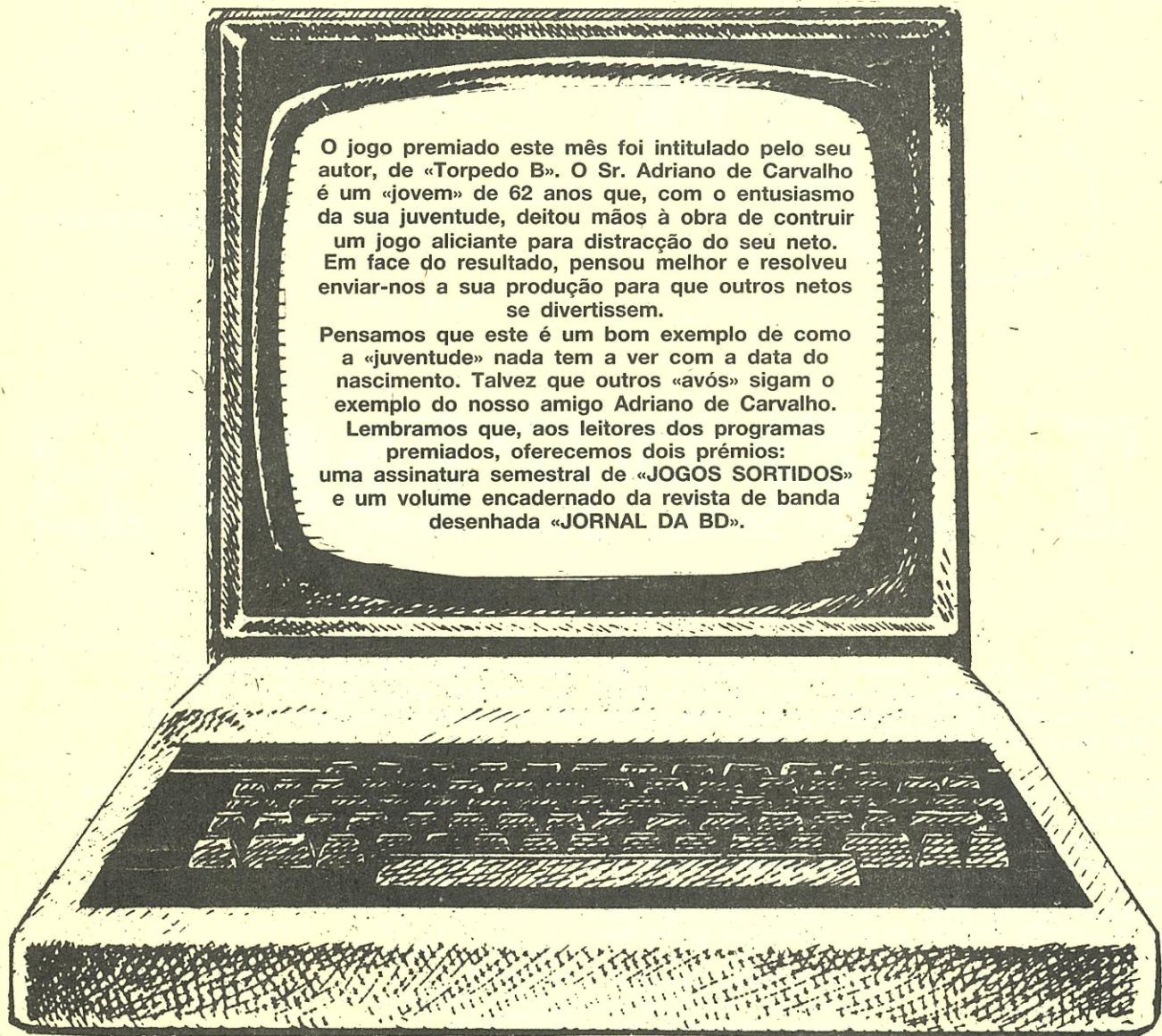


JOGOS PARA O SEU MICROCOMPUTADOR

AGORA
16
PÁGINAS



O jogo premiado este mês foi intitulado pelo seu autor, de «Torpedo B». O Sr. Adriano de Carvalho é um «jovem» de 62 anos que, com o entusiasmo da sua juventude, deitou mãos à obra de construir um jogo aliciante para distração do seu neto. Em face do resultado, pensou melhor e resolveu enviar-nos a sua produção para que outros netos se divertissem.

Pensamos que este é um bom exemplo de como a «juventude» nada tem a ver com a data do nascimento. Talvez que outros «avós» sigam o exemplo do nosso amigo Adriano de Carvalho.

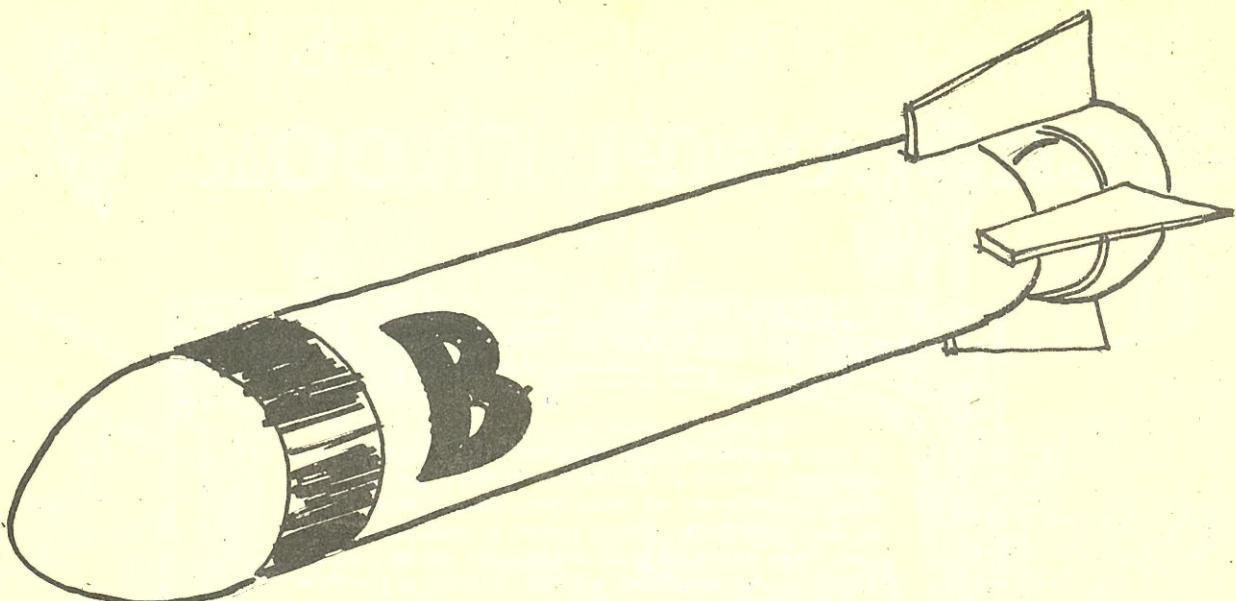
Lembramos que, aos leitores dos programas premiados, oferecemos dois prémios: uma assinatura semestral de «JOGOS SORTIDOS» e um volume encadernado da revista de banda desenhada «JORNAL DA BD».

ENVIE-NOS OS SEUS PROGRAMAS ORIGINAIS E GANHE PRÉMIOS

Colabore connosco, enviando-nos o seu *programa original*, do seguinte modo:

1. Nome, morada, idade e n.º de telefone.
2. O programa de preferência em cassette, indicando o tipo e a capacidade do computador.
3. Uma descrição geral do jogo com as instruções necessárias.
4. Uma explicação detalhada da função das várias partes do programa.

Para: JOGOS SORTIDOS - Rua Duque de Palmela, 37, 2.º-Dto. - 1200 LISBOA



TORPEDO B

Jogo escrito por Adriano de Carvalho, para o Spectrum 48K ou 16K. Este nosso "jovem" leitor tem 62 anos e escreveu-o para alegria do seu neto. Esperamos que dê a mesma alegria aos muitos entusiastas destes agradáveis passatempos.

Descrição Geral do Jogo:

Trata-se de um jogo simples em que um submarino armado de torpedos tenta evitar a passagem de navios de guerra inimigos. Os impactos têm tantos mais pontos, quanto menos torpedos forem utilizados em cada disparo. Sempre que o navio passa, o jogo pára podendo ser recomeçado com o registo do máximo de pontos atingidos.

Por sua vez o submarino está sujeito a ataques de bombas de profundidade lançadas pelo navio. Se for atingido perde-se direito aos pontos inclusive os máximos.

Explicação do Programa:

Na linha 1, o Poke 23658,8 é como se sabe um dispositivo para obrigar o teclado a maiúsculas.

A linha 2 dá as indicações para o jogo.

As linhas 4 a 14 são respeitantes aos gráficos, pelo que nas linhas 140 e 190 as respectivas letras devem ser metidas em modo gráfico. Nas linhas 20 a 100 encontram-se as variáveis cujas funções são:

r - n.º de pontos máximo; s - score normal; x - coordenada horizontal do submarino; y - coordenada vertical do torpedo; p - n.º de pontos por cada impacto; n - coordenada horizontal do navio; c - coordenada horizontal do torpedo; ss - estabelece a condição do submarino (activo ou afundado); yy - coordenada vertical das bombas de profundidade.

As linhas 120 e 130 proporcionam os comandos do submarino.

A linha 160 dá o movimento do navio em forma semi-aleatória.

A linha 213 dá o comando do disparo do torpedo.

As condições de impacto do navio e do submarino são concretizadas respectivamente nas linhas 270 e 208 com a utilização da função SCREEN\$, cujo valor depende dos atributos (cor) do alvo.

A linha 160 estabelece também a condição de passagem do navio (n > 29).

```

1 BORDER 8: PAPER 5: POKE 236
58,8
2 CLS : PRINT AT 8,8;"TORPEDO"
TORPEDO ##'((@ A.C.64)) T
U VAI SER COMANDANTE DE UM SU
BMARINO QUE VAI TENTAR AFUNDAR E
IMPEDIR A PASSAGEM DE NAVIOS IN
IMIGOS.";"Poupa torpedos e cuida
do com as bombas de profundidade
...;"Comandos:";" S-Esq,
B-Dir, D-Disparo"

```

```

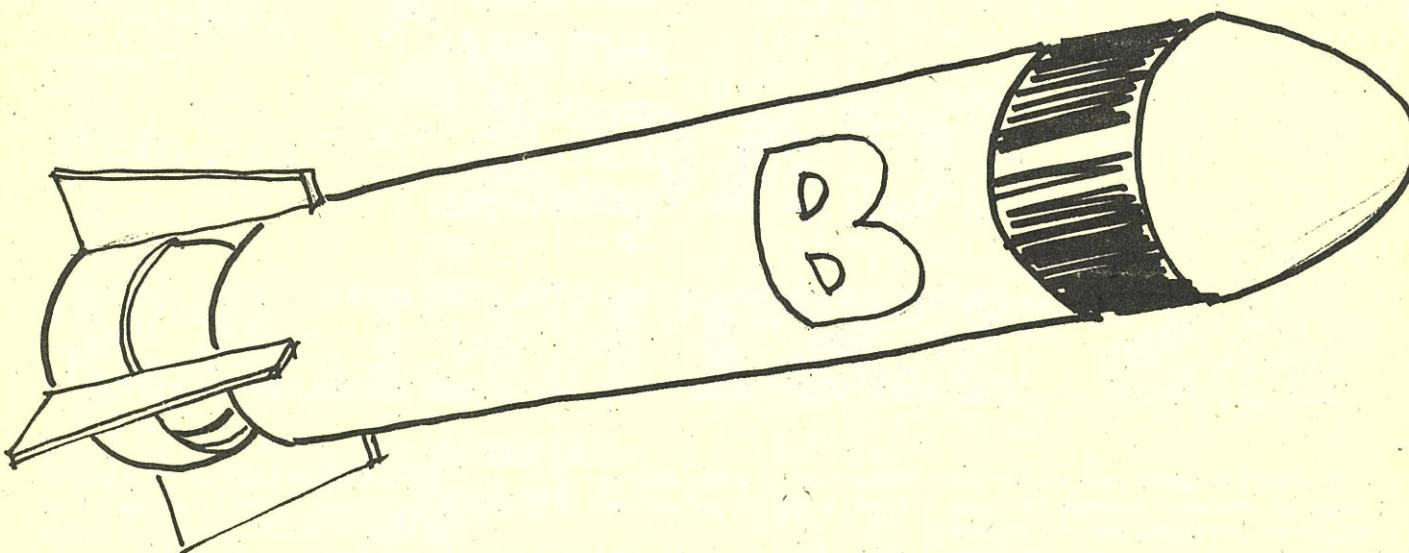
3 PRINT #0)"i tecla p/inicio"
4 PAUSE 0
5 RESTORE : LET ss=0
6 FOR a=1 TO 6: READ a$: FOR
t=0 TO 7: READ b
6 POKE USR a$+t,b
7 NEXT t: NEXT a
9 DATA "f",0,0,0,31,0,121,255
,255
10 DATA "9",56,56,56,57,57,255
,255,255

```

```

11 DATA "h",0,0,0,240,192,255,
254,252
12 DATA "i",0,0,0,0,0,253,253,
125
13 DATA "j",58,58,58,58,58,253
,253,253
14 DATA "k",0,0,0,0,0,253,253,
252
15 CLS
16 LET r=0
17 LET x=20: LET s=0
18 LET p=0
19 LET s=s+p
20 CLS
21 PRINT AT 0,20;"Pontos-":s
22 LET p=0
23 LET n=1
24 LET y=20
25 LET c=0
26 PRINT AT 8,0; INK 1;""
27
28 PRINT AT 20,x;""
29 IF INKEY$="S" AND X>0 THEN
LET X=X-1
30 IF INKEY$="S" AND X<28 THEN
LET X=X+1
31 PRINT AT 20,x; INK 1; INK
32
33 PRINT AT p,p;""
34 LET n=n+(RND/1.5): IF n>29
THEN PRINT AT 0,0;"ESTE PASSOU.."
35 BEEP 3,10: BEEP 2,0
36 IF n>29 THEN PRINT #0;"Mais
?(S/N)": PAUSE 0: IF PEEK 23656=
63 THEN GO TO 28
37 IF n>29 THEN GO TO 1
38 LET p=10
39
40 IF s>r THEN LET r=s
41 PRINT AT 2,20;"Max-":r
42 PRINT AT 7,n-1; INK 3;" FGH
";BEEP .01,RND*.50
43 IF n<12 THEN LET yy=(9+n)
44 IF n>12 AND n<21 THEN LET y
y=10+(n-10)
45 IF n>21 THEN LET yy=10+(n-1
9)
46 PRINT AT yy,(n+2); INK 7;"O
"
47
48 /PRINT AT yy-1,(n+1); ""
49 IF CODE SCREEN$ (20,x+2)=11
50 THEN PRINT AT yy,n-1;"**" ss
51 AFUNDADO!!!!": BEEP 8,8: LET ss=1
52 PRINT #0;"Mais?(S/N)": PAUSE 0
53 IF PEEK 23656=63 THEN GO TO 4
54 IF ss=1 THEN GO TO 1
55 IF c=0 AND INKEY$="0" THEN
LET c=x+1
56 IF INKEY$="0" THEN LET p=p-
1
57
58 IF c=0 THEN GO TO 110
59 PRINT AT y,c+1;""
60 LET y=y-1
61 IF y<7 THEN LET s=s-3
62 IF y<7 THEN GO TO 90
63 PRINT AT y,c+1;""
64 IF CODE SCREEN$ (7,n+1)=33
THEN FOR w=1 TO 5: PRINT AT y,c+
1;"**": PRINT ("AFUNDADO!!!!": BEEP
,5,15: NEXT w: GO TO 40
65 IF s>r THEN LET r=s
66 GO TO 110
67 SAVE "Torpedo B" LINE 1
68 PRINT "VERIFY": VERIFY "

```

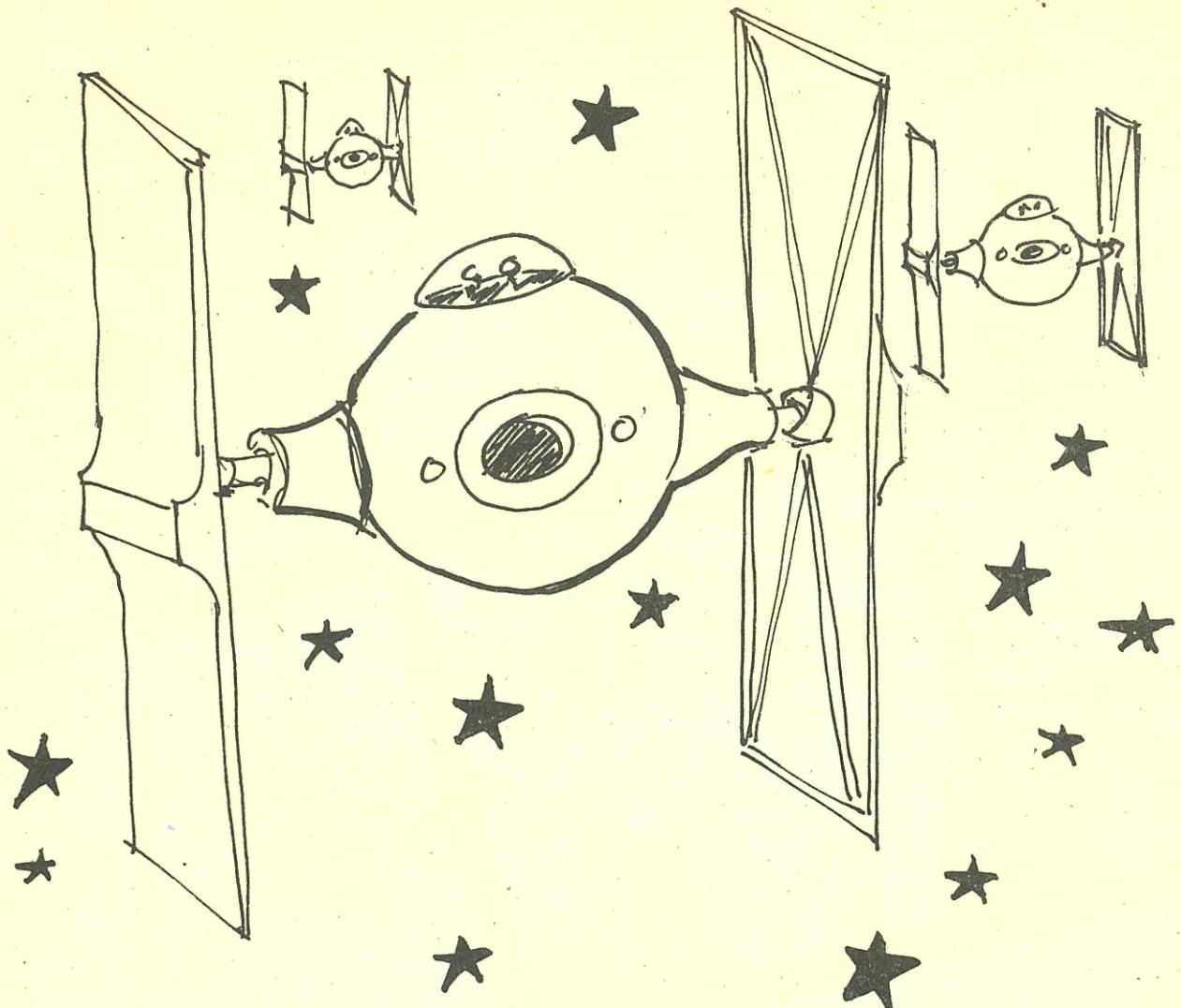


COMPUTER CLUB

ATARI

• 800 XL • 130 XE • 520 ST • 1040 ST •

RUA JOAQUIM PAÇO D'ARCOS N.º 9-A (BENFICA – Frente C. C. Fonte Nova) – 1500 LISBOA



CAÇA ÀS ESTRELAS

O objectivo deste jogo é o de dar caça às estrelas (inverse '★') que nascem continuamente. Se houver quatro estrelas sobrepostas, uma das suas vidas estará perdida. A sua tarefa é evitar que se forme um tal agrupamento de estrelas, destruindo-as à medida que se formam. Se as atingir, serão destruídas, mas não por muito tempo.

O jogo termina quando terminarem as suas vidas que, à partida, são três. Se bater o recorde da pontuação pode fazer entrar o seu nome (até treze caracteres), e, no fim do jogo, ficam à sua disposição as duas seguintes opções:

Tecla 1 para obter instruções.
Tecla 2 para jogar de novo.

Fazendo «1» ou «2» obterá as respostas apropriadas. Também lhe é oferecida uma vida suplementar se atingir os 2000 pontos.

O programa está dividido em duas partes, BASIC e código máquina. Este último imprime o resultado em caracteres invertidos no lado superior esquerdo do ecrã. Nessa altura, acrescenta 10 pontos.

Antes de mais, introduza o «code loader» e faça RUN. O computador mostra uma série de memórias e pedir-lhe-á para INPUT alguns nú-

meros que são dados na figura 1 (Disassembly listing). De seguida introduza a BASIC listing e estará pronto para começar.

Os caracteres gráficos na linha 310 são caracteres na chave «A».

Para poupar (SAVE) o jogo, introduza GOTO 9000. O jogo faz o SAVE automático e, só depois, começa. Se entender que o resultado necessário para ganhar uma vida suplementar, é muito alto, então altere a linha 830 conforme desejar.

LISTAGEM BASIC

Linhas

1 – Código máquina

10-90 – Torna o ecrã negro e constrói as variáveis

99-210 – Imprime as instruções no ecrã

220-390 – Imprime o écran

399-460 – Variáveis usadas na rotina

de disparo

470-480 – Rotina da chave de partida

489-840 – Programa principal

999-104

1999-2040 - Move a nave para a esquerda

1000-2010 - Mova a nave para a direita

2999-3230 - Sub-rotina do disparo da nave

3999-4210 - Rotina da «perda da

vida»

4999-5060 - Imprime as vidas no
écran

5999-7530 – Rotina do fim do jogo
e imprime as instruções

7999-8300 = Introduz o nome e o

1995 - Intendente
resultado mais alto

8499-8610 - Rotina da vida suplementar

8999-9030 - Rotina do SAVE

```

1 REM U?EEERND) - :16,GRNDEERND)E
200 / PRINT ?TAN (XXXXX
10 POKE 16418,0
20 LET B$=""

50 LET H$="00000"
60 LET M$=
70 LET I$="-----"
90 REM
100 GOOSUB 10000
105 PRINT AT 2,10;"-----"
110 TAB 10;"-----";TAB 10;"-----"
115 PRINT AT 6,5;"-----";TAB 10;"-----"
120 PRINT AT 6,5;"-----";TAB 10;"-----"
125 TAB 10;"-----";AT 9,5;"-----";TAB 10;"-----"
130 PRINT AT 10,5;"-----";TAB 10;"-----"
135 TAB 10;"-----";AT 11,5;"-----";TAB 10;"-----"
140 PRINT AT 12,5;"-----";TAB 10;"-----"
145 TAB 10;"-----";AT 13,5;"-----";TAB 10;"-----"
150 PRINT AT 14,5;"-----";TAB 10;"-----"
155 TAB 10;"-----";AT 15,5;"-----";TAB 10;"-----"
160 PRINT AT 16,5;"-----";TAB 10;"-----"
165 TAB 10;"-----";AT 17,5;"-----";TAB 10;"-----"
170 PRINT AT 18,5;"-----";TAB 10;"-----"
175 TAB 10;"-----";AT 19,5;"-----";TAB 10;"-----"
180 PRINT AT 20,5;"-----";TAB 10;"-----"
185 TAB 10;"-----";AT 21,5;"-----";TAB 10;"-----"
190 PRINT AT 22,5;"-----";TAB 10;"-----"
195 TAB 10;"-----";AT 23,5;"-----";TAB 10;"-----"
200 PRINT AT 23,4;"-----";TAB 10;"-----"
205 TAB 10;"-----";AT 24,4;"-----";TAB 10;"-----"
210 IF INKEY$="" THEN GOTO 210
220 LET SC=0
230 LET LV=0
240 LET U$="0"
250 GOOSUB 10000
260 PRINT AT 3,10;"-----";TAB 10;"-----"
265 TAB 10;"-----";AT 4,10;"-----";TAB 10;"-----"
270 PRINT AT 5,10;"-----";TAB 10;"-----"
275 TAB 10;"-----";AT 6,10;"-----";TAB 10;"-----"
280 PRINT AT 7,10;"-----";TAB 10;"-----"
285 TAB 10;"-----";AT 8,10;"-----";TAB 10;"-----"
290 PRINT AT 9,10;"-----";TAB 10;"-----"
295 TAB 10;"-----";AT 10,10;"-----";TAB 10;"-----"
300 PRINT AT 11,10;"-----";TAB 10;"-----"
305 TAB 10;"-----";AT 12,10;"-----";TAB 10;"-----"
310 PRINT AT 13,10;"-----";TAB 10;"-----"
315 TAB 10;"-----";AT 14,10;"-----";TAB 10;"-----"
320 PRINT AT 15,10;"-----";TAB 10;"-----"
325 TAB 10;"-----";AT 16,10;"-----";TAB 10;"-----"
330 PRINT AT 17,10;"-----";TAB 10;"-----"
335 TAB 10;"-----";AT 18,10;"-----";TAB 10;"-----"
340 PRINT AT 19,10;"-----";TAB 10;"-----"
345 TAB 10;"-----";AT 20,10;"-----";TAB 10;"-----"
350 PRINT AT 21,10;"-----";TAB 10;"-----"
355 TAB 10;"-----";AT 22,10;"-----";TAB 10;"-----"
360 PRINT AT 23,10;"-----";TAB 10;"-----"
365 TAB 10;"-----";AT 24,10;"-----";TAB 10;"-----"
370 PRINT AT 25,10;"-----";TAB 10;"-----"
375 TAB 10;"-----";AT 26,10;"-----";TAB 10;"-----"
380 PRINT AT 27,10;"-----";TAB 10;"-----"
385 TAB 10;"-----";AT 28,10;"-----";TAB 10;"-----"
390 REM
395 DIM P(11)
400 LET P(1)=1
405 LET D=15
410 IF INKEY$<>"M" THEN GOTO 470
415 REM
420 PRINT AT 16,0;B$;AT 18,0;B$
425 LET A=USR 16516
430 LET SC=SC+10
435 LET D#=INKEY$
440 LET D=D-(INKEY$="Z" AND D>1
445 +(INKEY$="Y" AND D<20)

```

```

540 PRINT AT 9,D-1; " "
550 IF D#="M" THEN GOSUB 3000
560 LET F=INT ((RND#11)+10
570 LET B=INT ((RND#4)+10
580 IF PEEK (PEEK 16396+256*PEEK
K 16397+B*33+F+1)=151 THEN GOTO
590
650 PRINT AT 8,F;" "
700 LET P(F-9)=P(F-9)+1
710 IF P(F-9)=4 THEN GOTO 4000
660 LET A=USR 16526
670 LET SC=SC+10
680 IF SC=2000 THEN GOSUB 8500
690 GOTO 520
1000 FOR A=0 TO 23
1010 PRINT AT A,0;B$
1020 NEXT A
1030 RETURN
2000 FOR M=9 TO 13
2010 PRINT AT M,0;B$
2020 NEXT M
2030 PRINT AT 16,0;B$;B$
2040 RETURN
2999 REM BLANK
3000 FOR Z=10 TO 13
3010 PRINT AT Z,D;" "
3020 NEXT Z
3200 FOR X=10 TO 13
3210 PRINT AT X,D;" "
3220 NEXT X
3230 LET P(D-9)=0
3230 RETURN
3999 REM BLANK
4000 LET LV=LV-1
4010 IF LV>0 THEN PRINT AT 16,9;
"ONE LINE"
4020 IF LV=0 THEN GOTO 6000
4030 GOSUB 5000
4040 FOR U=0 TO 50
4050 NEXT U
4060 DIM P(11)
4070 LET D=15
4100 GOSUB 2000
4200 PRINT AT 9,D;" "
4210 GOTO 520
4999 REM BLANK
5000 LET U#=CHR$(LV+156)
5050 PRINT AT 8,29;U$
5060 RETURN
5999 REM BLANK
6000 FOR U=0 TO 20
6010 PRINT AT 11,1;" "
6020 FOR B=0 TO 1
6030 NEXT B
6040 PRINT AT 11,1;" BLANK "
6050 NEXT U
6060 GOSUB 5000
7000 IF SC>HI THEN GOSUB 8000
7010 PRINT AT 16,0;B$;B$
7020 PRINT AT 16,31;" BLANK "
ECHARTSSTRUCT 3000
7030 PRINT AT 17,3;" BLANK "

```

PLA: AGATHA

```

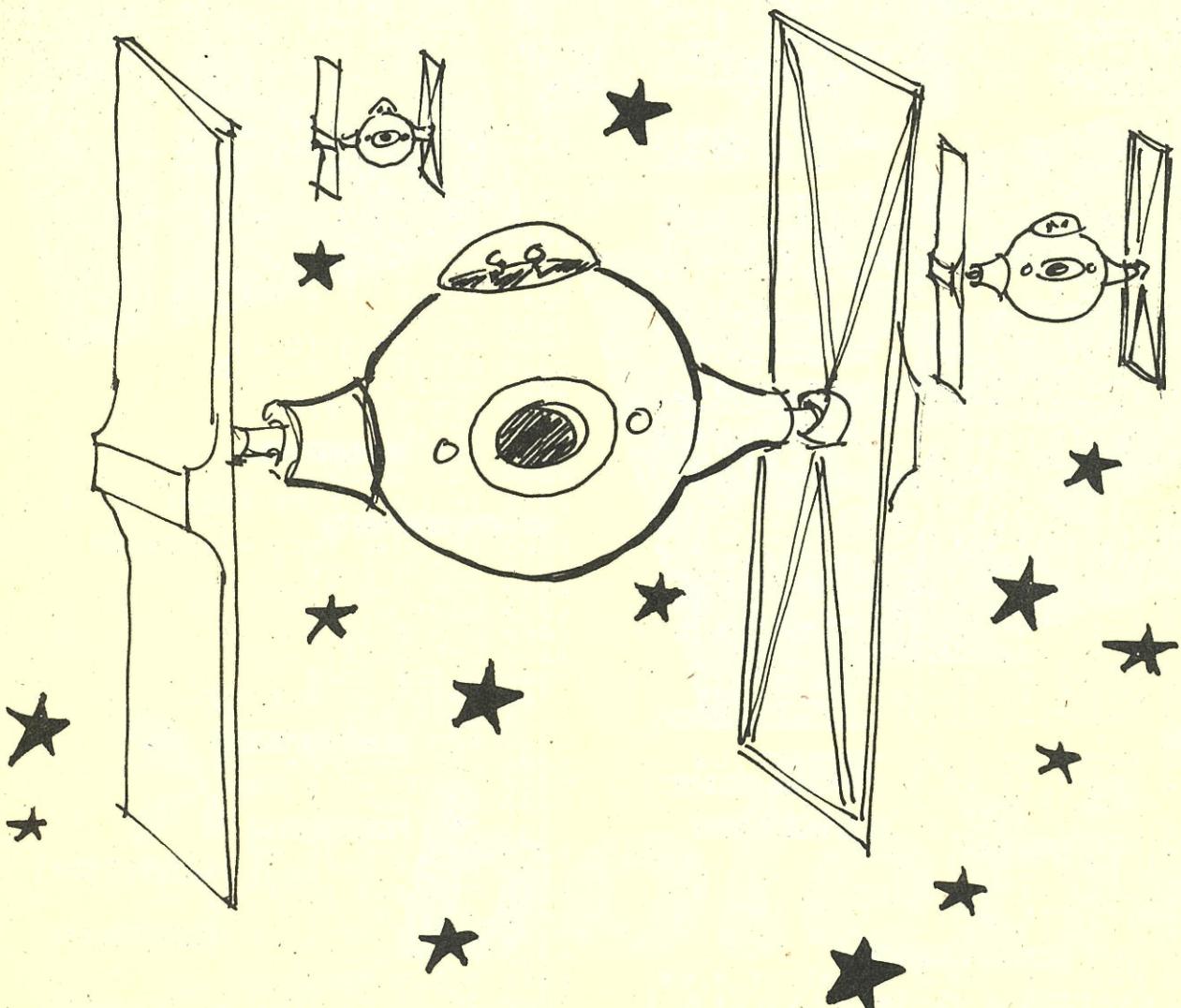
7040 LET LV=3
7050 LET SC=0
7060 GOTO 7060-(6960 AND INKEY$="1")+(40 AND INKEY$="2")
7100 GOSUB 2000
7160 LET U$=" "
7170 GOTO 320
7999 REM INPUT SAME - HIGH SCORE
8000 PRINT AT 16,5;"1"-2-3-4-5-6-7-8-9-0
8010 INPUT "SCOR";AT 17,5;"E-T-R-A-S-E-N-D-G-H
8020 POKE 16418,2
8050 INPUT I$
8070 IF LEN I$>13 THEN GOTO 8060
8080 FOR H=1 TO LEN I$
8100 LET L=CODE I$(H)
8110 IF L<129 THEN LET I$(H)=CHR
$(L+128)
8120 IF L>128 THEN LET I$(H)=CHR
$(L-128)
8130 NEXT H
8140 POKE 16418,0
8150 PRINT AT 22,0;B$;B$
8200 LET HI=50
8210 LET JS=STR$ HI

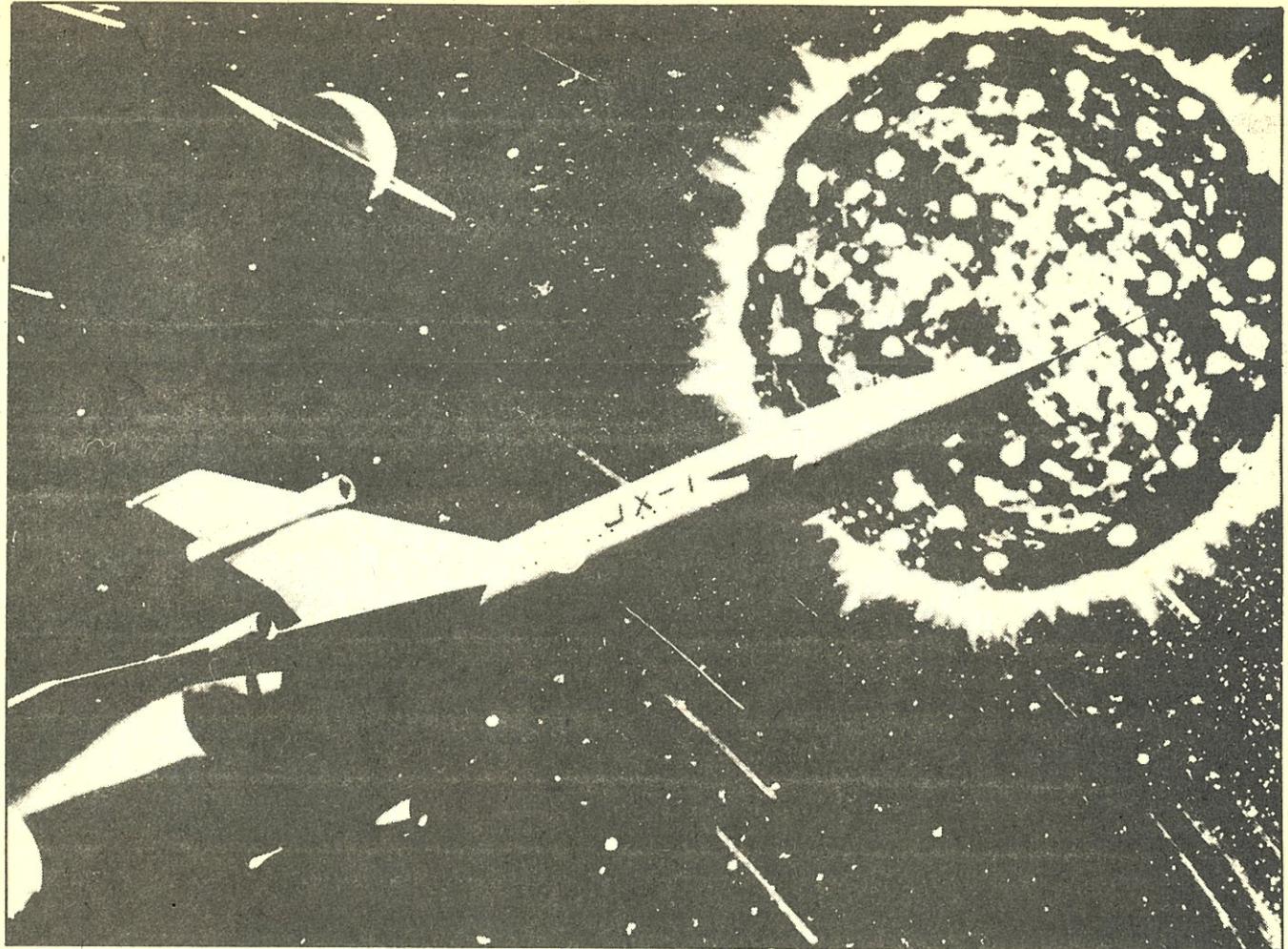
```

```

8220 LET H$=H$( TO 5-LEN J$)
8230 FOR X=1 TO LEN J$
8240 LET H$=H$+CHR$(CODE J$(X)+128)
8250 NEXT X
8260 PRINT AT 20,16;H$
8270 PRINT AT 22,5;"E";AT 22,6;I$
8300 RETURN
8499 REM EXTRA LINE
8500 FOR G=1 TO 20
8510 PRINT AT 16,10;B$( TO 10)
8520 LET R=RND*RND
8540 PRINT AT 16,10;"E-T-R-A-S-E-N-D-G-H
8550 NEXT G
8560 LET LV=LV+1
8570 GOSUB 5000
8580 FOR L=1 TO 10
8590 NEXT L
8600 PRINT AT 16,10;B$( TO 10)
8610 RETURN
9000 SAVE "STARFIGHTER"
9010 CLS
9020 SLOW
9030 RUN

```





MOONIRON

Escrito por Christopher Herbert, MOONIRON é um jogo aliciante que o manterá preso ao seu computador durante muitas horas. Sem se enfastiar...

Alguém tratou de roubar o Cristal de Mooniron e guardá-lo na nave espacial. Ora o Cristal é indispensável à vida em Mooniron e é vital recuperá-lo. Como de costume, o nosso amigo Rob Ot foi encarregado de o ir buscar ou não fosse ele o elemento sempre destacado para as missões mais complicadas.

Esta é uma missão que só o Rob Ot poderá concluir com êxito. Mas os problemas são muitos porque terá

que atravessar cinco salas e, em cada uma delas, recolher três embalagens luminosas que guardará em segurança.

Entretanto, o perigo espreita a cada momento porque as hordas maléficas aproveitarão cada oportunidade que se lhes deparar para lhe tirarem a vida.

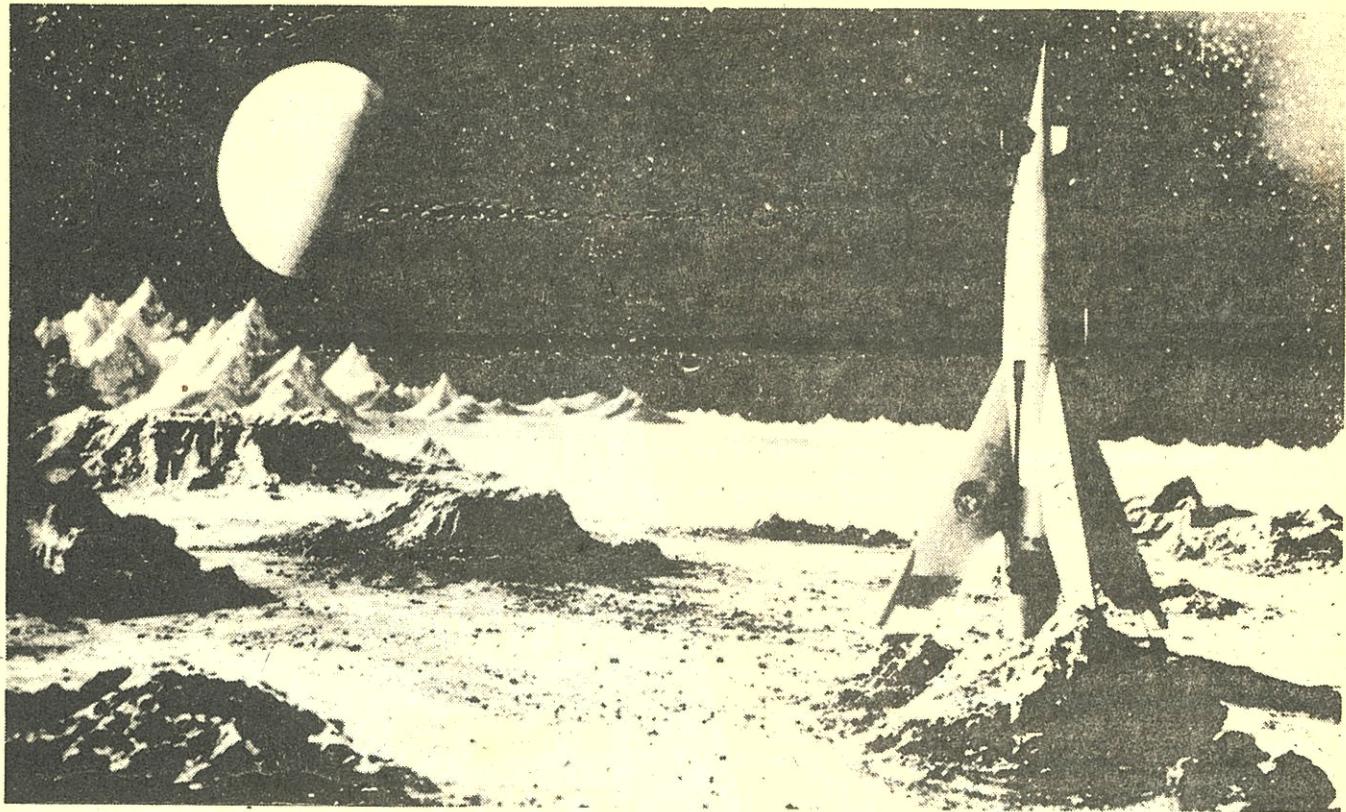
Surpresas também não faltam. Mas, em contrapartida, o Rob Ot terá, à sua disposição, uma vida suplementar (que bem merece) e um prémio, à saída de cada sala.

A chave dos «user defined graphics» ajudará quando tiver que entrar com os símbolos.

```
1 INK 0: PAPER 0: PRINT AT 20  
,0: GO SUB 600: LET F$="": LET  
KEY=1: LET JOY=0: GO SUB 1200: D  
IM M$(3): LET SON=1: LET M$(1)="  
1": LET M$(2)="2": LET M$(3)="L"  
: LET HI=40: GO TO 50  
2 LET T=0: LET S=166: RESTORE
```

```
12: GO SUB 3: LET T=11: RESTORE  
12: LET S=166: GO SUB 3: LET T=  
24: RESTORE 12: LET S=166: GO SU  
B 3: LET T=-7: RESTORE 20: LET S  
=80: GO SUB 3: LET T=21: RESTORE  
12: LET S=166: GO SUB 3: RESTOR  
E 20: LET S=80: LET T=6: GO SUB
```

```
3: GO TO 11  
3 FOR 9=1 TO 5  
4 READ D: BEEP .1,D+T:  
9 IF INKEY$(>"" THEN GO TO 30  
10 NEXT G: RETURN  
11 GO TO 30
```

```

TO
407 IF ATTR (X,Y)=69 THEN GO SU
B 750: IF LIFE<0 THEN GO TO 700
410 RETURN
500 REM [A NEW SCREEN]
501 FOR G=1 TO 21: PRINT AT G,0
; BRIGHT 1; " "; AT G-1,1;
; " "; AT G-1,1;
; " "; NEXT G
502 FOR H=1 TO 3: LET L$="BONUS"
; FOR K=1 TO LEN L$: PRINT AT 5
,11+K; INK RND*7; BRIGHT RND;L$(K)
; NEXT K: NEXT H
503 FOR G=1 TO 7: PRINT AT 5,12
; INK G; BRIGHT 1;"BONUS": BEEP
.0009,25+G: BEEP .0009,40+G: BEEP
.0009,50+G: NEXT G
505 FOR I=1 TO 15: LET SCORE=SC
ORE+1: PRINT #0;AT 1,8;SCORE: BE
EP .005,45: NEXT I
507 LET BULB=0: LET WIN=0: LET
X=18: LET Y=2
508 IF SCORE>50 AND SCORE<100 O
R SCORE>150 AND SCORE<200 OR SC
ORE>250 AND SCORE<300 OR SCORE>30
0 AND SCORE<400 THEN GO TO 546
510 GO TO 549
546 LET L$="AN EXTRA LIFE:"; FO
R T=1 TO LEN L$: PRINT AT 8,8+T-
1; INK 6; BRIGHT 1;L$(T): BEEP .
0009,60: BEEP .0009,55: BEEP .00
09,50: NEXT T: GO SUB 547: LET L
IFE=LIFE+1: GO SUB 547: GO TO 54
9
547 PRINT AT 10,14; BRIGHT 1;H$(
2);AT 11,14;B$(1);"; INK 5;LI
FE: BEEP .009,50: RETURN
549 PAUSE 25
550 IF FWD=1 THEN LET SCR=SCR+1
00
551 IF BWD=1 THEN LET SCR=SCR-1
00
552 IF SCR=3500 THEN GO SUB 350

```

```

0: GO SUB 500
560 FOR T=7 TO 0 STEP -1: PAPER
T: CLS : NEXT T: GO SUB SCR: RE
TURN
600 REM [VARIABLES]
601 LET CV=1: LET F=1: LET P=7
LET RITE=0: LET X=19: LET Y=3
602 LET X1=5: LET Y1=10
603 LET H$=""; LET B$=" "
604 LET SCORE=0: LET LIFE=3
605 LET SCR=3000: LET WIN=0
606 LET BULB=0: LET BALL=1: LET
SCORE=0
607 RETURN
700 REM [GAME-OVER]
701 FOR G=1 TO 21: PRINT AT G,0
; BRIGHT 1; INK 5; " "; AT G-1,0; "
; BEEP .0009,35: NEXT G
702 CLS : GO SUB 51
703 PRINT AT 1,10; INVERSE 1;" "
GAME OVER": IF SCORE>HI THEN GO
SUB 1400
704 PRINT INK 4; BRIGHT 1;AT 5,
3;"SCORE: ", INK 7;SCORE: PRINT
AT 10,3; INK 5; BRIGHT 0;"SCREEN
": INK 7; BRIGHT 1;SCR: FOR G
=1 TO 5 STEP 2: PRINT AT 4+G,15;
BRIGHT 1;" "; AT 4+G,15;" "; NEXT G:
PRINT AT 7,21; INK 6;" "; AT 8,2
; " "
705 IF F$="" THEN LET N$="NOBOD
Y"
706 IF F$<>"" THEN LET N$=F$
707 PRINT AT 15,3; INK 7; BRIGH
T 1;"HIGH: "; INK 3;HI; INK 7;" "
SET BY: "; INK 3;N$: PRINT AT 1
8,6;"OVERALL RATING";AT 13,7;" "
708 IF SCORE<50 THEN PRINT AT 2
0,11; FLASH 1; BRIGHT 1; PAPER 6
; INK 4;"PATHETIC"

```

709 IF SCORE>50 AND SCORE<80 TH
EN PRINT AT 20,11; BRIGHT 1; INK
5;"NOT BAD"
710 IF SCORE>100 THEN PRINT AT
20,14; BRIGHT 1; INVERSE 1; INK
3;"FAIR"
711 IF SCORE>150 THEN PRINT AT
20,14; BRIGHT 1; INVERSE 1; INK
6;"GOOD"
712 IF SCORE>200 THEN PRINT AT
20,11; FLASH 1;"VERY GOOD"
713 IF SCORE>300 THEN LET L\$="B
RILLIANT": FOR G=1 TO LEN L\$: PR
INT AT 20,10+G; INK INT (RND*7)+
2; BRIGHT 1;L\$(G): BEEP .0009,50
; BEEP .0009,60: BEEP .0009,55:
NEXT G
714 IF SCORE>400 THEN PRINT AT
20,12; FLASH 1;"EXPERT"
715 IF SCORE>500 THEN PRINT AT
20,11; INVERSE 1; BRIGHT 1;"CHAM
PION"
716 IF SCORE>600 THEN PRINT AT
20,12; FLASH 1;"MASTER"
724 RESTORE 725: FOR G=1 TO 49:
READ D,F: FOR S=1 TO D: BEEP .0
6,F
725 IF INKEY\$<>"" THEN GO TO 73
6
726 BEEP .05,F-12
727 NEXT S: NEXT G
735 DATA 5,4,4,9,2,9,2,11,5,12,
5,4,2,7,2,5,2,2,0,5,2,2,2,2,4,
4,5,2,5,2,7,2,5,2,4,2,2,2,0,4,7,
2,7,2,5,6,2,2,2,4,9,2,9,2,11,4,1
2,2,14,2,12,2,11,2,9,2,7,2,4,6,7
,2,4,2,5,2,7,2,9,2,11,4,12,2,4,2
,7,2,7,2,5,2,2,2,0,20,2
736 GO SUB 600: PAUSE 1000: FOR
G=2 TO 19: PRINT AT G,2;" "
; NEXT G:
GO TO 60
750 REM [LOSE A LIFE]
751 IF LIFE<0 THEN GO TO 700

```

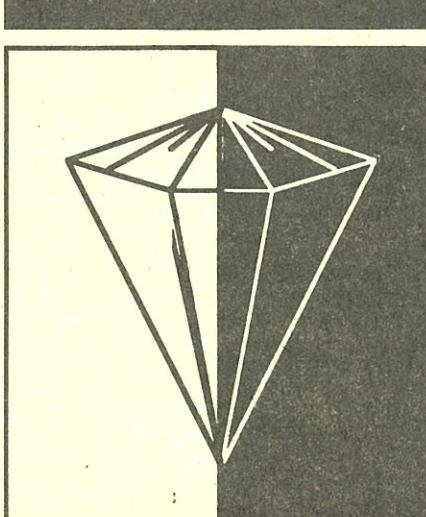
753 PRINT AT X-1,Y;" "; FOR S=1
TO 15: PRINT AT X,Y; BRIGHT 0;" "
;AT X,Y-1;" ";AT X,Y+1;" "; BE
EP .0009,50: PRINT AT X,Y; BRIGH
T 1;" ";AT X-1,Y-1;" ";AT X-1,Y+
1;" ";AT X-2,Y;" "; BEEP .0009,4
5: NEXT S: PRINT AT X,Y; INK 0;" "
; LET LIFE=LIFE-1: FOR S=15 TO
2 STEP -1: PRINT AT BLO,S; INK
5; PAPER 7; BRIGHT 1;" "; BEEP .
004,45: NEXT S
754 FOR S=15 TO 2 STEP -2: PRIN
T AT BLO,S; INK 0;" "; BEEP .00
5,25: NEXT S
755 LET X=BLO: LET Y=3: PRINT A
T 0,26; BRIGHT 1;LIFE;" "; RETUR
N
900 REM [PRINT SCORE ETC.]
901 PRINT AT 0,0; BRIGHT 1; INU
ERSE 1;" "; FOR F=1 TO LEN L$: P
RINT AT 0,0+F; BRIGHT 1;L$(F): B
EEP .0009,50: BEEP .0009,55: BEE
P .0009,60: NEXT F
902 PRINT AT 0,1+F-1; BRIGHT 1;
INVERSE 1;" "; PRINT AT 0,25; I
NK 5;" "; INK 7; BRIGHT 1;LIFE;" "
903 PRINT AT 1,0; BRIGHT 1;" "
;AT 0,31; INVERSE 1;" "
904 PRINT #0;AT 0,0; INK 7; PAP
ER 1; BRIGHT 1;" "
;HIGH SCREEN " "
905 PRINT #0;AT 1,8; INK 7; PAP
ER 1; BRIGHT 1;SCORE;AT 1,18;HI;
AT 1,29;SCRE
906 RETURN
1000 REM [JUMP LEFT]
1001 LET X=X-1: PRINT AT X,Y; IN
K 4; BRIGHT 1;B$(G);AT X-1,Y; IN
K 7; BRIGHT 0;H$(G): PRINT AT X,
Y+1;" ";AT X-1,Y+1;" ";AT X+1,Y;
" ;AT X,Y-1;" ;AT X,Y+1;" ";AT
X-1,Y-1;" ";AT X-1,Y+1;" "
1002 FOR T=1 TO 4: LET Y=Y-1: GO
SUB 1003: NEXT T: GO TO 1010
1003 PRINT AT X,Y; INK 4; BRIGHT
1;B$(G);AT X-1,Y; INK 7; BRIGHT
0;H$(G)
1004 PRINT AT X,Y+1;" ";AT X-1,Y
+1;" ";AT X+1,Y;" "
1005 BEEP .0009,55+T: RETURN
1010 LET X=X-1: PRINT AT X,Y; IN
K 4; BRIGHT 1;B$(G);AT X-1,Y; IN
K 7; BRIGHT 0;H$(G);AT X,Y+1;" "
;AT X-1,Y+1;" ";AT X-1,Y-1;" "
;AT X,Y+1;AT X,Y-1;" ";AT X-2,Y;" "
: RETURN
1050 REM [JUMP RIGHT]
1051 LET X=X-1: GO SUB 1053: FOR
T=1 TO 4: LET Y=Y+1: GO SUB 105
3: NEXT T: GO TO 1055
1052 PRINT AT X+1,Y;" ";AT X,Y;
INK 4; BRIGHT 1;B$(G);AT X-1,Y;
BRIGHT 0; INK 7;H$(G);AT X,Y-1;" "
;AT X-1,Y-1;" ";AT X+1,Y;" "
1053 PRINT AT X,Y; INK 4; BRIGHT
1;B$(G);AT X-1,Y; INK 7; BRIGHT
0;H$(G);AT X,Y-1;" ";AT X,Y+1;" "
;AT X+1,Y;" ";AT X-1,Y-1;" "
;BEEP .0009,55+T: RETURN
1054 RETURN
1055 LET X=X+1: PRINT AT X,Y; IN
K 4; BRIGHT 1;B$(G);AT X-1,Y; IN
K 7; BRIGHT 0;H$(G);AT X,Y-1;" "
;AT X,Y+1;" ";AT X-1,Y-1;" "
;AT X-1,Y+1;" ";AT X-2,Y;" "
: RETURN
1199 REM [GRAPHICS]
1200 RESTORE 1200: FOR G=USR "A"
TO USR "U"+7: READ S: POKE G,S:
NEXT G: BORDER 0: PAPER 0: INK

```

```

7: BRIGHT 0: CLS
1201 DATA 60,94,191,179,94,94,60
,60
1202 DATA 0,60,94,191,179,94,94
,60
1203 DATA 126,102,190,166,188,39
,231,224
1204 DATA 126,126,101,125,61,228
,231,7
1205 DATA 255,0,255,255,170,85,1
70,85
1206 DATA 188,92,188,92,188,92,1
88,92
1207 DATA 193,171,163,183,181,18
9,255,255
1208 DATA 0,255,213,171,255,171
,213,255
1209 DATA 60,44,94,90,191,191,25
5,102
1210 DATA 60,78,191,191,126,60,4
4,24
1211 DATA 24,60,48,126,127,247,2
18,92
1212 DATA 31,32,64,127,127,85,42
,31
1213 DATA 255,0,0,255,255,85,170
,255
1214 DATA 240,8,4,252,252,84,168
,240
1215 DATA 255,129,129,129,129,12
9,129,255
1217 DATA 255,85,170,85,170,85,1
70,255
1218 DATA 126,249,241,225,197,14
1,129,126
1219 DATA 255,255,0,255,0,56,92
,76,92,56,0,255,255,0,255,231,
24,255,231,126,129,255,126
1220 DATA 255,127,122,84,44,40,4
8,45
1221 RETURN
1300 REM [TELEPORT]
1301 LET G=1: PRINT AT X,Y-1;" "
;AT X,Y+1;" ";AT X-1,Y-1;" "
;AT X-1,Y+1;" ";FOR F=7 TO 0 STEP
-1: PRINT AT X,Y; INK F; BRIGHT 1
;AT X,Y+1;" "
;AT X-1,Y-1;" "
;AT X-1,Y+1;" "
1302 LET TRE=INT (RND*3): LET Y=
INT (RND*28)+2
1303 IF TRE=1 THEN LET X=INT
1304 IF TRE=2 THEN LET X=INT*2
1305 IF TRE=3 THEN LET X=INT*3
1306 IF ATTR (X+1,Y)=69 THEN GO
TO 1302
1307 IF SCREEN$ (X+1,Y)="" THEN
GO TO 1302
1308 IF ATTR (X,Y)=71 THEN GO TO
1302
1310 FOR T=0 TO 7: PRINT AT X,Y;
INK T,B$(G);AT X-1,Y;H$(G): BEE
P .009,55: BEEP .005,33-T: NEXT
T: RETURN
1350 FOR R=LIX TO 3 STEP -1: PRI
NT AT R,Y,I;" ";NEXT R: RETURN
1400 REM [HI SCORE]
1401 LET HI=SCORE: LET F$="": FO
R G=2 TO 19: PRINT AT G,2;" "
;NEXT G
: PRINT AT 4,5; BRIGHT 1; INVER
SE 1;"YOU HAVE A HIGH SCORE";AT 1
6,4; INVERSE 0; INK 5;"PLEASE EN
TER YOUR NAME";AT 18,7; INK 6;"(M
AX 8 LETTERS)"
1402 POKE 23617,238: INPUT F$
1403 IF LEN F$>8 THEN GO TO 1402
1405 FOR G=2 TO 19: PRINT AT G,2
;" "
NEXT G
1406 RETURN
2100 REM [INSTRUCTIONS]
2101 LET R=0: LET L$="The crysta
l MOONIRON has been stolen, and Ro
BoD has been sent to steal it b
ack from the starship were it is
being kept. Before he can res
cue it he will have to journey t
hrough five rooms. In each roo
m, 3 light packets will have to b
e taken to the light lock on the
floor (or somewhere else). Th
ere are also many dangers...and
surprise's and....an extra life,(If
deserved), and a bonus after
each room, so.....GOOD LUCK!
2102 PRINT #0;AT 1,0; BRIGHT 1;" "
;AT 1,30;" "
;FOR G=1 TO 31-
4: PRINT #0;AT 1,1+G; BRIGHT 1;L
$(G);AT 1,1+G+1;" ";BEEP .0009,
45+G/4: BEEP .0009,40+G/3: NEXT
G: PRINT #0;AT 1,1+G+1; BRIGHT 1
;" ";FOR G=1 TO LEN L$-31
2104 LET L$=L$(2 TO )
2105 PRINT #0;AT 1,2; INK 7; BRI
GHT 1;L$(2 TO 29)
2107 BEEP .005,45
2108 IF INKEY$="1" THEN FOR T=30
TO 0 STEP -1: PRINT #0;AT 1,T;
BRIGHT 1;" ";BEEP .0009,35+T/3
:BEEP .0009,40+T/5: BEEP .0009,
45+T/4: NEXT T: PRINT #0;AT 1,0
;" ";GO TO 2100
2109 IF INKEY$="2" THEN PRINT #0
;AT 1,0;" "
;" ";GO TO 300
2110 IF INKEY$="0" THEN PRINT #0
;AT 1,0;" "
;" ";GO TO 100
2111 PAUSE 1: NEXT G
2112 FOR G=40 TO 0 STEP -5: BEEP
.005,G: BEEP .06,G: FOR H=1 TO
2: OUT 254,54: OUT 254,2: OUT 25
4,0: NEXT H: NEXT G: PRINT #0;AT
1,0;" ";AT 1,30;" "; BORDER 0
: GO TO 60
3000 REM [SCREEN NO.1]
3001 LET FWD=1: LET BWD=0: LET S
LO=20: LET INT=5: LET X1=5: LET
SCRE=1: LET L$="THE RECEPTION RO
OM": GO SUB 900
3002 PRINT AT 21,0; BRIGHT 1;" "
;AT 21,10; INK 1; PAPER 7; FLASH
1;" ";AT 21,15; FLASH 0; PAPER 0
; INK 5;"M";AT 21,20;"M"
3003 PRINT AT 21,28; INK 2; PAPE

```



```

;B$(G);AT X-1,Y;H$(G): BEEP .009
,45: BEEP .005,G+30: NEXT F: PRI
NT AT X,Y;" ";AT X-1,Y;" "
1302 LET TRE=INT (RND*3): LET Y=
INT (RND*28)+2
1303 IF TRE=1 THEN LET X=INT
1304 IF TRE=2 THEN LET X=INT*2
1305 IF TRE=3 THEN LET X=INT*3
1306 IF ATTR (X+1,Y)=69 THEN GO

```

MOONIRON

ZOINK

Juan Fradera é o autor deste jogo que foi concebido para o 48K.

As reservas energéticas da terra estão a ponto de esgotamento total e, tanto os cientistas como os astrólogos, estão profundamente empenhados em descobrirem um planeta que consiga resolver a lenta agonia do ser humano.

Finalmente, as investigações deram alguns frutos e a esperança renasceu ao ser detectado um planeta ao que parece muito rico em minerais: o seu nome é Zoink.

A missão salvadora está em marcha e uma nave transportando os peritos astronautas dirige-se para o planeta.

Porém, qual é o seu espanto quando verificam que o planeta foi anteriormente habitado. Há rastros evidentes de uma civilização que deixou provas da sua existência por toda a superfície do planeta (minas, depósitos de combustível, caixas metálicas com minerais e até uma plataforma de aterragem de mísseis).

A expedição terrena deverá pousar nas plataformas e carregar os minerais para bordo da nave evitando, na medida do possível, roçar os depósitos de combustíveis que poderão explodir.

Assuma-se como «salvador da Humanidade» e leve a cabo esta espinhosa missão.

```

2 BORDER 5: BRIGHT 1: PAPER 5
CLS : GO SUB 8000: GO TO 9500
10 RANDOMIZE : BRIGHT 1: LET l=0: LET cc=l: LET c=cc: LET l=ll: DIM g$(3): LET fu=1000: LET sc=0: LET pu=sc: LET liv=4: GO TO 9000
50 DIM g$(3): LET l=4: LET c=1
5: LET ll=l: LET cc=c: LET fl=0: DIM d(3): DIM e(3): RESTORE 60: FOR f=1 TO 3: READ a: READ b: LET d(f)=a: LET e(f)=b: NEXT f
60 DATA 11,6,9,15,12,22
100 REM Bucle Principal de movimiento
200 BEEP .008,-20: PRINT AT 1,6: PAPER 7: INK 0;sc:AT 1,18: FLASH (fu<=200);fu;"": PRINT AT l+1,c;(" " AND fl=1): LET fl=(INK EY$="7"): LET fu=fu-5-(10 AND fl=1): LET ll=l+1-(2 AND fl=1): LET cc=c-(INKEY$="5" AND c>0)+(INK EY$="8" AND c<30): GO TO 210+(37*90 AND fu<0)+(30 AND ATTR (ll,cc)=109 AND ATTR (ll,cc+1)=109)+(4460 AND ATTR (ll+1,cc)=104)
210 IF ATTR (ll,cc)=111 OR ATTR (ll,cc+1)=111 THEN LET ll=l: GO TO 240
220 IF ATTR (ll,cc)=214 OR ATTR (ll,cc+1)=214 OR ATTR (ll,cc)=108 OR ATTR (ll,cc+1)=108 OR ATTR (ll,cc)=107 OR ATTR (ll,cc+1)=107 THEN GO TO 1000
230 IF ATTR (ll,cc)=106 OR ATTR (ll,cc+1)=106 THEN LET sc=sc+20
240 PRINT AT l,c;"": AT ll,cc: INK 1;"": AT ll+1,cc: INK 2;(" " AND fl=1): LET l=ll: LET c=c: FOR f=1 TO 3: IF g$(f)="1" THEN NEXT f: GO TO 200
310 LET ee=e(f)+1-INT (RND*3): LET d(f)=d(f)-1: IF ATTR (d(f),e)=108 OR ATTR (d(f),ee)=214 THEN LET g$(f)="1": PRINT AT d(f)+1,e(f);": GO SUB 2000: NEXT f: GO TO 200
320 IF ATTR (d(f),ee)=105 THEN PRINT AT d(f)+1,e(f);": GO TO 1000
400 PRINT AT d(f)+1,e(f);": AT d(f),ee: INK 4;"": LET e(f)=ee: NEXT f: GO TO 200
1000 REM Muerte de nave
1010 PRINT AT l,c;"": INK 2: PRINT AT ll,cc;"": PAUSE 1: BEEP .008,-10: PRINT AT ll,cc;"": PAUSE 1: BEEP .008,-20: PRINT AT ll,cc;"": PAUSE 1: BEEP .008,-5: PRINT AT ll,cc;"": PAUSE 1: BEEP .008,-10: PRINT AT ll,cc;"": BEEP .008,-20: BEEP .008,-30
1020 GO SUB 3000
1030 PRINT AT ll,cc;"": BEEP .008,-20: LET liv=liv-1: IF liv=0 THEN PRINT AT 10,11: INK 7: PAPER 0;"GAME OVER";AT 11,1;"Pulsa ENTER para otro juego...": IF sc >k THEN LET k=sc: INPUT "Introduce tu nombre: "; LINE s$: LET s=$(s$+"") ( TO 10)
1040 IF liv=0 THEN PRINT AT 12,3: INK 0;"RECORD: ";s$;" = ";k: INPUT LINE f$: IF f$="" THEN GO TO 9790
1045 IF liv=0 THEN STOP
1050 FOR f=1 TO 400: NEXT f: GO TO 9000
2000 REM explosion Misiles
2010 INK 2: PRINT AT d(f),ee;"": PAUSE 1: BEEP .008,-10: PRINT AT d(f),ee;"": PAUSE 1: BEEP .008,-20: PRINT AT d(f),ee;"": PAUSE 1: BEEP .008,-5: PRINT AT d(f),ee;"": PAUSE 1: BEEP .008,-10: PRINT AT d(f),ee;"": PAUSE 1: BEEP .008,-20: BEEP .008,-30
2020 GO SUB 3000: INK 5: PRINT AT d(f),ee;"": RETURN
3000 REM Final explosion
3010 FOR m=1 TO 3: BEEP .008,-20: BEEP .008,-30: BEEP .008,-20: BEEP .008,-30: INK 5: NEXT m: RETURN
4000 REM fuel acabado
4200 PRINT AT 1,18: INK 0; PAPER 7;"0": LET fu=1000: GO TO 1000
4500 REM Fin Pantalla
5000 IF ATTR (ll,cc)=107 OR ATTR (ll,cc+1)=107 THEN GO TO 1000
5005 IF ATTR (ll,cc)=106 OR ATTR (ll,cc+1)=106 THEN LET sc=sc+20
5010 IF ATTR (ll,cc)=110 THEN LET fu=fu+300
5015 LET sc=sc+500: LET liv=liv+INT ((sc/10000)-INT (pu/10000)): LET pu=INT (sc/10000)*10000: IF liv>4 THEN LET liv=4
5020 PRINT AT l,c;"": AT ll,cc: INK 7;"": FOR f=1 TO 200: NEXT f: LET fu=fu+100: GO TO 9000
8000 REM Definicion
8010 RESTORE 8020: FOR f=0 TO 11: READ a: POKE USR "a"+f,a: NEXT f
8020 DATA 0,7,8,31,63,255,62,8,0,224,16,248,252,255,124,16,60,98,110,102,110,60,66,129,255,129,6,36,24,255,0,0,16,16,56,56,56,5,6,124,108,0,24,60,126,126,60,24,0,255,127,63,31,15,7,3,1,255,254,252,248,240,224,192,128
8030 DATA 129,66,60,53,172,60,66

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129, 129, 82, 36, 152, 25, 36, 66, 161,
8, 66, 36, 25, 152, 36, 66, 16, 16, 0, 36,
152, 25, 36, 0, 8, 0, 72, 2, 64, 16, 2, 64,
16, 124, 198, 222, 198, 246, 198, 124, 0
, 56, 108, 108, 56, 16, 16, 0, 0
8200 RETURN
8500 GO TO 4500: REM Enlace de fuel y base entre fuel, base y aterr bacio.
9000 REM Presentacion
9010 BORDER 5: PAPER 5: INK 5: C
LS : INK 0: PAPER 7: PRINT AT 0,
0; PAPER 2; INK 7;" Invasion
@ Juan Fradera": PRINT "SCO
RE "/sc;" ";AT 1,13;"FUEL "
, fu;" ";AT 1,23;"LIVES ");: P
RINT " "; TO liv-1);"
9020 PAPER 5: INK 5: PRINT AT 2,
0; INK 4;" "
, AT 3,5;" "
, AT 4,6;" "
, IN
K 2;" "
, AT 4,6;" "
, IN
4,13; FLASH 1; PAPER 2; INK 6;" "
, AT 4,18; " "; PRINT AT 4,15; I
NK 1;" "
9030 PRINT AT 10,13; INK 7;" "
, AT 12,4;" "
, AT 13,22;" "
9040 PRINT AT 15,16; INK 0;" "
, AT 17,6;" "
, AT 17,25;" "
9050 PRINT AT 16,6; INK 6;" "
, AT
14,16;" "
, AT 16,25;" "
9060 INK 3: PLOT 0,71: DRAW 31,-
40: DRAW 9,16: DRAW 7,-8: PLOT 8
0,39: DRAW 8,16: DRAW 15,-15: DR
AU 0,-8: DRAW 8,0: DRAW 13,40: D
RAW 3,-16
9070 PLOT 152,55: DRAW 3,7: DRAW
5,-24: DRAW 16,-8: DRAW 16,-16:
DRAW 5,32: DRAW 2,-7: PLOT 232,
39: DRAW 8,-16: DRAW 11,22: DRAW
4,0: INK 5
9100 IF o$="2" THEN GO TO 9300
9200 FOR f=1 TO 10+RND*10
9210 LET l=2+INT (RND*13): LET c
=INT (RND*32): IF ATTR (l,c)<>10
9 THEN GO TO 9210
9230 PRINT AT l,c; INK 3;" "
, NE
XT f
9300 FOR f=1 TO 5+RND*5
9310 LET l=2+INT (RND*13): LET c
=INT (RND*32): IF ATTR (l,c)<>10
9 THEN GO TO 9310
9330 PRINT AT l,c; INK 2;" "
, NE
XT f: GO TO 50
9500 REM Instrucciones
9505 PRINT AT 15,0; INK 0;" "
, AT
18,9; INK 1;"@ Juan Fradera"; AT
21,0; INK 0;" "
9510 LET o$=" "
, AT
9515 FOR i=0 TO 7: IF i=5 THEN N
EXT i
9520 PRINT AT 0,0; INK 1;o$;AT 4
,0; INK 1;" "
I H V A G
I O N
9530 DIM b$(32): FOR f=1 TO 14:
PRINT AT f-1,0;b$:AT f,0; INK 1;
o$: BEEP .01,4*i+f: IF INKEY$=" "
, THEN NEXT f: PRINT AT 14,0;b$:
NEXT i: GO TO 9510
9599 BEEP .5,10: CLEAR: INK 0:
PRINT AT 0,10;"INVASION";AT 0,10
, OVER 1;" "
9700 PRINT "Los grandes astronóm

```

os de la tierra han descubier
to un nuevo Planeta, ZOINK, el cual posee una incalculable riqueza en minerales necesarios para la tierra."

9710 PRINT "Por ello se ha lanzado una gran nave que transportará a unos astronautas hasta ZOINK. Una vez allí divisarán que una civilización anterior dejó restos de su existencia, minas, cisternas de fuel, cajas metálicas con los minerales, y plataformas de misiles y de aterrizaje."

9720 PRINT "Tu misión es salir de la nave y recoger las máximas cajas metálicas que puedes y aterrizar en las plataformas adecuadas para ello, sin chocar con ninguna mina": PAUSE 0: BEEP 1,3
0: CLS : PRINT "na. misil, tu propia nave o contra la tierra, en cuyo caso perderás una de las cuatro naves que posees al principio."

9730 PRINT "Una vez aposentado en alguna de las plataformas de aterrizaje, sumarás 500 puntos y repostarás 100 litros de fuel."

9740 PRINT "Si además caes sobre la cisterna obtendrás 300 litros mas. Visita tu fuel, pues se irá gastando, y con mayor rapidez si te propulsas hacia arriba con los reactores. Si tu fuel se agota explotaras y perderás una nave. Pero antes si tienes menos de 200 litros el computador de vuelo te lo advertirá intermitentemente."

9750 PRINT "Al principio cuando los misiles se lancen tu velocidad se verá disminuida, pero una vez explotados": PAUSE 0: BEEP .5,30
0: CLS : PRINT "ten este aumentar considerablemente."

9760 PRINT "Cada 10000 puntos obtienes una nave extra pero se te dará si aterrizas, y hasta un máximo de cuatro, (las que aparecen en el panel de control son las que nos quedan todavía sin contar con la que estamos pilotando en ese momento)."

9770 PRINT "Teclas de control: 5
> Izquierda 8
> Derecha 7
> Reactores"

9780 PRINT "Objetos: "; INK 1;" "
, Tu minimave";TAB 9; INK 2;" "
, Reactores en marcha";TAB 9; INK
2;" "
, Caja con minerales";TAB 9;
INK 3;" "
, Minas";TAB 9; INK 4;" "
, Misil";TAB 9; INK 6;" "
, Cista
rna fuel";TAB 9; INK 7;" "
, Plata
forma aerea";TAB 9; INK 0;" "
, Pl
ataforma de";TAB 12;"aterrizaje"

9785 PAUSE 0: LET k=0
9790 BEEP .5,30: CLS : PRINT ' I
NK 0;"Elije la opción que deseas
, cogelos mandos de tu mininave
y suerte...."/"Opciones: 1>
Normal.
Sin minas."
9800 LET o\$=INKEY\$: IF o\$<>"1" A
ND o\$<>"2" THEN BEEP .005,10: GO
TO 9800
9810 BEEP .2,50: GO TO 10
9999 SAVE "Invasion" LINE 1

PINKY

O passarito travesso, a que Luís Miguel Lacosta deu o nome de PINKY, é especialista em meter-se em sarrinhos. Mas, desta vez, o PINKY ultrapassou as marcas e, se não for a nossa ajuda e a do Spectrum 48K, não escapará. Travesso como é, Pinky irritou um terrível monstro do qual foge espavorido, mas de cuja ira não poderá escapar-se facilmente.

Escondeu-se precipitadamente dentro do frigorífico sem pensar que o monstro não terá qualquer dificuldade

em abrir a porta e tratar-lhe da saúde.

É aqui que temos que dar uma mão ao nosso amigo traquinhas. Teremos ambos que bombardear o monstro com todos os cubos de gelo que tivermos à mão até que ele se assuste e nos deixe em paz.

«É muito fácil!», dirão alguns. O Pinky convida-os a experimentar tomando em linha de conta que todos os caracteres em maiúsculas e sombreados se devem introduzir no modo gráfico.

```

1 BORDER 7; PAPER 7; INK 0; CLS
2 PRINT FLASH 1; AT 10,10; "PAR
E LA CINTA"; FOR I=1 TO 15; BEEP
5,I; NEXT I; CLS
3 REM LUIS MIGUEL LACOSTA JIM
ENEZ C/ BATALLA DE PAVIA, 10,5,B
ZARAGOZA
4 CLEAR 64903; GO SUB 4040
5 GO SUB 4000
6 LET P=P+1; LET EP=P+1+(1 AN
D RND>(P/7)); LET dp=1; LET sa=0
7 GO SUB 4010; GO SUB 4060
8 LET ex=INT (RND*15)+2+1; LE
T ey=INT (RND*9)+2+1; IF m$(ey,e
x)<>"0" OR ABS (py-ey)<6 OR ABS
(px-ex)<6 THEN GO TO 40
9 LET ex1=ex; LET ey1=ey; LET
inke=INT (RND*4)+3; PRINT INK i
nke; AT ey,ex;g$; AT ey+1,ex;h$
10 BEEP .5,2; BEEP .5,7; BEEP
.25,2; BEEP .25,3; BEEP .5,7; BE
EP .5,3; BEEP .65,2
11 LET j$=INKEY$: GO TO 160-(8
0 AND j$="5" AND px>11-(80 AND j
$="6" AND py<19)-(40 AND j$="7"
AND py>1)-(20 AND j$="8" AND px<
29)+(290 AND j$="9")
12 LET dp=0; LET px1=px-1; IF
m$(py,px1)<>"0" OR m$(py+1,px1)<
>"0" THEN GO TO 155
13 LET sa=1 AND sa=0; LET sc=s
c+2; PRINT AT py,px;i$; AT py+1,p
x;i$; LET k=1+dp*4+sa*2; LET px=
px1; PRINT INK 7; AT py,px;a$(k T
O k+1); AT py+1,px;b$(k TO k+1);#
0; INK 8; AT 1,4;sc: GO TO 160
14 LET dp=1; LET py1=py+1; IF
m$(py1+1,px)<>"0" OR m$(py1+1,px
+1)<>"0" THEN GO TO 155
15 LET sa=1 AND sa=0; LET sc=s
c+2; PRINT AT py,px;i$; AT py+1,p
x;i$; LET k=1+dp*4+sa*2; LET py=
py1; PRINT INK 7; AT py,px;a$(k T
O k+1); AT py+1,px;b$(k TO k+1);#
0; INK 8; AT 1,4;sc: GO TO 160
16 LET dp=2; LET py1=py-1; IF
m$(py1,px)<>"0" OR m$(py1,px+1)<
>"0" THEN GO TO 155
17 LET sa=1 AND sa=0; LET sc=s
c+2; PRINT AT py,px;i$; AT py+1,p
x;i$; LET k=1+dp*4+sa*2; LET py=
py1; PRINT INK 7; AT py,px;a$(k T
O k+1); AT py+1,px;b$(k TO k+1);#
0; INK 8; AT 1,4;sc: GO TO 160
18 LET dp=3; LET px1=px+1; IF
m$(py,px1+1)<>"0" OR m$(py+1,px1
+1)<>"0" THEN GO TO 155
19 LET sa=1 AND sa=0; LET sc=s
c+2; PRINT AT py,px;i$; AT py+1,p
x;i$; LET k=1+dp*4+sa*2; LET px=
px1; PRINT INK 7; AT py,px;a$(k T
O k+1); AT py+1,px;b$(k TO k+1);#
0; INK 8; AT 1,4;sc: GO TO 160
20 LET k=1+dp*4+sa*2; PRINT IN
K 7; AT py,px;a$(k TO k+1); AT py+
1,px;b$(k TO k+1)
21 LET pru=0; IF RND>.5 OR px=
ex THEN GO TO 260
22 LET pru=1; IF SGN (ex-px)=-
1 THEN GO TO 220
23 LET ex1=ex-1; IF m$(ey,ex1)
<>"0" OR m$(ey+1,ex1)<>"0" THEN
IF m$(ey,ex1)<>"2" THEN GO TO 26
0

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190 GO TO 200+(10 AND m$(ey,ex1
1)="2")
200 PRINT AT ey,ex;i$; AT ey+1,e
x;i$; INK inke; AT ey,ex1;g$; AT e
y+1,ex1;h$: LET ex=ex1: GO TO 38
0
210 FOR f=1 TO 11 STEP 2; PRIN
T AT ey,ex-2;c$(f TO f+1); AT ey+1,
ex-2;d$(f TO f+1); BEEP .001,3;
NEXT f; PRINT AT ey,ex;i$; AT ey
+1,ex;i$; INK inke; AT ey,ex1;g$;
AT ey+1,ex1;h$: LET ex=ex1: LET
m$(ey,ex-1 TO ex)="00": LET m$(e
y+1,ex-1 TO ex)="00": GO TO 380
220 LET ex1=ex+1; IF m$(ey,ex1+1)
<>"0" OR m$(ey+1,ex1+1)<>"0" T
HEN IF m$(ey,ex1+1)<>"1" THEN GO
TO 260
230 GO TO 240+(10 AND m$(ey,ex1
+1)="1")
240 PRINT AT ey,ex;i$; AT ey+1,e
x;i$; INK inke; AT ey,ex1;g$; AT e
y+1,ex1;h$: LET ex=ex1: GO TO 38
0
250 FOR f=37 TO 47 STEP 2; PRIN
T AT ey,ex+2;c$(f TO f+1); AT ey+
1,ex+2;d$(f TO f+1); BEEP .001,3;
NEXT f; PRINT AT ey,ex;i$; AT ey
+1,ex;i$; INK inke; AT ey,ex1;g$;
AT ey+1,ex1;h$: LET ex=ex1: LET
m$(ey+1,ex+1 TO ex+2)="00": LET m
$(ey+1,ex+1 TO ex+2)="00": GO TO
380
260 IF py=ey THEN GO TO 360
270 IF SGN (ey-py)=-1 THEN GO T
O 320
280 LET ey1=ey-1; IF m$(ey1,ex)
<>"0" OR m$(ey1,ex+1)<>"0" THEN
IF m$(ey1,ex)<>"3" THEN GO TO 36
0
290 GO TO 300+(10 AND m$(ey1,ex
1)="3")
300 PRINT AT ey,ex;i$; AT ey+1,e
x;i$; INK inke; AT ey1,ex;g$; AT e
y1+1,ex;h$: LET ey=ey1: GO TO 38
0
310 FOR f=25 TO 35 STEP 2; PRIN
T AT ey-2,ex;c$(f TO f+1); AT ey-
1,ex;d$(f TO f+1); BEEP .001,3;
NEXT f; PRINT AT ey,ex;i$; AT ey+
1,ex;i$; INK inke; AT ey1,ex;g$; A
T ey1+1,ex;h$: LET ey=ey1: LET
m$(ey-1,ex TO ex+1)="00": LET m$(
ey,ex TO ex+1)="00": GO TO 380
320 LET ey1=ey+1; IF m$(ey1+1,e
x)<>"0" OR m$(ey1+1,ex+1)<>"0" T
HEN IF m$(ey1+1,ex)<>"1" THEN GO
TO 360
330 GO TO 340+(10 AND m$(ey1+1,
ex)="1")
340 PRINT AT ey,ex;i$; AT ey+1,e
x;i$; INK inke; AT ey1,ex;g$; AT e
y1+1,ex;h$: LET ey=ey1: GO TO 38
0
350 FOR f=13 TO 23 STEP 2; PRIN
T AT ey1+1,ex;c$(f TO f+1); AT ey
1+2,ex;d$(f TO f+1); BEEP .001,3;
NEXT f; PRINT AT ey,ex;i$; AT ey
+1,ex;i$; INK inke; AT ey1,ex;g$;
AT ey1+1,ex;h$: LET ey=ey1: LET
m$(ey1+1,ex TO ex+1)="00": LET
m$(ey1+2,ex TO ex+1)="00": GO TO
380
360 IF pru=0 THEN GO TO 170

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370 GO TO 70
380 IF ABS (ex-PX)>1 OR ABS (ey-PY)>1 THEN GO TO 70
390 LET k=1+dP*4+sA*2: FOR f=7 TO 0 STEP -1: BEEP .005,f: PRINT INK f; AT PY,PX;a$(k TO k+1); AT PY+1,PX;b$(k TO k+1); INK inke; AT ey,ex;g$: AT ey+1,ex;h$: NEXT f
400 BEEP .9,-14: BEEP .9,-12: BEEP .4,-14: BEEP .4,-12: BEEP .4,-10: BEEP .5,-12
410 CLS : POKE 23606,0: POKE 23607,60: PRINT AT 3,0; INK 4;"PINKY" PINKY "RA
T 19,0; BRIGHT 1;" UOTRA PR
ITIDA? (S/N) " ; INK 6; AT 6,8;"CUANTO LO SIENTO"; AT 8,9;"TE HA DEVORADO": IF sc>hs THEN PRINT AT 14,4;"PERO SUPERASTE EL RECORD"; AT 16,8;"EN1"+CHR$ 21+CHR$ 1+CHR$ 8;sc;CHR$ 21+CHR$ 0+" PUN TOS": LET hs=sc
420 LET j$=INKEY$: IF j$="S" OR j$="s" THEN GO TO 20
430 IF j$<>"N" AND j$<>"n" THEN GO TO 420
440 GO TO 10000
450 GO TO 460+110*dP
460 IF PX=1 OR m$(PY,PX-(1 AND PX))<>"2" THEN GO TO 160
470 LET m$(PY,PX-2 TO PX-1)="00"
480 LET m$(PY+1,PX-2 TO PX-1)="00"
490 LET by=py: FOR r=px-2 TO 1 STEP -1: IF ABS (ex-r)=2 AND ABS (ey-by)<=1 THEN GO TO 520
500 IF r=1 OR m$(by,r-(1 AND r>1))="2" THEN GO TO 510
500 PRINT AT by,r-1;" "; AT by+1,r-1;"<="; NEXT r
510 GO SUB 560: GO TO 70
520 IF ABS (ey-by)=1 THEN GO TO 510
530 FOR r=r-2 TO 1 STEP -1: IF r=1 OR m$(by,r-(1 AND r>1))="2" THEN GO TO 550
540 PRINT AT by,r-1; INK inke; g$; AT by+1,r-1;h$: PRINT AT by,r+1;" "; AT by+1,r+1;"<=": NEXT r
550 PRINT AT by,r;" "; AT by+1,r;"<=": FOR f=inke TO 0 STEP -.5: PRINT INK f; AT by,r;"L": AT by+1,r;"M": BEEP .005,f: NEXT f
560 IF r=19 OR m$(PY+(2 AND PY<19),PX)<>"1" THEN GO TO 160
580 LET m$(PY+2,PX TO PX+1)="00"
590 LET m$(PY+3,PX TO PX+1)="00"
600 LET bx=px: FOR r=py+2 TO 19: IF ABS (ey-r)=2 AND ABS (ex-bx)<=1 THEN GO TO 630
600 IF r=19 OR m$(r+(2 AND r<19),bx)="1" THEN GO TO 620
610 PRINT AT r+2,bx;f$; AT r+1,bx;e$; AT r,bx;i$: NEXT r
620 GO SUB 670: GO TO 70
630 IF ABS (ex-bx)=1 THEN GO TO 620
640 FOR r=r+2 TO 19: IF r=19 OR m$(r+(2 AND r<19),bx)="1" THEN GO TO 660
650 PRINT INK inke; AT r+2,bx;h$; AT r+1,bx;g$: PRINT AT r,bx;f$; AT r-1,bx;e$; AT r-2,bx;i$: NEXT r
660 PRINT AT r+1,bx;i$; AT r,bx;f$; AT r-1,bx;e$; AT r-2,bx;i$: FOR f=inke TO 0 STEP -.5: PRINT INK f; AT r+1,bx;"JK": BEEP .005,f:
NEXT f: PRINT AT r+1,bx;f$; AT r,bx;i$; LET m$(r+1,bx TO bx+1)="34": LET m$(r,bx TO bx+1)="12": GO TO 2000
670 FOR f=13 TO 23 STEP 2: PRINT AT r,bx;c$(f TO f+1); AT r+1,bx;d$(f TO f+1): BEEP .001,3: NEXT f: RETURN
680 IF PY=1 OR m$(PY-(1 AND PY>1),PX)<>"3" THEN GO TO 160
690 LET m$(PY-2,PX TO PX+1)="00"
700 LET m$(PY-1,PX TO PX+1)="00"
710 LET bx=px: FOR r=py-2 TO 1 STEP -1: IF ABS (ey-r)=2 AND ABS (ex-bx)<=1 THEN GO TO 740
720 IF r=1 OR m$(r-(1 AND r>1),bx)="3" THEN GO TO 730
730 PRINT AT r-1,bx;e$; AT r,bx;f$; AT r+1,bx;i$: NEXT r
730 GO SUB 780: GO TO 70
740 IF ABS (ex-bx)=1 THEN GO TO 730
750 FOR r=r-2 TO 1 STEP -1: IF r=1 OR m$(r-(1 AND r>1),bx)="3" THEN GO TO 770
760 PRINT INK inke; AT r-1,bx;g$; AT r,bx;h$: PRINT AT r+1,bx;e$; AT r+2,bx;f$; AT r+3,bx;i$: NEXT r
770 PRINT INK inke; AT r,bx;i$; AT r+1,bx;e$: PRINT AT r+2,bx;f$; AT r+3,bx;i$: FOR f=inke TO 0 STEP -.5: PRINT INK f; AT r,bx;"JK": BEEP .005,f: NEXT f: PRINT AT r,bx;e$; AT r+1,bx;f$; AT r+2,bx;i$: LET m$(r,bx TO bx+1)="12": LET m$(r+1,bx TO bx+1)="34": GO TO 2000
780 FOR f=25 TO 35 STEP 2: PRINT AT r,bx;c$(f TO f+1); AT r+1,bx;d$(f TO f+1): BEEP .001,3: NEXT f: RETURN
790 IF PX=29 OR m$(PY,PX+(2 AND PY<29))<>"1" THEN GO TO 160
800 LET m$(PY,PX+2 TO PX+3)="00"
810 LET m$(PY+1,PX+2 TO PX+3)="00"
820 LET by=py: FOR r=px+2 TO 29: IF ABS (ex-r)=2 AND ABS (ey-by)<=1 THEN GO TO 850
820 IF r=29 OR m$(by,r+(2 AND r<29))<>"1" THEN GO TO 840
830 PRINT AT by,r;" "; AT by+1,r;"<=": NEXT r
840 GO SUB 890: GO TO 70
850 IF ABS (ey-by)=1 THEN GO TO 840
860 FOR r=r+2 TO 29: IF r=29 OR m$(by,r+(2 AND r<29))<>"1" THEN GO TO 880
870 PRINT AT by,r-2;" "; AT by+1,r-2;"<=": INK inke; AT by,r+1;" "; AT by+1,r+1;h$: NEXT r
880 PRINT AT by,r-2;" "; AT by+1,r+1;"<=": FOR f=inke TO 0 STEP -.5: PRINT INK f; AT by,r+1;"L": AT by+1,r+1;"M": BEEP .005,f: NEXT f: PRINT AT by,r-1;" "; AT by+1,r-1;"<=": LET m$(by,r TO r+1)="12": LET m$(by+1,r TO r+1)="34": GO TO 2000
890 FOR f=37 TO 47 STEP 2: PRINT AT by,r;c$(f TO f+1); AT by+1,r;d$(f TO f+1): BEEP .001,3: NEXT f: RETURN
2000 LET sc=sc+250: PRINT #0; AT 1,4; INK 8;sc: LET ep=ep-1: IF ep=0 THEN POKE 23606,0: POKE 23607,60: GO SUB 3000: GO TO 302010 GO TO 40
3000 RESTORE 9000: FOR f=1 TO 28: READ n,m: BEEP n,m: NEXT f: RETURN
4000 CLS : PRINT AT 1,0; INK 2;"REGLAS DEL JUEGO"

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": INK 4; PRINT AT 4,8;"5.....I
ZQUIERDA";AT 6,8;"8.....DEREC
HA";AT 8,8;"6.....ABAJO";AT
10,8;"7.....ARRIBA";AT 12,8
;"9.....EMPUJAR";AT 15,4; INK
5; BRIGHT 1;"PINKY SE HA METIDO
EN LA NEVERA;EVITA QUE EL
MONSTRUO DE LAS TINIEBLAS LE
DEVORE PARA ELLA DEBERAS AF
LASTARLO CON LOS CUBITOS DE
HIELO";AT 21,0; INK 2;" FILME
NUEVA TECNOLOGIA";PAUSE "

```
4040 RANDOMIZE : BORDER 0: INK 7
: PAPER 0: BRIGHT 0: OVER 0: INVERSE 0: FLASH 0: CLS : PRINT AT
10,9;"ESPERE UN POCO": RESTORE 8
000: FOR f=15616 TO 15823: POKE
f+49288,PEEK f: NEXT f: FOR f=65
112 TO 65535: READ a: POKE f,a:
NEXT f
```

```
NEAT !
4050 DIM M$(20,30): LET a$="fg,jg
OPSTWX[\_E\_C": LET b$="hik!0RUVY
Z]1abde": LET c$=";?>?>CBCB >?
>?BCBC : ;?>?>BCBC : ;?>?>BCBC
": LET d$="<@A@ADEDED <=@A@AD
EDE @A@ADEDE @=@ADADE E ":".
LET e$=";"; LET f$="<"; LET g$=
="FG": LET h$="HI": LET i$="
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```

LET hs=10000000: RETURN
4060 RESTORE 8490+10*(P-INT ((P-
1)/7)*7): READ a: READ P$: FOR f=
1 TO a STEP 2: LET c1=(CODE P$(f-
97)*2+1: LET c2=(CODE P$(f+1)-
97)*2+1: PRINT AT c1,c2;i$:AT c
1+1,c2;i$: LET m$(c1,c2 TO c2+1)
="00": LET m$(c1+1,c2 TO c2+1)="00":
BEEP .016,.35: NEXT f
4070 LET px=INT (RND*15)*2+1: LE
T py=INT (RND*9)*2+1: IF m$(py,p
x)<>"0" THEN GO TO 4070
4080 LET px1=px: LET py1=py: LET
k=1+dp*4+s$*2: PRINT INK 7;AT P
y,px;a$(k TO k+1);AT py+1,px;b$(k
TO k+1): RETURN

```

```

8010 DATA 63,64,128,160,160,160,
160,160,252,2,249,13,5,5,5,5,160
,160,160,160,176,159,64,63,1,1,1
,1,1,249,2,252,14,17,113,139,140
,92,37,162,225,20,26,98,156,146,
218,38,34,94,144,222,37,72,85,54
,34,68,190,41,38,201,206,48
8020 DATA 5,36,74,52,170,4,82,37
,4,64,165,24,162,8,80,66,74,36,6
,9,16,165,152,34,16,8,70,40,163,1
,36,69,16,200,0,0,3,15,31,63,127,
103,0,0,192,240,248,252,254,230,

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```
9980 SAVE "PINKY" LINE 10: GO TO  
10000  
9985 REM RUTINA RESTAURAR  
9990 BRIGHT 0: FLASH 0: PAPER 7:  
INK 0: BORDER 7: CLS : POKE 236  
07,60: POKE 23606,0
```