"
5010 IFY=1THENL$="SABU"
5020 IFY=2THENL$="REPI"
5030 IFY=3THENL$="ASTE"

```

```

5040 IFY=4THENL$="PRIE"
5050 IFY=5THENL$="CONA"
5060 IFY=6THENL$="ZUSI"
5070 IFY=7THENL$="INQU"
5080 Y=INT(RND(1)*8)
5090 IFY=0THENL$=L$+"TAJE"
5100 IFY=1THENL$=L$+"LL'E"
5110 IFY=2THENL$=L$+"PROC"
5120 IFY=3THENL$=L$+"LEAL"
5130 IFY=4THENL$=L$+"MAPO"
5140 IFY=5THENL$=L$+"HERCON"
5150 IFY=6THENL$=L$+"ORAL"
5160 IFY=7THENL$=L$+"KOK"
5170 IFY=8THENL$=L$+"ZUCC"
5180 PRINT"{CYN}++++++++"
++++"
5190 GOSUB5720
5200 PRINT"{YEL}THE ALIEN CRAFT IS UNDER
THE"
5210 PRINT"CONTROL OF THE DREADED ";L$
5220 PRINT"{CYN}++++++++"
++++"
5230 GOSUB5720
5235 XC=RND(1)
5240 IFXC>.9ANDRI>0THENPRINT"THE ";L$;
ARE HEADING":PRINT"FOR THE RIEMANNIAN HO
LD"
5245 IFXC>.9ANDRI>0THENRI=INT(RI/2):GOTO
5290
5250 XC=RND(1):IFXC>.8THENPRINT"FIRE FRO
M THEIR CRAFT HITS OUR":PRINT"EXTERNAL F
UEL WEB!"
5255 IFXC>.8THENFU=4*(INT(FU/5)):GOTO529
0
5260 XC=RND(1):IFXC>.57THENPRINT"THE ";L
$;" LASERS STRIKE OUR":PRINT"OXYGEN WEB!
!"
5265 IFXC>.57THENOX=7*(INT(OX/8)):GOTO52
90
5270 XC=RND(1):IFXC>.8THENPRINT"OH NO! T
HE NASTY ";L$:PRINT"HAVE SENT A ROBOT RA
IDER TO"
5275 IFXC>.8THENPRINT"OUR PRECIOUS PROVI
SIONS!":PR=3*(INT(PR/4))

```

```

5280 PRINT "{CYN}+++++
++++"
5290 GOSUB5720
5300 IFRND(1)>.46THEN5250
5310 GOSUB5720
5320 PRINT "{CYN}+++++
++++"
5330 PRINT "{PUR}THE ";L$;" ARE RETREATIN
G..."
5340 GOSUB5720
5350 PRINT"THE ATTACK SEEMS TO BE OVER..
"
5360 GOSUB5720
5370 RETURN
5380 REM *****
5390 REM INITIALISATION
5400 PRINT "{CLR}"
5410 POKE53281,0:POKE53280,4
5420 DIMA$(12),X$(15)
5430 PL=0
5440 WE=INT(RND(1)*50)+75
5450 FU=INT(RND(1)*50)+75
5460 OX=INT(RND(1)*25)+50
5470 RI=0
5480 PR=100-INT(RND(1)*73)
5490 HA=0:REM HOSTILE ALIENS
5500 RS=0:REM REFUEL STATION
5510 FA=0:REM FRIENDLY ALIENS
5520 SA=0:REM SPACE ARK
5530 TP=0:REM TRADING POST
5540 AT=0:REM SPACE ATTACK
5550 TE=0:REM STARDATE
5560 PRINT "{LT GRN}PLEASE ENTER YOUR NAM
E"
5565 INPUTN$
5570 PRINT
5580 PRINT "{GRN}NOW THE NAME OF YOUR SHI
P"
5585 INPUTS$
5590 FORJ=1TO12
5600 READA$(J)
5610 NEXTJ
5620 FORJ=1TO15
5630 READX$(J)

```

```
5640 NEXT J
5650 RETURN
5660 DATA "TERRA", "PEGASUS", "MIRA", "CITTA",
, "DELPHINUS", "CYGNUS", "PLEIDES", "HYADES"
5670 DATA "HYDRUS", "LEPUS", "CARINA", "SPIC
A", "ASIMOV III", "GALILEO IV"
5675 DATA "BARNARD'S REST", "PRAESEPE", "SA
GAN IX"
5680 DATA "NEUTRINON", "SEYFERT VI", "TORUS
K", "LEMAITRE", "MARKARIA"
5690 DATA "LEVERRIER", "GAMOW", "HEISENBERG
", "FIZEAU", "CERENKOV"
5700 REM *****
5720 REM DELAY
5730 FOR T=1 TO 2500: NEXT T
5740 PRINT
5750 RETURN
```

READY.

THE BOXING CHAMP

Time to square it off in the big ring. You choose the strength of your opponent to begin with (1 is easy, right up to 9, which is extremely difficult).

The bell rings and the round has begun. You'll see the time in the top left hand corner, while the top right hand corner shows the number of rounds fought.

To knock out your opponent, you must get his score above ten. Once a player has been knocked down, a count of ten will be begun. If the count reaches ten, then it is classed as a knock out. If a player gets knocked down three times in a round, that will also be classed as a knock out.

If you knock out your opponent, then a stronger opponent will come to challenge you. If you beat them all, you'll be declared the grand champ.

Your controls:

I - up
M - down
J - left
K - right

```
10 REM ** BOXING **
20 POKE53281,15
30 POKE650,255
100 REM ** LOAD SPRITE DATA **
110 FORX=192TO199
120 FORY=0TO63:READA:POKE512+X*64+Y,A:NE
XI:NEXT
130 POKE53281,15:V=53248:POKEV+21,3
131 TI$="000000":RO=1
135 INPUT"{CLR}ENTER DIFFICULTY FACTOR(1
-9)";DI
136 IFDI<1ORDI>9THEN135
137 DD=DI:DI=10-DI:DI=DI/10
```



```

140 POKEV+28,3:POKEV+37,8:POKEV+38,0
150 POKEV+23,3:POKEV+29,3
160 POKEV+39,9
170 POKE2040,200:POKE2041,203:POKEV+40,6
:POKEV+2,230:POKEV+3,200
200 PRINT "{CLR}"
210 PRINT "{HOME}{CUR DN}{CUR DN}          {R
VS ON}{BRN}  {GY 2}
"
220 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}{CUR DN}          {R
VS ON}{GY 2}          {B
LU}  {RVS OFF}"
230 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN}
"SPC(6)"{RVS ON}{BRN}  {RVS OFF}
          {RVS ON}{GY 2}  {RVS OFF
}"
240 R$="{GY 2}{RVS ON} {CUR DN}{CUR L} {
CUR DN}{CUR L} {CUR DN}{CUR L} {CUR DN}{
CUR L} {CUR DN}{CUR L} {CUR DN}{CUR L} {
CUR DN}{CUR L} {CUR DN}{CUR L} {CUR DN}{
CUR L} {CUR DN}{CUR L} {CUR DN}{CUR L} {
CUR DN}{CUR L} {CUR DN}{CUR L} {CUR DN}{
CUR L} {CUR DN}{CUR L} {CUR DN}{CUR L} {
RVS OFF}"
250 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}"SPC(6)R$
260 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}"SPC(33)R$
270 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}"SPC(6)"{RVS ON}
{GY 2}  {RVS OFF}
  {RVS ON}{BLU}  {RVS OFF}"
280 X=80:Y=70:A=230:B=200:POKEV,X:POKEV+
1,Y
281 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}{PUR}@@@@@"
282 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN}

```

```

{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}@@@@@
283 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}{CUR DN} {BRN}YO
U":PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN}{
CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{
CUR DN}{CUR DN} {BLU}COMP"
284 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN}
{PUR}@@@@@
285 PRINT "{HOME}"SPC(17)" {BLU}COUNT"
286 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{RED}STAGE{CUR DN}{CUR L}{CUR L}
{CUR L}{CUR L}";DD
287 PRINT "{PUR}{HOME}{CUR DN}{CUR DN}{CU
R DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CU
R DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}@@@
@@@
290 GOSUB9000:FORT=1TO300:NEXT:GOSUB9000
1000 REM ** INPUT **
1003 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
} ";NO:PRINT "{HOME}{CUR DN}{CUR DN}{CUR
DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR
DN}{CUR DN}{CUR DN}{CUR DN} ";NN
1004 PRINT "{HOME}"SPC(32)" {GY 1}ROUND#"R
O
1005 T$(1)=RIGHT$(TI$,2):T$(2)=MID$(TI$,
3,2)
1006 PRINT "{HOME}{GY 1}TIME ";T$(2);": ";
T$(1)
1007 IFTI$>"000100"THEN8000
1010 P=PEEK(2040):IFP>203THENPOKE2040,20
3
1020 IFP<203THENPOKE2040,200
1030 PU=0:PO=0:P=0:M=0:PD=0
1040 GOTO3000
1050 REM
1055 GETA$
1060 IFA$="I" THENY=Y-5:GOTO1120
1070 IFA$="M" THENY=Y+5:GOTO1120
1080 IFA$="K" THENX=X+5:POKE2040,200:GOTO
1120
1090 IFA$="J" THENX=X-5:POKE2040,203:GOTO
1120

```

```

1095 IFA$=" " THEN 1120
1100 IFA$=" " AND RND(1) > .6 THEN 1500
1110 IFA$=" " THEN 1550
1115 FORT=1 TO 200: NEXT
1120 PE=PEEK(V+30) AND 1
1130 PP=PEEK(V+30) AND 1: IF PP=1 AND PU=1 THEN
NN=NN+1: IF NN>10 THEN 5400
1140 IF X<70 THEN X=70
1150 IF Y<70 THEN Y=70
1160 IF Y>195 THEN Y=195
1170 IF X>245 THEN X=245
1200 POKE V, X: POKE V+1, Y
1210 GOTO 1000
1500 REM ** PUNCH **
1510 IF PEEK(2040)=203 THEN PO=204: M=-8: GOT
01530
1520 PO=201: M=8
1530 PU=1: POKE V, X+M: POKE 2040, PO
1540 GOTO 1115
1550 IF PEEK(2040)=203 THEN PO=205: M=-8: GOT
01570
1560 PO=202: M=8
1570 PU=1: POKE V, X+M: POKE 2040, PO
1580 GOTO 1115
2000 REM ** OPPONENT PUNCH **
2010 IF PEEK(2041)=203 THEN PO=204: M=-8: GOT
02030
2020 PO=201: M=8
2030 PD=1: POKE V+2, A+M: POKE 2041, PO
2040 GOTO 3200
2050 IF PEEK(2041)=203 THEN PO=205: M=-8: GOT
02070
2060 PO=202: M=8
2070 PD=1: POKE V+2, A+M: POKE 2041, PO
2080 GOTO 3200
3000 REM ** OPPONENT **
3010 IFA<X THEN A=A+5: POKE 2041, 200
3020 IFA>X THEN A=A-5: POKE 2041, 203
3030 IF B>Y THEN B=B-5
3040 IF B<Y THEN B=B+5
3050 IF RND(1) > D THEN 2000
3060 IF RND(1) > D THEN 2050
3200 FORT=1 TO 100: NEXT
3210 QW=PEEK(V+30) AND 2

```

```

3220 WE=PEEK(V+30)AND2:IFWE=2ANDPD=1:THEN
NO=NO+1:IFNO>10THEN4000
3230 IFWE=2THENA=A+5
3240 POKEV+2,A:POKEV+3,B
3250 GOTO1050
4000 REM *****
4001 POKE2041,203:POKE2040,206
4010 IFA<230THENA=A+5
4020 IFB<200THENB=B+5
4030 IFA>230THENA=A-5
4040 IFB>200THENB=B-5
4050 IFA=230ANDB=200THEN5000
4055 T$(1)=RIGHT$(TI$,2):T$(2)=MID$(TI$,
3,2)
4056 PRINT"{HOME}{GY 1}TIME ";T$(2);": ";
T$(1)
4057 IFTI$>"000100"THEN8000
4060 POKEV+2,A:POKEV+3,B
4070 FORT=1TO150:NEXT
4080 GOTO4000
5000 B(RO)=B(RO)+1
5001 IFB(RO)=3THEN5050
5010 FORT=1TO10:PRINT"{HOME}{CUR DN}"SPC
(18);T
5015 T$(1)=RIGHT$(TI$,2):T$(2)=MID$(TI$,
3,2)
5016 PRINT"{HOME}{GY 1}TIME ";T$(2);": ";
T$(1)
5017 IFTI$>"000100"THEN8000
5020 IFRND(1)>.78THENX=80:Y=70:PRINT"{HO
ME}{CUR DN}"SPC(19)":GOTO1000
5030 FORTT=1TO300:NEXT
5040 NEXT
5050 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{BRN}KN
OCK{CUR DN}{CUR L}{CUR L}{CUR L}OUT"
5060 POKEV+21,2
5070 FORTT=1TO500:NEXT
5080 PRINT"{HOME}THE WINNER"
5090 FORT=230TO70STEP-1:POKEV+2,T:FORTT=
1TO20:NEXT:NEXT
5100 FORT=200TO70STEP-1:POKEV+3,T:FORTT=
1TO20:NEXT:NEXT
5110 POKE2041,200:FORT=70TO230:POKEV+2,T

```

```

:FORTT=1TO20:NEXT:NEXT
5120 FORT=70TO200:POKEV+3,T:FORTT=1TO20:
NEXT:NEXT
5130 POKE2041,203:POKEV+2,160:POKEV+3,13
0
5140 END
5400 REM *****
5401 POKE2041,206:POKE2040,200
5410 IFX>80THENX=X-5
5420 IFX<80THENX=X+5
5430 IFY>70THENY=Y-5
5450 IFX=80ANDY=70THEN5500
5455 T$(1)=RIGHT$(TI$,2):T$(2)=MID$(TI$,
3,2)
5456 PRINT"{HOME}{GY 1}TIME ";T$(2);": ";
T$(1)
5457 IFTI$>"000100"THEN8000
5460 POKEV,X:POKEV+1,Y
5470 FORT=1TO150:NEXT
5480 GOTO5400
5500 A(R0)=A(R0)+1
5501 IFA(R0)=3THEN5550
5510 FORT=1TO10:PRINT"{HOME}{CUR DN}"SPC
(18);T
5515 T$(1)=RIGHT$(TI$,2):T$(2)=MID$(TI$,
3,2)
5516 PRINT"{HOME}{GY 1}TIME ";T$(2);": ";
T$(1)
5517 IFTI$>"000100"THEN8000
5520 IFRND(1)>DITHEN A=230:B=200:PRINT"{H
OME}{CUR DN}"SPC(19)" ":GOTO1000
5530 FORTT=1TO300:NEXT
5540 NEXT
5550 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{BLU}KNOCK{CUR DN}{CUR
L}{CUR L}{CUR L}OUT"
5560 POKEV+21,1
5570 FORTT=1TO500:NEXT
5580 PRINT"{HOME}THE WINNER"
5590 FORT=70TO230:POKEV,T:FORTT=1TO20:NE
XT:NEXT
5600 FORT=70TO200:POKEV+1,T:FORTT=1TO20:
NEXT:NEXT

```

```

5610 POKE2040, 203: FORT=230T070STEP-1: POK
EV, T: FORTT=1T020: NEXT: NEXT
5620 FORT=200T070STEP-1: POKEV+1, T: FORTT=
1T020: NEXT: NEXT
5630 POKE2040, 200: POKEV, 160: POKEV+1, 130
5640 DI=DI-.1: IFDI=0THEN5700
5645 PRINT "{HOME}
"
5650 A=230: B=200: POKEV+21, 3: FORT=1T0500:
NEXT: GOTO8500
5700 REM ** YOU'RE THE CHAMP **
5710 POKEV+21, 0: PRINT "{CLR}"
5720 IFRO=10THENPRINT "{BLU}YOU WENT FOR
NINE ROUNDS, SO IT'S A DRAW": GOTO5740
5730 PRINT "{FUR}YOU ARE NOW THE CHAMP. W
ELL DONE!"
5740 PRINT: PRINT: PRINT
5750 PRINT "WOULD YOU LIKE TO GO ANOTHER
ROUND"
5760 INPUTA$: IFLEFT$(A$, 1)="N"THENEND
5770 IFLEFT$(A$, 1)<>"Y"THEN5750
5780 RUN130
6000 REM ** SPRITE DATA **
6010 DATA0, 0, 16, 0, 8, 84, 0, 41, 85, 0, 169, 85,
2, 168, 84, 2, 128, 16, 10, 0, 0, 10, 0, 0, 10, 60, 0
6020 DATA10, 255, 0, 10, 255, 192, 10, 255, 192,
10, 255, 0, 10, 60, 0, 10, 0, 0, 10, 0, 16, 2, 136, 84
6030 DATA2, 169, 85, 0, 169, 85, 0, 40, 84, 0, 0, 1
6, 0
6040 DATA0, 0, 16, 0, 8, 84, 0, 169, 85, 10, 169, 8
5, 42, 168, 84, 42, 0, 16, 160, 0, 0, 160, 0, 0
6050 DATA163, 192, 0, 175, 240, 0, 175, 252, 0, 1
75, 252, 0, 175, 240, 0, 163, 192, 0, 160, 0, 0
6060 DATA160, 16, 0, 168, 84, 0, 41, 85, 0, 9, 85,
0, 8, 84, 0, 0, 16, 0, 0
6070 DATA0, 16, 0, 8, 84, 0, 41, 85, 0, 41, 85, 0, 1
68, 84, 0, 160, 16, 0, 163, 192, 0, 175, 240, 0
6080 DATA175, 252, 0, 175, 252, 0, 175, 252, 0, 1
75, 240, 0, 163, 192, 0, 160, 0, 0, 160, 0, 0
6090 DATA42, 0, 16, 42, 168, 84, 10, 169, 85, 0, 1
69, 85, 0, 8, 84, 0, 0, 16, 0
6100 DATA4, 0, 0, 21, 32, 0, 85, 106, 0, 85, 106, 1
28, 21, 42, 160, 4, 0, 168, 0, 0, 40, 0, 0, 40
6110 DATA0, 15, 40, 0, 63, 232, 0, 63, 232, 0, 63,

```

```

232,0,15,40,0,0,40,0,0,40,4,0,168
6120 DATA21,42,160,85,106,128,85,106,0,2
1,32,0,4,0,0,0
6130 DATA4,0,0,21,32,0,85,106,128,85,106
,168,21,42,168,4,0,42,0,0,10,0,0,10
6140 DATA0,3,202,0,15,250,0,63,250,0,63,
250,0,15,250,0,3,202,0,0,10,0,16,10
6150 DATA0,84,168,1,85,168,1,85,160,0,84
,128,0,16,0,0
6160 DATA0,16,0,0,84,128,1,85,160,1,85,1
68,0,84,168,0,16,10,0,0,10,0,3,202
6170 DATA0,15,250,0,63,250,0,63,250,0,15
,250,0,3,202,0,0,10,0,0,10,4,0,168
6180 DATA21,42,168,85,106,160,85,106,0,2
1,32,0,4,0,0,0
6190 DATA0,0,0,0,0,0,0,0,0,0,0,0,0,0,168
,0,0,168,0,2,164,0,2,149,0,2,149
6200 DATA234,234,132,234,234,163,234,234
,175,0,234,175,234,234,175,234,234,163
6210 DATA234,234,128,0,2,128,1,74,128,5,
90,128,1,74,128,0,0,0,0
6220 DATA42,0,0,42,128,0,16,128,0,86,128
,0,86,128,0,18,128,0,2,171,171
6230 DATA202,171,171,250,171,171,250,171
,0,250,171,171,202,171,171,2,171,171
6240 DATA2,128,0,2,161,64,2,165,80,2,161
,64,0,0,0,0,0,0,0,0,0,0,0,0,0
8000 REM ** END OF ROUND **
8010 GOSUB9000
8015 POKE2040,200:POKE2041,203
8020 X=80:Y=70:A=230:B=200:POKEV,X:POKEV
+1,Y:POKEV+2,A:POKEV+3,B
8030 RO=RO+1:TI$="000000":NN=0:NO=0
8031 IFRO=10THEN5700
8035 FORT=1TO60
8040 PRINT"{HOME}PREPARE FOR NEXT ROUND"
8050 FORTT=1TO50:NEXT:PRINT"{HOME}{RVS O
N}PREPARE FOR NEXT ROUND{RVS OFF}"
8055 FORTT=1TO50:NEXT:NEXT
8056 PRINT"{HOME}                                {BLU}C
OUNT
"
8060 GOSUB9000
8065 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN"

```



```

}      ":PRINT"{CUR DN}{BLU} COMP{CUR DN}
{CUR L}{CUR L}{CUR L}{CUR L}      "
8070 GOTO1000
8500 REM ** STRONGER MAN **
8501 PRINT"{HOME}{CUR DN}
      "
8502 FORT=1TO9:A(T)=0:NEXT
8503 DD=DD+1
8505 POKE2040,200:POKE2041,203
8510 X=80:Y=70:POKEV,X:POKEV+1,Y:POKEV+2
,A:POKEV+3,B
8520 RO=1:NN=0:NO=0
8530 FORT=1TO40
8540 PRINT"{HOME}PREPARE FOR NEXT CHALLE
NGER"
8550 FORTT=1TO50:NEXT
8560 PRINT"{HOME}{RVS ON}PREPARE FOR NEX
T CHALLENGER{RVS OFF}"
8570 FORTT=1TO50:NEXT
8580 NEXT
8590 GOSUB9000:FORT=1TO300:NEXT:GOSUB900
0
8600 TI$="000000"
8610 PRINT"{HOME}      {BLU}C
OUNT      "
8620 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}      ":PRINT"{CUR DN}{BLU} COMP{CUR DN}
{CUR L}{CUR L}{CUR L}{CUR L}      "
8625 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN} ";DD
8630 GOTO1000
9000 REM ** BELL **
9010 POKE54296,15:POKE54276,0:POKE54277,
10:POKE54276,17:POKE54273,60
9020 RETURN

```

READY.

DETECTIVE Q

You are Detective Q, the man called in to solve the Mystery of the Murder at the Mansion.



It happened like this. Six guests are sharing a meal one evening at the Micro Mansion. The meal ends just before 8 pm and the guests decide to spend the rest of the evening exploring the mansion, and to meet again just after midnight for a final drink before bed.

However, when midnight arrives and the guests re-assemble, there is one missing. A hasty search of the Mansion produces A Body in A Location:

BETTY CRUMB'S BODY WAS DISCOVERED
LYING IN THE SERVANTS' QUARTERS

You are called in. You have to discover The Murderer and The Time At Which It Took Place. Once you've questioned as many of the guests as you like, you can make an accusation. You are only allowed to make two accusations per game, and if you do not succeed in discovering the murderer, and the time at which the murder took place, the computer will tell you who did the dastardly deed.

You refer to the guests by using the first letters of their first names, which due to a happy co-incidence, are extremely easy to remember:

- A - Arthur Moment
- B - Betty Crumb
- C - Caroline Forsooth
- D - Derek Lockjaw
- E - Emma Hornswipe
- F - Fatty Thompson
- G - General Bluff

You'll be asked if you wish to question a suspect or make an accusation:

ENTER 1 TO QUESTION A SUSPECT
OR 2 TO MAKE AN ACCUSATION

? 1

You have to indicate not only the person you wish to question (which you do, as was pointed out above, by entering the first letter of their first name) but also the time (8, 9, 10 or 11) that you wish to know about:

WHO WOULD YOU LIKE TO QUESTION? A

ARTHUR MOMENT IS READY

WHICH HOUR DO YOU WISH TO ASK ABOUT? 8

ARTHUR MOMENT REPLIES:
I WAS IN THE KITCHEN

> DO YOU WANT TO MAKE
AN ACCUSATION (Y OR N)? N

You have a map of the mansion, which is very useful as an aid to help determine who was where, at what time. You should make notes of where people have claimed they were at particular times, and who they saw in other rooms, to track down any discrepancies in their stories. A sample chart is given just before the program listing.

WHO WOULD YOU LIKE TO QUESTION? D

DEREK LOCKJAW IS READY

WHICH HOUR DO YOU WISH TO ASK ABOUT? 8

DEREK LOCKJAW REPLIES:
I WAS IN THE STUDY
I SAW FATTY THOMPSON IN THE DINING ROOM

> DO YOU WANT TO MAKE
AN ACCUSATION (Y OR N)? N

WHO WOULD YOU LIKE TO QUESTION? E

EMMA HORNSWIPE IS READY

WHICH HOUR DO YOU WISH TO ASK ABOUT? 8

EMMA HORNSWIPE REPLIES:
I WAS IN THE LIBRARY

> DO YOU WANT TO MAKE
AN ACCUSATION (Y OR N)? N

WHO WOULD YOU LIKE TO QUESTION? A

ARTHUR MOMENT IS READY

WHICH HOUR DO YOU WISH TO ASK ABOUT? 9

ARTHUR MOMENT REPLIES:

I WAS IN THE SERVANTS' QUARTERS
CAROLINE FORSOOTH WAS WITH ME
FATTY THOMPSON WAS WITH ME

As you can see, the idea is to try and find out who is lying, and therefore pin them down as the murderer. Only the murderer will lie to you, and he or she will only lie about the particular hour in which the murder took place (and the lie will be relatively consistent, at least in some particulars). However, the other guests - although they will never lie - are not particularly helpful, and will not always tell you the complete truth. That is, they are quite happy to tell you where they were at a particular hour, but are not always so forthcoming as to who was in the room with them (which is, I guess, understandable in some circumstances) nor the identity of those they saw in adjoining rooms.

WHO WOULD YOU LIKE TO QUESTION? C

CAROLINE FORSOOTH IS READY

WHICH HOUR DO YOU WISH TO ASK ABOUT? 9

CAROLINE FORSOOTH REPLIES:

I WAS IN THE LOUNGE
DEREK LOCKJAW WAS WITH ME
I SAW EMMA HORNSWIPE IN THE CONSERVATORY

> DO YOU WANT TO MAKE
AN ACCUSATION (Y OR N)? N

Eventually you should have enough information to make an
accusation:

WHO WOULD YOU LIKE TO QUESTION? D

DEREK LOCKJAW IS READY

WHICH HOUR DO YOU WISH TO ASK ABOUT? 9

DEREK LOCKJAW REPLIES:

I WAS IN THE ENTRANCE HALL
EMMA HORNSWIPE WAS WITH ME

> DO YOU WANT TO MAKE
AN ACCUSATION (Y OR N)? Y

THIS IS TRY NUMBER 1
WHO WAS THE MURDERER? C

WHEN DID IT HAPPEN? 10

YES, CAROLINE FORSOOTH IS THE KILLER
YOU'VE GOT THE KILLER, ALL YOU NEED
NOW IS THE TIME

Remember, you only have two guesses, so you must not
waste them. If you fail to identify the murderer and the
time at which the deathly deed was done, the computer
will spill the beans:

WHO WOULD YOU LIKE TO QUESTION? E

EMMA HORNSWIPE IS READY

WHICH HOUR DO YOU WISH TO ASK ABOUT? 10

EMMA HORNSWIPE REPLIES:

I WAS IN THE DINING ROOM

> DO YOU WANT TO MAKE
AN ACCUSATION (Y OR N)? Y
THIS IS TRY NUMBER 2
WHO WAS THE MURDERER? C

WHEN DID IT HAPPEN? 11

YES, CAROLINE FORSOOTH IS THE KILLER
YOU'VE GOT THE KILLER, ALL YOU NEED
NOW IS THE TIME

HOWEVER, YOU'VE USED UP ALL YOUR GUESSES

THE MURDERER WAS CAROLINE FORSOOTH

THE KILLING TOOK PLACE AT 9 PM

When you turn up at the mansion, you are provided with a map of the building, to help you clarify your thoughts:

Ok, Detective Q. Armed with your map and your razor-sharp mind, you must now tackle one of the most difficult cases of your career.

LOUNGE	DINING ROOM	STUDY
CONSERVATORY	PITCH BLACK COURTYARD - NO ONE USES IT, MURDER NEVER DONE IN HERE.	BALLROOM
ENTRANCE HALL		SERVANTS' QUARTERS
MASTER BEDROOM	LIBRARY	KITCHEN

Note that although the murderer will lie, other guests may well have seen him or her in the room where it happened at the time of the murder, although (of course) the murderer will claim to have been elsewhere at the time. A chart like the following can help you track down the killer in record time:

	8	9	10	11
A	KITCHEN	SERVANTS		B
B			?	
C	BALLR.	LOUNGE?		STUDY
D	STUDY		BEDRO.?	
E	LIBRARY	LOUNGE	BEDROOM	
F	DINING	SERVANTS		STUDY?
G	SERVANT			BALLR.

Here's the listing to enable you to tackle the Awful, Unspeakable Crime:

```
5 POKE53281,0:POKE53280,5
10 REM DETECTIVE Q
20 GOSUB890:REM INITIALISE
30 PRINT"{CLR}{YEL}":PRINT:PRINT
40 PRINTG$(MV);"'S BODY WAS DISCOVERED"
50 PRINT"LYING IN THE ";R$(MP)
60 PRINT:PRINT"{CYN}"
70 PRINT"ENTER 1 TO QUESTION A SUSPECT"
80 PRINT"    OR 2 TO MAKE AN ACCUSATION"
90 INPUTC
100 IFC<>1ANDC<>2THEN90
110 IFC=2THEN510
115 GOSUB5000
120 PRINT"{OR}WHO WOULD YOU LIKE TO QUES
TION"
125 PRINT:INPUTB$
130 B$=LEFT$(B$,1)
140 FL=0
150 IFB$=LEFT$(G$(MV),1)THENPRINT"{YEL}D
ON'T BE SILLY!":GOSUB1260:GOTO60
160 PRINT
170 FORJ=1TO7
180 IFB$=LEFT$(G$(J),1)THENPRINT"{LT GRN
}"G$(J);" IS READY":FL=J
190 NEXTJ
200 IFFL=0THEN60
210 PRINT:PRINT
220 PRINT"WHICH HOUR DO YOU WISH TO ASK
ABOUT"
225 INPUTB
230 IFB<8ORB>11THEN220
240 B=B-7
250 PRINT
260 PRINT"{PUR}"G$(FL);" REPLIES:"
270 IFFL<>MRORB<>MHTHENPRINTTAB(3);"I WA
S IN THE ";R$(A(FL,B))
280 IFFL=MRANDB=MHTHEN730
290 IFFL=MRANDB=MHTHENPRINTTAB(3);"I WAS
IN THE ";R$(X)
```

```

295  IFFL=MRANDB=MHTHEN=INT(RND(1)*7)+1:
IFT<>MVANDT<>MRTHENPRINTG$(T);" WAS WITH
ME"
300  IFFL=MRANDB=MHTHEN440
310  REM ** SHARING ROOM **
320  FORJ=1TO7
330  IFJ=FLTHEN350
340  IFA(J,B)=A(FL,B)ANDRND(1)>.2THENPRIN
TG$(J);" WAS WITH ME"
350  NEXTJ
360  REM ** ADJOINING ROOMS **
370  IFA(FL,B)=10THENN1=9:N2=1:GOTO400
380  IFA(FL,B)=1THENN1=10:N2=9:GOTO400
390  N1=A(FL,B)-1:N2=A(FL,B)+1
400  FORJ=1TO7
410  IFA(J,B)=N1ANDRND(1)>.4THENPRINT"I S
AW ";G$(J);" IN THE ";R$(N1)
420  IFA(J,B)=N2ANDRND(1)>.4THENPRINT"I S
AW ";G$(J);" IN THE ";R$(N2)
430  NEXTJ
440  REM ** CHANCE FOR ACCUSATION **
450  PRINT:PRINT
460  PRINTTAB(6);"> DO YOU WANT TO MAKE"
470  PRINTTAB(6);"AN ACCUSATION (Y OR N)"
480  INPUTB$
490  IFB$<>"Y"ANDB$<>"N"THEN480
500  IFB$="N"THENPRINT"{CLR}":PRINT:PRINT
:GOTO110
510  GU=GU+1
515  GOSUB5000
520  PRINT"THIS IS TRY NUMBER"GU
530  PRINT:PRINT"WHO WAS THE MURDERER?"
535  INPUTM$
540  PRINT:PRINT"WHAT TIME DID IT HAPPEN"
545  INPUTCL
550  PRINT:PRINT
560  FL=0
570  IFLEFT$(M$,1)=LEFT$(G$(MR),1)THENPRI
NT"YES, ";G$(MR);" IS THE KILLER":FL=FL+
1
580  IFCL=MH+7THENPRINT:PRINT"YES, IT HAP
PENED AT"CL:FL=FL+4
590  GOSUB1260

```

```

600  IFFL=5THEN670
610  IFFL=1THENPRINT"YOU'VE GOT THE KILLE
R, ALL YOU NEED":PRINT"NOW IS THE TIME"
620  IFFL=4THENPRINT"YOU'VE GOT THE TIME,
    BUT THE KILLER":PRINT"STILL ELUDES YOU"
630  IFFL=0THENPRINT"WRONG ON BOTH COUNTS
!!"
640  GOSUB1260
650  IFGU<2THEN30
660  PRINT:PRINT"HOWEVER, YOU'VE USED UP
ALL YOUR GUESSES":GOTO690
670  PRINT"WELL DONE!"
680  PRINT:PRINT"YOU'VE SOLVED THE MURDER
"
690  PRINT:PRINT
700  PRINT"THE MURDERER WAS ";G$(MR)
710  PRINT:PRINT"THE KILLING TOOK PLACE A
T"MH+7"PM"
720  END
730  PRINTTAB(3);"I WAS IN THE ";R$(X)
740  T=INT(RND(1)*7)+1:IFT=MRORT=MVTHEN74
0
750  S=INT(RND(1)*7)+1:IFS=MRORS=MVORS=TT
HEN750
760  IFRND(1)>.7THENPRINTG$(S);" WAS WITH
ME"
770  IFRND(1)>.7THENPRINTG$(T);" WAS WITH
ME"
780  IFX>1THENN1=X-1
781  IFX<2THEN830
790  T=T+1:IFT=8THENT=6
800  IFS=6ORMV=6ORMR=6THEN830
810  PRINT"I SAW ";G$(T);" IN THE ";R$(N2
)
820  GOTO440
830  IFX<10THENN2=X+1
831  IFX>9THEN820
840  T=T-1:IFT=0THENT=2
850  IFS=2ORMV=2ORMR=2THEN820
860  PRINT"I SAW ";G$(T);" IN THE ";R$(N2
)
870  GOTO440
880  REM *****
890  REM INITIALISATION

```

```

900 PRINT "{CLR}"
910 REM
920 DIMA(7,4),G$(7),R$(10)
930 FORJ=1TO7
940 FORK=1TO4
950 A(J,K)=INT(RND(1)*10)+1
960 NEXTK
970 NEXTJ
980 MH=INT(RND(1)*4)+1:REM MURDER HOUR
990 MV=INT(RND(1)*7)+1:REM MURDER VICTIM
1000 MR=INT(RND(1)*7)+1:REM MURDER
1010 IFMR=MVTHEN1000
1020 MP=INT(RND(1)*10)+1:REM MURDER PLAC
E
1030 A(MR,MH)=MP:REM PUT MURDERER IN ROO
M WHERE MURDER TOOK PLACE
1040 REM MOVE VICTIM FROM HOUR OF DEATH
1050 FORK=MHTO4
1060 A(MV,K)=0
1070 NEXTK
1080 X=INT(RND(1)*10)+1
1090 IFX=MPTHEN1080:REM GIVE MURDERER A
ROOM TO LIE ABOUT
1100 GU=0
1110 REM NAME GUESTS
1120 FORA=1TO7
1130 READG$(A)
1140 NEXTA
1150 REM NAME ROOMS
1160 FORA=1TO10
1170 READR$(A)
1180 NEXTA
1190 RETURN
1200 DATA"ARTHUR MOMENT","BETTY CRUMB","
CAROLINE FORSOOTH","DEREK LOCKJAW"
1210 DATA"EMMA HORNSWIPE","FATTY THOMPSON",
"GENERAL BLUFF"
1220 DATA"ENTRANCE HALL","CONSERVATORY",
"LOUNGE","DINING ROOM"
1230 DATA"STUDY","BALLROOM","SERVANTS' Q
UARTERS","KITCHEN","LIBRARY"
1240 DATA"MASTER BEDROOM"
1250 REM*****
1260 REM DELAY

```

```

1270 FORT=1TO1200:NEXTT
1280 RETURN
5000 PRINT "{CLR}{HOME}{RVS ON}{RED}
                                     " ;
5010 PRINT "{YEL}                               SUSPECTS
                                     " ;
5020 PRINT "{RED}
                                     " ;
5030 PRINT:PRINT
5040 IFMV=1THEN5050
5045 PRINT "{OR}ARTHUR MOMENT"
5050 IFMV=2THEN5060
5055 PRINT"BETTY CRUMB"
5060 IFMV=3THEN5070
5065 PRINT"CAROLINE FORSOOTH"
5070 IFMV=4THEN5080
5075 PRINT"DEREK LOCKJAW"
5080 IFMV=5THEN5090
5085 PRINT"EMMA HORNSWIPE"
5090 IFMV=6THEN5100
5095 PRINT"FATTY THOMPSON"
5100 IFMV=7THEN5110
5105 PRINT"GENERAL BLUFF"
5110 PRINT "{CYN}@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@
@@@@@@@@@@@@@@@@@@@@@@@@@" ;
5120 RETURN
5130 RETURN

```

READY.

KLONDIKE BILL

Klondike Bill was a famous gambler back in the days when paddle-steamers plied the Mississippi (well, he wasn't actually, 'cos I just made him up, but it sounds probable).



In this game, you take the part of Klondike Bill in a few breath-taking rounds of poker dice. Both you and the computer start the game with 100 chips each:

Stand by, Klondike Bill...

as I rattle the dice...

I have 100 chips
and you have 100

Your hand is dealt, and then the computer shows you the first two of its own cards. Based on your own judgement on how the rest of the computer's hand will come out, you are invited to place a bet:

Your hand is:

--> five five five two four

** THREE OF A KIND **

I am dealing my own hand...
Here are the first two cards:

--> four four

How much do you want to bet? 23

OK, 23 CHIPS IT IS...

Here is my hand:

four four three six three

)# TWO PAIR #(

And you win that round!

>-> Your chips: 123, mine: 77

Press the space bar...

Stand by, Klondike Bill...

as I rattle the dice...

The game continues in this way until either of you have less than nine chips:

I have 77 chips
and you have 123

Your hand is:

--> two two six two two

<<FOUR OF A KIND>>

I am dealing my own hand...
Here are the first two cards:

--> one five

How much do you want to bet? 40

OK, 40 CHIPS IT IS...

Here is my hand:
one five three six two

DEAD HAND...

And you win that round!

>-> Your chips: 163, mine: 37

Press the space bar...

Stand by, Klondike Bill...

as I rattle the dice...

I have 37 chips
and you have 163

Your hand is:

--> four four five five five

:: THREE AND TWO ::

I am dealing my own hand...

Here are the first two cards:

--> three four

How much do you want to bet? 37

OK, 37 CHIPS IT IS...

Here is my hand:

three four six one four

#> A PAIR <#

And you win that round!

>-> Your chips: 200, mine: 0

You've beaten me, Klondike Bill

Wait till next time!

Once you're broke, you can challenge the computer to
another round or two, if your nerves will take it.
Here's the listing, Mr K Bill:

```

10 REMKLONDIKE POKER
20 REM
30 GOSUB1110:REM INTIALISE
40 PRINT "{CLR}":POKE53281,0:POKE53280,8
50 GOSUB1190
60 PRINT "{CLR}":PRINT
70 PRINT "{CYN} I HAVE"CC"CHIPS"
80 PRINT" AND YOU HAVE"HC
90 HA=0
100 PRINT:PRINT"{YEL}YOUR HAND IS:"
110 GOSUB640:REM DEAL HAND
120 GOSUB820:REM ASSESS HAND
130 GOSUB1250
140 GOSUB1000:REM ANNOUNCE HAND
150 HS=PO:REM HUMAN SCORE
160 PRINT:PRINT"I AM DEALING THE FIRST T
WO CARDS:":PRINT
170 HA=1
200 GOSUB640:REM DEAL COM. HAND
210 GOSUB820:REM ASSESS HAND
220 GOSUB1250
230 PRINT:PRINT"{YEL}HOW MUCH DO YOU WAN
T TO BET"
235 INPUTBE
240 IFBE<1ORBE>HCTHEN230
250 PRINT:PRINT"{CYN}OK,"BE"CHIPS IT IS.
.. "
260 GOSUB1250
270 PRINT:PRINT:PRINT"{LT GRN}HERE IS MY
HAND:"
280 FORJ=1TO5
290 ONA(J)GOSUB750,760,770,780,790,800
300 FORZ=1TO500:NEXTZ
310 NEXT J
320 GOSUB 1250
330 PRINT
340 GOSUB1000:REM ANNOUNCE HAND
350 CS=PO:REM COMPUTER SCORE
360 IFHS=CSTHEN440
370 IFHS>CSTHEN500
380 REM *****
390 REM COMPUTER WINS
400 PRINT:PRINTTAB(6);"{LT RED}I WIN THA
T ROUND"

```

```

410 HC=HC-BE:CC=CC+BE
420 GOTO530
430 REM*****
440 REM A DRAW
450 PRINT:PRINT"{LT RED}THAT ROUND WAS A
DRAW"
460 PRINT"WE BOTH LOSE"BE"CHIPS TO THE B
ANK"
470 CC=CC-BE:HC=HC-BE
480 GOTO530
490 REM *****
500 REM HUMAN WINS
510 PRINT:PRINTTAB(6);"{LT RED}AND YOU W
IN THAT ROUND!"
520 HC=HC+BE:CC=CC-BE
530 PRINT:PRINT">@> YOUR CHIPS:"STR$(HC)
", MINE:"CC
540 IFHC<9ORCC<9THEN580
550 GOSUB1250
560 GOSUB1190
570 GOTO60
580 PRINT"-----
-----"
590 IFHC=CCTHENPRINT"WE'VE BOTH BEEN KIC
KED OUT OF THE GAME!!"
600 IFHC>CCTHENPRINT"YOU'VE BEATEN ME, K
LONDIKE BILL":PRINT"WAIT TILL NEXT TIME!
!!"
610 IFCC>HCTHENPRINT"SO I'VE PROVED THE
BETTER PLAYER":PRINT"AGAIN, KLONDIKE BIL
L!!"
620 END
630 REM*****
640 REM DEAL HAND
650 PRINT" --> ";
660 FORJ=1TO5
670 A(J)=INT(RND(1)*6)+1
680 FORZ=1TO500:NEXT Z
690 IFHA=1ANDJ>2THEN710
700 ONA(J)GOSUB750,760,770,780,790,800
710 NEXTJ
720 PRINT
730 RETURN
740 REM*****

```

```

750 PRINT "{PUR}ONE " ; : RETURN
760 PRINT "{PUR}TWO " ; : RETURN
770 PRINT "{PUR}THREE " ; : RETURN
780 PRINT "{PUR}FOUR " ; : RETURN
790 PRINT "{PUR}FIVE " ; : RETURN
800 PRINT "{PUR}SIX " ; : RETURN
810 REM *****
820 REM ASSESS HAND
830 PO=0
840 REM *****
850 REM *** FULL HOUSE FIVE ***
860 IFA(1)=A(2) AND A(2)=A(3) AND A(3)=A(4) AND
NDA(4)=A(5) THEN PO=15 : RETURN
870 REM *** OTHERS ***
880 IFA(1)=A(2) THEN PO=PO+1
890 IFA(1)=A(3) THEN PO=PO+1
900 IFA(1)=A(4) THEN PO=PO+1
910 IFA(1)=A(5) THEN PO=PO+1
920 IFA(2)=A(3) THEN PO=PO+1
930 IFA(2)=A(4) THEN PO=PO+1
940 IFA(2)=A(5) THEN PO=PO+1
950 IFA(3)=A(4) THEN PO=PO+1
960 IFA(3)=A(5) THEN PO=PO+1
970 IFA(4)=A(5) THEN PO=PO+1
980 RETURN
990 REM *****
1000 REM ANNOUNCE HAND
1005 PRINT "{WHT}"
1010 PRINT : PRINT " " ;
1020 IF PO=15 THEN PRINT ">>A FULL HOUSE FIVE
E<<"
1030 IF PO=6 THEN PRINT "<<FOUR OF A KIND>>"
1040 IF PO=4 THEN PRINT " : : THREE AND TWO : :
"
1050 IF PO=3 THEN PRINT " ** THREE OF A KIND "
1060 IF PO=2 THEN PRINT ") * TWO PAIR * ("
1070 IF PO=1 THEN PRINT "# > A PAIR < #"
1080 IF PO=0 THEN PRINT "DEAD HAND . . ."
1085 PRINT "{GY 3}"
1090 RETURN
1100 REM *****
1110 REM INITIALISATION
1120 REM

```

```
1130 HC=100: REM HUMAN CHIPS
1140 CC=100:REM COMPUTER CHIPS
1150 DIMA(5)
1160 RETURN
1170 REM *****
1180 REM DELAY
1190 REM
1200 PRINT:PRINT"PRESS THE SPACE BAR..."
1210 GETT$:IFT$<>" THEN1210
1220 PRINT"{CLR}":PRINT:PRINT:PRINT
1230 PRINT"STAND BY, KLONDIKE BILL..."
1240 PRINT:PRINT" AS I RATTLE THE DICE
... "
1250 FORT=1TO1000
1260 NEXT T
1270 RETURN
```



```

54277, 190: POKE54276, 0: POKE54276, 17: P7=1
517 GETA$: IFA$=" " THEN 600
518 MI=MI+QW/30: IFMI>500 THEN MI=500
519 IFK>X AND K<X+20 THEN POKE54273, 14: POKE5
4277, 187: POKE54276, 0: POKE54276, 17
520 IFA$="K" THEN QW=QW+1: IFQW>25 THEN QW=25
530 IFA$="J" THEN QW=QW-2: IFQW<0 THEN QW=0
535 IFQW=0 THEN 500
540 IFA$="I" THEN Y=Y-8
550 IFA$="M" THEN Y=Y+8
560 IFX>200 THEN X=200
570 IFX<30 THEN X=30
580 IFY<120 THEN Y=120
590 IFY>BB THEN Y=BB
600 POKEV, X: POKEV+1, Y
601 JI=PEEK(V+30) AND 1: JK=PEEK(V+30) AND 1:
IFJK=1 THEN 6000
602 MI=MI+QW/30: IFMI>500 THEN MI=500
603 IFQW=0 THEN 500
610 IFAB=0 AND RND(1)>.9 THEN 5010
640 IFCD=0 AND RND(1)>.9 THEN 5100
670 IFEF=0 AND RND(1)>.9 THEN 5200
700 IFGH=0 AND RND(1)>.9 THEN 5300
710 IFIJ=0 AND RND(1)>.9 THEN 5400
720 IFKL=0 AND RND(1)>.9 THEN 5500
730 IFAB=1 OR CD=1 OR EF=1 OR GH=1 OR IJ=1 OR KL=1
THEN 5000
1000 GOTO 500
5000 REM ** POSITION CARS **
5005 IFAB=0 THEN 5090
5006 IFAB=1 THEN 5040
5010 AB=1: A=255: B=INT(RND(1)*150)+70
5020 IFB>BB THEN 5010
5030 IFB<120 THEN 5010
5040 A=A-QW
5060 IFA<0 THEN AB=0: A=0: B=0
5070 POKEV+2, A: POKEV+3, B
5090 IFCD=0 THEN 5180
5095 IFCD=1 THEN 5140
5100 CD=1: C=255: D=INT(RND(1)*150)+50
5120 IFD>BB THEN 5100
5130 IFD<120 THEN 5100
5140 C=C-QW
5160 IFC<0 THEN CD=0: C=0: D=0

```



```

5170 POKEV+4,C:POKEV+5,D
5180 IFEF=0THEN5280
5190 IFEF=1THEN5240
5200 EF=1:E=255:F=INT(RND(1)*150)+50
5220 IFF>BBTHEN5200
5230 IFF<120THEN5200
5240 E=E-QW
5260 IFE<0THENE=0:E=0:F=0
5270 POKEV+6,E:POKEV+7,F
5280 IFGH=0THEN5380
5290 IFGH=1THEN5340
5300 GH=1:G=255:H=INT(RND(1)*150)+50
5320 IFH>BBTHEN5300
5330 IFH<120THEN5300
5340 G=G-QW
5360 IFG<0THEENG=0:G=0:H=0
5370 POKEV+8,G:POKEV+9,H
5380 IFIJ=0THEN5480
5390 IFIJ=1THEN5440
5400 IJ=1:I=255:J=INT(RND(1)*150)+50
5420 IFJ>BBTHEN5400
5430 IFJ<120THEN5400
5440 I=I-QW
5460 IFI<0THENIJ=0:I=0:J=0
5470 POKEV+10,I:POKEV+11,J
5480 IFKL=0THEN5580
5490 IFKL=1THEN5540
5500 KL=1:K=255:L=INT(RND(1)*150)+50
5520 IFL>BBTHEN5500
5530 IFL<120THEN5500
5540 K=K-QW
5560 IFK<0THENKL=0:K=0:L=0
5570 POKEV+12,K:POKEV+13,L
5580 GOTO500
6000 REM ** CRASH **
6005 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{RED}CAR NO@>{WHT}"ME+1
6010 POKE2040,242:POKEV+39,7
6020 POKE54277,0
6040 POKE54276,0:POKE54278,240
6050 FORT=15TO0STEP-1:POKE54276,129:POKE
54273,40:POKE54296,T:NEXT
6060 POKE54276.0:POKE54278,0

```

```

6070 POKE2040,241
6080 FORA=1TO100:NEXT:POKEV+21,254
6090 ME=ME+1:IFME=5THEN6120
6100 POKEV+3,10:POKEV+5,10:POKEV+7,10:PO
KEV+9,10:POKEV+11,10:POKEV+13,10
6110 POKE54276,0:POKE54278,0:POKE54296,1
5:GOTO130
6120 POKEV+21,0:PRINT"{CLR}"
6130 IFINT(MI)<=EN/4THENPRINT"{WHT}YOU O
NLY COVERED ONE QUARTER OF THE RACE":GOT
07000
6140 IFINT(MI)<=EN/3THENPRINT"{WHT}YOU O
NLY COVERED ONE THIRD OF THE COURSE":GOT
07000
6150 IFINT(MI)<=EN/2THENPRINT"{WHT}YOU O
NLY COVERED HALF THE DISTANCE.":GOTO7000
6160 IFINT(MI)>EN/2THENPRINT"A VERY NICE
EFFORT. YOU MADE OVER THE"
6170 PRINT"HALFWAY MARK."
7000 PRINT:PRINT:PRINT"{RED}YOUR SCORE I
S:"INT(MI*X)
7010 PRINT:INPUT"ANOTHER RACE:";A$
7020 IFA$="N"THENPRINT"{CLR}":END
7030 IFA$<>"Y"THEN7010
7040 POKEV+3,10:POKEV+5,10:POKEV+7,10:PO
KEV+9,10:POKEV+11,10:POKEV+13,10
7050 RUN
8000 POKEV+21,0:PRINT"{CLR}"
8010 PRINT"{WHT}WELL DONE!"
8020 LE=LE+1
8030 PRINT:PRINT:PRINT"{BLU}YOU WERE PRE
VIOUSLY ON LEVEL"LE-1
8040 IFLE=5THENPRINT:PRINT"WELL HOW ABOU
T THAT. WE CAN'T EVEN"
8050 IFLE=5THENPRINT:PRINT"PROMOTE YOU.
YOU ARE THE WORLD'S "
8060 IFLE=5THENPRINT"NUMBER 1. WELL DONE
!":GOTO7000
8070 PRINT:PRINT"NOW YOU HAVE BEEN PROMO
TED TO LEVEL"LE
8080 POKEV+3,10:POKEV+5,10:POKEV+7,10:PO
KEV+9,10:POKEV+11,10:POKEV+13,10
8090 PRINT:PRINT:PRINT"HIT ANY KEY TO PU
LL OUT OF PIT STOP."

```

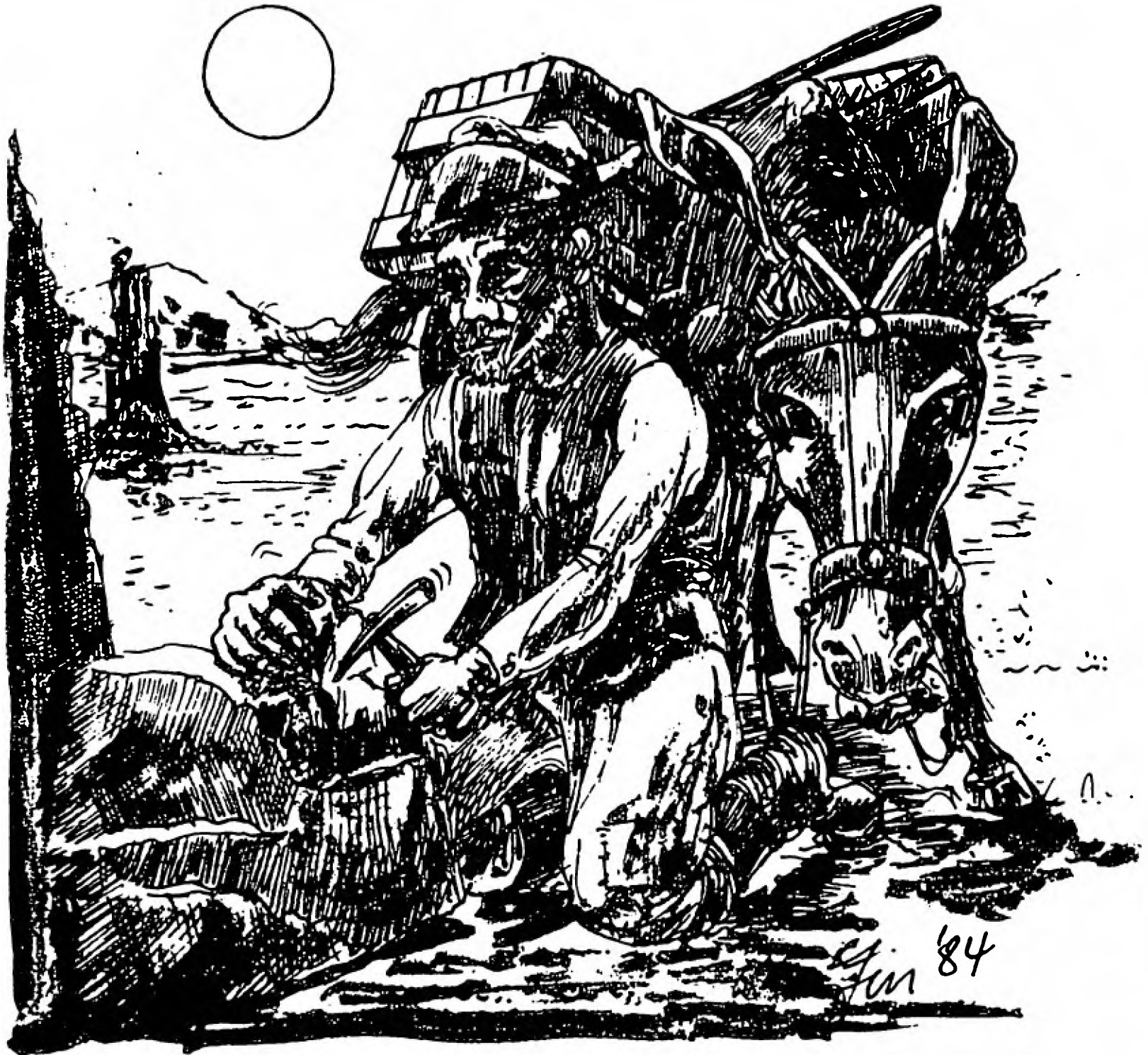
```

8095 GETA$: IFA$<>" " THEN 8095
8100 GETA$: IFA$=" " THEN 8100
8110 PRINT "{CLR}": MI=0: GOTO 125
9000 REM ** SPRITE DATA **
9010 DATA 0,0,0,0,0,0,20,0,0,20,0,0,20,1,
64,20,1,64,42,170,128,42,170,160
9020 DATA 42,170,168,21,85,84,42,170,168,
42,170,160,42,170,128,20,1,64,20,1,64
9030 DATA 20,0,0,20,0,0,0,0,0,0,0,0,0,0,0
,0,0,0,0
9040 DATA 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,0,0,0,0,0,60,0,0,255,0,0,251,240
9050 DATA 3,235,252,0,202,252,3,170,176,0
,255,236,3,234,252,0,255,240,0,63,192
9060 DATA 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,0,0
9070 DATA 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,0,0,0,0,0,240,0,3,172,0,15,188,0
9080 DATA 14,239,0,62,171,0,14,239,0,3,25
2,0,0,240,0,0,240,0,0,0,0,0,0,0,0,0,0,0
9090 DATA 0,0,0,0,0,0

```

THE ORE-SEEKERS

In this fascinating simulation, you take on the role of a big mining magnate, with hundreds of thousands of dollars at your command.



You start the game with just under \$100,000 and - to win the game - you have to use this money to increase it to \$150,000. You lose if your capital falls below \$70,000.

Although the following explanation may seem pretty involved, you'll find that most of it will be clear once you see the program up and running on your screen. When you start the game, you'll see this on your screen:

```

-----
      YOU HAVE $ 99500 IN WEEK 1
-----
MARKET PRICES      YOUR HOLDINGS
-----
IRON - 506          0 TON          *RISING
BAUXITE - 711       0 TON          *RISING
COPPER - 916        0 TON          *RISING
LEAD/ZINC - 555     0 TON          -FALLING
ALUMINIUM - 550     0 TON          *RISING
MAGNESIUM - 562     0 TON          *RISING
SILVER - 783        0 TON          -FALLING

```

The top line tells you how much money you have. Your capital drops by half a percent a week, to cover the overheads on your company. Below this you'll see the seven metals you can mine for in the game. Because lead and zinc are generally found in the same ore, they are treated as a single metal in this game.

Next to the name of the metal is a number. This is the price, in dollars, that the metal is fetching on the market in the current week. The next column - 'YOUR HOLDINGS' - shows how much of that particular metal you have extracted from your mines, and have not sold. Of course, all these figures will be zero at the start of the game. After the holdings column comes either the word 'RISING' or 'FALLING'. This indicates the change, from week to week, of the price of that metal.

You'll discover that the prices do not change arbitrarily within a single game. One metal may rise slowly throughout the entire game, another may rise fairly rapidly from week to week, then start to fall. The cost of buying a lease for a particular mine relates to the market price for the metal (so it makes sense to buy a lease when the metal price is falling). The cost of working a lease is also related to the state of the market. Watching the development of a metal's price will indicate the best time to buy a lease, the best time to work it, and the best time to sell (hopefully just before the market for that metal peaks and starts to decline).

YOU HAVE \$ 99002.5 IN WEEK 2

MARKET PRICES YOUR HOLDINGS

IRON - 512	0 TON	* RISING
BAUXITE - 722	0 TON	* RISING
COPPER - 932	0 TON	* RISING
LEAD/ZINC - 510	0 TON	- FALLING
ALUMINIUM - 550	0 TON	* RISING
MAGNESIUM - 604	0 TON	* RISING
SILVER - 766	0 TON	- FALLING

YOU HAVE \$ 98507.41 IN WEEK 3

MARKET PRICES YOUR HOLDINGS

IRON - 518	0 TON	* RISING
BAUXITE - 733	0 TON	* RISING
COPPER - 948	0 TON	* RISING
LEAD/ZINC - 465	0 TON	- FALLING
ALUMINIUM - 550	0 TON	* RISING
MAGNESIUM - 646	0 TON	* RISING
SILVER - 749	0 TON	- FALLING

You can see, for example, that LEAD/ZINC fell for the first three weeks, then started rising in week four (and, in fact, kept rising throughout this particular game). Note also that your capital is shrinking slightly from week to week.

From time to time you'll be given the option of buying the lease on a mine, the first step towards actually working the mine:

YOU ARE OFFERED A LEASE
 FOR ALUMINIUM FOR \$ 475
 ENTER 'B' TO BUY IT, OR 'R' TO REFUSE

The cost of the lease is related - quite realistically -
 to the current market price for the metal. If you
 decide to buy the lease, by entering 'B', you'll be
 shown this lease in the next week's computer report:

YOU HAVE \$ 97052.1 IN WEEK 5

```

-----
MARKET PRICES      YOUR HOLDINGS
-----
IRON - 530          0 TON          *RISING
BAUXITE - 755       0 TON          *RISING
COPPER - 980        0 TON          *RISING
LEAD/ZINC - 514    0 TON          *RISING
ALUMINIUM - 550    0 TON          *RISING
MAGNESIUM - 730    0 TON          *RISING
SILVER - 715        0 TON          -FALLING
-----
  
```

YOU HOLD THE FOLLOWING LEASES:
 ALUMINIUM ONE - 5

```

-----
YOU ARE OFFERED A LEASE
FOR COPPER FOR $ 855
  
```

Having bought leases, you are given the option of
 working that lease. You'll see that the name of the mine
 (such as COPPER KING) is followed by a number. This is
 your assayer's estimate of how much ore remains in the
 mine. The higher the number, the more ore you are likely
 to get out of that mine. You can return to rework the
 mine as many times as the number (so COPPER KING can be
 worked nine times, until it is exhausted). The number
 drops by one each time you work the mine, and then
 vanishes from your list of leases when it is exhausted.

YOU HAVE \$ 95716.1 IN WEEK 6

MARKET PRICES YOUR HOLDINGS

IRON - 536	0 TON	*RISING
BAUXITE - 766	0 TON	*RISING
COPPER - 996	0 TON	*RISING
LEAD/ZINC - 558	0 TON	*RISING
ALUMINIUM - 550	0 TON	*RISING
MAGNESIUM - 772	0 TON	*RISING
SILVER - 698	0 TON	-FALLING

YOU HOLD THE FOLLOWING LEASES:

COPPER KING - 9
ALUMINIUM ONE - 5

You can only own one mine for each metal at a time (and will not, in fact, be offered new leases for metals you already own). However, once a mine is exhausted, you'll possibly be offered, in due course, a new lease for that metal.

If you decide you wish to work a lease, you enter the first letter of the name of the metal. Here, I've decided to mine for copper:

WHICH LEASE WOULD YOU LIKE TO MINE
ENTER FIRST LETTER OF METAL
('N' IF YOU DO NOT WANT TO MINE)? C
YOU WISH TO MINE FOR COPPER
IT COSTS \$ 750 TO WORK THE MINE
PRESS ANY KEY TO MINE
 OK
YOU MINED 43 TONS

The cost of mining is, as I indicated earlier, related to the current market value of the metal. Once you have extracted some ore from your mine, it is added to your holdings (as you can see here for copper):

MARKET PRICES	YOUR HOLDINGS	
IRON - 542	0 TON	⊞ RISING
BAUXITE - 777	0 TON	⊞ RISING
COPPER - 1012	43 TON	⊞ RISING
LEAD/ZINC - 602	0 TON	⊞ RISING
ALUMINIUM - 550	0 TON	⊞ RISING
MAGNESIUM - 814	0 TON	⊞ RISING
SILVER - 681	0 TON	-FALLING

YOU HOLD THE FOLLOWING LEASES:		
COPPER KING - 8		
ALUMINIUM ONE - 5		

The real skill in this game comes from buying and working leases at the right time, and judging the best time to sell. Because your capital is constantly being eroded by your overheads, you cannot afford to just wait for turn after turn until the market is at its peak (as you judge it) before you sell. Note that the highest price a metal can reach changes from game to game, so you will not be able to assume that the market will necessarily behave the same way from game to game.

The game ends when you have either reached (or exceeded) your target of \$150,000, or have allowed your capital to fall to \$70,000. Here's the end of the demonstration game:

YOU HOLD THE FOLLOWING LEASES:
COPPER KING - 6
LEAD/ZINC LULU - 4
ALUMINIUM ONE - 3

WHICH LEASE WOULD YOU LIKE TO MINE
ENTER FIRST LETTER OF METAL
('N' IF YOU DO NOT WANT TO MINE)? N

DO YOU WANT TO SELL ANY ORE (Y OR N)

OK

ENTER FIRST LETTER OF METAL NAME? C
YOU WISH TO SELL COPPER

YOU HAVE 50 TON

THE CURRENT MARKET PRICE IS \$ 1140
PER TON

HOW MANY TON DO YOU WANT TO SELL? 41

THAT SALE IS WORTH \$ 46740
SALES COMMISSION IS \$ 934

```

-----
      YOU HAVE $ 172574 IN WEEK 16
-----
MARKET PRICES      YOUR HOLDINGS
-----
IRON - 596          0 TON          * RISING
BAUXITE - 876       0 TON          * RISING
COPPER - 1156       9 TON          * RISING
LEAD/ZINC - 998     9 TON          * RISING
ALUMINIUM - 550     7 TON          * RISING
MAGNESIUM - 1170   0 TON          - FALLING
SILVER - 528        0 TON          - FALLING
-----
YOU HOLD THE FOLLOWING LEASES:
COPPER KING - 6
LEAD/ZINC LULU - 4
ALUMINIUM ONE - 3
-----
YOU HAVE REACHED THE TARGET OF $150000

```

And here's the listing so you can climb down into the pit and become an 'ore-seeker':

```

10 REM THE ORE SEEKERS
20 GOSUB2030:REM INITIALISATION
30 REM *****
40 REM MAJOR LOOP
50 PRINT "{CLR}"
60 WE=WE+1
70 CA=INT(99.5*CA)/100:REM HALF PERCENT
OVERHEAD PER WEEK
80 GOSUB1510:REM REPORT
90 BU=0
100 IFCA>14999THENPRINT "{WHT}YOU HAVE RE
ACHED THE TARGET OF $150,000":END
110 IFCA<7001THENPRINT"YOU DO NOT HAVE E
NOUGH MONEY":PRINT"TO CONTINUE IN THIS F
IELD":END
120 GOSUB370:REM OFFERED LEASE
130 IFBU=1THEN50
140 R1=0
150 MI=0

```

```

160 GOSUB730:REM WORK A LEASE
170 IFMI=1THEN50
180 GOSUB1160:REM SELL METALS
190 IFRND(1)>.95THENGOSUB1700:REM STRIKE
200 IFRND(1)>.9ANDWE>4THENGOSUB1810:REM
SETBACKS
210 R1=0
220 GOT050
230 REM *****
240 REM METAL PRICES
250 PRINT"{CYN}MARKET PRICES      YOUR HOL
DINGS"
260 PRINT"{YEL}-----
-----"
270 FORT=1T07
280 V(T)=INT(10*(V(T)+4.5*F(T)))/10
290 IFV(T)<LOTHENF(T)=-F(T):V(T)=LO+1
300 IFV(T)>UPTHENF(T)=-F(T):V(T)=UP-1
310 PRINT"{OR}"M$(T); " -{WHT}"V(T)*10;TA
B(18);O(T)"{OR}TON";TAB(30);
320 IFSGN(F(T))=1THENPRINT"{RED}*{YEL}RI
SING"
325 IFSGN(F(T))<>1THENPRINT"{RED}-{YEL}F
ALLING"
330 NEXT T
340 GOSUB2260
350 RETURN
360 REM *****
370 REM OFFERED LEASE
380 IFRND(1)>.4THENRETURN
390 GETA$:IFA$=""THEN390
400 T=INT(RND(1)*7)+1
410 VA=INT((V(T)+.5)/10)
420 ONTGO SUB650,660,670,680,690,700,710
430 IFR1>0THENRETURN
440 PRINT"{PUR}YOU ARE OFFERED A LEASE"
450 PRINT"FOR ";M$(FL); " FOR $";95*VA
460 GETA$:IFA$<>""THEN460
470 PRINT"{GRN}ENTER 'B' TO BUY IT, OR '
R' TO REFUSE"
480 GETA$
490 IFA$<>"B"ANDA$<>"R"THEN480
500 PRINTTAB(12);"OK"

```

```

510 IFA$="R" THEN RETURN
520 IF 7.5*VA > CA THEN PRINT "{WHT} YOU CANNOT
AFFORD IT": GOSUB 2260: RETURN
530 BU=1
540 CA=CA-9.5*VA
550 R1=VA
560 ON FL GOSUB 580, 590, 600, 610, 620, 630, 640
570 RETURN
580 I1=R1: RETURN
590 B1=R1: RETURN
600 C1=R1: RETURN
610 L1=R1: RETURN
620 A1=R1: RETURN
630 M1=R1: RETURN
640 S1=R1: RETURN
650 FL=1: R1=I1: RETURN
660 FL=2: R1=B1: RETURN
670 FL=3: R1=C1: RETURN
680 FL=4: R1=L1: RETURN
690 FL=5: R1=A1: RETURN
700 FL=6: R1=M1: RETURN
710 FL=7: R1=S1: RETURN
720 REM *****
730 REM WORK A LEASE
740 IF I1+B1+C1+L1+A1+M1+S1=0 THEN RETURN
750 PRINT "{CYN} WHICH LEASE WOULD YOU LIKE
TO MINE"
760 PRINT "{PUR} ENTER FIRST LETTER OF MET
AL"
770 PRINT "('N' IF YOU DO NOT WANT TO MIN
E)"
780 INPUT J$: FL=0
790 IF J$="N" THEN RETURN
800 MI=1
810 FOR K=1 TO 7
820 IF J$=LEFT$(M$(K), 1) THEN FL=K
830 NEXT K
840 IF FL=0 THEN 780
850 PRINT: PRINT "{LT GRN} YOU WISH TO MINE
FOR "; M$(FL)
860 IF J$="I" THEN R1=I1
870 IF J$="B" THEN R1=B1
880 IF J$="C" THEN R1=C1

```

```

890 IFJ$="L" THENR1=L1
900 IFJ$="A" THENR1=A1
910 IFJ$="M" THENR1=M1
920 IFJ$="S" THENR1=S1
930 IFR1=0 THENPRINT "{WHT} YOU HAVE NO MINE":GOSUB2260:RETURN
940 REM * NOTE IT COSTS MORE TO MINE METAL WHICH IS RISING ON THE MARKET *
950 IFSGN(F(FL))=1 THENCO=75
955 IFSGN(F(FL))<>1 THENCO=45
960 PRINT "{OR} IT COSTS $"CO*10" TO WORK THE MINE":CA=CA-CO
970 LX=R1
980 R1=R1-1:IFR1<0 THENR1=0
990 REM
1000 PRINT "{LT GRN} PRESS ANY KEY TO MINE"
1010 GETA$:IFA$="" THEN1010
1020 PRINTTAB(12);"OK"
1030 ME=INT(RND(1)*5*LX)
1040 PRINT"YOU MINED"ME" TONS"
1050 O(FL)=O(FL)+ME
1060 IFJ$="I" THENI1=R1
1070 IFJ$="B" THENB1=R1
1080 IFJ$="C" THENC1=R1
1090 IFJ$="L" THENL1=R1
1100 IFJ$="A" THENA1=R1
1110 IFJ$="M" THENM1=R1
1120 IFJ$="S" THENS1=R1
1130 GOSUB2260
1140 RETURN
1150 REM *****
1160 REM SELL METALS
1170 WA=0
1180 FORJ=1TO7
1190 WA=WA+O(J)
1200 NEXT J
1210 IFWA=0 THENRETURN
1220 GETA$:IFA$<>"" THEN1220
1230 PRINT:PRINT "{PUR} DO YOU WANT TO SELL ANY ORE (Y OR N)"
1240 GETA$
1250 IFA$<>"Y" ANDA$<>"N" THEN1240

```

```

1260 PRINTTAB(12); "OK"
1270 IFA$="N" THEN RETURN
1280 PRINT "{CYN} ENTER FIRST LETTER OF METAL NAME"
1290 INPUT A$: A$ = LEFT$(A$, 1)
1300 FL = 0
1310 FORT = 1 TO 7
1320 IF LEFT$(M$(T), 1) = A$ THEN FL = T
1330 NEXT T
1340 IF FL = 0 THEN 1280
1350 PRINT "{PUR} YOU WISH TO SELL "; M$(FL)
1360 IF O(FL) = 0 THEN PRINTTAB(4) "BUT YOU DO NOT HAVE ANY": GOSUB 2260: RETURN
1370 PRINT: PRINT "{WHT} YOU HAVE "O(FL)" TONS"
1380 PRINT: PRINT "{YEL} THE CURRENT MARKET PRICE IS $"V(FL)*10" PER TON"
1390 PRINT: PRINT "{PUR} HOW MANY TONS DO YOU WANT TO SELL"
1400 INPUT T: IF T < 1 THEN 1400
1410 IF T > O(FL) THEN PRINT "{WHT} YOU DO NOT HAVE THAT MANY": GOTO 1390
1420 CO = T * V(FL)
1430 PRINT: PRINT "{CYN} THAT SALE IS WORTH $"CO*10
1440 SA = INT(CO*.2)
1450 PRINT "SALES COMMISSION IS $"SA
1460 CA = INT(100*(CO+CO-SA/10))/100
1470 O(FL) = O(FL) - T
1480 GOSUB 2260
1490 RETURN
1500 REM *****
1510 REM REPORT TO PLAYER
1520 PRINT "{CYN} -----"
1530 PRINTSPC(3); "{YEL} YOU HAVE $"CA*10" IN WEEK"WE
1540 PRINT "{CYN} -----"
1550 GOSUB 240: REM METAL PRICES
1560 GOSUB 2260
1570 IF I1+B1+C1+L1+A1+M1+S1=0 THEN 1670

```

```

1580 PRINT "{CYN}-----
-----";
1590 PRINT "{GRN}YOU HOLD THE FOLLOWING L
EASES: {OR}"
1600 IF I1 > 0 THEN PRINT "IRON MAIDEN -" I1
1610 IF B1 > 0 THEN PRINT "BAUXITE BEAUTY -" B1
1620 IF C1 > 0 THEN PRINT "COPPER KING -" C1
1630 IF L1 > 0 THEN PRINT "LEAD/ZINC LULU -" L1
1640 IF A1 > 0 THEN PRINT "ALUMINIUM ONE -" A1
1650 IF M1 > 0 THEN PRINT "MAGNESIUM MARVEL -"
M1
1660 IF S1 > 0 THEN PRINT "SILVER SHINE -" S1
1670 PRINT "{CYN}-----
-----";
1680 RETURN
1690 REM *****
1700 REM STRIKE
1710 PRINT:PRINT
1720 PRINT "{WHT}THERE IS A NATIONAL MINE
RS' STRIKE"
1730 WE=WE+2
1740 GOSUB 2260
1750 PRINT:PRINT "{WHT}YOU LOSE TWO WEEKS
' PRODUCTION"
1760 PRINT "SO YOUR CAPITAL FALLS 3%"
1770 GOSUB 2260
1780 CA=INT(97*CA)/100
1790 RETURN
1800 REM *****
1810 REM SETBACKS
1820 T=INT(RND(1)*4)+1
1830 ON T GOSUB 1860, 1890, 1940, 1980
1840 GOSUB 2260
1850 RETURN
1860 PRINT "{WHT}A SHAFT HAS COLLAPSED AT
ONE OF":PRINT "MINES. DAMAGE IS $12,350"
1870 CA=CA-12350
1880 RETURN
1890 PRINT "{WHT}A TUNNEL BLOCKAGE OCCURS
AT ONE OF"
1900 PRINT "YOUR MAJOR MINES. CLEARING IT
TAKES"
1910 PRINT "A WEEK, SO MUCH PRODUCTION WA
S LOST"

```



```

1920 CA=CA-850:WE=WE+1
1930 RETURN
1940 PRINT"{WHT}THREE MINERS WERE INJURE
D IN AN"
1950 PRINT"ACCIDENT IN ONE OF YOUR MINES
"
1960 CA=CA-123
1970 RETURN
1980 PRINT"{WHT}YOUR INVESTMENT IN SOUTH
ERN MINES"
1990 PRINT"CONTINUE TO LOSE MONEY...."
2000 CA=CA-100-INT(RND(1)*50)
2010 RETURN
2020 REM *****
2030 REM INITIALISATION
2040 POKE53281,0:POKE53280,0
2050 PRINT"{CLR}"
2060 REM ARRAYS HOLD METALS, THEIR VALUE
, FLUCTUATIONS, ORE MINED
2070 DIMM$(7),V(7),F(7),O(7)
2080 CA=10000
2090 I1=0:REM IRON LEASE
2100 B1=0:REM BAUXITE LEASE
2110 C1=0:REM COPPER LEASE
2120 L1=0:REM LEAD/ZINC LEASE
2130 A1=0:REM ALUMINIUM LEASE
2140 M1=0:REM MAGNESIUM LEASE
2150 S1=0:REM SILVER LEASE
2160 FORT=1TO7
2170 READM$(T),V(T)
2180 F(T)=RND(1):IFRND(1)>.5THENF(T)=-F(
T)
2190 UP=INT(110+RND(1)*40)
2200 LO=INT(40+RND(1)*10)
2210 NEXT T
2220 WE=0
2230 DATA"IRON",50,"BAUXITE",70,"COPPER"
,90
2240 DATA"LEAD/ZINC",60,"ALUMINIUM",55
2250 DATA"MAGNESIUM",52,"SILVER",80
2260 REM DELAY
2270 FOR T=1 TO2000:NEXT T
2280 RETURN

```

SQUISHER AND SQUASHER

Squisher and Squasher are two malevolent creatures who are hell bent on your destruction, as you move around a maze trying to survive for as long as possible. As you make your way around the maze, you try to eat as many dots as you can (by running over them). Each dot you run over adds to your score. You do not get points just for surviving.



As Squisher and Squasher (disguised, in this version, as '\$' and '?') move in towards you, they leave a trail of new dots. Therefore, if you can fool them into crossing areas which you have already 'eaten clean', you'll find more dots to eat.

Here's the game just after it has begun (you, the 'H' are up in the top left hand corner, Squisher (the '?') is down in the bottom right hand corner, and Squasher ('\$') has moved into the second square from the top right hand corner:

```
> Squisher is 1555.6 from human
> Squasher is 1000 from human
> Your score is 0      HiScore 357
```

```
H . . . . . # $ .
. . # . # # # . # . .
. # # . # . . # # . # .
. . . . # . . . . . . .
. . # # # . . # # # . #
# . . . # . . . . . #
. . . . . # . . . .
. # # . # . . # # . .
. . . . . # . . . . #
# # . . # . . . # . #
. . . . # . # . # # . #
. . # . # . . . . # ?
```

As you can see, the program prints out a distance reading, showing you how close the two little critters are to you.

A few seconds later, you have eaten your first few dots (85 points worth, in fact) and \$ and ? are making their way towards you:

```
> Squisher is 894.4 from human
> Squasher is 806.2 from human
> Your score is 85      HiScore 357
```

```

. . . . . # .
. # . # # # # . # .
# # . # . . # # . # .
. . # . . . . $ . .
. H # # # . . # # # . #
# . . . # . . . . . #
. . . . . # . . . .
. # # . # . . . # # . .
. . . . . # . . ? . #
# # . . # . . . . # . #
. . . . # . # . # # . #
. . # . # . . . . # .

```

The pace hots up, and you manage to keep on the move, exceeding the previous high score as you do so:

```
> Squisher is 400 from human
> Squasher is 300 from human
> Your score is 442      HiScore 357
```

```

. . . . . # . .
. # . # # # # . # .
# # . # . . # # . # .
. . # . . . . $ .
. # # # . . # # # . #
# . . # . . . . . #
. . . . ? . # . H .
. # # . # . . # # .
. . . . . # . #

```

However, 'death' is inevitable, and before long you are wiped off the face of the grid:

```
> Squisher is 100 from human
> Squasher is 0 from human
> Your score is 493    HiScore 357
```

```
  . . . . . . . # . .
  . # . # # # # . # . .
  # # . # . . # # . # .
    . . # . . . . . . .
  . # # # . . # # # . #
# . . . # . . . ? $ #
  . . . . . . # . . .
  . # # . # . . # # . .
  . . . . . # . . . #
# # . . # . . . # . #
  . . . . # . # # # . #
  . . # . # . . # .
```

Squisher & Squasher have got you!

You scored 493

The high score is 493

Note that the maze changes slightly from game to game, and neither you, nor Squisher and Squasher can move through the fences (the lines of # symbols). However, while you can only move up, down, right or left, the two protagonists can move along diagonals if they choose.

Your control keys are:

```
A - to move up
Z - to move down
, - to move left
. - to move right
```

If you wish to modify the 'intelligence' of Messrs. S and S, play around with the figures after the RND(1)'s in lines 220, 250, 330 and 360. The higher this number, the more ruthlessly Squisher and Squasher will come after you.

```

10 REM SQUISHER & SQUASHER
20 GOSUB750:REM INITIALISE
30 GOSUB450:REM PRINT BOARD
40 GOSUB200:REM COMPUTER MOVES
50 GOSUB450:REM PRINT BOARD
60 IFC1=H1ANDC2=H2THEN100
70 IFE1=H1ANDE2=H2THEN100
80 GOSUB600:REM HUMAN MOVES
90 GOTO40
100 PRINT"{CYN}SQUISHER AND SQUASHER HAV
E GOT YOU!!"
110 PRINT:PRINT"{GRN}YOU SCORED"SC
120 IFSC>HSTHENHS=SC
130 PRINT:PRINT"{LT GRN}THE HIGH SCORE I
S"HS
140 FORZ=1TO2000:NEXTZ
150 RESTORE
160 GOSUB810
170 GOTO30
180 END
190 REM*****
200 REM S & S NOVE
210 X=C1:Y=C2
220 IFRND(1)>.7THEN250
230 IFC1>H1THENC1=C1-1
240 IFC1<H1THENC1=C1+1
250 IFRND(1)>.75THEN280
260 IFC2>H2THENC2=C2-1
270 IFC2<H2THENC2=C2+1
280 M=A(C1,C2)
290 IFM=72ORM=36ORM=35THENC1=X:C2=Y
300 A(X,Y)=46
310 A(C1,C2)=63
320 X=E1:Y=E2
330 IFRND(1)>.7THEN360
340 IFE1>H1THENE1=E1-1
350 IFE1<H1THENE1=E1+1
360 IFRND(1)>.75THEN390
370 IFE2>H2THENE2=E2-1
380 IFE2<H2THENE2=E2+1
390 M=A(E1,E2)
400 IFM=72ORM=63ORM=35THENE1=X:E2=Y
410 A(X,Y)=46
420 A(E1,E2)=36

```

```

430 RETURN
440 REM*****
450 REM PRINT BOARD
460 PRINT "{CLR}":PRINT:PRINT
470 PRINT "{YEL}> SQUISHER IS";
475 PRINTINT(1000*SQR((H1-C1)*(H1-C1)+(H
2-C2)*(H2-C2)))/10"FROM HUMAN"
480 PRINT "{YEL}> SQUASHER IS";
485 PRINTINT(1000*SQR((H1-E1)*(H1-E1)+(H
2-E2)*(H2-E2)))/10"FROM HUMAN"
490 PRINT:PRINT "{CYN} >YOUR SCORE IS"SC
;
500 IFHS>0THENPRINT "{LT BLU} HISCORE"HS
510 PRINT:PRINT:PRINT
520 FORC=1TO12
530 FORB=1TO12
531 IFCHR$(A(B,C))="H"THENZ$="{YEL}"
532 IFCHR$(A(B,C))="$"THENZ$="{WHT}"
533 IFCHR$(A(B,C))="?"THENZ$="{WHT}"
534 IFCHR$(A(B,C))="."THENZ$="{LT GRN}"
535 IFCHR$(A(B,C))="#"THENZ$="{RED}"
540 PRINTZ$;TAB(7)CHR$(A(B,C));" ";
550 NEXTB
560 PRINT
570 NEXTC
580 RETURN
590 REM*****
600 REM HUMAN MOVES
610 GETA$: IFA$="" THEN610
620 REM
630 REM
640 G=H1:F=H2
650 A(H1,H2)=32
660 IFA$="," THENH1=H1-1: IFH1=0THENH1=1
670 IFA$="." THENH1=H1+1: IFH1=13THENH1=12
680 IFA$="A" THENH2=H2-1: IFH2=0THENH2=1
690 IFA$="Z" THENH2=H2+1: IFH2=13THENH2=12
700 IFA(H1,H2)=35THENH1=G:H2=F
710 IFA(H1,H2)=46THENSC=SC+17
720 A(H1,H2)=72
730 RETURN
740 REM*****
750 REM INITIALISE
760 PRINT "{CLR}"

```

```

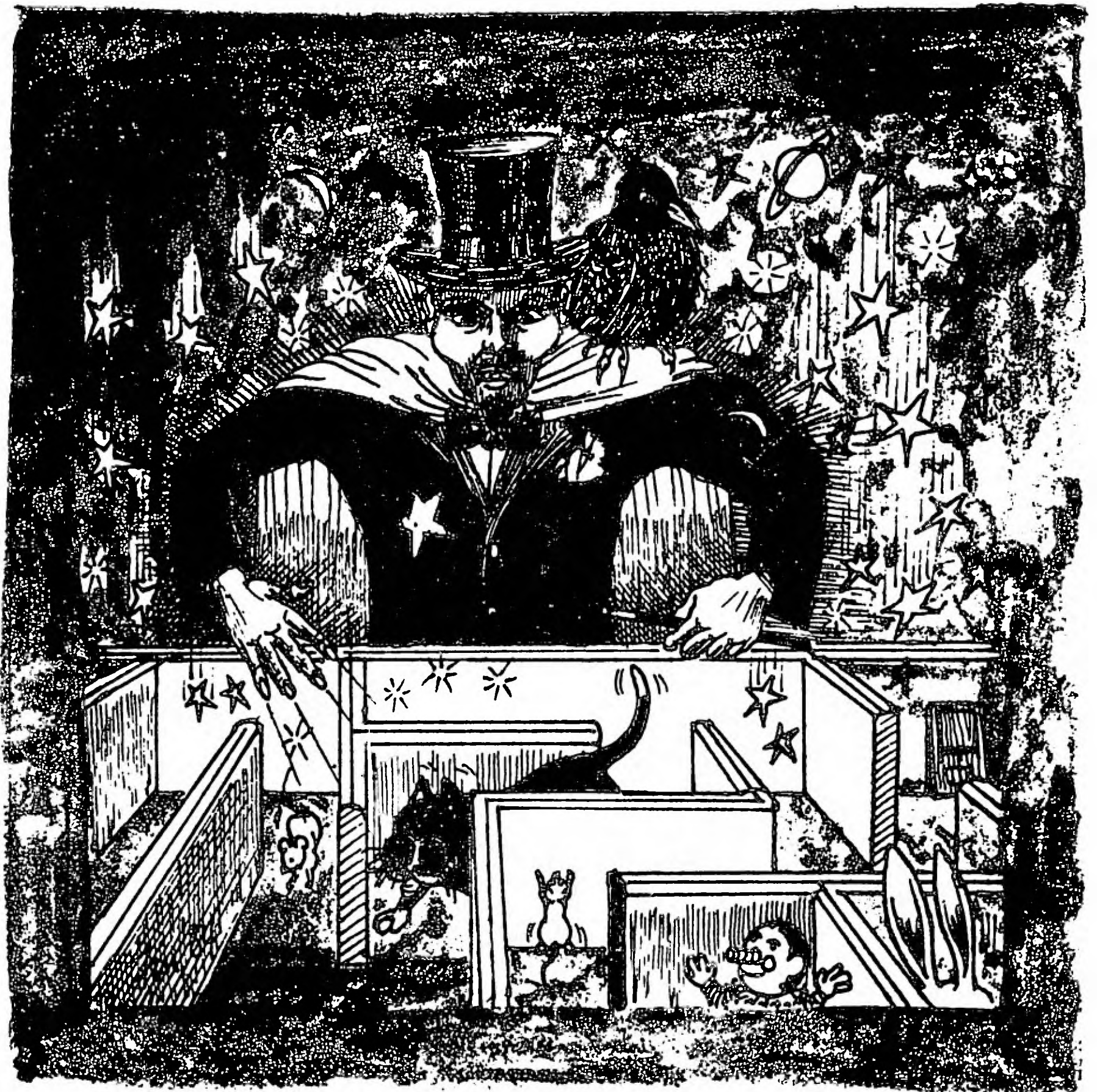
770 POKE53281,0:POKE53280,10
780 REM
790 HS=0:REM HIGH SCORE
800 DIMA(12,12)
810 H1=1:H2=1:REM HUMAN START
820 C1=12:C2=12:REM SQUISHER START
830 E1=12:E2=1:REM SQUASHER START
840 FORB=1TO12
850 FORC=1TO12
860 A(B,C)=46:REM '.'
870 NEXTC
880 NEXTB
890 FORB=1TO54
900 READC,D
910 A(C,D)=35:REM '#'
920 NEXTB
930 FORT=1TO25
940 A((INT(RND(1)*12+1)),(INT(RND(1)*12+
1)))=46
950 NEXTT
960 A(H1,H2)=ASC("H")
970 A(E1,E2)=ASC("$")
980 A(C1,C2)=ASC("?")
990 SC=0
1000 RETURN
1010 DATA3,1,10,1,3,2,5,2,6,2,7,2,8,2
1020 DATA10,2,2,3,3,3,5,3,8,3,9,3,11,3
1030 DATA5,4,5,8,1,5,3,5,4,5,5,5
1040 DATA8,5,9,5,10,5,12,5,9,7
1050 DATA1,6,3,6,5,6,12,6,2,8,3,8
1060 DATA4,8,9,8,10,8,11,8,7,9,12,9
1070 DATA1,10,2,10,10,10,5,10,7,10,12,10
1080 DATA5,11,7,11,9,11,10,11,12,11
1090 DATA2,12,3,12,4,12,5,12,11,12,12,12

```

READY.

MAGICIAN'S MAZE

Here's a program which will get your brain in a sweat, as it tests your powers of deduction...and map-making.



The wily old magician has trapped you in an abandoned house which is positively littered with magical and valuable items. To secure your freedom, you must transport six different objects into the store room.

Easy, you say, until the magician points out the true nature of his test. The house is built like a maze, and you do not yet have a map. You have to try and work out the ground plan as you go along. You do not even know where the store room is. To complicate matters further, you can only carry one thing at a time. Although you can drop any of the objects if you choose, you cannot drop them in a room which already contains one object.

Sounds complicated? It is, but the satisfaction you'll experience when you solve the maze and complete the task set by the magician will make it more than worthwhile.

The program understands the words you type in (after a limited fashion) and can carry out your wishes. Here's how the program begins:

THIS IS MOVE 1

YOU ARE IN THE LIBRARY

THERE ARE EXITS TO THE
EAST

THE ROOM HOLDS A WILLOW WAND

YOUR ARMS ARE EMPTY

WHAT DO YOU WANT TO DO? GO EAST

As you see, you type in your instructions in the form of two words, such as those used here: GO EAST

Moving east, as instructed, you enter the Audience Chamber:

THIS IS MOVE 2

YOU ARE IN THE AUDIENCE CHAMBER

THERE ARE EXITS TO THE
SOUTH EAST WEST

THE ROOM HOLDS A BLACK ACONITE

YOUR ARMS ARE EMPTY

WHAT DO YOU WANT TO DO? GET BLACK

Here you see a 'black aconite', and decide to pick it up, which you do with the command GET BLACK. In fact, only the first three letters are needed, so GET BLA would have worked as well (and you could have typed in GET BLACK ACONITE if you really wanted to do so).

If you are sensible, you'll be making a map as you work out the relationship of the rooms to each other, so you can move through the maze with growing confidence.

You have picked up the black aconite:

THIS IS MOVE 3

YOU ARE IN THE AUDIENCE CHAMBER

THERE ARE EXITS TO THE
SOUTH EAST WEST

YOU ARE CARRYING A BLACK ACONITE

WHAT DO YOU WANT TO DO? GO EAST

You soon discover your physical limitations as you try to carry two objects at once:

THIS IS MOVE 5

YOU ARE IN THE GLOOMY TURRET

THERE ARE EXITS TO THE
SOUTH WEST

THE ROOM HOLDS A GOLD PIECE

YOU ARE CARRYING A BLACK ACONITE

WHAT DO YOU WANT TO DO? GET GOLD
YOU CAN ONLY CARRY ONE THING AT ONCE

So, you decide to drop the aconite:

THIS IS MOVE 6

YOU ARE IN THE GLOOMY TURRET

THERE ARE EXITS TO THE
SOUTH WEST

THE ROOM HOLDS A GOLD PIECE

YOU ARE CARRYING A BLACK ACONITE

WHAT DO YOU WANT TO DO? DROP BLACK
THIS ROOM ALREADY
HOLDS A GOLD PIECE

Even that is not allowed! Soon, however, you come to the store room:

THIS IS MOVE 8

YOU ARE IN THE STORE ROOM
WHICH HOLDS:
NOTHING

THERE ARE EXITS TO THE
EAST

YOU ARE CARRYING A BLACK ACONITE
WHAT DO YOU WANT TO DO? DROP BLACK

THIS IS MOVE 9

YOU ARE IN THE STORE ROOM
WHICH HOLDS:
BLACK ACONITE

THERE ARE EXITS TO THE
EAST

YOUR ARMS ARE EMPTY

WHAT DO YOU WANT TO DO? GO EAST

After much wandering about and carrying, you find the store room is becoming gratifyingly full:

THIS IS MOVE 33

YOU ARE IN THE STORE ROOM
WHICH HOLDS:
BLACK ACONITE
GOLD PIECE
SHINING EMERALD
GLOWING ARTHAME

THERE ARE EXITS TO THE
EAST

YOUR ARMS ARE EMPTY

WHAT DO YOU WANT TO DO? WEST
ONLY GHOSTS CAN MOVE THROUGH WALLS

However, this still does not give you supernatural powers. Finally, after sixty moves, you succeed:

THERE ARE EXITS TO THE
EAST

YOU ARE CARRYING A HEMLOCK POTION

WHAT DO YOU WANT TO DO? DROP HEM
O OBJECTS TO GO

YOU'VE DONE IT!

YOU GOT 6 OBJECTS INTO THE STORE ROOM
BLACK ACONITE
GOLD PIECE
SHINING EMERALD
GLOWING ARTHAME
PAPYRUS INCANTATION
HEMLOCK POTION
IT TOOK YOU 60 MOVES

The computer will reject any input from you that it does not understand. To acquire an object, you tell the computer to GET or TAKE it, and to get rid of anything, you either DROP it or PUT it. To give up (as if you would!), enter QUIT. GO, followed by NORTH, SOUTH, EAST or WEST will move you in the direction of your choice.

Here's the listing so you can take on the challenge posed by the magician:

```
10 REM MAGICIAN'S MAZE
20 GOSUB1000:REM INITIALISE
30 FORY=1TO1000:NEXTY
40 PRINT "{CLR}":PRINT:PRINT
50 MOVE=MOVE+1
60 PRINTTAB(2+RND(1)*6); "{YEL}THIS IS MOVE"MOVE
70 PRINT:PRINT "{OR}YOU ARE IN THE ";N$(RO)
80 IFRO<>1THEN160
90 FLAG=0
100 PRINT "{GRN}WHICH HOLDS: "
110 FORZ=1TO8
120 IFP$(Z)<>" "THENPRINTP$(Z):FLAG=1
130 NEXTZ
140 IFFLAG=0THENPRINTTAB(6); "NOTHING"
150 PRINT
160 PRINT:PRINT "{PUR}THERE ARE EXITS TO THE "
170 PRINTTAB(7);
180 IFA(RO,1)<>0THENPRINT "NORTH ";
190 IFA(RO,2)<>0THENPRINT "SOUTH ";
200 IFA(RO,3)<>0THENPRINT "EAST ";
210 IFA(RO,4)<>0THENPRINT "WEST "
220 PRINT:PRINT
230 IFRO<>1ANDO$(RO)<>" "THENPRINT "{LT RED}THE ROOM HOLDS A ";O$(RO):PRINT
240 IFM$<>" "THENPRINT "{CYN}YOU ARE CARRYING A ";M$
250 IFM$=" "THENPRINT "{LT GRN}YOUR ARMS ARE EMPTY"
260 GOSUB300
270 GOTO30
280 REM*****
290 REM INPUT
300 PRINT:PRINT "{LT BLU}WHAT DO YOU WANT TO DO";
310 INPUTE$
320 IFLEN(E$)<7THENE$=E$+" ":GOTO320
330 F$=LEFT$(E$,3)
```

```

340 IFF$="QUI" THEN 960
350 IFF$="GO " THEN F$=MID$(E$, 4, 3)
360 IFF$="NOR" OR F$="SOU" OR F$="EAS" OR F$="
WES" THEN GOSUB 460: RETURN
370 Z=1
380 IF MID$(E$, Z, 1)=" " THEN G$=MID$(E$, Z+1
, 3): GOTO 420
390 IF Z<LEN(E$) THEN Z=Z+1: GOTO 380
400 PRINT "I DON'T UNDERSTAND "; E$
410 RETURN
420 IFF$="GET" OR F$="TAK" THEN GOSUB 600: RET
URN: REM 'GET' OR 'TAKE'
430 IFF$="PUT" OR F$="DRO" THEN GOSUB 680: RET
URN: REM 'PUT' OR 'DROP'
440 GOTO 400
450 REM*****
460 REM MOVE
470 F$=LEFT$(F$, 1)
480 IFF$="N" THEN 530
490 IFF$="S" THEN 550
500 IFF$="E" THEN 570
510 IFA(RO, 4)=0 THEN PRINT "ONLY GHOSTS CAN
MOVE THROUGH WALLS": RETURN
520 RO=A(RO, 4): RETURN
530 IFA(RO, 1)=0 THEN PRINT "THERE IS NO EXI
T THAT WAY": RETURN
540 RO=A(RO, 1): RETURN
550 IFA(RO, 2)=0 THEN PRINT "THAT'S A SOLID
WALL": RETURN
560 RO=A(RO, 2): RETURN
570 IFA(RO, 3)=0 THEN PRINT "THAT IS IMPOSSI
BLE!": RETURN
580 RO=A(RO, 3): RETURN
590 REM*****
600 REM GET OBJECTS
610 IF RO=1 THEN RETURN
620 IF LEFT$(G$, 3)<>LEFT$(O$(RO), 3) THEN PR
INT "IT IS NOT IN HERE": RETURN
630 IF M$<>" " THEN PRINT "YOU CAN ONLY CARRY
ON THING AT ONCE": RETURN
640 M$=O$(RO)
650 O$(RO)=" "
660 RETURN
670 REM*****

```



```

680 REM PUT THINGS DOWN
690 IFM$="" THENPRINT"YOU'RE NOT CARRYING
  IT":RETURN
700 IFRO=1THEN750
710 IF0$(RO)<>"" THENPRINT"THIS ROOM ALRE
ADY":PRINT"HOLDS A ";0$(RO):RETURN
720 0$(RO)=M$
730 M$=""
740 RETURN
750 PLACE=0:FLAG=0
760 FORZ=1TO6
770 IFPLACE=1THEN790
780 IFP$(Z)="" THENP$(Z)=M$:PLACE=1:M$=""
790 IFP$(Z)<>"" THENFLAG=FLAG+1
800 NEXTZ
810 IFFLAG=0THENPRINTTAB(8);"NOTHING"
820 PRINT6-FLAG"OBJECTS TO GO"
830 FORI=1TO700:NEXTI
840 IFFLAG=6THEN870:REM END OF GAME, ALL
  OBJECTS LOCATED
850 RETURN
860 REM*****
870 REM END OF GAME
880 PRINT:PRINT"YOU'VE DONE IT!"
890 PRINT:PRINT"YOU GOT 6 OBJECTS INTO T
HE STOREROOM"
900 FORZ=1TO8
910 IFP$(Z)<>"" THENPRINTTAB(2);P$(Z)
920 NEXTZ
930 PRINT"IT TOOK YOU";
940 PRINTMOVE"MOVES"
950 END
960 PRINT:PRINT"I DID NOT THINK YOU WERE
  A QUITTER!"
970 PRINT"YOU SURVIVED FOR";
980 GOTO940
990 REM*****
1000 REM INITIALISATION
1020 PRINT"{CLR}":POKE53281,0:POKE53280,
0
1030 DIMA(9,4),N$(9),0$(18),P$(9),M(8)
1040 RO=INT(RND(1)*8)+2:REM STARTING ROO
M
1050 FORJ=1TO9

```

```

1060 READN$(J):REM NAME OF ROOM
1070 NEXTJ
1080 FORJ=1TO18
1090 READO$(J)
1100 NEXTJ
1110 REM DISTRIBUTE OBJECTS
1120 REM MOSES/OAKFORD SHUFFLE ROUTINE
1130 FORJ=18TO11STEP-1
1140 Z=INT(RND(1)*J)+1
1150 M$=O$(Z)
1160 O$(Z)=O$(J)
1170 O$(J)=M$
1180 NEXTJ
1190 M$="":REM THIS IS OBJECT BEING CARR
IED
1200 MOVE=0
1210 FORJ=1TO9
1220 FORK=1TO4
1230 READA(J,K)
1240 NEXTK
1250 NEXTJ
1260 RETURN
1270 DATA"STORE ROOM","GLOOMY TURRET","M
ARBLE HALL","LIBRARY","AUDIENCE CHAMBER"
1275 DATA"MASTER BEDROOM","STUDY","ARTIS
T'S STUDIO","MUSICIAN'S QUARTERS"
1280 DATA"BROKEN CANDLESTICK","GOLD PIEC
E","SHINING EMERALD","BRONZE STATUE"
1285 DATA"SILVER CHALICE","MIGHTY SWORD"
,"DIAMOND RING","CRYSTAL GOBLET"
1286 DATA"SHADOW BOWL"
1290 DATA"MYSTIC SCROLL","WILLOW WAND","
NEWT'S TAIL","HEMLOCK POTION"
1295 DATA"PAPYRUS INCANTATION","BLACK AC
ONITE","GLOWING ARTHAME"
1296 DATA"GLASS FRAGILUS","POWERFUL PENT
ACLE"
1300 DATA0,0,2,0:REM ROOM 1
1310 DATA0,6,0,1:REM ROOM 2
1320 DATA0,9,7,0:REM ROOM 3
1330 DATA0,0,5,0:REM ROOM 4
1340 DATA0,7,6,4:REM ROOM 5
1350 DATA2,0,0,5:REM ROOM 6
1360 DATA5,0,8,3:REM ROOM 7

```

1370 DATA0,0,9,7:REM ROOM 8

1380 DATA3,0,0,8:REM ROOM 9

READY.

The names of many of the contents of the rooms came from the book *The Magicians*, by James Gunn (Methuen Paperbacks Ltd., London, 1980).

CPU PRISONER

Your Commodore 64 has imprisoned you within its central processing unit. When you run the program, you'll see yourself in a 3D room with doors facing in various directions. Can you find the room which will allow you to squeeze through the keyboard to safety?

Your controls:

I - up
M - down
J - left
K - right

```
10 POKE53281,0:POKE53280,2
20 PRINT"{CLR}"
30 POKE650,255
100 GOSUB7000:GOSUB8000:GOSUB5000
110 GOSUB4000
120 IFRO=36THENPRINT"{CLR}C O N G R A D
U L A T I O N S !!"
125 IFRO=36THENPRINT:PRINT:PRINT"YOU FOU
ND THE EXIT!":END
130 GOTO110
4000 REM*****
4010 REM**GET PLAYER COMMAND**
4020 REM*****
4029 PRINT"{HOME}{CUR DN}
"
4030 GETZ$:IFZ$=""THEN4030
4071 IFZ$="J"ANDX=85ANDY=163ANDA(RO,4)<>
0THENRO=A(RO,4):GOSUB4800:RETURN
4072 IFZ$="K"ANDX=245ANDY=163ANDA(RO,3)<
>0THENRO=A(RO,3):GOSUB4800:RETURN
4073 IFZ$="I"ANDX=165ANDY=153ANDA(RO,1)<
>0THENRO=A(RO,1):GOSUB4800:RETURN
4074 IFZ$="M"ANDY=193ANDA(RO,2)<>0THENRO
=A(RO,2):GOSUB4800:RETURN
4080 IFZ$="I"ANDY=153ANDA(RO,1)=0THEN414
0
```

```

4090 IFZ$="M"ANDY=193ANDA(RO,2)=0THEN414
0
4095 IFZ$="J"ANDX=85ANDA(RO,4)=0THEN4140
4096 IFZ$="K"ANDX=245ANDA(RO,3)=0THEN414
0
4100 IFZ$="I"THENY=Y-10:POKE2040,194
4110 IFZ$="M"THENY=Y+10:POKE2040,192
4120 IFZ$="K"THENX=X+10:POKE2040,193
4130 IFZ$="J"THENX=X-10:POKE2040,192
4140 IFY<153THENY=153
4141 IFY>193THENY=193
4142 IFX<65ANDY=193THENX=65
4143 IFX<75ANDY=183THENX=75
4144 IFX<85ANDY=173THENX=85
4146 IFX<105ANDY=153THENX=105
4150 IFX>255ANDY=193THENX=255
4160 IFX>245ANDY=183THENX=245
4170 IFX>235ANDY=173THENX=235
4171 IFX>215ANDY=153THENX=215
4180 POKEV,X:POKEV+1,Y
4500 RETURN
4760 PRINT"{HOME}{CUR DN}
"
4780 RETURN
4800 REM
4810 IFX=85THENX=245:GOTO4900
4820 IFX=245THENX=85:GOTO4900
4830 IFY=153ANDX=165THENY=193:X=165:GOTO
4900
4840 IFY=193THENX=165:Y=153
4900 POKEV,X:POKEV+1,Y
4910 GOSUB5000
4920 RETURN
5000 REM*****
5010 REM***3-D ROOM VISUAL***
5020 REM*****
5022 PRINT"{CLR}"
5040 A$(1)="{RVS ON}{WHT}"
_ {RVS OFF}"
5050 A$(2)="{RVS ON}{WHT}"
_ {RVS OFF}"
5060 A$(3)="{RVS ON}{WHT}"
_ {RVS OFF}"

```

```

5070 A$(4)="      {RVS ON}{WHT}>
      _{RVS OFF}"
5080 A$(5)="      {RVS ON}{WHT}>
      _{RVS OFF}"
5090 A$(6)="      {RVS ON}{WHT}>
      _{RVS OFF}"
5100 A$(7)="      {RVS ON}{WHT}>
      _{RVS OFF}"
5200 PRINT"{HOME}{CUR DN}{CUR DN}"
5300 B$="{CUR RT}{CUR RT}{CUR RT}{CUR RT}
}{CUR RT}{CUR RT}"
5310 PRINTB$;A$(7)
5320 PRINTB$;A$(6)
5330 PRINTB$;A$(5)
5340 PRINTB$;A$(4)
5350 PRINTB$;A$(3)
5360 PRINTB$;A$(2)
5370 PRINTB$;A$(1)
5400 PRINT"{CUR DN}{CUR DN}{CUR DN}{CUR
DN}{CUR DN}"
5410 PRINTB$;A$(7)
5420 PRINTB$;A$(6)
5430 PRINTB$;A$(5)
5440 PRINTB$;A$(4)
5450 PRINTB$;A$(3)
5460 PRINTB$;A$(2)
5470 PRINTB$;A$(1)
5500 B$(1)="{RVS ON}{GY 3} {CUR DN}{CUR
L} {CUR DN}{CUR L} {CUR DN}{CUR L} {CUR
DN}{CUR L} {CUR DN}{CUR L} {CUR DN}{CUR
L} {CUR DN}{CUR L} {CUR DN}{CUR L} {CUR
DN}{CUR L} {CUR DN}{CUR L} {CUR DN}{CUR
L} {CUR DN}{CUR L} "
5510 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}"B$(1)
5520 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}

```

```

}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}"B$(1)
5530 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{RVS ON
}
"
5540 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{RVS ON}
{RVS OFF}"
5550 B$(2)=" % "
5560 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}"B$(2)
5570 PRINT"{CUR RT}{CUR RT}{CUR RT}{CUR
RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR
RT}{CUR RT}{CUR RT}{CUR RT}"B$(2)
5580 PRINT"{CUR RT}{CUR RT}{CUR RT}{CUR
RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR
RT}{CUR RT}{CUR RT}{CUR RT}"B$(2)
5590 PRINT"{CUR RT}{CUR RT}{CUR RT}{CUR
RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR
RT}{CUR RT}{CUR RT}{CUR RT}"B$(2)
5600 PRINT"{CUR RT}{CUR RT}{CUR RT}{CUR
RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR
RT}{CUR RT}{CUR RT}{CUR RT}"B$(2)
5700 C$(1)="{RVS ON}{GRN}, "" ; {RVS OFF}{
CUR DN}{CUR L}{CUR L}{CUR L}{CUR L}{CUR
L}! {RVS ON}!{RVS OFF}{CUR DN}{CUR L}{
CUR L}{CUR L}{CUR L}!W {RVS ON}!
{RVS OFF}{CUR DN}{CUR L}{CUR L}{CUR L}{C
UR L}{CUR L}! {RVS ON}!{RVS OFF}{CUR D
N}{CUR L}{CUR L}{CUR L}{CUR L}{CUR L}!
{RVS ON}!{RVS OFF}"
5701 IFND=1THENC$(1)=C$(1)+"{CUR L}{CUR

```

```

L}M{CUR UP}{CUR L}{CUR L}M{CUR UP}{CUR L
}{CUR L}'{CUR UP}{CUR L}' "
5710 C$(2)="N{CUR UP}N%{CUR DN}{CUR L}%{
CUR DN}{CUR L}%{CUR DN}{CUR L}%{CUR DN}{
CUR L}%{CUR DN}{CUR L}%{CUR DN}{CUR DN}{
CUR L}{CUR L}{CUR L}{CUR L}'{CUR UP}{CUR
L}'{CUR UP}{CUR L}'{CUR UP}{CUR L}'W{CU
R UP}{CUR L}{CUR L}'{CUR UP}{CUR L}' "
5711 IFWD=1THENC$(2)="N{CUR UP}N%{CUR DN
}{CUR L}%{CUR DN}{CUR L}%{CUR DN}{CUR L}
%{CUR DN}{CUR L}%{CUR DN}{CUR L}%{CUR DN
}{CUR DN}{CUR L}{CUR L}{CUR L}{CUR L}'{C
UR UP}{CUR L}'{CUR UP}{CUR L}'{CUR UP}{C
UR L}'W{CUR UP}{CUR L}{CUR L}'{CUR UP}{C
UR L}'{CUR DN}{CUR DN}M{CUR DN}M"
5720 C$(3)="M{CUR DN}M{CUR DN}%{CUR DN}{
CUR L}%{CUR DN}{CUR L}{CUR L}W%{CUR DN}{
CUR L}%{CUR DN}{CUR L}%{CUR DN}{CUR L}%{
CUR UP}{CUR UP}{CUR L}{CUR L}{CUR L}{CUR
L}'{CUR UP}{CUR L}'{CUR UP}{CUR L}'{CUR
UP}{CUR L}'{CUR UP}{CUR L}'{CUR UP}{CUR
L}' "
5721 IFED=1THENC$(3)="M{CUR DN}M{CUR DN}
%{CUR DN}{CUR L}%{CUR DN}{CUR L}{CUR L}W
%{CUR DN}{CUR L}%{CUR DN}{CUR L}%{CUR DN
}{CUR L}%{CUR UP}{CUR UP}{CUR L}{CUR L}{
CUR L}{CUR L}'{CUR UP}{CUR L}'{CUR UP}{C
UR L}'{CUR UP}{CUR L}'{CUR UP}{CUR L}'{C
UR UP}{CUR L}'{CUR DN}{CUR DN}{CUR DN}{C
UR DN}{CUR RT}N{CUR DN}{CUR L}{CUR L}N"
5800 IFA(RO,4)<>ØTHENPRINT"{HOME}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}"C$(2)
5810 IFA(RO,3)<>ØTHENPRINT"{HOME}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}
```



```

}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}"C$(3)
5820 IFA(RO,1)<>0THENPRINT"{HOME}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}"C$(1)
5830 RETURN
6000 REM*****
6010 REM*****D A T A*****
6020 REM*****
6030 DATA0,8,2,0,0,0,0,0,0,0:REM ROOM 1
6040 DATA0,0,3,1,0,0,0,0,0,0:REM ROOM 2
6050 DATA0,10,0,2,0,0,0,0,0,0:REM ROOM 3
6060 DATA0,11,0,0,0,0,0,0,0,0:REM ROOM 4
6070 DATA0,0,6,0,0,0,0,0,0,0:REM ROOM 5
6080 DATA0,12,7,5,0,0,0,0,0,0:REM ROOM 6
6090 DATA0,0,0,6,0,0,0,0,0,0:REM ROOM 7
6100 DATA1,0,9,0,0,0,0,0,0,0:REM ROOM 8
6110 DATA0,20,10,8,0,0,0,0,0,0:REM ROOM
9
6120 DATA3,14,11,9,0,0,0,0,0,0:REM ROOM
10
6130 DATA4,16,12,10,0,0,0,0,0,0:REM ROOM
11
6140 DATA6,17,13,11,0,0,0,0,0,0:REM ROOM
12
6150 DATA0,18,0,12,0,0,0,0,0,0:REM ROOM
13
6160 DATA10,21,15,0,0,0,0,0,0,0:REM ROOM
14
6170 DATA0,0,16,14,0,0,0,0,0,0:REM ROOM
15
6180 DATA11,21,0,15,0,0,0,0,0,0:REM ROOM
6190 DATA12,27,18,16,0,0,0,0,0,0:REM ROO
M 17
6200 DATA13,28,0,17,0,0,0,0,0,0:REM ROOM
18
6210 DATA0,0,20,0,0,0,0,0,0,0:REM ROOM 1
9
6220 DATA9,23,0,19,0,0,0,0,0,0:REM ROOM

```

```

20
6230 DATA14,22,16,0,0,0,0,0,0,0:REM ROOM
  21
6240 DATA21,25,0,0,0,0,0,0,0,0:REM ROOM
  22
6250 DATA20,0,0,0,0,0,0,0,0,0:REM ROOM 2
  3
6260 DATA0,29,25,0,0,0,0,0,0,0:REM ROOM
  24
6270 DATA22,0,0,24,0,0,0,0,0,0:REM ROOM
  25
6280 DATA0,0,27,0,0,0,0,0,0,0:REM ROOM 2
  6
6290 DATA17,0,0,26,0,0,0,0,0,0:REM ROOM
  27
6300 DATA18,0,0,0,0,0,0,0,0,0:REM ROOM 2
  8
6310 DATA24,32,0,0,0,0,0,0,0,0:REM ROOM
  29
6320 DATA0,33,0,0,0,0,0,0,0,0:REM ROOM 3
  0
6330 DATA0,34,35,0,0,0,0,0,0,0:REM ROOM
  31
6340 DATA29,0,33,0,0,0,0,0,0,0:REM ROOM
  32
6350 DATA30,0,34,32,0,0,0,0,0,0:REM ROOM
  33
6360 DATA31,0,0,33,0,0,0,0,0,0:REM ROOM
  34
6370 DATA31,0,0,36,0,0,0,0,0,0:REM ROOM
  35
6380 DATA0,0,35,0,0,0,0,0,0,0:REM ROOM 3
  6
7000 REM*****
7010 REM***SET-UP***
7020 REM*****
7030 DIMA(36,10),M$(20),T$(20)
7040 RO=1
7050 FORB=1TO36:FORC=1TO10
7060 READA(B,C):NEXT:NEXT
7070 RETURN
8000 REM*****
8010 REM***SPRITE DATA***
8020 REM*****

```

```

8030 REM*****LOAD SPRITE DATA*****
8040 POKE2040,192
8050 FORX=192TO194:FORY=0TO63:READA:POKE
X*64+Y,A:NEXT:NEXT
8060 V=53248:POKEV+21,1:POKEV+39,15:POKE
V,165:POKEV+1,193
8070 POKEV+23,1:POKEV+29,1:POKEV+28,1:PO
KEV+38,6:POKEV+37,2
8075 X=165:Y=193:RETURN
8080 REM*****
8100 DATA0,252,0,1,85,0,15,255,192,2,165
,0,1,165,0,10,169,0,0,169,0,2,168,0
8110 DATA0,168,0,3,255,0,3,254,0,3,254,0
,3,254,0,3,254,0,1,86,0,3,250,0,3,3,0
8120 DATA3,3,0,1,3,0,5,1,0,0,5,0,0
8200 DATA0,255,0,0,85,0,3,255,192,1,106,
0,1,73,0,1,170,128,1,168,0,0,170,0
8210 DATA0,168,0,2,255,0,2,255,0,2,255,0
,2,255,0,2,255,0,2,149,0,3,255,0,3,3,0
8220 DATA3,3,0,3,1,0,1,1,64,1,64,0,0
8300 DATA0,252,0,1,85,0,15,255,192,1,85,
0,1,85,0,1,85,0,1,85,0,0,84,0,0,168,0
8310 DATA3,255,0,3,255,0,3,255,0,3,255,0
,3,255,0,1,85,0,3,255,0,3,3,0,3,3,0
8320 DATA1,1,0,1,1,0,1,1,0,0
10000 PRINT"{HOME}{CUR DN}{RVS ON}SORRY,
BUT THIS DOOR NEEDS THE SILVER KEY{RVS O
FF}"
10010 FORTT=1TO2000:NEXT
10040 IFA(RO,3)=12THENED=0
10060 RETURN

```

READY.

REFLEX BOWLING ALLEY

How's this for two in one? This program allows you to play ten pin bowling (after a fashion) by testing your reflexes.



When you run the program, you'll see the ten standing on the screen like this:

YOUR SCORE TO THIS FRAME IS 0

THIS IS FRAME 1 BALL 1

```
0 0 0 0
 0 0 0
  0 0
   0
```

STAND BY TO BOWL

After a short delay, of random duration, two magic words will appear beneath the words STAND BY TO BOWL:

BOWL NOW

The more quickly you react to this message, by hitting any key, the better your bowl will be. As you can see, I did not do too well with my first ball:

THIS IS FRAME 1 BALL 1

```
0 0 0 0
 0 0 0
  0 0
   -
```

-> SPARE <-
ONE PIN DOWN

However, I did a little better in the second frame:

YOUR SCORE TO THIS FRAME IS 2

THIS IS FRAME 2 BALL 1

```
0 0 0 0
- - -
- -
-
```

-> SPARE <-
6 PINS DOWN

And in the third frame, I got a strike!

YOUR SCORE TO THIS FRAME IS 8

THIS IS FRAME 3

```
- - - -
- - -
- -
-
```

>> STRIKE <<

Naturally, following the rules of bowling, the score I obtained in the next frame was doubled:

YOUR SCORE TO THIS FRAME IS 18

THIS IS FRAME 4 BALL 2

```
0 0 0 0
 0 0 -
  - -
  -
```

-> SPARE <-
4 PINS DOWN
PLUS 4 !!

But I utterly disgraced myself with the first ball in the fifth frame:

YOUR SCORE TO THIS FRAME IS 26

THIS IS FRAME 5 BALL 1

```
0 0 0 0
 0 0 0
  0 0
   0
```

> GUTTER <
0 PINS DOWN

I only managed a score of 43 for the round:

THAT'S THE END OF THE SET

YOUR SCORE WAS 43

When you're ready to beat my score, which you should find easy to do, here's the listing which will help you do it:

```
10 REM TEN-PIN BOWLING
20 GOSUB750:REM INITIALISE
30 FORF=1TO10
40 FORB=1TO2
50 IFB=1THENGOSUB280:REM SET UP PINS
60 GOSUB340:REM PRINT PINS
70 GOSUB470:REM BOWL BALL
80 GOSUB340
90 CO=0
100 FORJ=1TO10
110 IFA(J)=45THENCO=CO+1
120 NEXTJ
130 IFCO=0THENPRINT," > GUTTER <"
140 IFTS=FTHENPRINT," >> STRIKE <<":GOTO1
60
150 IFCO=10THENPRINT,":: ALL PINS DOWN :
:"
160 IFCO>0ANDCO<10THENPRINT,"-> SPARE <-
"
170 IFCO=1THENPRINTTAB(15)"ONE PIN DOWN"
180 IFTS<>FANDCO<>1ANDCO<10THENPRINTTAB(
14);CO"PINS DOWN"
190 GOSUB840
200 NEXT B
210 SC=SC+CO
220 IFTS=F-1THENPRINT,"PLUS"CO"!!":SC=SC
+CO:TS=99:GOSUB840
230 NEXT F
240 PRINT"THAT'S THE END OF THE FRAMES"
250 PRINT:PRINT"YOUR SCORE WAS"SC
260 END
270 REM *****
280 REM SET UP PINS
290 FORJ=1TO10
300 A(J)=79
310 NEXT J
320 RETURN
330 REM *****
340 REM PRINT PINS
350 PRINT"{CLR}":PRINT:PRINT
```



```

360 PRINT"YOUR SCORE TO THIS FRAME IS"SC
370 PRINT:PRINT"THIS IS FRAME"F;
380 IFTS=99THENPRINT" BALL"B
381 IFTS<>99THENPRINT
390 PRINT:PRINT"{YEL}"
400 PRINTTAB(13)CHR$(A(10));" ";CHR$(A(9
));" ";CHR$(A(8));" ";CHR$(A(7))
410 PRINTTAB(14);CHR$(A(6));" ";CHR$(A(5
));" ";CHR$(A(4))
420 PRINTTAB(15);CHR$(A(3));" ";CHR$(A(2
))
430 PRINTTAB(16);CHR$(A(1))
440 PRINT:PRINT
450 RETURN
460 REM *****
470 REM BOWL BALL
480 PRINTTAB(4)"STAND BY TO BOWL":PRINT
490 GETG$:IFG$<>" "THEN490
500 FORR=1TO300+RND(1)*Z
510 NEXTR
520 GETG$:IFG$<>" "THEN500
530 PRINTTAB(7)"BOWL NOW"
540 N=0
550 N=N+.7
560 GETG$:IFG$=" "THEN550
570 IFB=1ANDRND(1)>.9ANDN<30THENN=10
580 IFN<20ANDB=1THEN670
590 IFN<20THENT=10
600 IFN>19ANDN<30THENT=5+INT(RND(1)*4)
610 IFN>29ANDN<42THENT=2+INT(RND(1)*5)
620 IFN>41THENT=INT(RND(1)*4)
630 FORK=1TOT
640 IFRND(1)>.1THENA(K)=45
650 NEXTK
660 RETURN
670 REM * STRIKE *
680 FORK=1TO10
690 A(K)=45
700 NEXTK
710 TS=F
720 B=2
730 RETURN
740 REM *****

```

```
750 REM INITIALISATION
760 PRINT "{CLR}"
770 POKE53281,0:POKE53280,8
780 DIMA(10)
790 SC=0:REM SCORE
800 Z=500
810 TS=99
820 RETURN
830 REM *****
840 REM DELAY
850 FORL=1TO1300:NEXTL
860 RETURN
```

READY.

TELEPATHY TESTER

This relatively simple program is a good one to have on tap for when your friends come around, and you want to show them the power of your computer.



When the program is up and running, the computer explains the situation:

Now I'm going to test your ability at
doing Math in your head...and I'll
demonstrate my telepathic powers

.....

I'll give you a series of instructions
which I want you to carry out...

.....

After you've followed each instruction
you just press any key - and I'll give
the next instruction to follow

.....

Once the preliminaries are out of the way, the 'tele-
pathy testing' gets underway:

First, I want you to think of a number

.....

Now multiply that by five...

.....

 Add six to this

.....

Multiply the answer you've got by four

.....

 Add nine to this

.....

Now multiply this by five

.....

Now tell me the number you've
ended up with...

.....

? 465

.....

Your number is 3

.....

But there is more to the program than that. After a brief pause, so your guests can relax from the unaccustomed mental effort, a second 'test' begins:

.....

Now here we go with another one to test your mental powers again...

.....

I want you to write down three numbers which are each less than 10...

.....and greater than zero

Don't let me see them!

.....

Now multiply the first number by two

.....

Add three

.....

Multiply this by five...

.....

And next add seven to this...

.....

Time now to add in your second number

.....

Double the number you've got so far

.....

The next bit is easy - just add three

.....

Now, a hard bit...multiply by five...

.....

Another easy bit...add the third number
.....

Give me the number you've ended up with
? 878

.....

Your first number was 6

.....

Your second was 4

.....

And your third was 3

.....

A polite farewell, and the program is over:

Thanks for stretching your brain with
me, Math Champeen...See you again...

.....

Here's the listing to amaze your friends:

```
10 REM TELEPATHY TESTER
20 PRINT "{CLR}":PRINT:PRINT
30 PRINT "NOW I'M GOING TO TEST YOUR ABIL
ITY AT"
40 PRINT " DOING MATH IN YOUR HEAD...AND
I'LL"
50 PRINT " DEMONSTRATE MY TELEPATHIC PO
WERS"
60 GOSUB880
70 PRINT "I'LL GIVE YOU A SERIES OF INSTR
UCTIONS"
80 PRINT "WHICH I WANT YOU TO CARRY OUT..
."
90 GOSUB880
100 PRINT "AFTER YOU'VE FOLLOWED EACH INS
TRUCTION"
```

```

110 PRINT"YOU JUST PRESS ANY KEY - AND I
'LL GIVE"
120 PRINTTAB(4);"THE NEXT INSTRUCTION TO
FOLLOW."
130 GOSUB880
140 GETA$:IFA$<>" "THEN140
150 PRINT"FIRST, I WANT YOU TO THINK OF
A NUMBER"
160 GOSUB870
170 PRINT"NOW MULTIPLY THAT BY FIVE..."
180 GOSUB870
190 PRINTTAB(10);"ADD SIX TO THIS"
200 GOSUB870
210 PRINT"MULTIPLY THE ANSWER YOU'VE GOT
BY FOUR"
220 GOSUB870
230 PRINTTAB(10);"ADD NINE TO THIS"
240 GOSUB870
250 PRINT"NOW MULTIPLY THIS BY FIVE"
260 GOSUB870
270 PRINT"NOW TELL ME THE NUMBER YOU'VE"
280 PRINTTAB(10);"ENDED UP WITH..."
290 PRINT".....
.....":PRINT
300 INPUTNUMBER
310 NU=(NU-165)/100
320 GOSUB880
330 PRINTTAB(10);"YOUR NUMBER IS"NU
340 GOSUB880
350 GOSUB890
360 FORJ=1TO30
370 PRINTTAB(J);">"
380 FORT=1TO100:NEXT T
390 NEXT J
400 GOSUB880
410 PRINT"NOW HERE WE GO WITH ANOTHER ON
E TO"
420 PRINT"TEST YOUR MENTAL POWERS AGAIN.
.."
430 GOSUB880
440 GETA$:IFA$<>" "THEN440
450 PRINT"I WANT YOU TO WRITE DOWN THREE
NUMBERS"

```

```

460 PRINT " WHICH ARE EACH LESS THAN 10..
.....";
470 PRINT ".....AND GREATER THAN ZER
0....."
480 PRINTTAB(8); "DON'T LET ME SEE THEM!"
490 GOSUB870
500 PRINT "NOW MULTIPLY THE FIRST NUMBER
BY TWO"
510 GOSUB870
520 PRINTTAB(12); "ADD THREE"
530 GOSUB870
540 PRINT "MULTIPLY THIS BY FIVE"
550 GOSUB870
560 PRINT "AND NEXT ADD SEVEN TO THIS..."
570 GOSUB870
580 PRINT "TIME NOW TO ADD IN YOUR SECOND
NUMBER"
590 GOSUB870
600 PRINT "DOUBLE THE NUMBER YOU'VE GOT S
O FAR"
610 GOSUB870
620 PRINT "THE NEXT BIT IS EASY - JUST AD
D THREE"
630 GOSUB870
640 PRINT "NOW, A HARD BIT...MULTIPLY BY
FIVE..."
650 GOSUB870
660 PRINT "ANOTHER EASY BIT...ADD THE THI
RD NUMBER"
670 GOSUB870
680 PRINT "GIVE THE NUMBER YOU'VE ENDED U
P WITH"
690 INPUT NO
700 NO=NO-235
710 GOSUB880
720 A=INT(NO/100)
730 B=INT((NO-100*A)/10)
740 C=NO-10*B-100*A
750 PRINT:PRINT
760 PRINT "YOUR FIRST NUMBER WAS" A
770 GOSUB880
780 PRINTTAB(5); "YOUR SECOND WAS" B
790 GOSUB880

```



```

800 PRINTTAB(10); "AND YOUR THIRD WAS"C
810 GOSUB880
820 PRINT"THANKS FOR STRETCHING YOUR BRA
IN WITH"
830 PRINT"ME, MATH CHAMPEEN...SEE YOU AG
AIN..."
840 PRINT".....
....."
850 GOSUB880
860 END
870 GETA$: IFA$=" " THEN870
880 PRINT".....
.....":PRINT
890 FORT=1TO1000:NEXT T
900 RETURN

```

INVISIBLE

BRICKLAYER

Here's a snappy variation of an old favorite arcade game. You have five balls, and with them you have try and knock down all the bricks in the wall.

You gain five points for each brick you hit.

When one stage has been completed, you'll get a free man, bonus points, and an extra layer of bricks. There are five stages in all. You have the option of turning the bricks invisible, if you like a real challenge.

Your controls:

A - to move left
L - to move right
S & K - these double your speed

```
1 V1=54296:W1=54276:A1=54277
2 POKEV1,15:POKEW1,17
3 H1=54273:H2=54272
4 POKEH1,0:POKEH2,0
5 INPUT"{CLR}DO YOU WANT INVISIBLE BRICK
S";Y$
6 Y$=LEFT$(Y$,1):IFY$<>"Y"ANDY$<>"N"THEN
5
14 HI=0:N=1:Z=320:POKE650,255
15 N=1:Z=320:SC=0:M=1
16 PRINT"{CLR}{BLU}":POKE53280,5:POKE532
81,0
17 A=25:B=1024:C=15:D=18:E=0:BB$="
    @@@@@@@@@@@@@@@@@@":EE=55296
18 IFY$="Y"THEN9000
19 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN}{
CUR DN}{CUR DN}{WHT}"BB$:PRINT"{RED}"BB$
:PRINT"{GRN}"BB$:PRINT"{OR}"BB$
```

```

20 IFN>=2THENPRINT"{HOME}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{YEL}          @@@@
@@@@@@@@ " :Z=1020
21 IFN>=3THENPRINT"{HOME}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CYN}
      @@@@@@@@@@@@@@@@@@ " :Z=1800
22 IFN>=4THENPRINT"{HOME}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{GRN}
      @@@@@@@@@@@@@@@@@@ " :Z=2660
23 GOTO120
24 PRINT"{HOME}{CUR DN}{CYN}  BALL":PRIN
T" NUMBER":PRINT"  "M:PRINT"{PUR} @@@@@@
{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR L}{
CUR L}{CUR L}{CUR L}{CUR L}@@@@@
"
25 C=C-1:D=D-1
26 IFPEEK(B+C+40*D)=64THENPOKEB+C+40*D,3
2:GOSUB1000:GOTO63
27 IFD=3THEN63
28 POKEB+C+40*D,81:POKEEE+C+40*D,12:GOSU
B86
29 POKEB+C+40*D,32
30 IFC<11THENGOSUB2000:GOTO32
31 GOTO25
32 C=C+1:D=D-1
33 IFPEEK(B+C+40*D)=64THENPOKEB+C+40*D,3
2:GOSUB1000:GOTO63
34 IFD=3THEN63
35 POKEB+C+40*D,81:POKEEE+C+40*D,12:GOSU
B86
36 POKEB+C+40*D,32
37 IFC>28THENGOSUB2000:GOTO25
38 GOTO32
39 C=C-1:D=D+1
40 IFPEEK(B+C+40*D)=85THENGOSUB3000:GOTO
25
41 IFPEEK(B+C+40*D)=73THENGOSUB3000:GOTO
32
42 IFPEEK(B+C+40*D)=64THENSC=SC+5:GOSUB1
000
43 IFD=19THEN71

```

```

44 POKEB+C+40*D, 81:POKEEE+C+40*D, 12:GOSU
B86
45 POKEB+C+40*D, 32
46 IFC<11THENGOSUB2000:GOTO48
47 GOTO39
48 C=C+1:D=D+1
49 IFPEEK(B+C+40*D)=85THENC=C-INT(RND(1)
*3):GOSUB3000:GOTO25
50 IFPEEK(B+C+40*D)=73THENC=C+INT(RND(1)
*3):GOSUB3000:GOTO32
51 IFPEEK(B+C+40*D)=64THENSC=SC+5:GOSUB1
000
52 IFD=19THEN71
53 POKEB+C+40*D, 81:POKEEE+C+40*D, 12:GOSU
B86:POKEB+C+40*D, 32
54 IFC>28THENGOSUB2000:GOTO39
55 GOTO48
56 D=D+1
57 IFPEEK(B+C+40*D)=64THENSC=SC+5:GOSUB1
000
58 IFPEEK(B+C+40*D)=85THENC=C-INT(RND(1)
*3):GOSUB3000:GOTO25
59 IFPEEK(B+C+40*D)=73THENC=C+INT(RND(1)
*3):GOSUB3000:GOTO32
60 POKEB+C+40*D, 81:POKEEE+C+40*D, 12:GOSU
B86:POKEB+C+40*D, 32
61 IFD=19THEN71
62 GOTO56
63 L=INT(RND(1)*3)
64 IFD=3THEN66
65 SC=SC+5:IFSC>HITHENHI=SC
66 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN}{
CUR DN}{CUR DN}{WHT} SCORE:":PRINT:PRINT
" "SC:PRINT:PRINT" {RED}*{WHT}HIGH{RED}*
{YEL}":PRINT:PRINT" "HI
68 IFL=2THENC=C+L:GOTO39
69 IFL=0THENC=C-L:GOTO48
70 IFL=1THEN56
71 POKEV1, 15:M=M+1:IFM=6THEN79
72 POKEW1, 17:POKEA1, 9:FORTT=1TO120:NEXT
73 READAA:READBB:IFBB=-1THENPOKEH1, 0:POK
EH2, 0:GOTO75
74 POKEH1, AA:POKEH2, BB:POKEW1, 0:GOTO72
75 RESTORE:GOTO24

```

```

79 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN}{
CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{
CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{
CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{
CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}"
SPC(15) "{WHT}GAME OVER"
80 FORT1=1TO2000:NEXT
82 GOTO4000
86 GETA$
89 IFSC=ZTHEN103
90 POKEB+A+40*18,32:POKEB+(A+1)+40*18,32
92 IFA$="S" THENA=A-2:GOTO97
93 IFA$="K" THENA=A+2:GOTO97
94 IFA$="A" THENA=A-1
95 IFA$="L" THENA=A+1
97 IFA<10 THENA=10
98 IFA>28 THENA=28
99 IFSC>HITHENHI=SC
100 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{WHT} SCORE: ":PRINT:PRIN
T" "SC:PRINT:PRINT" {RED}*{WHT}HIGH{RED}
*{YEL}":PRINT:PRINT" "HI
101 POKEB+A+40*18,85:POKEB+(A+1)+40*18,7
3:POKEEE+A+40*18,13:POKEEE+(A+1)+40*18,1
3
102 RETURN
103 FORR=SC TO SC+299:POKEW1,17:POKEA1,9:P
OKEH1,68:POKEH2,149:POKEW1,0
104 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{PUR}"SPC(17)"BONUS"
105 IFR>HITHENHI=R
106 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{WHT} SCORE: ":PRINT:PRIN
T" "R:PRINT:PRINT" {RED}*{WHT}HIGH{RED}*
{YEL}":PRINT:PRINT" "HI
107 NEXT:POKEH1,0:POKEH2,0:SC=R:N=N+1:IF
N=6 THEN4000
108 IFM=1 THEN110
109 M=M-1
110 GOTO16
120 PRINT "{HOME}{CUR RT}{CUR RT}{CUR RT}
{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}
{CUR RT}{RVS ON}{LT BLU}
"

```



```

3010 POKEH1,81:POKEH2,161:FORRR=1TO10:NE
XT
3020 POKEW1,0:POKEH1,0:POKEH2,0:RETURN
4000 REM *****
4010 IFN=6THENPRINT"{HOME}{CUR DN}{CUR D
N}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR D
N}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR D
N}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR D
N}{CUR DN}"SPC(15){WHT}GAME OVER":FORT1
=1TO3000:NEXT
4020 FORT=1TO25:PRINT:FORTT=1TO60:NEXT:N
EXT
4050 PRINT"{HOME}{WHT}ANOTHER GO? "
4060 GETA$:IFA$<>"Y"ANDA$<>"N"THEN4060
4070 IFA$="Y"THENRUN
4080 POKE54279,0:POKE54273,0:POKE54272,0
:POKE54276,0:END
5000 DATA34,175,32,94,28,214,25,177
5010 DATA22,227,21,154,19,63,17,37
5020 DATA-1,-1
9000 REM *****
9010 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{BLK}"BB$:PRINTBB$
9020 PRINTBB$:PRINTBB$
9030 IFN>=2THENPRINT"{HOME}{CUR DN}{CUR
DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR
DN}{CUR DN}{CUR DN}{BLK}          @@@@
@@@@@@@@@@@@@@@@ " :Z=1020
9040 IFN>=3THENPRINT"{HOME}{CUR DN}{CUR
DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR
DN}{CUR DN}{CUR DN}{BLK}
          @@@@@@@@@@@@@@@@@@ " :Z=1800
9050 IFN>=4THENPRINT"{HOME}{CUR DN}{CUR
DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR
DN}{CUR DN}{CUR DN}{BLK}
          @@@@@@@@@@@@@@@@@@ " :Z=2660
9060 GOTO23

READY.

```

POKER

Here it is, a full 'solo poker' game. You play by the standard rules of draw poker.

You start the game with 10 credits. No matter how many credits you win, the maximum bet per game is 10 credits. The computer will deal your hand, showing fully-defined cards. You have the option of holding any (or none) of the cards, just by pressing the 1, 2, 3, 4 or 5 keys (where 1 is the leftmost card, and 5 is the one on the hard right). Pressing 'C' allows you to cancel your holds.

When you've decide which cards you wish to discard, press RETURN and the computer will deal out your replacement cards, and then look to see if you have won or not.

If you don't win, a new hand will begin. If you do win, you'll be given the chance to double your winnings (double or nothing).

If you decide to forgo this option, your winnings will be added to your credits total, and a new hand will begin. If, however, you decide to bet, a single card will be dealt, face down. You have to guess whether it will be high (six through to a king) or low (ace to five). You do this by pressing 'B' (for big) or 'S' (for small, of course). If you are right, your winnings will be doubled, and you'll get the chance to play 'double or nothing' with that amount again.


```

1 V1=54296:W1=54276:A1=54277:H1=54273:L1
=54272
5 CO=54272:CREDIT=10
6 DIMDD(13),EE(13)
10 POKE53280,5:POKE53281,0
11 PP(1)=500:PP(2)=100:PP(3)=25:PP(4)=10
:PP(5)=7:PP(6)=3:PP(7)=2:PP(8)=1
12 FORA=1TO13:DD(A)=0:EE(A)=0:NEXT:BB=0
20 A$="{LT BLU}N#####M N#####M N#####M N
#####M N#####M"
30 Q$="%{RED}VVVVV{LT BLU}' %{RED}VVVVV{
LT BLU}' %{RED}VVVVV{LT BLU}' %{RED}VVVV
V{LT BLU}' 4{RED}VVVVV{LT BLU}' "
40 W$="M$$$$$N M$$$$$N M$$$$$N M$$$$$N M
$$$$$N"
50 PRINT "{CLR}{HOME}{CUR DN}{CUR DN}{CUR
DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR
DN}{CUR DN}{CUR DN}{CUR DN}"
60 PRINTA$:PRINTQ$:PRINTQ$:PRINTQ$:PRINT
Q$:PRINTQ$:PRINTQ$:PRINTQ$:PRINTW$
70 PRINT "{HOME}{CUR DN}{CUR RT}{CUR RT}{
CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{
CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{
CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{
CUR RT}{OR}ROYAL FLUSH {WHT}500"
71 PRINT "{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{BLU}ST
RAIGHT FLUSH{WHT} 100"
72 PRINT "{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{OR}FOU
R OF A KIND{WHT} 25"
73 PRINT "{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{BLU}FU
LL HOUSE{WHT} "PP(4)
74 PRINT "{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{OR}FLU

```

```

SH          {WHT}          "PP(5)
75 PRINT"{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{BLU}TH
REE OF A KIND {WHT}"PP(6)
76 PRINT"{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{OR}TWO
PAIRS          {WHT}"PP(7)
77 PRINT"{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{BLU}AC
E OR BETTER   {WHT}"PP(8)
78 IFCREDIT=0THENPRINT"{CLR}{RVS ON}{LT
BLU}YOU NO LONGER HAVE ANY CREDITS LEFT.
..":END
100 PRINT"{HOME}{CUR DN}{CUR DN}{CUR RT}
{LT BLU}CREDIT:";CREDIT
105 PRINT
110 INPUT"{HOME}{CUR RT}{CUR RT}{CUR RT}
{PUR}BET:";BET
111 IFBET=0THENPRINT"{HOME}{RVS ON}{LT B
LU}***YOU MUST BET AT LEAST ONE CREDIT*
**{RVS OFF}":GOTO114
112 IFBET>10THENPRINT"{HOME}{RVS ON}{GRN
}10 CREDITS IS THE MAXIMUM AT A TIME":GO
TO115
113 IFBET<=CREDITTHEN200
114 PRINT"{HOME}{RVS ON}{GRN}***YOU DON'
T HAVE THAT MANY CREDITS.***"
115 FORA=1TO1500:NEXT
116 PRINT"{HOME}
          ":GOTO110
120 IFBET>10THENPRINT"{RVS ON}{LT BLU}**
**10 CREDITS IS THE MAX. AT A TIME***":G
OTO114
200 CREDIT=CREDIT-BET:PRINT"{HOME}{CUR D
N}{CUR DN}{CUR RT}          ":PRI
NT"{HOME}{CUR DN}{CUR DN}{CUR RT}{LT BLU
}CREDIT:";CREDIT
205 FORA=1TO8:PP(A)=PP(A)*BET:NEXT

```

```

206 PRINT "{HOME}{CUR DN}{CUR RT}{CUR RT}
{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}
{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}
{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}
{CUR RT}{OR}ROYAL FLUSH {WHT}"PP(1)
207 PRINT "{CUR RT}{CUR RT}{CUR RT}{CUR R
T}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR R
T}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR R
T}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{BLU}S
TRAIGHT FLUSH{WHT}"PP(2)
208 PRINT "{CUR RT}{CUR RT}{CUR RT}{CUR R
T}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR R
T}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR R
T}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{OR}FO
UR OF A KIND{WHT} "PP(3)
209 PRINT "{CUR RT}{CUR RT}{CUR RT}{CUR R
T}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR R
T}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR R
T}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{BLU}F
ULL HOUSE{WHT} "PP(4)
210 PRINT "{CUR RT}{CUR RT}{CUR RT}{CUR R
T}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR R
T}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR R
T}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{OR}FL
USH {WHT} "PP(5)
211 PRINT "{CUR RT}{CUR RT}{CUR RT}{CUR R
T}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR R
T}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR R
T}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{BLU}T
HREE OF A KIND {WHT}"PP(6)
212 PRINT "{CUR RT}{CUR RT}{CUR RT}{CUR R
T}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR R
T}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR R
T}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{OR}TW
O PAIRS {WHT}"PP(7)
213 PRINT "{CUR RT}{CUR RT}{CUR RT}{CUR R
T}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR R
T}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR R
T}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{BLU}A
CE OR BETTER {WHT}"PP(8)
219 FORA=1TO5:C(A)=INT(RND(1)*13)+1:NEXT
220 IFC(1)=C(2)ANDC(2)=C(3)ANDC(3)=C(4)A
NDC(4)=C(5)THEN219
230 FORA=1TO5:CC(A)=INT(RND(1)*4)+1:NEXT

```



```

CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{
CUR RT}{CUR RT}{CUR RT}"
410 IFCC(T)=1THENGOSUB1000
420 IFCC(T)=2THENGOSUB2000
430 IFCC(T)=3THENGOSUB3000
440 IFCC(T)=4THENGOSUB4000
445 POKEV1,15:POKEW1,17:POKEA1,9
446 READA:READB:IFB=-1THENPOKE54273,0:PO
KE54272,0:RESTORE:GOTO450
447 POKE54273,A:POKE54272,B:POKE54276,0:
GOTO445
448 DATA17,37,19,63,21,154,22,227
449 DATA25,177,-1,-1
450 NEXT
455 POKEV1,15:POKEW1,0:POKEA1,0
460 GETA$:IFA$=CHR$(13)THEN500
461 PRINT"{HOME}{RVS ON}{GRN}PRESS 1 , 2
, 3 , 4 , 5 TO HOLD CARDS"
462 PRINT:PRINT"{YEL}{CUR DN}'RETURN' TO
DEAL":PRINT:PRINT"{CUR DN}{CUR DN}{CUR
DN}{CUR DN}'C' TO CANCEL HOLDS"
470 IFA$="1"THENPRINT"{GRN}{HOME}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR RT}HELD.":CA(1)=1
471 IFA$="2"THENPRINT"{GRN}{HOME}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}HELD.":
CA(2)=1
472 IFA$="3"THENPRINT"{GRN}{HOME}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}HELD.":CA(3)=1

```

```

473  IFA$="4" THEN PRINT "{GRN}{HOME}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}HELD."
474  IFA$="5" THEN PRINT "{GRN}{HOME}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}";
475  IFA$="5" THEN PRINT "{GRN}HELD.":CA(5)=
1
476  IFA$="4" THEN CA(4)=1
477  IFA$="C" THEN PRINT "{HOME}{CUR DN}{CUR
DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR
DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR
DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR
DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}"
478  IFA$="C" THEN PRINT "
":FORA=1TO5:CA(A)=0
479  IFA$="C" THEN FORA=1TO5:CA(A)=0:NEXT
499  GOTO460
500  B$="{LT BLU}%{RED}VVVVV{LT BLU}'":BB
$="{LT BLU}%{RED}VVVVV{LT BLU}'":C$="{LT
BLU}%{RED}VVVVV{LT BLU}'":CC$="{LT BLU}
%{RED}VVVVV{LT BLU}'"
501  D$="{LT BLU}%{RED}VVVVV{LT BLU}'":DD
$="{LT BLU}%{RED}VVVVV{LT BLU}'":E$="{LT
BLU}%{RED}VVVVV{LT BLU}'"
502  P$(1)="{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN

```

```

}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}
503 P$(2)="{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}"
504 P$(3)="{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}"
505 P$(4)="{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}"
506 P$(5)="{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}"
507 FORA=1TO5:IFCA(A)=1THEN511
508 PRINTP$(A);:PRINTB$:PRINTP$(A)+"{CUR
DN}";:PRINTBB$:PRINTP$(A)+"{CUR DN}{CUR
DN}";:PRINTC$
509 PRINTP$(A)+"{CUR DN}{CUR DN}{CUR DN}
";:PRINTCC$:PRINTP$(A)+"{CUR DN}{CUR DN}
{CUR DN}{CUR DN}";:PRINTD$
510 PRINTP$(A)+"{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}";:PRINTDD$:PRINTP$(A)+"
{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}";:PRINTE$
511 NEXT

```

```

513 IFCA(1)=1THEN600
514 B=INT(RND(1)*13)+1:C=INT(RND(1)*4)+1
515 IFB=C(1)ANDC=CC(1)THEN513
516 C(1)=B:CC(1)=C
520 IFC(1)=C(2)ANDCC(1)=CC(2)THEN513
530 IFC(1)=C(3)ANDCC(1)=CC(3)THEN513
540 IFC(1)=C(4)ANDCC(1)=CC(4)THEN513
550 IFC(1)=C(5)ANDCC(1)=CC(5)THEN513
555 P$="{HOME}{CUR DN}{CUR DN}{CUR DN}{C
UR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{C
UR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}"
556 T=1
560 IFCC(1)=1THENGOSUB1000
570 IFCC(1)=2THENGOSUB2000
580 IFCC(1)=3THENGOSUB3000
590 IFCC(1)=4THENGOSUB4000
591 POKEV1,15:POKEW1,17:POKEA1,9
592 READA:READB:IFB=-1THENPOKE54273,0:PO
KE54272,0:RESTORE:GOTO600
593 POKE54273,A:POKE54272,B:POKE54276,0:
GOTO591
600 IFCA(2)=1THEN700
610 B=INT(RND(1)*12)+1:C=INT(RND(1)*3)+1
615 IFB=C(2)ANDC=CC(2)THEN600
616 C(2)=B:CC(2)=C
620 IFC(1)=C(2)ANDCC(1)=CC(2)THEN600
630 IFC(2)=C(3)ANDCC(2)=CC(3)THEN600
640 IFC(2)=C(4)ANDCC(2)=CC(4)THEN600
650 IFC(2)=C(5)ANDCC(2)=CC(5)THEN600
655 P$="{HOME}{CUR DN}{CUR DN}{CUR DN}{C
UR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{C
UR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{C
UR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{C
UR RT}{CUR RT}{CUR RT}"
656 T=2
660 IFCC(2)=1THENGOSUB1000
670 IFCC(2)=2THENGOSUB2000
680 IFCC(2)=3THENGOSUB3000
690 IFCC(2)=4THENGOSUB4000
691 POKEV1,15:POKEW1,17:POKEA1,9
692 READA:READB:IFB=-1THENPOKE54273,0:PO
KE54272,0:RESTORE:GOTO700
693 POKE54273,A:POKE54272,B:POKE54276,0:
GOTO691

```



```

700 IFCA(3)=1THEN800
710 B=INT(RND(1)*12)+1:C=INT(RND(1)*3)+1
715 IFB=C(3)ANDC=CC(3)THEN700
716 C(3)=B:CC(3)=C
720 IFC(3)=C(1)ANDCC(3)=CC(1)THEN700
730 IFC(2)=C(3)ANDCC(2)=CC(3)THEN700
740 IFC(3)=C(4)ANDCC(3)=CC(4)THEN700
750 IFC(3)=C(5)ANDCC(3)=CC(5)THEN700
755 P$="{HOME}{CUR DN}{CUR DN}{CUR DN}{C
UR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{C
UR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{C
UR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{C
UR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{C
UR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{C
UR RT}"
756 T=3
760 IFCC(3)=1THENGOSUB1000
770 IFCC(3)=2THENGOSUB2000
780 IFCC(3)=3THENGOSUB3000
790 IFCC(3)=4THENGOSUB4000
791 POKEV1,15:POKEW1,17:POKEA1,15
792 READA:READB:IFB=-1THENPOKE54273,0:PO
KE54272,0:RESTORE:GOTO800
793 POKE54273,A:POKE54272,B:POKE54276,0:
GOTO791
800 IFCA(4)=1THEN900
810 B=INT(RND(1)*12)+1:C=INT(RND(1)*3)+1
815 IFB=C(4)ANDC=CC(4)THEN800
816 C(4)=B:CC(4)=C
820 IFC(4)=C(1)ANDCC(4)=CC(1)THEN800
830 IFC(4)=C(2)ANDCC(4)=CC(2)THEN800
840 IFC(3)=C(4)ANDCC(3)=CC(4)THEN800
850 IFC(4)=C(5)ANDCC(4)=CC(5)THEN800
855 P$="{HOME}{CUR DN}{CUR DN}{CUR DN}{C
UR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{C
UR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{C
UR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{C
UR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{C
UR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{C
UR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{C
UR RT}"
856 T=4
860 IFCC(4)=1THENGOSUB1000
870 IFCC(4)=2THENGOSUB2000

```

```

880 IFCC(4)=3THENGOSUB3000
890 IFCC(4)=4THENGOSUB4000
891 POKEV1,15:POKEW1,17:POKEA1,9
892 READA:READB:IFB=-1THENPOKE54273,0:PO
KE54272,0:RESTORE:GOTO900
893 POKE54273,A:POKE54272,B:POKE54276,0:
GOTO891
900 IFCA(5)=1THEN980
910 B=INT(RND(1)*12)+1:C=INT(RND(1)*3)+1
915 IFB=C(5)ANDC=CC(5)THEN900
916 C(5)=B:CC(5)=C
920 IFC(5)=C(1)ANDCC(5)=CC(1)THEN900
930 IFC(5)=C(2)ANDCC(5)=CC(2)THEN900
940 IFC(5)=C(3)ANDCC(5)=CC(3)THEN900
950 IFC(4)=C(5)ANDCC(4)=CC(5)THEN900
955 P$="{HOME}{CUR DN}{CUR DN}{CUR DN}{C
UR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{C
UR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{C
UR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{C
UR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{C
UR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{C
UR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{C
UR RT}{CUR RT}"
956 T=5
960 IFCC(5)=1THENGOSUB1000
970 IFCC(5)=2THENGOSUB2000
971 IFCC(5)=3THENGOSUB3000
972 IFCC(5)=4THENGOSUB4000
973 POKEV1,15:POKEW1,17:POKEA1,9
974 READA:READB:IFB=-1THENPOKE54273,0:PO
KE54272,0:RESTORE:GOTO980
975 POKE54273,A:POKE54272,B:POKE54276,0:
GOTO973
980 GOTO5000
1000 REM
1010 IFC(T)=1THENB$="%{RED}A A{LT BLU}
' ":BB$="%"
1020 IFC(T)=1THENC$="%" ' ":CC$="%" {R
ED}S{LT BLU} ' "
1030 IFC(T)=1THEND$="%" ' ":DD$="%"
' "

```

1040 IFC(T)=1THENE\$="%{RED}A A{LT BLU}
' "
1050 IFC(T)=2THENB\$="%{RED}2 2{LT BLU}
' ":BB\$="% {RED}S{LT BLU} ' "
1060 IFC(T)=2THENC\$="% ' ":CC\$="%
' "
1070 IFC(T)=2THEND\$="% ' ":DD\$="% {R
ED}S{LT BLU} ' "
1080 IFC(T)=2THENE\$="%{RED}2 2{LT BLU}
' "
1090 IFC(T)=3THENB\$="%{RED}3 3{LT BLU}
' ":BB\$="% {RED}S{LT BLU} ' "
1100 IFC(T)=3THENC\$="% ' ":CC\$="% {R
ED}S{LT BLU} ' "
1110 IFC(T)=3THEND\$="% ' ":DD\$="% {R
ED}S{LT BLU} ' "
1120 IFC(T)=3THENE\$="%{RED}3 3{LT BLU}
' "
1130 IFC(T)=4THENB\$="%{RED}4 4{LT BLU}
' ":BB\$="%{RED}S S{LT BLU} ' "
1140 IFC(T)=4THENC\$="% ' ":CC\$="%
' "
1150 IFC(T)=4THEND\$="% ' ":DD\$="%{RED
}S S{LT BLU} ' "
1160 IFC(T)=4THENE\$="%{RED}4 4{LT BLU}
' "
1170 IFC(T)=5THENB\$="%{RED}5 5{LT BLU}
' ":BB\$="%{RED}S S{LT BLU} ' "
1180 IFC(T)=5THENC\$="% ' ":CC\$="% {R
ED}S{LT BLU} ' "
1190 IFC(T)=5THEND\$="% ' ":DD\$="%{RED
}S S{LT BLU} ' "
1200 IFC(T)=5THENE\$="%{RED}5 5{LT BLU}
' "
1210 IFC(T)=6THENB\$="%{RED}6 6{LT BLU}
' ":BB\$="%{RED}S S{LT BLU} ' "
1220 IFC(T)=6THENC\$="% ' ":CC\$="%{RED
}S S{LT BLU} ' "
1230 IFC(T)=6THEND\$="% ' ":DD\$="%{RED
}S S{LT BLU} ' "
1240 IFC(T)=6THENE\$="%{RED}6 6{LT BLU}
' "
1250 IFC(T)=7THENB\$="%{RED}7 7{LT BLU}
' ":BB\$="%{RED}S S{LT BLU} ' "

1260 IFC(T)=7THENC\$="% '":CC\$="%{RED
}S S S{LT BLU}'"
1270 IFC(T)=7THEND\$="% '":DD\$="%{RED
}S S{LT BLU}'"
1280 IFC(T)=7THENE\$="%{RED}7 7{LT BLU}
' "
1290 IFC(T)=8THENB\$="%{RED}8 8{LT BLU}
' ":BB\$="%{RED}S S{LT BLU}' "
1300 IFC(T)=8THENC\$="%{RED}S S{LT BLU}
' ":CC\$="% ' "
1310 IFC(T)=8THEND\$="%{RED}S S{LT BLU}
' ":DD\$="%{RED}S S{LT BLU}' "
1320 IFC(T)=8THENE\$="%{RED}8 8{LT BLU}
' "
1330 IFC(T)=9THENB\$="%{RED}9 9{LT BLU}
' ":BB\$="%{RED}S S{LT BLU}' "
1340 IFC(T)=9THENC\$="%{RED}S S{LT BLU}
' ":CC\$="% {RED}S{LT BLU}' "
1350 IFC(T)=9THEND\$="%{RED}S S{LT BLU}
' ":DD\$="%{RED}S S{LT BLU}' "
1360 IFC(T)=9THENE\$="%{RED}9 9{LT BLU}
' "
1370 IFC(T)=10THENB\$="%{RED}10 10{LT BLU}
}' ":BB\$="%{RED}S S{LT BLU}' "
1380 IFC(T)=10THENC\$="%{RED}S S S{LT BLU}
}' ":CC\$="% ' "
1390 IFC(T)=10THEND\$="%{RED}S S S{LT BLU}
}' ":DD\$="%{RED}S S{LT BLU}' "
1400 IFC(T)=10THENE\$="%{RED}10 10{LT BLU}
}' "
1410 IFC(T)=11THENB\$="%{RED}JS SJ{LT BLU}
}' ":BB\$="%{RED}J J{LT BLU}' "
1420 IFC(T)=11THENC\$="%{RED}J J J{LT BLU}
}' ":CC\$="% *"
1430 IFC(T)=11THEND\$="%{RED}J J J{LT BLU}
}' ":DD\$="%{RED}J J{LT BLU}' "
1440 IFC(T)=11THENE\$="%{RED}JS SJ{LT BLU}
}' "
1450 IFC(T)=12THENB\$="%{RED}QS SQ{LT BLU}
}' ":BB\$="%{RED}Q Q{LT BLU}' "
1460 IFC(T)=12THENC\$="%{RED}Q Q Q{LT BLU}
}' ":CC\$="% *"
1470 IFC(T)=12THEND\$="%{RED}Q Q Q{LT BLU}
}' ":DD\$="%{RED}Q Q{LT BLU}' "

```

1480 IFC(T)=12THENE$="%{RED}QS SQ{LT BLU
}' "
1490 IFC(T)=13THENB$="%{RED}KS SK{LT BLU
}':BB$="%{RED}K K{LT BLU}' "
1500 IFC(T)=13THENC$="%{RED}K K K{LT BLU
}':CC$="% * "
1510 IFC(T)=13THEND$="%{RED}K K K{LT BLU
}':DD$="%{RED}K K{LT BLU}' "
1520 IFC(T)=13THENE$="%{RED}KS SK{LT BLU
}' "
1550 PRINTP$;:PRINTB$:PRINTP$+"{CUR DN}"
;:PRINTBB$:PRINTP$+"{CUR DN}{CUR DN}";:P
RINTC$:PRINTP$+"{CUR DN}{CUR DN}{CUR DN}
";:PRINTCC$:PRINTP$+"{CUR DN}{CUR DN}{CU
R DN}{CUR DN}";:PRINTD$
1560 PRINTP$+"{CUR DN}{CUR DN}{CUR DN}{C
UR DN}{CUR DN}";:PRINTDD$:PRINTP$+"{CUR
DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR
DN}";:PRINTE$
1999 RETURN
2000 REM
2010 IFC(T)=1THENB$="%{RED}A A{LT BLU}
}' "
2020 IFC(T)=1THENC$="% {R
ED}Z{LT BLU} ' "
2030 IFC(T)=1THEND$="% ' " : DD$="%
}' "
2040 IFC(T)=1THENE$="%{RED}A A{LT BLU}
}' "
2050 IFC(T)=2THENB$="%{RED}2 2{LT BLU}
}' " : BB$="% {RED}Z{LT BLU} ' "
2060 IFC(T)=2THENC$="% ' " : CC$="%
}' "
2070 IFC(T)=2THEND$="% ' " : DD$="% {R
ED}Z{LT BLU} ' "
2080 IFC(T)=2THENE$="%{RED}2 2{LT BLU}
}' "
2090 IFC(T)=3THENB$="%{RED}3 3{LT BLU}
}' " : BB$="% {RED}Z{LT BLU} ' "
2100 IFC(T)=3THENC$="% ' " : CC$="% {R
ED}Z{LT BLU} ' "
2110 IFC(T)=3THEND$="% ' " : DD$="% {R
ED}Z{LT BLU} ' "

```

2120 IFC(T)=3THENE\$="%{RED}3 3{LT BLU}
', "
2130 IFC(T)=4THENB\$="%{RED}4 4{LT BLU}
', " : BB\$="%{RED}Z Z{LT BLU}' "
2140 IFC(T)=4THENC\$="% ' " : CC\$="%
', "
2150 IFC(T)=4THEND\$="% ' " : DD\$="%{RED
}Z Z{LT BLU}' "
2160 IFC(T)=4THENE\$="%{RED}4 4{LT BLU}
', "
2170 IFC(T)=5THENB\$="%{RED}5 5{LT BLU}
', " : BB\$="%{RED}Z Z{LT BLU}' "
2180 IFC(T)=5THENC\$="% ' " : CC\$="% {R
ED}Z{LT BLU}' "
2190 IFC(T)=5THEND\$="% ' " : DD\$="%{RED
}Z Z{LT BLU}' "
2200 IFC(T)=5THENE\$="%{RED}5 5{LT BLU}
', "
2210 IFC(T)=6THENB\$="%{RED}6 6{LT BLU}
', " : BB\$="%{RED}Z Z{LT BLU}' "
2220 IFC(T)=6THENC\$="% ' " : CC\$="%{RED
}Z Z{LT BLU}' "
2230 IFC(T)=6THEND\$="% ' " : DD\$="%{RED
}Z Z{LT BLU}' "
2240 IFC(T)=6THENE\$="%{RED}6 6{LT BLU}
', "
2250 IFC(T)=7THENB\$="%{RED}7 7{LT BLU}
', " : BB\$="%{RED}Z Z{LT BLU}' "
2260 IFC(T)=7THENC\$="% ' " : CC\$="%{RED
}Z Z Z{LT BLU}' "
2270 IFC(T)=7THEND\$="% ' " : DD\$="%{RED
}Z Z{LT BLU}' "
2280 IFC(T)=7THENE\$="%{RED}7 7{LT BLU}
', "
2290 IFC(T)=8THENB\$="%{RED}8 8{LT BLU}
', " : BB\$="%{RED}Z Z{LT BLU}' "
2300 IFC(T)=8THENC\$="%{RED}Z Z{LT BLU}
', " : CC\$="% ' "
2310 IFC(T)=8THEND\$="%{RED}Z Z{LT BLU}
', " : DD\$="%{RED}Z Z{LT BLU}' "
2320 IFC(T)=8THENE\$="%{RED}8 8{LT BLU}
', "
2330 IFC(T)=9THENB\$="%{RED}9 9{LT BLU}
', " : BB\$="%{RED}Z Z{LT BLU}' "

```

2340 IFC(T)=9THENC$="%{RED}Z      Z{LT BLU}
'":CC$="%  {RED}Z{LT BLU}  ' "
2350 IFC(T)=9THEND$="%{RED}Z      Z{LT BLU}
'":DD$="%{RED}Z      Z{LT BLU}' "
2360 IFC(T)=9THENE$="%{RED}9      9{LT BLU}
' "
2370 IFC(T)=10THENB$="%{RED}10  10{LT BLU
}'":BB$="%{RED}Z      Z{LT BLU}' "
2380 IFC(T)=10THENC$="%{RED}Z Z Z{LT BLU
}'":CC$="%          ' "
2390 IFC(T)=10THEND$="%{RED}Z Z Z{LT BLU
}'":DD$="%{RED}Z      Z{LT BLU}' "
2400 IFC(T)=10THENE$="%{RED}10  10{LT BLU
}' "
2410 IFC(T)=11THENB$="%{RED}JZ  ZJ{LT BLU
}'":BB$="%{RED}J      J{LT BLU}' "
2420 IFC(T)=11THENC$="%{RED}J J J{LT BLU
}'":CC$="%          * "
2430 IFC(T)=11THEND$="%{RED}J J J{LT BLU
}'":DD$="%{RED}J      J{LT BLU}' "
2440 IFC(T)=11THENE$="%{RED}JZ  ZJ{LT BLU
}' "
2450 IFC(T)=12THENB$="%{RED}QZ  ZQ{LT BLU
}'":BB$="%{RED}Q      Q{LT BLU}' "
2460 IFC(T)=12THENC$="%{RED}Q Q Q{LT BLU
}'":CC$="%          * "
2470 IFC(T)=12THEND$="%{RED}Q Q Q{LT BLU
}'":DD$="%{RED}Q      Q{LT BLU}' "
2480 IFC(T)=12THENE$="%{RED}QZ  ZQ{LT BLU
}' "
2490 IFC(T)=13THENB$="%{RED}KZ  ZK{LT BLU
}'":BB$="%{RED}K      K{LT BLU}' "
2500 IFC(T)=13THENC$="%{RED}K K K{LT BLU
}'":CC$="%          * "
2510 IFC(T)=13THEND$="%{RED}K K K{LT BLU
}'":DD$="%{RED}K      K{LT BLU}' "
2520 IFC(T)=13THENE$="%{RED}KZ  ZK{LT BLU
}' "
2550 PRINTP$;:PRINTB$:PRINTP$+"{CUR DN}"
;:PRINTBB$:PRINTP$+"{CUR DN}{CUR DN}";:P
RINTC$:PRINTP$+"{CUR DN}{CUR DN}{CUR DN}
";:PRINTCC$:PRINTP$+"{CUR DN}{CUR DN}{CU
R DN}{CUR DN}";:PRINTD$
2560 PRINTP$+"{CUR DN}{CUR DN}{CUR DN}{C

```

```

UR DN}{CUR DN}";:PRINTDD$:PRINTP$+"{CUR
DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR
DN}";:PRINTE$
2999 RETURN
3000 REM
3010 IFC(T)=1THENB$="%{GY 3}A    A{LT BLU
}'":BB$="%"      ' "
3020 IFC(T)=1THENC$="%"      ' " :CC$="%"  {G
Y 3}A{LT BLU}    ' "
3030 IFC(T)=1THEND$="%"      ' " :DD$="%"
' "
3040 IFC(T)=1THENE$="%{GY 3}A    A{LT BLU
}' "
3050 IFC(T)=2THENB$="%{GY 3}2    2{LT BLU
}'":BB$="%"  {GY 3}A{LT BLU}    ' "
3060 IFC(T)=2THENC$="%"      ' " :CC$="%"
' "
3070 IFC(T)=2THEND$="%"      ' " :DD$="%"  {G
Y 3}A{LT BLU}    ' "
3080 IFC(T)=2THENE$="%{GY 3}2    2{LT BLU
}' "
3090 IFC(T)=3THENB$="%{GY 3}3    3{LT BLU
}'":BB$="%"  {GY 3}A{LT BLU}    ' "
3100 IFC(T)=3THENC$="%"      ' " :CC$="%"  {G
Y 3}A{LT BLU}    ' "
3110 IFC(T)=3THEND$="%"      ' " :DD$="%"  {G
Y 3}A{LT BLU}    ' "
3120 IFC(T)=3THENE$="%{GY 3}3    3{LT BLU
}' "
3130 IFC(T)=4THENB$="%{GY 3}4    4{LT BLU
}'":BB$="%{GY 3}A    A{LT BLU}' "
3140 IFC(T)=4THENC$="%"      ' " :CC$="%"
' "
3150 IFC(T)=4THEND$="%"      ' " :DD$="%"{GY
3}A    A{LT BLU}' "
3160 IFC(T)=4THENE$="%{GY 3}4    4{LT BLU
}' "
3170 IFC(T)=5THENB$="%{GY 3}5    5{LT BLU
}'":BB$="%{GY 3}A    A{LT BLU}' "
3180 IFC(T)=5THENC$="%"      ' " :CC$="%"  {G
Y 3}A{LT BLU}    ' "
3190 IFC(T)=5THEND$="%"      ' " :DD$="%"{GY
3}A    A{LT BLU}' "
3200 IFC(T)=5THENE$="%{GY 3}5    5{LT BLU

```



```

} ' "
3210 IFC(T)=6THENB$="%{GY 3}6 6{LT BLU
}' " : BB$="%{GY 3}A A{LT BLU}' "
3220 IFC(T)=6THENC$="% ' " : CC$="%{GY
3}A A{LT BLU}' "
3230 IFC(T)=6THEND$="% ' " : DD$="%{GY
3}A A{LT BLU}' "
3240 IFC(T)=6THENE$="%{GY 3}6 6{LT BLU
}' "
3250 IFC(T)=7THENB$="%{GY 3}7 7{LT BLU
}' " : BB$="%{GY 3}A A{LT BLU}' "
3260 IFC(T)=7THENC$="% ' " : CC$="%{GY
3}A A A{LT BLU}' "
3270 IFC(T)=7THEND$="% ' " : DD$="%{GY
3}A A{LT BLU}' "
3280 IFC(T)=7THENE$="%{GY 3}7 7{LT BLU
}' "
3290 IFC(T)=8THENB$="%{GY 3}8 8{LT BLU
}' " : BB$="%{GY 3}A A{LT BLU}' "
3300 IFC(T)=8THENC$="%{GY 3}A A{LT BLU
}' " : CC$="% ' "
3310 IFC(T)=8THEND$="%{GY 3}A A{LT BLU
}' " : DD$="%{GY 3}A A{LT BLU}' "
3320 IFC(T)=8THENE$="%{GY 3}8 8{LT BLU
}' "
3330 IFC(T)=9THENB$="%{GY 3}9 9{LT BLU
}' " : BB$="%{GY 3}A A{LT BLU}' "
3340 IFC(T)=9THENC$="%{GY 3}A A{LT BLU
}' " : CC$="% {GY 3}A{LT BLU} ' "
3350 IFC(T)=9THEND$="%{GY 3}A A{LT BLU
}' " : DD$="%{GY 3}A A{LT BLU}' "
3360 IFC(T)=9THENE$="%{GY 3}9 9{LT BLU
}' "
3370 IFC(T)=10THENB$="%{GY 3}10 10{LT BL
U}' " : BB$="%{GY 3}A A{LT BLU}' "
3380 IFC(T)=10THENC$="%{GY 3}A A A{LT BL
U}' " : CC$="% ' "
3390 IFC(T)=10THEND$="%{GY 3}A A A{LT BL
U}' " : DD$="%{GY 3}A A{LT BLU}' "
3400 IFC(T)=10THENE$="%{GY 3}10 10{LT BL
U}' "
3410 IFC(T)=11THENB$="%{GY 3}JA AJ{LT BL
U}' " : BB$="%{GY 3}J J{LT BLU}' "
3420 IFC(T)=11THENC$="%{GY 3}J J J{LT BL

```

```

U}'":CC$="%      *
3430 IFC(T)=11THEND$="%{GY 3}J J J{LT BL
U}'":DD$="%{GY 3}J J{LT BLU}'"
3440 IFC(T)=11THENE$="%{GY 3}JA AJ{LT BL
U}'"
3450 IFC(T)=12THENB$="%{GY 3}QA AQ{LT BL
U}'":BB$="%{GY 3}Q Q{LT BLU}'"
3460 IFC(T)=12THENC$="%{GY 3}Q Q Q{LT BL
U}'":CC$="%      *
3470 IFC(T)=12THEND$="%{GY 3}Q Q Q{LT BL
U}'":DD$="%{GY 3}Q Q{LT BLU}'"
3480 IFC(T)=12THENE$="%{GY 3}QA AQ{LT BL
U}'"
3490 IFC(T)=13THENB$="%{GY 3}KA AK{LT BL
U}'":BB$="%{GY 3}K K{LT BLU}'"
3500 IFC(T)=13THENC$="%{GY 3}K K K{LT BL
U}'":CC$="%      *
3510 IFC(T)=13THEND$="%{GY 3}K K K{LT BL
U}'":DD$="%{GY 3}K K{LT BLU}'"
3520 IFC(T)=13THENE$="%{GY 3}KA AK{LT BL
U}'"
3550 PRINTP$;:PRINTB$:PRINTP$+"{CUR DN}"
;:PRINTBB$:PRINTP$+"{CUR DN}{CUR DN}";:P
RINTC$:PRINTP$+"{CUR DN}{CUR DN}{CUR DN}
";:PRINTCC$:PRINTP$+"{CUR DN}{CUR DN}{CU
R DN}{CUR DN}";:PRINTD$
3560 PRINTP$+"{CUR DN}{CUR DN}{CUR DN}{C
UR DN}{CUR DN}";:PRINTDD$:PRINTP$+"{CUR
DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR
DN}";:PRINTE$
3999 RETURN
4000 REM
4010 IFC(T)=1THENB$="%{GY 3}A A{LT BLU
}'":BB$="%      ' "
4020 IFC(T)=1THENC$="%      ' " :CC$="% {G
Y 3}X{LT BLU} ' "
4030 IFC(T)=1THEND$="%      ' " :DD$="%
' "
4040 IFC(T)=1THENE$="%{GY 3}A A{LT BLU
}'"
4050 IFC(T)=2THENB$="%{GY 3}2 2{LT BLU
}'":BB$="% {GY 3}X{LT BLU} ' "
4060 IFC(T)=2THENC$="%      ' " :CC$="%
' "

```

4070 IFC(T)=2THEND\$="% '":DD\$="% {G
 Y 3}X{LT BLU} ' "
 4080 IFC(T)=2THENE\$="%{GY 3}2 2{LT BLU
 }' "
 4090 IFC(T)=3THENB\$="%{GY 3}3 3{LT BLU
 }' ":BB\$="% {GY 3}X{LT BLU} ' "
 4100 IFC(T)=3THENC\$="% '":CC\$="% {G
 Y 3}X{LT BLU} ' "
 4110 IFC(T)=3THEND\$="% '":DD\$="% {G
 Y 3}X{LT BLU} ' "
 4120 IFC(T)=3THENE\$="%{GY 3}3 3{LT BLU
 }' "
 4130 IFC(T)=4THENB\$="%{GY 3}4 4{LT BLU
 }' ":BB\$="%{GY 3}X X{LT BLU}' "
 4140 IFC(T)=4THENC\$="% '":CC\$="%
 ' "
 4150 IFC(T)=4THEND\$="% '":DD\$="%{GY
 3}X X{LT BLU}' "
 4160 IFC(T)=4THENE\$="%{GY 3}4 4{LT BLU
 }' "
 4170 IFC(T)=5THENB\$="%{GY 3}5 5{LT BLU
 }' ":BB\$="%{GY 3}X X{LT BLU}' "
 4180 IFC(T)=5THENC\$="% '":CC\$="% {G
 Y 3}X{LT BLU} ' "
 4190 IFC(T)=5THEND\$="% '":DD\$="%{GY
 3}X X{LT BLU}' "
 4200 IFC(T)=5THENE\$="%{GY 3}5 5{LT BLU
 }' "
 4210 IFC(T)=6THENB\$="%{GY 3}6 6{LT BLU
 }' ":BB\$="%{GY 3}X X{LT BLU}' "
 4220 IFC(T)=6THENC\$="% '":CC\$="%{GY
 3}X X{LT BLU}' "
 4230 IFC(T)=6THEND\$="% '":DD\$="%{GY
 3}X X{LT BLU}' "
 4240 IFC(T)=6THENE\$="%{GY 3}6 6{LT BLU
 }' "
 4250 IFC(T)=7THENB\$="%{GY 3}7 7{LT BLU
 }' ":BB\$="%{GY 3}X X{LT BLU}' "
 4260 IFC(T)=7THENC\$="% '":CC\$="%{GY
 3}X X X{LT BLU}' "
 4270 IFC(T)=7THEND\$="% '":DD\$="%{GY
 3}X X{LT BLU}' "
 4280 IFC(T)=7THENE\$="%{GY 3}7 7{LT BLU
 }' "

4290 IFC(T)=8THENB\$="%{GY 3}8 8{LT BLU
}'":BB\$="%{GY 3}X X{LT BLU}'"
4300 IFC(T)=8THENC\$="%{GY 3}X X{LT BLU
}'":CC\$="% ' "
4310 IFC(T)=8THEND\$="%{GY 3}X X{LT BLU
}'":DD\$="%{GY 3}X X{LT BLU}' "
4320 IFC(T)=8THENE\$="%{GY 3}8 8{LT BLU
}' "
4330 IFC(T)=9THENB\$="%{GY 3}9 9{LT BLU
}'":BB\$="%{GY 3}X X{LT BLU}' "
4340 IFC(T)=9THENC\$="%{GY 3}X X{LT BLU
}'":CC\$="% {GY 3}X{LT BLU} ' "
4350 IFC(T)=9THEND\$="%{GY 3}X X{LT BLU
}'":DD\$="%{GY 3}X X{LT BLU}' "
4360 IFC(T)=9THENE\$="%{GY 3}9 9{LT BLU
}' "
4370 IFC(T)=10THENB\$="%{GY 3}10 10{LT BL
U}'":BB\$="%{GY 3}X X{LT BLU}' "
4380 IFC(T)=10THENC\$="%{GY 3}X X X{LT BL
U}'":CC\$="% ' "
4390 IFC(T)=10THEND\$="%{GY 3}X X X{LT BL
U}'":DD\$="%{GY 3}X X{LT BLU}' "
4400 IFC(T)=10THENE\$="%{GY 3}10 10{LT BL
U}' "
4410 IFC(T)=11THENB\$="%{GY 3}JX XJ{LT BL
U}'":BB\$="%{GY 3}J J{LT BLU}' "
4420 IFC(T)=11THENC\$="%{GY 3}J J J{LT BL
U}'":CC\$="% * "
4430 IFC(T)=11THEND\$="%{GY 3}J J J{LT BL
U}'":DD\$="%{GY 3}J J{LT BLU}' "
4440 IFC(T)=11THENE\$="%{GY 3}JX XJ{LT BL
U}' "
4450 IFC(T)=12THENB\$="%{GY 3}QX XQ{LT BL
U}'":BB\$="%{GY 3}Q Q{LT BLU}' "
4460 IFC(T)=12THENC\$="%{GY 3}Q Q Q{LT BL
U}'":CC\$="% * "
4470 IFC(T)=12THEND\$="%{GY 3}Q Q Q{LT BL
U}'":DD\$="%{GY 3}Q Q{LT BLU}' "
4480 IFC(T)=12THENE\$="%{GY 3}QX XQ{LT BL
U}' "
4490 IFC(T)=13THENB\$="%{GY 3}KX XK{LT BL
U}'":BB\$="%{GY 3}K K{LT BLU}' "
4500 IFC(T)=13THENC\$="%{GY 3}K K K{LT BL
U}'":CC\$="% * "

```

4510 IFC(T)=13THEND$="%{GY 3}K K K{LT BL
U}'":DD$="%{GY 3}K K{LT BLU}'"
4520 IFC(T)=13THENE$="%{GY 3}KX XK{LT BL
U}'"
4550 PRINTP$;:PRINTB$:PRINTP$+"{CUR DN}"
;:PRINTBB$:PRINTP$+"{CUR DN}{CUR DN}";:P
RINTC$:PRINTP$+"{CUR DN}{CUR DN}{CUR DN}
";:PRINTCC$:PRINTP$+"{CUR DN}{CUR DN}{CU
R DN}{CUR DN}";:PRINTD$
4560 PRINTP$+"{CUR DN}{CUR DN}{CUR DN}{C
UR DN}{CUR DN}";:PRINTDD$:PRINTP$+"{CUR
DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR
DN}";:PRINTE$
4999 RETURN
5000 REM*****CARD DESTINCTION*****
5010 FORB=1TO13:FORA=1TO5:IFC(A)=BTHENEE
(B)=EE(B)+1
5020 NEXT:NEXT
5030 FORA=1TO13:IFEE(A)=4THEN6600
5040 IFEE(A)=3THENBB=1
5050 NEXT:IFBB=1THEN5060
5055 GOTO5095
5060 FORB=1TO13:FORA=1TO5:IFC(A)=BTHENDD
(B)=DD(B)+1
5070 NEXT:NEXT
5080 FORA=1TO13:IFDD(A)=2THEN6000
5090 NEXT
5095 IFBB=1THENBB=0:GOTO7200
5096 FORA=1TO13:EE(A)=0:DD(A)=0:NEXT
5100 REM*****CARD DESTINCTION*****
5110 FORB=1TO13:FORA=1TO5:IFC(A)=BTHENDD
(B)=DD(B)+1
5120 NEXT:NEXT:FORA=1TO13:IFDD(A)=2THENB
B=BB+1
5130 NEXT:IFBB<2THENFORA=1TO13:DD(A)=0:N
EXT:BB=0:GOTO5150
5140 GOTO7400
5150 REM*****CARD DISTINCTION*****
5160 IFC(1)=C(2)ORC(1)=C(3)ORC(1)=C(4)OR
C(1)=C(5)THEN5250
5170 IFC(2)=C(3)ORC(2)=C(4)ORC(2)=C(5)TH
EN5250
5180 IFC(3)=C(4)ORC(3)=C(5)THEN5250
5190 IFC(4)=C(5)THEN5250

```

```

5200 FORB=13TO1STEP-1
5210 FORA=1TO5:IFC(A)=BORC(A)=B-1ORC(A)=
B-2ORC(A)=B-3ORC(A)=B-4THENDD(B)=DD(B)+1
5220 NEXT:NEXT:FORA=1TO13:IFDD(A)=5THEN6
800
5225 NEXT
5230 FORA=1TO5:IFC(A)=1ORC(A)=10ORC(A)=1
10ORC(A)=12ORC(A)=13THENNEXT:GOTO6800
5240 FORA=1TO13:DD(A)=0:NEXT
5250 REM*****CARD DESTINCTION*****
5260 FORA=1TO5:IFC(A)=1THENDD=DD+1
5270 NEXT:IFDD<2THEN5290
5280 GOTO7600
5290 REM*****CARD DESTINCTION*****
5300 IFCC(1)=CC(2)ANDCC(2)=CC(3)ANDCC(3)
=CC(4)ANDCC(4)=CC(5)THEN7000
5310 GOTO10000
6000 REM*****FULL HOUSE*****
*****
6010 PRINT "{HOME}
"
6020 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}
"
6030 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN} {RVS ON}{GRN}D
OUBLE OR NOTHING(Y/N) "
6040 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{RVS ON
}{OR}FULL HOUSE"
6050 GETA$:IFA$<>" "THEN6100
6060 FORA=1TO100:NEXT
6070 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN} {GRN}DOUBLE OR
NOTHING(Y/N) "
6080 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{BLU}FU

```

```

LL HOUSE"
6090 FORA=1TO100:NEXT:GOTO6030
6100 IFA$="Y"THENTT=4:NA=CREDIT:GOTO1500
0
6105 Q1=54276:Q2=54277:Q3=54278:POKEQ1,0
:POKEQ2,15:POKEQ3,0
6106 POKE54296,15:POKEQ2,64:POKEQ3,128:P
OKEQ1,17
6110 FORA=CREDITTOCREDIT+10*BET:PRINT"{H
OME}{CUR DN}{CUR DN}{CUR RT}{LT BLU}CRED
IT:";A
6130 POKE54273,40:POKE54272,200:POKE5427
3,0:POKE54272,0
6160 NEXT:CREDIT=A-1:GOTO10000
6400 REM*****ROYAL FLUSH*****
*****
6410 PRINT"{HOME}
"
6420 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}
"
6430 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}
{RVS ON}{GRN}D
OUBLE OR NOTHING(Y/N)"
6440 PRINT"{HOME}{CUR DN}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{RVS ON}{LT BLU}ROYAL FLUSH"
6450 GETA$:IFA$<>" "THEN6500
6460 FORA=1TO100:NEXT
6470 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}
{GRN}DOUBLE OR
NOTHING(Y/N)"
6480 PRINT"{HOME}{CUR DN}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{OR}ROYAL FLUSH"
6490 FORA=1TO100:NEXT:GOTO6430
6500 IFA$="Y"THENTT=1:NA=CREDIT:GOTO1500
0
6505 Q1=54276:Q2=54277:Q3=54278:POKEQ1,0

```



```

6710 FORA=CREDITTOCREDIT+25*BET:PRINT "{H
OME}{CUR DN}{CUR DN}{CUR RT}{LT BLU}CRED
IT:";A
6730 POKE54273,40:POKE54272,200:POKE5427
3,0:POKE54272,0
6760 NEXT:CREDIT=A-1:GOTO10000
6800 REM*****STRAIGHT FLUSH*****
*****
6805 IFCC(1)=CC(2)ANDCC(2)=CC(3)ANDCC(3)
=CC(4)ANDCC(4)=CC(5)THEN6400
6810 PRINT "{HOME}
"
6820 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}
"
6830 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN} {RVS ON}{GRN}D
OUBLE OR NOTHING(Y/N)"
6840 PRINT "{HOME}{CUR DN}{CUR DN}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{RVS ON}{OR}STRAIGHT FL
USH"
6850 GETA$:IFA$(">")THEN6900
6860 FORA=1TO100:NEXT
6870 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN} {GRN}DOUBLE OR
NOTHING(Y/N)"
6880 PRINT "{HOME}{CUR DN}{CUR DN}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{LT BLU}STRAIGHT FLUSH"
6890 FORA=1TO100:NEXT:GOTO6830
6900 IFA$="Y"THENTT=2:NA=CREDIT:GOTO1500
0
6905 Q1=54276:Q2=54277:Q3=54278:POKEQ1,0
:POKEQ2,15:POKEQ3,0
6906 POKE54296,15:POKEQ2,64:POKEQ3,128:P
OKEQ1,17
6910 FORA=CREDITTOCREDIT+100*BET:PRINT "{
HOME}{CUR DN}{CUR DN}{CUR RT}{LT BLU}CRE

```

```

DIT: ";A
6930 POKE54273,40:POKE54272,200:POKE5427
3,0:POKE54272,0
6960 NEXT:CREDIT=A-1:GOTO10000
7000 REM*****FLUSH*****
      *****
7010 PRINT "{HOME}
      "
7020 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}
"
7030 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}          {RVS ON}{GRN}D
OUBLE OR NOTHING(Y/N)"
7040 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{RVS ON}{LT BLU}FLUSH"
7050 GETA$:IFA$<>" "THEN7100
7060 FORA=1TO100:NEXT
7070 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}          {GRN}DOUBLE OR
NOTHING(Y/N)"
7080 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{OR}FLUSH"
7090 FORA=1TO100:NEXT:GOTO7030
7100 IFA$="Y"THENTT=5:NA=CREDIT:GOTO1500
0
7110 Q1=54276:Q2=54277:Q3=54278:POKEQ1,0
:POKEQ2,15:POKEQ3,0
7120 POKE54296,15:POKEQ2,64:POKEQ3,128:P
OKEQ1,17
7130 FORA=CREDITTOCREDIT+7*BET:PRINT "{HO
ME}{CUR DN}{CUR DN}{CUR RT}{LT BLU}CREDI
T: ";A
7140 POKE54273,40:POKE54272,200:POKE5427
3,0:POKE54272,0

```

```

7150 NEXT:CREDIT=A-1:GOTO10000
7200 REM*****THREE OF A KIND*****
      *****
7210 PRINT "{HOME}
      "
7220 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}
      "
7230 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}          {RVS ON}{GRN}D
OUBLE OR NOTHING(Y/N)"
7240 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{RVS ON}{OR}THREE OF A KIND"
7250 GETA$:IFA$<>" "THEN7300
7260 FORA=1TO100:NEXT
7270 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}          {GRN}DOUBLE OR
NOTHING(Y/N)"
7280 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{LT BLU}THREE OF A KIND"
7290 FORA=1TO100:NEXT:GOTO7230
7300 IFA$="Y"THENTT=4:NA=CREDIT:GOTO1500
0
7310 Q1=54276:Q2=54277:Q3=54278:POKEQ1,0
:POKEQ2,15:POKEQ3,0
7320 POKE54296,15:POKEQ2,64:POKEQ3,128:P
OKEQ1,17
7330 FORA=CREDITTOCREDIT+3*BET:PRINT "{HO
ME}{CUR DN}{CUR DN}{CUR RT}{LT BLU}CREDI
T:";A
7340 POKE54273,40:POKE54272,200:POKE5427
3,0:POKE54272,0
7350 NEXT:CREDIT=A-1:GOTO10000
7400 REM*****TWO PAIRS*****
      *****

```

```

7410 PRINT "{HOME}"
      "
7420 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN}
}{CUR DN}"
7430 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN}
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
}{CUR DN}{CUR DN}          {RVS ON}{GRN}D
OUBLE OR NOTHING(Y/N)"
7440 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN}
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR RT}
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}
}{CUR RT}{CUR RT}{RVS ON}{LT BLU}TWO PAI
RS"
7450 GETA$: IFA$(">") THEN 7500
7460 FORA=1 TO 100: NEXT
7470 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN}
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
}{CUR DN}{CUR DN}          {GRN}DOUBLE OR
NOTHING(Y/N)"
7480 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN}
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR RT}
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}
}{CUR RT}{CUR RT}{OR}TWO PAIRS"
7490 FORA=1 TO 100: NEXT: GOTO 7430
7500 IFA$="Y" THEN TT=7: NA=CREDIT: GOTO 1500
0
7510 Q1=54276: Q2=54277: Q3=54278: POKE Q1, 0
: POKE Q2, 15: POKE Q3, 0
7520 POKE 54296, 15: POKE Q2, 64: POKE Q3, 128: P
OKE Q1, 17
7530 FORA=CREDIT TO CREDIT+2*BET: PRINT "{HO
ME}{CUR DN}{CUR DN}{CUR RT}{LT BLU}CREDI
T: "; A
7540 POKE 54273, 40: POKE 54272, 200: POKE 5427
3, 0: POKE 54272, 0
7550 NEXT: CREDIT=A-1: GOTO 10000
7600 REM *****ACE OR BETTER*****
      *****
7610 PRINT "{HOME}"
      "

```

```

7620 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}
"
7630 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}
{RVS ON}{GRN}D
DOUBLE OR NOTHING(Y/N) "
7640 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{RVS ON}{OR}ACE
OR BETTER"
7650 GETA$: IFA$<>" " THEN 7700
7660 FORA=1 TO 100: NEXT
7670 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}
{GRN}DOUBLE OR
NOTHING(Y/N) "
7680 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{LT BLU}ACE OR
BETTER"
7690 FORA=1 TO 100: NEXT: GOTO 7630
7700 IFA$="Y" THEN TT=8: NA=CREDIT: GOTO 15000
0
7710 Q1=54276: Q2=54277: Q3=54278: POKEQ1, 0
: POKEQ2, 15: POKEQ3, 0
7720 POKE54296, 15: POKEQ2, 64: POKEQ3, 128: P
OKEQ1, 17
7730 FORA=CREDIT TO CREDIT+1*BET: PRINT "{HO
ME}{CUR DN}{CUR DN}{CUR RT}{LT BLU}CREDI
T: "; A
7740 POKE54273, 40: POKE54272, 200: POKE5427
3, 0: POKE54272, 0
7750 NEXT: CREDIT=A-1: GOTO 10000
10000 FORA=1 TO 5: CA(A)=0: NEXT: DD=0: GOTO 11
15000 PRINT "{CLR}{HOME}{RVS ON}*****
*--DOUBLE OR NOTHING--*****"
15001 PRINT "{HOME}{CUR DN}{CUR DN}{CUR D
N}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR D

```

```

N}{CUR DN}{CUR DN}{CUR RT}{CUR RT}{LT BL
U}N#####M
  % {RED}VVVVV{LT BLU}' "
15002 PRINT "{CUR RT}{CUR RT}% {RED}VVVVV{
LT BLU}'
  % {RED}VVVVV{LT BLU}' "
15003 PRINT "{CUR RT}{CUR RT}% {RED}VVVVV{
LT BLU}'
  % {RED}VVVVV{LT BLU}' "
15004 PRINT "{CUR RT}{CUR RT}% {RED}VVVVV{
LT BLU}'
  % {RED}VVVVV{LT BLU}' "
15005 PRINT "{CUR RT}{CUR RT}M$$$$$N"
15100 PRINT "{HOME}{CUR DN}{CUR DN}{CUR R
T}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{OR}6
AND ABOVE ARE BIG"
15110 PRINT "{CUR RT}{CUR RT}{CUR RT}{CUR
RT}{CUR RT}{LT BLU}5 AND UNDER ARE SMAL
L"
15120 PRINT "{CUR DN}{CUR DN}{CUR DN}{CUR
RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR
RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR
RT}{WHT}'BIG' OR 'SMALL' "
15130 GETA$: IFA$ <> "S" AND A$ <> "B" THEN 15130
15131 IFA$ = "B" THEN PRINT "{CUR UP}{CUR RT}
{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}
{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}
{WHT}' {RVS ON}{PUR}BIG{WHT}' {RVS OFF}' "
15132 IFA$ = "S" THEN PRINT "{CUR UP}{CUR RT}
{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}
{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}
{WHT}'BIG' OR '{RVS ON}{PUR}SMALL{WHT}' {R
VS OFF}' "
15140 T=1: C(1)=INT(RND(1)*12)+1: CC(1)=IN
T(RND(1)*3)+1
15145 P$="{HOME}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}{CUR RT}{CUR RT}
"
15150 IF CC(1)=1 THEN GOSUB 1000
15160 IF CC(1)=2 THEN GOSUB 2000
15170 IF CC(1)=3 THEN GOSUB 3000
15180 IF CC(1)=4 THEN GOSUB 4000
15190 IF C(1) >= 6 THEN PRINT "{HOME}{CUR DN}{

```

```

CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{
CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{
CUR DN}{CUR DN}{CUR DN}{CUR RT}{CUR RT}{
CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{
CUR RT}{CUR RT}{CUR RT}{RVS ON}{LT BLU}B
IG"
15200 IFC(1)<=5THENPRINT "{HOME}{CUR DN}{
CUR DN}{CUR DN}{CUR DN}{CUR DN}{
CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{
CUR DN}{CUR DN}{CUR DN}{CUR RT}{CUR RT}{
CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{
CUR RT}{CUR RT}{CUR RT}{RVS ON}{LT BLU}S
MALL"
15210 IFA$="B"ANDC(1)<=5THENFORA=1TO500:
NEXT:GOTO10000
15220 IFA$="S"ANDC(1)>=6THENFORA=1TO500:
NEXT:GOTO10000
15224 IFA$="B"ANDC(1)>=6THENBB=1
15225 IFBB=1THENPRINT "{HOME}{CUR DN}{CUR
DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR
DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR
DN}{CUR DN}{CUR DN}{CUR DN}{CUR RT}{CUR
RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR
RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR
RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR
RT}{GRN}YOU WIN!!"
15226 POKEW1,17:POKEA1,15:POKEV1,15
15230 FORA=NATONA+PP(TT)*2:PRINT "{HOME}{
CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{
LT.BLU}CREDIT:"A:POKEH1,40:POKEL1,200
15240 POKEH1,0:POKEL1,0:NEXT:POKEW1,0:PO
KEA1,0:NA=A-1
15250 PRINT "{HOME}
"
15260 FORA=1TO50:NEXT
15500 PRINT "{HOME}{GRN} {RVS ON}
DOUBLE OR NOTHING(Y/N)"
15505 FORA=1TO50:NEXT
15510 PRINT "{HOME}{GRN} DOUBLE O
R NOTHING(Y/N)"
15520 GETA$:IFA$<>"Y"ANDA$<>"N"THEN15260
15530 IFA$="Y"THEN15000
15540 CREDIT=NA:GOTO10000

```


CHOP AND CHANGE

This is a puzzling little program which provides far more of a challenge than you might think at first.



The computer will generate a random pattern of 0's and X's something like the following:

0 0 X 0 X 0 X X

1 2 3 4 5 6 7 8

NUMBER TO CHANGE? 7

Hidden deep in its metal mind, the computer has a pattern which determines which symbols change when you enter a number (which must be greater than zero):

0 0 X 0 X 0 X X

1 2 3 4 5 6 7 8

YOU HAVE 4 RIGHT

AFTER MOVE 3

NUMBER TO CHANGE? 6

0 0 X 0 X 0 0 X

1 2 3 4 5 6 7 8

YOU HAVE 5 RIGHT

You are aiming to get all the X's to turn into O's, and in this sample game, success does not take long:

0 0 0 0 0 0 0 X

1 2 3 4 5 6 7 8

YOU HAVE 7 RIGHT

AFTER MOVE 7

NUMBER TO CHANGE? 7

0 0 0 0 0 0 0 0

1 2 3 4 5 6 7 8

YOU DID IT IN 8 MOVES

BEST SO FAR IS 8

Once you've played the game a few times, you'll begin to see how the game works, and you'll quickly deduce which numbers to enter to get the pattern to alter as you wish. Sometimes it is not easy:

0 0 0 X 0 0 0 0

1 2 3 4 5 6 7 8

YOU HAVE 7 RIGHT

AFTER MOVE 14

NUMBER TO CHANGES 15

0 0 0 0 0 0 0 0

1 2 3 4 5 6 7 8

YOU DID IT IN 15 MOVES

BEST SO FAR IS 8

Note, also, that a slight element of randomness is introduced in line 310 to keep you on your toes.

```
10 REM CHOP & CHANGE
20 HS=1000
30 DIMA(9)
40 GOSUB530:REM INITIALISE
50 GOSUB110:REM PRINT OUT
60 GOSUB250:REM PLAYER INPUT
70 GOSUB110:REM PRINT OUT
80 GOSUB340:REM CHECK RESULT
90 GOTO60
100 REM *****
110 REM PRINT OUT
120 PRINT "{CLR}"
130 IFHS<>1000THENPRINT:PRINT "BEST SO FAR IS"HS
140 GOSUB200
150 FORJ=1TO8
160 PRINTCHR$(A(J));" ";
170 NEXT J
180 PRINT:PRINT
190 PRINT "1 2 3 4 5 6 7 8"
200 FORJ=1TO5
210 PRINT
220 NEXT J
230 RETURN
240 REM *****
250 REM PLAYER INPUT
260 PRINT
270 INPUT "NUMBER TO CHANGE";P
280 P=P+X
290 IFP>9THENP=P-9:GOTO290
300 IFP<0THENP=P+9:GOTO300
310 IFA(P)=88ANDRND(1)>.1THENA(P)=79
320 RETURN
340 REM *****
350 FL=0
360 MO=MO+1
370 FORZ=1TO8
380 IFA(Z)=79THENFL=FL+1
390 NEXT Z
```

```

400 IF FL=8 THEN 450:REM WIN
410 PRINT:PRINT"YOU HAVE"FL"RIGHT"
420 PRINT:PRINT"AFTER MOVE"MO
430 RETURN
440 REM ***
450 REM WIN
460 PRINT:PRINT
470 PRINT"YOU DID IT IN"MO"MOVES"
480 IF MO<H THEN HS=MO
490 PRINT:PRINT"BEST SO FAR IS"HS
500 FOR T=1 TO 2000:NEXT T
510 GOTO 40
520 REM *****
530 REM INITIALISATION
540 REM
550 FOR J=1 TO 8
560 A(J)=88
570 IF RND(1)>.6 THEN A(J)=79
580 NEXT J
590 MO=0
600 X=INT(RND(1)*7)+1
610 RETURN

```

READY.

POWER PLAY

Your brilliant mathematical mind, and that of your computer, are locked in a deathless struggle to achieve numerical domination.



At the start of the game, you're both issued with large numbers, chosen at random. You are told what your number is, but you do not know what number the computer has been blessed with.

The aim of the game is to exceed the other player's number by 1000000. Once you each have a number, you take away numbers from your opponent, simply by asking for them. For example, if the computer's number was 104637, and you said "Give me your 6's", 600 would be added to your number, and 600 subtracted from the computer's tally. If you asked for its 1's, 100000 would be added to your number (and - in this case - you'd probably win).

At the end of the game, the changes in fortune which took place as it was running are shown. Here's part of a sample game to show you what I mean:

Your number is 178275

Please give me your 8 's

Thank you!

Your number is now 170275

Which number would you like? 6

You've got them

Your number is 170281

Please give me your 9 's

OK

Your number is now 170281

Which number would you like? 3

Sorry, I don't have any

Your number is 170281

Please give me your 2 's

Thank you!

Your number is now 170081

Which number would you like? 7

You've got them

Your number is 170781

Please give me your 4 's

OK

Your number is now 170781

Which number would you like? 9

Sorry, I don't have any

Your number is 170781

Please give me your 5 's

OK

Your number is now 170781

Which number would you like? 2

You've got them

Your number is now 170781

Which number would you like? 2

You've got them

That's the end of the game

You won that game...

My final number was 10040
yours was 370781

Here's how the game went:

You: 170275	Me: 210546
You: 170281	Me: 210540
You: 170081	Me: 210740
You: 170781	Me: 210040
You: 170781	Me: 210040
You: 370781	Me: 10040

This listing will give you the chance to fight it out with your computer in a round of POWER PLAY:

```
10 REM POWER PLAY
20 DIM H(7),C(7),P(1000)
30 REM
40 PRINT "{CLR}":PRINT
50 H1=INT(10^5*RND(1)*9+10*RND(1)*9999+R
ND(1)*999)
60 PRINT "STAND BY..."
```



```

70 C1=10^5+10*INT(RND(1)*9999)+INT(RND(1)
)*9999)
80 IFABS(C1-H1)>10^5THEN50
90 CO=0
100 PRINT "{CLR}"
110 PRINT:PRINT
120 PRINT"YOUR NUMBER IS"H1
130 M=10^6
140 FORX=7TO1STEP-1
150 H(X)=0:C(X)=0
160 C(X)=INT(C1/M)
170 H(X)=INT(H1/M)
180 C1=C1-M*C(X)
190 H1=H1-M*H(X)
200 M=M/10
210 NEXT X
220 C1=0:H1=0
230 M=INT(RND(1)*8)+2
240 Y=1:FL=0
250 PRINT:PRINT"PLEASE GIVE ME YOUR"M"'S
"
260 FORK=1TO1000:NEXT K
270 PRINT:PRINT
280 FORX=1TO7
290 IFH(X)=MTHENC1=C1+Y*H(X):H(X)=0:FL=1
300 Y=10*Y
310 NEXT X
320 IFFL=1THENPRINTTAB(8);"THANK YOU!"
325 IFFL=0THENPRINTTAB(9);"OK":PRINT
330 Y=1
340 FORX=1TO7
350 H1=H1+Y*H(X)
360 C1=C1+Y*C(X)
370 Y=10*Y
380 NEXT X
390 PRINT:PRINT"YOUR NUMBER IS NOW"H1
400 CO=CO+1
410 P(CO)=H1
420 CO=CO+1
430 PRINT:PRINT"WHICH NUMBER WOULD YOU L
IKE"
440 P(CO)=C1
450 INPUTNU
460 IFNU=1ORNU>9THEN450

```

```

470 PRINT
480 M=10^6
490 FORX=7TO1STEP-1
500 H(X)=0:C(X)=0
510 C(X)=INT(C1/M)
520 H(X)=INT(H1/M)
530 C1=C1-M*C(X)
540 H1=H1-M*H(X)
550 M=M/10
560 NEXT X
570 H1=0:C1=0
580 FL=0:Y=1
590 FORX=1TO7
600 IFNU=C(X)THENH1=H1+Y*C(X):C(X)=0:FL=
1
610 Y=10*Y
620 NEXT X
630 IFFL=1THENPRINTTAB(4);"YOU'VE GOT TH
EM"
635 IFFL=0THENPRINTTAB(7);"SORRY, I DON'
T HAVE ANY"NU"'S"
640 FORX=1TO1500:NEXT X
650 Y=1
660 FORX=1TO7
670 H1=H1+Y*H(X)
680 C1=C1+Y*C(X)
690 Y=10*Y
700 NEXT X
710 IFABS(H1-C1)<10^5THEN100
720 PRINT:PRINT"THAT'S THE END OF THE GA
ME"
730 PRINT:PRINT
740 IFH1>C1THENPRINT"YOU";
745 IFC1>H1THENPRINT"I";
750 PRINT" WON THAT GAME..."
760 PRINT:PRINT"MY FINAL NUMBER WAS"C1
770 PRINTTAB(8);"YOURS WAS"H1:PRINT
780 PRINT"HERE'S HOW THE ACTION WENT:"
790 FORT=1 TO 100 STEP2
800 PRINT"YOU:"P(T),"ME:"P(T+1)
810 FORY=1TO100:NEXT Y
820 NEXT T
830 PRINT"YOU:"H1,"ME:"C1
      READY.

```

BUNGO

Here's a dice game for up to five players plus the computer. It's easy to play, with your computer doing most of the work. The following sample run will show you how simple it is.



First the computer asks how many people are playing and gets their names:

HOW MANY PLAYERS (1 TO 5)? 2

NOW WE'LL GET THE PLAYERS' NAMES
? PIZZA
? MAGPIE

Next, the 'bunco point' is selected:

FIRST WE NEED THE BUNCO POINT

PRESS ANY KEY TO GET BUNCO

5 3 1 3 4 4

- * - * - * - * - * - * - * - * - *

THE BUNCO POINT IS 4

The players now take it in turns to roll three dice, scoring each time the bunco point shows up. The only roll which counts is the final one in a set:

THE COMPUTER'S SCORE IS 0

> THIS IS THE COMPUTER'S ROLL <

HERE WE GO...

5 3 3
4 4 5 <<<---
5 2 5

MY DICE FELL 5 2 5

THE COMPUTER'S SCORE IS NOW 0

- * - * - * - * - * - * - * - * - * - *

THE BUNCO POINT IS 4

| | | | |
|---|---|---|--------|
| 5 | 1 | 3 | |
| 1 | 2 | 2 | |
| 1 | 4 | 5 | <<<--- |

MAGPIE'S DICE FELL 1 4 5

MAGPIE'S SCORE IS NOW 1

- * - * - * - * - * - * - * - * - * - *

THE BUNCO POINT IS 4

MAGPIE'S SCORE IS 1

-> IT IS MAGPIE'S TURN <-

PRESS A KEY TO ROLL...

| | | | |
|---|---|---|--------|
| 4 | 6 | 1 | <<<--- |
|---|---|---|--------|

MAGPIE'S DICE FELL 4 6 1

MAGPIE'S SCORE IS NOW 2

But mere humans should be wary of trying to defeat a mighty machine, as this game demonstrated convincingly, by getting a total of five before the other players:

```

2  3  3
1  2  3
6  4  3  <<<---
4  1  3  <<<---
1  1  6
2  4  2  <<<---

```

MY DICE FELL 2 4 2

THE COMPUTER'S SCORE IS NOW 5

- * - * - * - * - * - * - * - * - *

THE WINNER IS THE COMPUTER

THE OTHERS...

PIZZA - 4

MAGPIE - 4

Stop the bunco now and start a-rolling:

```

10 REM BUNCO
20 GOSUB900:REM INITIALISE
30 PRINT"{CLR}":PRINT:PRINT
40 PRINT"FIRST WE NEED THE BUNCO POINT"
50 REM
60 PRINT:PRINT
70 PRINT"PRESS ANY KEY TO GET BUNCO"
80 GETG$:IFG$=""THEN80
90 PRINT
100 FORT=1TO100
110 D=INT(RND(1)*6)+1
120 IFRND(1)>.9THENPRINT
130 PRINTD;
140 NEXT T
150 GOSUB 1050
160 PRINT"{CLR}":PRINT:PRINT

```

```

170 FORJ=1TOA+1
180 PRINT:PRINT"@ * @ * @ * @ * @ * @ * @ *
@ * @ * @ * @ * @ * @ * @ * @ * @ *
190 PRINT"THE BUNCO POINT IS"D:PRINT:PRI
NT
200 PRINT:PRINTQ$(J);"'S SCORE IS"Z(J)
210 IFJ>1THEN320
220 PRINT:PRINT"> THIS IS THE COMPUTER'S
ROLL <"
230 GOSUB1050:PRINT
240 PRINT"HERE WE GO...":GOSUB1050
250 PRINT:PRINT"!!!!!!!!!!!!!!!!!!!!!!!!!!!!
!!!!!!!!!!!!!!!!!!!!!!!!!!!!"
260 GOSUB790
270 PRINT:PRINT"MY DICE FELL"D1;D2;D3
280 GOSUB1050
290 GOSUB700
300 GOSUB1050
310 GOTO420
320 PRINT:PRINT" -> IT IS ";Q$(J)"'S TUR
N <- "
330 PRINT:PRINT"PRESS A KEY TO ROLL..."
340 GETG$:IFG$=""THEN340
350 PRINT"{CLR}"
360 GOSUB790
370 GOSUB1050
380 PRINTQ$(J);"'S DICE FELL"D1;D2;D3
390 GOSUB1050
400 GOSUB700
410 GOSUB1050
420 IFZ(J)>4THENE=J:GOTO510
430 NEXT J
440 FL=0
450 FORE=1TOA+1
460 IFZ(E)>4THENFL=E
470 NEXT E
480 IFFL=0THEN160
490 E=FL
500 REM *****
510 REM END OF GAME
520 PRINT"@ * @ * @ * @ * @ * @ * @ * @ * @ *
* @ * @ @ ":PRINT
530 PRINT"THE WINNER IS ";Q$(E)

```

```

540 PRINT
550 PRINT"THE OTHERS...":GOSUB1050
560 PRINT
570 FORJ=1TOA+1
580 IFJ=ETHEN610
590 PRINTQ$(J);" - ";Z(J)
600 PRINT
610 NEXT J
620 END
630 PRINT:PRINT
640 PRINT"AND ";Q$(J);" WINS"
650 PRINTTAB(6);"WITH BUNCO!"
660 GOSUB1050
670 E=J
680 GOTO540
690 RM *****
700 REM ASSESS DICE
710 IFD=D1ANDD1=D2ANDD2=D3THENPRINT"BUNC
O!!":GOTO630
720 IFD1=DTHENZ(J)=Z(J)+1
740 IFD3=DTHENZ(J)=Z(J)+1
750 PRINT:PRINTQ$(J);" 'S SCORE IS NOW"Z(
J):GOSUB1050
760 IF(D1=D ORD2=D ORD3=D)ANDZ(J)<5THENJ
=J-1
770 RETURN
780 REM *****
790 REM THE DICE
800 FORS=1TO20
810 D1=INT(RND(1)*6)+1:PRINTD1;
820 D2=INT(RND(1)*6)+1:PRINTD2;
830 D3=INT(RND(1)*6)+1:PRINTD3;
840 IFD1=DORD2=DORD3=DTHENPRINT" <<<---"
;
850 PRINT
860 NEXT S
870 PRINT"-----"
-----":PRINT
880 RETURN
890 REM*****
900 REM INITIALISATION
910 PRINT"{CLR}"
920 REM
930 PRINT:PRINT

```

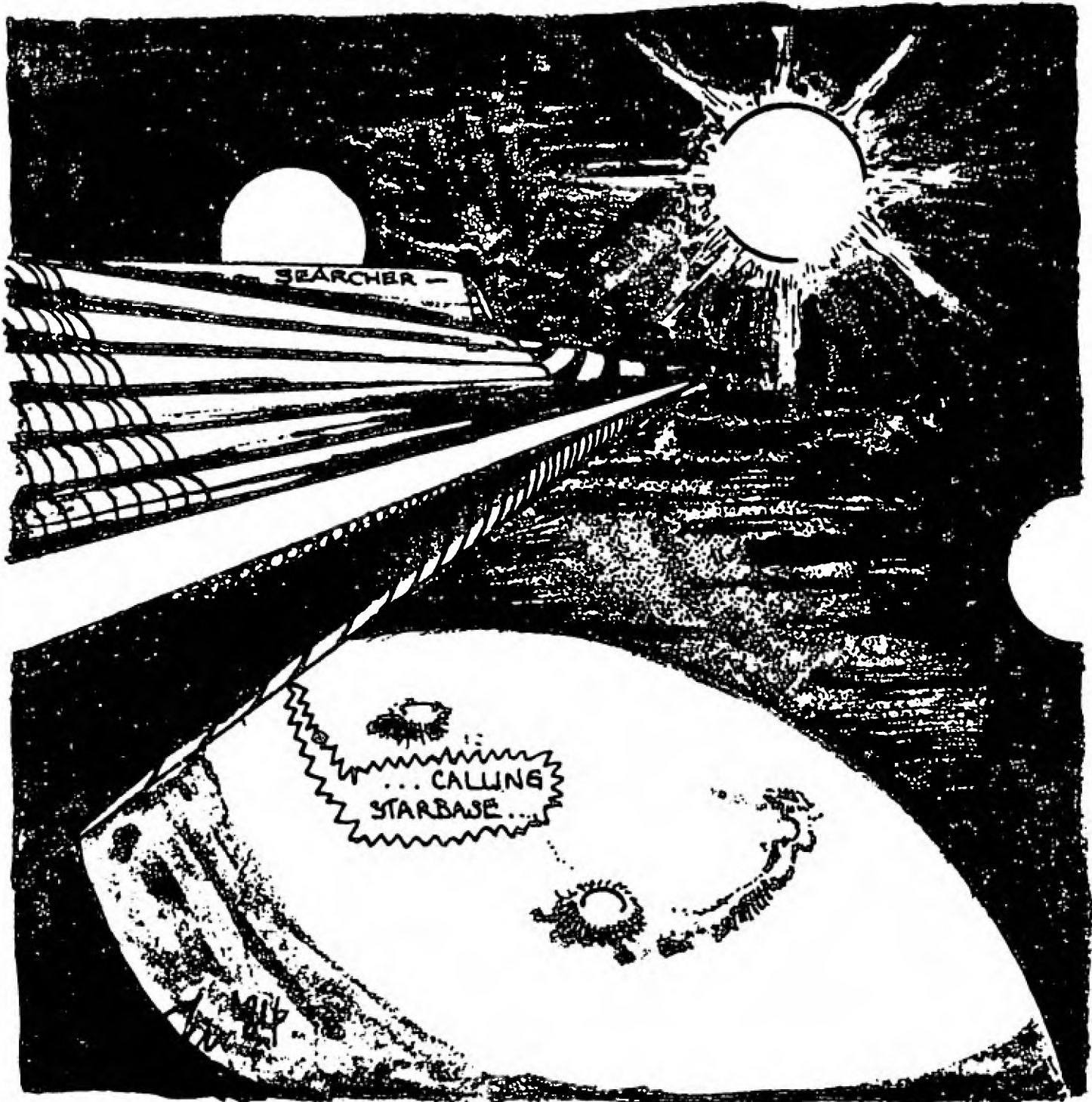


```
940 PRINT "HOW MANY PLAYERS (1 TO 5) "  
945 INPUT A  
950 IFA<10RA>5THEN945  
960 DIMZ(A+1),Q$(A+1)  
970 PRINT "{CLR}":PRINT:PRINT  
980 PRINT "NOW WE'LL GET THE PLAYER'S NAM  
ES"  
990 Q$(1)="THE COMPUTER"  
1000 FORB=2TOA+1  
1010 PRINTB-1;"-";:INPUTQ$(B)  
1020 NEXTB  
1030 RETURN  
1040 REM *****  
1050 REM DELAY  
1060 FORP=1TO1300:NEXT P  
1070 RETURN
```

READY.

STARBASE 2000

The residents of Starbase 2000 have been hit by an outbreak of Quintett Plague. A distress message has been received at HQ and you have been despatched with the necessary serum to save the residents' lives.



However, the people who control the movement of the base through space have come down with Quintett, and the base has wandered quadrillions of miles from its proper position. Therefore, you have to locate the missing starbase, and take your craft there with the serum, before all the inhabitants are dead.

The Galactic Area within which you will find the starbase is very, very large, and heavily populated. Not only are there are other starbase in the sector, but a number of alien races - not friendly to humankind - also spend their time in this Area. While attempting to find the Starbase 2000 and get to it, you have to avoid running into friendly starbases and not-so-friendly aliens, and make sure you do not run out of energy before your task has been carried out.

A number of other incidents lie in wait for you as you undertake this quest. You will find that only a few of them will be triggered each run of the game, so it will differ considerably from run to run. As well, the location of every object in the Galactic Area (you, aliens, starbase and Starbase 2000) changes from game to game.

Once the computer has distributed the contents of the Area, you'll be told where you are:

```
..... You are in Hyades sector
-----
Ship's Log stardate 1000      Aliens: 0
-----
^v^ Your galactic co-ordinates: 31  30
-----
                **ENERGY BANKS HOLD 300
```

If you decide to use your scanner, it will scan the sectors immediately surrounding the one you now occupy, giving an S for a starbase, and an A for an alien. As you'll see in this run, the scanner has also located Starbase 2000:

> WARNING ! <
> WARNING ! <
> WARNING ! <
ENERGY RESERVES *LOW*

YOU MUST FIND A STARBASE SOON

But if you are clever (and perhaps a little lucky) eventually you will save the day (if not the world):

:::: You are in Eridanus sector

Ship's Log stardate 1011 Aliens: 2

^v^ Your galactic co-ordinates: 30 25

?

##ENERGY BANKS HOLD 30.68037

> WARNING ! <
> WARNING ! <
> WARNING ! <
ENERGY RESERVES *LOW*

YOU MUST FIND A STARBASE SOON

Do you want to use scanner (Y or N)? Y
>Stand by for scan...>AA>S>A>S>>SA>A
.....STARBASE 2000 DETECTED!.....
>>>S>>>>>>>

Closest alien: Scan reading of 2.828

Closest starbase: Scan reading of 3.162

Scan on Starbase 2000 returns: 3.602
It is within range

Do you want to move ship (Y or N)? Y
 Which direction (N, S, E or W)? E

 YOU HAVE SUCCEEDED!

 YOU HAVE FOUND THE STARBASE 2000

 1012 STARBASE RESIDENTS ARE STILL
 ALIVE, AND WILL NOW LIVE BECAUSE OF THE
 SERUM YOU HAVE BROUGHT THEM

 YOUR RATING FOR THIS GAME IS 1078

Just to show you how crowded the Galactic Area can be, I modified the program slightly from the one included here, to print out just part of the Area. I've placed an asterisk next to your ship (S) and the elusive Starbase 2000 (T) to help you spot them. As you can see, this is not a game for those who lack the ability to concentrate:

```

  A   A   EA  P   A  E   A  E
  B   B
      BB R   F   R  H BBB
  A   A   A   AA
  A   A   B  A   ER   AA   *T
      B P   AFA A   A   B
A   A  B   B  B  A   B   A   A  A  E   B   A   A   E   B
      R   B  B  A
B   AAA   B
  A  AA  A   B   A   R  EA   P   A   B   A   E
  B   B  A   A   A   A
      B  A   A  E
  B   *S   SA   A   BA   B
      A  B   A   A   B   B
  B   A  B  A  AA   P   B   AE  A   P  B  A
  A
      B  BA  A   B  A   AA   A   PP  E  B
  B   A   B  BA  A   A   A   E   A   A   A
  B   AB
      AB
      A  A  A  A   E  R   B   A   A
      E
  
```

OK, cap'n, it is time to accept the challenge, and set out on your way to save the inhabitants of Starbase 2000 from the dreaded Quintett Plague:


```

10 REM STARBASE 2000
20 GOSUB2640:REM INITIALISE
30 GOSUB190:REM NAME OF QUADRANT
40 IFEV<5ANDRND(1)<.15THENGOSUB1900
50 GOSUB540:REM CONDITION OF SHIP
60 GOSUB700:REM PROXIMITY REPORTS
70 GOSUB1050:REM ACCEPT MOVE
80 IFB$="N"THEN120
90 GOSUB190
100 GOSUB540
110 GOSUB700
120 GOSUB1300:REM ACCEPT FIRE COMMAND
130 GOSUB540
140 GOSUB1580:REM ALIENS RETURN FIRE
150 TS=TS+1
160 B$=" "
170 GOTO30
180 REM *****
190 REM NAME OF QUADRANT
200 PRINT"{CLR}":PRINT:PRINT
210 PRINT":::: YOU ARE IN ";
220 P=INT(S1/8+.5)
230 Q=INT(S2/8+.5)
240 IFP<1THENP=1
250 IFQ<1THENQ=1
260 IFP>8THENP=8
270 IFQ>8THENQ=8
280 IFP>4THEN380
290 IFQ=1THENPRINT"PEGASUS";
300 IFQ=2THENPRINT"AQUARIUS";
310 IFQ=3THENPRINT"ERIDANUS";
320 IFQ=4THENPRINT"HYADES";
330 IFQ=5THENPRINT"CANIS MAJOR";
340 IFQ=6THENPRINT"URSA MAJOR";
350 IFQ=7THENPRINT"OPHIUCHUS";
360 IFQ=8THENPRINT"CEPHEUS";
370 GOTO460
380 IFQ=1THENPRINT"DORADO";
390 IFQ=2THENPRINT"TRIANGULUM";
400 IFQ=3THENPRINT"AURIGA";
410 IFQ=4THENPRINT"MAGELLANIC";
420 IFQ=5THENPRINT"SCORPIO";
430 IFQ=6THENPRINT"CORVUS";
440 IFQ=7THENPRINT"ARCHERNAR";

```

```

450 IFQ=8THENPRINT"CYGNUS";
460 PRINT" SECTOR"
470 PRINT"-----"
-----"
480 PRINT"SHIP'S LOG STARDATE"TS"ALIENS:
"AK
490 PRINT"-----"
-----"
500 PRINT"+++ YOUR GALACTIC CO-ORDINATES
:"S1;S2
510 PRINT"-----"
-----"
520 RETURN
530 REM *****
540 REM SHIP CONDITION
550 PRINTTAB(12);"*ENERGY BANKS HOLD"EN
560 IFEN>1THEN610
570 PRINT:PRINT:PRINT"YOU HAVE EXHAUSTED
YOUR ENERGY BANKS"
580 PRINT:PRINT"YOUR VOYAGE IS OVER"
590 PRINT:PRINT"YOU SURVIVED FOR"TS-1000
"STARDATES"
600 PRINT:PRINT"YOU DESTROYED"AK"ALIEN S
HIPS":GOTO1850
610 IFEN>50THEN670
620 FORH=1TO3
630 PRINTTAB(H*3);"> WARNING ! <"
640 NEXT H
650 PRINT"ENERGY RESERVES *LOW*"
660 PRINT:PRINT"YOU MUST FIND A STARBASE
SOON"
670 FORT=1TO1000:NEXT T
680 RETURN
690 REM *****
700 REM SCANNER
710 P=200:A1=200:AB=200:PR=0
720 PRINT:PRINT"DO YOU WANT TO USE SCANN
ER (Y OR N)"
730 INPUTC$
740 IFC$<>"N"ANDC$<>"Y"THEN730
750 IFC$="N"THENRETURN
760 EN=EN-.25
770 PRINT"> STAND BY FOR SCANNING <":PRI
NT

```

```

780 X1=S1-8:X2=S1+8:Y1=S2-8:Y2=S2+8
790 IFX1<1THENX1=1
800 IFX1>64THENX1=64
810 IFY1<1THENY1=1
820 IFY1>64THENY1=64
830 IFX2<1THENX2=1
840 IFX2>64THENX2=64
850 IFY2<1THENY2=1
860 IFY2>64THENY2=64
870 FORX=X1TOX2
880 PRINT"-> ";
890 FORY=Y1TOY2
900 P=SQR((X-S1)*(X-S1)+(Y-S2)*(Y-S2))
910 P=INT(P*1000)/1000
920 IFA(X,Y)=SHORA(X,Y)=0THEN960
930 IFA(X,Y)=TATHENPR=P:PRINT:PRINT". . . .
.STARBASE 2000 DETECTED!. . . . ."
940 IFA(X,Y)=ALANDP<A1THENA1=P:PRINT"A";
:GH=X:GJ=Y
950 IFA(X,Y)=SBANDP<ABTHENAB=P:PRINT"S";
960 NEXT Y
970 NEXT X
980 IFA1<>2000THENPRINT:PRINT"CLOSEST ALI
EN: SCAN READING OF"A1
990 IFAB<>2000THENPRINT:PRINT"CLOSEST STA
RBASE: SCAN READING OF"AB
1000 IFPR<>0THENPRINT:PRINT"SCAN ON STAR
BASE 2000 RETURNS:"PR:PRINTTAB(8)"IT IS
WITHIN RANGE"
1010 IFPR=0THENPRINT:PRINT"LONG RANGE FI
X ON STARBASE 2000 READS"100*(S1-B1)+(S2
-B2)
1020 FORT=1TO1000:NEXT T
1030 RETURN
1040 REM *****
1050 REM ACCEPT MOVE
1060 PRINT:PRINT"+++ YOUR GALACTIC CO-OR
DINATES:"S1;S2
1070 PRINT:PRINT"DO YOU WANT TO MOVE SHI
P (Y OR N)"
1080 INPUTB$
1090 IFB$<>"N"ANDB$<>"Y"THEN1080
1100 IFB$="N"THENRETURN
1110 EN=EN-2.725

```

```

1120 PRINTTAB(6); "WHICH DIRECTION (N, S,
    E, OR W) "
1130 INPUTA$
1140 IFA$<>"N" ANDA$<>"S" ANDA$<>"E" ANDA$<
>"W" THEN 1130
1150 IFA$="N" AND S1=1 THEN RETURN
1160 A(S1, S2)=SH
1170 IFA$="W" AND S2=1 THEN RETURN
1180 IFA$="E" AND S2=64 THEN RETURN
1190 A(S1, S2)=0
1200 IFA$="N" THEN S1=S1-1
1210 IFA$="S" THEN S1=S1+1
1220 IFA$="W" THEN S2=S2-1
1230 IFA$="E" THEN S2=S2+1
1240 IFA(S1, S2)=A THEN PRINT "YOU'VE LANDE
D ON AN ALIEN SHIP!!": EN=0
1245 IFA(S1, S2)=A THEN FORT=1 TO 1000: NEXT
T: RETURN
1250 IFA(S1, S2)=SB THEN PRINT "YOU'VE LANDE
D ON A STARBASE": EN=EN+50
1260 IFS1=B1 AND S2=B2 THEN 1700: REM STARBAS
E HAS BEEN FOUND
1270 FORT=1 TO 1000: NEXT T
1280 RETURN
1290 REM *****
1300 REM FIRE COMMAND
1310 PRINT: PRINT "DO YOU WANT TO FIRE PHO
TONS (Y OR N) "
1320 INPUTA$
1330 IFA$<>"N" ANDA$<>"Y" THEN 1320
1340 IFA$="N" THEN RETURN
1350 PRINTTAB(8); "AT WAHT FORCE (2 TO 8)
"
1360 INPUTK
1370 IFK<2 OR K>8 THEN 1380
1380 EN=EN-K*2.5
1390 PRINT: PRINT ":::: IN WHICH DIRECTION
(N, S, E, OR W) "
1400 INPUTA$
1410 IFA$<>"N" ANDA$<>"S" ANDA$<>"E" ANDA$<
>"W" THEN 1400
1420 M=S1: N=S2
1430 FORJ=1 TO K
1440 PRINT "SECTOR BEAM" J;

```

```

1450 IFA$="N" THENM=M-1
1460 IFA$="S" THENM=M+1
1470 IFA$="W" THENN=N-1
1480 IFA$="E" THENN=N+1
1490 IFM<10RM>64ORN<10RN>64THEN1530
1500 IFA(M,N)=AL THENPRINT:PRINT"ALIEN SH
IP DESTROYED AT"M;N:AK=AK+1
1505 IFA(M,N)=AL THENA(M,N)=0:GH=0:GJ=0:G
OTO1540
1510 IFA(M,N)=SB THENPRINT"YOU HIT A FRIE
NDLY STARBASE!":A(M,N)=0:EN=EN/2:GOTO154
0
1520 IFM=B1ANDN=B2 THENPRINT"YOU'VE DESTR
OYED STARBASE 2000!":EN=0:GOTO1810
1530 PRINT"...NOTHING"
1540 NEXT J
1550 FORT=1TO1000:NEXT T
1560 RETURN
1570 REM *****
1580 REM ALIENS RETURN FIRE
1590 IFGH=0ORGJ=0ORRND(1)>.5 THENRETURN
1600 PRINT"ALIENS AT"GH;GJ"ARE FIRING AT
US SIR..."
1610 FORT=1TO1000:NEXT T
1620 R=INT(RND(1)*4)
1630 IFR=0 THENPRINTTAB(7);"***THEY MISSE
D!!"
1640 IFR=1 THENPRINT"ALIEN FIRE CLIPPED T
HE STARBOARD SIDE"
1645 IFR=1 THENPRINT:PRINTTAB(7);"MINOR D
AMAGE":EN=EN-4.75
1650 IFR=2 THENPRINT"ALIEN FIRE HIT THE C
REW SECTION":PRINT
1655 IFR=2 THENPRINTTAB(7)"MEDIUM DAMAGE"
:EN=EN-18.25
1660 IFR=3 THENPRINT"ALIEN FIRE HIT THE D
RIVE SECTION":PRINT
1665 PRINTTAB(7)"MAJOR DAMAGE":EN=EN-30.
55
1670 FORT=1TO100:NEXT T
1680 RETURN
1690 REM *****
1700 REM END OF QUEST
1710 PRINT:PRINT

```

```

1720 PRINT"-----
-----"
1730 PRINTTAB(8);"YOU HAVE SUCCEEDED!"
1740 PRINT"-----
-----"
1750 PRINT"YOU HAVE FOUND THE STARBASE 2
000"
1760 PE=1000+INT(RND(1)*1000)
1770 PRINT"-----
-----"
1780 PRINTPE"STARBASE RESIDENTS ARE STIL
L"
1790 PRINT"ALIVE, AND WILL NOW LIVE BECA
USE OF THE"
1800 PRINTTAB(8);"SERUM YOU HAVE BROUGHT
THEM"
1810 PRINT"-----
-----"
1820 PRINT"YOUR RATING FOR THIS GAME IS"
1830 PRINTINT(PE+TS+EN*AK-1000)
1840 END
1850 PRINT"-----
-----"
1860 PRINT"UNFORTUNATELY, YOU DID NOT LO
CATE THE"
1870 PRINT"STARBASE, WHICH WAS AT"B1;B2
1880 GOTO1810
1890 REM *****
1900 REM ENVENTS
1910 EV=EV+1
1920 PRINT"=====
===== "
1930 PRINT"=====
===== "
1940 ONEVGOSUB1980,2080,2200,2350,2510
1950 FORT=1TO1000:NEXT T
1960 RETURN
1970 REM *****
1980 PRINT"YOUR SHIP HAS FLOWN INTO THE
BEAM OF A"
1990 PRINT"GAMMA-RAY EMISSION FROM GALAC
TIC"

```

```

2000 PRINT"ANTICENTER, EPIFOCUS IS VELA.
. ."
2010 FORT=1TO1000:NEXT T
2020 PRINT"YOUR SHIP IS DEVERTED BY THE
EMISSIONS"
2030 S1=S1+1:S2=S2-1
2040 IFS1>64THENS1=64
2050 IFS2<1THENS2=1
2060 RETURN
2070 REM *****
2080 PRINT"NAVIGATION REPORTS UNUSUAL AT
OMIC"
2090 PRINT"ACTIVITY AT MAGNITUDES 4.8 AN
D 10.13"
2100 PRINT"FROM KAPTEYN'S, APPARENTLY DI
RECTED"
2110 PRINT"TOWARDS UV CETI A AND B..."
2120 FORT=1TO1000:NEXT T
2130 PRINT"THIS SUGGESTS OUR SCANNER OUT
PUT"
2140 PRINT"MAY BE INACCURATE..."
2150 B1=B1+2:B2=B2-2
2160 IFB1>65THENB1=64
2170 IFB2<1THENB2=1
2180 RETURN
2190 REM *****
2200 PRINT"SIGNALS RECEIVED FROM DIRECTI
ON OF THE"
2210 PRINT"HORSEHEAD NEBULA AT 337 PARSE
CS SHOW"
2220 PRINT"EXCESSIVE SODIUM MEASUREMENT
IN"
2230 PRINT"THE INTERSTELLAR DUST CLOUD..
."
2240 FORT=1TO1000:NEXT T
2250 PRINT"WE MUST DIVERT 12% OF OUR ENE
RGY TO"
2260 PRINT"STRENGTHEN OUR SHIELDS..."
2270 FORT=1TO1000:NEXT T
2280 PRINT"ENERGY BANKS NOW HOLD"EN
2290 EN=.78*EN
2300 FORT=1TO500:NEXT T
2310 PRINT"AFTER SHIELD STRENGTHENING, E
NERGY"

```

```

2320 PRINT"BANKS REPORT A READING OF"EN
2330 RETURN
2340 REM *****
2350 PRINT"FORWARD CONTROL REPORTS PROTO
-STAR"
2360 PRINT"FORMATION IN THE GASEOUS NEBU
LA M16"
2370 PRINT"IN SERPENS. THE PROTON-PROTON
REACTION"
2380 PRINT"IS GENERATING INTERNAL TEMPER
ATURES OF"
2390 PRINT"THE ORDER OF 17 X 10^6.K..."
2400 PRINT"WE MUST MOVE AWAY FROM THAT L
OCATION..."
2410 FORT=1TO1000:NEXT T
2420 PRINTTAB(8);"'WARP DRIVE ON !'"
2430 FORT=1TO1000:NEXT T
2440 S1=S1+INT(RND(1)*3)
2450 S2=S2+INT(RND(1)*3)
2460 IFS1>64THENS1=64
2470 IFS2>64THENS2=64
2480 FORT=1TO1000:NEXT T
2490 RETURN
2500 REM *****
2510 PRINT"WARNING...WARNING..."
2520 FORT=1TO300:NEXT T:IFRND(1)>.7THEN2
510
2530 PRINT"BLACK HOLE WITHIN"RND(1)*1000
"UNITS, IN"
2540 PRINT"DIRECTION"RND(1)*1000" HEADIN
G"RND(1)*34
2550 FORT=1TO500:NEXT T
2560 PRINT:PRINT"GRAVITATIONAL LENS EFFE
CT IS PUTTING"
2570 PRINT"EXTREME STRAIN ON GALACTIC IM
AGE AS"
2580 PRINT"SEEN BY INITIATED PROCESS"INT
(RND(1)*100)/100
2590 M=S2:S2=S1:S1=M
2600 PRINT"WE ARE TUMBLING..."
2610 IFRND(1)>.4THEN2600
2620 RETURN
2630 REM *****

```



```

2640 REM INITIAL ISE
2650 PRINT "{CLR}"
2660 PRINT:PRINT "PLEASE STAND BY." ;
2670 REM
2680 DIMA(64,64)
2690 AL=ASC("A"):REM ALIEN
2700 AK=0:REM ALIENS KILLED
2710 SH=ASC("S"):REM YOUR SHIP
2720 SB=ASC("B"):REM STAR BASE
2730 TA=ASC("T"):REM TARGET OF GAME,
                STARBASE 2000
2740 TS=1000:REM STARDATE
2750 EN=300
2760 REM ** CREATE UNIVERSE **
2770 FORM=1TO300
2780 PRINT ". ";
2790 FORN=1TO2
2800 C=INT(RND(1)*64)+1
2810 D=INT(RND(1)*64)+1
2820 IFN=1THENA(C,D)=AL
2830 IFN=2THENA(C,D)=SB
2840 NEXT N
2850 NEXT M
2860 REM ** STARBASE 2000 **
2870 B1=INT(RND(1)*64)+1
2880 B2=INT(RND(1)*64)+1
2890 A(B1,B2)=TA
2900 REM ** START POSITION, SHIP **
2910 S1=INT(RND(1)*64)+1
2920 S2=INT(RND(1)*64)+1
2930 IFS1=B1ORS2=B2THEN2910
2940 A(S1,S2)=SH
2950 PE=0
2960 GH=0:GJ=0
2970 EV=0
2980 RETURN

```

SECRET AGENT

Four secret agents, from four major cities, are on their way to meet the head of their government in a fifth major city. They all carry the same secret papers which contain information on how to defeat all the other governments. Therefore, only the government who gets the information first can use it effectively.



The computer takes the role of one secret agent, and three human beings take the other roles. The game is very easy to play. When it starts, you'll first be told

the cities which are involved (they change from run to run of the game):

Here are the cities:

SHANGHAI
RANGOON
WASHINGTON
MOSCOW
BANGKOK

You will be asked to enter the names of the three human players:

ENTER AGENT NAME NUMBER 1 ? WENDY
ENTER AGENT NAME NUMBER 2 ? PETER
ENTER AGENT NAME NUMBER 3 ? DR HOOK
I WILL BE AGENT NUMBER 4

The computer will then allot the human players to their starting cities and will tell you which city you are all heading for

HERE ARE THE CITIES YOU ARE COMING FROM:

WENDY - SHANGHAI
PETER - RANGOON
DR HOOK - WASHINGTON
COMPUTER - MOSCOW

THE PAPERS MUST BE DELIVERED
TO BANGKOK

A highly accurate map is then shown, with the initials of the players (with C for computer) shown in their starting locations. The 'target city' (Bangkok in this case) is shown in the center of the map:


```

100 PRINT "{WHT}AGENT ";B$(OG); " GOT THE
PAPERS"
110 PRINT"TO "A$(5)" FIRST"
120 PRINT
130 PRINTTAB(12); "{YEL}IT TOOK"DA"DAYS"
140 END
150 REM*****
160 REM ROLL THE DICE
170 PRINT
180 M=1
190 FORJ=1TO4
200 C(J)=INT(RND(1)*6+RND(1)*6)+1
210 PRINT "{WHT}"B$(J); "{LT GRN} FROM ";A
$(J); " - ";C(J)
220 IFC(J)>C(M)THENM=J
230 NEXTJ
240 PRINT:PRINT "{PUR}AGENT {WHT}";B$(M);
"{PUR} MOVES TOWARDS ";A$(5)
250 IFM=1THENZ(A1,A2)=45:A1=A1+1:A2=A2+1
:Z(A1,A2)=ASC(B$(1))
260 IFM=2THENZ(B1,B2)=45:B1=B1+1:B2=B2-1
:Z(B1,B2)=ASC(B$(2))
270 IFM=3THENZ(C1,C2)=45:C1=C1-1:C2=C2+1
:Z(C1,C2)=ASC(B$(3))
280 IFM=4THENZ(D1,D2)=45:D1=D1-1:D2=D2-1
:Z(D1,D2)=ASC(B$(4))
290 IFA1=7AND A2=7THENOG=1
300 IFB1=7AND B2=7THENOG=2
310 IFC1=7AND C2=7THENOG=3
320 IFD1=7AND D2=7THENOG=4
330 GOSUB1010
340 RETURN
350 RETURN
360 REM *****
370 REM THE MAP
380 PRINT "{CLR}":PRINT
390 DA=DA+1
400 PRINTTAB(9) "{CYN}DAY"DA
410 PRINT "{LT BLU}"A$(1)TAB(26-LEN(A$(2)
));A$(2)
420 FORJ=1TO13
430 FORK=1TO13
440 PRINT "{OR}"CHR$(Z(J,K)); " ";
450 NEXTK

```



```

460 PRINT
470 NEXTJ
480 PRINT "{LT BLU}"A$(3)TAB(26-LEN(A$(4)
);A$(4)
490 GOSUB1010
500 RETURN
510 REM *****
520 REM INITIALISATION
530 PRINT "{CLR}"
540 POKE53281,0:POKE53280,5
550 DIMA$(5),B$(4),C(4),Z(13,13)
560 PRINT:PRINT"HERE ARE THE CITIES:"
570 FORJ=1TO5
580 RESTORE
590 FORT=1TORND(1)*16+1
600 READB$
610 NEXT T
620 A$(J)=B$
630 T=1
640 IFT>=JTHEN670
650 IFA$(T)=A$(J)THEN580
660 T=T+1:GOTO640
670 PRINTA$(J)
680 NEXT J
690 PRINT:PRINT
700 FORJ=1TO3
710 PRINT"ENTER AGENT NUMBER"J
720 INPUTB$(J)
730 NEXT J
740 PRINTTAB(5);"I WILL BE AGENT NUMBER"
4
750 B$(4)="COMPUTER"
760 GOSUB1010
770 PRINT:PRINT"HERE ARE THE CITIES YOU
ARE COMING FROM:"
780 FORJ=1TO4
790 PRINTB$(J);" - ";A$(J)
800 NEXTJ
810 PRINT:PRINT"THE PAPERS MUST BE DELIV
ERED"
820 PRINTTAB(9);"TO ";A$(5)
830 FORJ=1TO13
840 FORK=1TO13
850 Z(J,K)=45

```

```

860 NEXT K
870 NEXT J
880 A1=1:A2=1:REM AGENT ONE
890 B1=1:B2=13:REM AGENT TWO
900 C1=13:C2=1:REM AGENT THREE
910 D1=13:D2=13:REM AGENT FOUR
920 Z(A1,A2)=ASC(B$(1))
930 Z(B1,B2)=ASC(B$(2))
940 Z(C1,C2)=ASC(B$(3))
950 Z(D1,D2)=ASC(B$(4))
960 Z(7,7)=ASC(A$(5))

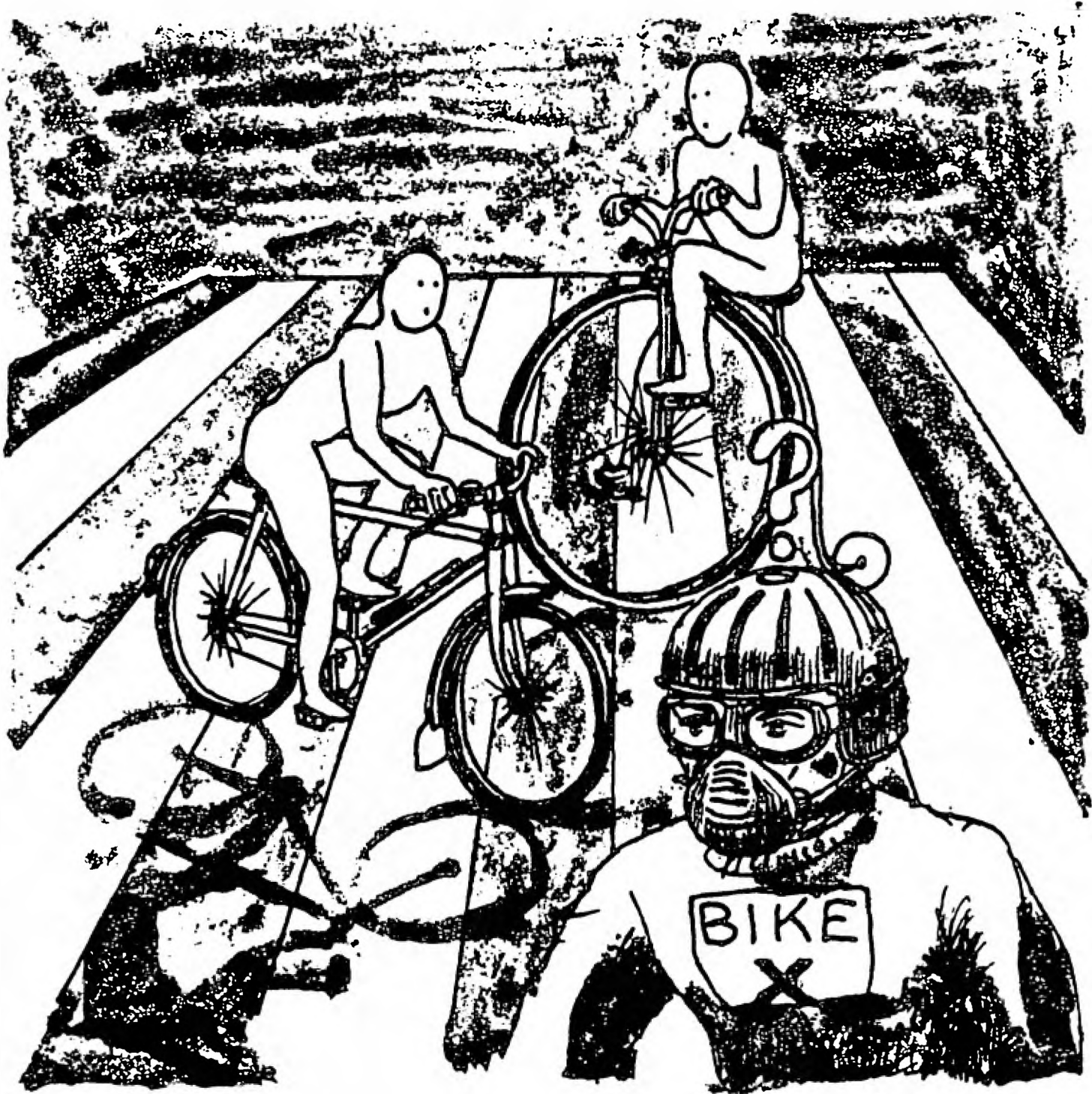
970 OG=0
980 DA=0
990 RETURN
1000 RM *****
1010 REM DELAY LOOP
1020 GETG$:IFG$="" THEN 1020
1030 RETURN
1040 DATA "MOSCOW", "PEKING", "WASHINGTON",
"PARIS", "GENEVA", "BONN", "KHARTOUM"
1050 DATA "SHANGHAI", "TOKYO", "ALGIERS", "O
TTAWA", "CALCUTTA", "RANGOON", "BANGKOK"
1060 DATA "QUITO", "CARACAS", "NAIROBI"

```

READY.

SCAT BIKES

This is a most unusual board game, in which the aim is to 'drive' off the side of the board opposite your starting side. You are the O's down the left hand side and you're driving straight across the board. The



computer controls the little X scat bikes, and they are heading due north. Here's how the board looks at the start of the game:

My score: 0
Your score: 0

```
1  
2 0 . . . .  
3 0 . . . .  
4 0 . . . .  
5 0 . . . .  
6   X X X X
```

1 2 3 4 5 6

Stand by for my move...

At any time, you can move one square in any direction. There are no captures, with the 'scores' at the top of the screen indicating how many of the O's or X's have made it from their respective sides of the board.

The computer moves first, and then you enter your move as the number from which you're moving and the number you're moving to.

My score: 0
Your score: 0

```
1  
2 0 . . . .  
3 0 . . . .  
4 0 . . . .  
5 0 . . . X  
6   X X X .
```

1 2 3 4 5 6

ENTER YOUR MOVE (side, bottom)? 21

FROM 21 TO? 22

Illegal moves are, as you can see, firmly rejected:

My score: 0
Your score: 0

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | | | | | | |
| 2 | . | 0 | . | . | . | |
| 3 | 0 | . | . | . | . | |
| 4 | 0 | . | . | . | . | |
| 5 | 0 | . | X | . | X | |
| 6 | | X | . | X | . | |
| | 1 | 2 | 3 | 4 | 5 | 6 |

ENTER YOUR MOVE (side, bottom)? 22

FROM 22 TO? 24

>>You can't move that far!

FROM 22 TO? 23

Here's a few more 'snapshots' of the game in action,
leading up to a narrow victory by the computer:

My score: 0
Your score: 0

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | | | | | | |
| 2 | . | . | X | 0 | X | |
| 3 | . | . | . | . | . | |
| 4 | . | 0 | 0 | 0 | . | |
| 5 | . | X | X | . | . | |
| 6 | | . | . | . | . | |
| | 1 | 2 | 3 | 4 | 5 | 6 |

ENTER YOUR MOVE (side, bottom)? 43

FROM 43 TO? 34

My score: 2
Your score: 2

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | | | | | | |
| 2 | . | . | X | 0 | . | |
| 3 | . | X | . | . | . | |
| 4 | . | . | . | 0 | . | |
| 5 | . | . | . | . | . | |
| 6 | . | . | . | . | . | |
| | 1 | 2 | 3 | 4 | 5 | 6 |

ENTER YOUR MOVE (side, bottom)? 44

FROM 44 TO? 45

My score: 4
Your score: 3

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | | | | | | |
| 2 | . | . | . | . | 0 | |
| 3 | . | . | . | . | . | |
| 4 | . | . | . | . | . | |
| 5 | . | . | . | . | . | |
| 6 | . | . | . | . | . | |
| | 1 | 2 | 3 | 4 | 5 | 6 |

I'm the winner!

If you decide you can't face the pace any longer, enter a zero when it is your turn to move.

```

10 REM SCAT BIKES
20 GOSUB770:REM INITIALISE
30 GOSUB210:REM PRINT BOARD
40 IFCS=4ORHS=4THEN140
50 GOSUB380:REM COMPUTER MOVE
60 GOSUB 210: REM PRINT BOARD
70 IFCS=4ORHS=4THEN140
80 GOSUB590:REM HUMAN MOVE
90 FORJ=2TO5:A(J)=46:NEXT J
100 FORJ=46TO16STEP-10
110 A(J)=46:NEXTJ
120 GOTO30
130 REM *****
140 REM END OF GAME
150 PRINT
160 IFCS>HSTHENPRINT"{YEL}I'M THE WINNER
!"
170 IFCS<HSTHENPRINT"{YEL}YOU'RE THE WIN
NER!"
180 PRINT:PRINT:PRINT
190 END
200 REM *****
210 REM PRINT BOARD
220 PRINT"{CLR}":PRINT:PRINT
230 PRINTTAB(7);"{PUR}MY SCORE:"CS
240 PRINTTAB(5);"YOUR SCORE:"HS
250 PRINT
260 PRINTTAB(6);"1":PRINTTAB(6);"2 ";
270 FORJ=11TO55
280 PRINTCHR$(A(J));" ";
290 IFJ=15THENJ=20:PRINT:PRINTTAB(6);"3
";
300 IFJ=25THENJ=30:PRINT:PRINTTAB(6);"4
";
310 IFJ=35THENJ=40:PRINT:PRINTTAB(6);"5
";
320 IFJ=45THENJ=50:PRINT:PRINTTAB(6);"6
";
330 NEXT J
340 PRINT:PRINT
350 PRINTTAB(8);"1 2 3 4 5 6"
360 RETURN
370 REM *****

```

```

380 REM COMPUTER MOVE
390 PRINT:PRINT"{CYN}STAND BY FOR MY MOV
E..."
395 FORTT=1TO1000:NEXT
400 Y=0
410 Y=Y+1
420 Z=INT(RND(1)*44)+12
430 IFY<500ANDA(Z)<>88THEN410
440 IFY>499THENGOSUB210:PRINT:PRINT"{YEL
}I CONCEDE, CHAMP!":END
450 IFA(Z-10)=46THENW=Z-10:GOTO550
460 U=0
470 J=INT(RND(1)*2)+1
480 U=U+1
490 IFJ=1THENM=-11
500 IFJ=2THENM=-9
510 W=Z+M
520 IFA(W)=46ANDW<>41ANDW<>31ANDW<>21AND
W<>11THEN550
530 IFU<4THEN470
540 GOTO410
550 A(Z)=46:A(W)=88
560 IFZ<16THENC=CS+1
570 RETURN
580 REM *****
590 REM HUMAN MOVE
600 PRINT:PRINT
610 REM ENTER 0 TO CONCEDE
620 INPUT"{GRN}ENTER YOUR MOVE (SIDE,BOT
TOM)";X
630 IFX=0THENPRINT"{YEL} >>THANKS FOR TH
E GAME, LOSER!":END
640 X=X-10
650 IFX<60RX>45THENPRINT"{CYN} >>NOT A L
EGAL MOVE!":GOTO620
660 IFA(X)<>79THENPRINT"{CYN} >>YOU DO N
OT HAVE A PIECE THERE":GOTO620
670 PRINT:PRINT"FROM"X+10;
680 INPUT"TO";Y
690 Y=Y-10
700 IFY<60RY>45THENPRINT" {CYN}>>NOT A L
EGAL MOVE!":GOTO620
710 IFA(Y)<>46THENPRINT"{CYN} >>YOU CANN
OT MOVE THERE!":GOTO680

```



```

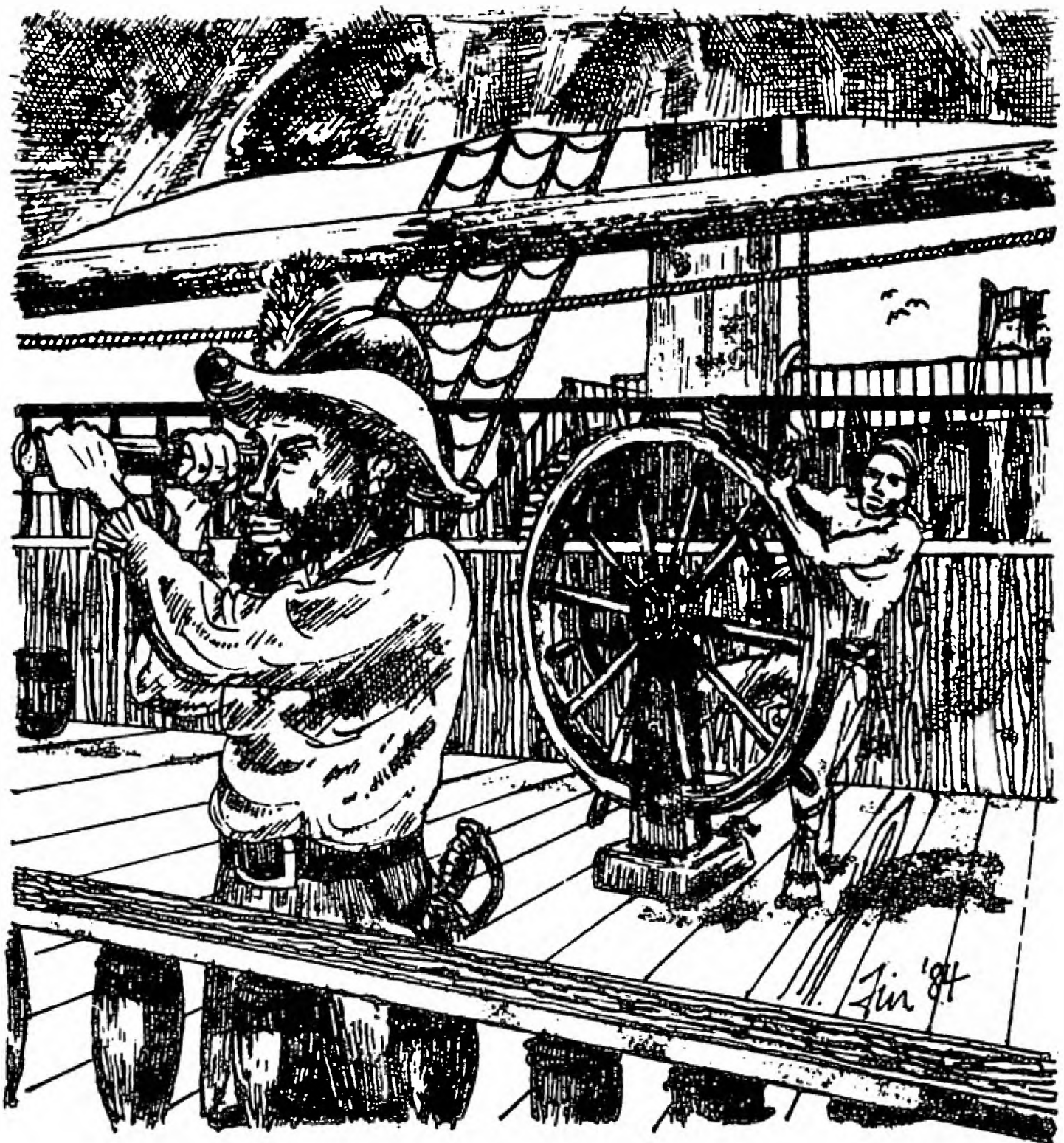
720 IFABS(X-Y)>11ORABS(X-Y)>1ANDABS(X-Y)
<9THENPRINT"{CYN}>>YOU CAN'T MOVE THAT F
AR":GOTO670
730 A(X)=46:A(Y)=79
740 IFY=16ORY=26ORY=36ORY=46THENHS=HS+1
750 RETURN
760 REM *****
770 REM INITIALISE
780 POKE53281,0:POKE53280,8
790 DIMA(56)
800 FORJ=1TO56
810 A(J)=46
820 NEXTJ
830 FORJ=1TO9
840 READX:READY
850 A(X)=Y
860 NEXT J
870 HS=0:REM HUMAN SCORE
880 CS=0:REM COMPUTER SCORE
890 RETURN
900 DATA11,79,21,79,31,79,41,79
910 DATA52,88,53,88,54,88,55,88,51,32

```

READY.

THE VOYAGES OF MAGELLAN

You no longer need to worry over the unfortunate fact that neither you, nor your trusty computer, were in existence back in the early 1500's. Although you missed out on the first circumnavigation of the globe, you can re-enact the expedition as many times as you like - with an enormous variety of possible outcomes - with the aid of this program.



Ferdinand Magellan left his native country of Portugal for Spain after four years of fruitless attempts to get financial backing for his planned voyage around the

world. Charles V of Spain lent a more sympathetic ear to the project, and in September 1519, Magellan set sail on the greatest journey man had ever undertaken. Five ships, in pretty poor condition, and only 280 men, did not suggest the voyage would prove successful. But although Magellan himself did not complete the first complete voyage around the globe (he was killed on a small island in the Philippines) the main ship - the Victoria - finally limped back to Spain, three years after they had begun.

Records show the expedition was outfitted with two and a half tons of gunpowder, twenty-one quadrants and seven astrolabes. On this voyage, when you're in charge of the Victoria, you'll have all this and more as you will see shortly. In this program, you have to keep your men fed, by carefully trading with natives you meet as you sail. As well, you may well be forced to deal with such diversions as shipwreck, mutiny and pirates. If you keep your head, you'll eventually make it back to Spain, after visiting many of the ports where the Victoria actually called.

The computer takes the role of the first mate, cheerfully bringing you up to date on the current events:

CAPTAIN FERDINAND, REPORT FOR WEEK 1

WE ARE SETTING SAIL FROM SPAIN
WITH A CREW OF 112 HEARTY MEN

WE ARE AT THE CANARY ISLANDS

THE TREASURY HOLDS 208 DUBLOONS

THE GALLEY STORES HOLD 111 SACKS
OF FOOD, ENOUGH FOR 9 WEEKS

ENTER 1 TO INSPECT THE HOLD
2 TO TRADE WITH THE NATIVES
3 TO SET SAIL FOR OUR NEXT PORT

It is good to know what you have on board to sell, to allow you to buy food for your perpetually-ravenous crew:

IN THE HOLD YOU SEE:

113 BOLTS OF CLOTH WORTH 1017 DBLNS
16 ASTROLABES WORTH 368 DBLNS
50 SACKS OF SALT WORTH 400 DBLNS
37 IRON INGOTS WORTH 185 DBLNS
11 QUADRANTS WORTH 385 DBLNS

TOTAL VALUE OF GOODS IS 2355 DUBLOONS
PRESS 1 TO TRADE WITH THE NATIVES
OR 2 TO RETURN TO THE VOYAGE

Life at sea is hard, even with all that food, and from time to time you'll notice a crewman or two missing at roll-call:

CAPTAIN FERDINAND, REPORT FOR WEEK 4
* YOU HAVE 110 MEN *

WE ARE AT THE CAPE VERDE ISLANDS

THE TREASURY HOLDS 208 DUBLOONS

THE GALLEY STORES HOLD 75 SACKS
OF FOOD, ENOUGH FOR 6 WEEKS

ENTER 1. TO INSPECT THE HOLD
2 TO TRADE WITH THE NATIVES
3 TO SET SAIL FOR OUR NEXT PORT

Trading with 'the natives' can be interesting:

CAPTAIN, WHICH GOODS WILL WE SELL?

- 1 - BOLTS OF CLOTH
- 2 - ASTROLABES
- 3 - SACKS OF SALT
- 4 - IRON INGOTS
- 5 - BARRELS OF GUNPOWDER
- 6 - QUADRANTS
- 7 - TO BUY FROM NATIVES
- 8 - TO RETURN TO VOYAGE

WE HAVE 50 SACKS OF SALT WORTH 8
DBLS EACH

THE LOCALS' BEST OFFER IS 5 EACH
HOW MANY DO YOU WANT TO SELL? 25

WE HAVE 37 INGOTS WORTH 5 DBLS EACH
THE BEST OFFER FOR IRON IS 4 EACH
HOW MANY DO YOU WANT TO SELL? 37

CAPTAIN, WHICH GOODS WILL WE SELL?

- 1 - BOLTS OF CLOTH
- 2 - ASTROLABES
- 3 - SACKS OF SALT
- 5 - BARRELS OF GUNPOWDER
- 6 - QUADRANTS
- 7 - TO BUY FROM NATIVES
- 8 - TO RETURN TO VOYAGE

>> YOU HAVE 481 DBLNS <<

THE NATIVES ARE OFFERING:

- 1 - FOOD AT 13 DBLNS PER SACK
- 2 - SLAVES AT 34 DBLNS EACH
- 3 - TO RETURN TO VOYAGE

HOW MUCH FOOD DO YOU WANT? 100

YOU DO NOT HAVE ENOUGH MONEY

? 25

> TRANSACTION COMPLETE <

>> YOU HAVE 156 DBLNS <<

THE NATIVES ARE OFFERING:

- 1 - FOOD AT 15 DBLNS PER SACK
- 2 - SLAVES AT 31 DBLNS EACH
- 3 - TO RETURN TO VOYAGE

HOW MANY SLAVES DO YOU WANT? 5
THEY'VE BEEN ADDED TO YOUR CREW

And so your journey continues:

CAPTAIN MAGELLAN, PROGRESS OF
THE VICTORIA FOR WEEK 5
* YOU HAVE 115 MEN *

STORES HOLD FOOD FOR 7 WEEKS

WE ARE SAILING...

CAPTAIN MAGELLAN, PROGRESS OF
THE VICTORIA FOR WEEK 6
* YOU HAVE 113 MEN *

STORES HOLD FOOD FOR 6 WEEKS

OUR VOYAGE CONTINUES...

DUE TO A LACK OF FRESH FOOD
SCURVY HAS HIT YOUR SHIP...
29 MEN HAVE DIED

Finally, despite all your efforts, the elements may turn against you, bringing the voyage to an abrupt halt:

YOUR SHIP IS FOUNDERING IN HEAVY
SEAS...YOU ARE IN PERIL.....

A MIGHTY WAVE SWAMPS YOUR SHIP
AND IT GOES DOWN TO THE BOTTOM

THE VOYAGE LASTED 11 WEEKS

Alternatively, fate might be kind, leading to an ending
such as this one:

WELL DONE, CAPTAIN

YOU'VE MADE IT BACK TO SPAIN
YOU ENDED THE VOYAGE WITH 116 DBLNS
113 BOLTS OF CLOTH, 16 ASTROLABES
0 SACKS OF SALT, 0 IRON INGOTS
3 BARRELS OF GUNPOWDER, AND
11 QUADRANTS

YOUR SCORE IS 3874

THE VOYAGE LASTED 11 WEEKS

Much of our knowledge of the events of the voyage comes
from an Italian crew-member named Pigafetta, who kept a
diary during the journey, and later converted it into
book form. He tells how he wanted to go with Magellan
"to experience and see with my eyes a part of the very
great and awful things of the Ocean". Now, without
having to go begging to Charles V of Portugal, you can see
some "great and awful things":

```
10 REM VOYAGES OF FERDINAND MAGELLAN
20 GOSUB2870:REM INITIALISE
30 PRINT "{CLR}":PRINT
40 T=INT(RND(1)*3)
50 WEEK=WEEK+1
60 FOOD=INT(FOOD-FEED*MEN)
70 IFFOOD<1THEN280
```

```

80 IFRND(1)>.74THENMEN=MEN-INT(RND(1)*3)
90 PRINT"{YEL}-----"
-----";
95 PRINT"{GRN}"
100 IFT=0THENPRINT"CAPTAIN MAGELLAN, PRO
GRESS OF":PRINT"THE VICTORIA FOR WEEK"WE
110 IFT=1THENPRINT"CAPTAIN FERDINAND, SHI
P'S LOG FOR WEEK"WEEK
120 IFT=2THENPRINT"CAPTAIN FERDINAND, RE
PORT FOR WEEK"WEEK
130 IFPT=1ORPT=9THEN540
140 MEN=INT(ABS(MEN))
150 PRINTTAB(8);"* YOU HAVE"MEN"MEN *"
160 IFMEN<10THENPRINT"THAT IS NOT ENOUGH
TO SAIL THE":PRINT"VICTORIA, SO WE MUST
STAY"
161 IFMEN<10THENPRINT"HERE IN ";A$(PT):G
OTO640
170 PRINT"{YEL}-----"
-----{LT BLU}";
175 PRINT:PRINT
180 T=INT(RND(1)*3.5)
190 IFAS=0ORQU=0THENPRINT"YOU DON'T HAVE
ANY INSTRUMENTS":PRINT"TO NAVIGATE WITH
!!!"
191 IFAS=0ORQU=0THENPRINT"THIS IS THE EN
D.....":GOSUB3190:GOTO640
200 IFT=0THENPT=PT+1:PRINT"WE ARE AT ";A
$(PT):IFPT=9THEN610
210 W=INT(RND(1)*2)
220 IFINT(FOOD/(FEED*MEN))<1THEN280
230 IFT>0THENPRINT:PRINTTAB(RND(1)*4);"S
TORES HOLD FOOD FOR"INT(FOOD/(FEED*MEN))
"WEEKS"
240 IFT>0ANDW=1THENPRINT:PRINTTAB(RND(1)
*8);"WE ARE SAILING...":GOTO460
250 IFT>0ANDW=0THENPRINT:PRINTTAB(RND(1)
*8);"OUR VOYAGE CONTINUES...":GOTO460
260 IFMEN<10THENPRINT"YOUR CREW IS TOO S
MALL TO SAIL THE":PRINT"VICTORIA, SO WE
MUST"
261 IFMEN<10THENPRINT"STAY HERE":PRINTTA
B(8);"IN ";A$(PT):GOTO640
270 IFFOOD>1THEN340

```



```

280 PRINTTAB(5); "YOU HAVE RUN OUT OF FOOD!"; GOSUB3190
290 PRINTTAB(5); "ALL OF YOUR MEN HAVE DIED..."
300 PRINTTAB(8); "YOU ARE DYING TOO..."
310 GOSUB3190
320 PRINT:PRINTTAB(5); "A PITY IT IS ALL OVER..."
330 PRINT:PRINTTAB(5); "THERE IS SO MUCH ON BOARD":PRINT:GOTO640
340 PRINT:PRINT"THE TREASURY HOLDS"CASH"DUBLOONS"
350 PRINT:PRINT"THE GALLEY STORES HOLD"FOOD"SACKS"
360 PRINT"OF FOOD, ENOUGH FOR"INT(FOOD/(FEED*MEN))"WEEKS"
370 PRINT:PRINT"ENTER 1 TO INSPECT THE HOLD"
380 PRINT"          2 TO TRADE WITH THE NATIVES"
390 PRINT"          3 TO SET SAIL FOR OUR NEXT PORT"
400 GETB$: IFB$="" THEN400
410 REM
420 IFB$<"1" ORB$>"3" THEN400
430 IFB$="1" THENGOSUB740
440 IFB$="2" THENGOSUB940:GOTO510
450 REM** INCIDENTS **
460 RN=INT(RND(1)*21)
470 IFRN=1 THENSC=SC+1: IFSC=3 THENRN=2
471 IFRN=1 ANDSC<>3 THENGOSUB2130
480 IFRN=2 THENSH=SH+1: IFSH=2 THENRN=3
481 IFRN=2 ANDSH<>2 THENGOSUB2230
490 IFRN=3 THENMU=MU+1: IFMU=2 THENRN=4
491 IFRN=3 ANDMU<>2 THENGOSUB2420
500 IFRN=4 THENPI=PI+1: IFPI=3 THEN460
501 IFRN=4 ANDPI<>3 THENGOSUB2600
510 GOSUB3190
520 GOTO 30
530 REM*****
540 REM PORT OF SPAIN
550 IFPT>8 THEN610:REM END
560 PRINT:PRINT"WE ARE SETTING SAIL FROM SPAIN"

```

```

570 PRINT"WITH A CREW OF"MEN"HEARTY MEN"
580 GOSUB3190
590 PRINT"{CLR}":PRINT:PRINT
600 T=0:GOTO200
610 REM** END OF VOYAGE **
620 PRINT"WELL DONE, CAPTAIN"
630 PRINT:PRINT"YOU'VE MADE IT BACK TO S
PAIN"
640 PRINT"YOU ENDED THE VOYAGE WITH"CASH
"DBLNS"
650 PRINTBOLT"BOLTS OF CLOTH,"ASTRO"ASTR
OLABES"
660 PRINTSA"SACKS OF SALT,"IRN"IRON INGO
TS"
670 PRINTGUNPOWDER"BARRELS OF GUNPOWDER,
AND"
680 PRINTTAB(9);QUADRANTS"QUADRANTS"
690 PRINT:PRINTTAB(8);"YOUR SCORE IS";
691 ZX=INT((BO+2*AS+SA+2*IR+3*GU+7*QU)*(
WE*ME+CA)/62)
692 PRINTZX
700 PRINT:PRINTTAB(5);"THE VOYAGE LASTED
"WE"WEEKS"
710 GETB$:IFB$=""THEN710
720 END
730 REM*****
740 REM INSPECT HOLD
741 PRINT"{PUR}-----
-----";
750 LOOT=0
755 PRINT"{CYN}"
760 PRINT"IN THE HOLD YOU SEE:"
770 IFBO>0THENPRINTBO"BOLTS OF CLOTH WOR
TH"BO*BC"DBLNS":LO=LO+BO*BC
780 IFAS>0THENPRINTAS"ASTROLABES WORTH"A
S*AC"DBLNS":LO=LO+AS*AC
790 IFSA>0THENPRINTSA"SACKS OF SALT WORT
H"SA*CS"DBLNS":LO=LO+SA*CS
800 IFIR>0THENPRINTIR"IRON INGOTS WORTH"
IR*IC"DBLNS":LO=LO+IR*IC
810 IFGU>0THENPRINTGU"BARRELS OF GUNPOWD
ER WORTH"GU*GC"DBLNS":LO=LO+GU*GC
820 IFQU>0THENPRINTQU"QUADRANTS WORTH"QU
*QC"DBLNS":LO=LO+QU*QC

```

```

830 PRINT:PRINT"TOTAL VALUE OF GOODS IS"
LOOT"DUBLOONS"
840 PRINT"PRESS 1 TO TRADE WITH THE NATI
YES"
850 PRINT" OR 2 TO RETURN TO THE VOYAG
E"
860 GETB$:IFB$=""THEN860
870 REM
880 IFB$<"1"ORB$>"2"THEN860
890 IFB$="1"THENB$="2":RETURN
900 IFB$="2"THENB$="3":RETURN
905 PRINT"{LT BLU}"
910 RETURN
920 END
930 REM*****
940 REM TRADE
950 PRINT"{GRN}-----
-----";
960 PRINT"{LT GRN}CAPTAIN, WHICH GOODS W
ILL WE SELL?"
965 PRINT"{GRN}-----
-----{YEL}";
970 GETB$:IFB$=""THEN970
980 IFB0>0THENPRINT"1 - BOLTS OF CLOTH"
990 IFAS>0THENPRINT"2 - ASTROLABES"
1000 IFSA>0THENPRINT"3 - SACKS OF SALT"
1010 IFIR>0THENPRINT"4 - IRON INGOTS"
1020 IFGU>0THENPRINT"5 - BARRELS OF GUNP
OWDER"
1030 IFQU>0THENPRINT"6 - QUADRANTS"
1040 PRINT"7 - TO BUY FROM NATIVES"
1050 PRINT"8 - TO RETURN TO VOYAGE"
1060 PRINT"-----
-----";
1070 GETA$:IFA$=""THEN1070
1080 IFA$<"1"ORA$>"8"THEN1070
1090 IFA$="8"THENPRINT"{LT BLU}":RETURN
1095 PRINT"{WHT}"
1100 IFA$="1"THEN1200
1110 IFA$="2"THEN1310
1120 IFA$="3"THEN1420
1130 IFA$="4"THEN1530
1140 IFA$="5"THEN1640
1150 IFA$="6"THEN1750

```

```

1160 IFA$="7"THEN1860
1170 GOTO1070
1180 GOSUB3190
1190 RETURN
1200 REM ** SELL CLOTH **
1210 IFBO<1THEN1180
1220 PRINT"WE HAVE"BO"BOLTS WORTH"BC"DBL
NS EACH"

1230 PR=INT(BC*RND(1)):IFPR<BC/2THEN1230
1240 PRINT"THE NATIVES ARE OFFERING"PR"P
ER BOLT"
1245 PRINT"{RED}"*****
*****";
1250 PRINT"{RVS ON}{YEL}          HOW MANY D
O YOU WANT TO SELL          ";
1255 PRINT"{RED}"*****
*****"{RVS OFF}{GY 3}"
1260 INPUTK
1270 IFK>BOTHEN1260
1280 CA=CA+K*PR
1290 BO=BO-K
1300 GOTO950
1310 REM ** SELL ASTROLABES **
1320 IFAS<1THEN1180
1330 PRINT"WE HAVE"AS"ASTROLABES WORTH"A
C"DBLNS EACH"
1340 PR=INT(AC*RND(1)):IFPR<AC/2THEN1340
1350 PRINT"ALL THE NATIVES OFFER IS"PR"E
ACH"
1355 PRINT"{RED}"*****
*****";
1360 PRINT"{RVS ON}{YEL}          HOW MANY D
O YOU WANT TO SELL          ";
1370 PRINT"{RED}"*****
*****"{RVS OFF}{GY 3}"
1375 INPUTK
1380 IFK>ASTHEN1375
1390 CA=CA+K*PR
1400 AS=AS-K
1410 GOTO 950
1420 REM ** SELL SALT **
1430 IFSA<1THEN1180
1440 PRINT"WE HAVE"SA"SACKS OF SALT WORT
H"CS"BDLNS EACH"

```

```

1450 PR=INT(CS*RND(1)):IFPR<CS/2THEN1450
1460 PRINT"THE LOCALS' BEST OFFER IS"PR"
EACH"
1465 PRINT"{RED}"*****
*****";
1470 PRINT"{YEL}{RVS ON}          HOW MANY D
O YOU WANT TO SELL          ";
1475 PRINT"{RED}"*****
*****"{RVS OFF}{GY 3}"
1480 INPUTK
1490 IFK>SATHEN1480
1500 CA=CA+K*PR
1510 SA=SA-K
1520 GOTO950
1530 REM ** SELL IRON INGOTS **
1540 IFIR<1THEN1180
1550 PRINT"WE HAVE"IR"INGOTS WORTH"IC"D
LNS EACH"
1560 PR=INT(IC*RND(1)):IFPR<IC/2THEN1560
1570 PRINT"THE BEST OFFER FOR IRON IS"PR
"EACH"
1575 PRINT"{RED}"*****
*****";
1580 PRINT"{RVS ON}{YEL}          HOW MANY D
O YOU WANT TO SELL          ";
1585 PRINT"{RED}"*****
*****"{RVS OFF}{GY 3}"
1590 INPUTK
1600 IFK>IR THEN 1590
1610 CA=CA+K*PR
1620 IR=IR-K
1630 GOTO950
1640 REM ** SELL GUNPOWDER **
1650 IFGU<1THEN1180
1660 PRINT"WE HAVE"GU"BARRELS WORTH"GC"D
BLNS EACH"
1670 PR=INT(GC*RND(1)):IFPR<GC/2THEN1670
1680 PRINTPR"EACH IS ALL THEY ARE OFFERI
NG"
1685 PRINT"{RED}"*****
*****";
1690 PRINT"{RVS ON}{YEL}          HOW MANY D
O YOU WANT TO SELL          ";

```



```

1970 IFB$<"1"ORB$>"3"THEN1960
1980 PRINT"-----
-----";
1990 IFB$="3"THEN1180
2000 IFB$="2"THEN2070
2010 PRINT"HOW MUCH FOOD DO YOU WANT"
2020 INPUTK
2030 IFK*BI>CATHENPRINT"YOU DON'T HAVE E
NOUGH MONEY":GOTO2020
2040 FO=FO+K:CA=CA-BI*K

2050 PRINT"{GY 3}> TRANSACTION COMPLETE
<":GOSUB3190:GOTO1870
2060 GOTO1900
2070 PRINT"HOW MANY SLAVES DO YOU WANT"
2080 INPUTK
2090 IFK*SL>CATHENPRINT"THAT IS BEYOND Y
OUR FINANCES":GOTO2080
2100 ME=ME+K:CA=CA-SL*K
2110 PRINT"THEY'VE BEEN ADDED TO YOUR CR
EW":GOSUB3190:GOTO1870
2120 REM*****
2130 REM DEATH FROM SCURVY
2131 PRINT"-----
-----";
2140 PRINT"DUE TO A LACK OF FRESH FOOD"
2150 PRINT"SCURVY HAS HIT YOUR SHIP..."
2160 GOSUB3190
2170 K=ME/3:K=INT(RND(1)*K+1)
2180 PRINTK"MEN HAVE DIED"
2190 GOSUB3190
2200 ME=ME-K
2210 RETURN
2220 REM*****
2230 REM SHIPWRECK
2231 PRINT"-----
-----";
2240 PRINT"YOUR SHIP IS FOUNDERING IN HE
AVY"
2250 PRINT"SEAS...YOU ARE IN PERIL.....
..."
2260 GOSUB3190
2270 IFRND(1)>.8THEN2370
2280 PRINT:PRINT"THE STORM IS PASSING...
"

```

```

2290 PRINT "BUT SOME OF YOUR GOODS AND"
2300 PRINT "MEN WERE SWEEP OVERBOARD..."
2310 ME=3*INT (ME/4):BO=5*INT (BO/6)
2320 AS=7*INT (AS/8):SA=3*INT (SA/4)
2330 IR=4*INT (IR/5):GU=5*INT (GU/6)
2340 QU=7*INT (QU/8)
2350 GOSUB3190
2360 RETURN
2370 PRINT:PRINT "A MIGHTY WAVE SWAMPS YO
UR SHIP"
2380 PRINT "AND IT GOES DOWN TO THE BOTTO
M"
2390 GOSUB3190
2400 GOTO700
2410 REM*****
2420 REM MUTINY
2421 PRINT "-----
-----";
2430 PRINT "THE MEN ARE UNHAPPY WITH YOUR
"
2440 PRINT "LEADERSHIP, THERE IS TALK OF"
2450 PRINTTAB(12); "A MUTINY..."
2460 GOSUB3190
2470 IFRND(1)>.8THEN2540
2480 PRINT "BUT YOU TAKE CONTROL, HANG"
2490 PRINT "TWO OF YOUR CREW TO TEACH"
2500 PRINT "THE OTHERS A LESSON, AND"
2510 PRINT "CONTINUE WITH THE VOYAGE"
2520 GOSUB3190
2530 RETURN
2540 PRINT "IT WAS SUCCESSFUL...AND YOU"
2550 PRINT "ARE PUT TO SEA IN A SMALL"
2560 PRINT "BOAT...THIS IS THE END"
2570 GOSUB3190
2580 GOTO700
2590 REM*****
2600 REM PIRATES
2601 PRINT "-----
-----";
2610 PRINT "A MEAN-LOOKING PIRATE SHIP"
2620 PRINT "IS SIGHTED OFF TO STARBOARD"
2630 GOSUB3190
2640 PRINT "IT COMES UP ALONGSIDE"

```



```

2650 GOSUB3190
2660 T=INT(RND(1)*3)
2670 IFT=0THEN2740
2680 IFT=1THEN2820
2690 PRINT"YOU OFFER TO BUY YOUR FREEDOM
"
2700 PRINT"THEY AGREE, TAKE YOUR DUBLOON
S"
2710 PRINT"AND YOUR GUNPOWDER...."
2720 CA=0:GU=0
2730 RETURN
2740 PRINT"THE SAVAGE PIRATES BOARD THE"
2750 PRINT"SHIP - KILLING MEN LEFT,RIGHT
AND CENTRE"
2760 K=INT(RND(1)*ME+ME/3)
2770 GOSUB3190
2780 PRINTK"HAVE BEEN KILLED IN ALL"
2790 ME=ME-K
2800 GOSUB3190
2810 RETURN
2820 PRINT"LUCKY YOU...THEY HAVE RUN"
2830 PRINTTAB(8); "AGROUND!!!!"
2840 GOSUB3190
2850 RETURN
2860 REM*****
2870 REM INITIALISATION
2880 PRINT"{CLR}"
2890 REM
2900 DIMA$(9)
2910 ME=100+INT(RND(1)*30)
2920 CA=200+INT(RND(1)*50)
2930 FO=100+INT(RND(1)*30)
2940 FE=.02+INT(RND(1)*10)/100
2950 IFFO/(FE*ME)>11THEN2910
2960 BO=100+INT(RND(1)*30):REM BOLTS OF
CLOTH
2970 BC=5+INT(RND(1)*5):REM VALUE OF EAC
H BOLT OF CLOTH
2980 AS=15+INT(RND(1)*5):REM ASTROLABES
2990 AC=20+INT(RND(1)*5):REM VALUE OF EA
CH ASTROLABE
3000 SA=50+INT(RND(1)*7):REM SACKS OF SA
LT

```

```

3010 CS=7+INT(RND(1)*4):REM VALUE OF SAL
T
3020 IR=30+INT(RND(1)+8):REM IRON INGOTS
3030 IC=5+INT(RND(1)*3):REM VALUE OF SAL
T
3040 GU=3+INT(RND(1)*2)
3050 GC=90+INT(RND(1)*20)
3060 QU=10+INT(RND(1)*4)
3070 QC=30+INT(RND(1)*6)
3080 WE=0
3090 PT=1
3100 SC=0

3110 SH=0
3120 MU=0
3130 PI=0
3140 FORJ=2T09
3150 READA$(J)
3160 NEXTJ
3165 POKE53281,0:POKE53280,2
3170 RETURN
3180 REM*****
3190 REM DELAY
3200 REM
3210 FORP=1TO1500:NEXTP
3220 RETURN
3230 REM*****
3240 REM DATA
3250 DATA"THE CANARY ISLANDS","THE CAPE
VERDE ISLANDS","CAPE ST AUGUSTINE"
3260 DATA"RIO DEJANEIRO","THE SANTA CRUZ
RIVER"
3270 DATA"TIERRA DEL FUEGO","THE ISLAND
OF MACTAN","{RVS ON}{YEL}THE PORT OF SPA
IN{RVS OFF}"

```

READY.

DISASTER FLIGHT

Here's your chance to fly a plane, with a complex and fairly realistic flight simulator program.

Russia has planted a nuclear device somewhere in the United States. The president has called an emergency meeting with the country's top five nuclear physicists.

You are the president's private pilot, and you've been assigned to find, pick up and deliver the five scientists to New York, where the president is waiting. However, to do this you have to cover every inch of the country in order to find them.

If you decide to fly below 1000 feet, then you run the risk of hitting a mountain. You are able to go around, or over a mountain, but if you take too long to decide what to do, you'll fly straight into it.

As you fly around the country, you'll see the current State that you're over is shown in the top left hand corner of the screen in purple. If you pass over a State which contains a scientist, then the name of the State will be shown in white. Each State is shown as one or more five by five squares. As some States are larger than others, you'll see these represented by two or more of the groups of squares.

FLYING YOUR PLANE

This is not so easy. All the instruments you see on the screen have their own uses. You'll find that by operating more than one instrument at a time, you'll be able to fly the aircraft more smoothly, and find certain States more easily.

THE ELEVATOR

The elevator shows the position of your plane's nose:

A - if the elevator is above the central position, then the nose is pointing upwards

B - if the elevator is in the central position, then the plane is flying horizontally

C - If the elevator is below the central position, then the nose is pointing downwards.

TAKING OFF

When preparing to take off, you must set the elevator below the central position. After your airspeed exceeds 360, move the elevator to the central position, and the plane will lift off.

If you're trying to take off, and your airspeed is less than 360, and/or you don't have the elevator in the correct position, you'll stall the airplane and it will crash.

YOUR AIRSPEED

A - if your airspeed is equal to 500, and the elevator is set in the central position, your plane will lose altitude. THIS IS THE ONLY WAY YOU CAN LAND THE PLANE.

B - if your airspeed is 500, and the elevator is set above the central position, then your altitude will remain steady

C - if the elevator is in the central position, and airspeed is above 500, you will stay on the same level

D - if the elevator is above the central position, and speed is greater than 500, then you will climb

E - if the elevator is below the central position, you'll lose altitude. If you try to land with the elevator in this position you will crash. You can only land as in (A)

THROTTLE

The throttle has five different positions, which determine how fast you will fly.

Throttle position: Maximum speed achieved:

| | |
|---|------|
| 1 | 50 |
| 2 | 200 |
| 3 | 500 |
| 4 | 1000 |
| 5 | 2000 |

When taking off, the throttle must be in either position 3, 4 or 5 as you must be going faster than 360 in order to leave the ground. The throttle must be in position 5 when you're landing.

Pressing the 'fire' button on your joystick increases the throttle setting and airspeed. Pressing the space bar cuts the throttle setting, and slows you down. Note that if your speed falls below 200 when you're in the air, you will stall and crash the plane.

COMPASS

The compass setting changes as you turn your craft. The latitude and longitude settings change as you move around. (Note that latitude measures your north/south orientation, and longitude your east/west.)

If you fly off the north end of the map, you'll reappear at the south end (and at the north end if you fly off the south, the east if you fly off the west, and at the western end if you fly off the east end).

PITCH AND ROLL

This instrument shows the lean of the plane. It is modified by the way you turn your craft.

UNDERCARRIAGE

Press D to lower the undercarriage

Press U to raise it

Once you've taken off, we suggest you raise your undercarriage fairly smartly. You must be below 150 feet before you'll be able to lower your undercarriage in order to land. A red light is visible beside the 'U' when your undercarriage is up. It turns orange when the undercarriage is down.

BRAKES

You should apply the brakes as soon as you land, or you will run out of runway.

You should release the brakes, when you are ready to take off. A light will appear in red beside the 'B' on your panel when the brakes are applied, and this will turn orange when you release them.

MOUNTAIN

You fly over or around a mountain to avoid it. You must do one of these things to prevent your plane flying head on into the mountain. You must be going faster than 500 in order to get over the mountain, and the elevator should be above the central position.

To go around the mountain peak, simply choose the side of the mountain you intend to go around. If the edge of the mountain reaches the end of the screen as you approach it, then you have successfully flown around it. The compass will not be altered when you fly around a mountain.

TO TAKE OFF

Here's the steps you must follow:

- 1 - Move the throttle over the central position
- 2 - Have the elevator set below the central position
- 3 - Ensure the undercarriage is down
- 4 - Release the brakes
- 5 - When your airspeed is greater than 360, move the elevator to the central position
- 6 - Raise the undercarriage before the altitude reaches 200 feet

TO LAND

The sequence of steps needed to land your plane is as follows:

- 1 - When the altitude is below 150, lower the undercarriage
- 2 - Set the throttle to the middle position, so that airspeed drops to 500
- 3 - Put the elevator in the central position, so your altitude starts to drop (note that you will crash if your elevator is below the central position)
- 4 - Engage the brakes once you've landed
- 5 - Note that your engines will shut off automatically

Happy flying, pilot.

```
5 POKE54276,0:POKE54283,0
10 POKE54296,0:POKE54278,240:POKE54277,9
:POKE54276,129:POKE54273,37
20 POKE54284,9:POKE54285,240:POKE54283,1
7:POKE54280,12
30 GOT0500
400 MO$(1)=" {WHT}{RVS
ON})_{RVS OFF} "
410 MO$(2)=" {RVS ON})
_{RVS OFF} "
420 MO$(3)=" {BRN} {RVS ON})
_{RVS OFF} "
430 MO$(4)=" {RVS ON}) _
{RVS OFF} "
440 MO$(5)=" {RVS ON})
_{RVS OFF} "
450 MO$(6)=" {RVS ON})
_{RVS OFF} "
```



```

460 MO$(7)="                {RVS ON})
    _{RVS OFF}                "
470 MO$(8)="                {RVS ON})
    _{RVS OFF}                "
480 MO$(9)="                {RVS ON})
    _{RVS OFF}                "
490 RETURN
500 REM *** FLIGHT 5241 ***
505 GOSUB400
510 REM SET ASIDE (A$) FOR COMMANDS
520 REM (AL) FOR ALTITUDE
530 REM (FU) FOR FUEL
540 REM (LO) FOR LONGITUDE
550 REM (LA) FOR LATITUDE
560 REM (AS) FOR AIRSPEED
570 REM (TI) FOR TIME ELAPSED
580 REM (TD) FOR SET TIME
590 REM (UC) FOR UNDER CARRIAGE
600 REM (BR) FOR BRAKES
610 REM (A) FOR A LOOP DELAY
620 REM (CO) FOR COMPASS
630 REM (HA) FOR DESTINATION
640 REM (HO) FOR DESTINATION
650 REM (EL) FOR ELEVATOR
660 REM (RO$) FOR ROLL DRAWING
670 REM (CO$) FOR COMPASS DRAWING
800 REM *****
890 REM*****
900 REM**SET UP VARIABLES & STRINGS**
910 REM*****
920 CO$(1)="{CYN}U@@@@@I"
930 CO$(2)="J {YEL}N{CYN} J"
940 CO$(3)="J J"
950 CO$(4)="J{YEL}W {RED}Q {YEL}E{CYN}J"
960 CO$(5)="J J"
970 CO$(6)="J {YEL}S{CYN} J"
980 CO$(7)="J@@@@@K"
994 FORA=1TO5
995 LA(A)=INT(RND(1)*45):LO(A)=INT(RND(1)
)*60)
996 LA=LA(A):LO=LO(A):GOSUB50000:D$(A)=P
$:IFD$(A)=D$(A-1)THEN995
997 DD$=LEFT$(D$(A),4):IFDD$="NEW "ORDD$
="ATLA"ORDD$="GULF"THEN995

```

```

998 NEXT
999 LA=INT(RND(1)*24)
1000 LO=INT(RND(1)*49)
1010 GOSUB50000:FORA=1TO5:IFP$=D$(A)THEN
999
1011 NEXT
1020 HO=INT(RND(1)*60)
1040 CO=INT(RND(1)*8)+1
1050 FU=4000
1060 AS=0:UC=1:BR=1
1070 EL=2:AL=0:TH=0
1080 R0$(1)="{CUR RT}{CUR RT}{CUR RT}{CU
R RT}{CYN}U@@@@@I"
1090 R0$(2)="{CUR RT}{CUR RT}{CUR RT}{CU
R RT}J      J"
1100 R0$(2)="{CUR RT}{CUR RT}{CUR RT}{CU
R RT}J      J"
1110 R0$(4)="{CUR RT}{CUR RT}{CUR RT}{CU
R RT}J{OR}@@{WHT}Q{OR}@@{CYN}J"
1120 R0$(2)="{CUR RT}{CUR RT}{CUR RT}{CU
R RT}J      J"
1130 R0$(2)="{CUR RT}{CUR RT}{CUR RT}{CU
R RT}J      J"
1140 R0$(7)="{CUR RT}{CUR RT}{CUR RT}{CU
R RT}J@@@@@K"
1150 B$="00000{CUR L}{CUR L}{CUR L}"
1160 TD=INT(RND(1)*5)+1
1170 IFTD=1THENTD$="000800"
1180 IFTD=2THENTD$="001600"
1190 IFTD=3THENTD$="003200"
1200 IFTD=4THENTD$="006400"
1210 IFTD=5THENTD$="012800"
1220 TD=0
1230 TI$="000000"
1240 D$="{HOME}{CUR DN}{CUR DN}{CUR DN}{
CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{
CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{
CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{
CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}"
1245 L$="{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT

```

```

}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}"
1250 FU$="{RED}077P{CUR DN}{CUR L}{CUR L
}{CUR L}{CUR L}%{YEL}{RVS ON} {RVS OFF}
{RED}'{CUR DN}{CUR L}{CUR L}{CUR L}{CUR
L}%{RVS ON}{YEL} {RVS OFF}{RED}'{CUR DN
}{CUR L}{CUR L}{CUR L}{CUR L}%{RVS ON}{Y
EL} {RVS OFF}{RED}'{CUR DN}{CUR L}{CUR
L}{CUR L}{CUR L}%{RVS ON}{YEL} {RVS OFF
}{RED}'{CUR DN}{CUR L}{CUR L}{CUR L}{CUR
L}%{RVS ON}{YEL} {RVS OFF}{RED}'"
1260 FU$=FU$+"{CUR DN}{CUR L}{CUR L}{CUR
L}{CUR L}{RED}L//;"
1270 SC$="{GRN}{RVS ON}
"
1280 AS$="{RED}, "" "" "" "" ;{CUR DN}{CUR L}{C
UR L}{CUR L}{CUR L}{CUR L}{CUR L}{CUR L}
{CUR L}{RVS ON}/ {CUR RT}{CUR RT}{CUR RT}
{CUR RT}{CUR RT}{CUR RT}{RVS OFF}/ {CUR D
N}{CUR L}{CUR L}{CUR L}{CUR L}{CUR L}{CU
R L}{CUR L}{CUR L}{RVS ON}"" "" "" "" {RVS OF
F}>"
1300 SC=1024:CL=55296
1310 TH$="{RED}077P077P{CUR DN}{CUR L}{C
UR L}{CUR L}{CUR L}{CUR L}{CUR L}{CUR L}
{CUR L}4{RVS ON}{YEL} / {RVS OFF}{RED
}*{CUR DN}{CUR L}{CUR L}{CUR L}{CUR L}{C
UR L}{CUR L}{CUR L}{CUR L}L//:L//:{CUR D
N}{CUR L}{CUR L}{CUR L}{CUR L}{CUR L}{CU
R L}{CUR L}{CUR L}{OR}THROTTLE"
1500 REM *****
1510 REM *****SET UP SCREEN*****
1520 REM *****
1530 PRINT "{CLR}{HOME}"; :FORA=1TO9:PRINT
RW$(A); :NEXT
1540 POKE53281,0:POKE53280,9
1550 PRINTRW$(2); :PRINTRW$(3)
1560 PRINT
1570 GOSUB9150
1600 PRINTLEFT$(D$,13)FU$:PRINT "{RVS OFF
}{PUR}ELEV"
1610 PRINTLEFT$(D$,13)"{CUR RT}{CUR RT}{

```

```

CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{
CUR RT}{CUR RT}{CUR RT}{CUR RT}"FU$;:PRI
NT"{CUR DN}{CUR L}{CUR L}{CUR L}{CUR L}{
RVS OFF}{PUR}FUEL"
1640 GOTO1710
1650 PRINTLEFT$(D$,11)
1660 GOSUB9000
1670 Z$=LEFT$(L$,30)
1675 PRINTZ$CO$(1):PRINTZ$CO$(2):PRINTZ$
CO$(3):PRINTZ$CO$(4):PRINTZ$CO$(5)
1680 PRINTZ$CO$(6):PRINTZ$CO$(7)
1690 RETURN
1710 PRINTLEFT$(D$,13)Z$"{CUR L}{CUR L}{
CUR L}{CUR L}{CUR L}{CUR L}{CUR L}{CUR L}
}{CUR L}{CUR L}{CUR L}{CUR L}{CUR L}{WHT
}L{OR}W{CUR RT}{CUR RT}{CUR RT}{CUR RT}{
CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT}W
{WHT}S"
1720 PRINTLEFT$(D$,21)" {LT GRN}SPEED
  ALT."
1730 PRINTLEFT$(D$,20)LEFT$(L$,30)" {WHT}
COMPASS"
1740 PRINTLEFT$(D$,19)LEFT$(L$,27)" {WHT}
U{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}{CUR RT}B"
1750 POKE1772,87:POKE56044,8
1760 POKE1782,81:POKE56054,2
1770 PRINTLEFT$(D$,15)SPC(17)TH$
1870 PRINTLEFT$(D$,24)SPC(26)" {WHT}LONG
  LAT."
1880 GOSUB12000
1890 GOSUB1650
1900 RW$(1)="{RVS ON}{GRN}
  {BLK} {GRN}
1910 RW$(2)="{RVS ON}{GRN}
  {BLK} {GRN}
1920 RW$(2)="{RVS ON}{GRN}
  {BLK} {GRN}
1930 RW$(3)="{RVS ON}{GRN}
  {BLK} {GRN}
1940 RW$(4)="{RVS ON}{GRN}
  {BLK} {GRN}

```

```

1950 RW$(5)="{RVS ON}{GRN}          {
BLK}          {GRN}          "
1960 RW$(6)="{RVS ON}{GRN}          {B
LK}          {GRN}          "
1970 RW$(7)="{RVS ON}{GRN}          {BL
K}          {GRN}          "
1980 RW$(8)="{RVS ON}{GRN}          {BLK
}          {GRN}          "
1990 RW$(9)="{RVS ON}{GRN}          {BLK}
          {GRN}          "
2000 LN$="{WHT}'%{CUR DN}{CUR L}{CUR L}
  {CUR DN}{CUR L}{CUR L}'%{CUR DN}{CUR L}
{CUR L}  {CUR DN}{CUR L}{CUR L}'%{CUR DN
}{CUR L}{CUR L}  {CUR DN}{CUR L}{CUR L}'
%{CUR DN}{CUR L}{CUR L}  {CUR DN}{CUR L}
{CUR L}'%"
2005 LN$(1)="{WHT}  {CUR DN}{CUR L}{CUR
L}'%{CUR DN}{CUR L}{CUR L}  {CUR DN}{CUR
L}{CUR L}'%{CUR DN}{CUR L}{CUR L}  {CUR
DN}{CUR L}{CUR L}'%{CUR DN}{CUR L}{CUR
L}  {CUR DN}{CUR L}{CUR L}'%{CUR DN}{CUR
L}{CUR L}  "
2010 PRINT"{HOME}";:FORA=1TO9:PRINTRW$(A
);:NEXT
2020 PRINT:PRINT"{HOME}"SPC(18)LN$
2050 PRINT"{CUR UP}{RVS ON}{RED}
          ";
2060 PRINTLEFT$(D$,13)LEFT$(L$,30)"{RVS
OFF}{CYN} /          /":GOTO5000
3000 REM *****
3010 REM ** MAIN ROUTINE **
3020 REM *****
3030 GOSUB8000:GOSUB9500
3040 GETA$:IFA$=" "THENTH=TH-.5:GOSUB100
00
3050 REM ** CHECK FOR UNDER CARRIAGE **
3060 IFA$<>"U"ANDDA$<>"D"THEN3100
3070 IFUC=1ANDDA$="U"THENUC=0:POKE1772,81
:POKE56044,2
3080 IFUC=0ANDDA$="D"THENUC=1:POKE1772,87
:POKE56044,8
3090 GOTO3000
3100 REM ** CHECK FOR BRAKES **
3110 IFA$<>"B"THEN3140

```

```

3120 IFBR=1THENBR=0:POKE1782,87:POKE5605
4,8:GOTO3000
3130 BR=1:POKE1782,81:POKE56054,2
3140 IFA$="T"THENTH=TH-.5:GOSUB10000
3200 REM ** DECREASE FUEL ETC **
3210 IFCO=1THENLA=LA-INT(AS/500)
3220 IFCO=2THENLA=LA-INT(AS/500)/2:LO=LO
+INT(AS/500)/2
3230 IFCO=3THENLO=LO+INT(AS/500)
3240 IFCO=4THENLA=LA+INT(AS/500)/2:LO=LO
+INT(AS/500)/2
3250 IFCO=5THENLA=LA+INT(AS/500)
3260 IFCO=6THENLA=LA+INT(AS/500)/2:LO=LO
-INT(AS/500)/2
3270 IFCO=7THENLO=LO-INT(AS/500)
3280 IFCO=8THENLA=LA-INT(AS/500)/2:LO=LO
-INT(AS/500)/2
3290 IF LA<0THENLA=45
3300 IF LO<0THENLO=60
3310 IFLA>45THENLA=0
3320 IFLO>60THENLO=0
3330 LA=INT(LA):LO=INT(LO)
3350 FU=FU-INT(AS/125)
3360 GOSUB8000
4000 REM ** FUEL LINE **
4010 IFFU<=4000ANDFU>3900THENFU$(1)="{RVS
ON}{YEL}77{RVS OFF}"
4020 IFFU<3901ANDFU>3800THENFU$(1)="{RVS
ON}{YEL}88{RVS OFF}"
4030 IFFU<3801ANDFU>3700THENFU$(1)="{YEL
}"
4040 IFFU<3701ANDFU>3600THENFU$(1)="{YEL
}99"
4050 IFFU<3601ANDFU>3500THENFU$(1)="{YEL
}"
4060 IFFU>3501ANDFU<3400THENFU$(1)="{YEL
}"
4070 IFFU<=3401ANDFU>3300THENFU$(2)="{RV
S ON}{YEL}77{RVS OFF}"
4080 IFFU<3301ANDFU>3200THENFU$(2)="{RVS
ON}{YEL}88{RVS OFF}"
4090 IFFU<3201ANDFU>3100THENFU$(2)="{YEL
}"

```

```

4100  IFFU<3101ANDFU>3000THENFU$(2)="{YEL
}99"
4110  IFFU<3001ANDFU>2900THENFU$(2)="{YEL
}  "
4120  IFFU>2901ANDFU<2800THENFU$(2)="{YEL
}  "
4130  IFFU<=2801ANDFU>2700THENFU$(3)="{RV
S ON}{YEL}77{RVS OFF}"
4140  IFFU<2701ANDFU>2600THENFU$(3)="{RVS
ON}{YEL}88{RVS OFF}"
4150  IFFU<2601ANDFU>2500THENFU$(3)="{YEL
}"" "
4160  IFFU<2501ANDFU>2400THENFU$(3)="{YEL
}99"
4170  IFFU<2401ANDFU>2300THENFU$(3)="{YEL
}  "
4180  IFFU>2301ANDFU<2200THENFU$(3)="{YEL
}  "
4190  IFFU<=2201ANDFU>2100THENFU$(4)="{RV
S ON}{YEL}77{RVS OFF}"
4200  IFFU<2101ANDFU>2000THENFU$(4)="{RVS
ON}{YEL}88{RVS OFF}"
4210  IFFU<2001ANDFU>1900THENFU$(4)="{YEL
}"" "
4220  IFFU<1901ANDFU>1800THENFU$(4)="{YEL
}99"
4230  IFFU<1801ANDFU>1700THENFU$(4)="{YEL
}  "
4240  IFFU>1701ANDFU<1600THENFU$(5)="{YEL
}  "
4250  IFFU<=1601ANDFU>1500THENFU$(5)="{RV
S ON}{YEL}77{RVS OFF}"
4260  IFFU<1501ANDFU>1400THENFU$(5)="{RVS
ON}{YEL}88{RVS OFF}"
4270  IFFU<1401ANDFU>1300THENFU$(5)="{YEL
}"" "
4280  IFFU<1201ANDFU>1100THENFU$(5)="{YEL
}  "
4290  IFFU>1101ANDFU<1000THENFU$(5)="{YEL
}  "
4291  GOSUB9500
4295  IFOT=1ANDAL<0THEN30000
4300  IFBR=1THEN4400
4310  AS=AS+(TH*10)

```

```

4320 IFTH=>1ANDTH<2ANDAS>10THENAS=50
4330 IFTH=>2ANDTH<3ANDAS>70THENAS=200
4340 IFTH=>3ANDTH<4ANDAS>200THENAS=500
4350 IFTH=>4ANDTH<5ANDAS>500THENAS=1000
4360 IFTH=>5ANDTH<6ANDAS>1200THENAS=2000
4400 IFAL=0ANDOT=1THEN30000
4405 IFAL=0THEN4450
4410 IFEL=3THENAL=AL-INT(AS/20)
4420 IFEL=1THENAL=AL+INT(AS/10)
4425 IFAL>10000THENAL=10000
4430 IFAL>0ANDAS<550THENAL=AL-INT(AS/10)
4450 IFOT=1ANDAL<0THEN30000
4455 IFAL<>0ORAS=0THEN5000
4460 IFOT=0ANDUC=0THEN40000
4461 RU=RU+(AS/10)
4465 IFAL=0ANDOT=0ANDAS>100ANDEL<>3THEN4
0000
4470 IFRU>600THEN40000
4480 PRINT "{HOME}"SPC(18)LN$:FORA=1TO400
-AS:NEXT:PRINT "{HOME}"SPC(18)LN$(1)
4490 GOSUB8000
4500 IFAL>0THEN5000
4510 GOSUB7000
4520 GOTO4310
5000 REM *****
5010 REM ** SET UP SCREEN **
5020 REM *****
5025 GOSUB8000
5030 PRINTLEFT$(D$,14)SPC(12)FU$(1)"{CUR
DN}{CUR L}{CUR L}"FU$(2)"{CUR DN}{CUR L
}{CUR L}"FU$(3)"{CUR DN}{CUR L}{CUR L}"F
U$(4)"{CUR DN}{CUR L}{CUR L}"FU$(5)
5035 IFOT=0THEN5070
5040 PRINT "{HOME}{PUR}"
GOSUB50000
5050 FORA=1TO5:IFP$=D$(A)THENPRINT "{WHT}
"
5060 NEXT
5070 PRINT "{HOME}";P$;
6000 GOSUB7000
6010 GOSUB7600
6050 IFAL>0ANDAL<1000ANDMO<1ANDRND(1)>.7
5THENGOSUB20000
6051 IFMO>=1THENGOSUB20000

```



```

6900 IFAS<200ANDOT=1THENCN=1:GOTO40000
6910 IFFU<=1000THEN40000
6920 IFAL>200ANDUC=1THEN40000
6990 GOTO3000
7000 REM *****
7010 REM ** AIRSPEED & ALTINATOR **
7020 REM *****
7030 D$="{HOME}{CUR DN}{CUR DN}{CUR DN}{
CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{
CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{
CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{
CUR DN}{CUR DN}"
7080 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}"AS$
7090 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR RT
}{RVS ON}{LT BLU}000000"
7100 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{RVS ON
}"TAB(7-LEN(STR$(AS)))AS
7150 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}"SPC(9)AS$
7160 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}"SPC(10
)"{RVS ON}{LT BLU}000000"
7170 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN

```

```

}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{RVS ON
} "TAB(16-LEN(STR$(AL)))AL
7180 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{RVS ON
} "TAB(16-LEN(STR$(AL))) "Ø"
7190 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{RVS ON
} "TAB(7-LEN(STR$(AS))) "Ø"
7500 RETURN
7600 REM *****
7610 REM ** LONG & LATITUDE **
7620 REM *****
7650 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}"SPC(24)AS$
7660 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}"SPC(25) "{RVS O
N}{LT BLU}ØØØØØØ"
7670 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{RVS ON}"SPC(31
-LEN(STR$(LO)))LO
7680 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}"SPC(32)AS$
7690 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN

```

```

}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}"SPC(33)"{RVS O
N}{LT BLU}000000"
7700 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{RVS ON}"SPC(39
-LEN(STR$(LA)))LA
7710 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{RVS ON}"SPC(39
-LEN(STR$(LA)))"0"
7720 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR DN}{CUR DN}{RVS ON}"SPC(31
-LEN(STR$(LO)))"0"
7800 RETURN
8000 REM *****
8010 REM ** JOYSTICK INPUT **
8020 REM *****
8030 JV=PEEK(56320)
8040 FR=JVAND16
8050 JV=15-(JVAND15)
8060 JS=JV:FB=FR
8070 JV=0:FR=0
8080 IFFB=0THENTH=TH+.5:GOSUB10000
8100 IFJS=2ANDOT=0ANDAS>360ANDAL=0THEN13
000
8110 IFJS=2THENEL=EL-1:GOSUB12000
8120 IFJS=1THENEL=EL+1:GOSUB12000
8130 IFJS=4ORJS=8THENGOSUB14000
8140 IFJS=0ANDAL>0THENGOSUB9150
8990 RETURN
9000 REM *****
9010 REM ** COMPASS DIRECTIONS **
9020 REM *****
9023 IFCO<1THENCO=8
9024 IFCO>8THENCO=1

```

```

9030 IF CO=1 THEN CO$(3)="J {LT GRN}J{CYN}
      J"
9040 IF CO=2 THEN CO$(3)="J {LT GRN}M{CYN}
      } J":CO$(4)="J{YEL}W {RED}Q {YEL}E{CYN}J
      "
9050 IF CO=3 THEN CO$(4)="J{YEL}W {RED}Q{LT
      GRN}@{YEL}E{CYN}J":CO$(3)="J      J":CO$(
      5)="J      J"
9060 IF CO=4 THEN CO$(5)="J {LT GRN}M{CYN}
      } J":CO$(4)="J{YEL}W {RED}Q {YEL}E{CYN}J
      "
9070 IF CO=5 THEN CO$(5)="J {LT GRN}J{CYN}
      J"
9080 IF CO=6 THEN CO$(5)="J {LT GRN}M{CYN}
      " J":CO$(4)="J{YEL}W {RED}Q {YEL}E{CYN}J
      "
9090 IF CO=7 THEN CO$(4)="J{YEL}W{LT GRN}@{
      RED}Q {YEL}E{CYN}J":CO$(3)="J      J":CO$(
      5)="J      J"
9100 IF CO=8 THEN CO$(3)="J {LT GRN}M{CYN}
      J":CO$(4)="J{YEL}W {RED}Q {YEL}E{CYN}J
      "
9145 RETURN
9150 REM *****
9160 REM ** PITCH & ROLL **
9170 REM *****
9180 IF JS=8 THEN 9300
9190 IF JS=4 THEN 9350
9200 IF JS=0 THEN 9400
9210 PRINT LEFT$(D$, 11)
9220 PRINT RO$(1):PRINT RO$(2):PRINT RO$(3)
      :PRINT RO$(4):PRINT RO$(5):PRINT RO$(6)
9230 PRINT RO$(7)
9240 GOSUB 9000
9250 RETURN
9300 RO$(2)="{CUR RT}{CUR RT}{CUR RT}{CU
      R RT}J{OR}M{CYN}      J":RO$(4)="{CUR RT}{
      CUR RT}{CUR RT}{CUR RT}J {WHT}Q {CYN}J
      "
9310 RO$(3)="{CUR RT}{CUR RT}{CUR RT}{CU
      R RT}J {OR}M{CYN}      J"
9320 RO$(5)="{CUR RT}{CUR RT}{CUR RT}{CU
      R RT}J {OR}M{CYN}      J"

```

```

9330 RO$(6)="{CUR RT}{CUR RT}{CUR RT}{CU
R RT}J {OR}N{CYN}J"
9340 GOTO9210
9350 RO$(2)="{CUR RT}{CUR RT}{CUR RT}{CU
R RT}J {OR}N{CYN}J":RO$(4)="{CUR RT}{
CUR RT}{CUR RT}{CUR RT}J {WHT}Q {CYN}J
"
9360 RO$(3)="{CUR RT}{CUR RT}{CUR RT}{CU
R RT}J {OR}N{CYN} J"
9370 RO$(5)="{CUR RT}{CUR RT}{CUR RT}{CU
R RT}J {OR}N{CYN} J"
9380 RO$(6)="{CUR RT}{CUR RT}{CUR RT}{CU
R RT}J{OR}N{CYN} J"
9390 GOTO9210
9400 RO$(2)="{CUR RT}{CUR RT}{CUR RT}{CU
R RT}J J"
9410 RO$(3)="{CUR RT}{CUR RT}{CUR RT}{CU
R RT}J J"
9420 RO$(4)="{CUR RT}{CUR RT}{CUR RT}{CU
R RT}J{OR}@@{WHT}Q{OR}@@{CYN}J"
9430 RO$(5)="{CUR RT}{CUR RT}{CUR RT}{CU
R RT}J J"
9440 RO$(6)="{CUR RT}{CUR RT}{CUR RT}{CU
R RT}J J"
9450 GOTO9210
9500 REM *****
9510 REM ** SET CLOCK **
9520 REM *****
9530 CL$(1)=RIGHT$(TI$,4)
9540 IFLEFT$(CL$(1),1)=""THENCL$(1)=RIG
HT$(TI$,3):GOTO9560
9550 CL$(2)=LEFT$(CL$(1),2):GOTO9570
9560 CL$(2)=LEFT$(CL$(1),1)
9570 CL$(3)=RIGHT$(TI$,2)
9580 CL$(1)=RIGHT$(TI$,5):CL$(4)=LEFT$(C
L$(1),1)
9590 PRINT"{CUR UP}{WHT}"
9600 PRINTLEFT$(D$,13)LEFT$(L$,18)CL$(4)
": "CL$(2)": "CL$(3)
9610 RETURN
10000 REM *****
10010 REM ** CHANGE DISPLAY **
10020 REM *****

```

```

10030 IFTH=>1ANDTH<2THENTH$="{RED}077P07
7P{CUR DN}{CUR L}{CUR L}{CUR L}{CUR L}{C
UR L}{CUR L}{CUR L}{CUR L}4{RVS ON}{YEL}
J {RVS OFF}{RED}*{CUR DN}{CUR L}{CUR
L}{CUR L}{CUR L}{CUR L}{CUR L}{C
UR L}L//:L//:"
10040 IFTH= >2ANDTH<3THENTH$="{RED}077P0
77P{CUR DN}{CUR L}{CUR L}{CUR L}{CUR L}{C
UR L}{CUR L}{CUR L}{CUR L}4{RVS ON}{YEL
} J {RVS OFF}{RED}*{CUR DN}{CUR L}{CU
R L}{CUR L}{CUR L}{CUR L}{CUR L}{C
UR L}L//:L//:"
10050 IFTH=>3ANDTH<4THENTH$="{RED}077P07
7P{CUR DN}{CUR L}{CUR L}{CUR L}{CUR L}{C
UR L}{CUR L}{CUR L}{CUR L}4{RVS ON}{YEL}
J {RVS OFF}{RED}*{CUR DN}{CUR L}{CUR
L}{CUR L}{CUR L}{CUR L}{CUR L}{C
UR L}L//:L//:"
10060 IFTH=>4ANDTH<5THENTH$="{RED}077P07
7P{CUR DN}{CUR L}{CUR L}{CUR L}{CUR L}{C
UR L}{CUR L}{CUR L}{CUR L}4{RVS ON}{YEL}
J {RVS OFF}{RED}*{CUR DN}{CUR L}{CUR
L}{CUR L}{CUR L}{CUR L}{CUR L}{C
UR L}L//:L//:"
10070 IFTH=>5ANDTH<6THENTH$="{RED}077P07
7P{CUR DN}{CUR L}{CUR L}{CUR L}{CUR L}{C
UR L}{CUR L}{CUR L}{CUR L}4{RVS ON}{YEL}
J{RVS OFF}{RED}*{CUR DN}{CUR L}{CUR
L}{CUR L}{CUR L}{CUR L}{CUR L}{C
UR L}L//:L//:"
10080 IFTH<1THENTH$="{RED}077P077P{CUR D
N}{CUR L}{CUR L}{CUR L}{CUR L}{CUR L}{CU
R L}{CUR L}{CUR L}4{RVS ON}{YEL}J {R
VS OFF}{RED}*{CUR DN}{CUR L}{CUR L}{CUR
L}{CUR L}{CUR L}{CUR L}{CUR L}L//
:L//:"
10090 IFTH>5THENTH=5
10095 IFTH<0THENTH=0
10100 PRINTLEFT$(D$,15)SPC(17)TH$
10110 IFTH=>1ANDTH<2THENPOKE54296,3
10120 IFTH=>2ANDTH<3THENPOKE54296,6
10130 IFTH=>3ANDTH<4THENPOKE54296,9
10140 IFTH=>4ANDTH<5THENPOKE54296,12
10150 IFTH=>5ANDTH<6THENPOKE54296,15

```

```

11000 RETURN
12000 REM *****
12010 REM ** ELEVATOR **
12020 REM *****
12070 IFEL<1THENEL=1
12080 IFEL>3THENEL=3
12090 IFEL=1THENEL$(1)="{RVS ON}{YEL}@"
:EL$(2)="{RVS ON}{YEL} "
12100 IF EL=2THENEL$(1)="{RVS ON}{YEL}
":EL$(3)="{RVS ON}{YEL} " :EL$(2)="{RVS
ON}{YEL}@"
12110 IFEL=3THENEL$(2)="{RVS ON}{YEL} "
:EL$(3)="{RVS ON}{YEL}@"
12120 PRINTLEFT$(D$,15)"{CUR RT}"EL$(1)"
{CUR DN}{CUR L}{CUR L}"EL$(2)"{CUR DN}{C
UR L}{CUR L}"EL$(3)
12130 RETURN
13000 REM ** TAKE OFF **
13010 AL=100:RU=0:OT=1:EL=2:GOSUB12000
13020 PRINT"{HOME}{CUR RT}{CUR RT}TAKE O
FF"
13050 PRINT"{HOME}";:FORA=1TO9:PRINT"{RV
S ON}{BLU}
";
13060 FORAA=1TO200:NEXT:NEXT
13070 RETURN
14000 REM ** TURNING **
14010 IFTH<1THENRETURN
14020 IFBR=1ANDAL=0THENRETURN
14030 IFAL=0THENRETURN
14040 IFMO>=1THEN14070
14050 IFJS=4THENDI=DI+TH:IFDI>10THENCO=C
O-1:DI=0:GOSUB1650
14060 IFJS=8THENDI=DI+TH:IFDI>10THENCO=C
O+1:DI=0:GOSUB1650
14070 GOSUB9150
14075 IFMO<1THENRETURN
14080 IFJS=4ANDLEN(TU$)>0THENTU$=TU$+"{C
UR RT}":GOTO14130
14090 IFJS=4THENR=R+1
14100 IFJS=8THENR=R-1
14110 IFR<=0THENR=0:TU$=TU$+"{CUR L}":IF
LEN(TU$)=11THENTU$=TU$+"{CUR RT}"
14120 IFR>10THENR=10

```

```

14130 RETURN
20000 REM *****
20010 REM * ALTITUDE TOO LOW *
20020 REM *****
20025 F$=LEFT$(P$,4):IFF$="GULF"ORF$="AT
LA"THEN21000
20030 GOSUB9500:MO=MO+1
20040 IFMO=1THENZX=AL:KL=0:R=INT(RND(1)*
6)+2
20050 IFMO=2ANDAL>ZXTHENKL=KL+1
20060 IFMO=3ANDAL>ZXTHENKL=KL+1
20070 IFMO=4ANDAL>ZXTHENKL=KL+1
20080 IFMO=5ANDAL>ZXTHENKL=KL+1
20090 IFMO=6ANDAL>ZXTHENKL=KL+1
20100 IFMO=7ANDAL>ZXTHENKL=KL+1
20110 IFMO=8ANDAL>ZXTHENKL=KL+1
20120 IFMO=9ANDAL>ZXTHENKL=KL+1
20125 IFMO=2THENMO$(1)="{RVS ON}{BLK}"
"
20130 IFMO=2THENMO$(3)="{WHT}"
{RVS ON}) _{BRN}{RVS OFF}
"
20140 IFMO=3THENMO$(4)="{WHT}"
{RVS ON}) _{BRN}{RVS OFF}
"
20150 IFMO=4THENMO$(5)="{WHT}"
{RVS ON}) _{BRN}{RVS OFF}
"
20160 IFMO=5THENMO$(6)="{WHT}"
{RVS ON}) _{BRN}{RVS OFF}
"
20170 IFMO=6THENMO$(7)="{WHT}" {R
VS ON}) _{BRN}{RVS OFF}
"
20180 IFMO=7THENMO$(8)="{WHT}" {RV
S ON}) _{BRN}{RVS OFF}
"
20190 IFMO=8THENMO$(9)="{WHT}" {R
VS ON}) _{RVS OFF}{BRN
}
"
20200 PRINT"{HOME}";:FORA=1TOKL+1:PRINT"
{RVS ON}{BLK}
";:NEXT

```



```

20500 PRINTTU$; :FORA=1TO9-KL:PRINTTAB(R)
;
20509 PRINTMO$(A);
20510 NEXT
20519 PRINT;
20520 IFMO=9ANDKL=7ORMO=9ANDLEN(TU$)>5ORMO=9ANDR>8THEN21000
20525 IFMO=9THEN40000
20530 IFR>8ORLEN(TU$)>5THEN21000
20540 ZX=AL
20600 RETURN
21000 REM *****
21010 REM ** PASSED MOUNTAIN **
21020 REM *****
21030 MO=0:KL=0:ZX=0:TU$=""
21040 PRINT "{HOME}"; :FORA=1TO9:PRINT "{RVS ON}{BLU}
; :NEXT
21050 PRINT "{RVS ON}{RED}
;
21060 GOSUB400
21070 GOTO20600
30000 REM *****
30010 REM ** LANDING **
30020 REM *****
30025 MO=0:KL=0:ZX=0:TU$=""
30030 IFLEFT$(P$,4)="GULF"ORLEFT$(P$,4)="ATLA"THENWA=1:GOTO40000
30031 PRINT "{HOME}"; :FORA=1TO9:PRINTRW$(A); :NEXT
30035 AL=0:JS=0:GOSUB9150
30040 IFUC<>1THEN40000
30050 IFBR=1THENAS=AS-20
30060 IFAS<1THEN31000
30070 RU=RU+INT(AS/30)
30075 PRINT "{HOME}"SPC(18)LN$:FORA=1TO400-AS:NEXT:PRINT "{HOME}"SPC(18)LN$(1)
30080 IFRU>600THEN40000
30090 GETA$
30091 IFA$="B"ANDBR=1THENBR=0:POKE1782,87:POKE56054,8:GOTO30110
30092 IFA$="B"ANDBR=0THENBR=1:POKE1782,81:POKE56054,2
30110 IFAS>100ANDEL=3THEN40000

```

```

30120 GOSUB7000:GOSUB7600
30200 GOTO30050
31000 REM ** SAFE LANDING **
31001 POKE54296,0:POKE54278,0:POKE54277,
0:POKE54276,0:POKE54273,0
31002 POKE54283,0:POKE54284,0:POKE54285,
0:POKE54280,0
31010 PRINT"{HOME}";:FORA=1TO10:PRINT"
";
:NEXT
31100 PRINT"{HOME}{WHT}YOU HAVE LANDED I
N ";P$
31105 PRINT"ENGINES HAVE BEEN TURNED OFF
...":RU=0:TH=0:OT=0:GOSUB10000:GOSUB7000
31107 IFP$="NEW YORK"THEN37000
31110 FORA=1TO5:IFD$(A)=P$THEN32000
31120 NEXT
31130 PRINT"{LT GRN}{HOME}{CUR DN}{CUR D
N}{CUR DN}I AM SORRY, BUT THERE IS NO SC
IENTIST":PRINT"WAITING HERE.."
31140 GOSUB35000
31150 PRINT"{HOME}";:FORA=1TO9:PRINTRW$(
A);:NEXT
31160 GOTO4310
32000 REM ** FOUND BUSINESS MAN **
32010 PRINT"{HOME}{CUR DN}{CUR DN}{CUR D
N}{LT GRN}A SCIENTIST RUSHES OVER TO YOU
R PLANE"
32020 PRINT"WITH A BRIEFCASE AND JUMPS I
N."
32030 PRINT"'GET ME TO NEW YORK QUICKLY'
HE SAYS OR"
32040 PRINT"I'LL BE LATE"
32060 BM=BM+1:D$(A)=" "
32100 GOTO31140
35000 REM ** TAKE OFF ONCE LANDED **
35020 GETA$:GOSUB9500:IFA$=""THEN35020
35025 POKE54276,0:POKE54283,0
35030 POKE54296,0:POKE54278,240:POKE5427
7,9:POKE54276,129:POKE54273,37
35040 POKE54284,9:POKE54285,240:POKE5428
3,17:POKE54280,12
35050 RETURN
37000 REM *** NEW YORK ***

```

```

37010 IFBM>=1THEN38000
37020 PRINT"{HOME}{CUR DN}{CUR DN}{CUR D
N}{YEL}YOU HAVE NO PASSENGERS. THE PRESI
DENT IS"
37030 PRINT"DISAPPOINTED WITH YOU...."
37040 GOTO31140
38000 REM**LAND SCIENTIST IN NEW YORK**
38010 IFBM>1THENSC$="SCIENTISTS"
38020 IFBM=1THENSC$="SCIENTIST"
38030 PRINT"{HOME}{CUR DN}{CUR DN}{CUR D
N}THE PRESIDENT GREET'S THE "SC$". "
38040 NY=NY+BM
38050 IFNY=5THEN39000
38060 PRINT"THE PRESIDENT THEN LOOKS AT
YOU, WITH A WORRIED LOOK.WHERE ARE THE";
38070 PRINT" OTHERS. GO AND FIND THEM
NOW"
38080 BM=0:GOTO31140
39000 REM ** MISSION COMPLETE **
39010 PRINT"{HOME}{CUR DN}{CUR DN}{CUR D
N}{CUR DN}THE PRESIDENT IS VERY HAPPY WI
TH YOU."
39020 PRINT"HE THEN TELLS YOU THIS WAS O
NLY A DRILL BUT ALL THE SAME HE IS STILL
"
39030 PRINT"VERY PLEASED WITH YOU. WELL
DONE!!"
39040 END
40000 REM *****
40010 REM ** CRASH **
40020 REM *****
40030 PRINT"{HOME}";:FORA=1TO9:PRINT"
";:
NEXT
40040 IFAL=0ANDUC=0THENPRINT"{HOME}{WHT}
YOUR UNDERCARRIAGE WAS UP!!":GOTO42000
40050 IFAL=0ANDOT=0ANDAS>100ANDEL<>3THEN
41000
40060 IFFU<1000THENPRINT"{HOME}YOU HAVE
EXHAUSTED YOUR FUEL TANKS...":GOTO42000
40070 IFAS>100ANDEL=3ANDOT=1THENPRINT"{H
OME}YOU WENT NOSE FIRST INTO THE RUNWAY!
!":GOTO42000
40080 IFRU>600THENPRINT"{HOME}YOU RAN OU

```

```

T OF RUNWAY AND HIT ANOTHER PLANE":GOT
042000
40090 IFMO=9THENPRINT"{HOME}YOU HIT THE
MOUNTAIN. THE PRESIDENT WILLBE MAD":GOTO
42000
40100 IFCR=1THENPRINT"{HOME}YOU HAVED ST
ALLED THE PLANE AND CRASHED"
40110 IFCR=1THENPRINT"DUE TO LACK OF SPE
ED":GOTO42000
40120 IFWA=1THENPRINT"{HOME}{CYN}YOU LAN
DED IN THE "P$
40130 IFWA=1THENPRINT"YOUR PLANE IS SINK
ING..":GOTO42000
40140 IFUC=1ANDAL>200THENPRINT"{HOME}YOU
R UNDERCARRIAGE LAY ON THE TOP OF A "
40150 IFUC=1ANDAL>200THENPRINT"MOUNTAIN
BECAUSE YOU FORGOT TO RAISE IT":GOTO4200
0
41000 PRINT"{HOME}YOUR PLANE HAS LANDED
ON IT'S BACK BECAUSE YOU HAD THE NO
SE UP
41010 PRINT"AND YOU WEREN'T GOING FAST E
NOUGH TO TAKE OFF..."
42000 REM *** CRASH END ***
42005 POKE54283,0:POKE54284,0:POKE54285,
0:POKE54280,0
42010 PRINT"{WHT}YOU HAVE FAILED, AND A
NUCLEAR BOMB IS ON IT'S WAY"
42020 FORA=15TO0STEP-1:POKE54276,129:POK
E54273,17:POKE54296,A:POKE54276,0
42030 FORAA=1TO10:NEXT:NEXT
42100 POKE54296,0:POKE54276,0:POKE54277,
0:POKE54278,0:POKE54273,0
42110 END
50000 REM *****
50010 REM ** CURRENT POSITION **
50020 REM *****
51000 X=L0:Y=LA
51010 IFX>=0ANDX<=5THEN52000
51020 IFX>=6ANDX<=9THEN53000
51030 IFX>=10ANDX<=15THEN54000
51040 IFX>=16ANDX<=19THEN55000
51050 IFX>=20ANDX<=25THEN56000
51060 IFX>=26ANDX<=29THEN57000

```

```

51070 IFX>=30ANDX<=35THEN58000
51080 IFX>=36ANDX<=39THEN59000
51090 IFX>=40ANDX<=45THEN60000
51100 IFX>=46ANDX<=49THEN61000
51110 IFX>=50ANDX<=55THEN62000
51120 IFX>=56ANDX<=59THEN63000
51200 RETURN
52000 REM ** BETWEEN 0 AND 5 **
52010 IFY>=0ANDY<=5THENP$="WASHINGTON"
52020 IFY>=6ANDY<=10THENP$="OREGON"
52030 IFY>=11ANDY<=25THENP$="CALIFORNIA"
52040 IFY>=26ANDY<=35THENP$="LOWER CALIF
ORNIA"
52050 IFY>=36ANDY<=45THENP$="GULF OF CAL
."
52060 GOTO51200
53000 REM ** BETWEEN 6 AND 9 **
53010 IFY>=0ANDY<=10THENP$="IDAHO"
53020 IFY>=11ANDY<=20THENP$="NEVADA"
53030 IFY>=21ANDY<=30THENP$="ARIZONA"
53040 IFY>=31ANDY<=45THENP$="GULF OF CAL
."
53050 GOTO51200
54000 REM ** BETWEEN 10 AND 15 **
54010 IFY>=0ANDY<=5THENP$="MONTANA"
54020 IFY>=6ANDY<=10THENP$="WYOMING"
54030 IFY>=11ANDY<=20THENP$="UTAH"
54040 IFY>=21ANDY<=35THENP$="NEW MEXICO"
54050 IFY>=36ANDY<=45THENP$="GULF OF CAL
."
54060 GOTO51200
55000 REM ** BETWEEN 16 AND 19 **
55010 IFY>=0ANDY<=5THENP$="NORTH DAKOTA"
55020 IFY>=6ANDY<=10THENP$="SOUTH DAKOTA
"
55030 IFY>=11ANDY<=20THENP$="COLORADO"
55040 IFY>=21ANDY<=25THENP$="OKLAHOMA"
55050 IFY>=26ANDY<=35THENP$="TEXAS"
55060 IFY>=36ANDY<=45THENP$="MEXICO"
55070 GOTO51200
56000 REM ** BETWEEN 20 AND 25 **
56010 IFY>=0ANDY<=5THENP$="MINNESOTA"
56020 IFY>=6ANDY<=10THENP$="IOWA"
56030 IFY>=11ANDY<=15THENP$="NEBRASKA"

```

```

56040 IFY>=16ANDY<=20THENP$="KANSAS"
56050 IFY>=21ANDY<=30THENP$="OKLAHOMA"
56060 IFY>=31ANDY<=40THENP$="TEXAS"
56070 IFY>=41ANDY<=45THENP$="GULF OF MEX
ICO"
56080 GOTO51200
57000 REM ** BETWEEN 26 AND 29 **
57010 IFY>=0ANDY<=5THENP$="WISCONSIN"
57020 IFY>=6ANDY<=10THENP$="ILLINOIS"
57030 IFY>=11ANDY<=15THENP$="MISSOURI"
57040 IFY>=16ANDY<=25THENP$="ARKANSAS"
57050 IFY>=26ANDY<=45THENP$="GULF OF MEX
ICO"
57060 GOTO51200
58000 REM ** BETWEEN 30 AND 35 **
58010 IFY>=0ANDY<=5THENP$="MICHIGAN"
58020 IFY>=6ANDY<=15THENP$="ILLINOIS"
58030 IFY>=16ANDY<=25THENP$="TENNESSEE"
58040 IFY>=26ANDY<=45THENP$="GULF OF MEX
ICO"
58050 IFY>=41ANDY<=45THENP$="GULF OF MEX
ICO"
58060 GOTO51200
59000 REM ** BETWEEN 36 AND 39 **
59010 IFY>=0ANDY<=5THENP$="CANADA"
59020 IFY>=6ANDY<=15THENP$="INDIANA"
59030 IFY>=16ANDY<=20THENP$="KENTUCKY"
59040 IFY>=21ANDY<=25THENP$="TENNESSEE"
59050 IFY>=26ANDY<=30THENP$="GULF OF MEX
ICO"
59060 IFY>=31ANDY<=40THENP$="MISSISSIPPI
"
59070 IFY>=41ANDY<=45THENP$="GULF OF MEX
ICO"
59080 GOTO51200
60000 REM ** BETWEEN 40 AND 45 **
60010 IFY>=0ANDY<=5THENP$="CANADA"
60020 IFY>=6ANDY<=15THENP$="OHIO"
60030 IFY>=16ANDY<=20THENP$="WEST VIRGIN
IA"
60040 IFY>=21ANDY<=25THENP$="CAROLINA"
60050 IFY>=26ANDY<=30THENP$="SOUTH CAROL
INA"
60060 IFY>=31ANDY<=40THENP$="ALABAMA"

```

```

60070 IFY>=41ANDY<=45THENP$="GULF OF MEX
ICO"
60080 GOT051200
61000 REM ** BETWEEN 46 AND 49 **
61010 IFY>=0ANDY<=5THENP$="NEW YORK"
61020 IFY>=6ANDY<=10THENP$="PENNSYLVANIA
"
61030 IFY>=11ANDY<=15THENP$="MARYLAND"
61040 IFY>=16ANDY<=20THENP$="VIRGINIA"
61050 IFY>=21ANDY<=25THENP$="NORTH CAROL
INA"
61060 IFY>=26ANDY<=30THENP$="SOUTH CAROL
INA"
61070 IFY>=31ANDY<=35THENP$="GEORGIA"
61080 IFY>=36ANDY<=45THENP$="FLORIDA"
61090 GOT051200
62000 REM ** BETWEEN 50 AND 55 **
62010 IFY>=0ANDY<=5THENP$="VERMONT"
62020 IFY>=6ANDY<=45THENP$="ATLANTIC OCE
AN"
62030 GOT051200
63000 REM ** BETWEEN 54 AND 59 **
63010 IFY>=0ANDY<=5THENP$="MAINE"
63020 IFY>=6ANDY<=45THENP$="ATLANTIC OCE
AN"
63030 GOT051200

```

READY.

TOWERS OF NEPTUNE

This is a variation on that old favorite, TOWERS OF HANOI. In this puzzle, you have to move several layers of steel, of different sizes, off one peg and onto another. This may seem simple, but of course, there are rules you have to follow to achieve the goal:

- 1 - You must take the top layer off each peg
- 2 - You cannot put a larger layer on top of a smaller one
- 3 - You must move all the layers from peg number one to peg nine

There are three pegs. One peg at a time will be shown on the screen, enlarged, in the center, so you can see which layers are on it. The other two pegs will be in the background. These background pegs have numbers on them, representing the layers which are on them.

```

100 A$(1)="{GRN}                                {RVS ON
}) Ø1 _"
110 A$(2)="{GRN}                                {RVS ON}>
    Ø2 _"
120 A$(3)="{GRN}                                {RVS ON}>
    Ø3 _"
130 A$(4)="{GRN}                                {RVS ON}>
    Ø4 _"
140 A$(5)="{GRN}                                {RVS ON}>
    Ø5 _"
150 A$(6)="{GRN}                                {RVS ON}>
    Ø6 _"
160 A$(7)="{GRN}                                {RVS ON}>
    Ø7 _"

```



```

170 A$(8)=" {GRN}      {RVS ON}>
      08          "
180 A$(9)=" {GRN}      {RVS ON}>
      09          "
190 B$="{RVS ON}{RED}>_ {CUR DN}{CUR L}{C
UR L}  {CUR DN}{CUR L}{CUR L}  {CUR DN}{
CUR L}{CUR L}  {CUR DN}{CUR L}{CUR L}  {
CUR DN}{CUR L}{CUR L}  {CUR DN}{CUR L}{C
UR L}  {CUR DN}{CUR L}{CUR L}  {CUR DN}{
CUR L}{CUR L}  {CUR DN}{CUR L}{CUR L}  {
CUR DN}{CUR L}{CUR L}  {CUR DN}{CUR L}{C
UR L}  {CUR DN}{CUR L}{CUR L}  {CUR DN}{
CUR L}{CUR L}  "
200 B$=B$+" {CUR DN}{CUR L}{CUR L}  {CUR
DN}{CUR L}{CUR L}  {CUR DN}{CUR L}{CUR L
}  {CUR DN}{CUR L}{CUR L}  {CUR DN}{CUR
L}{CUR L}  "
210 C$="{RVS ON}{RED}>
      "
211 PRINT "{CLR}{CUR DN}{CUR DN}{CUR DN}"
SPC(19)B$
212 PRINT C$
220 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}":POKE53281,0
230 L$="{PUR}N M{CUR DN}{CUR L}{CUR L}{C
UR L}4 *{CUR DN}{CUR L}{CUR L}{CUR L}4 *
{CUR DN}{CUR L}{CUR L}{CUR L}4 *{CUR DN}
{CUR L}{CUR L}{CUR L}4 *{CUR DN}{CUR L}{
CUR L}{CUR L}4 *{CUR DN}{CUR L}{CUR L}{C
UR L}4 *{CUR DN}{CUR L}{CUR L}{CUR L}4 *
{CUR DN}{CUR L}{CUR L}{CUR L}4 *{CUR DN}
{CUR L}{CUR L}{CUR L}{CUR L}N777M"
500 PRINTA$(1):PRINT:PRINTA$(2):PRINT:PR
INTA$(3):PRINT:PRINTA$(4):PRINT:PRINTA$(
5):PRINT:PRINTA$(6):PRINT:PRINTA$(7)
510 PRINT:PRINTA$(8):PRINT:PRINTA$(9)
600 PEG=1:A=1:B=1:C=1:D=1:E=1:F=1:G=1:H=
1:I=1
610 PRINT "{CLR}LEVEL OF DIFFICULTY (1 TO
9) "
611 INPUTL:IFL<1ORL>9THEN610
612 A1$="987654321":A1$=LEFT$(A1$,L):Q$=
A1$

```

```

620 D$="{HOME}{CUR DN}{CUR DN}{CUR DN}{C
UR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{C
UR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{C
UR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{C
UR DN}"
650 A1=22:A2=22:A3=22:GOTO940
700 IFPEG=1THEN750
705 PRINT"{HOME}{CUR DN}{YEL}PEG 1"
706 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR RT}"L$
710 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN}
{CUR RT}{CUR RT}{CYN}"
720 FORT=9TO1STEP-1:PRINT"{CUR RT}{CUR R
T}"MID$(A1$,T,1):NEXT
750 IFPEG=2THEN800
752 IFPEG=1THEN5000
753 IFPEG=3THEN5050
755 PRINT"{HOME}{CUR DN}{YEL}"SPC(8)"PEG
 2"
756 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}"SPC(7)L$
757 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN}
{CYN}"
780 FORT=9TO1STEP-1:PRINTSPC(8);MID$(A2$
,T,1):NEXT
800 IFPEG=3THEN850
805 PRINT"{HOME}{CUR DN}{YEL}"SPC(34)"PE
G 3"
806 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}"SPC(35)L$
807 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN}
{CYN}"
810 FORT=9TO1STEP-1:PRINTSPC(36);MID$(A3
$,T,1):NEXT
850 RETURN
900 REM *** INPUT ***
905 FL=0:A1=22:A2=22:A3=22
906 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}{CUR DN}"

```

```

910 PRINT "{OR} INPUT: {WHT} WHICH PEG WOULD
  YOU LIKE TO VIEW?"
920 GETPEG$: IF PEG$ = " " THEN 920
925 PEG = VAL (PEG$)
926 IF PEG < 1 OR PEG > 3 THEN 906
930 IF PEG < 1 OR PEG > 3 THEN 910
940 IF PEG = 1 THEN 1000
950 IF PEG = 2 THEN 1500
960 IF PEG = 3 THEN 2000
1000 REM PEG 1
1001 PRINT "{CLR}{CUR DN}{CUR DN}{CUR DN}
"SPC(19)B$
1002 PRINT C$
1010 FORT = 1 TO LEN (A1$) : Z$ = MID$ (A1$, T, 1) : Z
= VAL (Z$)
1011 PRINT LEFT$ (D$, A1) A$ (Z) : A1 = A1 - 2
1012 NEXT
1020 GOTO 3000
1500 REM PEG 2
1501 PRINT "{CLR}{CUR DN}{CUR DN}{CUR DN}
"SPC(19)B$
1502 PRINT C$
1510 FORT = 1 TO LEN (A2$) : Z$ = MID$ (A2$, T, 1) : Z
= VAL (Z$)
1511 PRINT LEFT$ (D$, A2) A$ (Z) : A2 = A2 - 2
1512 NEXT
1520 GOTO 3000
2000 REM PEG 3
2001 PRINT "{CLR}{CUR DN}{CUR DN}{CUR DN}
"SPC(19)B$
2002 PRINT C$
2010 FORT = 1 TO LEN (A3$) : Z$ = MID$ (A3$, T, 1) : Z
= VAL (Z$)
2011 PRINT LEFT$ (D$, A3) A$ (Z) : A3 = A3 - 2
2012 NEXT
3000 REM 2ND INPUT
3010 GOSUB 700
3011 IF A3$ = Q$ THEN 6000
3015 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN}
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
}{CUR DN}{CUR DN}{CUR DN}{CUR DN}"

```

```

3020 PRINT "{OR} INPUT: {WHT} DO YOU WANT TO
VIEW ANOTHER PEG? "
3030 GETT$: IFT$ <> "Y" AND T$ <> "N" THEN 3030
3040 IFT$ = "Y" THEN 900
3045 PRINT "{HOME} {CUR DN} {CUR DN} {CUR DN
} {CUR DN} {CUR DN} {CUR DN} {CUR DN} {CUR DN
} {CUR DN} {CUR DN} {CUR DN} {CUR DN} {CUR DN
} {CUR DN} {CUR DN} {CUR DN} {CUR DN} {CUR DN
} {CUR DN} {CUR DN} {CUR DN} {CUR DN}"
3050 PRINT "{OR} INPUT: {WHT} WHICH LAYER DO
YOU WANT TO MOVE?"
3060 GETN$: IFN$ = "" THEN 3060
3065 N = VAL(N$)
3066 IFN < 1 OR N > 9 THEN 3045
3070 IFPEG <> 1 THEN 3073
3071 FORT = 1 TO LEN(A1$): IFVAL(MID$(A1$, T, 1
)) = N THEN FL = 1
3072 NEXT: IF FL = 0 THEN 4000
3073 IFPEG <> 2 THEN 3076
3074 FORT = 1 TO LEN(A2$): IFVAL(MID$(A2$, T, 1
)) = N THEN FL = 1
3075 NEXT: IF FL = 0 THEN 4000
3076 IFPEG <> 2 THEN 3079
3077 FORT = 1 TO LEN(A3$): IFVAL(MID$(A3$, T, 1
)) = N THEN FL = 1
3078 NEXT: IF FL = 0 THEN 4000
3079 FL = 0: IFPEG = 1 THEN IFVAL(RIGHT$(A1$, 1
)) <> N THEN FL = 2: GOTO 4000
3080 FL = 0: IFPEG = 2 THEN IFVAL(RIGHT$(A2$, 1
)) <> N THEN FL = 2: GOTO 4000
3081 FL = 0: IFPEG = 3 THEN IFVAL(RIGHT$(A3$, 1
)) <> N THEN FL = 2: GOTO 4000
3089 PRINT "{HOME} {CUR DN} {CUR DN} {CUR DN
} {CUR DN} {CUR DN} {CUR DN} {CUR DN} {CUR DN
} {CUR DN} {CUR DN} {CUR DN} {CUR DN} {CUR DN
} {CUR DN} {CUR DN} {CUR DN} {CUR DN} {CUR DN
} {CUR DN} {CUR DN} {CUR DN} {CUR DN}"
3090 PRINT "{OR} INPUT: {WHT} MOVE LAYER "N" {
CUR L} TO WHICH PEG? "
3091 GETP$: IFP$ = "" THEN 3091
3092 P = VAL(P$): IFP < 1 OR P > 3 THEN 3089
3093 IFP = PEG THEN 3089
3094 IFP = 1 AND VAL(A1$) > 0 THEN IFN > VAL(RIGHT
$(A1$, 1)) THEN FL = 3: GOTO 4000

```

```

3095 IFP=2ANDVAL(A2$)>0THENIFN>VAL(RIGHT
$(A2$,1))THENFL=3:GOTO4000
3096 IFP=3ANDVAL(A3$)>0THENIFN>VAL(RIGHT
$(A3$,1))THENFL=3:GOTO4000
3097 IFPE=1THENZ=LEN(A1$):Z=Z-1:A1$=LEFT
$(A1$,Z)
3098 IFPE=2THENZ=LEN(A2$):Z=Z-1:A2$=LEFT
$(A2$,Z)
3099 IFPE=3THENZ=LEN(A3$):Z=Z-1:A3$=LEFT
$(A3$,Z)
3100 IFP=1THENA1$=A1$+RIGHT$(STR$(N),1)
3110 IFP=2THENA2$=A2$+RIGHT$(STR$(N),1)
3120 IFP=3THENA3$=A3$+RIGHT$(STR$(N),1)
3130 PRINT"{CLR}":A1=22:A2=22:A3=22:FL=0
:GOTO940
4000 REM BLOCK NOT ON PEG
4005 FORT=1TO7
4006 FORTT=1TO200:NEXT
4010 IFFL=0THENPRINT"{HOME}LAYER NO#"N" I
S NOT ON PEG NO#"PEG
4020 IFFL=2THENPRINT"{HOME}LAYER NO#"N" I
SN'T ON THE TOP."
4030 IFFL=3THENPRINT"{HOME}BIGGER LAYER
ON A SMALLER LAYER NOT NICE"
4040 FORTT=1TO350:NEXT
4050 PRINT"{HOME}
"
4060 NEXT
4070 GOTO900
5000 PRINT"{HOME}{CUR DN}{YEL}PEG 2"
5010 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}{CUR RT}"L$
5020 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR RT}{CUR RT}{CYN}"
5030 FORT=9TO1STEP-1:PRINT"{CUR RT}{CUR
RT}"MID$(A2$,T,1):NEXT
5040 GOTO800
5050 PRINT"{HOME}{CUR DN}{YEL}"SPC(34)"P
EG 2"
5055 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CUR DN}"SPC(35)L$
5060 PRINT"{HOME}{CUR DN}{CUR DN}{CUR DN
}{CYN}"

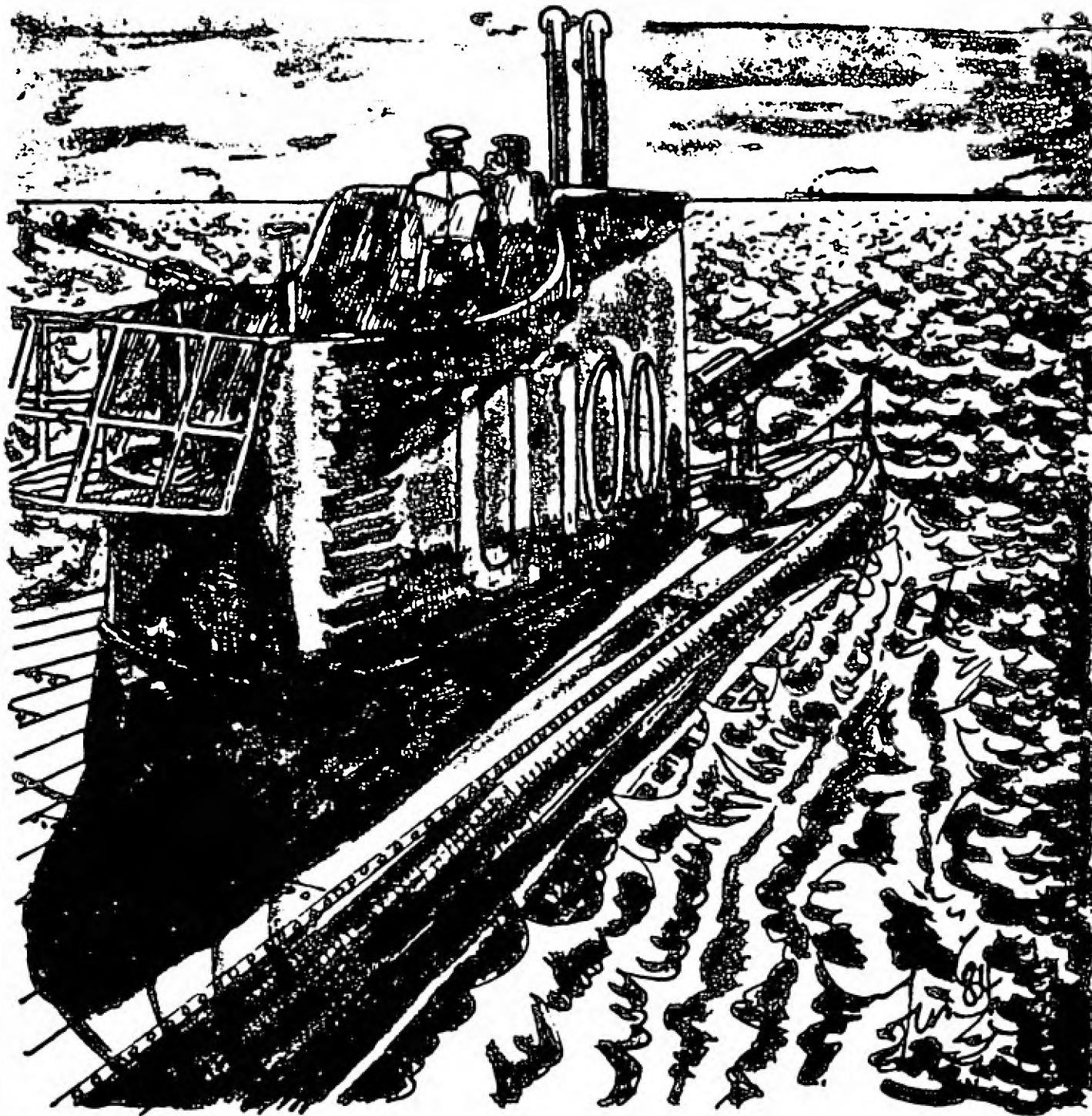
```

```
5070 FORT=9T01STEP-1:PRINTSPC(36);MID$(A  
2$,T,1):NEXT  
5080 GOTO850  
6000 PRINT"{CLR}{WHT}CONGRATULATIONS!!!"  
6010 PRINT:PRINT:PRINT"{YEL}THAT IS REAL  
LY WELL DONE..."
```

READY.

SEA WOLF

Here, out in the ocean far from land, you are battling for your life. In control of a convoy ship guarded by an escort vessel, you are attempting to sink an enemy submarine which is somewhere in the waters below you.



When the program begins, you are asked to enter the size of the grid on which you will play. The larger the grid, the more room you have to sail to evade the submarine, and the more room the submarine has to get away from you. In this sample game, I decided on a grid measuring eight each side:

ENTER SIZE OF GRID (3 TO 20)? 8

Enter degree of difficulty

1 - easy

10 - very hard? 7

The 'degree of difficulty' controls the accuracy and frequency of the submarine's attempts to destroy you.

You are then asked to place your convoy ship (the letter C) and your escort vessel (an E) on the grid, as the computer places its submarine.

PLACE CONVOY (TWO NUMBERS
EACH LESS THAN 9)

? 3,2

PLACE ESCORT (TWO NUMBERS
EACH LESS THAN 9)

? 6,7

I AM PLACING THE SUBMARINE

The computer then prints a map of the situation:

Sub condition: 0

>> Day 1 <<

Shots left 20

>Convoy at 3 2 Condition: 0

>Escort at 6 7 Condition: 0

```

8 .....
7 .....
6 .....E.
5 .....
4 .....
3 .C.....
2 .....
1 .....

```

```

CONVOY AT 3 2
  MOVE IT (Y OR N)? Y
N, S, E OR W? E
->> CONVOY NOW AT 3 3

```

The submarine, the convoy and the escort can each sustain three hits before they are destroyed. You have only 20 anti-submarine missiles. On each move, you can change the convoy's position, use its sonar to look for the submarine and fire, then carry out the same three actions (if you want to) for the escort:

Sub condition: 1

>> Day 1 <<

Shots left 19

```

>Convoy at 3 3 Condition: 0
>Escort at 6 7 Condition: 0

```

```

8 .....
7 .....
6 .....E.
5 .....
4 .....
3 ..C.....
2 .....
1 .....

```

```

ESCORT AT 6 7
  MOVE IT (Y OR N)? Y
N, S, E OR W? W
->> ESCORT NOW AT 6 6

```

Sub condition: 1

>> Day 1 <<

Shots left 19

```

>Convoy at 3 3 Condition: 0
>Escort at 6 6 Condition: 0

```

8
7
6E..
5
4
3 ..C.....
2
1

The sub is moving...
Sub unleashes long-range missile!
Escort hit 6 6

Sub condition: 1

>> Day 2 <<

Shots left 19

>Convoy at 2 3 Condition: 0

>Escort at 6 6 Condition: 1

8
7
6E..
5
4
3
2 ..C.....
1

DO YOU WANT TO FIRE (Y OR N)? Y
WHICH DIRECTION (N, S, E OR W)? E
Barrage no. 2 hit sub

Sub condition: 2

>> Day 2 <<

Shots left 18

>Convoy at 2 3 Condition: 0

>Escort at 6 6 Condition: 1

```

8 .....
7 .....
6 .....E..
5 .....
4 .....
3 .....
2 ..C.....
1 .....

```

```

ESCORT AT 6 6
MOVE IT (Y OR N)? N
DO YOU WANT TO USE
SONAR ON ESCORT (Y OR N)? Y

```

SONAR READING IS 5.099

Once you've made your move, the computer responds by moving the submarine and possibly firing at you:

```

Sub condition: 2
>> Day 3 <<
Shots left 17
>Convoy at 3 3 Condition: 0
>Escort at 6 6 Condition: 1

```

```

8 .....
7 .....
6 .....E..
5 .....
4 .....
3 ..C.....
2 .....
1 .....

```

```

The sub is moving...
Sub unleashes long-range missile!
Escort hit 6 6

```

The escort is now in a bad way. One more hit and it will go down to the bottom (as its condition is 2, as shown above the grid). However, the submarine is also suffering, with a similar condition rating. The program continues until either the submarine has been destroyed (as in our sample run) or both your vessels have been sunk:

```

                                Sub condition: 2
>> Day 6 <<
                                Shots left 14
    >Convoy at 5  3  Condition: 1
    >Escort at 6  6  Condition: 2
-----
8  .....
7  .....
6  .....E..
5  ..C.....
4  .....
3  .....
2  .....
1  .....
```

```
DO YOU WANT TO FIRE (Y OR N)? Y
WHICH DIRECTION (N, S, E OR W)? S
Barrage no. 7 hit sub
```

```
-----
Well done...you have destroyed the sub
Convoy condition: 1
Escort condition: 2
-----
```

```
-----
                You survived for 6 days
-----
```

Note that, whatever you do, you should not move directly over a submarine. Try it to see what happens if you don't mind losing a vessel. Here is the listing now to allow you to take part in this simulated battle of submarine combat:

```

10 REM SEAWOLF
20 GOSUB2510:REM INITIALISE
30 GOSUB2350:REM PRINT GRID
40 IFC1<>0THENGOSUB410:REM MOVE CONVOY
50 IFCC>2ANDEC>2THEN200
60 IFSH<1THEN290
70 IFSC>2THEN370
80 GOSUB2350
90 IFE1<>0THENGOSUB950:REM MOVE ESCORT
100 GOSUB2350
110 IFCC>2ANDEC>2THEN200
120 IFSH<1THEN290
130 IFSC>2THEN370
140 GOSUB1620:REM CONTROL SUB
150 FORT=1TO1000:NEXT T
160 DA=DA+1
170 GOTO30
180 END
190 REM *****
200 REM END OF GAME
210 PRINT"-----
-----"
220 PRINTTAB(6)"THE GAME IS OVER...AS YO
U HAVE"
230 PRINTTAB(18)"LOST"
240 PRINTTAB(6)"YOUR ESCORT AND CONVOY"
250 PRINT"-----
-----"
260 PRINTTAB(9)"YOU SURVIVED FOR"DA"DAYS
"
270 PRINT"-----
-----"
280 END
290 REM ** OUT OF SHOTS **
300 PRINT"-----
-----"
310 PRINTTAB(6)"YOU HAVE RUN OUT OF SHOT
S..."
320 PRINT"-----
-----"
330 PRINT"SUBMARINE CONDITION:"SC
340 PRINTTAB(4)"CONVOY CONDITION:"CC
350 PRINTTAB(4)"ESCORT CONDITION:"EC
360 GOTO250

```

```

370 PRINT"-----
-----"
380 PRINT"WELL DONE...YOU HAVE DESTROYED
THE SUB"
390 GOTO340
400 REM *****
410 REM MOVE CONVOY
420 PRINT:PRINT"CONVOY AT"C1;C2
430 X1=C1:X2=C2
440 INPUT" MOVE IT (Y OR N)";A$
450 IFA$<>"Y"ANDA$<>"N"THEN440
460 IFA$="N"THEN650
470 PRINT"N, S, E OR W"
480 INPUTA$
490 IFA$<>"N"ANDA$<>"S"ANDA$<>"E"ANDA$<>
"W"THEN480
500 IFA$="N"ANDC1=ZTHEN480
510 IFA$="S"ANDC1=1THEN480
520 IFA$="E"ANDC2=ZTHEN480
530 IFA$="W"ANDC2=1THEN480
540 A(C1,C2)=BL
550 IFA$="N"THENC1=C1+1
560 IFA$="S"THENC1=C1-1
570 IFA$="E"THENC2=C2+1
580 IFA$="W"THENC2=C2-1
590 IFA(C1,C2)=ESTHENPRINT"YOUR ESCORT I
S THERE!":C1=X1:C2=X2:GOTO420
600 IFA(C1,C2)=SUTHENPRINT"YOU MOVED RIG
HT OVER THE SUBMARINE":FORT=1TO500:NEXT
605 IFA(C1,C2)=SUTHENPRINT"IT FIRES UPWA
RDS!":FORT=1TO500:NEXT
606 IFA(C1,C2)=SUTHENCC=4:OG=1:C1=0:C2=0
:RETURN
610 PRINTTAB(3)"@>> CONVOY NOW AT"C1;C2
620 FORT=1TO500:NEXT T
630 A(C1,C2)=CO
640 GOSUB2350:REM PRINT GRID
650 PRINT"DO YOU WANT TO USE":PRINT"SONA
R ON CONVOY (Y OR N)"
660 INPUTA$
670 IFA$<>"Y"ANDA$<>"N"THEN660
680 IFA$="N"THEN730
690 PRINT:PRINT"SONAR READING IS";

```

```

700 NA=INT(1000*SQR((C1-S1)*(C1-S1)+(C2-
S2)*(C2-S2)))/1000
710 PRINTNA
720 FOR T=1TO1000:NEXT T
730 GOSUB2350: REM PRINT GRID
740 PRINT:PRINT"DO YOU WANT TO FIRE (Y O
R N)"
750 INPUTA$
760 IFA$<>"Y"AND A$<>"N"THEN750
770 IFA$="N"THENRETURN
780 PRINT"WHICH DIRECTION (N, S, E OR W)
"
790 INPUTA$
800 IFA$<>"N"AND A$<>"S"AND A$<>"E"AND A$<>
"W"THEN790
810 SH=SH-1
820 IFA$<>"N"AND A$<>"S"THEN860
830 IFS2<>C2THEN850
840 IFA$="S"AND S1<C1OR A$="N"AND S1>C1THEN
890
850 PRINTTAB(5)"ASW WAS UNSUCCESSFUL":GO
TO910
860 IFS1<>C1THEN850
870 IFA$="W"AND S2<C2OR A$="E"AND S2>C2THEN
890
880 GOTO850
890 PRINT"BARRAGE NO."20-SH"HIT SUB"
900 SC=SC+1
910 FORT=1TO500:NEXTT
920 GOSUB1490
930 RETURN
940 REM*****
950 REM MOVE ESCORT
960 PRINT:PRINT"ESCORT AT"E1;E2
970 X1=E1:X2=E2
980 INPUT" MOVE IT (Y OR N)";A$
990 IFA$<>"Y"AND A$<>"N"THEN980
1000 IFA$="N"THEN1190
1010 PRINT"N, S, E OR W"
1020 INPUTA$
1030 IFA$<>"N"AND A$<>"S"AND A$<>"E"AND A$<
>"W"THEN1020
1040 IFA$="N"ANDE1=ZTHEN1020
1050 IFA$="S"ANDE1=1THEN1020

```

```

1060 IFA$="E" ANDE2=Z THEN 1020
1070 IFA$="W" ANDE2=1 THEN 1020
1080 A(E1,E2)=BL
1090 IFA$="N" THEN E1=E1+1
1100 IFA$="S" THEN E1=E1-1
1110 IFA$="E" THEN E2=E2+1
1120 IFA$="W" THEN E2=E2-1
1130 IFA(E1,E2)=C THEN PRINT "YOUR CONVOY
IS THERE!":E1=X1:E2=X2:GOTO 960
1140 IFA(E1,E2)=S THEN PRINT "YOU MOVED RI
GHT OVER THE SUB!":FORT=1 TO 500:NEXT T
1145 IFA(E1,E2)=S THEN PRINT "IT BLASTS UP
WARDS!":FORT=1 TO 500:NEXT
1146 IFA(E1,E2)=S THEN EC=4:OG=1:E1=0:E2=
0:RETURN
1150 PRINT TAB(3)"J>> ESCORT NOW AT"E1;E2
1160 FORT=1 TO 500:NEXT T
1170 A(E1,E2)=ES
1180 GOSUB 2350:REM PRINT GRID
1190 PRINT "DO YOU WANT TO USE":PRINT "SON
AR ON ESCORT(Y OR N)"
1200 INPUT A$
1210 IFA$<>"Y" AND A$<>"N" THEN 1200
1220 IFA$="N" THEN 1270
1230 PRINT:PRINT "SONAR READING IS";
1240 NA=INT(1000*SQR((E1-S1)*(E1-S1)+(E2
-S2)*(E2-S2)))/1000
1250 PRINT NA
1260 FORT=1 TO 1000:NEXT T
1270 GOSUB 2350:REM PRINT GRID
1280 PRINT:PRINT "DO YOU WANT TO FIRE (Y
OR N)"
1290 INPUT A$
1300 IFA$<>"Y" AND A$<>"N" THEN 1290
1310 IFA$="N" THEN RETURN
1320 PRINT "WHICH DIRECTION (N, S, E OR W
)"
1330 INPUT A$
1340 IFA$<>"N" AND A$<>"S" AND A$<>"E" AND A$<
>"W" THEN 1330
1350 SH=SH-1
1360 IFA$<>"N" AND A$<>"S" THEN 1400
1370 IFS2<>E2 THEN 1390

```



```

1380 IFA$="S"ANDS1<E1ORAF$="N"ANDS1>E1THE
N1430
1390 PRINTTAB(5)"ASW WAS UNSUCCESSFUL":G
OTO1450
1400 IFS1<>E1THEN1390
1410 IFA$="W"ANDS2<E2ORAF$="E"ANDS2>E2THE
N1430
1420 GOTO1390
1430 PRINT"BARRAGE NO"20-SH"HI SUBMARINE
"
1440 SC=SC+1
1450 FORT=1TO500:NEXT T
1460 GOSUB1490
1470 RETURN
1480 REM*****
1490 REM MOVE SUB AFTER BEING HIT
1500 Y1=S1:Y2=S2
1510 A(S1,S2)=BL
1520 S1=S1+INT(RND(1)*2)-INT(RND(1)*2)
1530 S2=S2+INT(RND(1)*2)-INT(RND(1)*2)
1540 IFS1<1THENS1=1
1550 IFS1>ZTHENS1=Z
1560 IFS2<1THENS2=1
1570 IFS2>ZTHENS2=Z
1580 IFA(S1,S2)=ESORA(S1,S2)=COTHENS1=Y1
:S2=Y2
1590 A(S1,S2)=SU
1600 RETURN
1610 REM*****
1620 REM CONTROL SUB
1630 PRINTTAB(6)"THE SUB IS MOVING..."
1640 X1=S1:X2=S2
1650 A(S1,S2)=BL
1660 REM ** PICK CONVOY OR ESCORT **
1670 R=INT(RND(1)*2)+1
1680 IFR=1THENK1=C1:K2=C2
1690 IFR=2THENK1=E1:K2=E2
1700 FA=0
1710 IFRND(1)>DITHEN2250
1720 IFFA=1THENRETURN
1730 IFRND(1)>.5THEN1770
1740 IFS1<K1THENS1=S1+1:IFS1>ZTHENS1=Z:G

```

```

0T01790
1750 IFS2<K2THENS2=S2+1: IFS2>ZTHENS2=Z: G
0T01790
1760 GOTO1790
1770 IFSK>K1THENS1=S1-1: IFS1<1THENS1=1: G
0T01790
1780 IFS2>K2THENS2=S2-1: IFS2<1THENS2=1
1790 IFA(S1,S2)<>BLTHENS1=X:S2=X2:GOTO16
50
1800 A(S1,S2)=SU
1810 PRINTTAB(6)"SUB HAS STOPPED..."
1820 PRINTTAB(7)"PREPARING FOR SONAR..."
1830 REM ** 20% CHANCE OF NOT ATTEMPTING
TO FIRE **
1840 IFRND(1)>.8THENRETURN
1850 IFS1<>E1THEN2050
1860 IFS2<E2THEN1960
1870 IFS2>E2THENPRINT"I AM FIRING AT ESC
ORT..."
1880 FORE=S2TOE2STEP-1
1890 IFE<>S2THENPRINTTAB(E)"TORPEDO AT"S
1;E
1900 FORT=1TO100:NEXTT
1910 NEXTE
1920 IFRND(1)>.9THENPRINTTAB(7)"TORPEDO
WAS INEFFECTIVE":RETURN
1930 PRINT"ESCORT HIT AT"E1;E2:EC=EC+1: I
FEC>2THENOOG=OG+.5
1940 IFEC>2THENA(E1,E2)=BL:E1=0:E2=0:RET
URN
1950 RETURN
1960 PRINT"I AM FIRING AT ESCORT..."
1970 FORE=S2TOE2
1980 PRINTTAB(E)"TORPEDO AT"S1,E
1990 FORT=1TO100:NEXTT
2000 NEXTE
2010 IFRND(1)>.9THENPRINTTAB(4)"TORPEDO
FAILED...":RETURN
2020 PRINT"ESCORT HIT"E1;E2:EC=EC+1: IFEC
>2THENOOG=OG+.5
2030 IFEC>2THENA(E1,E2)=BL:E1=0:E2=0:RET
URN
2040 RETURN

```

```

2050 IFS1<>C1THENRETURN
2060 IFS2<C2THEN2160
2070 IFS2>C2THENPRINT"I AM FIRING AT CON
VOY... "
2080 FORE=S2TOC2STEP-1
2090 IFE<>S2THENPRINTTAB(E)"TORPEDO AT"S
1;E
2100 FORT=1TO100:NEXTT
2110 NEXT E
2120 IFRND(1)>.7THENPRINTTAB(4)"TORPEDO
FAILED...":RETURN
2130 PRINT"CONVOY HIT AT "C1;C2:CC=CC+1:
IFCC>2THENOG=OG+.5
2140 IFCC>2THENA(C1,C2)=BL:C1=0:C2=0:RET
URN
2150 RETURN
2160 PRINT"I AM FIRING AT CONVOY... "
2170 FORE=S2TOC2
2180 PRINTTAB(E)"TORPEDO AT "S1;E
2190 FORT=1TO100:NEXT T
2200 NEXT E
2210 IFRND(1)>.7THENPRINT"TORPEDO FAILED
...":RETURN
2220 PRINT"CONVOY HIT AT"C1;C2:CC=CC+1:I
FCC>2THENOG=OG+.5
2230 IFCC>2THENA(C1,C2)=BL:C1=0:C2=0:RET
URN
2240 RETURN
2250 PRINT"SUB UNLEASHES LONG-RANGE MISS
ILE!"
2260 GOSUB2310
2270 IFR=2ANDEC<3THENFA=1:GOTO2020
2280 IFR=2THEN2300
2290 IFCC<3THENFA=1:GOTO2220
2300 PRINTTAB(12)"IT FAILED... "
2310 FORT=1TO500:NEXT T
2320 FA=1
2330 RETURN
2340 REM *****
2350 REM PRINT GRID
2360 PRINT"{CLR}":PRINT:PRINT
2370 PRINT,"SUB CONDITION:"SC
2380 PRINT">> DAY"DA"<<"
2390 PRINT,"SHOTS LEFT"SH

```

```

2400 IFC1>0THENPRINTTAB(4)"CONVOY AT"C1;
C2;" CONDITION:"CC
2405 IFC1<1THENPRINT"CONVOY DESTROYED"
2410 IFE1>0THENPRINTTAB(4)"ESCORT AT"E1;
E2;" CONDITION:"EC
2415 IFE1<1THENPRINT"ESCORT SUNK!"
2420 PRINT"-----
-----":PRINT
2430 FORC=ZTO1STEP-1
2440 IFC<10THENPRINT" C;
2445 IFC>9THENPRINTC;
2450 FORD=1TOZ
2460 IFA(C,D)<>SUTHENPRINTCHR$(A(C,D));
2465 IFA(C,D)=SUTHENPRINT". ";
2470 NEXTD
2480 PRINT
2490 NEXT C
2500 RETURN
2510 REM INITIALISATION
2520 PRINT"{CLR}"
2530 POKE53281,0:POKE53280,0
2540 PRINT"{CLR}"
2550 PRINT:PRINT
2560 PRINT"ENTER SIZE OF GRID (3 TO 20)"
2570 INPUTZ
2580 IFZ<3ORZ>20THEN2570
2590 PRINT:PRINT"ENTER DEGREE OF DIFFICU
LTY":PRINTTAB(8);"1 - EASY"
2600 PRINTTAB(8);"10 - VERY HARD"
2610 INPUTDI
2620 DI=(11-D1)/10
2630 PRINT"{CLR}":PRINT:PRINT
2640 DIMA(Z,Z)
2650 BL=ASC("."):REM BLANK
2660 ES=ASC("E"):REM ESCORT
2670 CO=ASC("C"):REM CONVOY
2680 SU=ASC("S"):REM SUBMARINE
2690 EC=0:REM ESCORT CONDITION
2700 CC=0:REM CONVOY CONDITION
2710 SC=0:REM SUB CONDITION
2720 DA=1
2730 PRINT"PLACE CONVOY (TWO NUMBERS"
2740 PRINT"EACH LESS THEN"Z+1")"

```

```

2750 INPUT C1, C2
2760 IF C1 > Z OR C2 > Z OR C1 < 1 OR C2 < 1 THEN PRINT "S
TART AGAIN": PRINT: GOTO 2730
2770 A(C1, C2) = C0
2780 PRINT "PLACE ESCORT (TWO NUMBERS"
2790 PRINT "EACH LESS THAN "Z+1")"
2800 INPUT E1, E2
2810 IF E1 > Z OR E2 > Z OR E1 < 1 OR E2 < 1 THEN PRINT "S
TART AGAIN": PRINT: GOTO 2800
2820 IF A(E1, E2) = C0 THEN PRINT "CONVOY AT TH
AT POSITION": GOTO 2800
2830 A(E1, E2) = ES
2840 PRINT: PRINT "I AM PLACING THE SUBMAR
INE"
2850 FOR T = 1 TO 1000: NEXT T
2860 S1 = INT(RND(1)*Z) + 1
2870 S2 = INT(RND(1)*Z) + 1
2880 IF A(S1, S2) <> 0 THEN 2860
2890 A(S1, S2) = SU
2900 FOR C = 1 TO Z
2910 FOR D = 1 TO Z
2920 IF A(C, D) = 0 THEN A(C, D) = BL
2930 NEXT D
2940 NEXT C
2950 OG = 0
2960 SH = 20
2970 RETURN

```

READY.

FIRST BULL RUN

The First Battle of Bull Run was the first battle of the Civil War in the Eastern Theater. It took place in July, 1861. This was only weeks after the city of Washington had been placed under a virtual stage of siege following the action of Virginian troops in seizing the Harper's Ferry Arsenal and the Norfolk Navy Yard, and cut the Baltimore and Ohio Railroad, severing the capital's only rail link with the West.



Our battle takes place in and around the places where the original battle was fought, although the outcome is in your hands, rather than being dependant upon history.

The Union Army was under the control of Brigadier-General Irvin McDowell (1818-85), and the Confederate Army of the Potomac was under General Pierre Gustave Toutant Beauregard (1818-93). At the start of the game, you are allowed to choose which one you will be, with the computer taking the role of the opposing side:

This is the First Battle of Bull Run, on July 21, 1861, the first battle in the Civil War in the Eastern Theater

You can be:

1 - Maj. Gen. Irvin McDowell (Union)
or 2 - Gen. P G T Beauregard (Confed.)

Enter 1 or 2? 2

Once you have chosen your role, you are asked to distribute your troops across the battle zone. In this game, you and the computer distribute up to 100 troops in the battle area. As the fight gets underway, you take it in turns to choose a location for a battle.

The commander with the most men in and around that location wins that particular battle. The loser's men are removed from the field completely, while the winner's men stay on for future battles.

Executive Mansion,
Washington, Nov 21 1864

To Mrs. Beaby, Boston, Mass.

Dear Madam,

I have been shown in the files of the War Department a statement of the Adjutant General of Massachusetts that you are the mother of five sons who have died gloriously in the field of battle.

I feel how weak and fruitless must be any word of mine which should attempt to beguile you from the grief of a loss so overwhelming. But I cannot refrain from tendering you the consolation that may be found in the thanks of the Republic they died to save.

I pray that our Heavenly Father may assuage the anguish of your bereavement, and leave you the cherished memory of the loved and lost, and the solemn pride that must be yours to have laid so costly a sacrifice upon the altar of freedom.

Yours very sincerely and respectfully,
Abraham Lincoln.

At the end of the game (after 18 battles, or when either side has less than 16 troops, or one commander has more than double the number his opponent has) the winner is the player who has captured the most territory, not the one who has the most men still alive at the end of the day. Gruesome as that sounds, it is related to the way the way battles really are fought, lost and won.

Once you've decided which role you will occupy, you have to distribute your troops. The thirty-six battle locations all have geographical counterparts, and although their relationship to each other in direction is generally fairly correct, their distance from each other is not. You may wish to compare our layout with a map of the actual territory, to get your bearings.

Here are the battle sites:

| | | | | | |
|----------------------|-----------------------|-----------------------|--------------------------|---------------------|-------------------|
| MARTINSBURG | HARPER'S FERRY | SHARPSBURG | BALTIMORE
& OHIO R.R. | MT AIRY | BALTIMORE |
| WINCHESTER | BALL'S BLUFF | LEESBURG | CENTREVILLE | WASHINGTON | ANNAPOLIS |
| STRASBURG | PARIS | BLACKBURN'S
FORD | THE STONE
BRIDGE | ALEXANDRIA | PATUXENE
RIVER |
| MANASSAS
GAP R.R. | PIEDMONT | BULLRUN | SUDLEY
SPRINGS FORD | POTOMAC
RIVER | CHESAPEAKE
BAY |
| BRANDY
STATION | RAPPAHANNOCK
RIVER | MANASSAS
JUNCTION | AQUIA
LANDING | FREDER-
ICKSBURG | SALISBURY |
| GORDONSVILLE | RAPIDAN
RIVER | CHANCELL-
ORSVILLE | SPOTSYLVANIA | WEST POINT | PRINCESS
ANNE |

You distribute your troops by entering the number you want in that position after each location is named:

YOU CAN NOW DEPLOY YOUR
TROOPS, P G T BEAUREGARD
YOU HAVE 100 TROOPS

=====

MARTINSBURG? 1
YOU HAVE 99 LEFT

=====

HARPER'S FERRY? 5
YOU HAVE 94 LEFT

=====

SHARPSBURG? 4
YOU HAVE 90 LEFT

=====

OHIO/BALT R.R.? 7
YOU HAVE 83 LEFT

=====

Next, the battlefields are shown, with your troops, and those of your opponent, underneath a four-letter abbreviation of the place name:

| | | | | | |
|------|------|------|------|------|------|
| MART | HARP | SHAR | OHIO | MT A | BALT |
| 1 5 | 5 0 | 2 6 | 4 0 | 2 3 | 5 1 |

| | | | | | |
|------|------|------|------|------|------|
| WINC | BALL | LEES | CENT | WASH | ANNA |
| 5 2 | 1 3 | 3 1 | 3 3 | 3 3 | 3 6 |

| | | | | | |
|------|------|------|------|------|------|
| STRA | PARI | BLAC | STON | ALEX | PATU |
| 4 2 | 2 1 | 2 5 | 4 4 | 4 0 | 2 4 |

| | | | | | |
|------|------|------|------|------|------|
| GAPM | PIED | BULL | SUDL | POTO | CHES |
| 7 0 | 3 5 | 1 4 | 5 0 | 3 4 | 0 0 |

| | | | | | |
|------|------|------|------|------|------|
| BRAN | RAPP | MANA | AQUI | FRED | SALI |
| 2 5 | 2 6 | 2 5 | 4 3 | 2 6 | 1 0 |

| | | | | | |
|------|------|------|------|------|------|
| GORD | RAPI | CHAN | SPOT | WEST | PRIN |
| 3 3 | 1 2 | 3 1 | 3 6 | 3 1 | 0 0 |

P G T BEAUREGARD 100 TROOPS
IRVIN MC DOWELL 100

To fight, you enter the name of a zone (the four-letter abbreviation is all you enter) and the computer prints out the full name of the area, works out how many troops are in and around it, then determines who has won the battle:

```
P G T BEAUREGARD 100 TROOPS
IRVIN MC DOWELL 100
PLEASE SELECT WAR ZONE? BULL
```

```
WAR ZONE - BULL RUN
```

```
IN BULL RUN IRVIN MC DOWELL
HAS 25 AND P G T BEAUREGARD HAS 33
```

```
WELL DONE!
P G T BEAUREGARD WINS BATTLE FOR
BULL RUN
```

The map is then redrawn. As you can see, the player (Beauregard) won this battle so his men stay in position around Bull Run, while those of the computer (McDowell) are removed:

| | | | | | |
|------|------|------|------|------|------|
| MART | HARP | SHAR | OHIO | MT A | BALT |
| 1 5 | 5 0 | 2 6 | 4 0 | 2 3 | 5 1 |
| WINC | BALL | LEES | CENT | WASH | ANNA |
| 5 2 | 1 3 | 3 1 | 3 3 | 3 3 | 3 6 |
| STRA | PARI | BLAC | STON | ALEX | PATU |
| 4 2 | 0 1 | 0 5 | 0 4 | 4 0 | 2 4 |
| GAPM | PIED | BULL | SUDL | POTO | CHES |
| 7 0 | 0 5 | 0 4 | 0 0 | 3 4 | 0 0 |
| BRAN | RAPP | MANA | AQUI | FRED | SALI |
| 2 5 | 0 6 | 0 5 | 0 3 | 2 6 | 1 0 |
| GORD | RAPI | CHAN | SPOT | WEST | PRIN |
| 3 3 | 1 2 | 3 1 | 3 6 | 3 1 | 0 0 |

The computer then selects a zone, and the fight continues:

I WILL FIGHT AT MARTINSBURG
 P G T BEAUREGARD HAS 10
 IRVIN MC DOWELL HAS 12

THIS BATTLE OF MARTINSBURG WAS
 WON BY IRVIN MC DOWELL

| | | | | | |
|------|------|------|------|------|------|
| MART | HARP | SHAR | OHIO | MT A | BALT |
| 1 0 | 5 0 | 2 6 | 4 0 | 2 3 | 5 1 |
| WINC | BALL | LEES | CENT | WASH | ANNA |
| 5 0 | 1 0 | 3 1 | 3 3 | 3 3 | 3 6 |
| STRA | PARI | BLAC | STON | ALEX | PATU |
| 4 2 | 0 1 | 0 5 | 0 4 | 4 0 | 2 4 |
| GAPM | PIED | BULL | SUDL | POTO | CHES |
| 7 0 | 0 5 | 0 4 | 0 0 | 3 4 | 0 0 |
| BRAN | RAPP | MANA | AQUI | FRED | SALI |
| 2 5 | 0 6 | 0 5 | 0 3 | 2 6 | 1 0 |
| GORD | RAPI | CHAN | SPOT | WEST | PRIN |
| 3 3 | 1 2 | 3 1 | 3 6 | 3 1 | 0 0 |

P G T BEAUREGARD 90 TROOPS
 IRVIN MC DOWELL 75

And so the game continues:

| | | | | | |
|------|------|------|------|------|------|
| MART | HARP | SHAR | OHIO | MT A | BALT |
| 1 0 | 5 0 | 2 0 | 4 0 | 2 0 | 5 0 |
| WINC | BALL | LEES | CENT | WASH | ANNA |
| 5 0 | 1 0 | 3 0 | 3 0 | 3 0 | 3 0 |
| STRA | PARI | BLAC | STON | ALEX | PATU |
| 4 0 | 0 0 | 0 0 | 0 0 | 4 0 | 2 0 |

| | | | | | |
|------|------|------|------|------|------|
| GAPM | PIED | BULL | SUDL | POTO | CHES |
| 0 0 | 0 0 | 0 0 | 0 0 | 0 0 | 0 0 |
| BRAN | RAPP | MANA | AQUI | FRED | SALI |
| 0 5 | 0 6 | 0 5 | 0 3 | 0 6 | 0 0 |
| GORD | RAPI | CHAN | SPOT | WEST | PRIN |
| 0 3 | 0 2 | 0 1 | 0 6 | 0 1 | 0 0 |

P G T BEAUREGARD 38 TROOPS
 IRVIN MC DOWELL 47
 PLEASE SELECT WAR ZONE? AQUI

WAR ZONE - AQUIA LANDING

IN AQUIA LANDING IRVIN MC DOWELL
 HAS 0 AND P G T BEAUREGARD HAS 22

WELL DONE!
 P G T BEAUREGARD WINS BATTLE FOR
 AQUIA LANDING

At the end, when one of the terminating conditions mentioned earlier is achieved, the computer prints out a summary of the whole event, and names the final winner:

THIS IS HOW THE ACTION WENT:

 REMAINING TROOPS:

 P G T BEAUREGARD 38
 IRVIN MC DOWELL 47

P G T BEAUREGARD WON BULL RUN
 IRVIN MC DOWELL WON MARTINSBURG
 P G T BEAUREGARD WON FREDERICKSBURG
 IRVIN MC DOWELL WON HARPER'S FERRY
 IRVIN MC DOWELL WON WASHINGTON
 IRVIN MC DOWELL WON SHARPSBURG
 P G T BEAUREGARD WON BRANDY STATION
 IRVIN MC DOWELL WON WINCHESTER
 P G T BEAUREGARD WON CHANCELLORSVILLE
 IRVIN MC DOWELL WON BALL'S BLUFF

IRVIN MC DOWELL WON PATUXENT RIVER
 IRVIN MC DOWELL WON LEESBURG
 P G T BEAUREGARD WON RAPPAHANNOCK R.
 IRVIN MC DOWELL WON STRASBURG
 P G T BEAUREGARD WON AQUIA LANDING
 IRVIN MC DOWELL WON PARIS
 IRVIN MC DOWELL WON BLACKBURN'S FORD
 THE BATTLE OF BULL RUN
 HAS BEEN FOUGHT AND
 WON BY IRVIN MC DOWELL

Time now for you to do your part in recreating, and rewriting, history:

```

10 REM FIRST BULL RUN
20 GOSUB1300:REM INITIALISE
30 GOSUB1830
40 PRINT "{CLR}":PRINT:PRINT"STAND BY, ";
H$, FOR A"
50 PRINTTAB(7);"SITUATION REPORT"
60 GOSUB1830
70 GOSUB1120:REM PRINT OUT
80 IFHC<16ORCC<16ORHC<CC/2ORCC<HC/2ORBA=
18THEN780:REM END
90 PRINTH$;HC"TROOPS ";C$;CC
100 GOSUB1830
110 GETA$:IFA$<>" "THEN110
120 BA=BA+1
130 GOSUB440:REM HUMAN SELECTS
140 GOSUB1830
150 GOSUB1120
160 GOSUB1830
170 IFHC=0ORCC=0THEN780
180 BA=BA+1
190 GOSUB220:REM COMPUTER SELECTS
200 GOTO30
210 REM *****
220 REM COMPUTER SELECTS
230 HT=0:CT=0
240 D=2
250 E=2
260 GOSUB1060
270 IFCT>HTTHEN330
  
```

```

280  IFE<7THENE=E+1:GOTO260
290  IFD<7THEND=D+1:GOTO250
300  E=INT(RND(1)*6)+2
310  D=INT(RND(1)*6)+2
320  GOSUB1060
330  F$=B$(D,E)
340  FL=0:GOSUB1000:IFFL=1THEN280
350  PRINT"I WILL FIGHT AT ";B$(D,E):F$=B
$(D,E)
360  R$(BA)=F$
370  GOSUB1830
380  PRINHT$;" HAS"HT
390  GOSUB1830
400  PRINTC$;" HAS"CT
410  GOSUB1830
420  GOTO590
430  REM *****
440  REM HUMAN SELECTS ZONE
450  INPUT"PLEASE SELECT WAR ZONE";F$
460  IFLEN(F$)<>4THEN450
470  PRINT
480  D=0:E=0
490  FORX=2TO7
500  FORY=2TO7
510  IFLEFT$(F$,4)=LEFT$(B$(X,Y),4)THENE=
X:D=Y:PRINT"WAR ZONE - ";B$(X,Y):F$=B$(X
520  NEXT Y
530  NEXT X
540  FL=0:GOSUB1000:IFFL=1THENPRINTF$;" H
AS BEEN FOUGHT":GOSUB1830:GOTO450
550  R$(BA)=F$
560  GOSUB1060:REM COUNT SUBROUTINE
570  PRINT:PRINT"IN ";F$;" ";C$
580  PRINT"HAS"CT"AND ";H$;" HAS"HT
590  PRINT
600  IFHT=CTTHENPRINTTAB(8);"> NO BATTLE
<":GOSUB1830:RETURN
610  IFHT>CTTHENPRINT"WELL DONE!":PRINHT$
;" WINS BATTLE FOR ",F$:P$(BA)=F$
620  GOSUB1830
630  IFCT>HTTHENPRINT"THIS BATTLE OF ";F$
;" WAS":PRINTTAB(3);"WON BY ";C$:Q$(BA)=
F$:GOTO700

```

```

640 A(D-1,E-1)=0:A(D-1,E)=0
650 A(D-1,E+1)=0:A(D,E-1)=0
660 A(D,E+1)=0:A(D+1,E+1)=0
670 A(D+1,E)=0:A(D+1,E-1)=0
680 A(D,E)=0
690 RETURN
700 G(D-1,E-1)=0:G(D-1,E)=0
710 G(D-1,E+1)=0:G(D,E-1)=0
720 G(D,E+1)=0:G(D+1,E+1)=0
730 G(D+1,E)=0:G(D+1,E-1)=0
740 G(D,E)=0
750 GOSUB1830
760 RETURN
770 REM *****
780 REM END OF BATTLES
790 PRINT:PRINT
800 PRINT"THIS IS HOW THE ACTION WENT:"
805 PRINT"-----
-----"
810 PRINT"REMAINING TROOPS:"
820 PRINTTAB(7);H$;HC
830 PRINTTAB(7);C$;CC
840 PRINT"-----
-----"
850 HW=0:CW=0:REM HUMAN, COMP. WIN
860 FORZ=1TOBA
870 FORT=1TO300:NEXT T
880 IFP$(Z)<>" "THENPRINTH$;" WON ";P$(Z)
:HW=HW+1
890 IFQ$(Z)<>" "THENPRINTTAB(3);C$;" WON
";Q$(Z):CW=CW+1
900 NEXT Z
910 PRINTTAB(7);"THE BATTLE OF BULL RUN"
920 PRINTTAB(9);"HAS BEEN FOUGHT AND"
930 PRINTTAB(7);"WON BY ";
940 IFCW>HWTHENPRINTC$
950 IFHW>CWTHENPRINTH$
960 IFHW=CWTHENPRINT"NO-ONE..."
970 IFHW>CWTHENPRINT"CONGRADULATIONS ";H
$;"!"
980 END
990 REM *****

```

```

1000 REM CHECK IF BATTLE FOUGHT BEFORE
1010 FORK=1TOBA
1020 IFLEFT$(F$,4)=LEFT$(R$(K),4) THENFL=
1
1030 NEXTK
1040 RETURN
1050 REM *****
1060 REM COUNT SUBROUTINE
1070 HT=0:CT=0
1080 HT=G(D-1,E-1)+G(D-1,E)+G(D-1,E+1)+G
(D,E-1)+G(D,E)+G(D,E+1)+G(D+1,E+1)
1085 HT=HT+G(D+1,E)+G(D+1,E-1)
1090 CT=A(D-1,E-1)+A(D-1,E)+A(D-1,E+1)+A
(D,E-1)+A(D,E)+A(D,E+1)+A(D+1,E+1)
1095 CT=CT+A(D+1,E)+A(D+1,E-1)
1100 RETURN
1110 REM *****
1120 REM PRINT OUT MAP
1130 HC=0:CC=0:REM HUMAN, COMP. COUNT
1140 PRINT"{CLR}":PRINT
1150 FORE=2TO7
1160 FORJ=1TO2
1170 FORD=2TO7
1180 IFJ=1ANDD=2THENPRINT" ";
1190 IFJ=1THENPRINTLEFT$(B$(D,E),4);" "
;
1200 IFJ=2THENPRINTA(D,E);G(D,E);
1210 HC=HC+G(D,E):CC=CC+A(D,E)
1220 NEXT D
1230 PRINT
1240 NEXT J
1250 PRINT
1260 NEXT E
1270 HC=HC/2:CC=CC/2
1280 RETURN
1290 REM *****
1300 REM INITIALIASTION
1310 PRINT"{CLR}"
1320 REM
1330 DIMA(8,8),G(8,8),B$(8,8),Q$(36),P$(
36),R$(36)
1340 H$="IRVIN MC DOWELL":C$="P G T BEAU
REGARD"
1350 PRINT:PRINT

```



```

1360 PRINT"THIS IS THE FIRST BATTLE OF B
ULL RUN,"
1370 PRINT"ON JULY 21, 1861, THE FIRST B
ATTLE IN"
1380 PRINT"THE CIVIL WAR IN THE EASTERN
THEATER"
1390 PRINT:PRINT:PRINT
1400 PRINT"YOU CAN BE:";PRINT" 1 - MAJ
OR GEN. IRVIN MCDOWELL (UNION)"
1410 PRINT"OR 2 - GEN. P G T BEAUREGARD
(CONFED.)";PRINT
1420 INPUT"ENTER 1 OR 2";F
1430 IFF<1ORF>2THEN1420
1440 PRINT"{CLR}"
1450 IFF=2THENM$=H$:H$=C$:C$=M$
1460 PRINT:PRINT"PLEASE STAND BY ";H$
1470 FORD=2TO7
1480 FORE=2TO7
1490 READB$(D,E)
1500 NEXT E
1510 NEXT D
1520 GOSUB1120:REM PRINT OUT
1530 FORT=1TO30:PRINT:FORJ=1TO100:NEXT J
:NEXT T
1540 PRINT"YOU CAN NOW DEPLOY YOUR"
1550 HT=100:CT=100:REM HUMAN TROOPS, COM
PUTER TROOPS
1560 PRINT"TROOPS, ";H$
1570 PRINT"YOU HAVE 100 TROOPS."
1580 FORD=2TO7
1590 FORE=2TO7
1600 PRINT"=====
===== "
1610 PRINTB$(D,E);
1620 INPUTA(D,E)
1630 IFA(D,E)>9THENPRINT"TOO MANY TROOPS
IN ONE AREA":GOTO1620
1640 IFHT-A(D,E)<0THENPRINT"YOU DO NOT H
AVE THAT MANY LEFT":GOTO1620
1650 HT=HT-A(D,E)
1660 X=INT(RND(1)*7)
1670 IFCT-X<0THENX=0
1680 G(D,E)=X:CT=CT-X

```

```

1690 PRINT"YOU HAVE"HT"TROOPS LEFT TO DE
PLOY"
1700 NEXT E
1710 NEXT D
1720 PRINT"=====
=====
1730 IFCT>0THENG(4,5)=G(4,5)+CT
1740 BA=0
1750 RETURN
1760 DATA"MARTINSBURG","HARPER'S FERRY","
SHARPSBURG","OHIO/BALT R.R. ","MT AIRY"
1765 DATA"BALTIMORE","WINCHESTER"
1770 DATA"BALL'S BLUFF","LEESBURG","CENT
REVILLE","WASHINGTON","ANNAPOLIS"
1780 DATA"STRASBURG","PARIS","BLACKBURN'S
FORD","STONE BRIDGE","ALEXANDRIA"
1785 DATA"PATUXENT RIVER","GAPMANASSAS R
R","PIEDMONT","BULL RUN"
1790 DATA"SUDLEY SPRINGS","POTOMAC RIVER
","CHESAPEAKE BAY"
1800 DATA"BRANDY STATION","RAPPAHANNOCK
R. ","MANASSAS JUNCTION","AQUIA LANDING"
1805 DATA"FREDERICKSBURG","SALISBURY","G
ORDONSVILLE","RAPIDAN RIVER"
1810 DATA"CHANCELLORSVILLE","SPOTSYLVANI
A","WEST POINT","PRINCESS ANNE"
1820 REM ****
1830 REM DELAY
1840 FORT=1TO1000:NEXT T
1850 RETURN

```

READY.

GETTYSBURG DICE

From July first to third, 1863, the Civil War blazed around Gettysburg. The Confederate Army of Northern Virginia was under the command of General Robert E Lee and the Union Army of the Potomac was controlled by Major-General George C Meade.



In contrast to complex simulations of famous battles, this 'war game' allows you to rewrite history simply by throwing a few dice.

When the game begins, you are asked which army you wish to command:

GETTYSBURG DICE

It is July 2, 1863, the second day of the Battle of Gettysburg...

Do you wish to command the Confederate Army of Northern Virginia - as Robert E Lee (1) or the Union Army of the Potomac as George C Meade (2)? 1

Once you have decided, the computer explains the rules:

In this re-enactment of the second day of battle, you are Robert E Lee in charge of the Confederates

We will roll two dice to determine the outcome of the small battles for territories within the Gettysburg area

You have to predict, whether the total of the dice will be below seven, or above seven (a total of seven is not possible...)

Please stand by....

And so the battle rages:

> Battle 1 - Little Round Top

Now, General Robert E Lee
Do you predict the dice total will be
A - less than seven, or
B - greater than seven
? A

Stand by to fight, General...
6 >> 10 11 5 >> 7 8 9 >> 2 >>
5 >> 9 >> 8 >> 6 >> 10 >> 5

The total was 5

Well done, General...
You have defeated George C Meade
in the Battle of Little Round Top

Robert E Lee is leading...
and your troops' morale is 100 %

> Battle 3 - Devil's Den

Now, General Robert E Lee
Do you predict the dice total will be
A - less than seven, or
B - greater than seven
? A

Stand by to fight, General...
4 >> 10 8 10 >> 9 >> 8 10 10

The total was 10

I am sorry, General...
but the battle of Devil's Den
goes to George C Meade

Robert E Lee is leading...
and your troops' morale is 66.66 %

> Battle 7 - Ziegler's Grove

Now, General Robert E Lee
Do you predict the dice total will be
A - less than seven, or
B - greater than seven
? B

Stand by to fight, General...
4 >> 10 5 >> 9 10 9 8 >> 11 >>
7 5 >> 4

The total was 4

I am sorry, General...
but the battle of Ziegler's Grove
goes to George C Meade

George C Meade has the edge...
and his troops' morale is 57.14 %

There are nine battles in all, based in and around
actual locations at the historical site. At the end of
the skirmishes, you are shown a summary of each clash,
and then the result of the Battle of Gettysburg is
determined:

Here's a summary of the action:

Little Round Top

Robert E Lee was the victor

His troops' morale was then 100 %

Cemetery Ridge

Robert E Lee was the victor

His troops' morale was then 100 %

Devil's Den

George C Meade was the victor

His troops' morale was then 33.33 %

The Wheatfield

George C Meade was the victor

His troops' morale was then 50 %

The Peach Orchard

Robert E Lee was the victor

His troops' morale was then 60 %

Culp's Hill

George C Meade was the victor

His troops' morale was then 50 %

Ziegler's Grove

George C Meade was the victor

His troops' morale was then 57.14 %

Seminary Ridge

Robert E Lee was the victor

His troops' morale was then 50 %

Gettysburg

Robert E Lee was the victor

His troops' morale was then 55.55 %

As you can see, Robert E Lee
won the majority of the battles
And so I declare Robert E Lee
is the victor, on July 2, 1863

In the actual Battle at Gettysburg,
Lee acknowledged defeat on July 4...

The Confederates lost about 4000 men,
18,000 were wounded, and 5,150 were
captured or missing...

The Unionists lost 3,155 men,
14,529 were wounded, and 5,365 were
captured or missing...

When you're ready to rewrite history, enter the
following program, and be ready to take over the role of
commander for a few brief shining moments:

```
10 REM GETTYSBURG DICE
20 POKE53281,0:POKE53280,5
30 PRINT
40 HU=0:REM HUMAN SCORE
50 DIMA(9),C(9),H(9)
60 H$="{YEL}ROBERT E LEE"
70 C$="{GRN}GEORGE C MEADE"
80 PRINT"{CLR}":PRINT:PRINT
90 PRINT"{YEL}GETTYSBURG DICE"
100 PRINT:PRINT
110 PRINT"{CYN}IT IS JULY 2, 1863, THE S
ECOND DAY"
120 PRINT"OF THE BATTLE OF GETTYSBURG..."
"
130 PRINT:PRINT
140 PRINT"DO YOU WISH TO COMMAND FEDERAT
E"
150 PRINT"ARMY OF NORTHERN VIRGINIA - AS
ROBERT E"
160 PRINT"LEE (1) OR THE UNION ARMY OF T
HE"
170 PRINT"POTOMAC AS GEORGE E MEADE (2)"
180 INPUTA
190 IFA<10RA>2THEN180
```



```

200 IFA=2THEND$=C$:C$=H$:H$=D$
210 PRINT"{CLR}":PRINT:PRINT
220 PRINT"{WHT}IN THIS RE-ENACTMENT OF T
HE SECOND DAY"
230 PRINT"OF BATTLE, YOU ARE "H$
240 IFLEFT$(H$,1)="R"THENPRINT"IN CHARGE
OF THE CONFEDERATES":GOTO250
245 PRINT"IN CHARGE OF THE UNIONISTS"
250 PRINT:PRINT
260 PRINT"WE WILL ROLL TWO DICE TO DETER
MINE THE"
270 PRINT"OUTCOME OF THE SMALL BATTLES F
OR"
280 PRINT"TERRITORIES WITHIN THE GETTYSB
URG AREA"
290 PRINT
300 PRINTTAB(7);"YOU HAVE TO PREDICT"
310 PRINT"WHETHER THE TOTAL OF THE DICE
WILL BE"
320 PRINT"BELOW SEVEN, OR ABOVE SEVEN (A
TOTAL"
330 PRINTTAB(6);"OF SEVEN IS NOT POSSIBL
E...)"
350 PRINT"{PUR}PLEASE STAND BY...."
360 FORT=1TO30:PRINT
370 FORX=1TO100:NEXT X
380 NEXT T
390 FORJ=1TO9
400 GOSUB420
410 GOTO530
420 PRINTTAB(3);"{OR}> BATTLE"J;" - {WHT
}";
430 IFJ=1THENPRINT"LITTLE ROUND TOP"
440 IFJ=2THENPRINT"CEMETRY RIDGE"
450 IFJ=3THENPRINT"DEVIL'S DEN"
460 IFJ=4THENPRINT"THE WHEATFIELD"
470 IFJ=5THENPRINT"THE PEACH ORCHARD"
480 IFJ=6THENPRINT"CULP'S HILL"
490 IFJ=7THENPRINT"ZIEGLER'S GROVE"
500 IFJ=8THENPRINT"SEMINARY RIDGE"
510 IFJ=9THENPRINT"GETTYSBURG"
520 RETURN
530 PRINT
540 PRINT"{PUR}NOW, GENERAL ";H$

```

```

550 PRINT:PRINT"{CYN}DO YOU PREDICT THE
DICE TOTAL WILL BE"
560 PRINT:PRINTTAB(9);"{LT RED}A - LESS
THAN SEVEN, OR"
570 PRINT:PRINTTAB(9);"B - GREATER THAN
SEVEN"
580 INPUTZ$
590 IFZ$<>"A"ANDZ$<>"B"THEN580
600 PRINT:PRINT
610 PRINTTAB(3);"{GRN}STAND BY TO FIGHT,
GENERAL...."
620 FORT=1TO1000:NEXT T
630 RE=INT(RND(1)*6+RND(1)*6+2)
640 PRINT"{OR}"RE;
650 FORT=1TO130:NEXT T
660 IFRE=7THEN630
670 IFRE>7ANDRND(1)>.45THEN630
680 IFRND(1)>.2THENPRINT">> ";:GOTO630
690 PRINT:PRINT:PRINTTAB(6);"THE TOTAL W
AS"RE:PRINT
700 IFZ$="A"ANDRE<7ORZ$="B"ANDRE>7THEN77
0
710 PRINT:PRINT"{LT BLU}I AM SORRY, GENE
RAL....."
720 PRINT"BUT THE BATTLE OF ";
730 GOSUB430
740 PRINTTAB(5);"GOES TO ";C$
750 CO=CO+1
760 GOTO830
770 PRINT:PRINT"{LT BLU}WELL DONE, GENER
AL..."
780 PRINT"YOU HAVE DEFEATED ";C$
790 PRINT"IN THE BATTLE OF ";
800 GOSUB430
810 HU=HU+1
820 A(J)=1
830 IFJ=9THEN880
840 PRINT:PRINT
850 IFCO>HUTHENPRINTC$;" HAS THE EDGE...
":PRINT"AND HIS TROOPS' MORALE IS";
855 IFCO>HUTHENPRINTINT(CO*10000/J)/100"
%"
860 IFHU>COTHENPRINTH$;" IS LEADING...":
PRINT"AND YOUR TROOPS' MORALE IS";

```

```

865 IFHU>COTHENPRINTINT(HU*10000/J)/100"
%"
870 IFCO=HUTHENPRINT"THE FORCES ARE BALA
NCED...."
880 H(J)=INT(HU*10000/J)/100
890 C(J)=INT(CO*10000/J)/100
900 FORT=1TO1500:NEXT T
910 FORT=1TO30:PRINT
920 FORX=1TO70:NEXT X
930 NEXT T
940 NEXT J
950 PRINT:PRINT"{LT GRN}HERE'S A SUMMARY
OF THE ACTION:"
960 FORJ=1TO9
970 GOSUB430
980 IFA(J)=1THENPRINTH$;
985 IFA(J)<>1THENPRINTC$;
990 PRINT"{OR}WAS THE VICTOR"
1000 PRINT"{WHT}HIS TROOPS' MORALE WAS T
HEN";
1010 IFA(J)=1THENPRINTH(J);%"
1015 IFA(J)<>1THENPRINTC(J);%"
1020 PRINT"{CYN}-----
-----";
1030 FORT=1TO500:NEXT T
1040 NEXT J
1050 PRINT
1060 IFHU>COTHENPRINT"{CYN}AS YOU CAN SE
E, ";H$
1070 IFCO>HUTHENPRINT"THE RESULTS SHOW T
HAT ";C$
1080 PRINT"WON THE MAJORITY OF THE BATTLE
ES"
1090 FORT=1TO500:NEXT T
1100 PRINT"AND SO I DECLARE ";
1110 IFHU>COTHENPRINTH$
1115 IFCO>HUTHENPRINTC$
1120 PRINT"IS THE VICTOR, ON JULY 2, 186
3"
1130 PRINT:PRINT
1140 PRINT"{PUR}IN THE ACTUAL BATTLE AT
GETTYSBURG,"

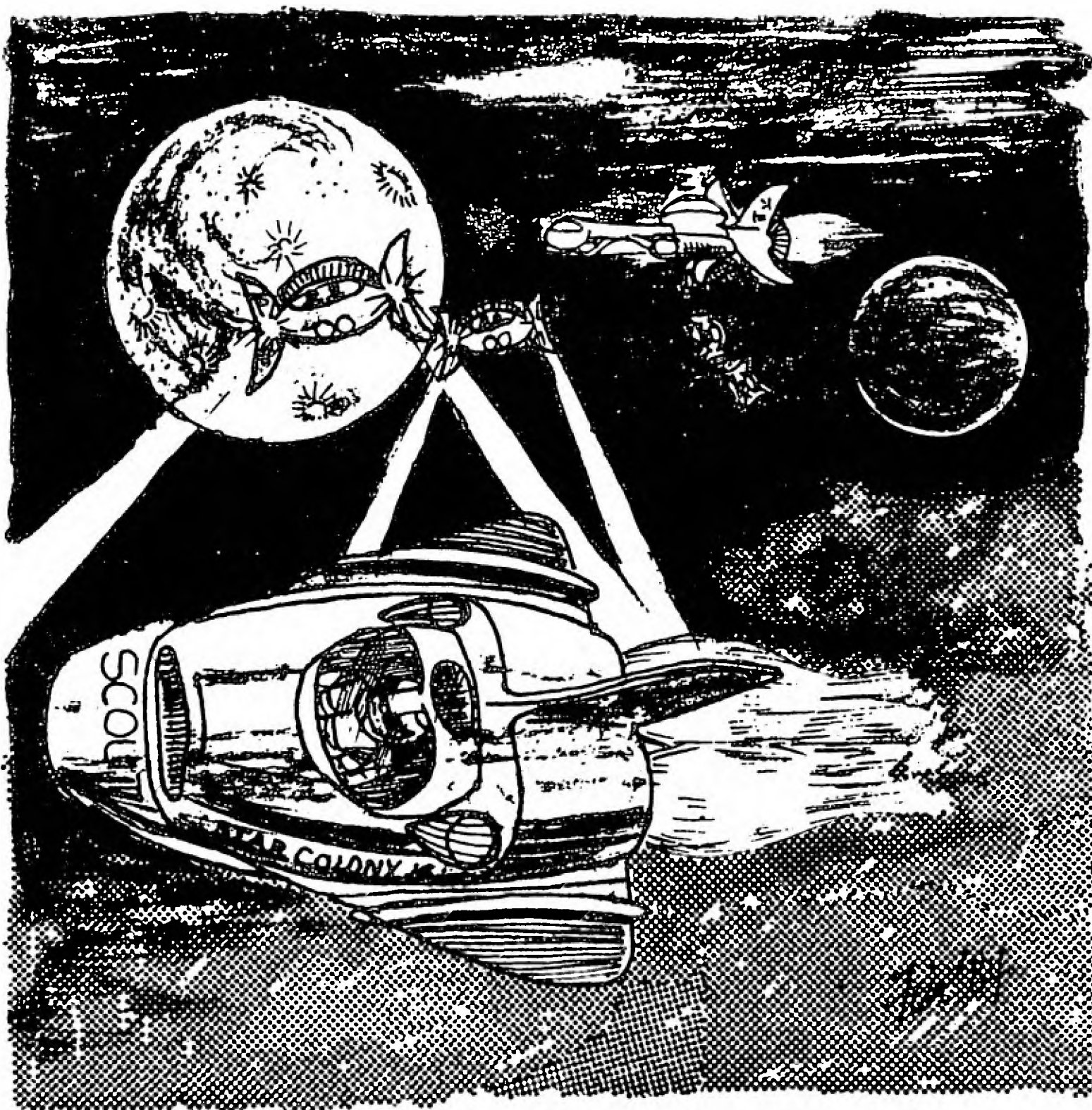
```

```
1150 PRINT"LEE ACKNOWLEDGED DEFEAT ON JU
LY 4..."
1160 PRINT:PRINT
1170 FORT=1T0500:NEXT T
1180 PRINT"THE CONFEDERATES LOST ABOUT 4
000 MEN,"
1190 PRINT"18,000 WERE WOUNDED, AND 5,15
0 WERE"
1200 PRINTTAB(8);"CAPTURED OR MISSING..."
"
1210 FORT=1T0500:NEXT T
1220 PRINT
1230 PRINT"THE UNIONISTS LOST 3,155 MEN,"
"
1240 PRINT"14,529 WERE WOUNDED, AND 5,36
5 WERE"
1250 PRINTTAB(8);"CAPTURED OR MISSING..."
"

READY.
```

ALIEN ATTACK

Earth has fallen on hard times. The entire responsibility for defending the poor old planet against teeming hordes of less-than-friendly alien creatures has fallen on your shoulders. Again.



In ALIEN ATTACK, outer space looks like this:

```
>> ALIENS ON EARTH 0 <<
>> SHIPS DESTROYED 0 <<
```

```
  . . .M. . . . .E.E.E.
A. . .M. . . . .E.E.E.
D. . . . . . .E.E.E.
A. . . . .M. . . . .
D. .M. . . . . . . .
A. . . . .M. . . . .
D. . .M. .M. .M. . . .
A. . .M.H. . .M. . . .
  . . . .M. .M. . . .
A. . . . . . . . . .
```

```
>> Survival time: 0 <<
```

Earth is the nine 'E's up in the top right hand corner and the aliens are represented by the A's. The aliens start the game as you see them now, up against the left hand side of the solar system.

As well as aliens and the earth, this sector of space contains the hapless human defender (you, shown here as an H), three 'droids shown as D's who are working for the aliens, and a number of generally nasty space-mines (shown as M's) which will hurt anybody or anything they come into contact with.

A lot happens from move to move in this game. Here's the scene seven moves from the printout we looked at a few moments ago:

```
>> ALIENS ON EARTH 0 <<
>> SHIPS DESTROYED 1 <<
```

```
. . A . M . . . . . E . E . E .
. A . . M . A . . . . E . E . E .
. . . . . . . . . E . E . E .
. . D . . . . M . . . . .
. D . M . A . H . . . . .
. . . D . . . M . . . . .
. . . M . M . . M . . . . .
. . . M . . . . M . . . . .
. . . . M . . M . . . . .
. . . . . . . . . . .
```

```
>> Survival time: 7 <<
```

Two moves later and it looks like this:

```
>> ALIENS ON EARTH 0 <<
>> SHIPS DESTROYED 1 <<
```

```
. . . M . . . . . E . E . E .
. . A . M . . . A . . E . E . E .
. . A . . H . . . . E . E . E .
. D . D . . A . . M . . . . .
. . M . . D . . . . . . . .
. . . . . . M . . . . .
. . . M . M . . M . . . . .
. . . M . . . . M . . . . .
. . . . M . . M . . . . .
. . . . . . . . . . .
```

```
>> Survival time: 9 <<
```

Needless to say, the aim of the game is to prevent the aliens from landing on earth. You can only do this by blowing them up, which you do simply by landing on top of them. Note that a floating mine will do you a rather fatal amount of harm if you happen to connect with it.

The game is an intriguing one, with a number of different possible outcomes, and with many strategies you can try. Sometimes the computer appears to concentrate only on getting the aliens to earth. In other games, you'll see that it works the three 'droids in concert in an attempt to crush you in a three-pronged attack. To make it more difficult for you, to overcome your natural advantage at being born on earth, you can only move up, down, left or right. The aliens and 'droids can move along the diagonals, as well as your four directions. Their position is strengthened further by their great mobility. While you can only move one square at a time, 'droids and aliens can move one or two squares per move, as they choose.

Here's the first alien making it to earth in our demonstration game:

```
>> ALIENS ON EARTH 0 <<
>> SHIPS DESTROYED 2 <<
```

```
. . .M. . . . .A.E.E.
. .A.M. .H. . . .E.E.E.
. . . .D. . .A. .E.E.E.
. . . . . .M. . . . .
. .M. . . . . . . . .
. . . . . .M. . . . .
. . .M. .M. . .M. . . .
. . .M. . . . .M. . . .
. . . . .M. . .M. . . .
. . . . . . . . . .
```

```
>> Survival time: 13 <<
```


A few moves later, and all I can do is sail out into the space lanes again to try and get the single remaining alien. In doing so, I intended to keep away from the three 'droids, using the mines for cover (and making sure that I don't run into them):

```
>> ALIENS ON EARTH 1 <<
>> SHIPS DESTROYED 3 <<
```

```
. . .M. . . . .E.E.E.
. .A.M. . . . .E.E.E.
. . .D.D.D. .H.E.E.E.
. . . . .M. . . . .
. .M. . . . . . . . .
. . . . .M. . . . .
. .M. .M. .M. . . . .
. .M. . . . .M. . . . .
. . . .M. .M. . . . .
. . . . . . . . . .
```

```
>> Survival time: 17 <<
```

But as the 'droids move in, I find myself in rather a spot of hot water:

```
. .A.M. . . . .E.E.E.
. .M. . . . .E.E.E.
. . . . .D. .E.E.E.
. . . . .M. . . . .
. .M. . .D.H. . . . .
. . . . .M. . . . .
. .M. .M. .M. . . . .
. .M. . . . .M. . . . .
. . . .M. .M. . . . .
. . . . . . . . . . >> ALIENS ON EARTH 1 <<
. . . . . . . . . . >> SHIPS DESTROYED 3 <<
```

>> Survival time

```

. . .M. . . . .E.E.E.
. .A.M. . . . .E.E.E.
. . . . .D.D.E.E.E.
. . . . .M. . . .
. .M. . .D. .H. . . .
. . . . .M. . . .
. . .M. .M. .M. . . .
. . .M. . . .M. . . .
. . . .M. .M. . . .
. . . . . . . . .

```

>> Survival time: 21 <<

All my efforts are in vain:

```

>> ALIENS ON EARTH 1 <<
>> SHIPS DESTROYED 3 <<

```

```

. . .M. . . . .E.E.E.
. .A.M. . . . .E.E.E.
. . . . .E.E.E.
. . . . .M. . . .
. .M. . .D. . . .
. . . . .M. . . .
. . .M. .M. .M. . . .
. . .M. . . .M.D. . .
. . . .M.* .M. . . .
. . . . . . . . .

```

You survived for 31 moves

You have been killed in your valiant attempt to defend Earth

Your success rating is 250

Here's the listing so you can do your best to rid the terran skies of the Green Peril:

```
10 REM ALIEN ATTACK
20 PRINT "{CLR}"
30 GOTO860:REM INITIALISE
40 REM *****
50 REM HUMAN MOVE
70 PRINT:PRINT"AWAITING YOUR COMMAND 'SI
R'"
71 POKE198,0:REM THIS POKE CLEARS THE KE
YBOARD BUFFER
72 GETA$:IFA$="" THEN71
80 IFA$<>"A"ANDA$<>"Z"ANDA$<>","ANDA$<>"
." THENPRINT"SORRY BUT I DON'T COMPREHEND
90 MO=MO+1
100 G=HX:F=HY
110 Q(HX, HY)=0
120 IFA$=", " THENHX=HX-1: IFHX=0THENHX=1: R
EM LEFT
130 IFA$="." THENHX=HX+1: IFHX=13THENHX=12
:REM RIGHT
140 IFA$="A" THENHY=HY-1: IFHY=0THENHY=1: R
EM UP
150 IFA$="Z" THENHY=HY+1: IFHY=11THENHY=10
:REM DOWN
160 IFQ(HX, HY)=68ORQ(HX, HY)=77THENDE=1: Q
(HX, HY)=42: GOTO540
170 IFQ(HX, HY)=65THENAK=AK+1
180 IFQ(HX, HY)=69THENHX=G: HY=F
190 Q(HX, HY)=72
200 REM *****
210REM ALIEN MOVE
220 FORJ=1TO5
230 IFQ(A(J), B(J))<>65THEN360
240 Q(A(J), B(J))=0
250 IFA(J)>9ANDB(J)<4THENQ(A(J), B(J))=69
:AS=AS+1: GOTO360
260 IFRND(1)>.5THEN290
270 IFA(J)=12THEN350
280 IFQ(A(J)+1, B(J))=0ORQ(A(J)+1, B(J))=6
9THENA(J)=A(J)+1: GOTO340
```

```

290 IFB(J)=10RA(J)=12THEN320
300 IFQ(A(J),B(J)-1)=0ORQ(A(J),B(J)-1)=6
9THENB(J)=B(J)-1:GOTO340
310 IFQ(A(J)+1,B(J)-1)=0ORQ(A(J)+1,B(J)-
1)=69THENA(J)=A(J)+1:B(J)=B(J)-1:GOTO340
320 IFB(J)=10THEN340
330 IFQ(A(J),B(J)+1)=0THENB(J)=B(J)+1
340 IFM=72THENAK=AK+1:GOTO360
350 Q(A(J),B(J))=65
360 NEXT J
370 REM *****
380 REM DROIDS
390 FORJ=1TO3
400 Q(C(J),D(J))=0
410 G=C(J):H=D(J)
420 IFRND(1)>.4THEN450
430 IFC(J)>HXTHENC(J)=C(J)-1
440 IFC(J)<HXTHENC(J)=C(J)+1
450 IFRND(1)>.35THEN480
460 IFD(J)>HYTHEND(J)=D(J)-1
470 IFD(J)<HYTHEND(J)=D(J)+1
480 M=Q(C(J),D(J))
490 IFM=65ORM=69ORM=77THENC(J)=G:D(J)=H:
GOTO510
500 IFM=72THENQ(C(J),D(J))=42:DE=1:GOTO5
40
510 Q(C(J),D(J))=68
520 NEXT J
530 REM *****
540 REM PRINT BOARD
550 PRINT"{CLR}":PRINT:PRINT
560 PRINTTAB(5);">> ALIENS ON EARTH"AS"
<<"
570 PRINTTAB(5);">> SHIPS DESTROYED"AK"
<<":PRINT
580 FORA=1TO10
590 FORB=1TO12
600 M=Q(B,A)
601 IFQ(B,A)=0THENPRINT" {CYN}.";:GOTO62
0
602 IFQ(B,A)=77THENPRINT"{LT RED}";
603 IFQ(B,A)=68THENPRINT"{LT GRN}";
604 IFQ(B,A)=65THENPRINT"{WHT}";
605 IFQ(B,A)=69THENPRINT"{OR}";

```

```

610 PRINTCHR$(Q(B,A)); "{CYN}.";
620 NEXT B
630 PRINT
640 NEXT A
650 IFDE=1ORAS+AK=5THEN680
660 PRINT:PRINTTAB(5); ">> SURVIVAL TIME:
"MO" <<"
670 GOTO70
680 PRINT:PRINT"YOU SURVIVED FOR"MO"MOVE
S"
690 PRINT:PRINT
700 SC=100*AK-50*AS
710 IFAK=5THENPRINT"YOU HAVE SAVED THE E
ARTH!!":GOTO790
720 IFAS+AK=5THEN760
730 PRINT"YOU HAVE BEEN KILLED IN YOUR"
740 PRINT"VALIANT ATTEMPT TO DEFEND EART
H."
750 GOTO790
760 IFAS<5THEN810
770 PRINTTAB(6); "YOU FAILED COMPLETELY"
780 PRINT:PRINT"ALL ALIEN SHIPS LANDED O
N EARTH.."
790 PRINT:PRINT"YOUR SUCCESS RATING IS"SC
800 END
810 PRINT"YOU WERE PARTIALLY SUCCESSFUL.
..."
820 PRINT:PRINTTAB(5); "YOU MANAGED TO DE
STROY"AK
830 PRINTTAB(8); "OF THE ALIEN SHIPS"
840 GOTO790
850 REM *****
860 REM INITIALISE
870 POKE53281,0:POKE53280,4
880 REM
890 DIMA(5),B(5),C(3),D(3),Q(12,10)
900 REM ** POSITION ALIENS **
910 FORJ=1TO5
920 READA(J),B(J)
930 Q(A(J),B(J))=65
940 NEXTJ
950 REM ** POSITION DROIDS **
960 FOR J=1TO3

```

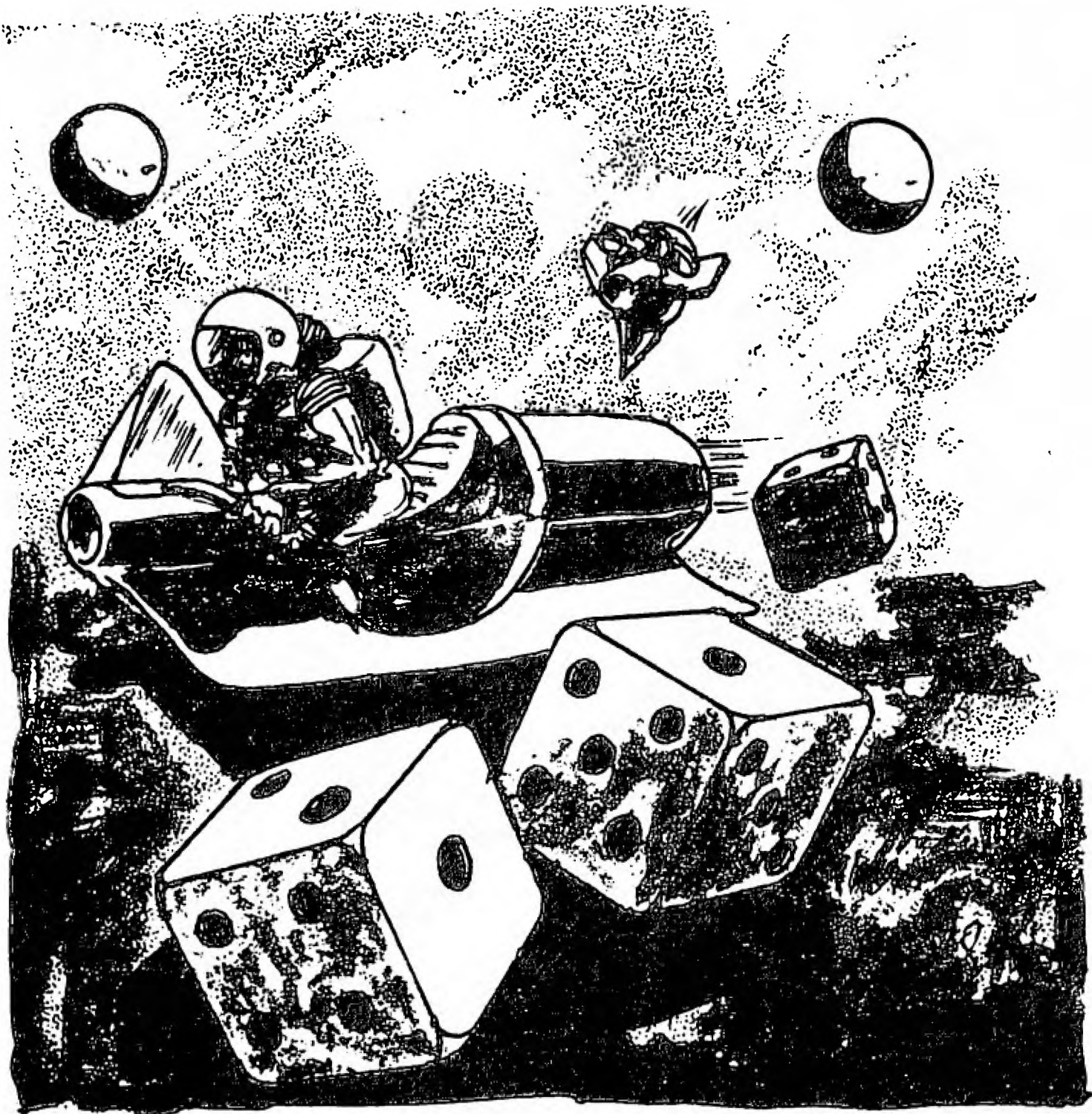
```

970 READC(J),D(J)
980 Q(C(J),D(J))=68
990 NEXT J
1000 REM ** EARTH **
1010 FORJ=1TO9
1020 READE,F
1030 Q(E,F)=69
1040 NEXT J
1050 REM ** HUMAN **
1060 Q(5,8)=72
1070 HX=5:HY=8
1080 REM ** POSITION MINES **
1090 FORJ=1TO12
1100 X=INT(RND(1)*9)+1
1110 Y=INT(RND(1)*9)+1
1120 IFQ(X,Y)<>0THEN1100
1130 Q(X,Y)=77
1140 NEXT J
1150 REM ** OTHER VARIABLES **
1160 AS=0:REM ALIEN SHIPS SAFE
1170 AK=0:REM ALIEN SHIPS DESTROYED
1180 DE=0:REM IFDE=1 THEN THE HUMAN IS D
EAD
1190 MO=0
1200 GOT0540
1210 DATA1,2,1,4,1,6,1,8,1,10
1220 DATA1,3,1,5,1,7
1230 DATA10,1,11,1,12,1,10,2,11,2,12,2
1240 DATA10,3,11,3,12,3

```

MARRAN RACE

You and your ever-patient computer take it in turn to roll a single dice, in this race along a numbered board. You move along the board the number of positions indicated by your dice, and then add the number that you've ended up beside to your total.



Here's the game in action:

YOUR SCORE IS 0 AND MY SCORE IS 0

PRESS ANY KEY TO ROLL YOUR DIE

2 2 4

4 4

3

>> YOU ROLLED 3

..*.....
143213423412431423412
..*.....

> YOUR TOTAL IS 3 <

NOW MY ROLL...

STAND BY ##

5 4 5

6

4 5 >> I ROLLED 5

.....\$.....
143213423412431423412
.....\$.....

> MY TOTAL IS 1 <

And here's the end:

STAND BY ##

```

1 6 5
3
2 2
3 4 3 3 6 4 3 4
4 5 2
3
1 5 2 3 6 1 4 6 3 2
4 5 >> I ROLLED 5
-----

```

```

.....$.....
143213423412431423412
.....$.....

```

```

                > MY TOTAL IS 10 <
SO I'M THE WINNER
    BY 10 %

    YOU SCORED 9

```

The game ends when one of the players gets a total of more than nine. Any player going over the end of the slide automatically loses.

This listing gets you in the Marran Stakes:

```

10 REM MARRAN RACE
20 REM
30 H=0:C=0:REM SCORES
40 H1=0:C1=0:REM STARTING POSITIONS
50 E$="143213423412431423412"
60 PRINT "{CLR}":PRINT:PRINT
70 GETZ$:IFZ$<>" "THEN70
80 IFH=0ANDC=0THEN110
90 PRINT:PRINT"YOU: ";D$:PRINTTAB(6);E$
:PRINTTAB(6);D$
100 PRINT:PRINT"ME: ";A$:PRINTTAB(6);E
$:PRINTTAB(6);A$
110 PRINT:PRINT"YOUR SCORE IS"H"AND MY S
CORE IS"C
120 PRINT:PRINT"PRESS ANY KEY TO ROLL YO
UR DICE"

```

```

130 PRINT "-----"
-----"
140 GETZ$:IFZ$=" "THEN140
150 PRINT:PRINTTAB(9); "## STAND BY ##"
160 FORT=1TO500:NEXT T
170 PRINT "-----"
-----"
180 FORJ=1TO30
190 D=INT(RND(1)*6)+1
200 PRINTD;
210 IFRND(1)>.7THENPRINT
220 NEXT J
230 PRINT " >> YOU ROLLED"D
240 PRINT "-----"
-----"
250 H1=H1+D
260 IFH1>21THEN750
270 D$=".....":REM 21 '
,
280 D$=LEFT$(D$,H1-1)+"*"
290 H=H+VAL(MID$(E$,H1,1))
300 PRINT:PRINTD$:PRINTE$:PRINTD$
310 PRINT
320 PRINTTAB(12); "> YOUR TOTAL IS"H"<"
330 IFH>9THEN660
340 PRINT "-----"
-----"
350 FORT=1TO2000:NEXT T
360 PRINT:PRINT
370 PRINT"NOW MY ROLL..."
380 PRINT:PRINTTAB(9); "## STAND BY ##"
390 FORT=1TO500:NEXT T
400 PRINT "-----"
-----"
410 FORJ=1TO30
420 D=INT(RND(1)*6)+1
430 PRINTD;
440 IFRND(1)>.7THENPRINT
450 NEXT J
460 PRINT " >> I ROLLED"D
470 PRINT "-----"
-----"
480 C1=C1+D
490 IFC1>21THEN720

```

```

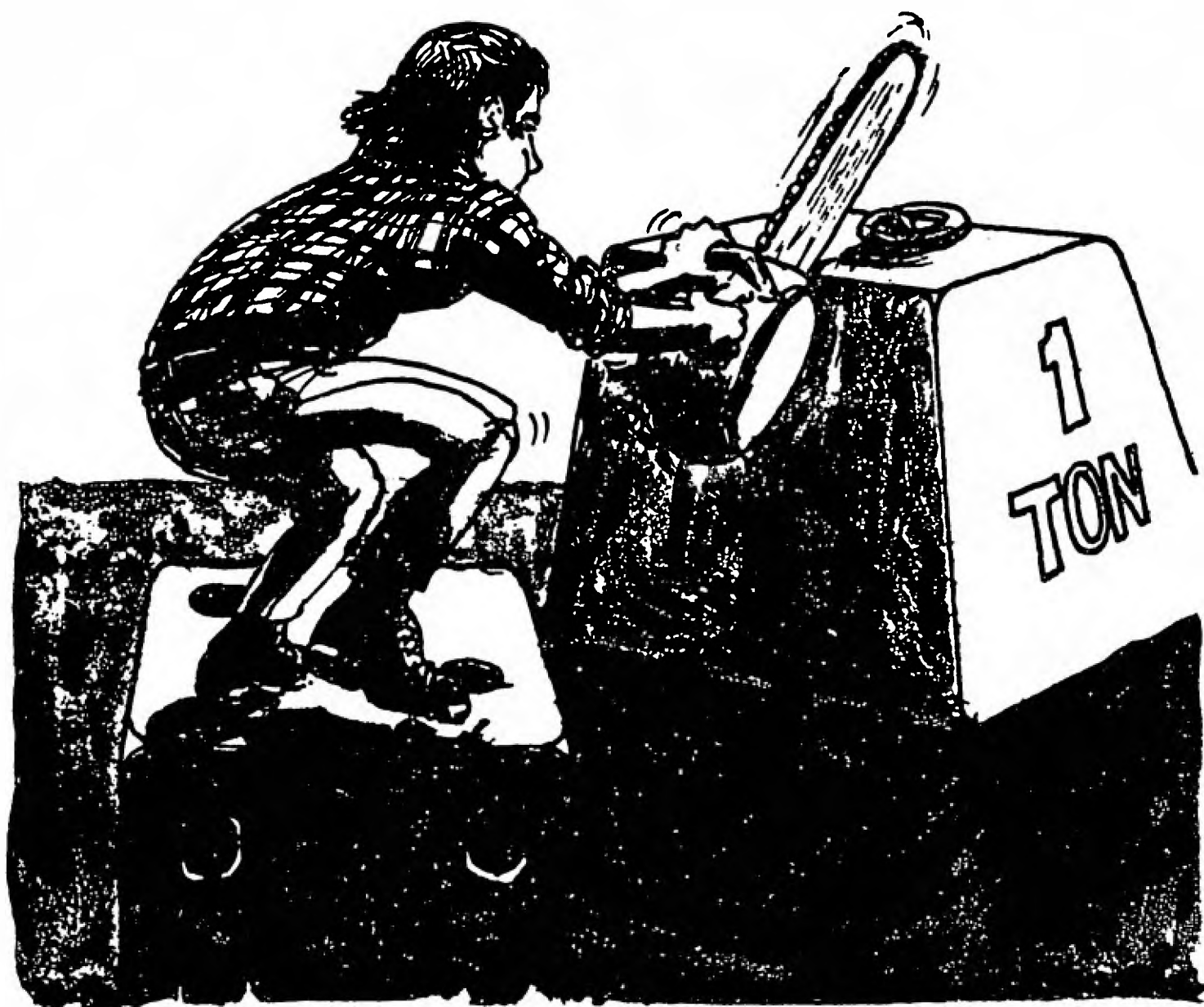
500 A$=".....":REM 21 '
,
510 A$=LEFT$(A$,C1-1)+"$"
520 C=C+VAL(MID$(E$,C1,1))
530 PRINT:PRINTA$:PRINTE$:PRINTA$
540 PRINT
550 PRINTTAB(12);"> MY TOTAL IS"C"<"
560 IFC>9THEN610
570 PRINT"-----
-----"
580 FORT=1TO2000:NEXT T
590 GOTO60
600 REM *****
610 REM END OF GAME
620 PRINT"SO I'M THE WINNER"
630 PRINTTAB(7);"BY"INT(1000*(C-H)/C)/10
"%
640 PRINT:PRINTTAB(7);"YOU SCORED"H
650 END
660 PRINT:PRINT"SO YOU'RE THE WINNER"
670 PRINT
680 PRINTTAB(7);"BY"INT(1000*(H-C)/H)/10
; "%
690 PRINT:PRINTTAB(7);"I SCORED"C
700 END
710 REM *****
720 REM OVER RUN
730 PRINT:PRINT"YOU WIN BECAUSE I OVER-R
AN"
740 GOTO760
750 PRINT:PRINT"I WIN BECAUSE YOU OVER-R
AN"
760 PRINT:PRINT"FINAL SCORES:"
770 PRINTTAB(3);"YOU:"H
780 PRINTTAB(4);"ME:"C

READY.

```

HALVING THE TON

You and the stainless steel computer take it in turns to roll the dice, aiming for a total which exceeds fifty. Any number you roll (except one) is added to your total. If you, or the computer, are stupid enough to roll a one, the total is wiped out, and your tally goes back to zero. You must judge when to take a break from adding to your score, and give your opponent a chance.



Here's a game in action, which should make it pretty clear how HALVING THE TON is played:

Your total is 17

>> Press SPACE BAR to roll dice
'E' key to end turn <<
Stand by to roll...

4
2
5
1
4
3
2
6
4
3

You just rolled 3

Your total is 20

>> Press SPACE BAR to roll dice
'E' key to end turn <<

3
5

I just rolled 5

My score is 12

I'll roll again

2 6
 5
 4
2 4

I just rolled 4

 My score is 19

I'll roll again

----- 2 -----
 5

I just rolled 5

 My score is 54

Well, that's the end of the game...

I guess I'm just a natural winner

My score: 54 Your score: 20

And here's the listing so you can do a little halving on your own:

```
10 REM HALVING THE TON
20 REM
30 HS=0:CS=0
40 PRINT "{CLR}":PRINT:PRINT
50 IFHS>0THENPRINT:PRINTTAB(7);"YOUR TOT
AL IS"HS
```

```

60 IFHS>50THEN470
70 GETA$:IFA$<>" "THEN70
80 PRINT:PRINT" >> PRESS SPACE BAR TO R
OLL DICE":PRINTTAB(12)"'E' KEY TO END TU
RN <<"
90 GETA$
100 IFA$<>" "ANDA$<>"E"THEN90
110 IFA$="E"THEN250
120 PRINT"STAND BY TO ROLL..."
130 FORT=1TO10
140 X=INT(RND(1)*6)+1
150 J$=RIGHT$(STR$(X),1)
160 IFASC(J$)=49ANDRND(1)>.42THEN140
170 PRINTTAB(2*X);X
180 NEXT T
190 PRINT:PRINT"-----
-----"
200 PRINT"YOU JUST ROLLED"X
210 HS=HS+X
220 FORT=1TO500:NEXT T
230 IFX=1THENPRINTTAB(8);"SO YOUR SCORE
IS NOW ZERO":HS=0
240 IFHS>0THEN50
250 CC=0:REM COUNTS ROLLS
260 CT=0:REM COUNTS THIS THROW'S TOTAL
270 PRINT:PRINT"-----
-----"
280 PRINT"NOW I'LL ROLL..."
290 FORT=1TO10
300 X=INT(RND(1)*6)+1
310 J$=RIGHT$(STR$(X),1)
320 IFASC(J$)=49ANDRND(1)>.62THEN300
330 PRINTTAB(2*X);X
340 NEXT T
350 PRINT:PRINT"-----
-----"
360 PRINT"I JUST ROLLED"X:PRINT
370 CS=CS+X
380 IFCS>0ANDX<>1THENPRINTTAB(13);"MY SC
ORE IS"CS
390 IFCS>50THEN470
400 IFX=1THENPRINTTAB(8);"SO MY SCORE IS
NOW ZERO":CS=0:GOTO50
410 IFRND(1)>.89THEN430

```

```

420 IFCS=HS>15ORCT<9ORCC<2ORHS>42THENPRI
NT:PRINT"I'LL ROLL AGAIN":FORT=1TO400:NE
XT:GOTO270
430 PRINT:PRINTTAB(6);"YOUR TURN..."
440 FORT=1TO400:NEXT T
450 GOTO50
460 REM *****
470 REM END OF GAME
480 PRINT:PRINT
490 PRINT"WELL, THAT'S THE END OF THE GA
ME..."
500 PRINT:PRINT
510 IFCS=HSTHEN570
520 IFCS>HSTHENPRINTTAB(3);"I GUESS I'M
JUST A NATURAL WINNER"
525 IFHS>CSTHENPRINT"IT SEEMS YOU WERE L
UCKY THAT TIME"
530 PRINT:PRINT
540 PRINT"MY SCORE:"CS,"YOUR SCORE:"HS
550 END
560 REM *****
570 REM DEAD HEAT
580 PRINT:PRINT
590 PRINT"IMPROBABLE AS IT MAY SEEM, THI
S GAME"
600 PRINT"HAS ENDED WITH US BOTH SCORING
"HS

READY.

```


CUBE OF ELEUSIS

A religious cult, the Eleusian Mysteries, flourished around Eleusis in ancient Greece. It sprang from an agrarian fertility cult which originated around 600BC.



Initiation into the cult required the newcomer to undergo a series of trials. In this program, we re-enact one such trial, in which the neophyte's mental ability is tested.

You are handed a cube, fashioned of a clear, amber-like solid. You are told that the cube contains three gems which are invisible to the naked eye. You have to concentrate your mental energy beam on a particular part of the cube, and then deduce - if your mental energy beam emerges or not from the opposite side - where the three gems are located.

I made a cube out of cardboard to write this program, as I found it of immense help in visualizing the position of the 'gems' within it. You might like to do the same.

The computer screen shows you a picture of the cube's faces 'unfolded' as follows:

```

                TOP
                1 2 3
                4 5 6
                7 8 9

    LEFT      FRONT      RIGHT      BACK
    1 2 3     1 2 3     3 2 1     3 2 1
    4 5 6     4 5 6     6 5 4     6 5 4
    7 8 9     7 8 9     9 8 7     9 8 7

                BASE
                7 8 9
                4 5 6
                1 2 3

```

You are told how many mental energy rays you have left, and are asked to say which face of the cube you will concentrate on (entering a four if you think you know where the gems are located):

<#> YOU HAVE 20 RAYS LEFT <#>

DO YOU WANT TO CONCENTRATE ON
 1- TOP, 2- FRONT, 3- LEFT, 4- GUESS? 1
 CONCENTRATION AIMED AT THE TOP FACE
 WHICH NUMBER (1 TO 9)? 9

In this case, the player is concentrating on the top face, and sending a beam through at position 9. The computer reports the result:

```

                TOP
                1 2 3
                4 5 6
                7 8 9

LEFT   FRONT   RIGHT   BACK
1 2 3  1 2 3   3 2 1   3 2 1
4 5 6  4 5 6   6 5 4   6 5 4
7 8 9  7 8 9   9 8 7   9 8 7

                BASE
                7 8 9
                4 5 6
                1 2 3

```

THE BEAM DID NOT EMERGE

This suggests that at least one of the gems lies along that line from 9 to 9, top to bottom (which, as you can see if you visualise the entire cube, takes in the numbers 3, 6 and 9 in the front face, and 3, 6, and 9 in the right face).

The player continues, entering beams until he or she is confident regarding the gems' locations:

```

                TOP
                1 2 3
                4 5 6
                7 8 9

LEFT   FRONT   RIGHT   BACK
1 2 3  1 2 3   3 2 1   3 2 1
4 5 6  4 5 6   6 5 4   6 5 4
7 8 9  7 8 9   9 8 7   9 8 7

                BASE
                7 8 9
                4 5 6
                1 2 3

```

<■> YOU HAVE 6 RAYS LEFT <■>

DO YOU WANT TO CONCENTRATE ON
1- TOP, 2- FRONT, 3- LEFT, 4- GUESS? 4
TIME TO GUESS LOCATIONS

```

ENTER CO-ORDINATES (3 NUMBERS)? 2,5,4
    >> LOCATED AT 2 5 4 <<
ENTER CO-ORDINATES (3 NUMBERS)? 7,8,3
ENTER CO-ORDINATES (3 NUMBERS)? 1,4,3
    >> LOCATED AT 1 4 3 <<

```

<< YOU FOUND 2 >>

PRESS ANY KEY TO CONTINUE

A few moves later, the player believes all the gems have been found:

<#> YOU HAVE 3 RAYS LEFT <#>

DO YOU WANT TO CONCENTRATE ON
1- TOP, 2- FRONT, 3- LEFT, 4- GUESS? 4
TIME TO GUESS LOCATIONS

ENTER CO-ORDINATES (3 NUMBERS)? 7,8,5
>> LOCATED AT 7 8 5 <<
ENTER CO-ORDINATES (3 NUMBERS)? 1,4,3
>> LOCATED AT 1 4 3 <<
ENTER CO-ORDINATES (3 NUMBERS)? 2,5,4
>> LOCATED AT 2 5 4 <<

YOU FOUND THEM WITH 3 RAYS LEFT

THEY WERE AT:

1 4 3

2 5 4

7 8 5

When you're ready to be initiated into the mystery cult,
enter the following program:

```
10 REM CUBE OF ELEUSIS
20 DIMA(9),B(9),C(9),M(3),N(3),O(3)
30 REM
40 BE=20
50 FORJ=1TO3
60 Z=INT(RND(1)*9)+1:IFA(Z)=1THEN60
70 A(Z)=1
80 Z=INT(RND(1)*9)+1:IFB(Z)=1THEN80
90 B(Z)=1
100 Z=INT(RND(1)*9)+1:IFC(Z)=1THEN100
110 C(Z)=1
120 NEXT J
```

```

130 GOSUB780
140 GOSUB590
150 PRINT"<*> YOU HAVE"BE" RAYS LEFT <*>"
160 PRINT"DO YOU WANT TO CONCENTRATE ON"
170 PRINT"1- TOP, 2- FRONT, 3- LEFT, 4-
GUESS"
180 INPUTZ
190 IFZ<1ORZ>4THEN180
200 IFZ=4THENGOSUB880
210 IFZ=4THEN530
220 PRINT"CONCENTRATION AIMED AT THE ";
230 IFZ=1THENPRINT"TOP";
240 IFZ=2THENPRINT"FRONT";
250 IFZ=3THENPRINT"LFT";
260 PRINT" FACE"
270 PRINT"WHICH NUMBER (1 TO 9)"
280 INPUTX
290 IFX<1ORX>9THEN280
300 GOSUB590
310 FL=0
320 IFZ=2THEN380
330 IFZ=3THEN420
340 FORJ=1TO3
350 IFX=M(J)THENFL=1
360 NEXT J
370 GOTO450
380 FORJ=1TO3
390 IFX=N(J)THENFL=1
400 NEXT J
410 GOTO450
420 FORJ=1TO3
430 IFX=O(J)THENFL=1
440 NEXT J
450 IFFL=1THENPRINT"THE BEAM DID NOT EME
RGE":GOTO510
460 PRINT"THE RAY CAME OUT AT THE ";
470 IFZ=1THENPRINT"BASE"
480 IFZ=2THENPRINT"BACK"
490 IFZ=3THENPRINT"RIGHT"
500 PRINTTAB(7);"SECTOR ";X
510 FORT=1TO1500:NEXT T
520 BE=BE-1
530 IFBE>0THEN140
540 PRINT:PRINT"SORRY, YOUR TIME IS UP"

```

```

550 PRINT"YOU DID NOT LOCATE THEM"
560 GOTO1110
570 END
580 REM *****
590 REM DISPLAY
600 PRINT"{CLR}":PRINT
610 PRINT"          TOP"
620 PRINT"          1 2 3"
630 PRINT"          4 5 6"
640 PRINT"          7 8 9"
650 PRINT
660 PRINT" LEFT      FRONT      RIGHT      BACK"
670 PRINT" 1 2 3    1 2 3    3 2 1    3 2 1"
680 PRINT" 4 5 6    4 5 6    6 5 4    6 5 4"
690 PRINT" 7 8 9    7 8 9    9 8 7    9 8 7"
700 PRINT
710 PRINT"          BASE"
720 PRINT"          7 8 9"
730 PRINT"          4 5 6"
740 PRINT"          1 2 3"
750 PRINT:PRINT
760 RETURN
770 REM *****
780 REM LOCATE
790 FORJ=1TO3:M(J)=0:N(J)=0:O(J)=0:NEXT
J
800 M1=1:N1=1:O1=1
810 FORJ=1TO9
820 IFA(J)=1THENM(M1)=J:M1=M1+1
830 IFB(J)=1THENN(N1)=J:N1=N1+1
840 IFC(J)=1THENO(O1)=J:O1=O1+1
850 NEXT J
860 RETURN
870 REM *****
880 REM GUESS LOCATIONS
890 PRINT"TIME TO GUESS LOCATIONS"
900 PRINT
910 CO=0
920 FORT=1TO3
930 PRINT"ENTER CO-ORDINATE (3 NUMBERS)"
940 INPUTA(T),B(T),C(T)
950 IFA(T)=M(1)ANDB(T)=N(1)ANDC(T)=O(1)T
HENPRINTTAB(5)">> LOCATED AT";

```

```

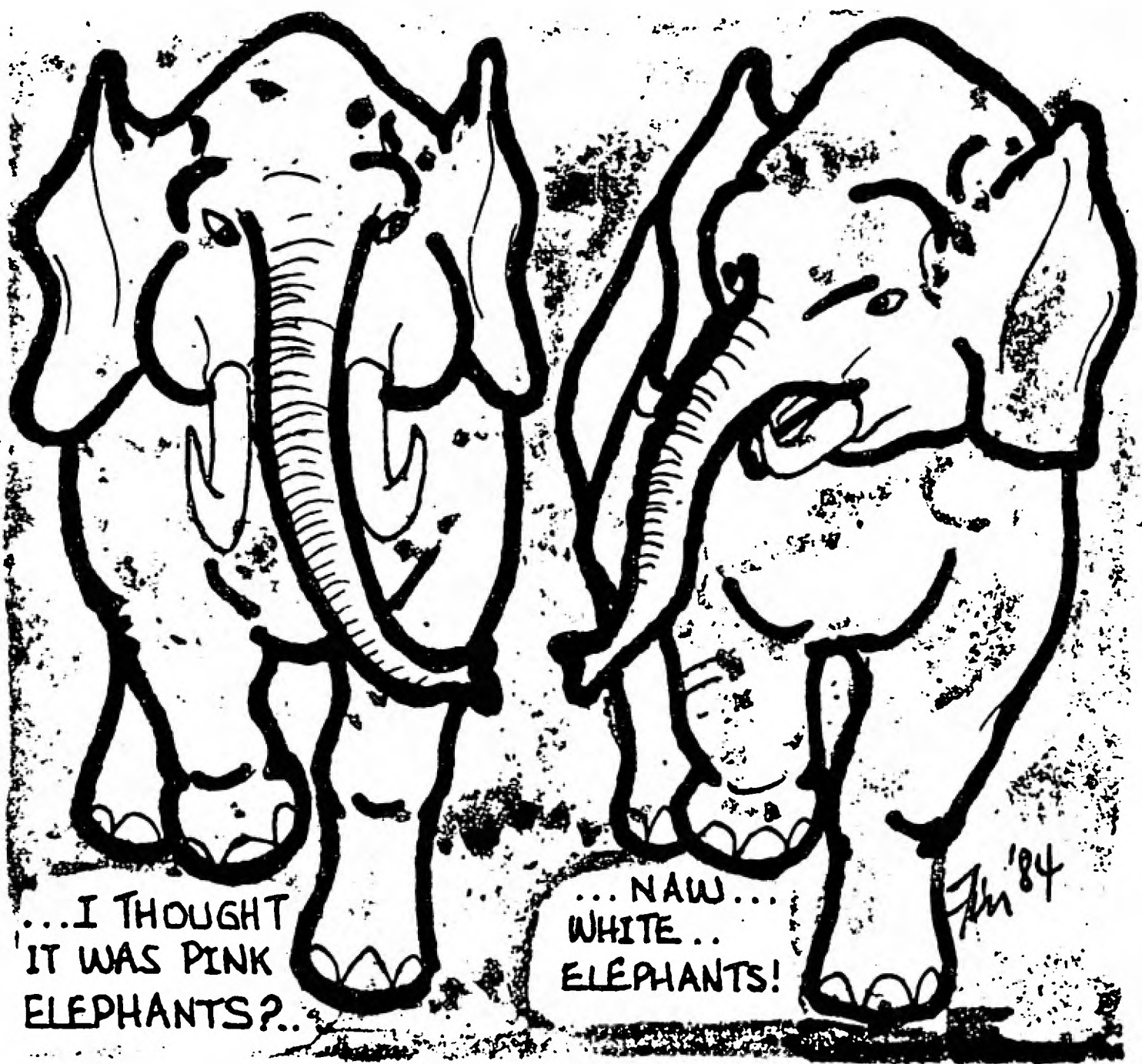
955 IFA(T)=M(1)ANDB(T)=N(1)ANDC(T)=O(1)T
HENPRINTM(1);N(1);O(1);"<<":CO=CO+1
960 IFA(T)=M(2)ANDB(T)=N(2)ANDC(T)=O(2)T
HENPRINTTAB(5)">> LOCATED AT";
965 IFA(T)=M(2)ANDB(T)=N(2)ANDC(T)=O(2)T
HENPRINTM(2);N(2);O(2):CO=CO+1
970 IFA(T)=M(3)ANDB(T)=N(3)ANDC(T)=O(3)T
HENPRINTTAB(5)">> LOCATED AT";
975 IFA(T)=M(3)ANDB(T)=N(3)ANDC(T)=O(3)T
HENPRINTM(3);N(3);O(3):CO=CO+1
980 NEXT T
990 FORT=1TO1000:NEXT T
1000 IFCO=3THEN1070
1010 PRINT:PRINTTAB(9);"<< YOU FOUND"CO"
>>":PRINT
1020 GETA$:IFA$<>" "THEN1070
1030 PRINT:PRINTTAB(13)"PRESS ANY KEY TO
CONTINUE"
1040 GETA$:IFA$=" "THEN1040
1050 PRINT"{CLR}"
1060 RETURN
1070 REM ** END OF GAME **
1080 GOSUB590
1090 PRINT:PRINT
1100 PRINT"YOU FOUND THEM WITH"BE"RAYS L
EFT"
1110 PRINT
1130 PRINT
1140 FORJ=1TO3
1150 PRINTTAB(9);M(J);N(J);O(J)
1160 PRINT
1170 NEXT J
1180 END

```

READY.

BIG BLUE ELEPHANTS

In this particularly heartless program, you are a big game hunter on safari, about 250 years in the future. Your quarry is the elephant, bred at this late stage in time only for preservation in zoos, or for rich people such as yourself to shoot.



You are actually using a new anti-elephant laser. in this game, but in deference to tradition, it is called an 'elephant gun'.

To give the elephants, which were born blue after years of selective breeding, a fighting chance, they are within a peculiar elephant pen. You cannot see the elephants. All you can do is fire your laser into the compound, from one of the numbered positions around the edge, and then - from information as to where the laser beam left the compound - try to deduce where the elephants are. The only elephants you get are those whose position you can identify.

The elephants are wearing laser-proof vests, which deflect all but shots which hit them right on target. When you first run the program, you'll be asked how many elephants you want in the compound:

How many elephants (2 to 10)? 5

Elephant 1 is in place

Elephant 2 is in place

Elephant 3 is in place

Elephant 4 is in place

Elephant 5 is in place

Next, a map of the compound from above will be shown, with the numbered positions around it:

```

      /234567\
      .....
    9 ..... 16
   17 ..... 24
   25 ..... 32
   33 ..... 40
   41 ..... 48
   49 ..... 56
      .....
     \556666/
      890123

```

You then enter the number of the position from which you want to fire:

From which compound gate would you like to fire your prized elephant gun? 5

The laser beam is on its way. A fraction of a second later it emerges from the compound, and from the number of the position from which it leaves the compound, you have to try and work out where the elephants are standing:

```
      /234567\  
      .....  
     9 ..... 16  
    17 ..... 24  
    25 ..... 32  
    33 ..... 40  
    41 ..... 48  
    49 ..... 56  
      .....  
     \556666/  
      890123
```

You shot from 5

```
V   -> DEFLECTED <-  
> > ZAP! And the beam flies out at 16
```

You keep firing, learning more about the elephants' position with each shot:

That was shot 2

```
      /234567\  
      .....  
  9   ..... 16  
 17   ..... 24  
 25   ..... 32  
 33   ..... 40  
 41   ..... 48  
 49   ..... 56  
      .....  
     \556666/  
      890123
```

You shot from 41

```
>  -> DEFLECTED <-  
V  The beam left the compound at 58
```

When you think you know where the elephants are, you enter a zero instead of a number:

From which compound gate
would you like to fire
your prized elephant gun? 0

```
ENTER GUESS 1 ? 37  
ENTER GUESS 2 ? 43  
ENTER GUESS 3 ? 20  
ENTER GUESS 4 ? 22  
ENTER GUESS 5 ? 36  
Guess number 2 is correct  
Guess number 3 is correct
```

You've found 2 elephants...

Eventually, if you haven't found them all, you may want to give up. You do this by entering -1 for your shot:

That was shot 6

```

      /234567\
      .....
  9   ..... 16
 17   ..... 24
 25   ..... 32
 33   ..... 40
 41   ..... 48
 49   ..... 56
      .....
     \556666/
      890123
  
```

From which compound gate
would you like to fire
your prized elephant gun? -1

The elephants were hiding at:

21 35 28 43 20

Here's a view of the compound from above, showing the numbers within it:

```

      /  2  3  4  5  6  7  \
      -----
      :  2  3  4  5  6  7  :
  9  : 9 10 11 12 13 14 15 16 : 16
 17 :17 18 19 20 21 22 23 24 : 24
 25 :25 26 27 28 29 30 31 32 : 32
 33 :33 34 35 36 37 38 39 40 : 40
 41 :41 42 43 44 45 46 47 48 : 48
 49 :49 50 51 52 53 54 55 56 : 56
      : 58 59 60 61 62 63 :
      -----
     \ 56 59 60 61 62 63 /
  
```

Your laser beams follow strict rules when bouncing off the elephants' hides. If a laser hits an elephant dead on, it will be absorbed, and not emerge from the compound at all. If it comes within one square of an elephant, the laser beam will be deflected through 90 degrees. Therefore, if there was an elephant at location 27, and you fired from 17, the beam would go to 18, then be bent through 90 degrees to 10 and emerge from the compound at location 2. By looking at the following sample shots, and noting especially the direction of the arrow heads (V meaning it is travelling downwards, < to the left, > to the right and ^ travelling upwards) as well as words like DEFLECTED, you should be able to work out just how the beams behave:

```

      /234567\
      .....
    9 ..... 16
   17 ..... 24
   25 ..... 32
   33 ..... 40
   41 ..... 48
   49 ..... 56
      .....
     \556666/
      890123

```

You shot from 41

```

> -> DEFLECTED <-
V The beam left the compound at 58

```

Here's the listing so you can tackle the elephants on their home turf:

```

10 REM BIG BLUE ELEPHANTS
20 GOSUB1170:REM INITIALISE
30 GOSUB950:REM PRINT COMPOUND
40 GOSUB790:REM ENTER MOVE
50 IFM=0THENGOSUB120:GOTO30:REM GUESS
60 IFM=-1THEN340:REM GIVE UP
70 GOSUB950:REM PRINT COMPOUND

```

```

80 GOSUB420:REM RESULT
90 FORY=1TO1000:NEXTY
100 PRINT:PRINT"HIT RETURN TO CONTINUE"
101 GETG$:IFG$<>CHR$(13)THEN101
105 GOTO30
110 REM *****
120 REM ENTER GUESS
130 PRINT
140 FORJ=1TOE
150 PRINTTAB(J)"{CYN}ENTER GUESS"J
160 INPUTC(J)
170 NEXTJ
180 SC=0
190 FORJ=1TOE
200 FORK=1TOE
210 IFC(J)=B(K)THENPRINT"GUESS NUMBER"J"
IS CORRECT":C(J)=0:SC=SC+1
220 NEXTK
230 NEXTJ
240 PRINT
250 M=-99
260 FORY=1TO500:NEXTY
270 IFSC<>0THENPRINT"{GRN}YOU'VE FOUND"S
C"ELEPHANTS..."
280 FORY=1TO2000:NEXT Y
290 IFSC<>0THENRETURN
300 PRINT"YOU HAVE FOUND THEM ALL!"
310 PRINT:PRINT"WELL DONE!"
320 END
330 REM *****
340 REM GIVE UP
350 PRINT"THE ELEPHANTS WERE HIDING AT:"
360 PRINT
370 FORJ=1TOE
380 PRINTB(J);
390 NEXT J
400 END
410 REM *****
420 REM RESULT
430 Q=-1
440 IFM<9THENQ=8
450 IFM>56THENQ=-8
460 IFM=9ORM=17ORM=25ORM=33ORM=41ORM=49T
HENQ=1

```

```

470 IFM+Q<10ORM+Q>55THENPRINT"THE BEAM L
EFT THE COMPOUND AT"M+Q:M=-99:RETURN
480 FL=0
490 FORT=1TO10
500 IFD(T)=M+QTHENFL=M+Q
510 NEXT T
520 IFFL<>0THENPRINT"ZAP! AND THE BEAM F
LIES OUT AT"FL:M=-99:RETURN
530 M=M+Q
540 REM DELETE NEXT FOUR LINES WHEN YOU
GAIN PROFICIENCY
550 IFQ=1THENPRINT"> ";
560 IFQ=-1THENPRINT"_ ";
570 IFQ=8THENPRINT"V ";
580 IFQ=-8THENPRINT"^ ";
590 REM *** ABSORB ***
600 IFA(M)=9THENPRINT"...ABSORBED...":M
=-99:RETURN
610 REM *** REFLECT ***
620 X=7:Y=-9
630 IFQ=8THENY=9
640 IFQ=-8THENX=-7:Y=-9
650 IFQ=1THENX=-7:Y=9
660 IFM+X<10ORM+X>64ORM+Y<10ORM+Y>64THEN68
0
670 IFA(M+X)=9ANDA(M+Y)=9THENPRINT">>RE
FLECTED<<":Q=-Q:GOTO470
680 REM *** DEFLECTED ***
690 IFM+X<10ORM+X>64THEN710
700 IFA(M+X)=9THENPRINT"@> DEFLECTED <
@" :GOTO740
710 IFM+Y<10ORM+Y>64THEN470
720 IFA(M+Y)=9THENPRINT"*> DEFLECTED <
*" :GOTO760
730 GOTO470
740 IFABS(Q)=8THENQ=Q/8:GOTO750
745 IFABS(Q)<>8THENQ=Q*8
750 GOTO470
760 IFABS(Q)=8THENQ=-Q/8:GOTO770
765 IFABS(Q)<>8THENQ=-Q*8
770 GOTO470
780 REM*****
790 REM ENTER MOVE

```



```

800 PRINT "{LT GRN}FROM WHICH COMPOUND GAT
E"
810 PRINT "WOULD YOU LIKE TO FIRE"
820 PRINT "YOUR PRIZED ELEPHANT GUN"
830 REM YOU CANNOT SHOOT FROM 1 OR 8
840 REM          OR FROM 57 OR 64
850 INPUT M
860 IF M<1 THEN RETURN
870 FL=0
880 IF (M<10 OR M>55) AND M<>1 AND M<>8 AND M<>57
AND M<>64 THEN FL=1
890 FOR T=1 TO 10
900 IF M=D(T) THEN FL=1
910 NEXT T
920 IF FL=0 THEN 850
930 RETURN
940 REM *****
950 REM PRINT COMPOUND
960 PRINT "{CLR}"
970 MO=MO+.5
980 PRINT:PRINT:PRINT
990 IF INT(MO)<>PR THEN PRINT "{GRN} THAT WAS
SHOT" INT(MO)
995 PRINT:PRINT
1000 PRINT "{CYN}          N234567M"
1010 PRINT "          ....."
1020 PRINT "          9";
1030 FOR T=1 TO 5
1040 PRINT "          "; STR$(D(T+5))
1050 PRINT "          "STR$(D(T));
1060 NEXT T
1070 PRINT "          56"
1080 PRINT "          ....."
1090 PRINT "          M556666N"
1100 PRINT "          890123 "
1110 PRINT:PRINT
1120 PR=MO
1130 IF M<>-99 THEN PRINT "{PUR} YOU SHOT FRO
M" M:PRINT
1140 RETURN
1150 END
1160 REM *****
1170 REM INITIALISE
1180 POKE 53281,0:POKE 53280,0

```

```

1190 PRINT "{CLR}"
1200 DIMD(30)
1210 FORT=1TO30
1220 READD(T)
1230 NEXT T
1240 PRINT "{YEL}HOW MANY ELEPHANTS (2 TO
10)"
1245 INPUTE
1250 IFE<2ORE>10THEN1245
1260 DIMA(64),B(E),C(E)
1270 FORZ=1TOE
1280 M=INT(RND(1)*29)+18
1290 FL=0
1300 IFA(M)<>0THEN1280
1310 FORT=1TO30
1320 IFM=D(T)THENFL=1
1330 NEXTT
1340 IFFL=1THEN1280
1350 PRINT
1360 PRINTTAB(Z)"ELEPHANT"Z"IS IN PLACE"
1370 B(Z)=M
1380 A(M)=9
1390 NEXTZ
1400 M=-99
1410 MO=0
1420 PR=0
1430 PRINT:PRINT"HIT A KEY"
1431 GETG$:IFG$=""THEN1431
1440 RETURN
1450 DATA17,25,33,41,49
1460 DATA16,24,32,40,48
1470 DATA10,11,12,13,14,15
1480 DATA18,26,34,42,50,51
1490 DATA52,53,54,55,47,39
1500 DATA31,23

```

READY.

ALPHABETICA

This is a two-part game. The first part is very simple, but the speed with which you solve the easy problem (to work out which letter of the alphabet the computer is thinking of) dictates how many moves you'll have to work out the solution to the second part.



The second is a game somewhat like Invicta's Mastermind,TM except that instead of you having to guess a code of colors, the code here is made up from the first six letters of the alphabet.

The code could be ABCD, FDEA or even FFFF, or any other of the enormous number of possible combinations of those six letters.

After you've entered your guess, the computer will rate your answer. A plus sign (+) is awarded for each letter which occurs in your code and in the computer's code, but not in the right position. So if the computer was thinking of ABCA and you entered CEEF, you would be awarded one + sign. A correct letter in the correct position gains you an asterisk (*). So, if you had entered AEEF when the computer was thinking of ABCA, you would be awarded an * as a result.

Here's the first part of the program in action:

We'll start our game of ALPHABETICA by getting you to guess the letter of the alphabet I'm thinking of. The quicker you guess it, the more chances you'll have to solve the problem posed in the second part of the game...

OK, enter your guess number 1 ? A

No, it's not A
Try closer to the end
of the alphabet

OK, enter your guess number 2 ? Z

No, it's not Z
Try closer to the start
of the alphabet

OK, enter your guess number 3 ? G

No, it's not G
Try closer to the end
of the alphabet

OK, enter your guess number 4 ? M

No, it's not M
Try closer to the start
of the alphabet

OK, enter your guess number 5 ? J

No, it's not J
Try closer to the end
of the alphabet

OK, enter your guess number 6 ? K

No, it's not K
Try closer to the end
of the alphabet

OK, enter your guess number 7 ? L
Yes, you're right. I was thinking of L.

It took you 7 guesses

```

60 PRINT "{CLR}":POKE53281,0:POKE53280,15
70 D=0:C=1
80 A=65+INT(RND(1)*26)
90 PRINT:PRINT
100 PRINT"WE'LL START OUR GAME OF 'ALPHA
BETICA' BY"
110 PRINT"GETTING YOU TO GUESS THE LETTE
R OF THE"
120 PRINT:PRINT"ALPHABET I'M THINKING OF
. THE QUICKER"
130 PRINT:PRINT"YOU GUESS IT, THE MORE C
HANCES YOU'LL"
140 PRINT:PRINT"HAVE TO SOLVE THE PROBLE
M POSED IN THE"
150 PRINT:PRINTTAB(7)"SECOND PART OF THE
GAME..."
160 GOSUB940
170 PRINT"{OR}OK, ENTER YOUR GUESS NUMBE
R"C
175 INPUTZ$
190 IFASC(Z$)=ATHEN270
200 GOSUB940
210 PRINT"{CYN}NO, IT'S NOT ";Z$
220 PRINTTAB(4);"{PUR}TRY CLOSER TO THE
";
230 IFASC(Z$)<ATHENPRINT"END"
235 IFASC(Z$)>ATHENPRINT"START"
240 PRINTTAB(12);"OF THE ALPHABET"
250 C=C+1
260 GOTO160
270 PRINT"{YEL}YES, YOU'RE RIGHT. I WAS
THINKING OF ";CHR$(A)
280 GOSUB940
290 PRINTTAB(8);"{GRN}IT TOOK YOU"C"GUES
SES"
300 GOSUB940
310 CH=20-C
320 PRINT"{LT GRN}THAT MEANS YOU HAVE"CH
"GUESSES TO SOLVE"
330 PRINT" THE SECOND PROBLEM I'M GOING
TO POSE"
340 GOSUB940

```



```

350 PRINT "{LT RED}IN THE SECOND PART OF
ALPHABETICA, YOU"
360 PRINT "HAVE"CH"GUESSES TO WORK OUT A
CODE MADE"
370 PRINTTAB(4)"UP OF FOUR LETTERS - CHO
OSE FROM"
380 PRINTTAB(10)"{YEL}A, B, C, D, E AND
F"
390 GOSUB940
400 PRINT "{WHT}YOU'LL GET A + FOR EACH L
ETTER WHICH IS"
410 PRINT "IN THE CODE, BUT IN THE WRONG
POSITION,"
420 PRINT "AND A * FOR EACH LETTER WHICH
IS RIGHT,"
430 PRINTTAB(11)"IN THE RIGHT POSITION"
440 GOSUB940
450 DIMA(4),B(4)
460 Y$=""
470 FORZ=1TO4
480 B(Z)=INT(RND(1)*6+1)
490 Y$=Y$+CHR$(64+B(Z))
500 NEXTZ
510 L=0
520 PRINT "{GRN}CHOOSE FROM: A B C D E F"
530 L=L+1
540 PRINT "{CYN}ENTER GUESS NUMBER"L
550 INPUTX$:R$=X$
560 IFLLEN(X$)<>4THEN550
570 K=0
580 J=K
590 FORZ=1TO4
600 A(Z)=ASC(X$)-64
610 B(Z)=ABS(B(Z))
620 IFA(Z)<>B(Z)THEN660
630 K=K+1
640 A(Z)=0
650 B(Z)=-B(Z)
660 X$=RIGHT$(X$, (LEN(X$)-1))
670 NEXTZ
680 FORH=1TO4
690 Z=1
700 IFA(H)<>B(Z)THEN740
710 J=J+1

```

```

720 B(Z)=-B(Z)
730 GOTO750
740 IFZ<4THENZ=Z+1:GOTO700
750 NEXTH
760 PRINT"{LT GRN}*@*@*@*@*@*@*@*@*@*@*@*
*@*@*@*@*@*@*@*@*@*@*@*"
770 PRINT"{YEL}"R$" SCORED ";
780 IFK=0THEN820
790 FORZ=1TOK
800 PRINT"{OR} *";
810 NEXTZ
820 IFJ=0THEN860
830 FORZ=1TOJ
840 PRINT"{OR} +";
850 NEXTZ
860 PRINT:PRINT
870 IFK<4ANDL<=CHTHEN530
880 IFK=4THENPRINT"{WHT}YOU DID IT IN"L"
GUESSES!"
890 PRINT"THE CODE WAS ";Y$
900 GOSUB940
930 RUN
940 FORQ=1TO1200:NEXTQ
960 PRINT"{CYN}*****
*****"
970 PRINT
980 RETURN

```

BURSTING CLOUDS

Once again you are being bombarded by aliens. But this time, the aliens have banded forces with other aliens, so a multitude of strange races are about to rain down upon you.

You are in an armored tank on the earth's crust.

Beware. Not only do the aliens move slowly downwards, but they can also move horizontally once they've landed, and may even burrow into the ground. Beware of the acid rain. As you rid the sky of one race, a new, different one will replace it. Some of the races do not move downward, but are happy instead to move across the screen, firing down at you.

Your controls:

J - rotate tank left
K - rotate tank right
Spacebar - fire your cannon

Beware of the acid rain as you defend our earth.

```
0 PRINT "{CLR}PLEASE WAIT FOR THE COUNT T  
0 REACH '15'."  
1 FORX=192TO206:PRINTX-191;" ";  
2 FORY=0TO63:READA:POKE2048+X*64+Y,A:NEX  
T:NEXT  
5 POKE650,129  
6 SC=1024:CL=55296  
7 QW=40:GV=1  
10 POKE53281,0:POKE53280,4:PRINT "{CLR}"  
20 Q=3:W=5  
50 POKE2047,224:X=128  
70 V=53248:POKEV+21,255:POKEV+29,255  
80 POKEV+46,15:POKEV+45,2:FORA=1TO6:POKE  
V+A+38,A:NEXT
```

```

100 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}{RVS DN}{GY 3}
"

110 FORA=1904TO2023:POKEA,160:POKEA+5427
2,9:NEXT:Z=3:AL=227:GOTO114
112 IFAL=228THENAL=232
113 IFAL>236THEN9000
114 POKE2046,228:FORA=2040TO2045:POKEA,A
L:NEXT
115 FORA=1TO6:FL(A)=0:NEXT:S=0
116 IFQW>120THENQW=120
46 POKEV+15,197:POKEV+14,X
130 B=60:D=80:F=100:H=120:J=140:L=160
140 A=INT(RND(1)*200)+30:C=INT(RND(1)*20
0)+30:E=INT(RND(1)*200)+30
150 G=INT(RND(1)*200)+30:I=INT(RND(1)*20
0)+30:K=INT(RND(1)*200)+30
499 GOTO2000

500 REM ** INPUT **
501 IFAS=0ANDRND(1)>.8THEN6000
502 IFAS>1THEN6020
503 IFSA=0ANDRND(1)>.8THEN6500
504 IFSA>1THEN6520
505 IFAA=0ANDRND(1)>.8THEN6600
506 IFAA>1THEN6620
507 IFSS=0ANDRND(1)>.8THEN6700
508 IFSS>1THEN6720
510 GETA$
511 POKEV+12,10:POKEV+13,10
512 IFS=6THENQ=Q+2:W=W+2:AL=AL+1:GOTO112
515 IFA$=" "THEN1000
520 IFA$="J"ANDZ=1THENX=X-10
530 IFA$="J"ANDZ=3THENZ=2:POKE2047,226:G
OTO600
540 IFA$="K"ANDZ=1THENZ=2:POKE2047,226:G
OTO600
550 IFA$="K"ANDZ=3THENX=X+10
560 IFA$="J"ANDZ=2THENZ=1:POKE2047,225
570 IFA$="K"ANDZ=2THENZ=3:POKE2047,224
600 IFX<23THENX=23
610 IFX>255THENX=255

```

```

620 POKEV+14,X
660 JU=PEEK(V+31)AND128
670 JP=PEEK(V+31)AND128:IFJP=128THEN7000
870 JI=PEEK(V+30)AND128
700 JK=PEEK(V+30)AND128:IFJK=128THEN7000
710 ONWEGOTO2071,2147,2211,2291,2376,244
6
1000 REM *** FIRE CANNON ***
1001 POKE54276,0:POKE54296,15:POKE54277,
138:POKE54276,129:POKE54273,17
1005 P=PEEK(V+30)AND64
1010 P=PEEK(2047)
1020 IFP=225THEN1100
1021 IFP=226THEN1200
1025 POKE2046,228
1026 IFX+16>=255THEN1031
1028 FORR=X+16TO255STEP5:POKEV+13,198:PO
KEV+12,R
1029 M=PEEK(53278)AND64:IFM=64THENMMM=1:G
OTO3000
1030 NEXT
1031 POKEV+16,64:FORR=16TO65STEP5
1032 POKEV+13,198:POKEV+12,R
1033 M=PEEK(V+30)AND64:IFM=64THEN3000
1034 NEXT:POKEV+16,0
1040 POKEV+12,10:POKEV+13,10
1050 GOTO510
1100 POKE2046,229
1105 IFX-10<20THEN510
1110 FORR=X-10TO20STEP-5:POKEV+13,196:PO
KEV+12,R
1120 M=PEEK(V+30)AND64:IFM=64THENMMM=2:GO
TO3000
1130 NEXT
1140 POKEV+12,10:POKEV+13,10
1150 GOTO510
1200 POKE2046,230
1205 IFX=255THENX=250:POKEV+14,X
1210 FORR=190TO50STEP-5:POKEV+12,X+3:POK
EV+13,R
1213 M=PEEK(V+30)AND64:IFM=64THENMMM=3:GO
TO3000
1215 NEXT

```

```

1220 POKEV+12, 10: POKEV+13, 10
1230 GOTO510
2000 REM ** MOVE ALIENS **
2010 IFFL(1)=1 THEN2070
2020 IFA>X THENA=A-Q
2030 IFA<X THENA=A+Q
2031 IFA>255 THENA=255
2040 IFB>=200 THENB=200: GOTO2060
2050 B=B+W
2060 POKEV, A: POKEV+1, B
2070 WE=1: GOTO500
2071 WE=0
2080 IFFL(2)=1 THEN2146
2090 IFC>X THENC=C-Q
2100 IFC<X THENC=C+Q
2120 IFC>255 THENC=255
2130 IFD>=200 THEND=200: GOTO2145
2140 D=D+W
2145 POKEV+2, C: POKEV+3, D
2146 WE=2: GOTO503
2147 WE=0
2150 IFFL(3)=1 THEN2210
2160 IFE>X THENE=E-Q
2170 IFE<X THENE=E+Q
2180 IFE>255 THENE=255
2190 IFF>=200 THENF=200: GOTO2205
2200 F=F+W
2205 POKEV+4, E: POKEV+5, F
2210 WE=3: GOTO505
2211 WE=0
2220 IFFL(4)=1 THEN2290
2230 IFG>X THENG=G-Q
2240 IFG<X THENG=G+Q
2250 IFG>255 THENG=255
2260 IFH>=200 THENH=200: GOTO2280
2270 H=H+W
2280 POKEV+6, G: POKEV+7, H
2290 WE=4: GOTO507
2291 WE=0
2310 IFFL(5)=1 THEN2375
2320 IFI>X THENI=I-Q
2330 IFI<X THENI=I+Q
2340 IFI>255 THENI=255
2350 IFJ>=200 THENJ=200: GOTO2370

```

```

2360 J=J+W
2370 POKEV+8, I: POKEV+9, J
2375 WE=5: GOTO500
2376 WE=0
2380 IFFL(6)=1 THEN2445
2390 IFK>X THENK=K-Q
2400 IFK<X THENK=K+Q
2410 IFK>255 THENK=255
2420 IFL>=200 THENL=200: GOTO2440
2430 L=L+W
2440 POKEV+10, K: POKEV+11, L
2445 WE=6: GOTO503
2446 WE=0
2450 GOTO2000
3000 REM ** ALIEN HIT **
3010 A1=PEEK(V+30) AND1: IFA1=1 THENPOKE204
0, 231: U=1: GOTO4000
3020 A2=PEEK(V+30) AND2: IFA2=2 THENPOKE204
1, 231: U=2: GOTO4000
3030 A3=PEEK(V+30) AND4: IFA3=4 THENPOKE204
2, 231: U=3: GOTO4000
3040 A4=PEEK(V+30) AND8: IFA4=8 THENPOKE204
3, 231: U=4: GOTO4000
3050 A5=PEEK(V+30) AND16: IFA5=16 THENPOKE2
044, 231: U=5: GOTO4000
3060 A6=PEEK(V+30) AND32: IFA6=32 THENPOKE2
045, 231: U=6: GOTO4000
3070 IFMM=1 THEN1030
3080 IFMM=2 THEN1130
3090 IFMM=3 THEN1215
4000 REM ** IF ALIEN HIT THEN: **
4006 FORT=1 TO50: NEXT
4007 POKE54276, 0: POKE54296, 15: POKE54277,
150: POKE54276, 129: POKE54273, 100
4010 IFU=1 THENPOKEV, 40: POKEV+1, 10: U=0: FL
(1)=1: S=S+1: GOTO510
4020 IFU=2 THENPOKEV+2, 70: POKEV+3, 10: U=0:
FL(2)=1: S=S+1: GOTO510
4030 IFU=3 THENPOKEV+4, 100: POKEV+5, 10: U=0
: FL(3)=1: S=S+1: GOTO510
4040 IFU=4 THENPOKEV+6, 130: POKEV+7, 10: U=0
: FL(4)=1: S=S+1: GOTO510
4050 IFU=5 THENPOKEV+8, 160: POKEV+9, 10: U=0
: FL(5)=1: S=S+1: GOTO510

```

```

4060 IFU=6THENPOKEV+10,190:FOKEV+11,10:U
=0:FL(6)=1:S=S+1:GOTO510
6000 REM ** RAIN **
6010 AS=1:AS=INT(RND(1)*35)+3
6020 POKESC+AS,32:AS=AS+QW:POKESC+AS,33:
POKEAS+CL,7
6030 IFSC+AS>1824THENPOKESC+AS,32:AS=0
6040 GOTO510
6500 SA=1:SA=INT(RND(1)*35)+3
6520 POKESC+SA,32:SA=SA+QW:POKESC+SA,33:
POKESA+CL,7
6530 IFSC+SA>1824THENPOKESC+SA,32:SA=0
6540 GOTO510
6600 AA=1:AA=INT(RND(1)*35)+3
6620 POKESC+AA,32:AA=AA+QW:POKESC+AA,33:
POKEAA+CL,7
6630 IFSC+AA>1824THENPOKESC+AA,32:AA=0
6640 GOTO510
6700 SS=1:SS=INT(RND(1)*35)+3
6720 POKESC+SS,32:SS=SS+QW:POKESC+SS,33:
POKESS+CL,7
6730 IFSC+SS>1824THENPOKESC+SS,32:SS=0
6740 GOTO510
7000 REM ** THE END **
7020 POKE54276,0
7030 FORX=255TO0STEP-1:POKE54276,129:POK
E54278,240:POKE54273,X:NEXT
7040 POKE2047,231:POKE54296,0
7050 FORX=15TO0STEP-1:POKE54276,129:POKE
54273,40:POKE54296,X
7060 FORT=1TO20:NEXTT:NEXT
7070 POKE54276,0:POKE54296,0:POKE54278,0
7071 ME=ME+1:IFME=3THEN12000
7075 IFGV=2THENPOKE54278,0:POKE2047,224:
Z=3:GOTO9160
7080 POKE54278,0:POKEV+1,10:POKEV+3,10:P
OKEV+5,10:POKEV+7,10:POKEV+9,10
7090 Z=3:POKEV+11,10:X=128:POKE2047,224
7100 IFGV=1THEN114
8000 REM ** SPRITE DATA **
8010 REM ** TANK RIGHT **
8020 DATA0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,0,0,0,0,0,0,0,0,0,0,0,0,0
8030 DATA15,240,0,31,248,0,31,255,252,63

```



```

0,112,0,0,32,0,0,0,0,0,0,0,0,0,0,0,0,0
9000 REM ** SECOND STAGE **
9010 POKEV+21,128:S=0:GV=2
9020 POKE2040,237:POKE2042,237:POKE2044,
237:POKE2041,238:POKE2043,238
9030 POKE2045,238
9100 Q1=INT(RND(1)*15)+2:Q2=INT(RND(1)*1
5)+2:Q3=INT(RND(1)*15)+2
9110 B=60:F=100:J=150:A=INT(RND(1)*200)+
20:E=INT(RND(1)*200)+20
9120 I=INT(RND(1)*200)+20
9130 C=0:D=0:G=0:H=0:K=0:L=0
9140 POKEV,A:POKEV+1,B:POKEV+4,E:POKEV+5
,F:POKEV+8,I:POKEV+9,J
9150 POKEV+21,255
9160 GOTO9500
9165 IFFR(1)=1THEN9175
9170 A=A-Q1:IFA<20THENA=250
9171 POKEV,A
9175 IFFR(2)=1THEN9185
9180 E=E-Q2:IFE<20THENE=250
9181 POKEV+4,E
9185 IFFR(3)=1THEN9210
9190 I=I-Q3:IFI<20THENI=250
9200 POKEV+8,I
9210 IFFR(1)=1ANDQ4=0THEN9230
9211 IFQ4=0ANDRND(1)>.8THEN9700
9220 IFQ4=1THEN9720
9230 IFFR(2)=1ANDQ5=0THEN9250
9231 IFQ5=0ANDRND(1)>.8THEN9800
9240 IFQ5=1THEN9820
9250 IFFR(3)=1ANDQ6=0THEN9270
9251 IFQ6=0ANDRND(1)>.8THEN9900
9260 IFQ6=1THEN9920
9270 GOTO9160
9500 REM ** INPUT **
9510 GETA$
9511 POKEV+12,10:POKEV+13,10
9515 IFA$=" "ANDPEEK(2047)=226THEN10000
9520 IFA$="J"ANDZ=1THENX=X-10
9530 IFA$="J"ANDZ=3THENZ=2:POKE2047,226:
GOTO9600
9540 IFA$="K"ANDZ=1THENZ=2:POKE2047,226:

```

```

GOTO9600
9550 IFA$="K"ANDZ=3THENX=X+10
9560 IFA$="J"ANDZ=2THENZ=1:POKE2047,225
9570 IFA$="K"ANDZ=2THENZ=3:POKE2047,224
9600 IFX<23THENX=23
9610 IFX>255THENX=255
9620 POKEV+14,X
9660 JU=PEEK(V+31)AND128
9670 JP=PEEK(V+31)AND128:IFJP=128THEN700
0
9690 JI=PEEK(V+30)AND128
9695 JK=PEEK(V+30)AND128:IFJK=128THEN700
0
9696 IFS=3THENAL=227:GV=1:GOTO114
9697 GOTO9170
9700 REM *****
9705 POKE2041,238
9710 Q4=1:C=A+3:D=B+5
9720 D=D+10:IFD>205THENQ4=0:C=10:D=10
9730 POKEV+2,C:POKEV+3,D
9740 GOTO9230
9800 REM *****
9805 POKE2043,238
9810 Q5=1:G=E+3:H=F+5
9820 H=H+10:IFH>205THENQ5=0:G=20:D=10
9830 POKEV+6,G:POKEV+7,H
9840 GOTO9250
9900 REM *****
9905 POKE2045,238
9910 Q6=1:K=I+3:L=J+5
9920 L=L+10:IFL>205THENQ6=0:K=30:L=10
9930 POKEV+10,K:POKEV+11,L
9940 GOTO9160
10000 POKE2046,230
10001 POKE54276,0:POKE54296,15:POKE54277
,138:POKE54276,129:POKE54273,17
10005 IFX=255THENX=250:POKEV+14,X
10010 FORR=190TO50STEP-5:POKEV+12,X+3:PO
KEV+13,R
10020 M=PEEK(V+30)AND64:IFM=64THEN10060
10030 NEXT
10040 POKEV+12,10:POKEV+13,10
10050 GOTO9520
10060 S1=PEEK(V+30)AND1:IFS1=1THEN10200

```

```

10070 S2=PEEK(V+30)AND4:IFS2=4THEN10250
10080 S3=PEEK(V+30)AND16:IFS3=16THEN10300
0
10090 S4=PEEK(V+30)AND2:IFS4=2THEN10350
10100 S5=PEEK(V+30)AND8:IFS5=8THEN10400
10110 S6=PEEK(V+30)AND32:IFS6=32THEN10450
0
10120 GOTO10030
10200 POKE2040,231:S=S+1:GOTO11000
10250 POKE2042,231:S=S+1:GOTO11000
10300 POKE2044,231:S=S+1:GOTO11000
10350 POKE2041,231:GOTO11000
10400 POKE2043,231:GOTO11000
10450 POKE2045,231:GOTO11000
11000 FORT=1TO50:NEXT
11010 POKE54276,0:POKE54296,15:POKE54277
,150:POKE54276,129:POKE54273,100
11020 IFS1=1THENPOKEV,30:POKEV+1,10:FR(1
)=1:GOTO9520
11030 IFS2=4THENPOKEV+4,80:POKEV+5,10:FR
(2)=1:GOTO9520
11040 IFS3=16THENPOKEV+8,130:POKEV+9,10:
FR(3)=1:GOTO9520
11050 IFS4=2THENPOKEV+2,20:POKEV+3,10:Q4
=0:C=10:D=20:GOTO9520
11060 IFS5=8THENPOKEV+6,30:POKEV+7,10:Q5
=0:G=10:H=20:GOTO9520
11070 IFS6=32THENPOKEV+10,40:POKEV+11,10
:Q6=0:K=10:L=20:GOTO9520
11080 GOTO9520
12000 POKEV+21,0:POKE54276,0:POKE54296,0
:POKE54278,0:POKE54277,0
12010 POKE54273,0
12020 PRINT"{CLR}{WHT}WOULD YOU LIKE ANO
THER GAME?"
12030 GETA$
12040 IFA$="N"THENEND
12050 IFA$<>"Y"THEN12030
12060 RUN5

```

READY.

GO FISH

The computer plays a mean hand in this electronic version of the well-known card game. The aim of the game is to build up a series of 'books', where a book is all four of a particular card (such as four Aces, or four nines).



You start the game with five cards each. You can see your cards but (of course) you cannot see the computer's hand. The two players take it in turns to ask their opponents for a particular card which they need to help build up a set. If the player being asked does not have a requested card, the 'asker' must GO FISH (that is, select a card from those which have not been dealt).

Here are the first few exchanges in one game I played:

Your cards:

13 6 4 11 10

Do you have a 5 (Y or N)? N

I must go fish

What card do you want? 13

I do not have one. You must go fish

Your card is 6

You have 0 books

I have 0 books

Your cards:

4 6 6 10 11 13

Do you have an 8 (Y or N)? N

I must go fish

What card do you want? 6

I have one!

You have 0 books

I have 0 books

Your cards:

4 6 6 6 10 11 13

Do you have a 13 (Y or N)? Y

What card do you want? 4

I have one!

You have 0 books
I have 0 books

As the game continues, the number of cards each of you holds naturally increases. The computer helps you by keeping your hand in order:

Your cards:

2 3 4 4 5 6 6 6 8 9 9 9 11
11 11

Do you have a 1 (Y or N)? N

I must go fish

What card do you want? 6

I do not have one. You must go fish

Your card is 10

You have 0 books
I have 0 books

Your cards:

2 3 4 4 5 6 6 6 8 9 9 9 10
11 11 11

Do you have a 10 (Y or N)? Y

What card do you want? 11

I do not have one. You must go fish

Your card is 13

You have 0 books
I have 0 books

In due course, you'll start forming 'books' (groups of four similar cards):

Your cards:

2 2 2 3 3 3 3 6 6 6 6 9 9
9 10 11 11 11 11

Do you have a 1 (Y or N)? N

I must go fish

What card do you want? 2

I do not have one. You must go fish

Your card is 5

You have 3 books

I have 2 books

The game ends when all the books have been formed, or the time limit has been exceeded:

We've run out of time, so

that's the end of the game...

and it's a draw

My cards:

1 1 1 1 4 4 4 4 8 8 8 8 10
10 10 10 12 12 12 12 13 13 13
13

Your cards:

2 2 2 2 3 3 3 3 5 5 6 6 6
6 7 7 7 7 9 9 9 9 11 11 11
11

When you're ready to forgo pasteboard for the electronic equivalent, hitch your computer to the following program, and wait for it to do the Micro Shuffle:

```
10 REM GO FISH
20 GOSUB1280:REM INITIALISE
30 REM *** INITIAL DEAL ***
40 FORJ=1TO5
50 C(J)=A(J)
60 H(J)=A(J+5)
70 NEXT J
80 REM *** MAJOR GAME LOOP ***
90 PRINT"{CLR}":PRINT:PRINT
100 HZ=0
110 PRINT"YOUR CARDS:"
120 FORJ=1TO52
130 IFH(J)<>0THENHZ=HZ+1:PRINTH(J);
140 NEXT
150 REM *** COMP. CHECKS IT'S CARDS ***
160 CZ=0
170 FORJ=1TO52
180 IFC(J)<>0THENCZ=CZ+1
190 NEXTJ
200 TU=0
210 TU=TU+1
220 IFTU=100THENPRINTTAB(8);"NO REQUEST"
:GOTO410
230 M=INT(RND(1)*CZ)+1:IFC(M)=0ORC(M)=LA
ANDRND(1)>.2THEN210
240 FL=0
250 FORT=1TOCB
260 IFC(M)=Q(T)THENFL=1
270 NEXT T
280 IFFL=1THEN230
290 LA=C(M)
300 PRINT:PRINT
310 PRINT"DO YOU HAVE A";
320 IFC(M)=8ORC(M)=11THENPRINT"N";
330 PRINTC(M)"(Y OR N)";
340 INPUTK$:IFK$<>"Y"ANDK$<>"N"THEN340
350 IFK$<>"Y"THEN400
360 J=0
370 J=J+1
```

```

380 IFH(J)=C(M) THENH(J)=0:C(CZ+1)=C(M):G
OTO420
390 IFJ<HZ THEN370
400 PRINT:PRINT"I MUST GO FISH"
410 C(CZ+1)=A(X):X=X+1
420 PRINT:PRINT"WHAT CARD DO YOU WANT"
430 INPUTP:IFP<0ORP>13 THEN430
440 IFP=0 THENPRINT:PRINT"YOU MUST SELECT
  A CARD":PRINT:GOTO560
450 FL=0
460 FORM=1TOHZ
470 IFH(M)=P THENFL=1
480 NEXT M
490 IFFL=0 THENPRINT:PRINTTAB(7);"NO CHEA
TING!":GOTO420
500 PRINT
510 CC=0
520 CC=CC+1
530 IFC(CC)=P THENPRINT"I HAVE ONE!":H(HZ
+1)=C(CC):C(CC)=0:GOTO580
540 IFCC<TT THEN520
550 PRINT"I DON'T HAVE ONE. YOU MUST GO
FISH"
560 PRINT:PRINT"YOUR CARD IS"A(X)
570 H(HZ+1)=A(X):X=X+1
580 REM *** PURGE ZEROES ***
590 REM *** FIRST COPY ARRAYS ***
600 TT=HZ:IFCZ>HZ THENTT=CZ
610 TT=TT+4
620 FORM=1TOTTT
630 E(M)=C(M):C(M)=0
640 F(M)=H(M):H(M)=0
650 NEXT M
660 REM *** COMPUTER PURGE ***
670 M=0:N=1
680 M=M+1
690 IFE(M)=0 THEN710
700 C(N)=E(M):N=N+1
710 IFM<TT THEN680
720 REM *** HUMAN PURGE ***
730 M=0:N=1
740 M=M+1
750 IFF(M)=0 THEN770
760 H(N)=F(M):N=N+1

```

```

770 IFM<TTTHEN740
780 REM *** COPY ARRAYS AGAIN ***
790 FORM=1TOTT
800 E(M)=C(M):C(M)=0
810 F(M)=H(M):H(M)=0
820 NEXT M
830 REM *** SORT INTO ORDER ***
840 REM *** COMPUTER FIRST ***
850 M=0
860 FORJ=1TO13
870 FORL=1TO26
880 IFE(L)=JTHENM=M+1:C(M)=J:E(L)=0
890 NEXT L
900 NEXT J
910 REM *** NOW HUMAN ***
920 M=0
930 FORJ=1TO13
940 FORL=1TO26
950 IFF(L)=JTHENM=M+1:H(M)=J:F(L)=0
960 NEXT L
970 NEXT J
980 REM *** ASSIGN, COUNT BOOKS ***
990 HB=0:CB=0
1000 FORZ=1TOTT
1010 IFC(Z)=C(Z+1)ANDC(Z+1)=C(Z+2)ANDC(Z
+2)=C(Z+3)ANDC(Z)<>0THENCB=CB+1:Q(CB)=C(
Z)
1020 IFH(Z)=H(Z+1)ANDH(Z+1)=H(Z+2)ANDH(Z
+2)=H(Z+3)ANDH(Z)<>0THENHB=HB+1
1030 NEXT Z
1040 PRINT:PRINT"YOU HAVE"HB"BOOK";
1050 IFHB<>1THENPRINT"S"
1055 IFHB=1THENPRINT
1060 PRINT"I HAVE"CB"BOOK";
1070 IFCB<>1THENPRINT"S"
1075 IFCB=1THENPRINT
1080 FORY=1TO1000:NEXT Y
1090 IFX<53THEN80
1100 REM *** END OF GAME ***
1110 PRINT:PRINT"WE'VE RUN OUT OF TIME,
50"
1120 PRINT:PRINT"THAT'S THE END OF THE G
AME..."

```

```

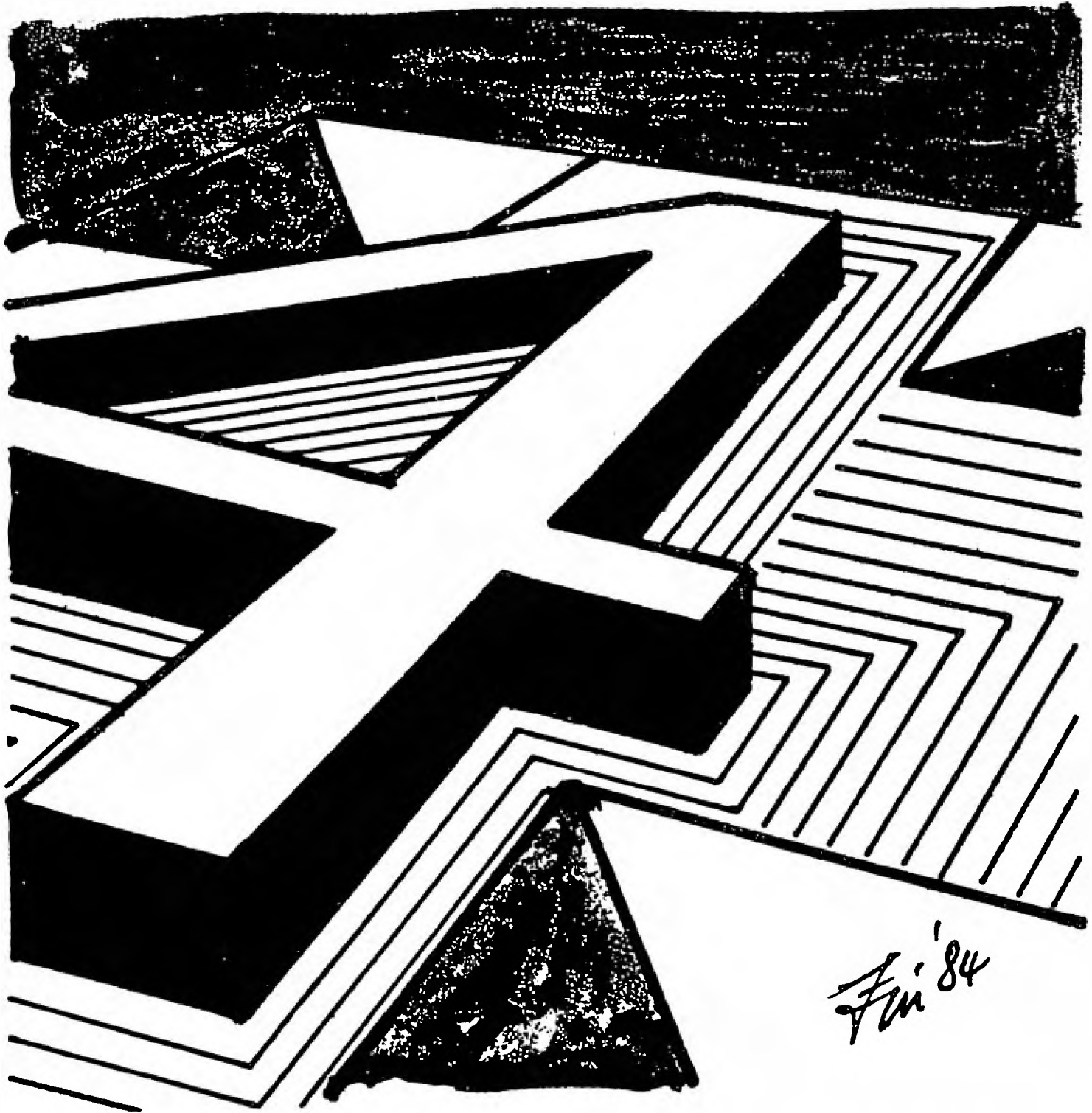
1130 FOR Y=1 TO 1000: NEXT Y
1140 PRINT
1150 IF HB > CB THEN PRINT "AND YOU'RE THE WIN
NER!"
1160 IF CB > HB THEN PRINT "AND I'M THE WINNER
!"
1170 IF CB = HB THEN PRINT "AND IT'S A DRAW."
1180 PRINT: PRINT "MY CARDS: ": PRINT
1190 FOR Y=1 TO 52
1200 IF C(Y) < > 0 THEN PRINT C(Y);
1210 NEXT: PRINT: PRINT
1220 PRINT "YOUR CARDS: ": PRINT
1230 FOR Y=1 TO 52
1240 IF H(Y) < > 0 THEN PRINT H(Y);
1250 NEXT: PRINT: PRINT
1260 END
1270 REM *****
1280 REM INITIALISE
1290 POKE 53281, 0
1300 DIM C(56), H(56), E(56), F(56), A(52), Q(
13)
1310 HB=0: CB=0: REM 'BOOKS' COUNT
1320 X=11: REM NEXT CARD TO DEAL
1330 TT=8: REM NO. OF CARDS TO CHECK
1340 LA=0
1350 REM MOSES/OAKFORD SHUFFLE
1360 FOR J=0 TO 51
1370 K=INT(J/4)+1
1380 A(J+1)=K
1390 NEXT J
1400 FOR J=52 TO 2 STEP -1
1410 Z=INT(RND(1)*J)+1
1420 H=A(Z): A(Z)=A(J)
1430 A(J)=H: NEXT J
1440 RETURN

```

READY.

FOUR SQUARE

This is an unusual board game, in which you have to try and possess as many squares in a group of four as you can. This should be clear when you look at the board at the start of the game:



My score: 0 Your score: 0

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| A | . | . | . | . | . | . | . |
| B | . | . | . | . | . | . | . |
| C | . | . | H | . | . | . | . |
| D | . | . | . | . | . | . | . |
| E | . | . | . | . | C | . | . |
| F | . | . | . | . | . | . | . |
| G | . | . | . | . | . | . | . |

ENTER YOUR MOVE (LETTER, NO.)? D2

The human has moved into H3 and the computer moves into E5. Next, the human moves into D2:

My score: 0 Your score: 0

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| A | . | . | . | . | . | . | . |
| B | . | . | . | . | . | . | . |
| C | . | . | H | . | . | . | . |
| D | . | H | . | . | . | C | . |
| E | . | . | . | . | C | . | . |
| F | . | . | . | . | . | . | . |
| G | . | . | . | . | . | . | . |

Very shortly, the human looks like getting a group of four squares, so the computer moves into D1 to frustrate that aim:

My score: 0 Your score: 0

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| A | . | . | . | . | . | . | . |
| B | . | . | . | . | . | . | . |
| C | H | H | H | . | . | . | . |
| D | C | H | . | . | . | C | . |
| E | . | . | . | . | C | . | C |
| F | . | . | . | . | . | . | . |
| G | . | . | . | . | . | . | . |

ENTER YOUR MOVE (LETTER, NO.)? D3

As the game progresses, the possibilities for success by both sides increase:

My score: 1 Your score: 2

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| A | . | . | . | . | . | . | . |
| B | . | C | H | H | . | . | C |
| C | H | H | H | H | . | . | . |
| D | C | H | H | C | C | C | . |
| E | . | H | C | C | C | H | C |
| F | . | . | . | . | . | . | . |
| G | . | . | . | . | . | . | . |

ENTER YOUR MOVE (LETTER, NO.)? E5

Note that one particular symbol can be part of more than one group of four. For example, here you can see that the middle H is part of two groups of four:

```

. . H H . . .
. . H H H . .
. . . H H . .

```

The computer keeps track of the totals as the game unfolds:

My score: 4 Your score: 4

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| A | . | . | H | H | C | . | . |
| B | H | C | H | H | H | C | C |
| C | H | H | H | H | C | C | C |
| D | C | H | H | C | C | C | C |
| E | H | H | C | C | C | H | C |
| F | H | H | H | H | . | C | C |
| G | H | C | . | . | C | . | . |

ENTER YOUR MOVE (LETTER, NO.)? A2

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| A | . | H | H | H | C | . | . |
| B | H | C | H | H | H | C | C |
| C | H | H | H | H | C | C | C |
| D | C | H | H | C | C | C | C |
| E | H | H | C | C | C | H | C |
| F | H | H | H | H | . | C | C |
| G | H | C | . | . | C | C | . |

Until, finally, one player (in this case, the computer) proves victorious:

My score: 6 Your score: 5

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| A | C | H | H | H | C | H | H |
| B | H | C | H | H | H | C | C |
| C | H | H | H | H | C | C | C |
| D | C | H | H | C | C | C | C |
| E | H | H | C | C | C | H | C |
| F | H | H | H | H | C | C | C |
| G | H | C | H | H | C | C | C |

That's the end of the game

And I'm the winner!

When you're ready for a four square battle, here's the listing to allow you to do it:

```
10 REM FOUR SQUARE
20 GOSUB850:REM INITIALISE
30 GOSUB730:REM PRINT BOARD
40 GOSUB640:REM PLAYER MOVE
50 GOSUB510:REM ASSESS BOARD
60 GOSUB730:REM PRINT BOARD
70 IFCO=49THEN130
80 GOSUB210:REM COMPUTER MOVES
90 GOSUB510:REM ASSESS BOARD
100 GOSUB730:REM PRINT BOARD
110 IFCO<>49THEN40
120 REM *****
130 REM END OF GAME
140 PRINT:PRINT"THAT'S THE END OF THE GA
ME"
```

```

150 PRINT:PRINT
160 IFHS>CSTHENPRINT"YOU'RE THE WINNER!"
170 IFC>HSTHENPRINT"AND I'M THE WINNER!"
180 IFHS=CSTHENPRINT"WE SEEM TO HAVE COME TO A DRAW!"
190 END
200 REM *****
210 REM COMPUTER MOVES
220 PRINT"MY MOVE..."
230 REM ** WIN/BLOCK MOVE **
240 MO=0
250 J=C
260 X=0
270 X=X+1
280 IFA(X)=JANDA(X+1)=JANDA(X+10)=JANDA(X+11)=NTHENMO=X+11:GOTO470
290 IFRND(1)>.9ANDJ=HTHEN320
300 IFA(X)=JANDA(X+10)=JANDA(X+11)=JANDA(X+1)=NTHENMO=X+1:GOTO470
310 IFRND(1)>.9ANDJ=HTHEN330
320 IFA(X)=JANDA(X+1)=JANDA(X+11)=JANDA(X+10)=NTHENMO=X+10:GOTO470
330 IFA(X)=NANDA(X+1)=JANDA(X+10)=JANDA(X+11)=JTHENMO=X:GOTO470
340 IFX<67THEN270
350 IFJ=CTHENJ=H:GOTO260
360 REM ** MIRROR MOVE **
370 IFA(68-K)=NTHENMO=68-K:GOTO470
380 REM ** RANDOM MOVE **
390 X=0
400 X=X+1
410 Z=INT(RND(1)*67)+1
420 IFA(Z)=NTHENMO=Z:GOTO470
430 IFX<500THEN400
440 PRINT:PRINT
450 PRINT"I CONCEDE THE GAME CHAMP!"
460 END
470 REM ** MAKE MOVE **
480 A(MO)=C
490 RETURN
500 REM *****
510 REM ASSESS BOARD
520 CO=0
530 HS=0:REM HUMAN SCORE

```

```

540 CS=0:REM COMPUTER SCORE
550 FORZ=1TO56
560 IFA(Z)=HANDA(Z+1)=HANDA(Z+10)=HANDA(
Z+11)=HTHENHS=HS+1
570 IFA(Z)=CANDA(Z+1)=CANDA(Z+10)=CANDA(
Z+11)=CTHENCS=CS+1
580 NEXT Z
590 FORZ=1TO67
600 IFA(Z)=CORA(Z)=HTHENCO=CO+1
610 NEXT Z
620 RETURN
630 REM *****
640 REM ACCEPT PLAYER MOVE
650 REM ENTER 0 TO END GAME
660 PRINT"ENTER YOUR MOVE (LETTER, NO.)"
665 INPUTB$
670 IFASC(B$)=ASC("0")THEN140
680 IFLLEN(B$)<>2ORASC(B$)<65ORASC(B$)>72
THEN660
690 K=10*(ASC(B$)-54)+VAL(RIGHT$(B$,1))-
110
695 IFA(K)=67THEN660
700 A(K)=H
710 RETURN
720 REM *****
730 REM PRINT BOARD
740 PRINT"{CLR}":PRINT:PRINT
750 PRINT"MY SCORE:"CS" YOUR SCORE:"HS:
PRINT:PRINT
760 PRINT" 1 2 3 4 5 6 7"
770 FORJ=0TO68
780 IF10*INT(J/10)=JTHENPRINT:PRINTCHR$(
65+INT(J/10));" ";:IFJ>1THENPRINT" ";
790 IFA(J)=ETHEN810
800 PRINTCHR$(A(J));" ";
810 NEXT J
820 PRINT:PRINT:PRINT
830 RETURN
840 REM *****
850 REM INITIALISATION
860 REM
870 PRINT"{CLR}":PRINT:PRINT
880 PRINT"PLEASE STAND BY..."
890 DIMA(99)

```

```
900 E=-9:REM OFF BOARD
910 C=ASC("C"):REM COMPUTER PIECE
920 H=ASC("H"):REM HUMAN PIECE
930 N=ASC("."):REM NOT FILLED IN
940 FORJ=1TO99
950 A(J)=E
960 Z=J-10*INT(J/10)
970 IFZ=0ORZ=8ORZ=9THEN1000
980 IFJ>67THEN1000
990 A(J)=N
1000 NEXT J
1010 RETURN
```

READY.

IMPERIAL CASTLE

You've been zapped away in a time machine, to land in an isolated castle, in the year 1638. You have to try and get out of the castle safely.

Here's the vocabulary you can use:

N, S, E, W
GO, MOVE
GET, PICK
KILL, FIGHT
QUIT
MELT
DIG
CROSS
PRESS
KISS
OPEN
INVENTORY

Time to tackle the dangers of Imperial Castle.

```
10 PRINT "{CLR}":POKE53281,0:POKE53280,2
100 REM *****
110 REM *** MAIN ROUTINE ***
120 REM *****
130 GOSUB2000:REM INITIALISE
135 IFC$(3)=" "THEN160
140 IFRO>13THEN144
141 ONROGOSUB9010,9050,9100,9150,9200,92
50,9300,9350,9400,9450,9500,9550,9600
142 GOTO160
144 IFRO>25THEN148
145 Z=RO-13
146 ONZGOSUB9650,9700,9750,9800,9850,990
0,9950,10000,10050,10100,10150,10200
147 GOTO160
148 IFRO>35THEN152
149 Z=RO-25
150 ONZGOSUB10250,10300,10350,10400,1045
```

```

0, 10500, 10550, 10600, 10650, 10700
151 GOTO160
152 IFRO>45THEN156
153 Z=RO-35
154 ONZGOSUB10750, 10800, 10850, 10900, 1095
0, 11000, 11050, 11100, 11150, 11200
155 GOTO160
156 Z=RO-45:ONZGOSUB11250, 11300, 11350, 11
400
160 REM
165 IFRO=4ANDC$(3)=" "THEN180
170 IFC$(3)=" "THENPRINT "{OR}IT IS TOO DA
RK TO SEE ANYTHING. {LT BLU}":GOTO240
180 GOSUB5000
190 PRINT:PRINT "{GRN}DIRECTIONS:";
200 IFA(RO, 1)<>0THENPRINT " {LT GRN}NORTH
,";
210 IFA(RO, 2)<>0THENPRINT " {LT GRN}SOUTH
";
220 IFA(RO, 3)<>0THENPRINT " {LT GRN}EAST,
";
230 IFA(RO, 4)<>0THENPRINT " {LT GRN}WEST.
"
235 PRINT:PRINT
240 GOSUB1000
250 PRINT "{HOME}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{CUR DN}{CUR DN}{CUR DN}{CUR DN}
{CUR DN}{RVS ON}{GRN}
.";
255 PRINT "{RVS ON}{LT GRN}
";
256 PRINT "{RVS ON}{GRN}
"

290 GOTO135
1000 REM *****
1010 REM ** INPUT **
1020 REM *****
1040 INPUT "OK. WHAT NOW";A$
1041 IFA$="N"THENA$="NORTH"
1042 IFA$="S"THENA$="SOUTH"
1043 IFA$="E"THENA$="EAST"

```

```

1044 IFA$="W" THEN A$="WEST"
1050 L$=LEFT$(A$, 2): IFL$="GO" OR L$="NO" OR
L$="NO" OR L$="SO" OR L$="EA" THEN 1500
1055 IFL$="WE" THEN 1500
1056 IF LEFT$(A$, 4)="QUIT" THEN PRINT: PRINT
"{WHT}ADVENTURE OVER, COWARD!!": END
1060 IF LEFT$(A$, 4)="PICK" OR LEFT$(A$, 3)="
GET" THEN 1600
1070 IF LEFT$(A$, 4)="FIGHT" OR LEFT$(A$, 4)="
KILL" THEN 1700
1075 IF LEFT$(A$, 4)="MELT" THEN 8000
1080 IF LEFT$(A$, 3)="DIG" THEN 1800
1090 IF LEFT$(A$, 5)="CROSS" THEN 1850
1100 IF LEFT$(A$, 5)="PRESS" THEN 1900
1110 IF LEFT$(A$, 4)="KISS" THEN 1950
1111 IF LEFT$(A$, 4)="OPEN" THEN 7000
1112 IF RIGHT$(A$, 9)="INVENTORY" THEN GOSUB
6000: RETURN
1130 PRINT: PRINT "{GY 3}SORRY, BUT THAT C
OMMAND DOES NOT COMPUTE{LT BLU}"
1140 RETURN
1500 REM *** MOVE ***
1510 L$=RIGHT$(A$, 4): IFL$="EAST" AND A(RO,
3)=0 THEN 1580
1511 IFL$="WEST" AND A(RO, 4)=0 THEN 1580
1512 IFL$="EAST" AND RO=13 AND C$(2)=" " THEN P
RINT "YOU JUST FELL DOWN A PIT!": END
1513 IFL$="WEST" AND RO=28 AND DI(3)<>1 THEN P
RINT "THERE IS A CAVED IN TUNNEL": RETURN
1514 IFL$="WEST" AND RO=45 AND PR<>1 THEN PRIN
T "THIS DOOR CAN BE OPENED, BUT NOT BY A"
1515 IFL$="WEST" AND RO=45 AND PR<>1 THEN PRIN
T "KEY": RETURN
1516 IFL$="EAST" AND RO=34 AND DI(1)=0 THEN PR
INT "YOU NEED THE GOLD KEY.": RETURN
1517 L$=RIGHT$(A$, 5)
1518 IFL$="NORTH" AND RO=41 AND C$(10)=" " THE
N PRINT "YOU NEED THE CRYSTAL.": RETURN
1519 IFL$="NORTH" AND RO=46 AND DI(2)=0 THEN P
RINT "YOU NEED THE SILVER KEY.": RETURN
1520 IFL$="NORTH" AND A(RO, 1)=0 THEN 1580
1530 IFL$="SOUTH" AND A(RO, 2)=0 THEN 1580
1540 IFL$="NORTH" THEN RO=A(RO, 1)
1550 IFL$="SOUTH" THEN RO=A(RO, 2)

```



```

1555 L$=RIGHT$(A$,4)
1560 IFRO=13ANDL$="EAST"THENPRINT"A ROPE
EXTENDS ACROSS THE LONG PIT.":RETURN
1561 IFRO=14ANDL$="WEST"THENPRINT"THERE
IS ONE SOLITARY ROPE ACROSS THE PIT":R
ETURN
1565 IFL$="WEST"THENRO=A(RO,4)
1570 IFL$="EAST"THENRO=A(RO,3)
1575 RETURN
1580 PRINT"{RVS ON}NO EXIT!{RVS OFF}"
1590 RETURN
1600 REM ***PICK UP OBJECTS ***
1604 IFRO=4THEN1615
1605 IFA(RO,5)<>1THENPRINT"THERE IS NOTH
ING TO PICK UP.":RETURN
1610 IFC$(3)=" "THENPRINT"{OR}I CAN'T SEE
WHERE IT IS!{LT BLU}":RETURN
1615 IFRO=30ANDZO=0THENPRINT"THERE IS A
ZOMBIE IN THE WAY!!":RETURN
1616 IFRO=19ANDKI=0THENPRINT"THERE IS A
SLEEPING PRINCESS THERE!!":RETURN
1617 IFRO=31ANDWI=0THENPRINT"THE WIZARD
HAS IT!":RETURN
1620 IFRO=4ANDRIGHT$(A$,7)="LANTERN"THEN
C$(3)=" LANTERN":GOTO1696
1630 IFRO=9ANDRIGHT$(A$,4)="ROPE"THENC$(
2)=" ROPE":GOTO1696
1640 IFRO=35ANDRIGHT$(A$,6)="SHOVEL"THEN
C$(1)=" SHOVEL":GOTO1696
1650 IFRO=30ANDZO=1ANDRIGHT$(A$,8)="DETE
CTOR"THENC$(4)=" METAL DETECTOR":GOTO169
6
1660 IFRO=31ANDWI=1ANDRIGHT$(A$,4)="WAND
"THENC$(5)=" WAND":GOTO1696
1670 IFRO=26ANDRIGHT$(A$,4)="GOLD"THENC$
(6)=" A GOLD SACK":GOTO1696
1675 IFRO=26ANDRIGHT$(A$,4)="SACK"THENC$
(6)=" A GOLD SACK":GOTO1696
1680 IFRO=21ANDRIGHT$(A$,5)="SWORD"THENC
$(7)=" SWORD":GOTO1696
1690 IFRO=24ANDRIGHT$(A$,6)="HEATER"THEN
C$(8)=" HEATER":GOTO1696
1691 IFRO=19ANDKI=1ANDRIGHT$(A$,3)="KEY"
THENC$(9)=" SKELETON KEY":GOTO1696

```

```

1692 IFRO=23ANDCH=1ANDRIGHT$(A$,7)="CRYSTAL"THENC$(10)="CRYSTAL":GOTO1696
1693 IFRO=16ANDDI(1)=1ANDRIGHT$(A$,3)="KEY"THENC$(11)="GOLDKEY":GOTO1696
1694 IFRO=44ANDDI(2)=1ANDRIGHT$(A$,3)="KEY"THENC$(12)="SILVERKEY":GOTO1696
1695 PRINT"YOU ARE NOT ABLE TO GET IT!":RETURN
1696 A(RO,5)=0:RETURN
1700 REM *** FIGHT / KILL ***
1710 IFA(RO,5)<>1THENPRINT"WHO DO YOU WANT TO ";A$;"YOURSELF!":RETURN
1720 IFRO=19THENPRINT"SURELY YOU DON'T WANT TO KILL THE PRINCESS":RETURN
1730 IFRO=31THENPRINT"YOU WANT TO ";A$;"THE WIZARD. NOT A WISE MOVE.":RETURN
1731 IFRO=12ANDC$(5)=" "ANDC$(7)=" "THENPRINT"YOU MUST FIGHT THE WITCH DOCTOR"
1732 IFRO=12ANDC$(5)=" "ANDC$(7)=" "THENPRINT"WITH BARE HANDS."
1733 IFRO=12ANDC$(5)=" "ANDC$(7)=" "THENFORAA=1TO2500:NEXT
1734 IFRO=12ANDC$(5)=" "ANDC$(7)=" "THENPRINT"YOU DISAPPEAR IN A PUFF OF SMOKE":END
1735 IFRO=12ANDC$(7)<>" "ANDC$(5)=" "THENPRINT"YOUR SWORD WAS INEFFECTIVE.":END
1736 IFRO=12ANDC$(5)<>" "THENPRINT"THE WAND THAT THE WIZARD GAVE YOU, HAS "
1737 IFRO=12ANDC$(5)<>" "THENPRINT"KILLED THE WITCH DOCTOR.":VD=1:RETURN
1740 IFRO<>30THENRETURN
1750 IFC$(7)=" "THENPRINT"YOU MUST FIGHT WITH BARE HANDS."
1760 IFC$(7)=" "THENFORAA=1TO2500:NEXT:PRINT"THE ZOMBIE HAS MUTILATED YOU!":END
1770 PRINT"THE ZOMBIE LIES DEAD AT YOUR FEET.":ZO=1
1780 RETURN
1800 REM *** DIG ***
1810 IFC$(1)=" "THENPRINT"YOU CAN'T DIG WITH BARE HANDS!!!":RETURN
1811 IFRO<>28ANDRO<>16ANDRO<>44ANDRO<>45THENPRINT"YOU JUST DUG A MASSIVE HOLE IN

```

```

THE "
1812 IFRO<>28ANDRO<>16ANDRO<>44ANDRO<>45
THENPRINT"GROUND AND FELL DOWN IT!!":END
1813 IFDI(3)=1THEN1815
1814 IFRO=28THENPRINT"{CYN}YOUR HAVE CLE
ARED AWAY THE CAVE IN!":DI(3)=1:RETURN
1815 IFDI(1)=1THEN1825
1820 IFRO=16THENPRINT"{CYN}ON A PILE OF
DIRT YOU SEE A GOLD KEY!!":DI(1)=1:RETUR
N
1825 IFDI(2)=1THEN1835
1830 IFRO=44THENPRINT"{CYN}YOUR DIGGING
HAS EXPOSED A SILVER KEY!!":DI(2)=1:RETU
RN
1835 IFRO=45THENPRINT"{CYN}HIDDEN UNDER
A TILE IN THE CORNER IS A  BUTTON...."
1840 RETURN
1850 REM *** CROSS ROPE ***
1860 IFRO<>13ANDRO<>14THENPRINT"I SEE NO
THING TO CROSS!!":RETURN
1870 IFC$(2)=" "THENPRINT"I SEE A VERY LO
NG AND DEEP PIT."
1880 IFC$(2)=" "THENPRINT"YOU CAN'T CROSS
IT WITHOUT THE ROPE.":RETURN
1890 PRINT"AT ONE STAGE YOU SLIPPED, BUT
YOU MADE IT ACROSS SAFELY."
1895 IFRO=14THENRO=A(RO,4):RETURN
1896 IFRO=13THENRO=A(RO,3):RETURN
1897 RETURN
1900 REM *** PRESS BUTTON ***
1910 IFRO<>45THENPRINT"I CAN'T SEE ANYTH
ING TO PRESS!!!":RETURN
1920 IFA$="PRESS"THEN1930
1921 IFRIGHT$(A$,6)="BUTTON"THEN1925
1922 RETURN
1925 PRINT"THE DOOR HAS OPENED MECHANICA
LLY":PR=1:RETURN
1930 INPUT"PRESS WHAT";A$
1940 IFRIGHT$(A$,6)="BUTTON"THEN1925
1945 PRINT"I'M NOT ABLE TO PRESS THE ";A
$:RETURN
1950 REM *** KISS ***
1960 IFRO<>19THENPRINT"I LIKE THE IDEA,
BUT I CAN'T SEE ANYONE.":RETURN

```

```

1965 IFKI=1THENPRINT"SHE GIVES YOU A SLA
P ON THE FACE!":RETURN
1970 PRINT"I'VE FAINTED. GIVE ME A COUPL
E OF          SECONDS TO RECOVER!"
1980 PRINT"THE PRINCESS GIVES YOU A KISS
BACK AND THANKS YOU FOR BREAKING THE"
1990 PRINT"SPELL THAT THE WITCH DOCTOR P
UT HER          UNDER."
1991 PRINT"SHE WARNS YOU THAT THE WITCH
DOCTOR MAY HAVE MADE A VOODOO DOLL OF YOU
."
1992 PRINT"COME TO THINK OF IT, I DO REM
EMBER          GETTING SOME PRICKS HERE AND"
1993 PRINT"THERE"
1994 IFWI(1)=1THENPRINT"ACTUALLY, I DO R
EMEMBER SEEING A PERSON WHO RESEMBLED "
1995 IFWI(1)=1THENPRINT"A WITCH DOCTOR.
I'M STARTING TO SCARE          MYSELF!!!"
1996 KI=1:RETURN
2000 REM *** INITIALISATION ***
2010 DIMA(47,5):DIMC$(12)
2020 FORB=1TO47
2030 FORC=1TO5
2040 READA(B,C)
2050 NEXT C
2060 NEXT B
2070 RO=1
2080 RETURN
3000 REM *****
3010 REM *** ROOM DATA ***
3020 REM *****
3030 DATA2,0,0,0,0:REM ROOM 1
3040 DATA5,1,4,3,0:REM ROOM 2
3050 DATA0,0,2,0,0:REM ROOM 3
3060 DATA6,0,43,2,1:REM ROOM 4
3070 DATA7,2,6,0,0:REM ROOM 5
3080 DATA8,4,0,5,0:REM ROOM 6
3090 DATA10,5,0,0,0:REM ROOM 7
3100 DATA0,6,9,0,0:REM ROOM 8
3110 DATA11,43,0,8,1:REM ROOM 9
3120 DATA12,7,11,25,0:REM ROOM 10
3130 DATA13,0,9,10,0:REM ROOM 11
3140 DATA0,10,13,26,1:REM ROOM 12
3150 DATA0,11,14,12,0:REM ROOM 13

```

```

3160 DATA16,17,15,13,0:REM ROOM 14
3170 DATA20,17,18,14,0:REM ROOM 15
3180 DATA0,14,20,0,1:REM ROOM 16
3190 DATA15,0,0,14,0:REM ROOM 17
3200 DATA19,21,0,15,0:REM ROOM 18
3210 DATA0,18,0,20,1:REM ROOM 19
3220 DATA0,15,19,16,0:REM ROOM 20
3230 DATA18,0,22,0,1:REM ROOM 21
3240 DATA24,23,0,21,0:REM ROOM 22
3250 DATA22,0,0,0,1:REM ROOM 23
3260 DATA0,22,0,0,1:REM ROOM 24
3270 DATA26,0,10,27,0:REM ROOM 25
3280 DATA0,5,12,0,1:REM ROOM 26
3290 DATA34,34,25,28,0:REM ROOM 27
3300 DATA33,35,27,29,0:REM ROOM 28
3310 DATA32,32,28,30,0:REM ROOM 29
3320 DATA31,31,29,0,1:REM ROOM 30
3330 DATA30,30,32,0,1:REM ROOM 31
3340 DATA29,29,0,31,0:REM ROOM 32
3350 DATA36,28,34,0,0:REM ROOM 33
3360 DATA27,27,37,33,0:REM ROOM 34
3370 DATA28,36,0,0,1:REM ROOM 35
3380 DATA35,33,0,0,0:REM ROOM 36
3390 DATA41,34,38,39,0:REM ROOM 37
3400 DATA42,0,0,37,0:REM ROOM 38
3410 DATA40,0,37,0,0:REM ROOM 39
3420 DATA0,39,41,0,0:REM ROOM 40
3430 DATA45,37,42,40,0:REM ROOM 41
3440 DATA0,38,0,41,0:REM ROOM 42
3450 DATA9,4,44,0,0:REM ROOM 43
3460 DATA0,0,0,43,1:REM ROOM 44
3470 DATA0,41,0,46,1:REM ROOM 45
3480 DATA47,0,45,0,0:REM ROOM 46
3490 DATA0,46,0,48,0:REM ROOM 47
3500 REM *****
      *****
5000 PRINT:PRINT"{YEL}## {PUR}YOU CAN SE
E {YEL}##"
5001 PRINT
5006 IFRO=19ANDC$(9)<>" "THENPRINT"{WHT}A
BEAUTIFUL PRINCESS. SHE GIVES YOU A K
ISS":RETURN
5007 IFRO=31ANDC$(5)<>" "THENPRINT"{WHT}A
SHIVERING WIZARD":RETURN

```

```

5009 IFRO=12THEN5020
5010 IFA(RO,5)=0THENPRINT"{WHT}NOTHING S
PECIAL{LT BLU}":RETURN
5020 IFRO=4THENPRINT"{WHT}A GLOWING LANT
ERN":RETURN
5021 IFRO=26THENPRINT"{WHT}A GOLD SACK."
:RETURN
5022 IFRO=12ANDVD=1THENPRINT"{WHT}A DEAD
WITCH DOCTOR":RETURN
5029 IFRO=9THENPRINT"{WHT}A LONG PIECE O
F ROPE":RETURN
5030 IFC$(4)=" METAL DETECTOR"ANDRO=44TH
ENPRINT"YOUR METAL DETECTOR"
5031 IFC$(4)=" METAL DETECTOR"ANDRO=44TH
ENPRINT"HAS FOUND SOME SORT"
5032 IFC$(4)=" METAL DETECTOR"ANDRO=44TH
ENPRINT"OF METAL BELOW YOUR FEET"
5040 IFC$(4)=" METAL DETECTOR"ANDRO=45TH
ENPRINT"{WHT}YOUR METAL DETECTOR"
5041 IFC$(4)=" METAL DETECTOR"ANDRO=45TH
ENPRINT"HAS FOUND SOME SORT"
5042 IFC$(4)=" METAL DETECTOR"ANDRO=45TH
ENPRINT"OF METAL BELOW YOUR FEET"
5050 IFRO=35THENPRINT"{WHT}A SHOVEL"
5060 IFRO=30ANDZO=1THENPRINT"{WHT}A DEAD
ZOMBIE!"
5070 IFRO=30THENPRINT"{WHT}A METAL DETEC
TOR"
5080 IFRO=31ANDWI=0THENPRINT"{WHT}A FROZ
EN WIZARD IN ICE"
5090 IFRO=31ANDWI=1THENPRINT"{WHT}A WIZA
RD AND HIS WAND"
5100 IFRO=21THENPRINT"{WHT}A SWORD"
5110 IFC$(4)=" METAL DETECTOR"ANDRO=16TH
ENPRINT"{WHT}YOUR METAL DETECTOR"
5111 IFC$(4)=" METAL DETECTOR"ANDRO=16TH
ENPRINT"HAS FOUND SOME SORT"
5112 IFC$(4)=" METAL DETECTOR"ANDRO=16TH
ENPRINT"OF METAL BELOW YOUR FEET"
5120 IFRO=19ANDKI=0THENPRINT"{WHT}A SLEE
PING PRINCESS"
5130 IFRO=19ANDKI=1THENPRINT"{WHT}A BEAU
TIFUL PRINCESS":PRINT"A SKELETON KEY"
5140 IFRO=24THENPRINT"{WHT}A PORTABLE HE

```

```

ATER"
5150 IFRO=23ANDCH=0THENPRINT"{WHT}A FINE
LY DECORATED CHEST"
5160 IFRO=23ANDCH=1THENPRINT"{WHT}AN OPE
N CHEST"
5165 IFRO=23ANDCH=1THENPRINT"{WHT}WITH A
CRYSTAL IN IT"
5170 IFRO=23ANDVD=0ANDCH=1THENPRINT"{WHT
}A VODOO DOLL WITH IT'S HEAD CHOPPED OFF
"
5180 IFRO=23ANDVD=0ANDCH=1THENPRINT"'THE
VOODOO DOLL IS A REPLICA OF YOU':END
5190 IFRO=12ANDWI(1)=0THENPRINT"{WHT}A W
ITCH DOCTOR. HE HAS WHAT LOOKS LIKE"
5200 IFRO=12ANDWI(1)=0THENPRINT"{WHT}A V
ODOO DOLL. IT SEEMS TO RESEMBLE YOU!!"
5205 IFRO=12ANDWI(1)=0THENWI(1)=1:RETURN
5206 IFVD=1THENRETURN
5210 IFRO=12ANDWI(1)=1THENPRINT"A WITCH
DOCTOR. AROUND HIM LAY THE REMAINS"
5220 IFRO=12ANDWI(1)=1THENPRINT"OF FINGE
R NAIL PIECES AND STRANDS OF HAIR. YO
UR"
5230 IFRO=12ANDWI(1)=1THENPRINT"FINGER N
AILS LOOK A BIT SHORT, AND YOU HAVE A"
5240 IFRO=12ANDWI(1)=1THENPRINT"SMALL BA
LD PATCH ON YOUR HEAD!!"
5245 IFRO=12ANDWI(1)=1THENPRINT"OH NO!!
I'D BE CAREFUL!"
5250 RETURN
6000 PRINT:PRINT"{OR}YOU ARE CARRYING{WH
T}"
6010 FORAA=1TO12:PRINT"("AA") "C$(AA):NE
XT
6020 PRINT"{OR}":PRINT"HIT ANY KEY{LT BL
U}"
6030 GETG$:IFG$=""THEN6030
6040 RETURN
7000 REM *** OPEN ***
7010 IFCH=1ANDRO=23THENPRINT"THE CHEST I
S ALREADY OPEN":RETURN
7020 IFRO<>23THENPRINT"THERE IS NOTHING
IN HERE TO OPEN!":RETURN

```

```

7025 IFC$(9)=" "THENPRINT"{WHT}YOU NEED T
HE SKELETON KEY.":RETURN
7030 CH=1
7040 RETURN
8000 REM *** MELT ICE WITH HEATER ***
8010 IFRO<>31ANDC$(8)=" "THENPRINT"{WHT}W
HAT IS THERE TO MELT IN HERE!":RETURN
8020 IFC$(8)=" "THENPRINT"YOU HAVE NOTHIN
G TO MELT IT WITH!":RETURN
8025 IFWI=1THENRETURN
8030 PRINT"THE ICE SLOWLY MELTS AND THE
WIZARD      BECOMES FREE."
8040 WI=1:RETURN
9000 REM *** ROOM DESCRIPTION ***
9010 PRINT"{CYN}YOU ARE IN THE ENTRANCE
HALL OF THE"
9020 PRINT"CASTLE. ALL AROUND YOU ARE OR
IGINAL      PAINTINGS BY PICASSO AND"
9030 PRINT"VAN GOGH. THE CEILING IS FINE
LY          DECORATED."
9040 PRINT"ANTIQUE FURNITURE LINE THE WO
ODEN WALLS."
9045 RETURN
9050 PRINT"{CYN}COB WEBBS AND DUST FILTE
R THROUGH THE"
9060 PRINT"AIR. WHITE CLOTHS HANG LOOSEL
Y OVER THE CHAIRS AND THE OLD GRAND PIAN
O."
9070 PRINT"THE ARMOUR SUIT OF A DEAD KNI
GHT STANDS STIFFLY IN ONE CORNER OF THE
ROOM"
9080 PRINT"YOU CAN STILL FEEL HIS PRESEN
CE!"
9090 RETURN
9100 PRINT"{CYN}YOU ARE IN A DARK, SPOOK
Y, CLOSET. MOTH EATEN CLOTHES STILL HANG
IN HERE"
9110 PRINT"THE SPIDERS OF THE CASTLE HAV
E CERTAINLYFOUND A GOOD SPOT TO NEST."
9120 PRINT"SMELLY SHOES AND A WET UMBREL
LA STILL    REMAIN IN THE CLOSET."
9130 PRINT"OBVIOUSLY THE PROPERTY OF THE
LAST      PERSON WHO DARED TO ENTER THI
S"

```


9140 PRINT"CASTLE. THERE IS A SKELETON I
N THE CORNER....."
9145 RETURN
9150 PRINT"{CYN}THIS ROOM HAS A VARIETY
OF DIFFERENT OBJECTS, BUT MOST OF THE
M ARE"
9160 PRINT"EITHER DAMAGED OR BROKEN, PIT
Y."
9170 PRINT"IN THE WALL IS AN AIR VENT, F
ROM WHICH SEEMS TO TRAVEL ALL AROUND TH
E"
9180 PRINT"CASTLE. YOU CAN HEAR WHAT IS
GOING ON IN ANY OTHER ROOM. A SCREAM H
AS"
9190 PRINT"JUST ECHOED THROUGH THE ALUMI
NIUM VENT. I SUGGEST WE GET OUT OF HERE.
"
9195 RETURN
9200 PRINT"{CYN}THIS ROOM WAS DEFINATELY
A TORTURE ROOM.OLD RUSTY CHAINS DANGLE
ON THE"
9210 PRINT"BLOOD STAINED WALLS. A SKELET
ON IS STILLHANGING IN CHAINS."
9220 PRINT"A STRETCHING RACK IS PRESENT
IN THE MIDDLE OF THE ROOM. DEAD SNAK
ES"
9230 PRINT"LIE IN ONE CORNER OF THE ROOM
, NEXT TO ABUNDLE OF BONES."
9240 RETURN
9250 PRINT"{CYN}THIS ROOM LOOKS AND SMEL
LS LIKE A MORGUETHERE ARE DEAD BODIES EV
ERYWHERE"
9260 PRINT"I DON'T PLAN ON BEING ONE OF
THESE DEAD BEATS. LETS GET OUT OF HERE,
FAST"
9270 RETURN
9300 PRINT"{CYN}THERE IS NOT MUCH TO THI
S ROOM. THERE ARE MAINLY TINS OF FOOD
ON"
9310 PRINT"THE SHELVES SURROUNDING THE R
OOM."
9320 PRINT"A LOT OF MICE ARE RUNNING ABO
UT THE FLOOR."
9330 PRINT"OUCH! ONE JUST BIT ME."

9340 RETURN
9350 PRINT "{CYN}NO DOUBT ABOUT IT. THIS ROOM WAS MEANT TO KEEP PEOPLE FROM ESCAPING."
9360 PRINT "THERE ARE SOLID STEEL BARS ON THE WINDOWS AND DOORS."
9370 PRINT "THERE ARE BROKEN CHAINS SCATTERED ALL OVER THE FLOOR."
9380 RETURN
9400 PRINT "{CYN}THIS ROOM IS CHOC-A-BLOCK FULL WITH CAMPING EQUIPMENT."
9410 PRINT "ALTHOUGH MOST OF IT IS COVERED WITH SPIDER WEBS AND DUST, YOU CAN"
"
9420 PRINT "STILL MAKE OUT THE TENT, B.B.Q., SLEEPING BAGS ETC."
9430 RETURN
9450 PRINT "{CYN}THIS IS A VERY LARGE ROOM. AROUND YOU ARE MANY BROKEN PIECES OF"
"
9460 PRINT "FURNITURE. A LARGE CANDLE LIGHT FITTING HANGS FROM THE FINELY CARVED ROOF"
"
9470 PRINT "A FEW DUSTY, BUT COLOURFUL PAINTINGS ARE SUSPENDED ON THE WALLS."
9480 PRINT "THIS ROOM IS A PART OF A LONG HALLWAY."
9490 RETURN
9500 PRINT "{CYN}THIS ROOM IS THE EASTERN MOST PART OF A LONG CORRIDOR. TO THE WEST IS"
"
9510 PRINT "A VERY LONG HALLWAY. IT ALMOST SEEMS NEVER ENDING."
9520 PRINT "ANTIQUE FURNITURE AND PAINTINGS LINE THE WALLS."
9530 RETURN
9550 PRINT "{CYN}THIS ROOM LOOKS LIKE A LABORATORY. IN THE BACKGROUND IS A DARK FIGURE"
"
9560 PRINT "SPILT LIQUIDS ARE DRIPPINGS OFF THE BENCHES."
9570 PRINT "IN FRONT OF YOU THERE IS A BOOK ON VOODOOISM."
9580 RETURN

9600 PRINT "{CYN}YOU ARE IN WHAT SEEMS TO
 BE A GREEN HOUSE."
 9610 PRINT " TO YOUR RIGHT THERE IS A VER
 Y WIDE AND DEEP PIT. ON THE OTHER SIDE Y
 OU"
 9620 PRINT "CAN SEE AN OPEN DOOR, BUT YOU
 AREN'T ABLE TO 'CROSS' THE PIT."
 9630 IFC\$(2)=" "THEN9640
 9635 PRINT "THE ROPE THAT YOU PICKED UP E
 ARLIER HAS STRETCHED ITSELF ACROSS THE P
 IT"
 9636 PRINT "NOW ALLOWING YOU TO CROSS THE
 PIT AND ENTER THROUGH THE OPEN DOOR O
 N"
 9637 PRINT "THE OTHER SIDE. {WHT}GOOD LU
 CK"
 9640 RETURN
 9650 PRINT "{CYN}TO YOUR LEFT IS A WIDE A
 ND VERY, VERY DEEP PIT. YOU CAN SEE YO
 UR ROPE"
 9660 PRINT "STRETCHED ACROSS IT."
 9670 PRINT "YOU ARE IN THE WESTERN ROOM O
 F THE CELLAR."
 9680 RETURN
 9700 PRINT "YOU ARE NOW IN THE CENTRAL RO
 OM OF THE CELLARS. THERE ARE BOTTLES AN
 D"
 9710 PRINT "CASKETS EVERY WHERE..."
 9720 RETURN
 9750 PRINT "THIS ROOM HAS A GLASS WALL ON
 IT'S WEST SIDE. THROUGH THE GLASS YOU C
 AN"
 9760 PRINT "SEE A VERY DEEP PIT WITH A RO
 PE ACROSS IT."
 9770 IFC\$(5)<>" "THENPRINT "YOU CAN SEE A
 WITCH DOCTOR FREEZING THE WIZARD IN ICE.
 "
 9780 RETURN
 9800 PRINT "{CYN}YOU ARE NOW IN THE SOUTH
 ERN ROOM OF THE CELLARS. THIS IS WHERE A
 LL THE"
 9810 PRINT "BROKEN BOTTLES WERE KEPT."
 9820 RETURN

9850 PRINT "{CYN}YOU ARE NOW IN THE EASTERN ROOM OF THE CELLARS."

9860 PRINT "IN THE AIR YOU CAN SMELL A BEAUTIFUL SCENT."

9870 RETURN

9900 PRINT "{CYN}THIS ROOM IS VERY BEAUTIFUL, AS IS ITS CONTENTS. THERE ARE WONDERFULLY"

9910 PRINT "SOFT SILK CURTAINS ON THE WINDOWS, A VERY SHINY BRASS BED"

9920 IFKI=0THENPRINT "ON WHICH LIES A VERY PRETTY PRINCESS."

9930 IFKI=1THENPRINT "THERE IS A BEAUTIFUL BLONDE PRINCESS IN SILK STANDING IN"

9940 IFKI=1THENPRINT "THE MIDDLE OF THE ROOM."

9945 RETURN

9950 PRINT "{CYN}YOU ARE IN THE NORTHERN ROOM OF THE CELLARS. BIG CASKETS OF RUM"

9960 PRINT "ARE STACKED ONE ON TOP OF EACH OTHER."

9970 RETURN

10000 PRINT "{CYN}THIS ROOM IS OBVIOUSLY THE ARMOURY ROOM. GUN MUSKETS, SWORDS, AND A LOT"

10010 PRINT "OF OTHER WEAPONS HANG ON THE WALLS. IN ONE CORNER THERE IS A SOLID GOLD"

10020 PRINT "CANNON FROM THE SHIP 'EMPORE R II'"

10030 RETURN

10050 PRINT "{CYN}TO YOUR RIGHT IS AN OPEN FIRE PLACE. SET AROUND THE FIRE PLACE ARE"

10060 PRINT "THREE CHAIRS. UNDER THE CHAIRS IS A LARGE SHEEP SKIN RUG."

10070 PRINT "I FIND THIS ROOM VERY COSY."

10080 RETURN

10100 PRINT "{CYN}THIS IS JUST ONE OF THE KING'S TREASURY ROOMS."

10110 PRINT "SOMETHING FISHY SEEMS TO BE GOING ON HERE. THIS ROOM HAS RECENTLY"

"

10120 PRINT"BEEN DISTURBED. I CAN SEE TH
 E TRACES OF A WITCH DOCTOR...."
 10130 RETURN
 10150 PRINT"{CYN}THIS IS A VERY WARM ROO
 M. THIS ROOM WOULD'VE SUPPL
 IED"
 10160 PRINT"THE THERMOSTAT FOR THE REST
 OF THE CASTLE."
 10170 RETURN
 10200 PRINT"{CYN}TO YOUR WEST YOU CAN SE
 E A CORRIDOR WHICH SEEMS NEVER ENDIN
 G."
 10210 PRINT"TO YOUR LEFT IS ANOTHER VERY
 LONG CORRIDOR."
 10220 RETURN
 10250 PRINT"{CYN}ALL AROUND YOU IS GOLD,
 LOTS OF IT. JUSTREMEMBER THAT I CAN'T C
 ARRY ALL"
 10260 PRINT"THAT MUCH!"
 10270 RETURN
 10300 PRINT"{CYN}YOU ARE NOW IN THE CENT
 RAL ROOM OF THE LONG CORRIDOR."
 10310 RETURN
 10350 PRINT"{CYN}TO YOUR RIGHT IS A VERY
 LONG CORRIDOR. TO THE SOUTH THERE IS Q
 UITE A"
 10360 PRINT"LONG HALLWAY...."
 10370 RETURN
 10400 PRINT"{CYN}THIS ROOM SEEMS A LITTL
 E DAMP."
 10410 RETURN
 10450 PRINT"{CYN}THIS ROOM ABSOLUTELY ST
 INKS."
 10460 IFZO=1THENPRINT"THERE IS A PUDDLE
 OF BLOOD ON THE FLOOR."
 10470 RETURN
 10500 PRINT"{CYN}THIS ROOM LOOKS LIKE MA
 GIC WAS ONCE PERFORMED HERE."
 10510 IFWI=1THENPRINT"THERE IS A PUDDLE
 OF WATER ON THE CONCRETE FLOOR."
 10520 IFWI=0THENPRINT"THERE IS A TALL TH
 IN BLOCK OF ICE. IN THE BLOCK OF ICE Y
 OU"

10530 IFWI=0THENPRINT"CAN SEE THE BLURRE
D OUTLINE OF A PERSON."
10540 RETURN
10550 PRINT"{CYN}THIS PLACE LOOKS LIKE A
GRAVE YARD."
10560 RETURN
10600 PRINT"{CYN}THERE IS AN OLD MODEL
T' FORD IN THIS SMELLY ROOM, ALONG WITH
OLD"
10610 PRINT"MOTOR CAR PARTS."
10620 RETURN
10650 PRINT"{CYN}THERE IS A THICK MIST I
N THIS ROOM. YOU CAN'T EVEN SEE YOUR HAN
D IN"
10660 PRINT"FRONT OF YOU."
10670 RETURN
10700 PRINT"{CYN}THERE ARE GARDEN TOOLS
SCATTERED ALL OVER THE FLOOR. ONE OF
THESE"
10710 PRINT"OBJECTS MIGHT COME IN VERY H
ANDY."
10720 RETURN
10750 PRINT"{CYN}TO YOUR NORTH IS A RATH
ER LONG HALLWAY."
10760 RETURN
10800 PRINT"{CYN}ROOMS LEAD OFF IN EVERY
DIRECTION FROM THIS ROOM. I HOPE YOU P
ICK THE"
10810 PRINT"RIGHT ONE."
10820 RETURN
10850 PRINT"{CYN}THIS ROOM IS IN THE SHA
PE OF A CIRCLE. I FEEL A LITTLE DIZZY."
10860 RETURN
10900 PRINT"{CYN}THIS ROOM IS SHAPED LIK
E A TRIANGLE. I CAN'T MAKE OUT THE DOOR
."
10910 RETURN
10950 PRINT"{CYN}THERE ARE HUNDREDS OF M
IRRORS ALONG THE WALLS. I CAN'T MAKE OUT
WHICH"
10960 PRINT"IMAGE IS YOU AND WHICH IMAGE
IS ME"
10970 RETURN
11000 PRINT"{CYN}NORTH, SOUTH, EAST OR W

EST, TAKE YOUR PICK!"

11010 RETURN

11050 PRINT"{CYN}I WOULD LIKE TO CONGRATULATE YOU ON GETTING THIS FAR INTO THE"

11060 PRINT"ADVENTURE. I WOULDN'T GO MAKING ANY RASHMOVES NOW, IF I WAS YOU."

11070 RETURN

11100 PRINT"{CYN}THE FLOOR IS COMPLETELY COVERED WITH TILES."

11110 RETURN

11150 PRINT"{CYN}YOU CAN HEAR A FUNNY MOANING NOISE. IT SEEMS TO BE COMING FROM THE"

11160 PRINT"WEST!"

11170 RETURN

11200 PRINT"THERE ARE BEAUTIFULLY DECORATED TILES UNDER YOUR FEET. JUST HOPE THAT"

11210 PRINT"THERE ISN'T A TRAP DOOR ANYWHERE!"

11220 RETURN

11250 PRINT"NICE GOING, I WOULD BE VERY CAREFUL ABOUT YOUR NEXT MOVE."

11260 RETURN

11300 PRINT"{CYN}A DOOR JUST SLAMMED SHUT SOMEWHERE IN THE CASTLE."

11310 PRINT"AS YOUR EYES ROLL TO THE ROOF YOU CAN SEE A DEAD BODY HANGING."

11320 PRINT"A DROP OF BLOOD HITS YOU ON THE FACE. OBVIOUSLY THIS HAS HAPPENED"

11330 PRINT"RECENTLY."

11340 RETURN

11350 PRINT"{CYN}YOU PULL BACK THE CURTAINS IN YOUR BEDROOM. YOU CAN SEE THE SUN"

11360 PRINT"IS SHINING BRILLIANTLY. YOU REALISE NOW THAT IT WAS ALL A DREAM."

11370 PRINT"BUT AS YOU EXIT YOUR BEDROOM, YOU FIND"

11380 FORA=1TO1000:NEXT:PRINT"{WHT}A VOO DOO DOLL!!!!!"

```
11390 PRINT"{YEL}I WOULDN'T GO TO BED TO  
NIGHT IF I WAS YOU....."  
11400 END
```

READY.


```

}{CUR RT}{CUR RT}{CUR RT}{CUR RT}{CUR RT
}@@@@@@@@@@@@@@@@@@@@@
14 PRINTSPC(24) "'Q' TO RE-RUN..."
15 PRINTSPC(24) "'F5' TO RUBOUT..."
16 PRINTSPC(24) "'F7' TO SKETCH..."
17 PRINTSPC(24) "'RETURN' DATA..."
20 GETA$
30 IFA$="Q" THEN GOTO 10
40 IFA$="{CUR UP}" THEN B=B-1
50 IFA$="{CUR DN}" THEN B=B+1
60 IFA$="{CUR L}" THEN A=A-1
70 IFA$="{CUR RT}" THEN A=A+1
80 IFA$=CHR$(13) THEN Z=0
81 IFA$="" THEN Z=1
82 IFA$=" " THEN Z=0
83 IF Z=0 THEN 90
85 IFA=10RA=30RA=50RA=70RA=90RA=110RA=13
ORA=150RA=170RA=190RA=210RA=230RA=25 THEN
Z=2
90 IF B<0 THEN B=0
100 IF B>20 THEN B=20
110 IFA<0 THEN A=0
120 IFA>23 THEN A=23
130 IF Z=0 THEN POKE SC+A+40*B, 32: FORT=1 TO 30
:NEXT: POKE SC+A+40*B, 160: POKE CL+A+40*B, 1
131 IF Z=1 THEN POKE SC+A+40*B, 160: POKE CL+A+
40*B, 14: FORT=1 TO 30: NEXT: POKE SC+A+40*B, 42
132 IF Z=2 THEN POKE SC+A+40*B, 160: POKE CL+A+
40*B, 14: FORT=1 TO 30: NEXT: POKE SC+A+40*B, 50
133 IF Z=2 THEN Z=1
140 GOTO 20
2000 REM *****
2010 REM *DECODE*
2020 REM *****
2021 PRINT "{HOME}" SPC(27) "STAGE# 1"
2030 FORT=1 TO 21
2031 IFT=1 THEN 2090
2032 SC=SC+40
2090 FOR R=0 TO 7
2100 IF PEEK(SC+R)=160 THEN GOSUB 5000
2110 NEXT
2120 NEXT
2121 PRINT "{HOME}" SPC(27) "STAGE# 2"

```

```

2130 SC=1032
2140 FORT=1TO21:IFT=1THEN2160
2150 SC=SC+40
2160 FORR=0TO7
2170 IFPEEK(SC+R)=160THENGOSUB6000
2180 NEXT
2190 NEXT
2191 PRINT "{HOME}"SPC(27)"FINAL STAGE"
2200 SC=1040
2210 FORT=1TO21:IFT=1THEN2230
2220 SC=SC+40
2230 FORR=0TO7
2240 IFPEEK(SC+R)=160THENGOSUB7000
2250 NEXT
2260 NEXT
2265 GOTO2341
2270 PRINT "{CLR}@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@
@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@
2280 PRINT "@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@DATA@@@@@@@@@
@@@@@@@@@@@@@@@@@@@@@
2285 PRINT "@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@
@@@@@@@@@@@@@@@@@@@@@
2290 PRINT:PRINT"DO YOU WANT TO SEND THE
DATA TO THE {RVS ON}P{RVS OFF}RINTE
R OR {RVS ON}W{RVS OFF}RITE IT DOWN."
2291 INPUTA$:IFA$="P"THENOPEN4,4:CMD4
2300 PRINT "{CLR}":FORT=1TO21
2310 PRINT"DATA"Q(T)","W(T)","E(T)
2320 NEXT
2322 IFA$="P"THENPRINT#4:CLOSE4:PRINT "{C
LR}"
2330 PRINT "{HOME}HIT RETURN TO CONTINUE"
2339 GETA$:IFA$<>CHR$(13)THEN2339
2340 GOTO2350
2341 PRINT "{CLR}WOULD YOU LIKE TO VIEW Y
OUR SPRITE"
2342 INPUTA$:IFA$="Y"THEN3000
2343 GOTO2270
2350 PRINT "{CLR}WOULD YOU LIKE TO CREATE
ANOTHER SPRITE"
2351 FORN=0TO62:POKE832+N,0:NEXT:N=0
2360 INPUTA$:IFA$="Y"THENCLR:RUN
2362 IFA$="N"THEN2370
2366 GOTO10

```

```

2370 PRINT "{CLR}YOU HAVE BEEN USING THE
'SPRITE CREATER' ":END
3000 V=53248:POKEV+21,4:POKE2042,13
3002 D=832:POKEV+23,0:POKEV+29,0:POKEV+3
7,1:POKEV+38,1:POKEV+28,0
3003 POKEV+4,200:POKEV+5,200
3004 POKEV+40,1
3010 FORTT=1TO21
3020 POKED,Q(TT):POKED+1,W(TT):POKED+2,E
(TT):D=D+3:NEXT
3050 PRINT "{CLR}DO YOU WANT YOUR SPRITE
ENLARGED"
3051 INPUTA$:IFA$="Y"THENPOKEV+23,4:POKE
V+29,4
3052 PRINT "{CLR}IS YOUR SPRITE MULTI-COL
OURED."
3053 INPUTA$:IFA$="Y"THENGOSUB8000
3055 PRINT "{CLR}"
3059 FORX=0TO200:POKEV+4,X:POKEV+5,X:NEX
T
3060 PRINT "{CLR}HIT 'RETURN' TO CONTINUE
"
3070 GETA$:IFA$(>CHR$(13))THEN3070
3080 GOTO2270
5000 IFR=0THENQ(T)=Q(T)+128
5010 IFR=1THENQ(T)=Q(T)+64
5020 IFR=2THENQ(T)=Q(T)+32
5030 IFR=3THENQ(T)=Q(T)+16
5040 IFR=4THENQ(T)=Q(T)+8
5050 IFR=5THENQ(T)=Q(T)+4
5060 IFR=6THENQ(T)=Q(T)+2
5070 IFR=7THENQ(T)=Q(T)+1
5080 RETURN
6000 IFR=0THENW(T)=W(T)+128
6010 IFR=1THENW(T)=W(T)+64
6020 IFR=2THENW(T)=W(T)+32
6030 IFR=3THENW(T)=W(T)+16
6040 IFR=4THENW(T)=W(T)+8
6050 IFR=5THENW(T)=W(T)+4
6060 IFR=6THENW(T)=W(T)+2
6070 IFR=7THENW(T)=W(T)+1
6080 RETURN
7000 IFR=0THENE(T)=E(T)+128
7010 IFR=1THENE(T)=E(T)+64

```

```

7020 IFR=2THENE(T)=E(T)+32
7030 IFR=3THENE(T)=E(T)+16
7040 IFR=4THENE(T)=E(T)+8
7050 IFR=5THENE(T)=E(T)+4
7060 IFR=6THENE(T)=E(T)+2
7070 IFR=7THENE(T)=E(T)+1
7080 RETURN
8000 REM *** MULTI-COLOURED ***
8004 POKEV+41,1
8010 PRINT"{CLR}WHAT COLOUR IS MULTI-COL
OUR 1"
8020 PRINT:PRINT"NUMBER PLEASE (1TO15)"
8030 PRINT:INPUT"COLOR";C
8035 IFC<10RC>15THEN8020
8040 POKEV+28,4:POKEV+37,C-1
8050 PRINT"{CLR}WHAT COLOUR IS MULTI-COL
OUR 2"
8060 PRINT:PRINT"NUMBER PLEASE (1TO15)"
8070 PRINT:INPUT"COLOR";C
8075 IFC<10RC>15THEN8060
8080 POKEV+38,C-1
8090 PRINT"{CLR}WHAT COLOUR IS SPRITE"
8100 PRINT:PRINT"NUMBER PLEASE (1TO15)"
8110 PRINT:INPUT"COLOR";C
8115 IFC<10RC>15THEN8100
8120 POKEV+41,C-1
8130 PRINT"{CLR}ARE YOU SATISFIED WITH T
HE COLOURS"
8140 INPUTA$
8150 IFA$="Y"THENRETURN
8160 GOTO8010

```

READY.

BIBLIOGRAPHY

There were many, many books we consulted for inspiration and ideas while this book was being developed. The ones which helped us most are listed below:

Discovery and Exploration - Frank Debenham (Paul Hamlyn, London, 1960)

Deep Space - Colin A Ronan (Macmillan London Ltd., 1982)

Battles of the American Civil War - Curt Johnson and Mark McLaughlin (Sampson Low, Maidenhead, UK, 1977)

The American Civil War - A H Allt (Longman Group Ltd., London, 1961)

The Best of Board Wargaming - Nicholas Palmer (Arthur Barker Ltd., London, 1980)

Table Games - How to Make and Play Them - Ray J Marran (A S Barnes and Co., Inc., Cranbury, New Jersey, 1976)

The Story of Yankee Whaling - Irwin Shapiro (American Heritage Publishing Co., Inc., New York, 1959)

Games for Two - John Wasley (Proteus Publishing Co., New York, 1981)

Spacecraft - 2000 to 2100 AD - Stuart Cowley (Hamlyn, New York, 1978)

Games with Pencil and Paper - Eric Solomon (Thomas Nelson and Sons Ltd, London, 1973)

The Indoor Games Book - Andrew Pennycook (Faber and Faber Ltd., London, 1973)

The Pocket Calculator Game Book - Edwin Schlossberg and John Brockman (William Morrow and Co., Inc., New York 1975; Wilton House Publications Ltd., London, 1976)

Best of The Dragon (TSR Periodicals, Lake Geneva, WI, 1980)

