

JULY 1983

75p

Dm5

COMPUTER & VIDEO GAMES



Double agent on ZAX'S V
DONKEY KONG JUNIOR

Atari's Supercharger

WIN AN ELECTRON

FREE INSIDE

32 PAGE GAMES EXTRA

LISTINGS FOR THE ATARI·ATOM·BBC·SHARP·
DRAGON·SPECTRUM·ZX81·VIC-20·TEXAS.



Please drop us a line at: Computer and Video Games, EMAP, Durrant House, 8 Herbal Hill, London EC1R 5JB.

PLAYING BY MAIL

Dear Sir,
Due to being unbearably bored during the last couple of weeks, I have decided to take part in a play-by-mail game. I would be grateful if you could give me the addresses of people I should contact to get further information.

Steven Mill,
Broughty-Ferry,
Dundee.

Editor's reply: There are several games you can play, Steven. Starlord by Mike Singleton, 1 Rake Hey Close, Moreton, Wirral, Merseyside, Vorcon Wars by John Nicholson, 71 Juniper, Birch Hill, Bracknell, Berks. Or for free you can enter our own Seventh Empire play-by-mail game in the July issue.

LOW COST SPECTRUM

Dear Sir,
I have just read that the ZX Spectrum will be going down in price. Does this mean that it will now be cheaper to convert my 16K Spectrum to 48K?

Simon Gill,
Bellbroughton,
West Midlands.

Editor's reply: The price of the Spectrum goes down from May 2 1983. A 16K Spectrum will cost £99.99, making it the first under-£100 colour micro to be available. The 48K model is reduced to £129.99. The cost of an upgrade to 48K is reduced from £60 to £40.

Orders for a Spectrum placed by mail order after April 7 were frozen, so if you ordered a Spectrum after that date you should be receiving a refund.



DEFENDER DEFENDED!

Dear Sir,
As a proud Atari 800 owner I must complain strongly on your review of the Defender cartridge for this machine.

According to me, the graphics are spectacular for the 16K program and equal to those of Acornsoft's 32K Defender program (Planetoids) for the much over-rated BBC in every way.

There is no question of which is easier to play because playing with six keys at once on the BBC keyboard is impossible.

Lastly, on the question of the best quality software, it is known in every home computer selling nation that the Atari has the most and certainly the best quality software of any available computer and it does not only come from Atari Inc. but from a variety of companies.

It is not like the BBC where you are restricted to Acornsoft software if you want programs of any reasonable quality.

Paul Ippaso,
Barrow-on-Soar,
Leicester.

Editor's reply: Thanks for your comments Paul, but as a keen Defender fan I can only defend my reviewer by saying that I also prefer the BBC version of Planetoids. The action is more reminiscent of the arcade original and the screen scrolls more neatly.

Also you don't mention the fact that Atari's Defender is much more expensive than Planetoids.

Still, perhaps we have all been spoilt by arcade Defender anyway.

SPECTRUM STICKS?

Dear Sir,
Can you get joysticks for the Spectrum?

M. Law,
Sutton Coldfield,
West Midlands.

Editor's reply: There are many companies selling joystick interfaces for the Spectrum. Try Fuller, Kempston or AGF Wardware. A Spectrum joystick review soon.

LOCATIONS, ROUTINES. . .

Dear Sir,
I am writing to tell you about some useful memory locations and routines which may be of some value to those of your readers who own a Sharp MZ-80K. They are listed below.

POKE 10167,1 removes the PEEK protect from Sharp Basic.

Type SG when you switch on and a beep will sound when you hit a key.

Type SS and the beep will stop.

POKE 59555,0 will blank the screen whilst retaining anything on it and POKE 59555,1 will reactivate the screen.

PRINT AT X,Y; can be simulated by POKE 4465, X:POKE 4466, Y:PRINT "character".

POKE 4464,1 will go into the small alphabet mode without having to press sml/CAP. POKE 10682,1 before saving a program will cause the program to run automatically after loading.

The location of the keyboard buffer is 17828, but this only holds the ASCII number of the key being pressed if GET is issued before hand, thus GET A\$:A\$=CHR\$(PEEK(17828)) can be used in a program so that movement of your ship or whatever is continuous.

Finally to make a security copy of Sharp Basic, simply load the Basic and type POKE 10167,1:USR(33):USR(36) and hit CR.

Ian Clarke,
Stoke on Trent,
Staffordshire.

REVERSI REQUEST

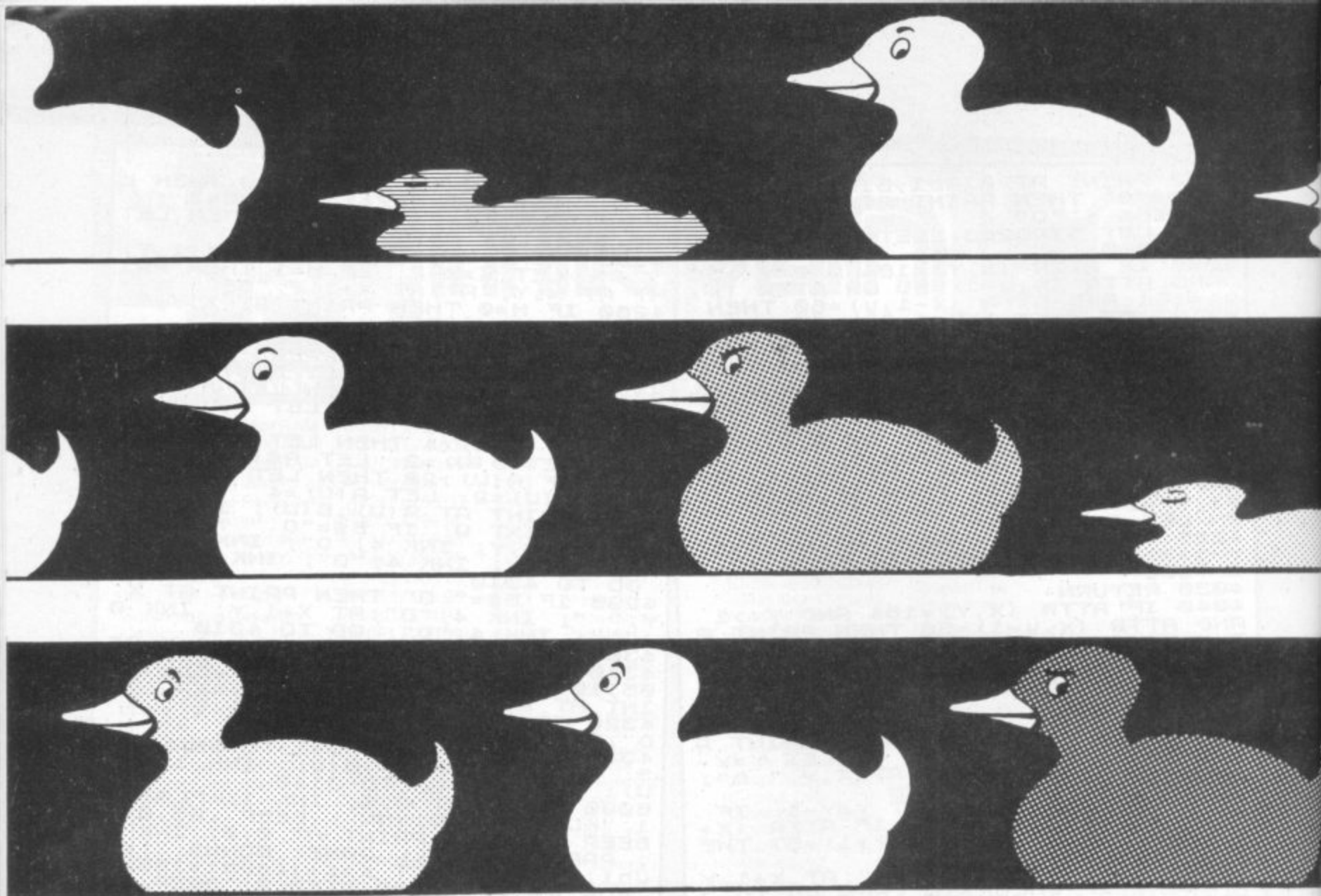
Dear Sir,
I think it was in the March 1982 edition that Gordon Stevens gave us an excellent Reversi (Othello) program for the ZX81.

However, this used some machine code and peeks for which there does not seem to be direct Spectrum equivalents.

Any chance of a Spectrum "conversion kit" for this very good program? I want to try to beat the swine!!

G. N. Thorne,
Welwick,
Hull.

Editor's reply: I suggest that you try and get hold of a ZX81 manual with all the system addresses in. Most of the variable names are the same as those for the Spectrum, and it's simply a matter of replacing the locations.



BY NIGEL PERCY

RUNS ON A SHARP MZ-80K IN 3K

USR calls and specialised Peeks and Pokes

USR (68) — Starts a sound after a value other than zero has been poked into locations 4514 or 4513

USR (71) — Stops the sound

USR (62) — Emits a short beep

USR (3494) — Stops some of the screen noise when laser is fired

POKE 10167,1 — Switches off the peek protect on Sharp Basic to allow Peek (17828)

PEEK (17828) — Returns the ASC value of the current key being pressed (for continuous movement of laser)

List of main variables

TL — Time limit of game in seconds

Y — Random position of blocks

P — Target poke code

T — Position of target

X — Position of laser gun

P1 — Movement key input

TI\$ — Internal timer

F — Position of laser bullet

H — High score

F\$ — Message which is flashed on screen

If you like taking pot shots at those bobbing ducks and targets you find in fairground shooting galleries you'll enjoy this game. The object is to shoot down as many targets within one minute as you can. Each target is worth 100 points — and if you shoot down all nine you'll be rewarded with a 500 point bonus and another crack at the game. However, each time you win an extra go the time limit gets shorter. The targets are represented by the numbers 1-9. They appear at random among a "battlefield" of blocks. If you hit a block with a blast from your laser gun instead of a target number you will lose 10 points — and valuable time. Once one target is hit another appears to take its place until you have destroyed all nine. Your score and the high score are displayed throughout the game.

You'll be hooked from the moment you start blasting away — those targets have an annoying habit of avoiding you!

```

1 POKE10167,1:TL=60
2 PRINT"#####";TAB(14);""SHOOT OUT""
3 PRINTTAB(8);"BY NIGEL PERCY (C) 1982"
4 PRINTTAB(6);"DO YOU REQUIRE INSTRUCTIONS"
5 PRINTTAB(11);"ANSWER 'Y' OR 'N'"
6 GETA$:IFA$=""THEN6
7 IFA$="Y"THENGOSUB91:GOTO10
8 IFA$="N"THEN10
9 GOTO6
10 PRINT"@"
11 FORI=53288TO53327
12 POKEI,208:POKEI+920,208
13 NEXT
14 FORI=53328TO54168STEP40
15 POKEI,208:POKEI+39,208
16 NEXT
17 FORI=1TO110
18 Y=INT(780*RND(1)+53288)
19 IFPEEK(Y)<>0THEN18
20 POKEY,67:NEXT
21 P=33
22 T=INT(780*RND(1)+53288)
23 IFPEEK(T)<>0THEN22
24 POKET,P
25 X=54169:POKEX,31
26 GOSUB27:TI$="000000":GOTO28
27 PRINT"    SCORE:   ####";S:TAB(23);"HIGH SCORE:";H:RETURN
28 GETA$:P1=PEEK(17828):IFP1=0THEN37
29 IFVAL(TI$)>=TLTHEN72
30 IFP1=65THENM=-1:GOTO34
31 IFP1=68THENM=1:GOTO34
32 IFP1=76THEN48
33 GOTO37
34 POKEX,0
35 IFPEEK(X+M)<>0THENPOKEX,31:GOTO37
36 X=X+M:POKEX,31
37 IFINT(3*RND(1)+1)=1THEN39
38 GOTO28
39 ONINT(4*RND(1)+1)GOTO40,41,42,43
40 M=-1:GOTO44
41 M=1:GOTO44

```

SHOOT OUT



Illustration: Terry Rogers



```

42 M=-40:GOTO44
43 M=40
44 POKET,0
45 IFPEEK(T+M)<>0THENPOKET,P:GOTO28
46 IFT+M>54089THENPOKET,P:GOTO28
47 T=T+M:POKET,P:GOTO28
48 F=X-40
49 POKEF,0
50 IFPEEK(F-40)<>0THEN53
51 F=F-40:USR(3494):POKEF,121
52 POKE4514,1:USR(68):USR(71):GOTO49
53 IFPEEK(F-40)=208THEN39
54 IFPEEK(F-40)=67THENPOKEF-40,0:S=S-10:GOSUB27:GOTO39
55 S=S+100:GOSUB27
56 FORDL=1TO30
57 POKET,INT(50*RND(1)+188):POKE4513,INT(255*RND(1)+1):USR(68):NEXT:USR(71)
58 POKET,0
59 P=P+1:IFP=42THEN63
60 T=INT(780*RND(1)+53288)
61 IFPEEK(T)<>0THEN60
62 POKET,P:GOTO28
63 F#=""
64 PRINT"@";GOSUB85
65 PRINT"@"WELL DONE ... !!!"
66 PRINT"@"WELL DONE YOU HAVE DESTROYED ALL THE"
67 PRINT"@"TARGETS AND YOU HAVE RECEIVED A BONUS"
68 TL=TL-10:IFTL<=10THENTL=10
69 PRINT"@"
70 GETA$:IFA#="" THEN10
71 GOTO70
72 F#=""
73 PRINT"@" YOU HAVE RUN OUT OF TIME...!!"
74 PRINT"@"GOSUB85
75 PRINT"@"BAD LUCK!!! YOU HAVE RUN OUT OF TIME"
76 IFS>HTHENH=S
77 S=0:TL=60
78 PRINT"@"DO YOU WANT ANOTHER GAME (Y OR N)"
79 GETA$:IFA#="" THEN79
80 IFA#="Y" THEN10
81 IFA#="N" THEN83
82 GOTO79
83 PRINT"@"GOSUB85
84 END
85 FORI=1TO5
86 PRINT"@"GOSUB85
87 FORDL=1TO150:NEXT
88 PRINT"@"
89 FORDL=1TO150:NEXT
90 NEXTI:RETURN
91 PRINT"@";TAB(14);"'SHOOT OUT'"
92 PRINTTAB(14);" "
93 PRINT"@" The object of this game is to shoot"
94 PRINT"@"as many targets (each worth 100 points)"
95 PRINT"@"in 1 minute. The targets are represented "
96 PRINT"@"by the numbers 1-9 depending on how"
97 PRINT"@"many you have shot down."
98 PRINT"@"If you shoot all nine in one minute"
99 PRINT"@"you will receive a bonus of 500 points"
100 PRINT"@"and an extra go - every time you"
101 PRINT"@"receive an extra go your time limit"
102 PRINT"@"will decrease by ten seconds."
103 PRINT"@"PRESS [SPACE] FOR FURTHER INSTRUCTIONS"
104 GETA$:IFA#="" THEN106
105 GOTO104
106 PRINT"@"To move your laser base you use the"
107 PRINT"@"following keys:-"
108 PRINT"@"
109 PRINT"@"A - LEFT D - RIGHT"
110 PRINT"@"You use key 'L' to fire the laser"
111 PRINT"@"The targets are moving randomly in a "
112 PRINT"@"maze which is made up of 'M's and"
113 PRINT"@"each time you destroy one of these"
114 PRINT"@"blocks your score is decremented by"
115 PRINT"@"
116 GETA$:IFA#="" THENRETURN
117 GOTO116

```



No games supplement would be complete without that little denizen of the mazes. So here he is - renamed and revamped for the Sharp MZ80k!

Guide your little Muncher around his maze home eating up points and the Munchers favourite snack called "Gulps". These "Gulps" are extremely important as they guard you against the attentions of those nasty ghosts which also haunt the corridors of the maze.

If you manage to gobble down 20 "Gulps" the ghost which is chasing you will turn white with fear and runs away. If you catch and eat the ghost while he is in this fear-stricken state the score is given and you get a new restocked maze.

Avoiding the ghost is a difficult task and there are several surprise features built into this program should you manage to chalk up a high score - which are best left for you

to find out! At the end of each game the top ten scores are displayed.

To move your little Muncher around use the W, A, D and X keys as in many MZ80k games.

If you find the game too difficult then a useful tip is to change the value of the variable P9 in line 420 which specifies the number of "Gulps" that must be munched before the ghost turns white.

The author has managed a high score of 258,000 - so that's the target for all you maze fans out there!

Variables:
206, 207-different ghosts.
46-fullstop. 202-man.
208-grey walls.
191-"Gulps". PEEK (17828)- address contains ASC code of key passed in GET routine. 53248- screen address (TOP LEFT).

The author says that conversion to a Pet is easy using the above variables.

MUNCHERS

```

1 GOSUB3000:POKE10167,1
2 TEMPO7
3 MUSIC"CBAGAGFEDRDRRC2"
10 DIMG(4),D(4),E(4),HS(10),N$(10)
15 G(1)=53704:G(2)=53320:G(3)=54166:G(4)=54130:X9=0:II=0
16 FORN=1TO4:D(N)=G(N):NEXTN
20 D=1
30 PRINT"Press Any key or E to end."
32 GETA$:IFA$="E"THENPRINT"Thankyou.":END
33 IFA$=""THEN32
90 A1$="A":A2$="D":A3$="W":A4$="X"
91 PRINT"USE DIFFERENT KEYS?"
92 GETA$:IFA$=""THEN92
93 IFA$="N"THEN98
94 INPUT "WEST KEY? ":A1$
95 INPUT "EAST KEY? ":A2$
96 INPUT "NORTH KEY? ":A3$
97 INPUT "SOUTH KEY? ":A4$
98 A=ASC(A1$):B=ASC(A2$):C=ASC(A3$):D=ASC(A4$)
100 PRINT"MMMUNCHERS."
110 PRINT"Press ANY KEY."
120 GET A$:IF A$="" THEN 120
130 REM **** DRAW MAZE ****
135 PRINT "
140 PRINT "
150 PRINT "
160 PRINT "
170 PRINT "
180 PRINT "
190 PRINT "
200 PRINT "
210 PRINT "
220 PRINT "
230 PRINT "
240 PRINT "
250 PRINT "
260 PRINT "
280 PRINT "
290 PRINT "
300 PRINT "
310 PRINT "
320 PRINT "
330 PRINT "
340 PRINT "
350 PRINT "
360 PRINT "
370 PRINT "
380 GOTO4000

```





```
400 REM **** VARIABLES ****
410 X=53293:Y=202:Q=17828:E=208:F=207
420 I=1:J=-1:K=40:L=-40:M=30:T=10:V=191:P=0:P9=20:G=206:T1=11+(0*1.5)
430 I1=1:J1=-1:K1=40:L1=-40
440 POKEX,Y
500 GETX$:IFPEEK(Q)=ATHENXX=J
520 IFPEEK(Q)=BTHENXX=I
530 IFPEEK(Q)=CTHENXX=L
540 IFPEEK(Q)=DTHENXX=K
560 X=X+XX:IFPEEK(X)=ETHENX=X-XX:GOTO621
570 IFPEEK(X)=FTHEN2000
580 IFPEEK(X)=UTHENSC=SC+T
590 IFPEEK(X)=VTHENP=P+I
600 IF (P=P9)*(K2=0) THENF=G:T1$="000000":I1=-I1:J1=-J1:K1=-K1:L1=-L1:M=-M:K2=1
620 POKEX-XX,0:POKEX,Y
621 FORH=1TO0:POKEG(H),F
710 IFG(H)>X+MTHENGG=L1:GOTO750
720 IFG(H)<X-MTHENGG=K1:GOTO750
730 IFG(H)<XTHENGG=I1:GOTO750
740 GG=J1:GOTO750
745 IF (PEEK(G(H)+K1)=E)*(PEEK(G(H)+I1)=E) THENGG=J1:GOTO750
747 IF (PEEK(G(H)-K1)=E)*(PEEK(G(H)-I1)=E) THENGG=I1
750 G(H)=G(H)+GG:POKE G(H)-GG,U
780 IFPEEK(G(H))=ETHENG(H)=G(H)-GG:GG=SGN(GG)*41-GG:GOTO745
790 IFPEEK(G(H))=YTHEN2000
795 IF (K2=1)*(VAL(T1$)>=T1) THENF=207:K2=0:I1=-I1:J1=-J1:
K1=-K1:L1=-L1:M=-M:P=0
800 POKEG(H),F:NEXTH:GOTO500
2000 IFF=206THEN5000
2005 SC=SC+I1*1000000
2006 SC=SC+P*100
2007 FORJ=0TO5:FORI=1TOJ*50STEPJ:POKE4514,I:USR(68):NEXTI,J
2008 FORJ=255TO1STEP-3:POKE4514,J:USR(68):NEXTJ
2009 USR(71)
2010 PRINT "G MUNCH!!!"
2020 PRINT "G SCORE = ";SC
2030 IFSC>HS(10) THENINPUT "NAME? ";N$(10)
2031 IFLEN(N$(10))>15 THENPRINT "TOO LONG... (MAX 15)":GOTO2030
2032 IFSC>HS(10) THENHS(10)=SC:GOTO2040
2034 MUSIC "CDEEFFGGGC"
2035 GOTO2130
2040 REM **** HALL OF FAME ****
2050 FORS1=1TO9:M=0
2060 FORS2=S1TO10
2070 IFHS(S2)<=MTHEN2090
2080 M=HS(S2):S3=S2
2090 NEXTS2
2100 HS(S3)=HS(S1):HS(S1)=M
2110 N$(S3)=N$(S1):N$(S1)=N$(S1)=N$
2120 NEXTS1
2130 PRINT "G Hall of Fame...."
2140 FORN=1TO10
2150 PRINT "G ";N; ". ";TAB(4);HS(N);TAB(20);N$(N)
2160 NEXTN
2170 SC=0:GOTO10
3000 REM **** INSTRUCTIONS ****
3010 PRINT "G MUNCHERS."
3020 B1$="G Written by "
3030 B2$="G Chris Stangroom "
3040 B3$="G Iain MacNaughton "
3050 FORN=1TOLEN(B1$):PRINTMID$(B1$,N,1);:FORI=1TO20:NEXTI:NEXTN:PRINT
3060 FORN=1TOLEN(B2$):PRINTMID$(B2$,N,1);:FORI=1TO20:NEXTI:NEXTN:PRINT
3063 PRINT "G %%"
3065 FORN=1TOLEN(B3$):PRINTMID$(B3$,N,1);:FORI=1TO20:NEXTI:NEXTN
3070 PRINT "G %%%Instructions? (Y/N)"
3090 FORN=1TO500:NEXTN
3100 GETA$
3110 IFA$="" THEN3100
3120 FORN=53608TO53613:POKEN,207:FORT=1TO250STEP50:POKE4514,T:USR(68)
3130 NEXTT:POKEN,0:NEXTN:USR(71)
3131 POKE53573,207:GOSUB5300:POKE53573,0:GOSUB5300:POKE53533,207:GOSUB5300
3132 POKE53533,0:GOSUB5300:POKE53573,207:GOSUB5300:POKE53573,0:GOSUB5300
3133 FORN=53613TO53623:POKEN,207:FORT=1TO250STEP50:POKE4514,T:USR(68):NEXTT
3135 POKEN,0:NEXTN:USR(68):POKE4465,0:POKE4466,9:PRINT "G O O D L U C K"
3137 USR(71):FORN=1TO1000:NEXT
3140 IFA$="N" THEN3280
3145 USR(71)
3150 PRINT "G Instructions."
3160 PRINT "G Run from the GHOST ( ) & eat the dots"
3170 PRINT "G GULPS ( ). As soon as you have"
3180 PRINT "G eaten 20 GULPS, the Ghost turns"
3190 PRINT "G WHITE and you must chase it."
```



81



```

3200 PRINT "If you catch it, a new screen will"
3210 PRINT "appear. Normal controls are:-"
3220 PRINT "SA --- WEST."
3230 PRINT "SD --- EAST."
3240 PRINT "SW --- NORTH."
3250 PRINT "SX --- SOUTH."
3260 POKE53348,207:POKE53417,191
3270 GETA$:IFA$=""THEN3270
3280 REM **** DATA ****
3290 DIMH(25),P(100),T(33)
3300 USR(62):FORN=1TO25:READH(N):H(N)=H(N)+53000:NEXTN
3310 DATA 751,975,542,376,972,997,987,980,681,676,700,695,595,343,355,622,763
3320 DATA 764,765,498,418,424,516,1071,785
3330 FORN=1TO100:READP(N):NEXTN
3340 DATA 1,1,1,1,2,2,2,1,3,3
3350 DATA 3,3,1,4,1,4,1,4,3,1
3360 DATA 3,4,4,2,2,1,4,1,4,2
3370 DATA 1,1,2,2,3,3,4,4,2,2
3380 DATA 2,1,1,4,4,1,3,4,2,3
3390 DATA 3,3,2,3,4,4,3,1,1,2
3400 DATA 2,2,2,3,4,1,4,4,1,1
3410 DATA 2,3,4,2,3,4,3,2,3,4
3420 DATA 1,1,1,2,2,2,3,3,3,4
3430 DATA 4,4,2,2,3,3,2,2,3,2
3440 FORN=1TO27:READT(N):NEXTN
3450 DATA 13,17,20,26,30,33,34,39,40,42,43,49,53,59,60,61,62
3460 DATA 66,69,71,74,78,93,94,97,98,100
3470 REM **** FINISH ****
3480 RETURN
4000 REM **** VARIATIONS ****
4010 REM
4020 REM * HOLES *
4030 FORN=1TOINT(SC/40000)
4040 POKEH(N),46
4050 NEXTN
4060 REM * NUMBER OF PUDS *
4070 O=P(INT(SC/10000))
4080 REM * TRAIL *
4090 U=46
4100 FORN=1TO27
4110 IFINT(SC/10000)=T(N)THENU=207
4120 NEXTN
4130 REM * HOLES BLOCKED UP *
4140 IFRND(1)<0.5THENPOKE53729,207
4150 IF(RND(1)<0.2)*(O<4)*(U=46)THENPOKE53407,46:POKE53409,46
4160 IF(RND(1)<0.2)*(O<4)*(U=46)THENPOKE54087,46:POKE54089,46
4170 IFSC+II*1000000 >500000THENX9=10000
4180 GOTO400
5000 ST=0:SC=SC+P*100:K2=0
5001 GOSUB5200
5007 FORNN=1TO55
5008 ST=ST+1
5010 FORN=255TO1STEP-ST*2
5020 POKE4513,N:USR(68)
5030 NEXTN
5035 NEXTNN
5045 SC=SC+2000+X9:FT=FT+1
5046 IF FT=4 THEN FT=1:GOTO 5100
5047 IFSC>1000000THENII=II+1:SC=SC-1000000
5048 PRINT"SCORE = ";SC+II*1000000
5050 USR(71):ST=0
5060 POKE4466,23:PRINT"PRESS ANY KEY."
5070 GETA$:IFA$=""THEN5070
5080 USR(62):GOTO130
5100 FOR NN=55 TO 1 STEP-1
5110 ST=ST-1
5120 FOR N=255 TO 1 STEP -ST*2
5130 POKE 4513,N:USR(68)
5140 NEXT N
5150 NEXT NN
5160 SC=SC+10000+X9:FT=1:GOTO 5047
5200 REM * START POSITIONS *
5210 FORN=1TO4
5220 E(N)=INT(RND(1)*4)+1
5230 FORI=N-1TO1STEP-1:IFE(I)=E(N)THEN5220
5240 NEXTI
5250 NEXTN
5260 REM * SWAP *
5270 FORN=1TO4:G(N)=D(E(N)):NEXTN
5280 RETURN
5300 FORT=1TO50:NEXTT:RETURN

```



In Short Circuit you are charged with repairing a silicon chip from the inside.

Your mission is to help Fred the Repairman to rectify a short circuit in the wall of the chip.

This is done by picking up the pills of silicon chip repairing vitamins which

can be found on the edge of screen.

Fred must be guided through the chip using the keys:

- Up - J
- Down - I
- Left - Y
- Right - I

Fred must not touch anything on his way up to the vitamin pills or he will be instantly fried by 10 billion volts. He must also beware of the Sparx which wander around the chip.

A nice display awaits you should you complete

Fred's hazardous task. And the author's highest score is 1,980 so try and beat that.

Next month we publish the sequel to this game called Repairman's Revenge. And the author has speeded up his sparx and armed Fred with an energy gun. . . don't miss it Sharp owners.

SHORT CIRCUIT

```

1 GOTO 9600
2 GOTO 9500
3 POKE 10167,1:TEMPO 7
4 PRINT "G":FOR A=1 TO 100:X=INT(49*RND(1)):
Y=INT(79*RND(1)):SET Y,X
5 NEXT
6 PRINTTAB(17);"00000000SHORT"
7 PRINTTAB(16);"CIRCUIT"
8 PRINT:PRINTTAB(17);"/\/"
9 PRINTTAB(17);"00/"
10 PRINTTAB(17);"0/\0"
11 PRINTTAB(17);"U"
13 PRINTTAB(17);" "
14 PRINTTAB(17);" ":PRINTTAB(3);
"(C)copyright stuart wider(7.6.82)"
15 FOR G=1 TO 1000:NEXT:USR(71):SC=0:T=0
16 FOR X=1 TO 50:PRINT:NEXT:BN=53540
70 DIM M(255)
71 FOR C=0 TO 255:POKE 4514,C:USR(68)
72 M(C)=BN:BN=BN+1
73 NEXT
74 PRINT "G"
83 PRINTTAB(9);"0000"
84 PRINTTAB(9);" "
85 PRINTTAB(9);" "
86 PRINTTAB(9);" "
87 PRINTTAB(9);" "
88 USR(71):FOR GV=1 TO1000:NEXT GV
90 PRINT "G" SCORE HI-SCORE";HS:" ";X$:TEMPO 7
100 PRINT " "
110 PRINT " "
120 PRINT " "
130 PRINT " "
140 PRINT " "
150 PRINT " "
160 PRINT " "
170 PRINT " "
180 PRINT " "
190 PRINT " "
200 PRINT " "
210 PRINT " "
220 PRINT " "
240 PRINT " "
250 PRINT " "
260 PRINT " "
270 PRINT " "
280 PRINT " "
290 PRINT " "
300 PRINT " "
310 PRINT " "
320 PRINT " "
330 PRINT " "
335 PRINT
340 PRINTTAB(33);"SHORT"
350 PRINTTAB(32);"CIRCUIT"
360 PRINT:PRINTTAB(33);"/\/"
370 PRINTTAB(33);"00/"
380 PRINTTAB(33);"0/\0"
390 PRINTTAB(33);"U"
400 PRINTTAB(33);" "
410 PRINTTAB(33);" ":PRINTTAB(3);
415 PRINT
420 PRINTTAB(33);"BY"
430 PRINTTAB(33);"STUART"

```



83

```
460 PRINTTAB(33); "WIDER"  
461 REM +++SET UP VARIABLES+++  
462 MAN=56935-40  
463 A=207  
464 C=1  
500 GOSUB 1000  
520 GOTO 500  
1000 GET A$  
1001 POKE 4514,255:USR(68)  
1010 IF PEEK(17828)=55 THEN POKE  
1020 IF PEEK(17828)=73 THEN POKE  
1030 IF PEEK(17828)=74 THEN POKE  
1040 IF PEEK(17828)=89 THEN POKE  
MAN,0:MAN=MAN-40  
MAN,0:MAN=MAN+1  
MAN,0:MAN=MAN+40  
MAN,0:MAN=MAN-1  
1042 USR(71)  
1050 POKE MAN,A  
1051 GOTO 5000  
1052 IF A=206 THEN GOTO 3500  
1055 IF (PEEK(MAN+40)=71) THEN A=206:  
POKE MAN+40,0:GOTO 6000:MO=0  
1060 IF (PEEK(MAN+1)<>0) THEN GOTO 3000  
1070 IF (PEEK(MAN-1)<>0) THEN GOTO 3000  
1080 IF (PEEK(MAN+40)<>0) THEN GOTO 3000  
1090 IF (PEEK(MAN-40)<>0) THEN GOTO 3000  
1100 RETURN  
1956 IF A=207 THEN GOTO 1055  
3000 FOR B=206 TO 207  
3001 POKE 4514,200:USR(68)  
3010 POKE MAN,B  
3025 C=C+1  
3026 IF C>50 THEN 3040  
3030 NEXT B  
3035 GOTO 3000  
3040 POKE MAN-1,227:POKE MAN-2,227  
3045 POKE MAN+1,227:POKE MAN+2,227  
3050 POKE MAN,166  
3060 POKE MAN+40,238:POKE MAN-40,238  
3065 POKE MAN+80,238:POKE MAN-80,238  
3072 POKE MAN-1,0:POKE MAN-2,0  
3073 POKE MAN+1,0:POKE MAN+2,0  
3074 POKE MAN,0  
3075 POKE MAN+40,0:POKE MAN-40,0  
3076 POKE MAN+80,0:POKE MAN-80,0  
3090 FOR VC=1 TO 255:POKE 4514,VC:  
USR(68):NEXT VC  
3091 USR(71):FOR VB=1 TO 1000:NEXT VB  
3092 IF SC>HS THEN PRINT"#####Well  
done!! Please enter your name...."  
3094 IF SC>HS THEN INPUT X$  
3095 AA=LEN(X$):IF AA>10 THEN GOTO 3092  
3096 IF SC>HS THEN HS=SC  
3097 PRINTTAB(9); "ANOTHER GAME ?"  
3098 GET A$  
3099 IF A$="Y" THEN PRINTTAB(14);  
"YES":GOTO 15  
3100 IF A$="N" THEN END  
3101 GOTO 3098  
3500 IF (PEEK(MAN-40)=43)  
THEN POKE MAN-40,71:  
MAN=MAN+40:A=207:GOTO 7000  
3510 POKE MAN,A  
3515 GOTO 1060  
5000 C=C+1  
5001 POKE M(C),0  
5010 IF C=>9 THEN C=0  
5020 X=INT(4*RND(1))  
5025 POKE M(C),0
```



