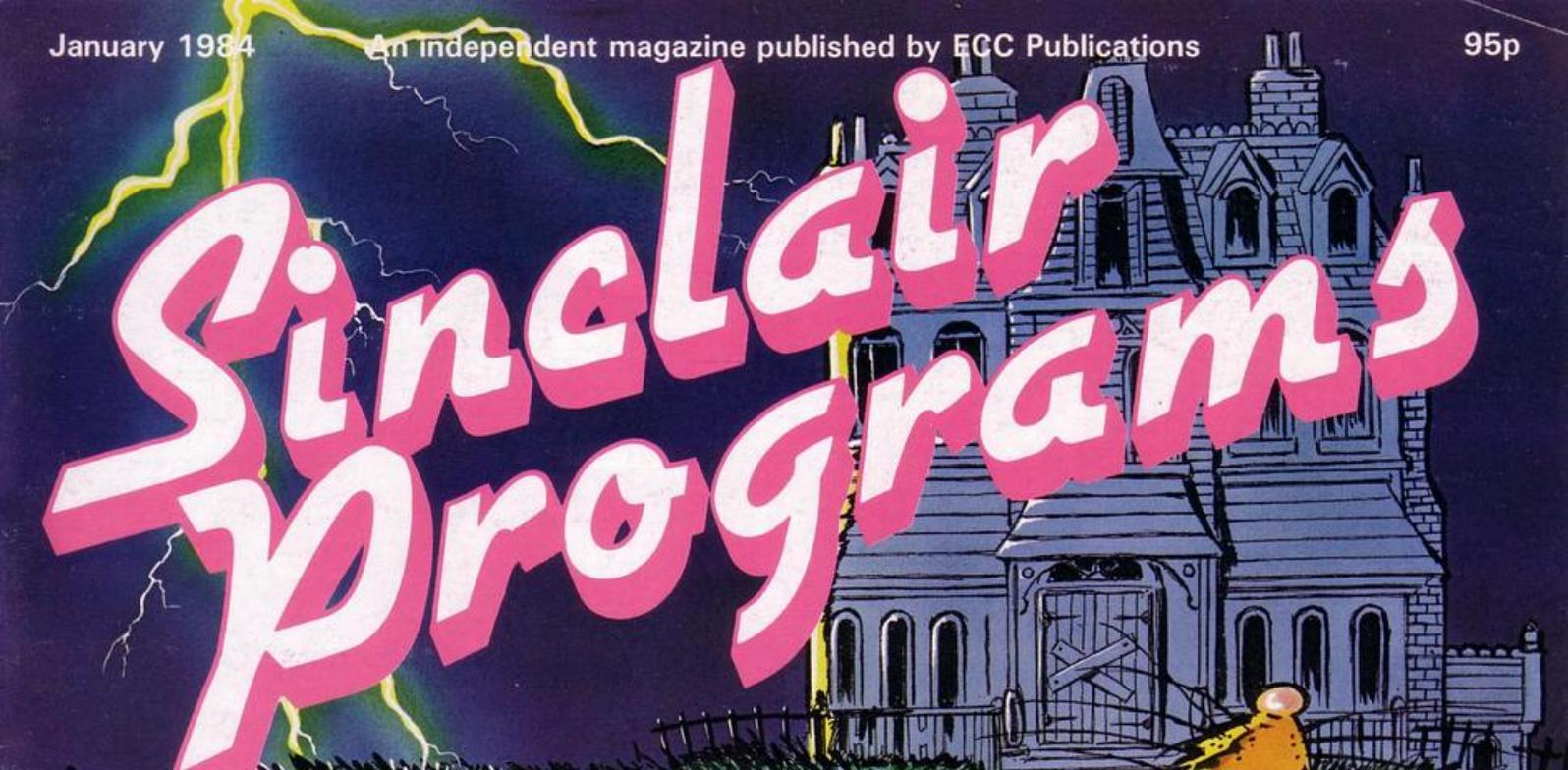


Sinclair Programs



**ABANDONED HOUSE
RAT INVASION**

**DAMSELS IN DISTRESS
GENERAL DOOM
STAMPEDE
and many more**

**30 Programs for
the Spectrum
and
ZX-81**

SPOT THE DIFFERENCE!

Choosing which game to buy from the mountain available is a difficult job, especially when everyone claims to produce the best on the market. But how can you tell the best from the rest?. To help you decide, read on. . . .



THE DUNGEON MASTER

Let your Spectrum be your guide in a totally new dimension in adventures in the true spirit of traditional role playing games where YOU design the scenario.

"I have been a Dungeons and Dragons fan for several years...The package provides excellent entertainment for all fans of the cults and should prove a good introduction to the game".

....Sinclair User.

"Highly recommended for its versatility, originality and quality. Definitely well worth obtaining".

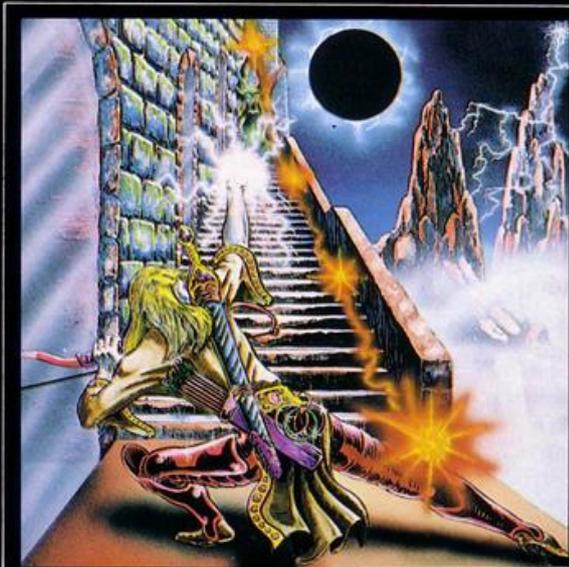
....ZX Computing.

ZX Spectrum 48K £7.50
Written by Graham Stafford.

What the real critics say. . . .

Very rarely have software titles produced such universal acclaim as 'Halls of the Things' and 'The Dungeon Master'. Now, with three brand new programs, Crystal continues to set the standard of software excellence. The difference is obvious - the choice is yours:

The Best or The Rest.



HALLS OF THE THINGS

A stunning multi-level maze 'arcade - adventure'.

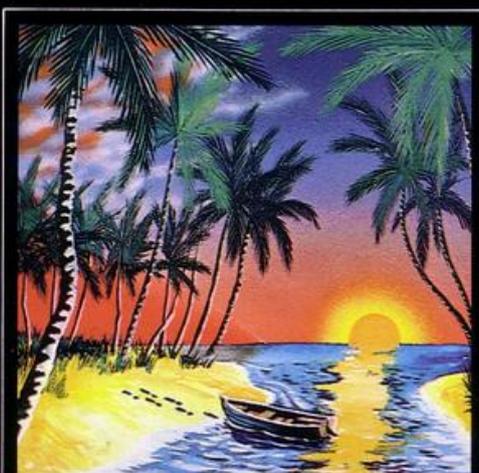
"Excellent and dangerously addictive - could change the Spectrum games scene overnight".

....Sinclair User.

"Spectacular - One of the best games I've seen, finely balanced between simplicity and addictiveness - superb graphics and colour - I CAN'T RECOMMEND IT HIGHLY ENOUGH".

....Popular Computing Weekly.

ZX Spectrum 48K £7.50
Written by Neil Mottershead, Simon Brattel and Martin Horsley.

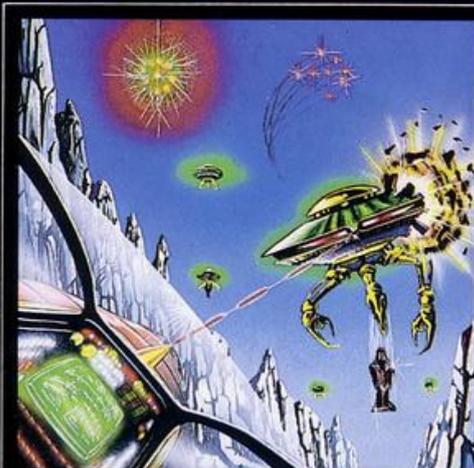


THE ISLAND

The ultimate test of logic and deduction! Can you solve the hidden mysteries of the South Pacific Island on which you have been stranded - and escape alive! A brilliant classic style adventure game to fascinate and frustrate you for months!

ZX Spectrum 48K £7.50

Written by Martin H. Smith.



INVASION OF THE BODY SNATCHAS!

At last! a version as fast and furious and as frustratingly addictive as the arcade original. Landers, Mutants, Bombers, Pods, Swarms and much much more combine to produce the ultimate space game!

ZX Spectrum 48K £6.50

Written by Simon Brattel and Neil Mottershead.



ROMMEL'S REVENGE

A brilliant interpretation of the most visually stunning arcade game of all time. Superb high resolution 3D graphics with full perspective plus a host of new and exciting features make Rommel's Revenge the most spectacular game ever produced for your Spectrum!

ZX Spectrum 48K £6.50

Written by Martin Horsley.



Please Supply:

- Invasion of the Body Snatchas
- Rommel's Revenge
- The Island
- Halls of the Things
- The Dungeon Master
- Catalogue (please enclose SAE 6in. x 9in.)

I enclose cheque/PO for.....

NAME.....

ADDRESS.....

Please send SAE for our latest catalogue and details of our forthcoming software.

Catalogue FREE with every order. P&P included.

Please add £0.50 per item for overseas orders.

Please make cheques/PO's payable to:

CRYSTAL COMPUTING

Dept SP1
2 ASHTON WAY
EAST HERRINGTON
SUNDERLAND SR3 3RX

DEALERS! For details of our excellent dealer discounts (including export) ring Chris Clarke on 061-205 6603.

PROGRAMMERS! Written any good software? send it to us for evaluation and details of our excellent royalty scheme.

Contents

Managing editor
Nigel Clark

Managing production editor
Harold Mayes MBE

Design
Elaine Bishop

Assistant Editor
Rebecca Ferguson

Program Reviews
Alison McCulloch

Group advertisement manager
John Ross

Advertisement executive
Frank Humphrey-Gaskin

Editorial/production assistant
Dezi Epaminondou

Managing director
Terry Cartwright

Chairman
Richard Hease

Sinclair Programs is published monthly by ECC Publications Ltd.

Telephone
All departments
01-359 3525

If you would like to contribute to any of the Sinclair User group of publications please send programs, articles or ideas for hardware projects to:
Sinclair User and Programs,
ECC Publications,
196-200 Balls Pond Road,
London N1 4AQ

Programs should be on cassette and articles should be typed. We cannot undertake to return them unless a stamped-addressed envelope is included.

We pay £10 for the copyright of each program published and £50 per 1,000 words for each article used.

© Copyright 1984
Sinclair Programs
ISSN No 0263-0265

Printed and typeset by
Cradley Print PLC,
Warley,
West Midlands

Distributed by
Spotlight Magazine Distribution Ltd,
1 Benwell Road,
Holloway,
London N7
01-607 6411

Cover Design/Illustrations
Ivan Hissey

7 LETTERS

BEGINNERS' SECTION ZX-81

- 15 CLOCK
RIVER RESCUE
- 16 HOPPIT
- 17 CAVEMAN
SNIPER FIRE

SPECTRUM

- 16 PHASE

ZX-81

- 12 EXAM ROOM
- 33 RAT INVASION

☆☆☆ 34 PROGRAM OF THE MONTH ☆☆☆ ABANDONED HOUSE

- 39 FORT KNOX
- 47 STAMPEDE
SKY DIVER
- 52 GENERAL DOOM
- 54 DAMSELS IN
DISTRESS

- 62 WINDFALL

- 63 IT'S SNOWING
AGAIN
SAVE FREDDIE

SPECTRUM

- 8 SHEEP DOG

- 13 STAR

- 19 COCONUTS

- 24 BUILDER

- 27 FLITE

- 29 TREE EATERS

- 37 MAZEMAN

- 44 ENIGMA

- 45 MISSILE

- 50 CHOPPER SQUAD

- 56 LEAVE ONE

- 60 ARITHMETIC
EXPRESS

- 61 BMX

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

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

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

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

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

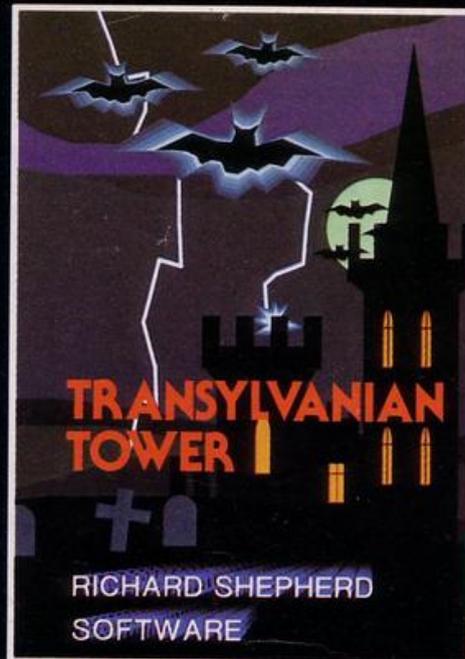
"ADVENTURES IN

AVAILABLE FROM W.H. SMITH
AND ALL LEADING

Transylvanian Tower

A spine chilling adventure... enter via the dungeons... navigate your way through 500 3-D rooms... survive the swooping vampire bats... reach the terrifying top... confront and kill Count Kreepie, ridding the world of this Transylvanian Terror.

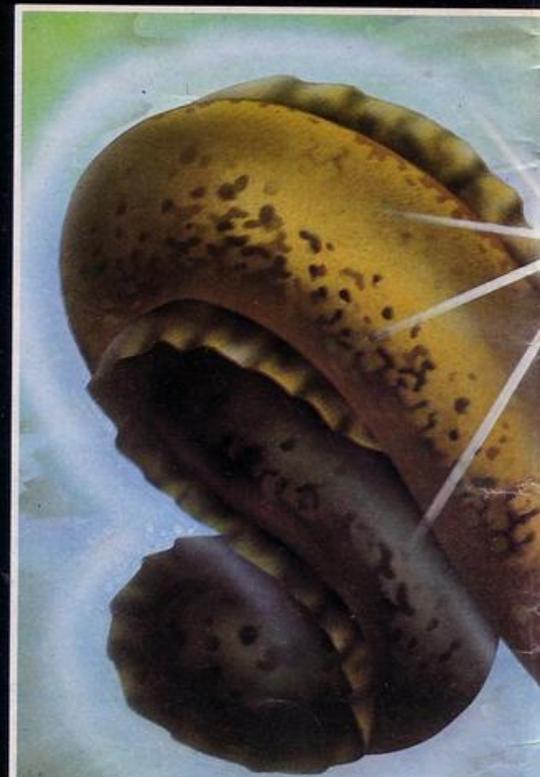
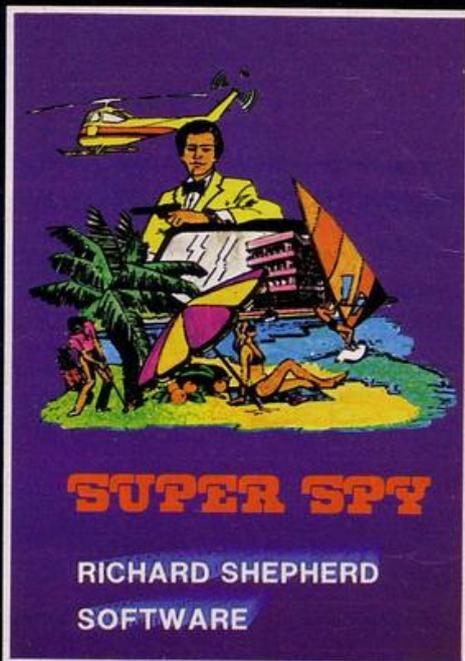
Can you survive the Top of the Tower? Full save routine for use during the hours of darkness! 48K Spectrum
£6.50



Super Spy

Locate the secret island hideaway of the mysterious meglomaniac Dr. Death. Follow his trail across continents, through complex puzzles and 3-D mazes. Discover the entrance to his underground lair — but beware — even with your death-defying gadgets his evil henchmen may still win the day!

With save routine for part time secret agents! 48K Spectrum £6.50



Devils of the Deep

Can you discover the fabled treasure by lethal crabs and menacing elephants? Explore the secrets of the Lost City as you wade through the ancient columns. Explore the horrors of the treacherous seabed, each with its own dangers.

Sensational 3-D graphics used as never before! 48 K Spectrum £6.50. Full save routine!

RICHARD SHEPHERD
SOFTWARE

DEALERS — GENEROUS DISCOUNTS AVAILABLE CONT

RICHARD SHEPHERD SOFTWARE

ELM HOUSE, 23-25 ELM SHOTT LANE, CIPPENHAM, SLOUGH, BERKSHIRE.

CREDIT CARD
RING 1062
FOR EXPRE

All programs are sold subject to the condition that they may not, by way of trade or otherwise, be lent, hired, or otherwise distributed in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without the prior written permission of the publisher.

TO IMAGINATION"

TH, JOHN MENZIES, BOOTS*
COMPUTER STORES

The Deep

...res of Atlantis, guarded
...tric eels? Uncover the
...er among the timeless
...dred deadly sectors of
...its multitude of hidden

...you've never seen
...save routine.

SHEPHERD

New

New

Invincible Island

RICHARD SHEPHERD
SOFTWARE

Invincible Island by Peter Cooke

Exhaust your ingenuity in the quest to find The Seven Parchments of Xaro and their meaning! Will they lead you to undreamt of treasures or eternal doom? Explore the mysteries of the stockade and puzzle within the Pagoda! A spectacular split screen graphic and text adventure to braintease you for weeks!

Adventurous graphics for every location. Save routine. 48K Spectrum £6.50.

EVEREST ASCENT

RICHARD SHEPHERD
SOFTWARE

Everest Ascent

Stake your claim to the top of the world in this strategic vertical adventure. Conquer the summit of the world's highest peak! ... struggle from base camp to base camp ... survive the elements ... watch out for avalanches, thin ice and wayward sherpas ... encounter abominable snowmen and cross bottomless crevasses!

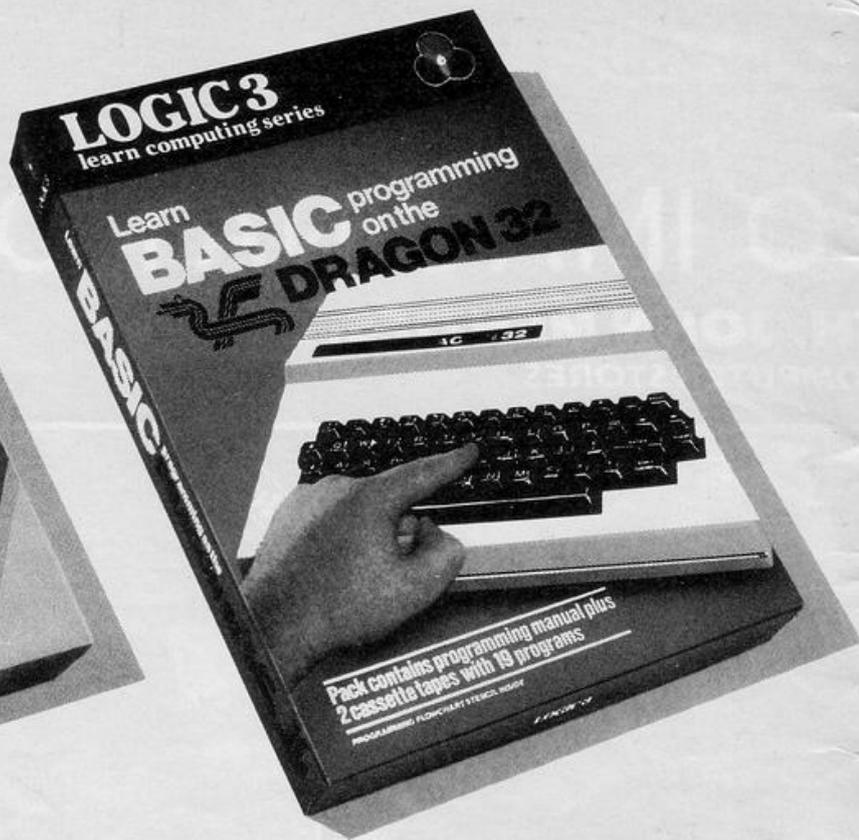
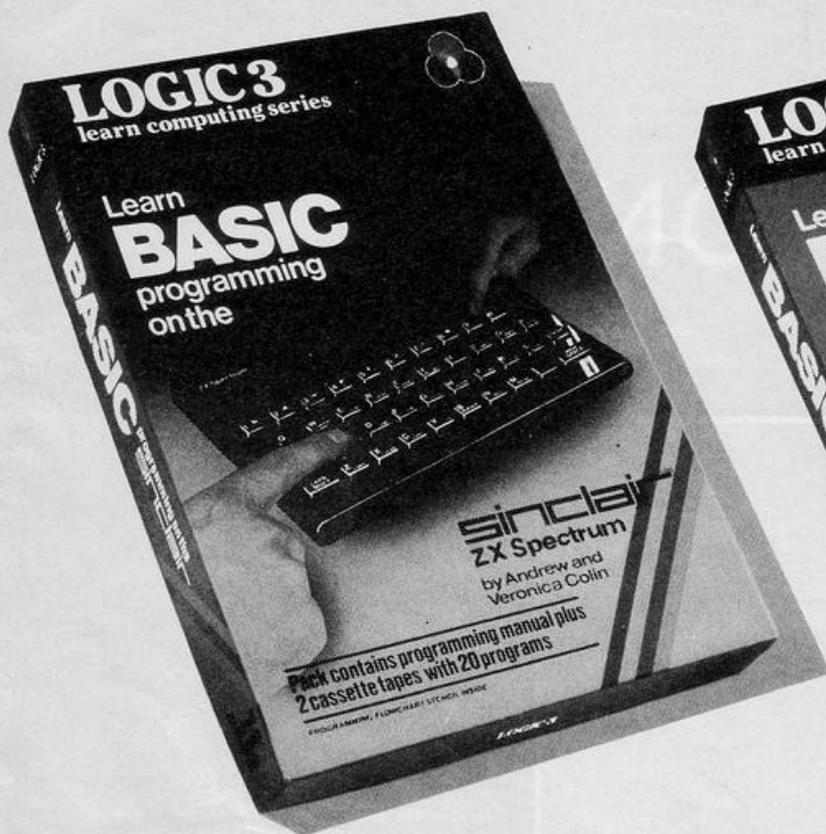
A game of skill, strategy and planning — a graphic simulation of man's ultimate endeavour! Save routine. 48K Spectrum £6.50.

CONTACT JOHN SALTHOUSE ON (06286) 63531 FOR DETAILS

D HOTLINE
[06286] 63531
SS SERVICE

RICHARD SHEPHERD SOFTWARE

ELM HOUSE, 23-25 ELM SHOTT LANE, CIPPENHAM, SLOUGH, BERKSHIRE.



THERE'S NO PRESENT LIKE THE FUTURE.

THE WORLD'S FINEST PROGRAMMING TUTORIAL FOR ONLY £12.95.

Thousands who own, or would like to own home computers have yet to experience the feeling of discovery that comes when you write your own programs. Yet learning programming can be easy.

'Learn Basic' from Logic 3 is the ultimate development of the method first devised at Strathclyde University—a straightforward, easily understood tutorial written by Professor Andrew Colin and Veronica Colin, authors of Britain's best-selling tutorial package.

Using the method tested by university students and used successfully by over 200,000 home computer users, 'Learn Basic' runs on your own computer and explains everything in clear non-American English without jargon or computertalk. In a matter of hours, you will be writing programs that work.

Essentially, 'Learn Basic' and the rest of the 'Learn Computing' Series that will follow soon are designed for people who want to keep abreast of the computer age. For people who realise that understanding computers is the key to future success, at school, at work and as a parent.

Make your future, and your family's future, richer this Christmas.

Get 'Learn Basic' by Logic 3—two tapes and a full-size manual for Spectrum or Dragon (others soon) at just £12.95.

At that price, it's a gift.

Buy the Logic 3 'Learn Computing' Series at computer shops and major retail stores all over Britain. In case of difficulty, write to Logic 3 in Windsor.

TO: Logic 3 Ltd, Mountbatten House, Victoria Street, Windsor SL4 1HE.

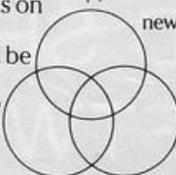
If you would like to know more about using and programming a computer in your home, send this coupon for your free copy of our 16-page explanatory booklet "100 things you wanted to know about computers."

It will help you cut through the jungle of computer jargon, and give you news about software developments—even games.

Or send for our software catalogue (tick either or both).

Name _____

Address _____



LOGIC 3

I have already/intend to get a _____ microcomputer (delete as inapplicable)

— THE KEY TO THE WORLD OF TOMORROW. —

LETTERS

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

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

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

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

There must be many programs you have published which newcomers do not know about. Could you reprint them? When you come to the financial part, your magazine proves the cheapest and, as far as programs go,

they surpass all the opposition. I would not mind if you raised the price so long as you increased the number of programs and added some interesting features.

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

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

**C Fowler,
Sheffield.**

Record Breaker?

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

**Andrew Lamb, aged 11,
Edgbaston, Birmingham.**

Werewolf's Lair Changes

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

graphic As in lines 90 and 290 to graphics Hs.

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

**Tom Liptrot,
Burscough,
Lancashire.**

ZX-81-to-Spectrum Conversion

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

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

**M Gibson,
Stoke-on-Trent.**

Letter not Figure

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

**A Ferguson,
Middlesbrough.**

Mark Three Defender

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

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

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

My amended program now works perfectly.

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

**C A Bailey,
Ely,
Cambs.**

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

```
6000 LET OP=OP: LET N=0: LET A=2
64+256*(255-2+n): LET L=LN A: LF
T DP=2*(1-109 AND OP<25)-2*1
=150 AND OP>7) IF A>3 AND INK
Y=16" THEN OVER 1: PRINT AT OP,
4: INK 5: "XXXXXXXXXXXXXXXXXX
XXXX: PRINT AT OP,37-USA 65057
: INK 6: "LLLLLLLLLLLLLLLLLLLL
LLLL": OVER 3: TWICE 1: PLOT 3
3,170-OP+6: DRAW 223,0: INVERSE
8: IF OP=30 THEN GO TO 2300
```

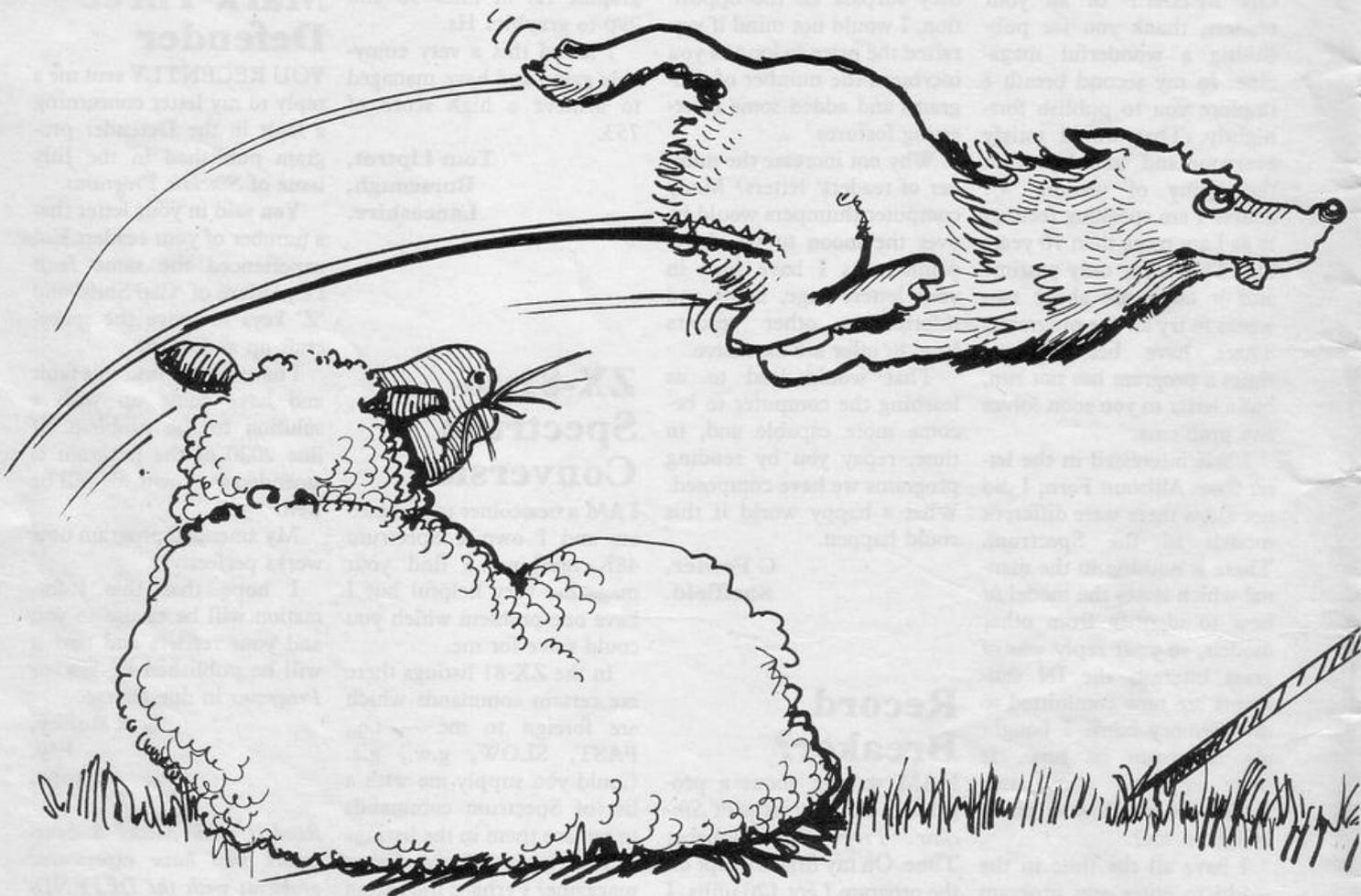
More Graphics Programs

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

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

**Bjorn Jonnor,
Reykjavik,
Iceland.**

SHEEP DOG



```

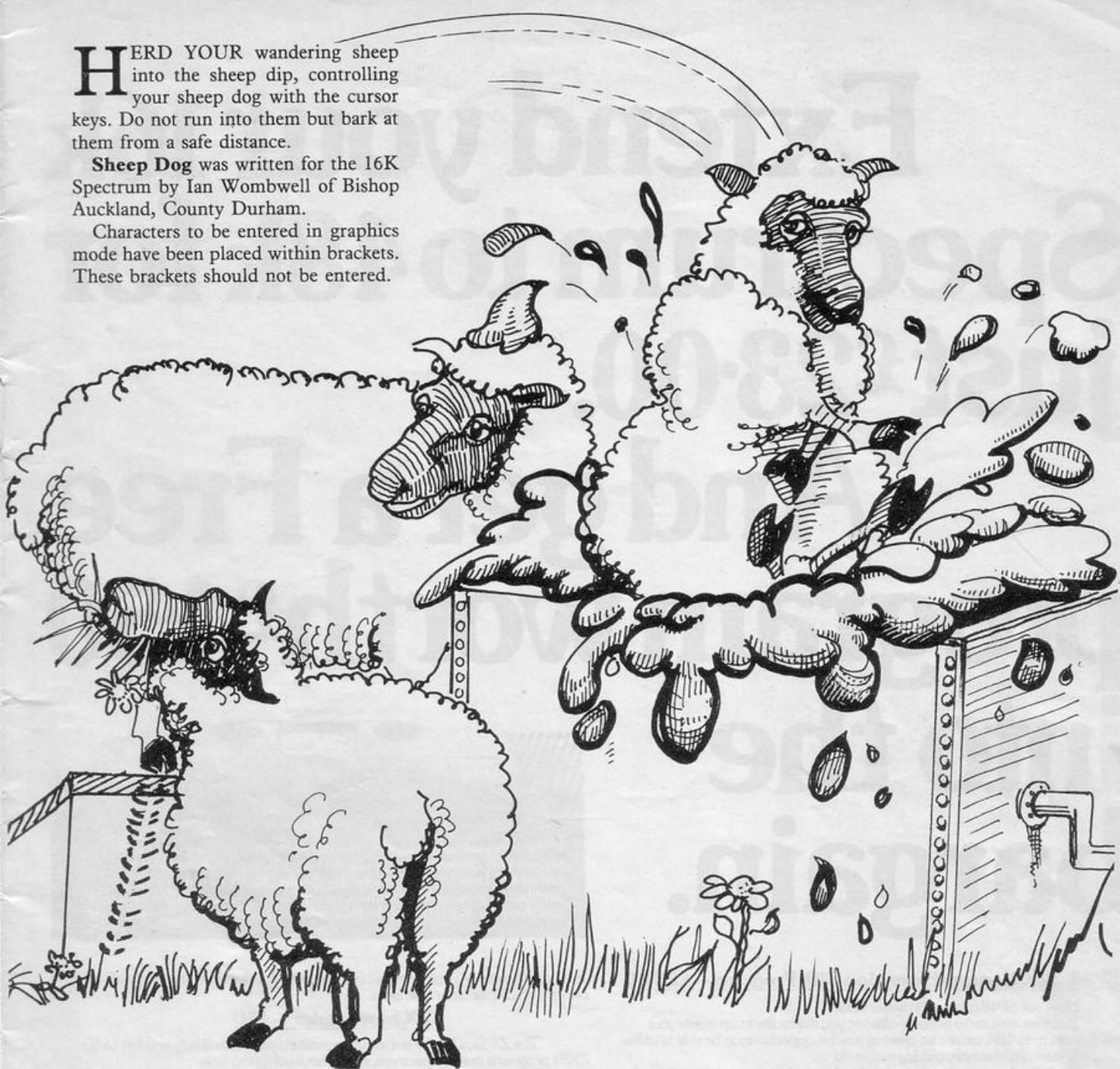
10 REM "SHEEP DOG"
20 DIM a(4): DIM b(4): DIM c(4)
30 FOR n=1 TO 4: LET a(n)=INT (RND*31)+1: LET c(n)=0: LET b(n)=INT (RND*20)+1: NEXT n
40 LET x=10: LET y=10
50 LET t=0
60 LET a$="( 1)"
70 LET b$="( 0)"
80 INPUT "DO WANT PASTURE OR DESERT P/D": s$: IF s$="P" THEN PAPER 4
90 IF s$="D" THEN PAPER 6
95 IF s$="" THEN PAPER 6
97 BORDER 1: CLS
100 FOR n=0 TO 7: READ q: POKE USR "P"+n,q: NEXT n: DATA BIN 0, BIN 10000000, BIN 10000100, BIN 11000111, BIN 01111111, BIN 01111100, BIN 01000100, BIN 01000100
110 FOR n=0 TO 7: READ q: POKE USR "o"+n,q: NEXT n: DATA BIN 0, BIN 0, BIN 00000100, BIN 01111111, BIN 01111110, BIN 01000100, BIN 01000100
120 FOR n=0 TO 7: READ q: POKE USR "1"+n,q: NEXT n: DATA BIN 0, BIN 00000001, BIN 00100001, BIN 11000111, BIN 11111110, BIN 00111110, BIN 00100010, BIN 00100010
130 FOR n=0 TO 7: READ q: POKE USR "u"+n,q: NEXT n: DATA BIN 0, BIN 0, BIN 01000000, BIN 11111110, BIN 01111110, BIN 00100010, BIN 00100010, BIN 00100010
140 FOR n=0 TO 7: READ q: POKE USR "T"+n,q: NEXT n: DATA BIN 0, BIN 00000000, BIN 00000100, BIN 11000111, BIN 11111111, BIN 11111100, BIN 01000100, BIN 01000100
150 PLOT 103,80: DRAW 32,0: DRAW 0,8: DRAW -32,0: DRAW 0,-8: PRINT AT 10,15: " ": PLOT 120,80: DRAW 0,8: PLOT 120,80: DRAW 0,8
160 PRINT INK 0: AT 0,0: "(32*1s p)": INK 6: PAPER 0: AT 0,24: "DOG S=(ppp)"
200 FOR n=1 TO 4
220 PRINT AT x,y: " "
230 IF INKEY$="7" AND x>1 THEN LET a$="( 1)": LET x=x-1: BEEP .001,35: BEEP .003,55
240 IF INKEY$="6" AND x<21 THEN LET a$="( 1)": LET x=x+1: BEEP .001,25: BEEP .003,45
250 IF INKEY$="8" AND y<31 THEN LET a$="( p)": LET y=y+1: BEEP .001,15: BEEP .003,35
260 IF INKEY$="5" AND y>0 THEN LET a$="( 1)": LET y=y-1: BEEP .001,5: BEEP .003,25
263 PRINT INK 1: AT x,y: a$
265 IF c(n)=1 AND n<4 THEN NEXT n
267 IF c(n)=1 AND n=4 THEN GO TO 710
270 PRINT AT b(n),a(n): " "
280 IF a(n)>y AND a(n)<21 THEN LET a(n)=a(n)+1: LET b$="( 0)": GO TO 350
290 IF b(n)>x AND b(n)<21 THEN LET b(n)=b(n)+1: LET b$="( 0)": GO TO 350
300 IF b(n)<x AND b(n)>1 THEN LET b(n)=b(n)-1: LET b$="( u)": GO TO 350
310 IF a(n)<y AND a(n)>0 THEN LET a(n)=a(n)-1: LET b$="( u)": GO TO 350
320 IF a(n)=0 THEN LET a(n)=a(n)+1
330 IF a(n)=31 THEN LET a(n)=a(n)-1
340 IF b(n)=21 THEN LET b(n)=b(n)-1
345 IF b(n)=1 THEN LET b(n)=b(

```

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

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

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



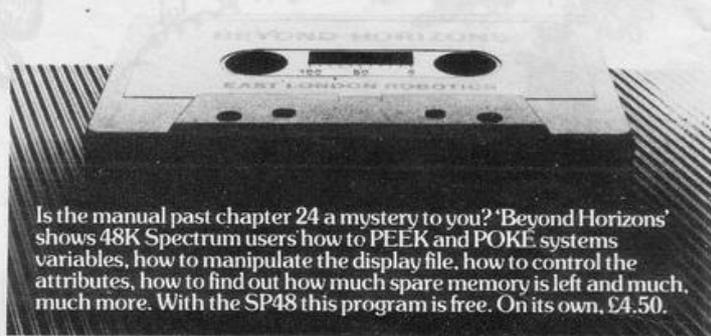
```
n)+1
350 PRINT INK 0; AT b(n), a(n); b
#
360 IF a(n)=15 AND b(n)=11 THEN
LET c(n)=1: LET a(n)=n+12: LET
b(n)=10: PRINT AT 11,15;" ": PR
INT AT b(n), a(n); "( _ o)"; BEEP .0
1,10: BEEP .005,60: BEEP .03,20
380 IF x=b(1) AND y=a(1) OR x=b
(2) AND y=a(2) OR x=b(3) AND y=a
(3) OR a(4)=y AND b(4)=x THEN L
ET l=l-1: PRINT AT 0,29+l;"(isp)
": LET x=10: LET y=10: BEEP .1,-
30: BEEP .05,0: BEEP .3,-10: IF
l<=0 THEN GO TO 900
700 NEXT n
710 PLOT 103,80: DRAW 32,0: DRA
W 0,0: DRAW -32,0: DRAW 0,-8: PR
INT AT 10,15;" ": PLOT 120,80: D
RAW 0,8: PLOT 120,80: DRAW 0,8
720 FOR m=1 TO 4: IF c(m)=1 THE
N PRINT PAPER 0: INK 7; AT 0,12
;"SHEEP="; AT 0,17+m;"( _ o)"; PRIN
T AT b(m), a(m); "( _ o)"
740 IF c(1)=1 AND c(2)=1 AND c
(3)=1 AND c(4)=1 THEN GO TO 1000
741 NEXT m
```

```
745 LET t=t+1: PRINT PAPER 0:
INK 5; AT 0,3;"TIME=";t
750 GO TO 200
800 GO TO 200
900 PRINT AT 10,10;"you're dead"
910 PRINT FLASH 1; PAPER 2; IN
K 5; AT 11,3;"Keep away from the
sheep": PAUSE 70: PRINT INVERSE
1; INK 1; AT 12,8;"PRESS ANY KEY
": IF INKEY$="" THEN GO TO 910
920 RUN
1000 PRINT FLASH 1; PAPER 0; IN
K 5; AT 0,3;"TIME=";t
1010 PRINT AT 10,10;"Game Over";
PAPER 1; INK 6; AT 11,7;"YOU CAN
E ";INT (t/20);" PLACE"
1020 IF INT (t/25)<=3 THEN LET
b$="!!!EXCELLENT!!! 100%": GO TO
1100
1030 IF INT (t/25)<=4 THEN LET
b$="GREAT!! 80%": GO TO 1100
1040 IF INT (t/25)<=5 THEN LET
b$="GOOD! 70%": GO TO 1100
1050 IF INT (t/25)<=6 THEN LET
b$="AVERAGE 60%": GO TO 1100
1060 IF INT (t/25)<=7 THEN LET
b$="FAIR 45%": GO TO 1100
```

```
1070 IF INT (t/25)<=8 THEN LET
b$="SLOW! 30%": GO TO 1100
1080 IF INT (t/25)<=10 THEN LET
b$="NOT AT ALL GOOD 20%": GO TO
1100
1090 IF INT (t/25)>10 THEN LET
b$="A LOAD OF !!! 10%": GO TO 1
100
2000 PRINT INK 7; PAPER 2;"YOU
ARE ";b$;
2010 FOR n=1 TO 21: PAUSE 5: PRI
NT AT 10,15;"( _ p)"; AT 10,13;"( _ p
)"; AT 10,17;"( _ p)"; BEEP .001,10
: BEEP .01,20: PAUSE 5: PRINT AT
10,15;"( _ t)"; AT 10,13;"( _ t)"; AT
10,17;"( _ t)"; BEEP .001,0: NEXT
n
2100 INPUT "Another go Y/N";b$:
IF b$="y" THEN RUN
2111 LET a=0: LET b=50: LET c=-1
2200 BEEP a/10000; b: LET a=a+1:
BORDER INT (RND*7): IF a=20 THEN
LET a=10: LET b=b+1
2210 IF b=60 THEN LET b=0
2220 GO TO 2200
```

Extend your 16k Spectrum to 48k for just £23.00.

And get a Free program worth £4.50 into the bargain.



Is the manual past chapter 24 a mystery to you? 'Beyond Horizons' shows 48K Spectrum users how to PEEK and POKE systems variables, how to manipulate the display file, how to control the attributes, how to find out how much spare memory is left and much, much more. With the SP48 this program is free. On its own, £4.50.

SP48, 32K Memory Extension with Program – £23.00

Now, our SP48 offers even better value.

Because now, we're not only offering you the facility to up-grade your 16K Spectrum to 48K, we're also offering you the opportunity to be able to utilise this vastly extended memory quickly and easily.

For £23 all you need to do is plug the chip-set into the sockets provided by Sinclair on your issue 2 (or £35 for issue 1) and you have a standard 48K Spectrum fully compatible with all Sinclair add-ons and very low in power consumption.

There is no soldering required.

Fitting and removal are easy.

And the SP48 carries our full warranty and is upgradable, on a part exchange basis, to SP80.

Then all you need to do is LOAD our specially written 48K guide program, 'Beyond Horizons', and your 48K computer will guide you through its memory.

With no need to labour through manuals.

This will save you time, because we all know how easy it is to get lost with memory maps.

SP80 Paged 64K memory extension – £46

The fitting, power consumption and add-on compatibility are identical to the SP48 (Issue 1 Version £50).

It can be used as a standard 48K, but software instructions can switch to a second page of 32K.

But this is not recommended for the complete beginner.

Yet it is of tremendous benefit to the serious user. And an SP80 FORTH compiler will be available in late September.

For a fit and test service at our premises £3, and by registered post £7.

MAXIMEM ZX81. 32K – £39 (PLUS ONE USED 1K ZX81) 64K – £59 (PLUS ONE USED 1K ZX81)

The MAXIMEM 32 and 64K is a modified ZX81 and not just a RAM pack. It fits inside the case.

We also give a six-month guarantee on the computer, regardless of the age of your trade-in ZX81.

The extra memory uses only a quarter of the power consumption of a

16K plug-in memory, and does not interfere with any standard add-ons, such as printers RS232 or other interfaces.

ZX Slowloader – £10

The ZX Slowloader is a software masterpiece that will help you to LOAD ZX81 programs onto a Spectrum, saving hours of typing time.

The Next Robotics Exclusive. The Trickstick

This new joystick is a revolution in computer games control. With our Trickstick from one to eight players will be able to play simultaneously. It will be on sale soon – see our next advertisement.

All products on this order form are in stock at the time of going to press. Same day dispatch for phoned Access and Visa orders.

To East London Robotics Ltd: Please send by return (tick items required)

- MAXIMEM 32K (£39) 64K (£59) + 1kZX81 _____
- SP48 (Issue 1 £35) (Issue 2 £23) _____
- SP80 (Issue 1 £50) (Issue 2 £46) _____
- SLOWLOADER £10 _____
- "BEYOND HORIZONS" program £4.50 _____
- Free catalogue (SAE only) _____

Postage 0.65p. I enclose a cheque/PO for _____ My Access/Visa No. is _____

_____  

Name _____

Address _____

SP1

East London Robotics Ltd., Gate 11, Royal Albert Dock, London E16.

24 Hour Information Service

Tel: 01-471 3308

24 Hour Access and Visa ordering

Tel: 01-474 4715

Special Enquiries: Tel: 01-474 4430

Telex: 8813271

**EAST LONDON
ROBOTICS**

ORWIN SOFTWARE: ZX81 & SPECTRUM

SUPER SOFTWARE AT LOW PRICES

NEW! FOR 16K SPECTRUM

(will also run on 48K Spectrum)

CASSETTE A

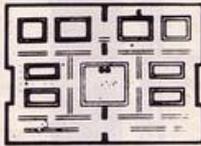
Ten programs for £6

"quantity as well as quality"
Sinclair User, Oct '82

"if each game was on a separate tape and selling for £5 each I would still recommend them"
ZX Computing, Oct/Nov '82

"Easy to operate, graphically impressive and good value for money."
The Times, 11th Dec '82

"Definitely good value for money at £6 ... A smooth clear display and a relatively fast response from the keys. Graphics are as good as you will ever get on the 81."
What Micro? Nov '83



GHOST GOBLER
Eat the ghosts before the ghosts eat you. Eat a star and you can chase the ghosts for a while.

ALIENKILL Control lasers, rockets and a force-field to stop the aliens from landing.

MOUSETRAP Trap the mouse in the corner but not anywhere else.

REVERSI A game of skill with simple rules but sophisticated tactics. Play against the computer.

LASER DEFENCE Control the laser sight to shoot down the alien ships. Machine code sound routines.

TANK BATTLE For 2 players simultaneously or play against the computer. Each player has 2 rotate controls and move and fire controls. The tanks fire steerable missiles.

PHOEBUS A puzzle.

BLACKSPOT Gobble the stars and avoid running into black spots created by crossing your own path.

CUBE Manipulate a cube any size from 2 x 2 x 2 to 7 x 7 x 7.

MINEFIELD Collect the crowns while avoiding the mines and the electrified fence.

plus an extra ...

GRAPHIC DEMO Did you know your Spectrum could do all this?!

CASSETTE 1, eleven programs (including 7 in machine code) for 1K ZX81 **£3.80**

CASSETTE 2, ten games in Basic for 16K ZX81 **£5**

CASSETTE 3, eight programs (including 1 in machine code) for 16K ZX81 **£5**

CASSETTE 4 8 games for 16k ZX81 **£6**

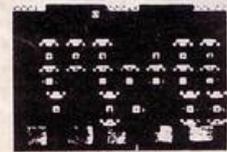
ZX-SCRAMBLE (machine code) with 3 stages. Bomb and shoot your way through the fortified caves.



GUNFIGHT (machine code)



INVADERS (machine code)



FUNGALOID
THE FUNGALOID IS GROWING AND WHEN THEY REACH THE SKY THEY PRODUCE DEADLY SPORES. YOU CONTROL A FLYER AND YOUR MISSION IS TO DESTROY THE FUNGALOID BY PLACING ANTI-FUNGUS BOMBS ON THEM.



GALAXY INVADERS (machine code)

Fleets of swooping and diving alien craft to fight off.

SNAKEBITE (machine code)

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

LIFE (machine code)

A ZX81 version of the well known game.

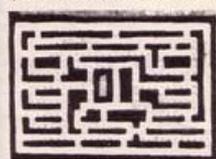
3D TIC-TAC-TOE (Basic)

Played on a 4 x 4 x 4 board, this is a game for the brain. It is very hard to beat the computer at it.

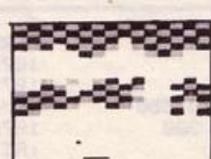
7 of the 8 games are in machine code, because this is much faster than Basic. (Some of these games were previously available from J. Steadman).

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

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



BREAKOUT (machine code)



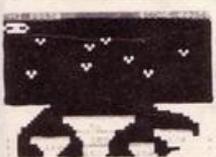
PLANETOIDS (machine code)

Rotate, move, fire and hyperspace controls. Wide range of choice of speed and difficulty.

DODGEMS (machine code)

Dodge the computer's car while eating the dots.

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



BLITZ (machine code)



DRAUGHTS (machine code)

Three skill levels.

MERCHANT (Basic)

Make your fortune on trading voyages in the Mediterranean and beyond.

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

"New polish on old favourites

... the quality of the software and the smooth action displays created on the screen make the programs worthwhile for anyone who has a ZX 81 and plays games using it.

... It is pleasant to see that Orwin's kind of quality is available again."

Sinclair User, Sept '83

"Among the best reviewed was Cassette 5 from Orwin Software. For a mere £6, you get eight top-quality games ... All the games are of very high quality and would cost £4 or £5 if sold separately ... Many of the other software houses could learn a lesson from these."

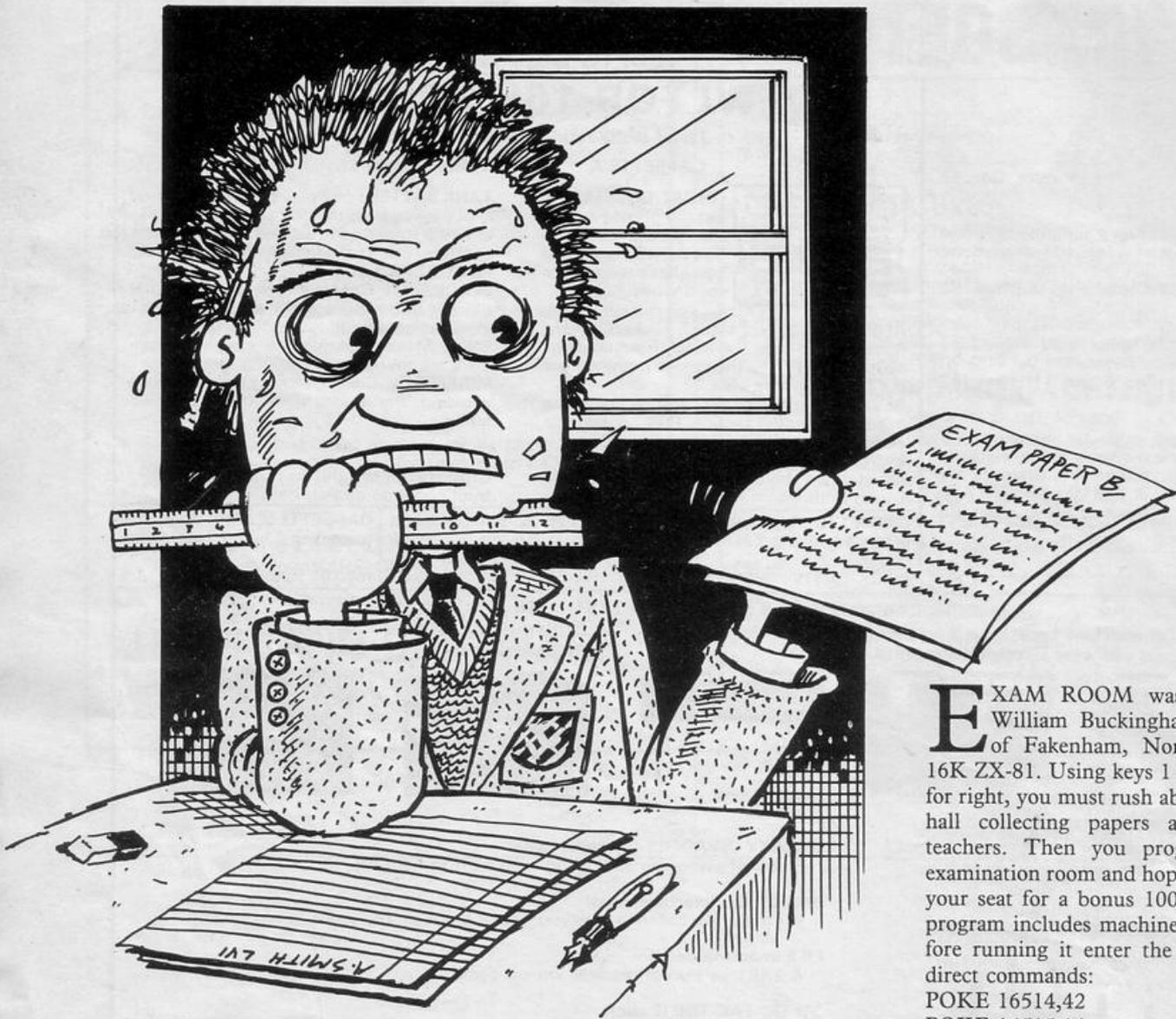
What Micro? Games Supplement, Nov '83



Please make your cheques payable to **ORWIN SOFTWARE**.
ORWIN SOFTWARE, Dept OSP, 26 Brownlow Road, Harlesden, London NW10 9QL.
ZX81 and SPECTRUM SOFTWARE WANTED (Royalties or buy outright)

Trans cash
505 4362

For orders placed at the post office



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

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

EXAM ROOM

```

1 REM 1234567
2 CLS
10 LET S=0
20 LET X=19
25 LET Y=30
30 LET T=-1
31 FAST
35 PRINT AT 0,0;"(1SP:exam roo
m'5*1SP:main hall:0*1SP)"
40 FOR F=1 TO 19
45 PRINT AT F,0;"(1SP:30*SP:1S
P)"
50 NEXT F
55~PRINT AT 20,0;"(32*1SP)"
56 GOSUB 1000
61 PRINT AT X,Y;"0";AT X-1,Y;"
";AT X-2,Y;" ";AT X-3,Y;" "
62 FOR F=1 TO 50
63 NEXT F
70 PRINT AT X,Y;" "
80 LET X=X+T
100 LET Y=Y+(INKEY#="0")-(INKEY
100~LET Y=Y+(INKEY#="0")-(INKEY
#="1")
101 IF X=1 AND Y=1 THEN GOTO 20
00
110 PRINT AT X,Y;
120 LET L=USR 16514
130 IF L>=120 THEN GOTO 500
140 IF L=23 THEN GOTO 300
150 PRINT "0"
180 GOTO 70
300 LET S=S+1
310 LET T=-T
340 GOTO 70
500 PRINT AT X,Y;CHR# L
505 PRINT AT 18,5;"ANOTHER GAME
? (Y/N)"
510 PRINT AT 21,0;"YOUR SCORE:
";S
515 INPUT A#
520 IF A#="Y" THEN RUN
530 GOTO 500
1020 FOR F=1 TO 110
1030~PRINT AT INT (RND*18)+1,INT
(RND*30)+1;"*"
1040 NEXT F
1050 FOR F=1 TO 20
1060 PRINT AT INT (RND*18)+1,INT
(RND*30)+1;"(1)"
1070 NEXT F
1075 PRINT AT 10,0;"(7*1SP:1"1SP
:1"1SP)"
1076 PRINT AT 1,1;"(9h) "
;AT 2,1;" "
1080 FOR F=1 TO 9
1090 PRINT AT F,10;" (1SP)"
1095 NEXT F
1096 PRINT AT 9,8;" ";AT 11,8;"
"
1100 SLOW
1105 RETURN
2000 FOR F=1 TO 20
2010 PRINT AT 1,1;"(10)";AT 1,1;
"(9h)"
2020 NEXT F
2030 LET S=S+100
2040 PRINT AT 21,0;"BONUS 100.YO
UR SCORE: ";S
2045 PAUSE 4E4
2050 CLS
2060 GOTO 20
9999 SAVE "EXAm"
9999 RUN

```

STAR

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

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

```

10 GO SUB 9000
20 FOR f=1 TO 20
30 FOR g=1 TO 22: GO SUB scrol
1: NEXT g: GO SUB 1000+1000*INT
(RND*4): NEXT f
40 INK 1: PAPER 5: FLASH 1: CL
S: FOR f=1 TO 50: BEEP .05,f: B
ORDER f/7: NEXT f: PRINT #0;"
YOU SAVED EARTH": BEEP 1,10
50 PRINT AT 1,5: FLASH 1:"Anot
her game ?""": FLASH 0:" You s
cored "s'" & reached adventure
":f
60 IF INKEY#="y" OR INKEY#="Y"
THEN RUN
70 IF INKEY#="n" OR INKEY#="N"
THEN GO TO 9999
80 GO TO 60
500 POKE 23692,20: PRINT AT 21,
0:" RETURN
600 BEEP .01,0: LET x=x+(INKEY#
="0" AND x<30)-(INKEY#="5" AND x
): RETURN
650 IF SCREEN#(1,x)>"" THEN R
ETURN
660 GO TO 710
700 IF ATTR(1,x)<0 THEN RETUR
N
710 INK 6: PAPER 2: FLASH 1: CL
S
720 FOR g=1 TO 30: BEEP .05,g:
BORDER g/7: CLS: NEXT g: GO TO
50
1000 LET P=15
1010 FOR g=1 TO 100: GO SUB scro
ll: PRINT AT 0,x) INK 6;"s"
1020 PRINT AT 21,0: PAPER RND*5+
1;"
";AT 21,P: PAPER 0;" "; G
O SUB move: GO SUB hit: LET s=s+
1: LET P=ABS(P+INT(RND*3))-1-(P
=25)): NEXT g: RETURN
2000 INK 3: FOR g=1 TO 100: LET
s=s+1: IF RND>RND THEN PLOT 0*I
NT(RND*27),?: DRAW 39,0
2010 GO SUB scroll: PRINT AT 0,x
: INK 6;"s": GO SUB move: GO SUB
hit1: NEXT g: RETURN
3000 INK 7: FOR g=1 TO 100: LET
s=s+1: GO SUB scroll: PRINT TAB
RND*31: BRIGHT 1;"*":AT 0,x) INK
6;"s":AT 21,x) BRIGHT 1;"*" AND
RND>.3: GO SUB hit: GO SUB move
: NEXT g: RETURN
4000 INK 0: CLS: FOR g=1 TO 100
: LET a=ATTR(1,x): LET i=INT(R
ND*5+1): GO SUB scroll: PRINT TA
B RND*31: INK i: FLASH i=2;"#":A
T 0,x) INK 6;"s": IF a>127 THEN
GO TO 710
4010 LET s=s+2*a: BEEP a/20,0: G
O SUB move: NEXT g: RETURN
9000 FLASH 0: BRIGHT 0: BORDER 0
: PAPER 0: INK 2: CLS
9010 LET hit1=650: LET x=15: LET
scroll=500: LET move=600: LET h
it=700: LET s=0
9020 PRINT INK 6;TAB 9;"SPACE V
OYAGE""": You are lost in unknow
n space""": During your voyage yo
u will """: meet some space rubbi
sh""": You must avoid this at all
cost""": Also you may meet a blac
k hole""":& inside you must not t
ouch the""": sides. Also you must a
void all""": stars. Finally you gai
n fuel by """: crashing into the co
loured fuel""": dumps (■) but bewa
re, the red """: dumps are booby tr
apped"
9030 PAUSE 1: PAUSE 0: RESTORE 9
030: FOR f=0 TO 7: READ g: POKE
USR "s"+f,VAL("BIN "+STR# g): N
EXT f: RETURN: DATA 1111111,10
0100,111100,1100011,1111110,1111
1111,9,1111110
9999 BORDER 7: PAPER 7: INK 0: F
LASH 0

```



```

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

```



RIVER RESCUE

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

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



CLOCK



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

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

```

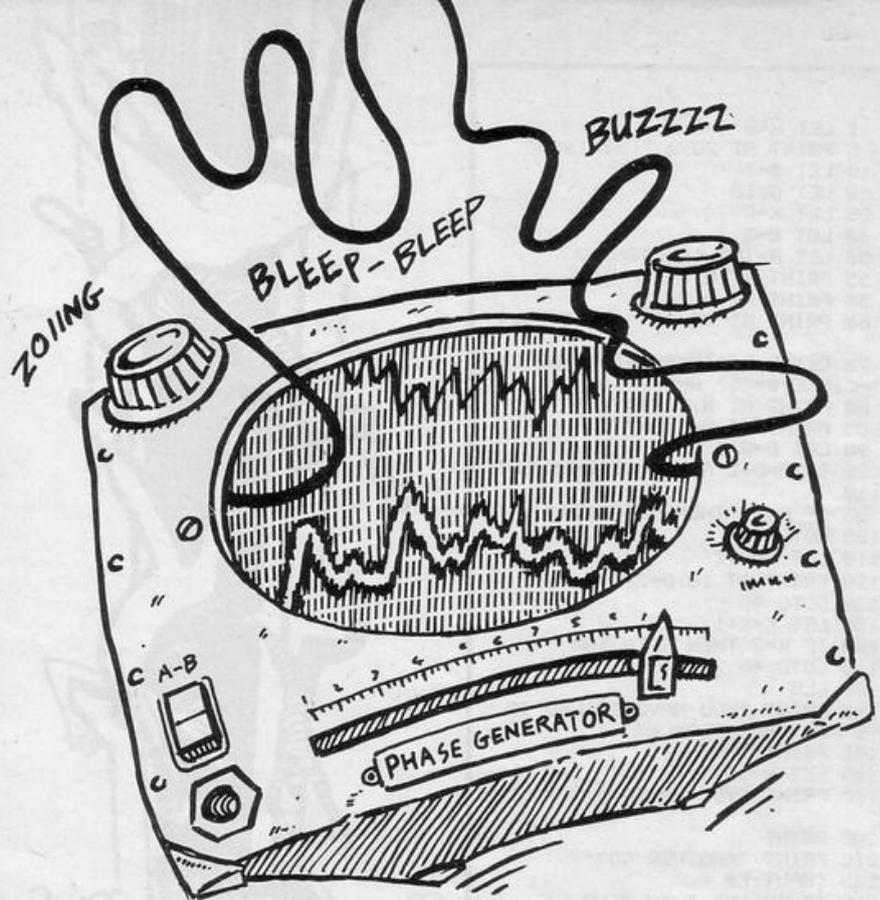
10 PAUSE 0
11 LET L=49.277
20 PRINT "INPUT THE TIME IN FO
RM ""HH MM"" WHERE H=HOUR(1 TO
12) AND M= MINUTE(0 TO 60)"
21 INPUT A#
23 LET H=VAL A#(1 TO 3)
30 LET M=VAL A#(4 TO )
35 PRINT "PRESS KEY TO START C
LOCK AT ";H;" ";M;" :00"
36 LET A#=INKEY#
37 IF A#="" THEN GOTO 36
45 CLS
46 PRINT AT 9,9;"(10*1SP)";TAB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

```

```

1 PRINT AT 10,5;"Phase lead a
nd lag"
2 PAUSE 100
3 CLS
4 PRINT AT 5,0;"This Programm
e will help you to understand A
.C. theory and the study of wave
s. It plots graphs of sinusoidal
functions for various Phase
angles"
5 PAUSE 300
8 CLS
10 INPUT "If y=aSIN (wt+&) typ
e angle & in multiples of PI r
adians e.g 0,.5,1,-.5 etc an
d ENTER",a
11 IF a=0 THEN PRINT "SIN (wt
+&),&=";a; GO TO 15
14 PRINT "SIN (wt+&),&=";a;"PI
"
15 FOR n=0 TO 255
20 PLOT n,80+50*SIN (n/128*PI+
a*PI)
30 NEXT n
40 INPUT "type c1 to clear scr
een or any letter to continue";
a#
50 IF a#="c1" THEN GO TO 7
60 IF a#<>"c1" THEN GO TO 10

```



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

PHASE

BEGINNER



BEGINNER

```

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

```

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

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

CAVEMAN

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

```

1 LET S=0
1 LET A=0
1 RAND
1 FOR A=1 TO 25
1 CLS
1 LET M=18
1 LET F=2*(INT (RND*8))
1 FOR B=0 TO 20
1 PRINT AT F,B: " "
1 PRINT AT 18,14: " "
1 PRINT AT 19,15: " "
1 PRINT AT 20,14: " "
1 IF M<F THEN LET M=18
140 IF INKEY$="P" OR M<18 THEN
1 PRINT AT M,16: " "
150 IF B=15 AND M=F THEN GOTO 1
500
155 IF B=14 AND M=F THEN GOTO 1
500
160 IF INKEY$="P" OR M<18 THEN
GOSUB 1000
300 PRINT AT F,B: " "
370 NEXT B
500 NEXT A
700 PRINT AT 20,16,5: " "
1000 PRINT AT M,16: " "
1010 LET M=M-2
1020 RETURN
1550 PRINT AT M-1,B: " "
1555 PRINT AT M,B: " "
1560 PRINT AT M+1,B: " "
1565 PRINT AT M,B: " "
1568 PRINT AT M+1,B: " "
1570 PRINT AT M,B: " "
1700 PAUSE 60
1750 LET S=S+1
1800 NEXT A
2000 PRINT AT 20,16,5:

```



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

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

```

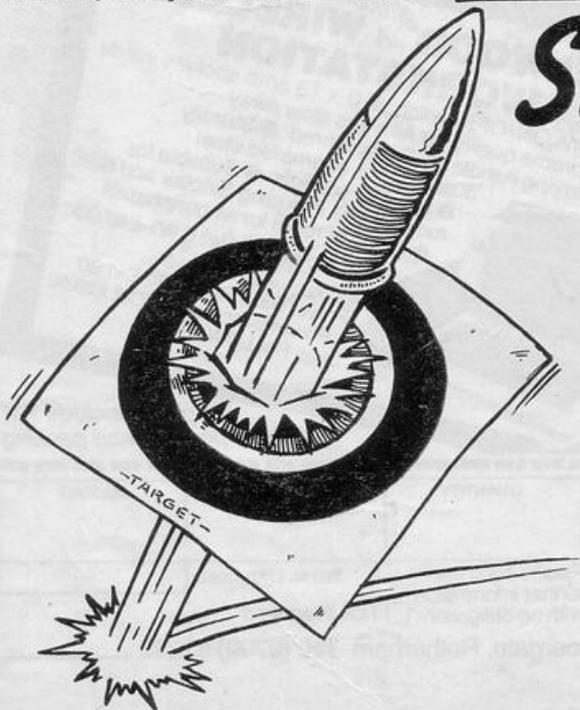
10 LET M=0
20 PRINT AT 0,0;"WHAT RANGE 5-
30"
30 INPUT E
40 IF E>=31 OR E<=4 THEN GOTO
20
45 CLS
50 LET A=10
60 LET B=24
70 LET C=0

```

```

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

```



SNIPER FIRE



KELWOOD

ADD-ITS FOR SINCLAIR ADDICTS

GENATIONAL **KELWOOD POWER BASE** COMPLETES YOUR COMPUTER

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

- ON/OFF switch for instant screen clearing
- LOAD/SAVE switch
- All wires included
- Angled for easier use
- Saves wear and tear on connections
- Real value for money



Spectrum Ref **PBS1** £13.50 ZX81 Ref **PBZX1** £13.00.

WEAR SAVERS

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

MICROSTATION

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



BACKPACKS



- Six versions of this indispensable unit complete your computer. All have SAVE/LOAD and ON/OFF switching and a housing for the transformer. **MICRODRIVE** compatible
- Ref **BP1** - Fully variable sound amp - 3 x 13 amp sockets, switch and neon indicator - cable and plug £27.50
 - Ref. **BP2** - as BP1 but no sockets, cable and plugs. Has room to fix your own 'Duraplug' sockets £19.50
 - Ref. **BP3** - as BP1 but no sound £21.50
 - Ref. **BP4** - as BP1 but no sound or sockets £13.05
 - Ref. **BP5** - ZX81 version inc. sockets, mains switch neon, cable and plug £20.85
 - Ref. **BP6** as BP5 but no cable or sockets £12.85

AND ALSO SOUND POWER BASE GET REAL SOUND FROM YOUR SPECTRUM

All the features of the Power Base plus built-in variable sound amplifier Ref **SPB1**
Amazing value at ONLY £19.95

SUPER SOUND SPEC-AMP

- The great Spectrum sound improver
- Fully adjustable Spectrum Sound Amplifier
 - Simply plugs into mic. socket
- Ref **SSS** ONLY £7.00 (PP3 Battery included)

COOL-IT UNIT

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



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

- Other Kelwood add-its with Cool-it unit built in
- Power Base (Spectrum) Ref **PBSIC** £18.55
 - Power Base (ZX81) Ref **PBZIC** £19.35
 - Sound Power Base (Spectrum only) Ref **SPBIC** £25.00
 - Back Pack 1 Ref **BP1C** £32.55
 - Back Pack 2 Ref **BP2C** £24.55
 - Back Pack 3 Ref **BP3C** £26.55
 - Back Pack 4 Ref **BP4C** £18.60
 - Back Pack 5 Ref **BP5C** £26.90
 - Back Pack 6 Ref **BP6C** £18.90
 - Wearsaver (Spectrum) Ref **WSSC** £16.00
 - Wearsaver (ZX81) Ref **WSZC** £15.80

SOLVE IT WITH A KELWOOD Wobble STOPPER

- Firmly clamps Ram-Pack to computer
 - No solder
 - Easily removed
 - No glue
- Flat: Ref **SW** £5.25. Tilted: Ref **STW** £6.25
Extra long for printer - Flat: Ref **LW** £5.75. Tilted: Ref **LTW** £6.75

KELWOOD ^{almost} WIRELESS WORKSTATION

- Mains ON/OFF switch
 - Supreme quality
 - Carrying handle
 - All wires stow away
 - Easily stored
 - built in stove enamelled steel
 - Ideal for schools
 - Acres of room for all peripherals
 - Suitable for most micros including Sinclair and BBC
- Desk top model Ref **CW1** £49.00



Accessories for above
Power Base Ref **PBS2** £11.00
Power Base Ref **PBZ2** £10.50
Legs Ref **LCW** £11.00

All prices include VAT and postage and packing

Name _____

Address _____

SP1

QUANTITY	REF	AMOUNT
TOTAL ENCLOSED		

Please send me further information with no obligation Tick if required

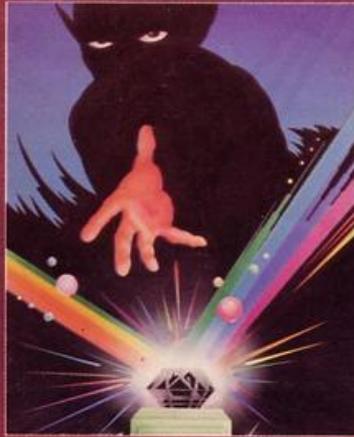


Access/Barclaycard No _____

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

A NEW WORLD OF ADVENTURE

BLACK CRYSTAL



BLACK CRYSTAL A THIRD CONTINENT SERIES ADVENTURE

The Classic, six program adventure game for the 48K Spectrum and 16K ZX81 computers. No software collection is complete without it. "Black Crystal an excellent graphics adventure and a well thought out package." *Sinclair User, April '83* "Black Crystal has impressed me by its sheer quantity and generally high quality of presentation. I am afraid I have become an addict." *Home Computing Weekly, April '83*
Spectrum 48K 180K of program in six parts only **£7.50**
ZX81 16K over 100K of program in seven parts only **£7.50**
WHY PAY MORE FOR LESS OF AN ADVENTURE?

THE CRYPT by Stephen Renton

Prepare yourself for the many challenges that shall confront you when you dare to enter **THE CRYPT**. You will battle with giant scorpions, Hell spawn, Cranes, Pos - Negs and if you are unlucky enough — the Dark Cyclops in this arcade style adventure.

Available for the 48K Spectrum at **£4.95**

THE CRYPT



ADVENTURES OF ST. BERNARD



THE ADVENTURES OF ST. BERNARD

An exciting, fast moving, machine code, arcade game where you guide your intrepid St. Bernard through the perils of the icy wastelands to rescue his Mistress from the clutches of the abominable snowman.

Available for 48K Spectrum **£5.95**

STARFORCE ONE

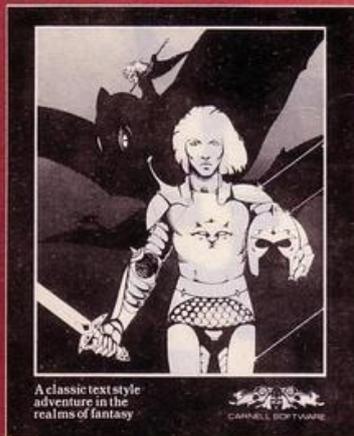
Take on the robot guardians of the central computer in a superbly stylised three dimensional battle game. **(100% machine code arcade action)**

Available for 48K Spectrum **£5.95**

STARFORCE ONE



VOLCANIC DUNGEON



VOLCANIC DUNGEON A THIRD CONTINENT SERIES ADVENTURE

Enter the realm of Myth and Magic in this classic Fantasy Adventure. Battle with Magma and her Evil Allies to rescue the Elfin Princess Imprisoned in a Crystal Coffin Deep within the Volcanic Dungeon. Random Dungeon set ups ensure that you can play this addictive adventure over and over again. Single-key entry cuts out tiresome typing associated with other Text Adventures. Instruction Manual with Map of Dungeon enclosed.

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

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

THE DEVIL RIDES IN

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

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

Available for 48K Spectrum **£5.95**

DEVIL RIDES IN



The above are available through most good computer stores or direct from:

CARNELL SOFTWARE LTD.,
 North Weylands Ind. Est., Molesey Road, Hersham, Surrey KT12 3PL.

DEALERS: Contact us for your nearest wholesaler.

FROM CARNELL SOFTWARE



"THE WRATH OF MAGRA" A THIRD CONTINENT SERIES ADVENTURE

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

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

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

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

Available from Feb '84



CARNELL SOFTWARE LTD

The NEXT GENERATION... of Spectrum software

NEW



Aircraft in the distance signal imminent attack. BATTLESTATIONS!! They fly nearer... nearer... line up your twin machine guns and open fire with streams of tracer bullets but you've got to be quick or you'll never run or the flight home. NIGHT GUNNER is a challenging, super-smooth game with excellent 3-D graphics.
48K only. Joystick compatible (Kempston, AGF, Sinclair) £6.95p

NEW



Only the best become a FIGHTER PILOT... climb into the seat of the world's most exciting aircraft and prepare for take-off. Stunning 3-D graphics, air-to-air combat, and fully aerobic performance put the challenge of real-time flight simulation at your fingertips. Based upon the USAF air superiority jet fighter. The supreme simulation... for those who simply want the best!
48K only. Joystick compatible (Kempston, AGF, Sinclair) £7.95p

NEW



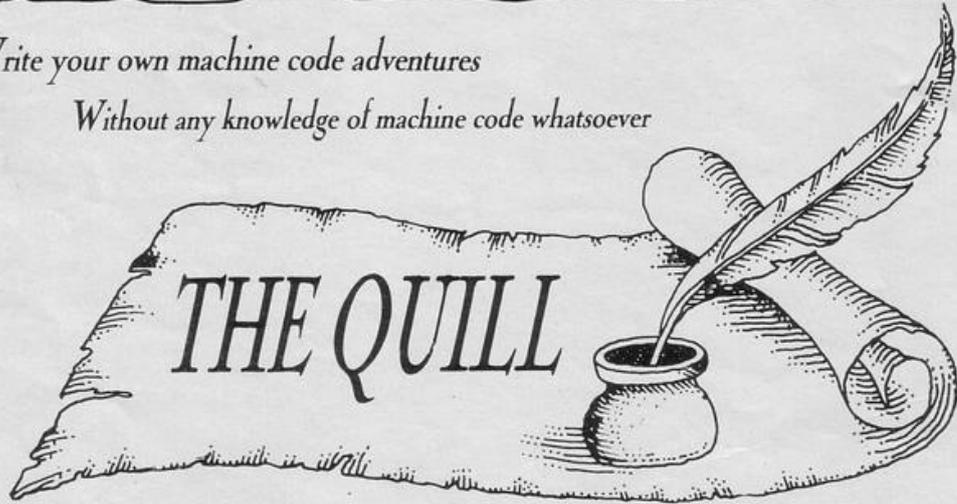
Pools forecasting based upon the analysis of team performance. This is a user-friendly program that will generate or update your own database from league results and tables. Simply enter the fixtures and let your Spectrum guide you to your pool selection with 9 methods of analysis.
48K only. £7.95p

DIGITAL Integration



Dept. SP, 22 Ash Church Road, Ash, Aldershot, Hants GU14 9LP. All prices include VAT and p&p (overseas add 55p per cassette). All cassettes carry a lifetime guarantee. Trade & export enquiries welcome - ring Dave Marshall 0252 518269. Mail order or check your local computer store.

Write your own machine code adventures
Without any knowledge of machine code whatsoever



THE QUILL is a major new utility written in machine code which allows even the novice programmer to produce high-speed machine code adventures of superior quality to many available at the moment without any knowledge of machine code whatsoever. Using a menu selection system you may create well over 200 locations, describe them and connect routes between them. You may then fill them with objects and problems of your choice. Having tested your adventure you may alter and experiment with any section with the greatest of ease. A part formed adventure may be saved to tape for later completion. When you have done so THE QUILL will allow you to produce a copy of your adventure which will run independently of the main QUILL editor, so that you may give copies away to your friends. THE QUILL is provided with a detailed tutorial manual which covers every aspect of its use in writing adventures. It is impossible to describe all the features of this amazing program in such a small space so we have produced a demonstration cassette which gives further information and an example of its use. This demo-cassette is available at £2.00, and THE QUILL itself at £14.95.

FOR THE 48K SPECTRUM AT £14.95

Now available in W H Smith, and from many computer shops nationwide, or direct from us by post or telephone.

SAE for full details of our range.

Dealer enquires welcome.

GILSOFT
30 Hawthorn Road
Barry
South Glamorgan
CF6 8LE
☎(0446) 736369

TELEPHONE YOUR ORDER
WITH



DEATH CRUISER



"... you enter an alarmingly different world, in which the awesome new adversarial potential of true artificial Intelligence seeks to dominate."

£5.95
INC. VAT + P&P
For overseas orders,
please add 50p
48K SPECTRUM

cramble! - you're the Zarghat commander of a cosmic battleship of fearful power and destructiveness, the 'Death Cruiser'. You're entrusted with the task of defending the galactic corridors of your home planet against a new kind of alien invader - a super intelligent breed of biotechnical beings whose potent adversaries indeed! 'Death Cruiser' is more than just a game. In it you enter an alarmingly different world, in which the awesome new adversarial potential of true Artificial Intelligence seeks to dominate.

SPECIFICATIONS: 48K Spectrum, 100% Machine Code, arcade action ★ Ultrasmooth hi-res graphic animation ★ Kempston Joystick compatible ★ Unique multimode intelligence routines; omnidirectional firing ★ Hi-score, on-screen display.

To: NOBLE HOUSE SOFTWARE, 29 Kingbrude Terrace, Inverness, Scotland
Please send me Death Cruiser/s

Name _____ Signature _____
Address _____

Access No. [] [] [] [] [] [] [] [] [] []
I enclose *cheque/PO, payable to NOBLE HOUSE SOFTWARE: £
*Delete as applicable. TRADE ENQUIRIES WELCOME

Design by
Portland Artists

NOBLE HOUSE SOFTWARE
29 Kingbrude Terrace
Inverness
Scotland



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

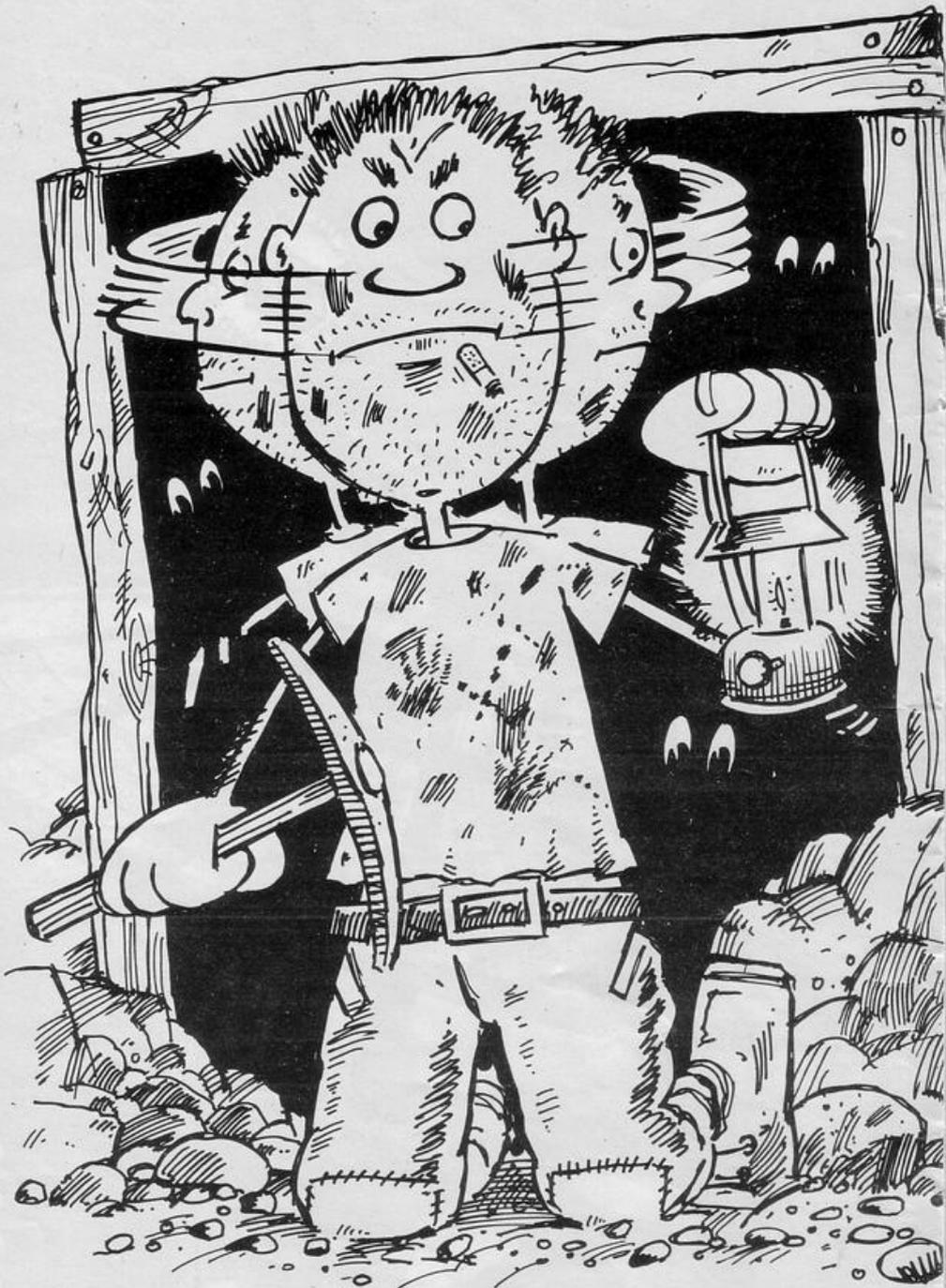
To enter, type-in the first program, RUN it, then type CLEAR. Type 'SAVE' "Builder" LINE 1', VERIFY it and then type NEW. Enter the second program, save it with SAVE "Builder" line 9999 and VERIFY it. **Builder** can then be LOADED as one program.

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

```

1 BORDER 1: PAPER 1: INK 7: C
LEAR : PRINT AT 10,9: FLASH 1:"P
LEASE WAIT"
10 DATA "A",187,187,0,238,238,
0,119,119
15 DATA "B",56,60,25,126,152,6
0,36,36
20 DATA "C",20,164,170,116,80,
92,124,56
25 DATA "E",0,112,28,48,120,12
4,60,24
30 DATA "F",0,255,171,213,255,
0,0,0
35 DATA "G",0,0,0,255,255,255,
126,60
40 DATA "H",66,126,66,66,66,12
6,66,66
45 DATA "I",76,88,120,120,88,7
6,64,64
50 DATA "L",126,62,14,6,6,14,6
2,126
55 DATA "U",30,6,2,0,0,2,6,30
100 FOR F=1 TO 10: RESTORE S+5*
F: READ F#: FOR N=0 TO 7: READ A
: POKE USR F#+N,A: NEXT N: NEXT
F
110 BORDER 0: PAPER 0: INK 7: C
LEAR
120 LOAD ""
9998 REM FOR MAIN PROGRAM TYPE .
CLEAR : SAVE "BUILDER" LINE 99
99
9999 CLEAR : SAVE "BUILDER" LINE
1

```



BUILDER

```

1 PAPER 0: BORDER 0: INK 3: C
LS : DIM z(6): DIM z$(6,10): FOR
f=1 TO 6: LET z(7-f)=100+100*f:
LET z$(f)="SPECTRUM": NEXT f
10 DIM a(2): DIM p(2): LET a(1
)=13: LET p(1)=5: LET a(2)=8: LE
T p(2)=27: CLS : LET she=1: LET
s=0: FOR m=3 TO 1 STEP -1: CLS :
OVER 0: PRINT AT 5,5:" MEN:";m
;" :AT 6,5:" SCORE:";s:" "
;AT 7,5:" SHEETS:";she:" :AT 1
0,4:" PRESS ANY KEY TO PLAY "
20 IF INKEY#("<") THEN GO TO 2
0

```

```

30 IF INKEY#="" THEN GO TO 30
100 BORDER 0: INK 7: OVER 0: CL
S : PRINT #;TAB 9;"By Ian McN
air": BORDER 1: RESTORE 9990: RE
AD a: FOR f=1 TO a: READ b,c,e:
PRINT AT b,c;: FOR h=1 TO 9: PR
INT INK 2;"a"; NEXT h: NEXT f
101 INK 6: RESTORE 9992: READ a

```

```

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

```

```

; FOR f=3 TO 10: PRINT AT f,1;"
"; NEXT f: FOR f=8 TO 17: PRINT
AT f,26;"I": NEXT f
110 INK 2: PLOT 0,0: DRAW 255,0
; DRAW 0,175: DRAW -255,0: DRAW
0,-175: LET bon=0: LET sta=4: LE
T axe=0: LET x=1: LET dr=0: LET
y=29: INK 5: PRINT AT x,y;"b";AT
21,14: INK 4;"MEN:";m;" SCORE:"
;s
199 FOR f=19 TO 21: PRINT AT f,
30: INK 6;"h": NEXT f

```

```

200 FOR v=40 TO 0 STEP -2: PRIN
T AT 0,2: OVER 0;"TIME:";INT v;"
": FOR f=14 TO 20: PRINT AT 19,
f: OVER 1: BRIGHT 1: INK 6;"g";A
T 16,-12+f;"g"

```

```

201 OVER 1: GO SUB 300: PRINT A
T 6,23;"BONUS:";bon;AT 7,23;"PIC
KS:";axe: IF INKEY#="0" THEN IF
ATTR(x,y)=5 THEN LET bon=bon+
10: PRINT OVER 1;AT x,y: INK 6;
"e"

```

```

202 IF INKEY#="0" THEN IF ATTR
(x,y)=4 THEN LET axe=axe+1: PR
INT OVER 1: INK 6;AT x,y;"i"
205 IF x=19 AND y=f OR x=16 AND
y=-12+f THEN GO TO 9690
252 GO SUB 9500: PRINT AT 16,-1
2+f: OVER 1: INK 6;"g";AT 19,f;"
g"

```

```

260 NEXT f: LET v=v-2: PRINT AT
0,2: OVER 0;"TIME:";INT v;" "
; FOR f=28 TO 14 STEP -1: PRINT AT
19,f: OVER 1: INK 7: BRIGHT 1;"
g";AT 16,-12+f;"g"

```

```

265 IF x=19 AND y=f OR x=16 AND
y=-12+f THEN GO TO 9690

```

```

289 OVER 1: GO SUB 300: PRINT A
T 6,23;"BONUS:";bon;AT 7,23;"PIC
KS:";axe: IF INKEY#="0" AND ATTR
(x,y)=5 THEN LET bon=bon+10: P
RINT OVER 1;AT x,y: INK 7;"e"

```

```

290 IF INKEY#="0" AND ATTR(x,y
)=4 THEN LET axe=axe+1: PRINT
OVER 1;AT x,y: INK 7;"i"

```

```

299 PRINT AT 19,f: OVER 1: INK
6;"g";AT 16,-12+f;"g": GO SUB 95
00: NEXT f: NEXT v: GO TO 9690

```

```

300 PRINT AT x,y: BRIGHT 8: PAP
ER 8: INK 8;"b": LET x=x+(1 AND
ATTR(x+1,y)=?): IF INKEY#="" TH
EN GO TO 310

```

```

301 LET x=x+(INKEY#="6" AND ATT
R(x+1,y)=6)-(INKEY#="7" AND ATT
R(x-1,y)=6): LET y=y+(INKEY#="8
" AND ATTR(x,y+1)<>2)-(INKEY#="
5" AND ATTR(x,y-1)<>2)

```

```

310 IF ATTR(x,y)<4 THEN GO TO
9690

```

```

311 IF (x=15 AND y=13) OR (x=15
AND y=18) THEN LET x=x+1

```

```

312 PRINT OVER 1;AT x,y: INK 8
; PAPER 8: BRIGHT 8;"b": OVER 0:
IF INKEY#="8" THEN IF x=19 THE
N IF y=29 THEN GO TO 9800

```

```

313 IF x=19 AND y=28 AND axe>0
THEN IF INKEY#="0" THEN LET ax
e=axe-1: GO SUB 9750

```

```

320 GO SUB 500: RETURN

```

```

500 FOR o=1 TO 2: LET di=RND: P
RINT AT a(o),p(o); OVER 1: INK 8
; BRIGHT 0;"c": LET a(o)=a(o)+(d
i).7 AND ATTR(a(o)+1,p(o))=6)-(
di<.45 AND ATTR(a(o)-1,p(o))=6)

```

```

501 LET p(o)=p(o)+(di).65 AND y
>p(o) AND ATTR(a(o),p(o)+1)<>2)
-(di<.5 AND p(o))y AND ATTR(a(
o),p(o)-1)<>2): IF ATTR(a(o)+1,
p(o))=7 THEN LET a(o)=a(o)+1

```

```

550 PRINT AT a(o),p(o); OVER 1:
INK 8;"c": IF a(o)=x AND y=p(o)
THEN GO TO 9690

```

```

570 NEXT o: RETURN

```

```

9500 IF RND>.5 THEN RETURN

```

```

9505 OVER 0: LET rd=INT(RND*2)+
1: IF rd=2 THEN PRINT AT 9,25:
INK 3: BRIGHT 1;"f";AT 11,25;"f"
;AT 8,7;"f";AT 10,25: INK 7: BRI
GHT 0;" :AT 15,13:" :AT 14,13:

```

```

INK 3: BRIGHT 1;"f";AT 16,20;"f
";AT 6,7;"f";AT 6,5: BRIGHT 0: I
NK 7;" :AT 7,15:" :AT 8,10:" "
;AT 20,7:" :AT 20,11: INK 2;"a"

```

```

9510 IF rd=1 THEN PRINT AT 9,25
; INK 7;" :AT 11,25:" :AT 8,7:
" : BRIGHT 1: INK 3;AT 10,25;"f
";AT 15,13;"f"; BRIGHT 0: INK 7:
AT 14,13:" :AT 16,20:" :AT 6,7
; " : INK 3: BRIGHT 1;AT 6,5;"f"
;AT 7,15;"f";AT 8,10;"f"; INK 7:
BRIGHT 0;AT 20,11:" :AT 20,7:

```

```

INK 2;"a"
9530 OVER 1: RETURN

```

```

9600 CLS : FOR f=1 TO 6: PRINT A
T 0+f*2,2;f;" :z(f);".By..";z$(
(f): NEXT f: FOR f=1 TO 6: IF s<
z(f) THEN NEXT F

```

```

9601 IF F>6 THEN LET F=6
9602 IF S>Z(F) THEN GO TO 9640
9603 NEXT F

```

```

9604 FOR f=0 TO 400: NEXT f: GO
TO 9700

```

```

9640 LET FF=F

```

```

9641 IF S=Z(FF) THEN GO TO 9604
9650 PRINT AT FF*2,4: OVER 1: FL
ASH 1;" : INPU

```

```

T "NAME ...";z$(FF): IF LEN z$(
FF)>10 THEN GO TO 9650
9651 BEEP .5,0: LET z(FF)=s: GO
TO 9604

```

```

9690 PRINT AT x,y: FLASH 1: PAPE
R 2: INK 6;"b": FOR f=0 TO 100:
BEEP .05,50-f: NEXT f: BEEP .05,
-50: NEXT m

```

```

9700 OVER 0: PRINT AT 15,9: FLAS
H 1;"GAME OVER": FOR f=0 TO 40
9700 OVER 0: PRINT AT 15,9: FLAS
H 1;"GAME OVER": FOR f=0 TO 40
0: NEXT f: PRINT AT 17,6:" PRESS
; :AT 19,6:" P...PLAY." :AT 2
0,6:" A...ABONDON." :AT 21,6:" S
...SCORE TABLE": PAUSE 0: PAUSE
0: IF INKEY#="s" OR INKEY#="S" T
HEN GO TO 9600

```

```

9701 PAUSE 0: LET a#=INKEY#: IF
a#="p" OR a#="P" THEN GO TO 10
9702 IF a#="a" OR a#="A" THEN R
ANDOMIZE USR 0
9703 IF a#="s" OR a#="S" THEN G
O TO 9600

```

```

9710 GO TO 9701
9750 IF sta=4 THEN PRINT AT 19,
29;"1"

```

```

9753 IF sta=3 THEN PRINT AT 19,
29;"u"

```

```

9754 IF sta=2 THEN PRINT AT 19,
29;"-"

```

```

9755 IF sta=1 THEN PRINT AT 19,
29;" "

```

```

9756 LET sta=sta-1: RETURN

```

```

9800 OVER 0: FOR f=6 TO 15: PRIN
T AT f,6:" : NEXT
f: OVER 1: FOR f=7 TO 0 STEP -

```

```

4: BORDER f: BEEP .15,f: PRINT A
T 10,7:" WELL DONE ";AT 13,7:
" BONUS:";bon: NEXT f: LET s=s+
bon*2: OVER 0: PRINT AT 7,8: FLA
SH 1;" SCORE :";s: FOR f=-50 TO
50: BEEP .05,f: NEXT f: LET she=
she+1

```

```

9810 DATA 1,0,0,1,0,1: RESTORE 9
815: FOR f=1 TO 3: BEEP .2,1: PR
INT OVER 1;AT x,y: INK 8;"b": R
EAD n,m: LET y=y+n: LET x=x+m: P
RINT OVER 1: INK 8;AT x,y;"b":
BEEP .3,f: NEXT f

```

```

9820 GO TO 20

```

```

9990 DATA 20,7,16,5,11,4,8,10,5,
5,13,0,13,12,27,5,11,14,12,13,19
,7,15,19,3,16,22,9,19,0,13,18,18
,14,17,0,19,15,0,17,20,14,50,4,2
2,10,9,20,12,4,0,18,2,26,6,6,1,1
3,8,1,13

```

```

9991 REM

```

```

9992 DATA 19,19,23,2,16,16,4,18,
3,3,18,13,3,14,19,4,16,8,3,15,6,
2,13,29,3,11,27,5,12,22,4,9,8,4,
10,12,3,5,14,6,3,6,3,7,2,6,3,21,
6,3,18,4,8,30,4,1,25,3

```

```

9993 REM

```

```

9994 DATA 12,3,20,20,2,20,6,20,9
,20,12,7,3,9,6,10,10,8,28,10,21,
10,23,14,7

```

```

9995 REM

```

```

9996 DATA 4,3,23,16,18,19,29,19,
31

```

```

9997 REM

```

```

9998 DATA 4,3,2,7,6,12,19,13,28

```

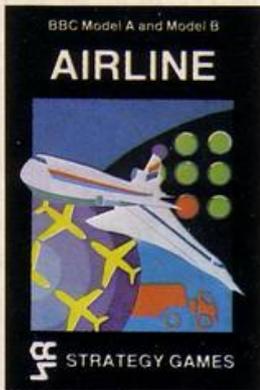
```

9999 BORDER 0: PAPER 0: INK 5: C
LS : FOR f=0 TO 40: BEEP .009,f:
BEEP .009,f+5: NEXT f: RUN

```

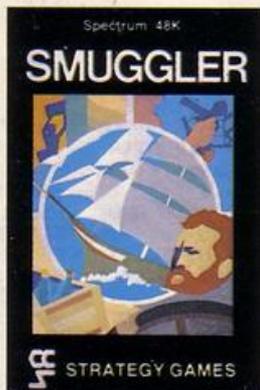
DER

PLANE SAILING



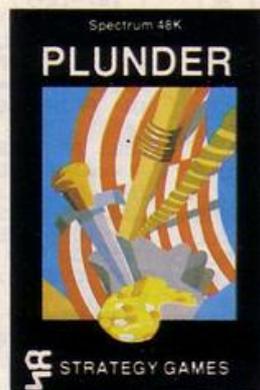
BBC Model A and Model B
AIRLINE
STRATEGY GAMES

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



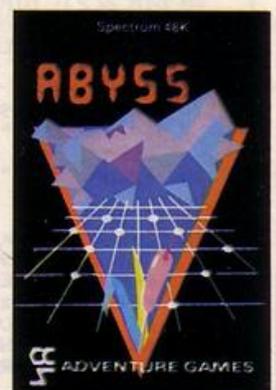
Spectrum 48K
SMUGGLER
STRATEGY GAMES

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



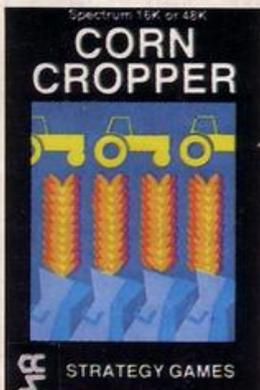
Spectrum 48K
PLUNDER
STRATEGY GAMES

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



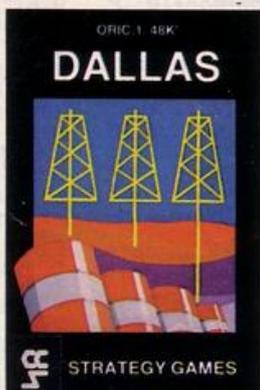
Spectrum 48K
ABYSS
ADVENTURE GAMES

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



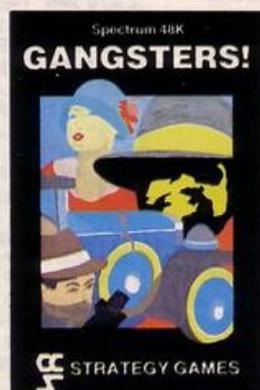
Spectrum 16K or 48K
CORN CROPPER
STRATEGY GAMES

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



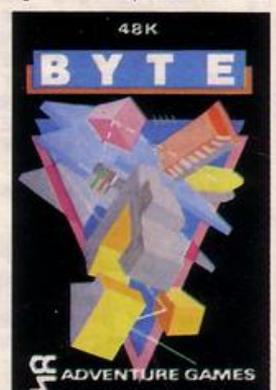
ORIC 1 48K
DALLAS
STRATEGY GAMES

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



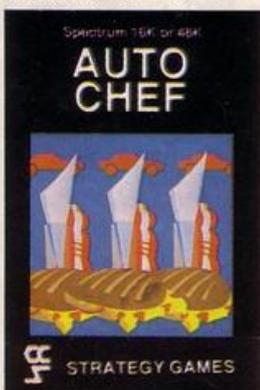
Spectrum 48K
GANGSTERS!
STRATEGY GAMES

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



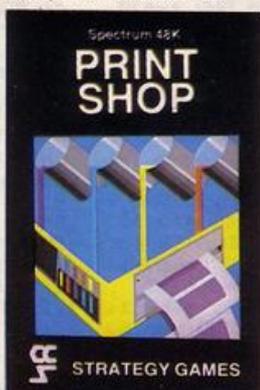
48K
BYTE
ADVENTURE GAMES

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



Spectrum 16K or 48K
AUTO CHEF
STRATEGY GAMES

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



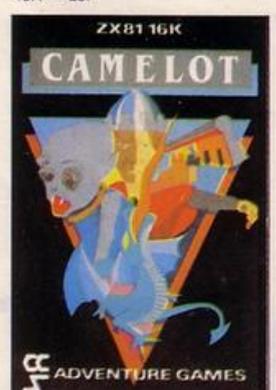
Spectrum 48K
PRINT SHOP
STRATEGY GAMES

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



Spectrum 48K
BRITISH LOWLAND
STRATEGY GAMES

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



ZX81 16K
CAMELOT
ADVENTURE GAMES

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

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



Strategy Games. They're no pushover

FLITE

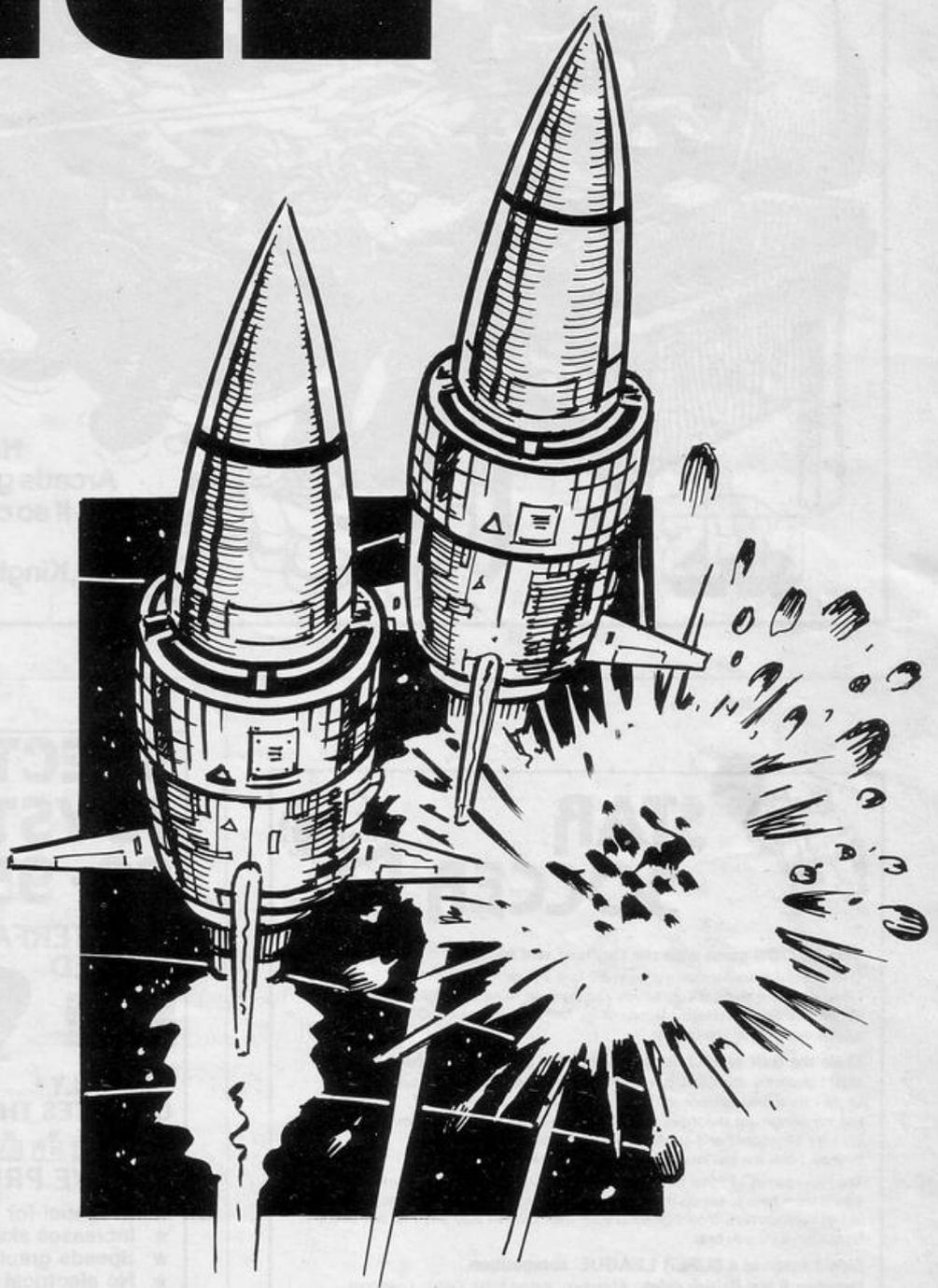
FLITE is an addictive dodge 'em game. You must avoid the deadly heat-seeking missiles heading for you and at the same time you must try and hit an enemy target to gain points.

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

```

10 FOR n=0 TO 15: READ a: PUKE
USR "a"+n,a: NEXT n
20 DATA 0,62,85,127,85,127,85,
62,0,62,127,127,127,127,62
25 BORDER 1: PAPER 6: CLS
30 PRINT INK 9;"
ER""""Dodge the "; INK 5;"(ga)
"; INK 9;"'s and the "; INK 4;"^
"; INK 0;"'s""""Hit the "; INK
2;"(gb)"; INK 0;"'s to score Poi
nts""""Control Keys UP.....
..~1""""
DOWN.
....~z~
40 LET hs=0: LET mx=INT (RND*2
0)+6: LET my=20
44 PRINT AT 21,0: INK 0;" PRE
SS ANY KEY TO START": PAUSE 1e3
45 CLS: LET s=0: LET l=3
50 FOR n=1 TO 100
55 LET x=1+INT (RND*31): LET y
=1+INT (RND*20)
60 IF SCREEN# (y,x)="" THEN G
O TO 55
70 PRINT AT y,x: INK 2;"(ga)":
NEXT n
80 FOR n=1 TO 20
85 LET x=1+INT (RND*31): LET y
=1+INT (RND*20)
90 IF SCREEN# (y,x)="" THEN G
O TO 85
100 PRINT AT y,x: INK 5;"(ga)":
NEXT n
110 PRINT AT 21,0:"SCORE ";s:AT
21,12:"LIVES >>":AT 21,23:"HI
";hs
115 PRINT AT 21,18+1;" "
120 LET x=0: LET y=0
130 IF SCREEN# (y,x)="" THEN G
O TO 200
150 PRINT AT y,x:">"
155 GO SUB 400
160 IF INKEY#="z" THEN LET y=y
+(y<20): LET z=1: GO TO 190
170 IF INKEY#="1" THEN LET y=y
-(y>0): LET z=0: GO TO 190
180 LET x=x+1: IF x=32 THEN LE
T x=1: PRINT AT y,31;" ": GO TO
130
185 LET z=2
190 PRINT AT y+(z=0)-(z=1),x-(z
=2);" ": GO TO 130
200 IF ATTR (y,x)=40 THEN GO T
O 150
205 IF ATTR (y,x)<>50 THEN GO
TO 210
206 LET s=s+10: IF s/1000=INT (
s/1000) THEN GO TO 300
207 PRINT AT 21,6:s: BEEP .01,2
0: GO TO 150
210 PRINT FLASH 1:AT y,x;"(ga)
": FLASH 0: PRINT AT 21,17+1;" "
: LET l=l-1: IF l=0 THEN GO TO

```



```

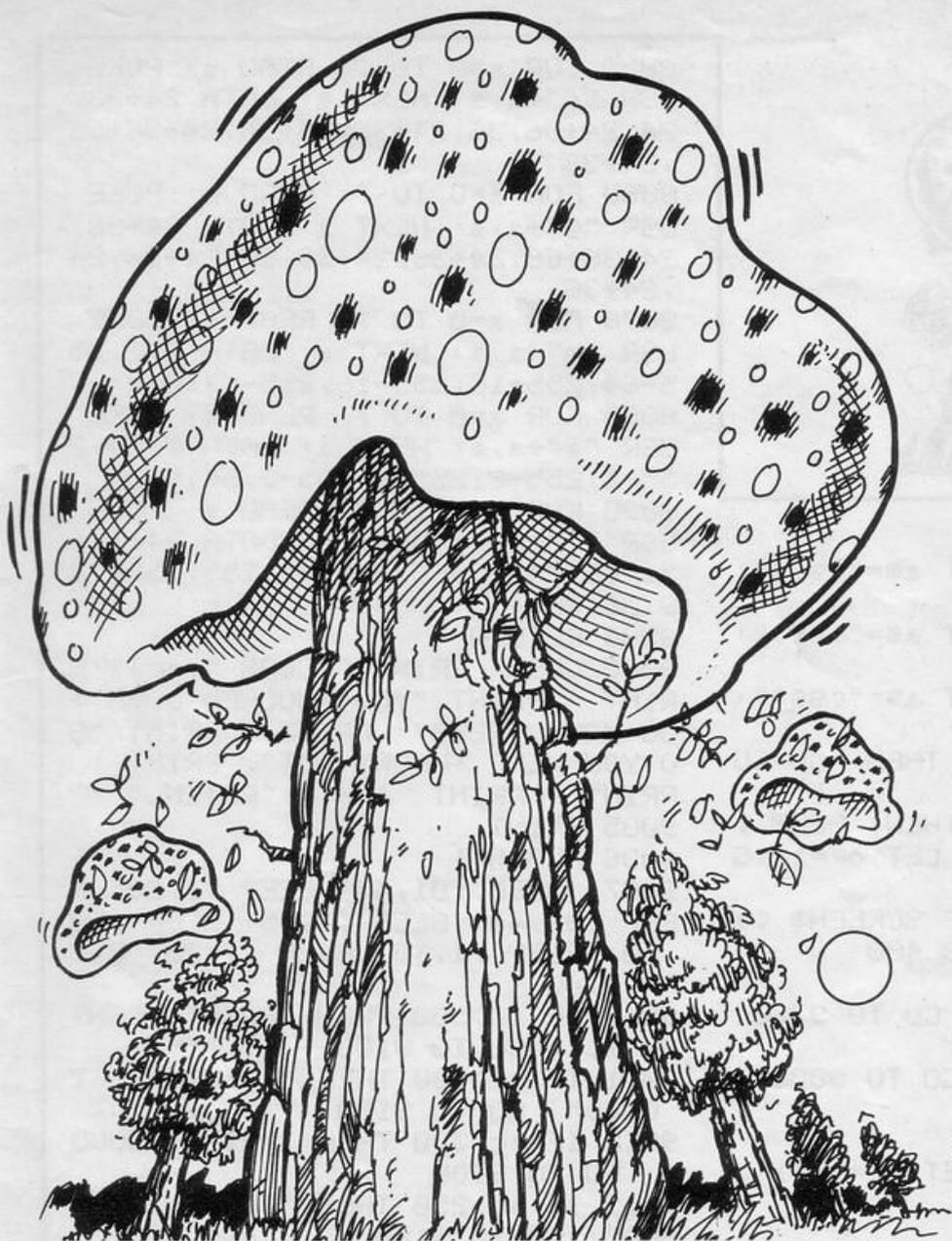
240
220 BEEP .01,0: GO TO 120
240 IF hs<s THEN LET hs=s
250 PRINT AT 21,26;hs
260 PRINT AT 11,8: FLASH 1: INK
3;"Another Go ? (y/n)"
270 IF INKEY#="y" THEN GO TO 4
5
275 IF INKEY#="n" THEN STOP
280 GO TO 270
300 RESTORE 320: FOR n=1 TO 16:
READ a: BEEP .1,a: NEXT n
310 CLS: GO TO 50
320 DATA 0,12,2,10,3,8,4,7,7,4,

```

```

8,3,10,2,12,0
400 IF my<20 THEN PRINT AT my+
1,mx;" "
401 IF SCREEN# (my,mx)=">" THEN
GO TO 210
405 IF SCREEN# (my,mx)="" THEN
LET mx=RND*20+6: BEEP .01,40: L
ET my=20: RETURN
410 PRINT AT my,mx: INK 4;"^":
LET my=my-1
420 IF my=0 THEN PRINT AT my+1
,mx;" ": LET mx=RND*20+6: LET my
=20: RETURN
430 RETURN

```

TREE EATERS

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

```
1 BORDER 0: PAPER 0: INK 6: C
LS
```

```
2 PRINT "YOU(9a) MUST KILL TH
E MARTIAN TREE EATERS "; INK
2;"9p"; INK 6;" AT ALL COSTS"; P
RINT "BUT DON'T KNOCK DOWN THE T
REES"; PRINT : PRINT "O=UP, K=DO
WN, S=RIGHT, A=LEFT. "; PRINT :
PRINT "BUT CAREFUL YOU HAVE NO B
RAKE"
```

```
3 PRINT AT 21,0;"PRESS ANY KE
Y TO START GAME"
```

```
15 GO SUB 8000: PAUSE 0
```

```
16 FOR a=0 TO 21: INK 2
```

```
17 PRINT AT a,0:" "
```

```
" : NEXT a
```

```
20 PRINT AT 1,1: INK 6;"(30*9a
)";AT 21,1;"(30*9b)";
```

```
21 INK 6
```

```
25 FOR a=2 TO 20: PRINT AT a,0
;"(9c)";AT a,31;"(9d)"; NEXT a
```

```
29 LET a=0
```

```
30 PRINT AT INT (RND*19)+2,INT
(RND*30)+1: INK 4;"(9e)"; LET a
```

```
=a+1: IF a<80 THEN GO TO 30
40 PRINT AT 9,14;"(9a)";AT 9,1
6;"(9a)";AT 12,14;"(3*9b)";
```

```
50 FOR a=10 TO 11: PRINT AT a,
13;"(9c)";AT a,17;"(9d)"; NEXT a
: PRINT AT 8,14: INK 2;" "
```

```
55 PRINT AT 0,1;"SCORE:=0
TREES KILLED:=0 "
```

```
60 LET x=0
```

```
65 LET sc=0: LET tr=0
```

```
70 LET a$="(99)";
```

```
80 LET op=0: LET a=11: LET s=1
5
```

```
85 LET a=INT (RND*19)+2: LET w
=INT (RND*30)+1
```

```
86 PRINT AT a,w: INK INT (RND*
3)+1;"(9p)";
```

```
100 PRINT AT a,s;a$
```

```
120 IF INKEY$="a" THEN LET x=1
```

```
130 IF INKEY$="s" THEN LET x=2
```

```
140 IF INKEY$="o" THEN LET x=3
```

```
150 IF INKEY$="k" THEN LET x=4
```

```
155 PRINT AT a,s: INK 2;" "
```

```
170 IF x=1 THEN LET a$="(9h)";
```



```

LET s=s-1
171 IF x=2 THEN LET a#="(9i)":
LET s=s+1
172 IF x=3 THEN LET a#="(9f)":
LET a=a-1
173 IF x=4 THEN LET a#="(99)":
LET a=a+1
175 IF ATTR (a,s)=6 THEN GO SUB
B 410: LET op=1
176 IF a=9 AND s=w THEN BEEP .
05,40: LET sc=sc+10: LET op=1: G
O SUB 500: GO TO 85
177 IF op=0 THEN IF SCREEN# (a
,s)<>" " THEN GO SUB 400
178 LET op=0
180 IF sc>500 THEN GO TO 9700
200 PRINT AT a,s;a#
210 IF tr>15 THEN GO TO 9000
250 LET op=0
300 GO TO 100
405 BEEP .09,-20: LET tr=tr+1:
GO SUB 500
406 RETURN
410 IF x=1 THEN LET s=s+1
411 IF x=2 THEN LET s=s-1
412 IF x=3 THEN LET a=a+1
413 IF x=4 THEN LET a=a-1
420 PRINT AT a,s;a#: RETURN
500 PRINT AT 0,8;sc:AT 0,28;tr
510 RETURN
8000 FOR a=0 TO 7: READ s: POKE
USR "a"+a,s: NEXT a: DATA 0,0,0,
0,24+36,128+64+3,255,255
8010 FOR a=0 TO 7: READ s: POKE
USR "b"+a,s: NEXT a: DATA 255,25
5,128+64+3,24+36,0,0,0,0
8020 FOR a=0 TO 7: READ s: POKE
USR "c"+a,s: NEXT a: DATA 7,7,11
,11,11,11,7,7
8030 FOR a=0 TO 7: READ s: POKE
USR "d"+a,s: NEXT a: DATA 128+64
+32,128+64+32,128+64+16,128+64+1
6,128+64+16,128+64+16,128+64+32,
128+64+32
8040 FOR a=0 TO 7: READ s: POKE
USR "e"+a,s: NEXT a: DATA 24,24+
36+2,24+36+66,255-129,24+36,24,2
4,24

```

```

8050 FOR a=0 TO 7: READ s: POKE
USR "f"+a,s: NEXT a: DATA 24+36,
24,24+36,36,24+36,24+36,24+36+66
,24+36
8060 FOR a=0 TO 7: READ s: POKE
USR "g"+a,s: NEXT a: DATA 24+36,
24+36+66,24+36,24+36,36,24+36,24
,24+36
8070 FOR a=0 TO 7: READ s: POKE
USR "h"+a,s: NEXT a: DATA 0,2,25
5-64,255-16,255-16,255-64,2,0
8080 FOR a=0 TO 7: READ s: POKE
USR "i"+a,s: NEXT a: DATA 0,64,2
55-2,255-8,255-8,255-2,64,0
8090 FOR a=0 TO 7: READ s: POKE
USR "p"+a,s: NEXT a: DATA 24,24+
36+66,24+36+66,255-36,255,255-12
9,36,36
8500 RETURN
9000 CLS: PRINT "SCORE ";sc: P
RINT: PRINT "YOU KNOCKED DOWN T
OO MANY TREES": PRINT: PRINT "S
O YOU WERE THROWN OUT": PRINT:
PRINT: PRINT INK 7;"RATING"
9005 PRINT
9006 FLASH 1
9007 BEEP .01,40: BEEP .1,20: B
EEP .02,40: BEEP .1,15: BEEP .03
,40: BEEP .1,10: BEEP .1,20: BEE
P .1,40
9010 IF sc>500 THEN PRINT "FANT
ASTIC": GO TO 9100
9011 IF sc>400 THEN PRINT "VERY
GOOD": GO TO 9100
9012 IF sc>300 THEN PRINT "GOOD
": GO TO 9100
9013 IF sc>250 THEN PRINT "NOT
BAD": GO TO 9100
9014 IF sc>200 THEN PRINT "BAD"
: GO TO 9100
9015 IF sc>150 THEN PRINT "VERY
BAD": GO TO 9100
9016 IF sc>100 THEN PRINT "OLD
GRANNY": GO TO 9100
9017 IF sc>=0 THEN PRINT "FORGE
T IT": GO TO 9100
9100 GO TO 9500
9500 FLASH 0: PRINT AT 21,0;"AND
THER GO(Y/N)"
9600 IF INKEY#="" THEN GO TO 95
00
9610 IF INKEY#="y" THEN RESTORE
: GO TO 1
9620 IF INKEY#="n" THEN GO TO 9
999
9630 GO TO 9500
9700 CLS: BEEP .05,40: BEEP .05
,30: BEEP .05,50: BEEP .1,30: BE
EP .1,40: BEEP .1,20: PRINT "YOU
HAVE KILLED ALL THE MAR
TIAN TREE EATERS..WELL DONE..":
BEEP .01,30: BEEP .01,30: BEEP .
01,30: GO TO 9500

```

A NEW, IMPROVED ZX81 KEYBOARD AT THE SAME OLD PRICE. £9.95.



There's only one thing wrong with the ZX81. Its keyboard.

Or rather its lack of one.

Since it's flat your fingers don't feel as if there's any response to the pressure put on the keys.

ZX81 KEYS

FILESIXTY KEYS

In other words, you're not quite sure which keys you've pressed until the screen actually tells you.

Our new, improved push button keyboard changes all that.

It matches the ZX81 perfectly. And the keys give a real calculator-type feel.

To set it up all you have to do is peel off the adhesive backing and stick it on top of the ZX81 touchpad.

Because no tampering or soldering is involved the guarantee is not affected. And it will last for up to 3½ million operations.

Filesixty Ltd., 25 Chippenham Mews, London W9 2AN, England. Tel: 01-289 3059. Telex: 268 048 EXTLDN G 4087.

But our keyboard doesn't just come loaded with features. With it comes a separate overlay and a set of coloured stick-on labels to make game playing easier.

It's yours for the original price of £9.95.

Whichever way you look at it, we think you'll agree that it's a keyboard that's quite outstanding.

Orders to Filesixty Ltd., FREEPOST, London W9 2BR.
Cheques/PO made payable to Filesixty Ltd.
Please send me _____ (qty.) Keyboards at £9.95 each
(including VAT and P&P).

Total £

Name

BLOCK CAPITALS

Address

SP1/84

FILESIXTY



```

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

```


MAZEMAN

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

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

```

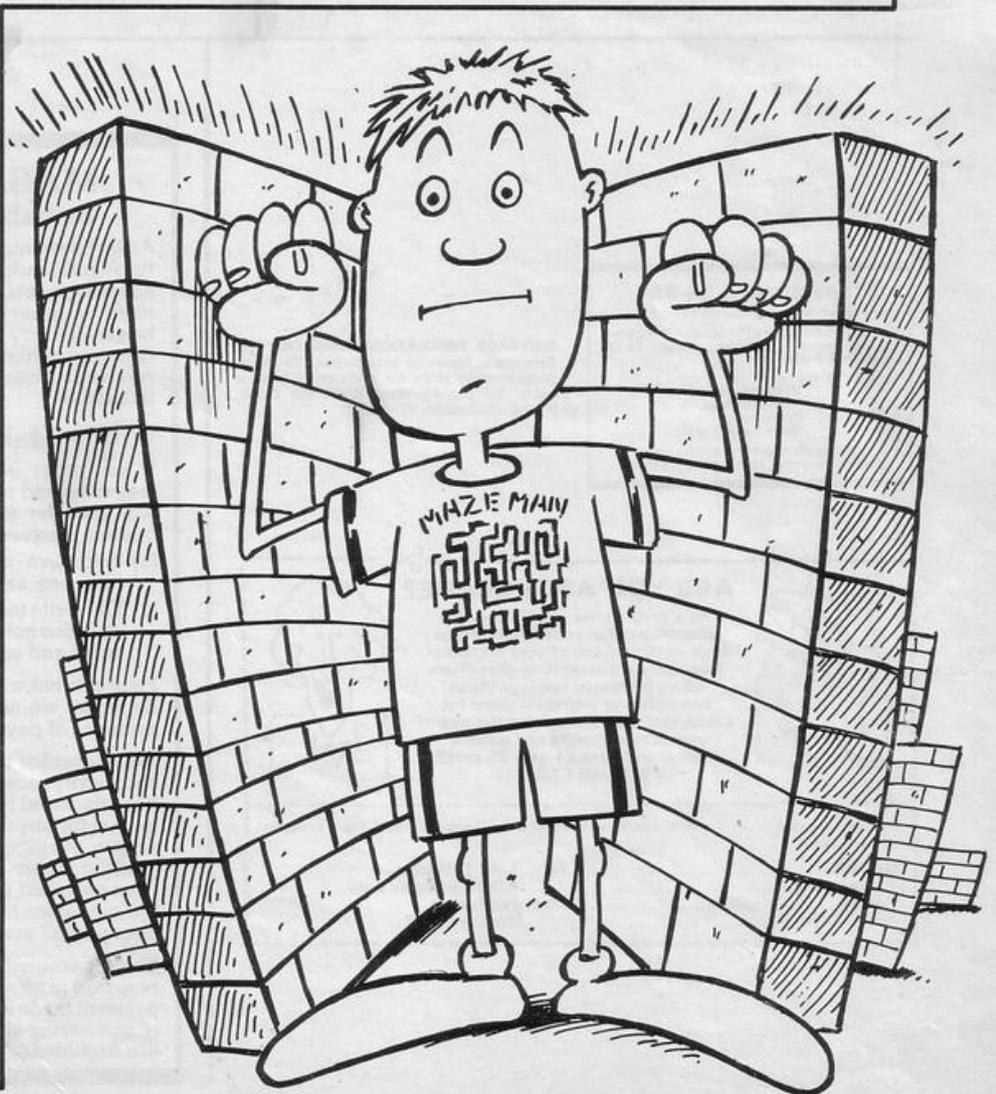
9  10 GO SUB 9000
20 LET x=INT (RND*1+1): LET y=
INT (RND*w+1): IF m$(y,x)="(isp)"
OR x<1/2 THEN GO TO 20
30 LET e=INT (RND*(w-2)+2): IF
m$(e,2)="(isp)" THEN GO TO 30
35 LET m$(e,1)=" "
40 IF x=1 AND m$(y,x)=" " THEN
GO TO 8e3
50 GO SUB 7000
60 BEEP .1,RND*20: LET i$=INKE
Y$: IF i$<"5" OR i$>"8" THEN GO
TO 60
70 LET a=(i$="8")-(i$="5"): LE
T b=(i$="6")-(i$="7"): IF m$(y+b
,x+a)=" " THEN LET x=x+a: LET y
=y+b: GO TO 40
80 PRINT #0: FLASH 1: INK 2: P
APER 6: "YOU WALKED INTO A WALL":
FOR F=1 TO 200: OUT 254,F: OUT
254,255: NEXT F: INPUT "": OUT 2
54,0: GO TO 60
7000 CLS: LET a=y-le: IF a<1 TH
EN LET a=1
7010 LET b=y+le: IF b>w THEN LE
T b=w
7020 LET c=x-le: IF c<1 THEN LE
T c=1
7030 LET d=x+le: IF d>l THEN LE
T d=l
7040 FOR e=a TO b: PRINT m$(e,c
TO d): NEXT e: PRINT AT y-a,x-c:
FLASH 1: " ": RETURN
8000 FOR F=1 TO 50: PAPER RND*7:
OUT 254,RND*7: OUT 254,255: CLS
: NEXT F: BORDER 7: PAPER 7: IN
K 0: CLS
8010 PRINT AT 9,6: FLASH 1:"YOU
FOUND THE EXIT": PRINT #0:"ANOTH
ER GO ? "
8020 IF INKEY$="Y" OR INKEY$="y"
THEN RUN
8030 IF INKEY$="N" OR INKEY$="n"
THEN GO TO 9999
8040 GO TO 8020
8999 REM MAZE & INSTRUCTIONS
9000 PAPER 5: INK 0: BORDER 5: C
LS: RESTORE 9e3: READ l,w
9010 PRINT TAB 7:"MAZEMAN"" You
are lost in a large maze."" Y
our only hope of escape is to fi
nd the exit,which is hidden so
meuhere in the left hand""corne
r.All you can see in the dark
Passages is the glowing corne
rs of the tunnel.""To move,use
the cursor keys."
9020 DIM m$(w,l): FOR f=1 TO w:
READ m$(f): NEXT f: INK 6: PAPER
0
9030 INPUT "Enter level 1-9 (9 i
s easiest)":le: IF le<1 OR le>9
OR le>INT le THEN GO TO 9030
9040 LET le=le+1: BORDER 0: CLS
: RETURN: DATA 32,24,"(32*isp)"

```

```

9050 DATA "(isp:7*isp:isp:6*isp:10
*isp:2*isp:5*isp)"
9060 DATA "(isp:5*isp:isp:isp:isp:
isp:isp:isp:isp:2*isp:3*isp:9*isp:2*
isp:2*isp:isp)"
9070 DATA "(isp:5*isp:isp:3*isp:1s
p:isp:isp:3*isp:5*isp:6*isp:2*isp:2
*isp:isp)"
9080 DATA "(isp:isp:13*isp:2*isp:4
*isp:10*isp:isp)"
9090 DATA "(isp:isp:isp:17*isp:isp
:6*isp:isp:3*isp:isp)"
9100 DATA "(isp:isp:isp:2*isp:3*is
p:isp:10*isp:isp:isp:6*isp:5*isp)"
9110 DATA "(3*isp:2*isp:isp:6*isp:
2*isp:13*isp:isp:3*isp:isp)"
9120 DATA "(isp:isp:isp:2*isp:3*is
p:isp:2*isp:isp:2*isp:3*isp:2*isp:is
p:isp:10*isp:isp)"
9130 DATA "(isp:isp:isp:2*isp:1*isp:
3*isp:1*isp:7*isp:2*isp:4*isp:1*isp:5*
p:3*isp)"
9140 DATA "(isp:isp:isp:6*isp:1*isp:
sp:4*isp:2*isp:5*isp:2*isp:2*isp:4
*isp:isp:isp:isp)"
9150 DATA "(isp:isp:8*isp:isp:isp:
2*isp:isp:2*isp:4*isp:2*isp:2*isp:4
*isp:isp:isp:isp)"
9160 DATA "(isp:13*isp:isp:14*isp:
isp:isp:isp)"
9170 DATA "(12*isp:2*isp:16*isp:is
p:isp)"
9180 DATA "(isp:10*isp:isp:2*isp:5
*isp:12*isp:isp)"
9190 DATA "(isp:isp:8*isp:isp:isp:
12*isp:3*isp:4*isp:isp)"
9200 DATA "(isp:3*isp:3*isp:2*isp:
isp:isp:isp:2*isp:isp:3*isp:7*isp:is
p:isp:4*isp:isp)"
9210 DATA "(isp:8*isp:3*isp:2*isp:
1*isp:isp:isp:isp:5*isp:isp:isp:is
p:4*isp:isp)"
9220 DATA "(isp:isp:6*isp:isp:isp:
4*isp:isp:isp:isp:isp:12*isp:isp)"
9230 DATA "(isp:8*isp:isp:4*isp:is
p:3*isp:isp:isp:8*isp:3*isp:isp)"
9240 DATA "(4*isp:isp:5*isp:21*isp
:isp)"
9250 DATA "(isp:2*isp:isp:8*isp:6*
isp:4*isp:7*isp:2*isp:isp)"
9260 DATA "(isp:8*isp:6*isp:7*isp:
2*isp:7*isp:isp)"
9270 DATA "(32*isp)"

```



BE A TOP SOCCER TACTICIAN IN THE



SUPER-LEAGUE

©Cross Software 1983

- Full 11-a-side match action
- Scale 90-minute game
- On-screen commentary showing current score, name of player in possession, time played
- Individual player skills
- Full 22-team League
- 42-match season
- League table and results on screen and printer
- Save season to date on tape

FOR USE ON 48K SPECTRUM

To order SUPER-LEAGUE, please send cheque/
P.O. value £6-50 payable to CROSS SOFTWARE,
36 Langford Crescent, Barnet, Herts, EN4 9EH

Reach an estimated readership of over 200,000 users
per month for as little as £2.00*.

Or if you are starting your own small business advertise in the classified for
only £10.00.

Yes all you have to do is fill in the coupon below including your name,
address and/or telephone number and send to: Sinclair Programs, ECC
Publications, 196-200 Balls Pond Road, London N1 4AQ.

Maximum 30 words.

Your advert will appear in the earliest possible edition.

Name

Address

..... Tel:

Have you included the fee of £2.00 or £10.00?

*for second hand sales only

Conditions
The Advertisement Manager reserves the right to alter, reject or suspend an advertisement without assigning any reason. Advertisements are accepted subject to approval of copy and to the right of the Advertisement Manager to alter, reject or cancel any order without explanation. The Proprietors are not liable for any loss from any cause whatever, nor do they accept liability for printers' errors. The Advertisers shall indemnify the Publishers in respect of any claim, cost and expenses arising out of any libellous or malicious matter or untrue statement in any advertisement published for the advertisers, or any infringement of copyright, patent or design therein. The placing of any order will be deemed to be an acceptance of these conditions.

Spectrum — ZX-81

Overheating? Noisy? Keyboard runs hot?
Problem solved with the P.R. adaptor. No soldering, no dismantling, just plugs in place. £8.95 please state model

Cheques/P.O. to:
P. R. Electronics
14 Bretby Close,
Doncaster,
South Yorks DN4 6EL

Also available over the counter from
Modern Electronics, Market Road, Doncaster

BIGTRACK SIMULATION PROGRAM. 48K
Spectrum, Home or school use. Develops programming skills for children. £2.50 or s.a.e. for details, Holt, Guillemot Close, Hythe, Hampshire SO4 6GJ.

MAIL ORDER ADVERTISING British Code of Advertising Practice

Advertisements in this publication are required to conform to the British Code of Advertising Practice. In respect of mail order advertisements where money is paid in advance, the code requires advertisers to fulfil orders within 28 days, unless a longer delivery period is stated. Where goods are returned undamaged within seven days, the purchaser's money must be refunded. Please retain proof of postage/despatch, as this may be needed.

Mail Order Protection Scheme

If you order goods from Mail Order advertisements in this magazine and pay by post in advance of delivery, *Sinclair User* will consider you for compensation if the Advertiser should become insolvent or bankrupt, provided:

- (1) You have not received the goods or had your money returned; and
- (2) You write to the Publisher of *Sinclair User* summarizing the situation not earlier than 28 days from the day you sent your order and not later than two months from that day.

Please do not wait until the last moment to inform us. When you do write, we will tell you how to make your claim and what evidence of payment is required.

We guarantee to meet claims from readers in accordance with the above procedure as soon as possible after the Advertiser has been declared bankrupt or insolvent (up to a limit of £4,250 per annum for any one Advertiser so affected and up to £10,000 per annum in respect of all insolvent Advertisers. Claims may be paid for higher amounts, or when the above procedure has not been complied with at the discretion of *Sinclair User*, but we do not guarantee to do so in view of the need to set some limit to this commitment and to learn quickly of readers' difficulties).

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

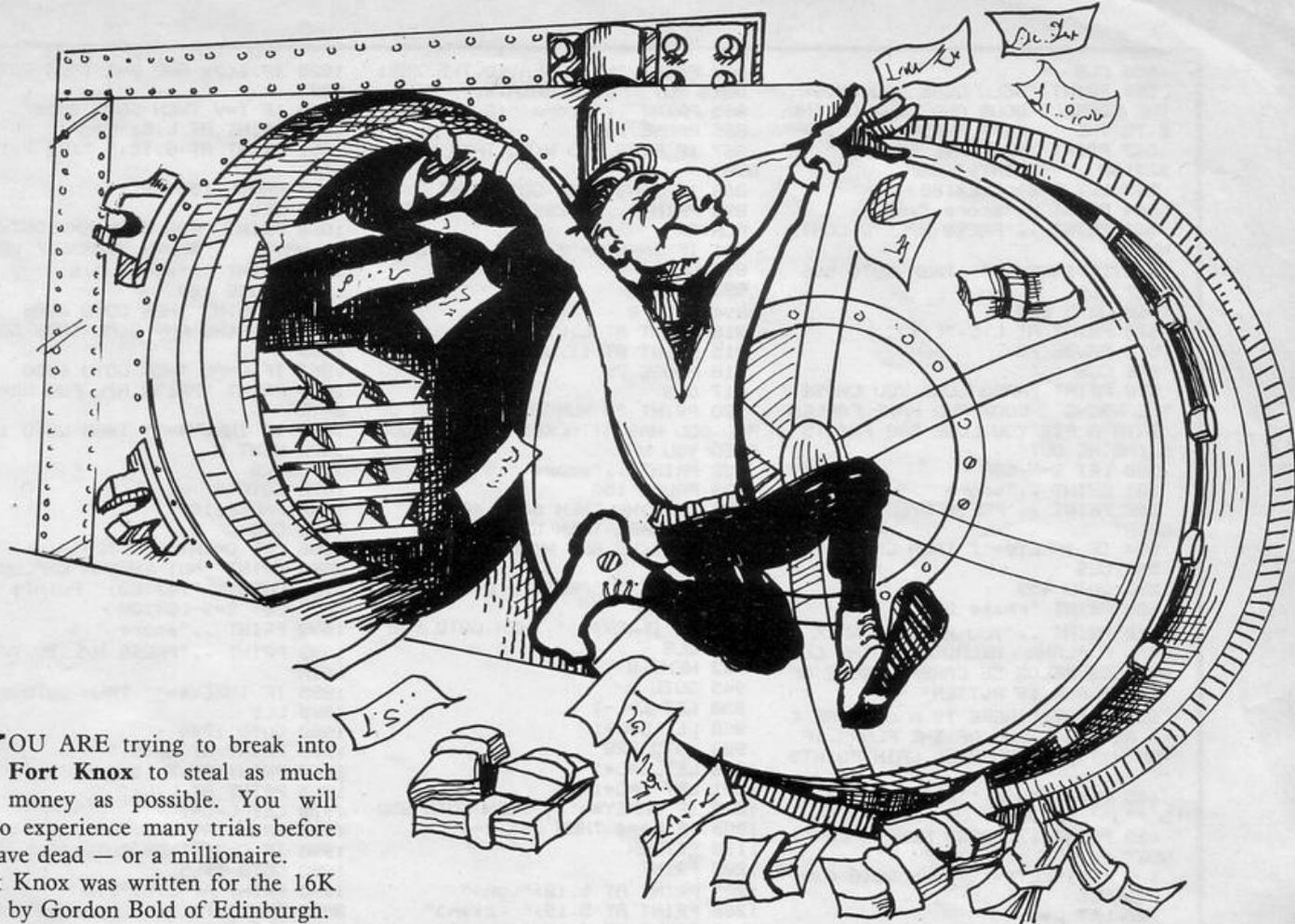
ARE YOU ANTI-GLARE?

As a programmer you'll know the discomfort of eyestrain that results from continued use of your computer. Now there's a cure! Anti-glare filters allow prolonged use — without headaches or mistakes! Great for colour too! Just write down the size of your screen (height and width in inches) and send £1.65 + 25 pence P&P (total £1.90) to:



Please rush me Anti-Glare screens at £1.90 each so that I can program in comfort.

Name To: **T. R. T. Design,**
Address **43B Nightingale Lane,**
County **Clapham,**
Screen Size " x **London SW12**



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

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

FORT KNOX

```

2 LET AG=0
3 LET HS=0
4 LET N#=""
5 GOSUB 5000
6 PRINT "HOW MANY PLAYERS?"
7 INPUT PL
8 LET S=0
9 FOR W=1 TO PL
10 PRINT "Player ";W
11 LET S=0
12 PAUSE 75
13 CLS
14 PRINT "fort knox 11"
15 PRINT AT 0,14;"high score="
;HS
17 PRINT AT 1,14;"name:- ";N#
18 PRINT AT 2,14;"age=";AG
22 PRINT AT 5,7;"INSTRUCTIONS?
(Y/N)"
23 INPUT I#
24 IF I#="N" THEN GOTO 100
25 IF I#="Y" THEN GOTO 30
30 PRINT AT 5,7;"instructions
"
33 PRINT "YOU ARE TRYING TO
BREAK INTO A SPECIAL BANK WHICH
CONTAINS OVER£100,000,000. YOU W
ILL HAVE TO "
34 PRINT "OVERCOME MANY DANGER
S ON YOUR WAY TO THE VAULT. DUR
ING THE GAME YOU GAIN AND LOSE PO
INTS."
35 PRINT "YOU ARE REPRESENTED
BY AN ""O""
40 PRINT "IF YOU COMPLETE A TR
ACK SUCCESSFULLY YOU WILL
CHANGE TO AN (<10>), IF NOT YOU
WILL CHANGE TO AN (<1*>)."
80 PRINT "PRESS N/L TO CONTI
NUE"
90 IF INKEY#="" THEN GOTO 90
100 CLS
109 LET A=INT (RND*3)+1
110 PRINT "Phase 11"
120 PRINT "THERE ARE 3 PASSAGES
WHICH LEAD TO THE VAULT. 1 OF TH
E PASSAGES HAS AN ALARM"
140 PRINT "TYPE IN WHICH PASSAG
E (1 TO 3)"
150 INPUT C
170 PRINT
180 PRINT AT 7,0;"(0*99;1SP;1SP;
1SP;2*99;1SP;1SP;1SP;2*99;1SP;1SP;
1SP;11*99)"
182 FOR F=1 TO 7
184 PRINT "(0*9h;1SP;1SP;1SP;2*9
h;1SP;1SP;1SP;2*9h;1SP;1SP;1SP;11*
9h)"
185 NEXT F
186 PRINT AT 15,0;"(0*9f;1SP;1SP;
1SP;2*9f;1SP;1SP;1SP;2*9f;1SP;1SP;
1SP;11*9f)"
190 IF C=1 THEN LET Y=9
200 IF C=2 THEN LET Y=14
210 IF C=3 THEN LET Y=19
220 LET X=6
230 PRINT AT X,Y;" "
240 LET X=X+1
250 IF X=15 THEN GOTO 300
255 IF X=10 AND C=A THEN GOTO 3
50
260 PRINT AT X,Y;"0"
270 GOTO 230
300 PRINT AT X,Y;"<10>"
302 PAUSE 75
305 CLS
306 LET Q=INT (RND*30)+10
308 PRINT "YOU HAVE ELUDED THE
ALARM AND "
310 PRINT "HAVE GAINED ";Q*100
;" POINTS"
330 GOTO 400
350 PRINT AT X,Y;"<1*>"
352 PAUSE 75
354 CLS
355 PRINT "YOU HAVE BEEN ARREST
ED BY A "
360 PRINT "POLICEMAN. YOU LOSE 5
00 POINTS AFTER BRIBING HIM"
365 LET S=S-500
368 PRINT "score ";S
370 PRINT "PRESS N/L TO TRY A
GAIN"
380 IF INKEY#="" THEN GOTO 380
390 GOTO 105
400 LET S=S+(Q*100)
405 PRINT "score ";S
410 PRINT "PRESS N/L TO CONTI
NUE"
420 IF INKEY#="" THEN GOTO 420
430 CLS
440 PRINT "phase 2"
450 LET Z=INT (RND*6)+1
455 PRINT "YOU HAVE FOUND A K
EY AND MUST PUT IT INTO 1 OF T
HE DOORS (<1d>). USE THE CURSOR
KEYS TO MOVE AROUND"
456 PRINT "PRESS N/L TO CONTI
NUE"
457 IF INKEY#="" THEN GOTO 457
458 CLS
459 LET L=6
460 LET C=4
461 LET X=INT (RND*5)
462 LET Y=INT (RND*5)
464 PRINT AT X,Y;"<1d>"
470 LET A=INT (RND*5)
472 LET B=INT (RND*5)
474 PRINT AT A,B;"<1d>"
475 PRINT AT L,C;" "
477 LET L=L+(INKEY#="6")-(INKEY
#="7")
478 LET C=C+(INKEY#="8")-(INKEY
#="5")
480 IF L=X AND C=Y THEN GOTO 55
0
485 IF L=A AND C=B THEN GOTO 57
0
490 PRINT AT L,C;"0"
500 GOTO 475
550 PRINT AT L,C;"<10>"
555 PAUSE 75

```

```

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

```

```

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

```

Upgrade your 16K ZX SPECTRUM Now!

The CHEETAH 32K RAMPACK simply plugs into the user port at the rear of your computer and increases the memory instantly to 48K.

- ★ Fully compatible with all accessories via rear edge connector
- ★ No need to open computer and invalidate guarantee
- ★ Why send your computer away and wait weeks for upgrade
- ★ Fully cased tested and guaranteed.

Why wait any longer?

Only £39.95 including VAT and P&P.



Now make your Spectrum and ZX-81 Talk

The Cheetah "SWEET TALKER" just plugs into the back of the computer using the existing power supply. Based on an allophone system you can easily program any word sentence or phrase. Fully cased, tested guaranteed and compatible with all accessories via rear edge connector. Complete with demonstration cassette and full instructions. No more lonely nights! Simply incredible at **£29.75** (Please quote when ordering whether Spectrum or ZX81 owner)

16K RAM Pack for ZX-81
64K RAM Pack for ZX-81

£19.75
£44.75

Prices include VAT, postage & packing. Delivery normally 14 days. Export orders at no extra cost. Dealer enquiries welcome.

Send cheque/PO now to:
CHEETAH MARKETING LTD
Dept SU/1
24 Ray Street
London EC1 R3 DJ
Tel: 01-278 6954

32K RAM Pack and "SWEET TALKER" also available from larger Branches of

John Menzies



WH SMITH

UNBELIEVABLE
SOFTSOLID 3D
ANT ATTACK

MADE ON EARTH

COMMODORE 64 GAMES

QUINTIC WARRIOR

Stand alone against
Sinister Crabmen and
Mangled Mutants.
Author: T. P. Watts.

RING OF POWER

Search thru' the kingdom
for the mystical ring.
Graphics/Text Adventure.
Commodore 64.
**Authors:
Fred Preston &
Bob McClelland.**

SUPPLIED TO SENTIENT BEINGS
THROUGHOUT THE UNIVERSE



AQUAPLANE

Ski thru' Marine
Maniacs but beware
the deadly snapping
Sharks.
Commodore 64
(Joystick or Keyboard).
**Designer: John Hollis
& Programmer
Steve Hickman.**

PURPLE TURTLES

Turtle bobbing with
the cute Purpilius
Turtillium.
Commodore 64.
(Joystick or Keyboard).
**Authors: Mark &
Richard Moore.**



SPECTRUM GAMES

VELNOR'S LAIR (Adventure)

Battle of Denizens of
the Goblin Labyrinth
and the Evil Wizard
Velnor.
Spectrum 48K.
**By Derek Brewster
of Neptune
Computing.**



SMUGGLERS COVE

You are caught in a
fable full of horror and
Black Beard's
Treasure.
Spectrum 48K.
**Author:
John Keneally.**

TRAXX

Pilot your way thru'
the Grid.
Spectrum 48K
**Designer:
Jeff Minter.**



3D STRATEGY

A battle of Nerves and
Wits. Faster than a
speeding bullet!
Spectrum 16K.
**Author:
Freddy Vachha.**

BUGABOO (THE FLEA)

No fleas on This
Program!!
Itchy Action!!
Spectrum 48K
Author: Indescomp.



SOFTSOLID 3D ANT ATTACK

Battle the ants in the
walled city of
Antescher.
Spectrum 48K.
**Authors:
Sandy White**

URGENT
Join the
QUICKSILVA
Game Lords Club
send for details

BBC PROGRAMES MINED-OUT

Save Bill The Worm
from Certain Death.
BBC model B 32K.
(1.0 + 1.2 operating
systems only).
**Authors: I. Andrew
& I. Rowlings.**

BEEB-ART

High Quality Art/
Design program for
versatile manipulation
of the BBC's graphics
ability.
BBC model B 32K.
**Author:
Dave Mendes.**

THE GENERATORS

Superb Character +
Teletext Utility
BBC model B 32K.
**By the author of
Beeb-Art:
David Mendes.**



THE

GAME LORDS

Please send order to
**QUICKSILVA MAIL ORDER:
55 Haviland Road
Ferndown Industrial Estate
Wimborne, Dorset**

Quintic Warrior Commodore 64	£7.95	□
Purple Turtles Commodore 64	£7.95	□
Aquaplane Commodore 64	£7.95	□
Ring of Power Commodore 64	£9.95	□
Mined-Out BBC model B 32K	£6.95	□
Beeb-Art BBC model B 32K	£14.95	□
The Generators BBC model B 32K	£6.95	□
Velnor's Lair Spectrum 48K	£6.95	□
Smugglers Cove Spectrum 48K	£6.95	□
Traxx Spectrum 48K	£6.95	□
Gridrunner Spectrum 16K/48K	£6.95	□
Aquaplane Spectrum 48K	£6.95	□
Xadom Spectrum 48K	£6.95	□
3D Strategy Spectrum 16K	£6.95	□
BugaBoo (The Flea) Spectrum 48K	£6.95	□
Softsolid 3D Ant Attack Spectrum 48K	£6.95	□

HEAD OFFICE: QUICKSILVA LIMITED, PALMERSTON PARK HOUSE, 13 PALMERSTON ROAD, SOUTHAMPTON SO1 1LL

PLEASE SEND ME THE GAMES AS TICKED SUPPLIED ON CASSETTE

Total cheque/P.O. enclosed _____

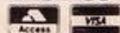
Cheque payable to Quicksilva Limited

NAME _____

ADDRESS _____

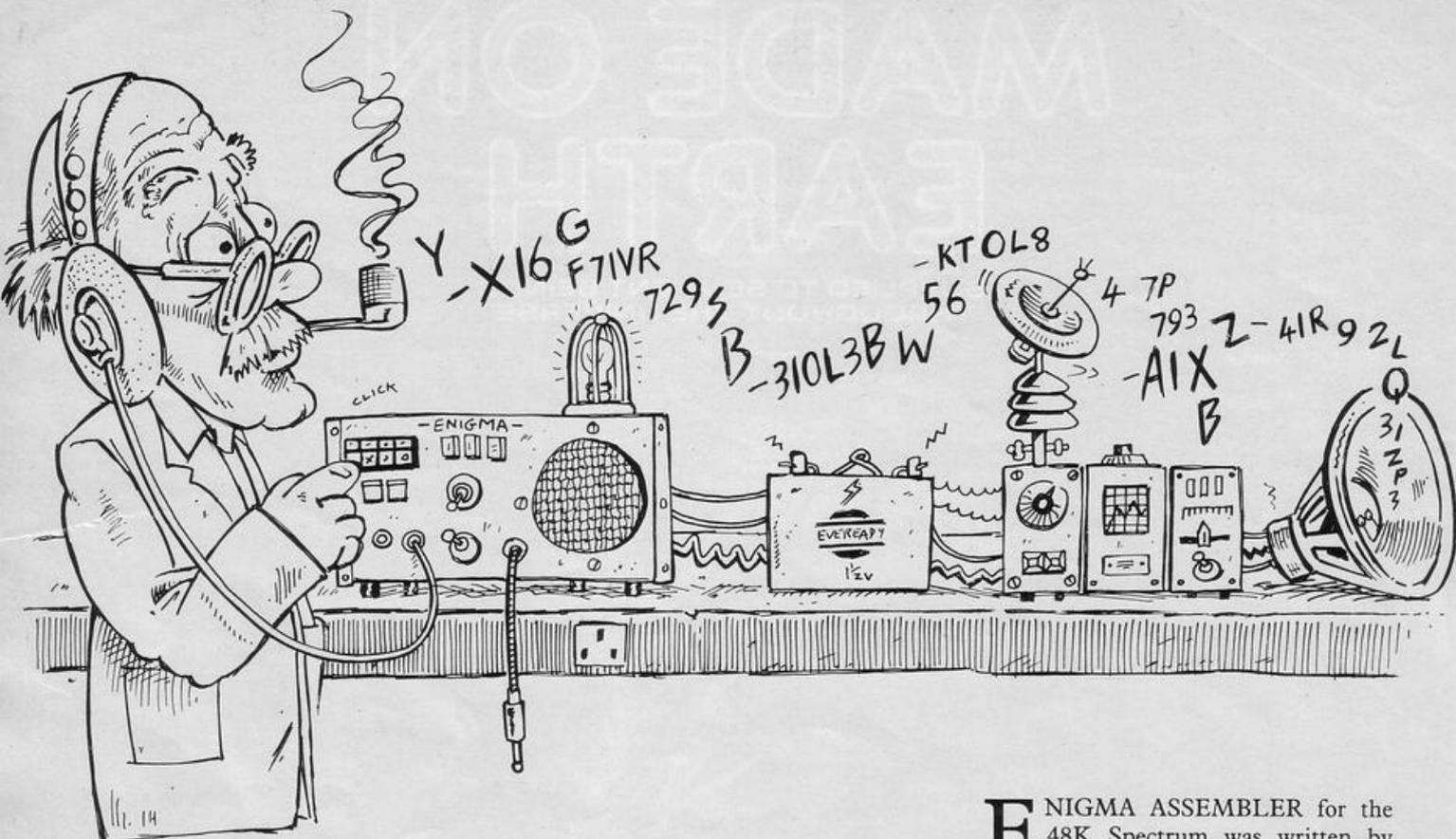
Send S.A.E. for Catalogue. QS
Games are available through Boots,
J. Menzies, Smiths, Hamleys,
and all leading computer stores.

CREDIT CARD
TELE SALES:
0202-891744



WARNING: These programs are sold
according to QUICKSILVA Ltd's terms
of trade and conditions of sale. Copies of
which are available on request.

GSH



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

ENIGMA ASSEMBLER

```

1 DIM a(252): DIM a$(252,12)
2 INK 0: PAPER 7: BORDER 7: C
LS : PRINT AT 11,0: FLASH 1)
  Please wait a moment
50 GO SUB 0000
110 CLS
120 PRINT TAB 10;"Options";TAB
10;"-----"
130 PRINT : PRINT : PRINT : PRI
NT
131 BRIGHT 1
140 PRINT TAB 2;"1.....Write";
TAB 2;"2.....Look";TAB 2;"3....
..Run";TAB 0
145 PRINT AT 15,2: INK 3: PLUT
7,43: DRAW 0,17: DRAW 190,0: DR
AW 0,-17: DRAW -190,0
147 INK 0
150 PRINT #0: FLASH 1;"Please s
elect"
160 PAUSE 0: IF INKEY#<"1" OR I
NKEY#>"3" THEN GO TO 160
165 BRIGHT 0
170 GO TO (2000 AND INKEY#="1")
+(4000 AND INKEY#="2")+(<5000 AND
INKEY#="3")
2000 REM      Write
2010 CLS : INPUT "Start address:
";st
2015 PRINT AT 0,0;"Address: ";st
: PRINT : PRINT : PRINT : PRINT
2020 INPUT "Code: ";y#
2022 IF y#="stop" THEN GO TO 10
0
2025 IF LEN y#>12 THEN GO TO 2
050
2030 FOR f=1 TO 252: IF y#<=a$(f)
THEN GO TO 2100
2040 NEXT f
2050 PRINT INVERSE 1,;0; FLASH
1;"Wrong input"; PAUSE 100: PRIN
T 0;
  GO TO 2020
2100 PRINT TAB 3,y#
2120 POKE st,a$(f)
2121 FOR f=1 TO LEN y#
2122 IF y#(f TO f)="N" THEN GO
TO 2125
2123 NEXT f
2124 GO TO 2130
2125 INPUT "NN: ";s
2126 IF s>255 THEN GO TO 2125
2127 LET st=st+1: POKE st,s: PRI
NT TAB 0;"N="; INVERSE 1;s
2130 LET st=st+1: GO TO 2020
4005 LET w=0
4010 CLS : INPUT "Start address:
";rt
4015 PRINT AT 0,0: INVERSE 1;"Ad
resse: ";rt;0; INVERSE 1)
  'M' menu
4020 PRINT : PRINT : PRINT : PRI
NT
4021 FOR f=1 TO 252: IF PEEK (rt
)=a$(f) THEN GO SUB 4500
4022 NEXT f
4023 IF w=1 THEN LET rt=rt+1: P
RINT TAB 0;"N="; INVERSE 1;PEEK
(rt): LET w=0
4035 IF INKEY#="m" THEN GO TO 1
00
4040 LET rt=rt+1: GO TO 4021
4500 PRINT TAB 3;a$(f)
4510 FOR e=1 TO LEN a$(f)
4520 IF a$(f,e TO e)="N" THEN L
ET w=1: RETURN
4530 NEXT e: RETURN
5010 CLS
5020 INPUT "Start address: ";d
5030 CLS : PRINT USR d: PRINT F
LASH 1,;0;"Press any key"
5050 PAUSE 0: GO TO 100
0000 RESTORE
8010 FOR f=1 TO 252
8020 READ a$(f),a(f)
8030 NEXT f
9010 DATA "nop",0,"ld bc,NN",1,"
ld (bc),a",2,"inc bc",3,"inc b",
4,"dec c",5,"ld b,N",6,"rlca",7,
"ex af,af",8,"add hl,bc",9,"ld
a,(bc)",10,"dec bc",11,"inc c",1
2,"dec c",13,"ld c,N",14,"rrca",
15,"djnz DIS",16,"ld de,NN",17,
"ld (de),a",18,"inc de",19,"inc
d",20,"dec d",21,"ld d,N",22,"rl
a",23,"jr DIS",24,"add hl,de",25
,"ld a,(de)",26,"dec de",27,"inc
e",28,"dec e",29,"ld e,N",30,"r
ra",31,"jr nz,DIS",32,"ld hl,NN",
33,"ld (NN),hl",34,"inc hl",35,
"inc h",36,"dec h",37
9020 DATA "ld h,N",38,"daa",39,"
jr z,DIS",40,"add hl,hl",41,"ld
hl,(NN)",42,"dec hl",43,"inc l",
44,"dec l",45,"ld l,N",46,"cpl",

```

```

47,"jr nc,DIS",48,"ld sp,NN",49,
"ld (NN),a",50,"inc sp",51,"inc
(hl)",52,"dec (hl)",53,"ld (hl),
N",54,"scf",55,"jr c,DIS",56,"ad
d hl,sp",57,"ld a,(NN)",58,"dec
sp",59,"inc a",60,"dec a",61,"ld
a,N",62,"ccf",63,"ld b,b",64,"ld
b,c",65,"ld b,d",66,"ld b,e",6
7,"ld b,h",68,"ld b,l",69,"ld b,
(hl)",70,"ld b,a",71,"ld c,b",72
,"ld c,c",73,"ld c,d",74,"ld c,e
",75,"ld c,h",76,"ld c,l",77,"ld
c,(hl)",78,"ld c,a",79,"ld d,b"
,80,"ld d,c",81
9030 DATA "ld d,d",82,"ld d,e",8
3,"ld d,h",84,"ld d,l",85,"ld d,
(hl)",86,"ld d,a",87,"ld e,b",88
,"ld e,c",89,"ld e,d",90,"ld e,e
",91,"ld e,h",92,"ld e,l",93,"ld
e,(hl)",94,"ld e,a",95,"ld h,b"
,96,"ld h,c",97,"ld h,d",98,"ld
h,e",99,"ld h,h",100,"ld h,l",10
1,"ld h,(hl)",102,"ld h,a",103,"
ld l,b",104,"ld l,c",105,"ld l,d
",106,"ld l,e",107,"ld l,h",108,
"ld l,l",109,"ld l,(hl)",110,"ld
l,a",111,"ld (hl),b",112,"ld (h
l),c",113,"ld (hl),d",114,"ld (h
l),e",115,"ld (hl),h",116,"ld (h
l),l",117,"halt",118,"ld (hl),a"
,119,"ld a,b",120,"ld a,c",121,"
ld a,d",122,"ld a,e",123,"ld a,h
",124,"ld a,l",125
9040 DATA "ld a,(hl)",126,"ld a,
a",127,"add a,b",128,"add a,c",1
29,"add a,d",130,"add a,e",131,"
add a,h",132,"add a,l",133,"add
a,(hl)",134,"add a,a",135,"adc a
,b",136,"adc a,c",137,"adc a,d",
138,"adc a,e",139,"adc a,h",140,
"adc a,l",141,"adc a,(hl)",142,"
adc a,a",143,"sub b",144,"sub c"
,145,"sub d",146,"sub e",147,"su
b h",148,"sub l",149,"sub (hl)",
150,"sub a",151,"sbc a,b",152,"s
bc a,c",153,"sbc a,d",154,"sbc a

```

```

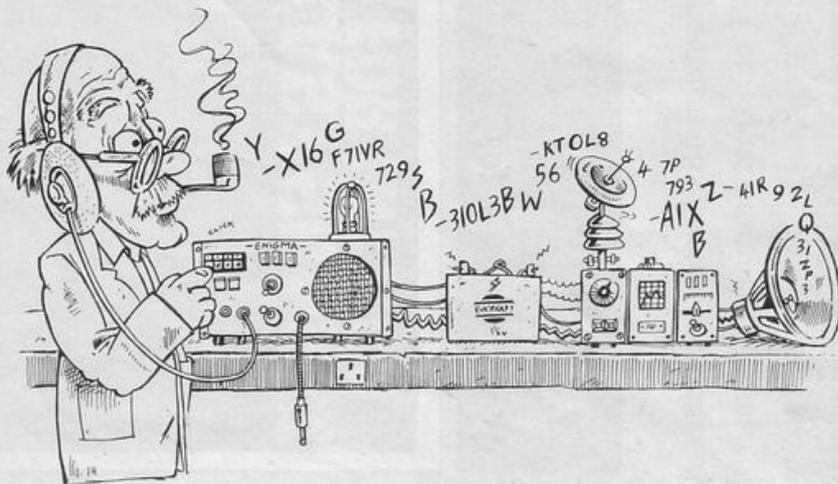
,e",155,"sbc a,h",156,"sbc a,l",
157,"sbc a,(hl)",158,"sbc a,a",1
59,"and b",160,"and c",161,"and
d",162,"and e",163,"and h",164,"
and l",165,"and (hl)",166,"and a
",167,"xor b",168,"xor c",169
9050 DATA "xor d",170,"xor e",17
1,"xor h",172,"xor l",173,"xor (
hl)",174,"xor a",175,"or b",176,
"or c",177,"or d",178,"or e",179
,"or h",180,"or l",181,"or (hl)"
,182,"or a",183,"cp b",184,"cp c
",185,"cp d",186,"cp e",187,"cp
h",188,"cp l",189,"cp (hl)",190,
"cp a",191,"ret nz",192,"pop bc"
,193,"jp nz,NN",194,"jp NN",195,
"call nz,NN",196,"push bc",197,"
add a,N",198,"rst 0",199,"ret z"
,200,"ret",201,"jp z,NN",202,"ca
ll z,NN",204,"call NN",205,"adc
a,N",206,"rst 8",207,"ret nc",20

```

```

8,"pop de",209,"jp nc,NN",210,"o
ut (N),a",211,"call nc,NN",212,"o
Push de",213
9060 DATA "sub N",214,"rst 16",2
15,"ret c",216,"exx",217,"jp c,N
N",218,"in a,(N)",219,"call c,NN
",220,"sbc a,N",222,"rst 24",223
,"ret po",224,"pop hl",225,"jp P
o,NN",226,"ex (sp),hl",227,"call
po,NN",228,"push hl",229,"and N
",230,"rst 32",231,"ret pe",232,"
jp (hl)",233,"jp pe,NN",234,"ex
de,hl",235,"call pe,NN",236,"xo
r N",238,"rst 40",239,"ret p",24
0,"pop af",241,"jp p,NN",242,"di
",243,"call p,NN",244,"push af",
245,"or N",246,"rst 48",247,"ret
m",248,"ld sp,hl",249,"jp m,NN"
,250,"ei",251,"call m,NN",252,"c
p N",254,"rst 56",255
9999 RETURN

```



```

1 FOR A=0 TO 7: READ B: POKE
USR "(9a)+A,B: NEXT A
2 FOR A=0 TO 7: READ B: POKE
USR "(9b)+A,B: NEXT A
3 FOR A=0 TO 7: READ B: POKE
USR "(9c)+A,B: NEXT A
4 LET sc=0: LET v=0
5 LET v=21: LET x=15: LET s=2
0: LET r=15
10 LET a=INT (RND*32): LET b=2
20 PRINT AT b,a: INK 2: "(9a)"
30 PRINT AT v,x: INK 4: "(9b)"
35 PRINT AT s+1,r-1: " PRI
NT AT s,r: "(9c)"
36 BEEP .01,s: LET s=s-1
38 PRINT AT 0,6: "SCORE ",s
39 PRINT AT 0,21: "MISSILES ",v
40 LET c#=INKEY#
50 IF c#="5" THEN LET r=r-1
62 IF c#="8" THEN LET r=r+1
70 IF s=1 THEN GO TO 150
80 IF r=a AND s=b THEN GO TO
160
90 IF sc=20 THEN GO TO 1000
95 IF v=25 THEN GO TO 2000
110 GO TO 20
150 CLS: LET v=v+1: GO TO 5
160 PRINT AT 0,0: INK 1: FLASH
1: "BANG!"
163 FOR a=30 TO 33: BEEP .05,a:
NEXT a
170 LET sc=sc+1
180 GO TO 10
1000 CLS: PRINT "YOU MADE IT WI
TH ";25-v: " MISSILES LEFT"
1005 FOR j=1 TO 32: BEEP .05,j
1020 NEXT j
1030 GO TO 1005
2000 CLS
2001 PRINT "YOU HAVE JUST USED U
P ALL YOUR MISSILES BUT THERE A
RE STILL SOME INVADERS LEFT"
2010 BEEP .5,0: BEEP .5,-2: BEEP

```

MISSILE



```

.5,-4
2020 GO TO 2010
3000 DATA 20,62,42,62,127,99,65,
65
3010 DATA 24,24,24,60,60,126,255
,255
3020 DATA 24,60,126,24,24,126,12
6,24

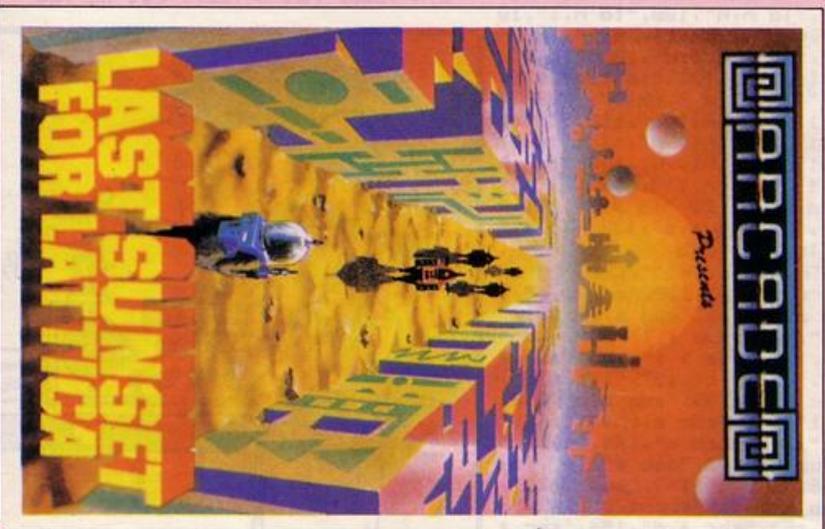
```

MISSILE for the 16K Spectrum was written by Tim Rose of Amisfield, Dumfries. Guide your missile with keys 5 and 8 towards the intruder. You have 25 missiles and 20 intruders to shoot.

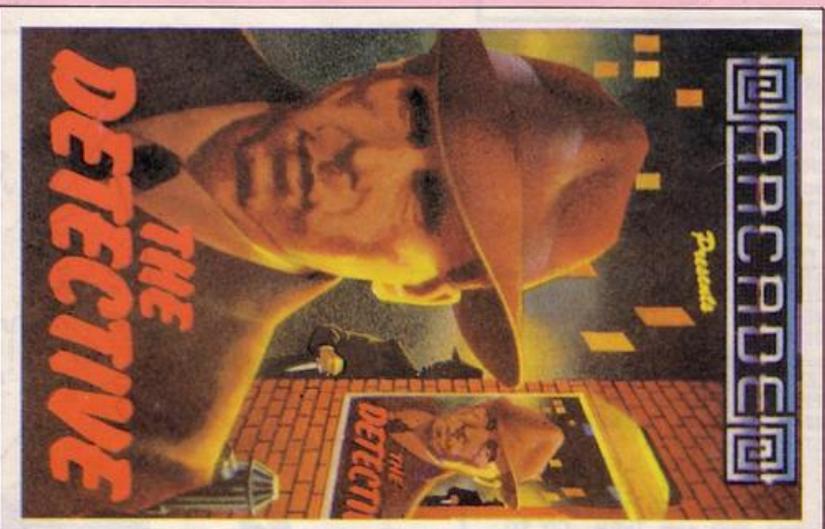
THE ARCADE COLLECTION



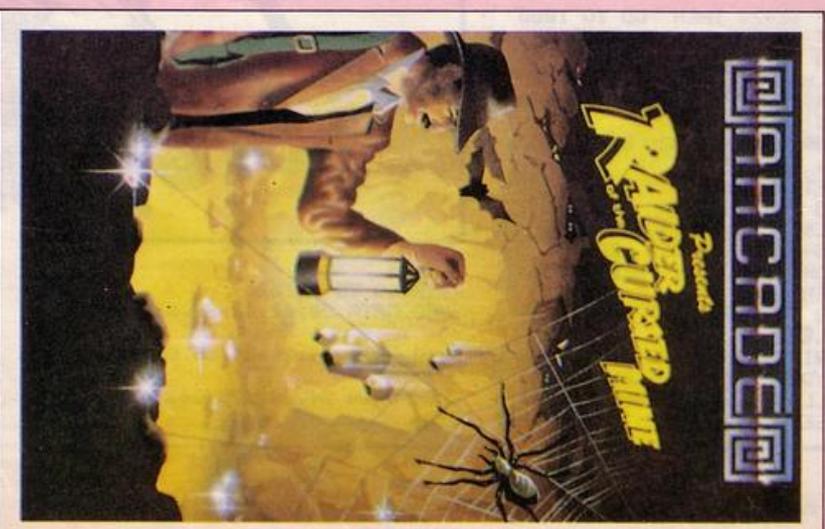
GRID RUN is a high resolution, fast machine code game using the spectrums sound and colour to the full. Set in a maze you must avoid oncoming android cars bent on your destruction. Bonus car every 10,000 points. Famous Five hall of fame, increasing speed and difficulty. There is even a hold button to get your breath back. **PONTON** included on side B absolutely free. Pontoon has full graphical representations of all the cards including King, Queen, Jack, "Intelligent" play of aces, and full analysis of results at end of each game. REF: GRID



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



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



RAIDER OF THE CURSED MINE (Original) Greed drove you down into the old diamond mine, sheer determination and luck is the only way out again. Lits help you, so do lamps, and diamonds can't worth a fortune but beware of the evils that lurk deep in the mine. Trolls who throw boulders at you, spiders who eat you, ghosts who show no mercy, and bats who steal things, add to this a time bonus and you have an exciting Arcade quality game. Reach level 32 and escapes to the big outside world. REF: RAID

All these games are available for the ZX Spectrum 48K for the incredible price of only **£5.50** including P&P VAT etc. Just complete the mail order form for prompt dispatch by return of post.

Arcade are committed to original game concepts so look out for new titles in the Arcade range. Trade enquiries welcome. Phone Orpington 35639 anytime or write to Arcade Software Ltd, Technology House, 32 Chislehurst Road, Orpington, Kent BR6 0DG.

TO: ALL MAIL ORDERS

Qty.	Item	Item Price £	Total £

DON'T FORGET YOU CAN ALWAYS ORDER ON THE TELEPHONE WITH YOUR CREDIT CARD. TRADE ENQUIRIES WELCOME.

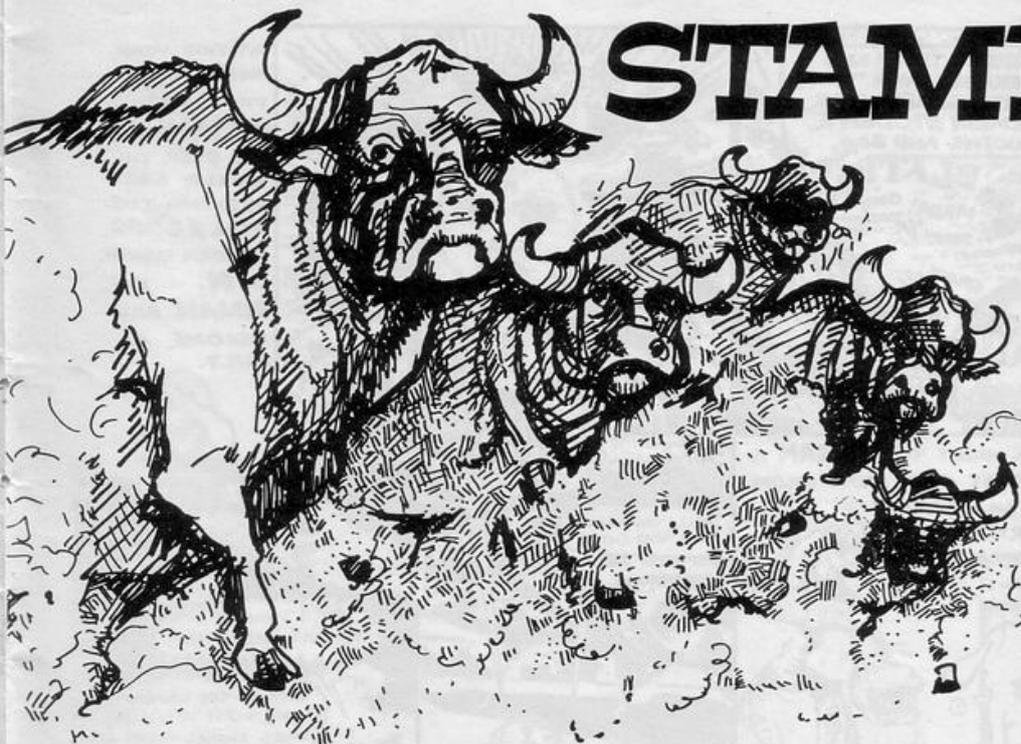
*I enclose a cheque/postal order payable to: **ARCADE SOFTWARE LTD.**, for £..... *Please charge to my Access/B Barclaycard account no.

Signature *Please delete/complete as applicable.

Name: Mr/Ms/Miss

Address

SP



STAMPEDE

IT IS the law of the jungle — kill or be killed — as you drive your truck over the scrub straight into a stampede of wild buffalo. If you are within range you can fire with “.” or you must dodge the wild beasts using “6” for down, “7” for up and “M” for over-

drive. If you hit five buffalo, you must stop to repair your vehicle; stop with “1”.

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

```

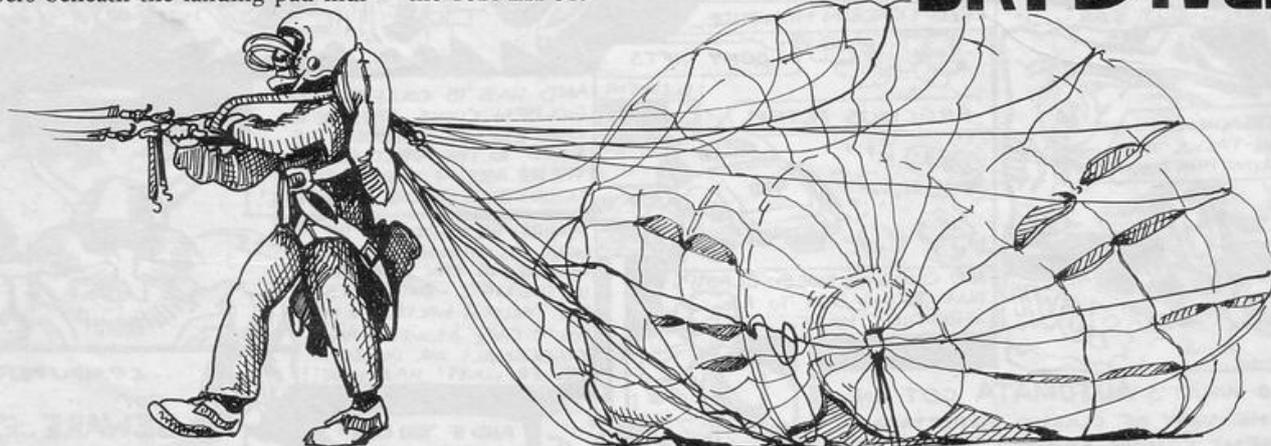
100 LET A$=" "
110 LET F=1
120 LET A=12
130 LET C=20
140 LET D=INT (RND*27)+2
150 LET G=1
170 LET S=S+1
500 PRINT AT 10,0;A$
520 SCROLL
530 PRINT AT A,F;">-"
540 PRINT AT A,F;" "
550 LET F=F+1
554 IF F>=27 THEN LET F=1
541 IF A=1 THEN LET A=2
542 IF A=20 THEN LET A=10
550 IF INKEY$="." THEN GOSUB 60
60
551 IF INKEY$="7" THEN LET A=A-1
552 IF INKEY$="6" THEN LET A=A+1
553 IF INKEY$="5" THEN LET F=F-1
554 IF INKEY$="M" THEN LET F=F+1
555 IF INKEY$="1" THEN GOTO 200
600 GOTO 130
2000 PAUSE 1
3000 PRINT "SCORE ";S
4000 PAUSE 500
4500 CLS
5000 RUN
5000 PRINT AT A,F+2;"-----"
5001 PRINT AT A,F+2;" "
6002 RETURN

```

RELEASE your parachutist using key “0” to make a controlled landing on the landing pad. The numbers beneath the landing pad indi-

cate the points you score if you land accurately. **Sky Diver** was written by Jeremy Bell of Tuffley, Gloucester for the 16K ZX-81.

SKY DIVER



```

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

```

THE STORY SO FAR...

AUTOMATA UK LTD

PUT SOME TING IN COMPUTING! IN 1981 THEY WERE THE FIRST TO PUT FREE MUSIC TRACKS ON COMPUTER CASSETTES. IN 1982 THEY WERE THE FIRST WITH BIG PRIZE GAMES. IN '83 IT WAS COMIC STRIP ADS. THIS IS THEIR STORY.

ONCE UPON A TIME (AND A MISERABLE TIME 'T WAS), COMPUTER GAMES WERE EXTREMELY VIOLENT, DESTRUCTIVE AND BORN.

BLAT! ZOT! MAIM! OINK! BANG! DING! WAAH!

BOFF! FONKS! BEEP! ZIT! ZIT! BAMBOZZLE! ZIT! ZIT! ZIT! BONK!

AUTOMATA CREATED THEM

PIMANIA

MOORAY! BALLELUJA!

AT THIS VERY MOMENT, THOUSANDS OF PIMANIACS ALL OVER THE WORLD, ARE SEEKING THE REAL £6000 GOLDEN SUNDAY OF PI. THE PIMAN HAS BECOME A CULT.

THE CRITICS GO WILD! PIMANIA IS HAILED AS AN ALL-TIME CLASSIC!

LATE ONE NIGHT THE PIMAN IS DISTURBED BY A VISITOR FROM THE DISTANT GALAXY OF MORRIS MINOR.

GORKS!

I'VE GOT A SHIP OUTSIDE YOU JUST WON'T BE ABLE TO RESIST!

WELL, 'OW MUCH 'AVE YOU GOT?

HOW MUCH?

A POGO-STICK, A SAXOPHONE AND A CAN OF WORMS

WELL THAT'S 'OW MUCH IT IS! SIGN HERE, HERE AN' HERE!

TATTAN, MUGGINS!

OH! I THOUGHT I'D JUST BOUGHT THAT!

LOOK AT THE LOG-BOOK! IT IS I YOU'VE PAID YOUR HARD-EARNED WORMS FOR! BEEP!

EH, WOT?

WHAT DO YOU KEEP STOPPING FOR?

BEERP! CAR-SICKNESS!

CAR PARK

LEMME OUITA HERE, YA BUM!

NOW TO RETRIEVE MORRIS SO THAT I CAN SELL HIM TO SOME OTHER MUG! GO, MY PHANTOM PHEAKY BIKERS!

I'M FREE! TAKEEEE!

TOO LATE! THE MAD BIKERS BLAZE IN, LIKE GHOSTS THROUGH THE BRICK WALL.

THIS IS IT!

MORRIS meets the Bikers

WATCH OUT FOR... CREEPY CARBON MONOXIDE... LOONY LIFTS

PRECIOUS PETROL

...TREACHEROUS TIN-TACKS THAT SLOW HIM DOWN...

AND CLINGING WHEEL CLAMPS THAT BRING HIM TO A GRINDING HALT...

YOW!

AND HAS TO COLLECT TEN GOLDEN COINS BEFORE HE CAN ESCAPE THROUGH THE EXIT TO THE NEXT SCREEN. THERE ARE 9 SCREENS ALTOGETHER, BEFORE HE IS FREE!

MAYBE WE DON'T LIKE THE NOISE HIS HORN MAKES, AN' MAYBE WE CAN'T GET HIM IN THE LIFTS - BUT WE CAN FLY THROUGH WALLS, AN WE DON'T CARE ABOUT NO HAND-SIGGERNALS OR DOUBLE-TELLER LINES! HAR HAR!!

.. COMPUTER! BUT BEWARE...

IT MAY WELL WIN!!

GO TO JAIL!

HEH HEH...

AND IF YOU CAN'T FIND ANY HUMANS TO PLAY AGAINST, WE DARE YOU TO PLAY YOUR...

*2 TO 5 PLAYERS
*LARGE SIZE MOVING BOARD
*DISPLAY *SAVE-GAME FACILITY.
*STATE OF PLAY AT THE TOUCH OF A BUTTON *YOUR COMPUTER AS 'HONEST BANKER'

GO TO JAIL!

SO WHAT'S AUTOMATA GOT IN THE WAY OF CLASSIC ENTERTAINMENT? HOW ABOUT THE DEFINITIVE VERSION OF THAT BOARD GAME!

AND IF YOU CAN'T FIND ANY HUMANS TO PLAY AGAINST, WE DARE YOU TO PLAY YOUR...

*2 TO 5 PLAYERS
*LARGE SIZE MOVING BOARD
*DISPLAY *SAVE-GAME FACILITY.
*STATE OF PLAY AT THE TOUCH OF A BUTTON *YOUR COMPUTER AS 'HONEST BANKER'

GO TO JAIL!

THE STORY SO FURTHER



HAVING LOST AT GO TO JAIL TO THEIR COMPUTER, THE PIMAN & A PAL GO TO THE

FLICKS... WHEREIN AUTOMATA SPRING A SURPRISE.



OUT NOW
MY NAME IS **UNCLE GROUCHO** YOU WIN A FAT CIGAR!

FIND THE HOLLYWOOD PERSONALITY IN THIS GAME, AND WIN A TRIP TO MEET 'EM! FLY OUT BY CONCORDE, STAY AT A REAL LUXURY HOTEL AND HAVE £500 TO SPEND...

WHAT IS THIS, THE STAMPEDE SEASON? WE'RE BEING TRAMPLED!



THEY MUST BE OFF TO GET THEIR 'UNCLE GROUCHO'S'



THE 'PIMANIA' FOLLOW-UP

HAVING HIDDEN A WORLD-FAMOUS HOLLYWOOD STAR IN "GROUCHO" AUTOMATA WILL SEND 2 LUCKY PLAYERS TO MEET THEM! TRACK GROUCHO AS HE TOURS THE U.S.A. - CARTOONS, MUSIC & LARFS.



I'D LIKE TO SEE YOU DO BETTER, BIG EAD! JUST £05 YOU'VE NOW GOT TOP BILLING IN THE INTRO PANEL...



THAT MULE WAS SLOW TO THE LAST! IT'S BEEN SITTING IN MY STOMACH FOR 2 DAYS NOW



WE SHOULD NEVER HAVE TRADED THE MAP AND COMPASS FOR FUR COATS! WE'RE LOST AGAIN



FOR HIRE HOLLYWOOD. 5,000 MILES AS THE CROW FLIES RIO DE JANEIRO WELCOMES CAREFUL GROUCHOS



ON THE OPPOSITE PAGE, THE PIMAN WAS SOLD A CANTANKEROUS MORRIS, WHICH HE PROMPTLY ABANDONED IN A MULTI-STORY EYESORE... BUT GROUCHO HAS OTHER IDEAS...



ORDER FORM

TO AUTOMATA U.K. LTD: "PLEASE RUSH ME THE FOLLOWING CASSETTES"

"MY NAME IS UNCLE GROUCHO YOU WIN A FAT CIGAR" for 48K ZX SPECTRUM	£10
"MORRIS MEETS THE BIKERS" for any ZX SPECTRUM	£6
"GO TO JAIL" for 48K ZX SPECTRUM	£6
"YAKZEE" for 48K ZX SPECTRUM	£5
"PIMANIA" for 48K ZX SPECTRUM	£10
"PIMANIA" for B.B.C. 32K	£10
"PIMANIA" for DRAGON 32	£10
"THE PIMAN'S CHRISTMAS STOCKING" (including Piman's 1984 Kartoon Kalendar, Piman's own C20 Blank Computer Cassette, plus the truly amazing "PIMAN'S GREATEST HITS" stereo L.P.)	£5

I ENCLOSE THE RIGHT MONEY, TOTAL _____ £

or please charge my ACCESS/EURO/MASTERCARD

CARD NUMBER _____

MY SIGNATURE _____

MY NAME _____

MY ADDRESS _____

POST CODE _____

send to AUTOMATA U.K. LTD., 27 HIGHLAND ROAD, PORTSMOUTH, PO49DA, HANTS., ENGLAND. Telephone (0705) 735242 Mail Order Service..... ALL PRICES INCLUSIVE! NO EXTRAS! Please leave space below blank..

SP

CHOPPER SQUAD



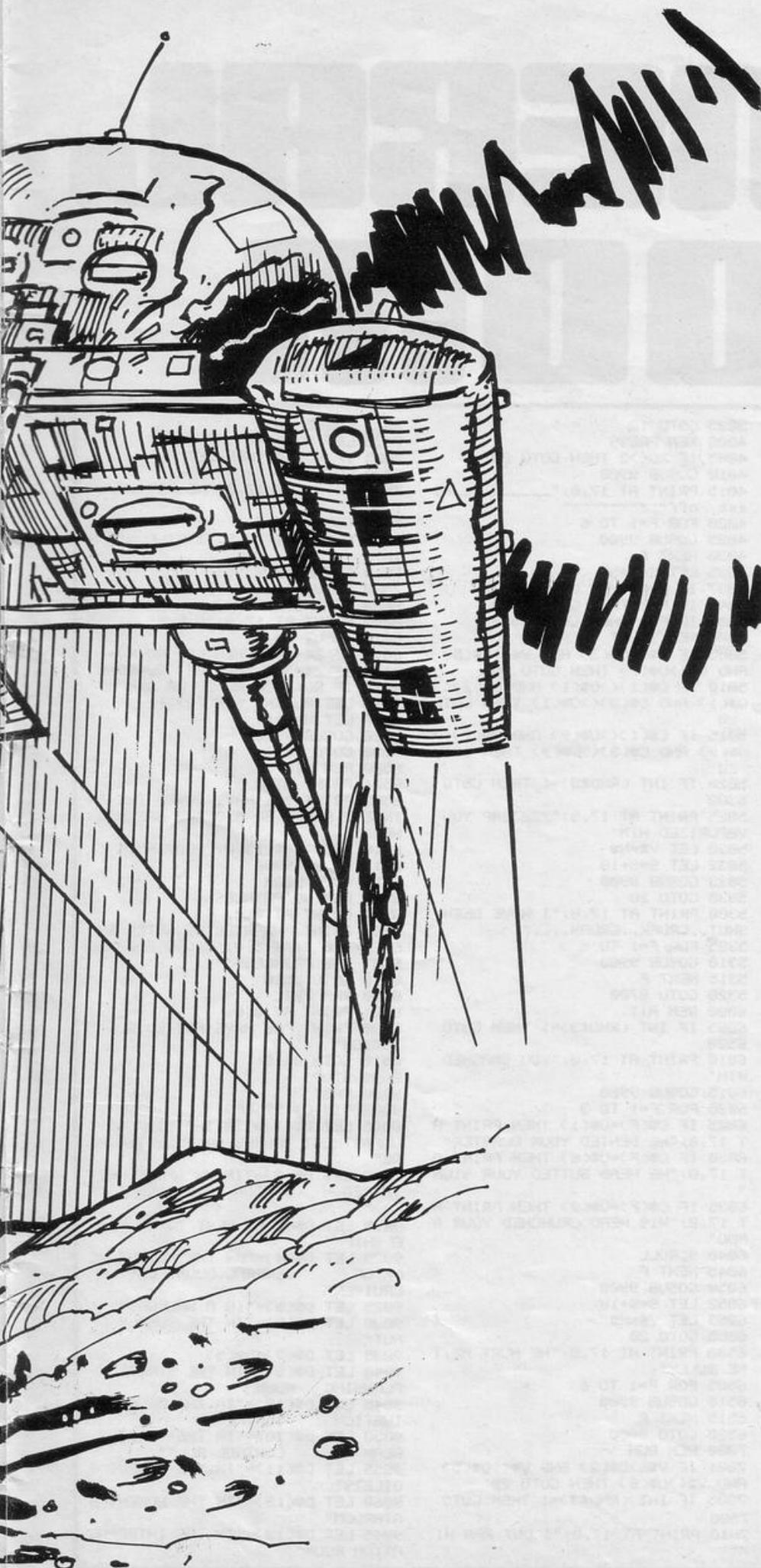
AS A helicopter pilot you must destroy all the enemy bases. A variety of points can be gained for the different types of buildings and

firing needs expert timing. **Chopper Squad** was written for the 16K Spectrum by R Davidson and P Watts of Seamills, Bristol.

```

1 LET HS=0: LLS: GO SUB 301:
GO SUB 1000
2 LET SC=0: LET SHOT=14: LET
z=RND/100: LET x=RND*50
3 INK 4: BORDER 1: CLS: FOR
n=0 TO 20: BEEP z,x: PRINT AT n,
31:"(isp)": NEXT n
4 FOR n=0 TO 20: BEEP z,x: PR
INT AT n,0:"(isp)": NEXT n: FOR
n=0 TO 31: BEEP z,x: PRINT AT 20
,n:"(isp)": NEXT n: FOR n=0 TO 3
1: BEEP z,x: PRINT AT 0,n:"(isp)
": NEXT n
5 INK 0: PRINT AT 19,1: INK 1
: FLASH 1: "a": PRINT AT 19,3: "a"
: PRINT AT 19,4: "f": PRINT AT 19
,7: "a": PRINT AT 19,9: "a": PRINT
AT 19,10: "a": PRINT AT 19,11: "a
"
6 PRINT AT 19,13: "f": PRINT A
T 19,14: "f": PRINT AT 19,16: "a":
PRINT AT 19,19: "a": PRINT AT 19
,20: "a": PRINT AT 19,24: "a"
7 INK 1: PRINT AT 2,2:"999999
999 99 9 99"
8 PRINT AT 3,3:"99 9 9 9 9
99 9 9 "
9 FOR n=0 TO 5: INK 2: CIRCLE
240,160,n: NEXT n: INK 0
10 LET a=4: LET b=1
20 PRINT AT 21,17:"SHOTS LEFT=
":shot: PRINT AT 21,0:"SCORE= "
:sc: PRINT AT a,b: "cd": BEEP .0
03,40
21 IF sc=0 THEN PRINT AT 21,8
,"": PRINT AT 21,0:"SCORE= "
:sc
22 IF sc>=1000 THEN GO TO 600
0
23 IF SC=-50 THEN PRINT AT 21
,10: " "
24 IF SHOT=9 THEN PRINT AT 21
,30: " "
25 IF SC=50 THEN PRINT AT 21,
10: " "
30 LET b=b+1
40 FOR z=0 TO 5: IF b=25 THEN
LET b=1: LET a=4: PRINT AT 4,25
," "
50 IF INKEY$="D" OR INKEY$="d"
THEN LET shot=shot-1: PRINT AT
a,b,"": GO TO 99
60 GO TO 20
99 IF shot=0 THEN PRINT INVE
RSE 1: FLASH 1: AT 11,10:"GAME OV
ER": FOR N=0 TO 500: NEXT N: GO
TO 6000
100 PRINT AT a,b,"": LET a=a+1
: BEEP .05,A+5
101 PRINT AT a,b:"e": FOR z=0 T
O 5: NEXT z
104 IF a=19 AND b=1 THEN PRINT
AT a,b: FLASH 1: INK 2:"b": LET
sc=sc+200: GO TO 10
105 IF a=19 AND b=3 THEN PRINT
AT a,b: FLASH 1: INK 2:"b": LET
sc=sc+50: GO TO 10
106 IF a=19 AND b=4 THEN PRINT
AT a,b: FLASH 1: INK 2:"b": LET
sc=sc+100: GO TO 10
107 IF a=19 AND b=7 THEN PRINT
AT a,b: FLASH 1: INK 2:"b": LET
sc=sc+50: GO TO 10
108 IF a=19 AND b=9 THEN PRINT
AT a,b: FLASH 1: INK 2:"b": LET
sc=sc+50: GO TO 10
109 IF a=19 AND b=10 THEN PRIN
T AT a,b: FLASH 1: INK 2:"b": LE
T sc=sc+50: GO TO 10
110 IF a=19 AND b=11 THEN PRIN
T AT a,b: FLASH 1: INK 2:"b": LE
T sc=sc+50: GO TO 10
111 IF a=19 AND b=13 THEN PRIN
T AT a,b: FLASH 1: INK 2:"b": LE
T sc=sc+100: GO TO 10
112 IF a=19 AND b=14 THEN PRIN
T AT a,b: FLASH 1: INK 2:"b": LE
T sc=sc+100: GO TO 10
113 IF a=19 AND b=16 THEN PRIN
T AT a,b: FLASH 1: INK 2:"b": LE
T sc=sc+50: GO TO 10
114 IF a=19 AND b=19 THEN PRIN
T AT a,b: FLASH 1: INK 2:"b": LE
T sc=sc+50: GO TO 10
115 IF a=19 AND b=20 THEN PRIN
T AT a,b: FLASH 1: INK 2:"b": LE
T sc=sc+50: GO TO 10
116 IF a=19 AND b=24 THEN PRIN
T AT a,b: FLASH 1: INK 2:"b": LE
T sc=sc+100: GO TO 10
119 IF a>10 THEN PRINT INK 3:
FLASH 1: AT a,b:"e": BEEP .1,.2:
BEEP .1,1: BEEP .2,1: BEEP .05
,.1: PAUSE 10: PRINT AT a,b,"":
LET sc=sc-200: GO TO 10
300 GO TO 100
301 POKE USR "a",BIN 00011010
302 POKE USR "a"+1,BIN 00111110
303 POKE USR "a"+2,BIN 01111111
304 POKE USR "a"+3,BIN 10011001
305 POKE USR "a"+4,BIN 11111111
306 POKE USR "a"+5,BIN 11111111
307 POKE USR "a"+6,BIN 11100111
308 POKE USR "a"+7,BIN 11001111
309 POKE USR "a",BIN 00101010
310 POKE USR "b",BIN 00101010

```



```

311 POKE USR "b"+1,BIN 10011000
312 POKE USR "b"+2,BIN 10011010
313 POKE USR "b"+3,BIN 00100010
314 POKE USR "b"+4,BIN 01010101
315 POKE USR "b"+5,BIN 11101000
316 POKE USR "b"+6,BIN 11000110
317 POKE USR "b"+7,BIN 10100101
318 POKE USR "c",BIN 10001001
319 POKE USR "c"+1,BIN 01010000
320 POKE USR "c"+2,BIN 00111111
321 POKE USR "c"+3,BIN 01010011
322 POKE USR "c"+4,BIN 10001000
323 POKE USR "c"+5,BIN 00000000
324 POKE USR "c"+6,BIN 00000000
325 POKE USR "c"+7,BIN 00000000
326 POKE USR "d",BIN 11111111
327 POKE USR "d"+1,BIN 00010000
328 POKE USR "d"+2,BIN 11111100
329 POKE USR "d"+3,BIN 11111110
330 POKE USR "d"+4,BIN 11111110
331 POKE USR "d"+5,BIN 00111100
332 POKE USR "d"+6,BIN 00010001
333 POKE USR "d"+7,BIN 11111110
334 POKE USR "e",BIN 00000000
335 POKE USR "e"+1,BIN 00011000
336 POKE USR "e"+2,BIN 00111100
337 POKE USR "e"+3,BIN 00011000
338 POKE USR "e"+4,BIN 00011000
339 POKE USR "e"+5,BIN 00100100
340 POKE USR "e"+6,BIN 00111100
341 POKE USR "e"+7,BIN 00011000
342 POKE USR "f",BIN 11111111
343 POKE USR "f"+1,BIN 10011001
344 POKE USR "f"+2,BIN 11111111
345 POKE USR "f"+3,BIN 10011001
346 POKE USR "f"+4,BIN 11111111
347 POKE USR "f"+5,BIN 10011001
348 POKE USR "f"+6,BIN 11100111
349 POKE USR "f"+7,BIN 11100111
350 POKE USR "g",BIN 00111000
351 POKE USR "g"+1,BIN 00111100
352 POKE USR "g"+2,BIN 01000001
353 POKE USR "g"+3,BIN 10000001
354 POKE USR "g"+4,BIN 01000011
355 POKE USR "g"+5,BIN 01000001
356 POKE USR "g"+6,BIN 00100100
357 POKE USR "g"+7,BIN 00000000
900 RETURN
1000 LET A$="*****Q 1983
*****
~CHOPPER CO
NTROL~ YOU ARE IN CONTRO
L OF A HELICOPTER IN WHI
CH YOU MUST DESTROY ALL THE E
NEMY BASES
..... POINTS RATIO---
a=50 f=100 (flash
in9 a=200) YOUR CHOPPER cd
the d key) MUST BOMB e (with
ALL THE BASES a f
TO MAKE THEM EXPL
ODE b GOOD LUCK!!"
1001 LET O=0: LET P=0: LET G=LEN
A$
1002 FOR N=1 TO G
1003 IF P<32 THEN GO TO 1005
1004 LET O=O+1: LET P=0
1005 PRINT AT O,P: INK 1;" cd"
1006 BEEP RND/50,RND*50
1007 PRINT AT O,P:A$(N): LET P=P
+1
1008 NEXT N
5000 RETURN
6000 CLS : IF SC>HS THEN PRINT
"WELL DONE! YOU HAVE TODAY'S
HIGH SCORE"
6001 PRINT AT 6,0;"DO YOU WANT T
O PLAY AGAIN Y/N?"
6002 INPUT A$
6005 IF A$="Y" OR A$="y" THEN C
LS : GO TO 2
6006 STOP

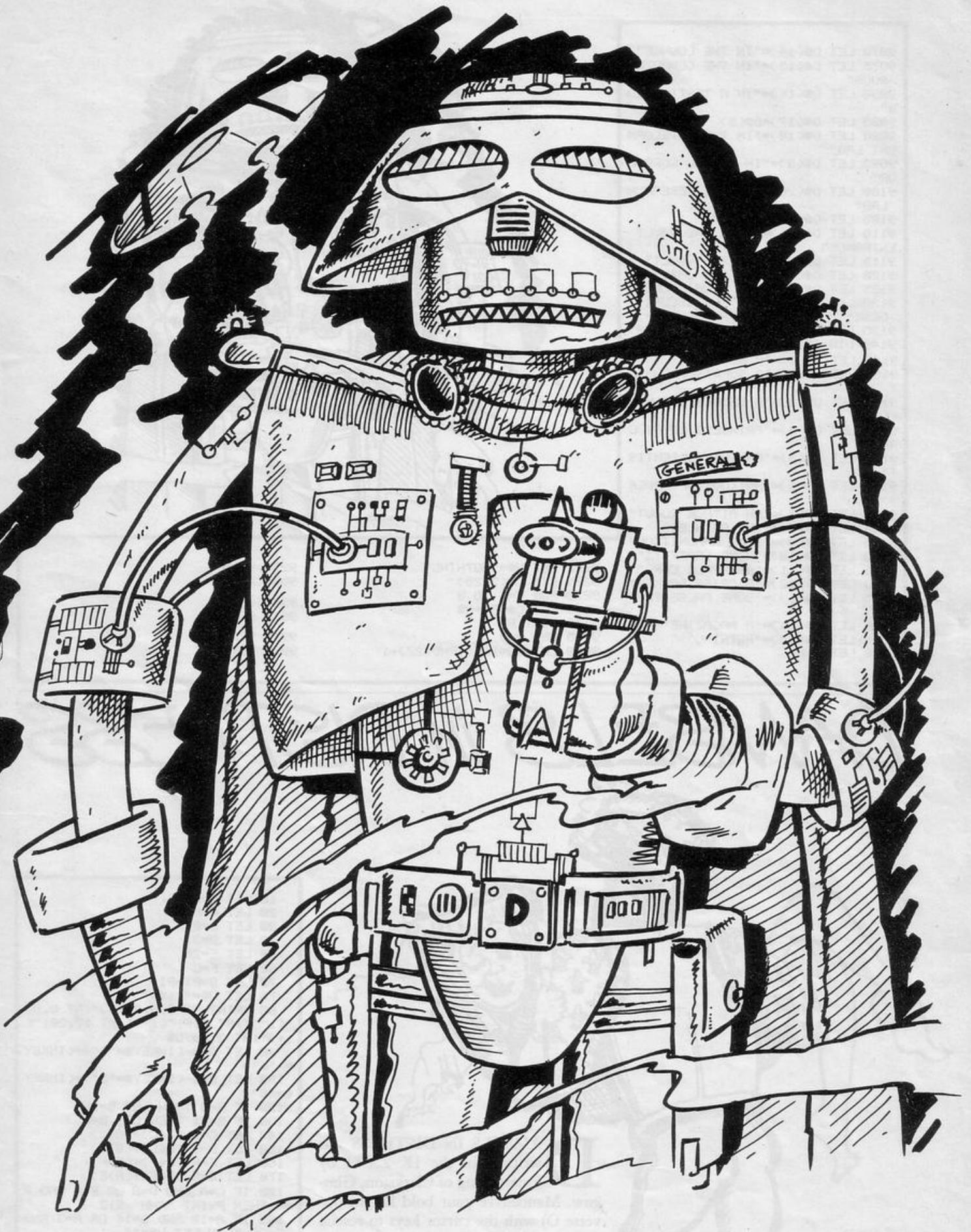
```

GENERAL DOOM

```

5 GOSUB 9900
10 LET S=0*(RU)
15 LET V=0*(INT (RND*15)+1)
17 IF V=0*(8) AND P=1 THEN GO
TO 15
20 PRINT AT 17,0;"I CAN SEE ";
V#
25 GOSUB 9900
30 PRINT AT 17,0;"I AM ";S#
35 GOSUB 9900
40 PRINT AT 17,0;"I AM CARRYIN
G. -"
45 FOR F=1 TO 3
50 PRINT C*(F)
55 NEXT F
60 GOSUB 9900
65 GOSUB 9900
70 PRINT AT 17,0;"WHAT NOW"
75 INPUT A#
78 GOSUB 9900
80 IF A#="T" THEN GOTO 1000
85 IF A#="D" THEN GOTO 2000
90 IF A#="Q" THEN GOTO 3000
95 IF A#="P" THEN GOTO 4000
100 IF A#="S" THEN GOTO 5000
105 IF A#="H" THEN GOTO 6000
110 IF A#="R" THEN GOTO 7000
115 IF A#="M" THEN GOTO 8000
120 GOTO 70
1000 REM TAKE
1005 IF V=0*(2) OR V=0*(5) OR
V=0*(7) OR V=0*(10) THEN GOTO
20
1010 IF C*(1,1 TO 7)<>N# AND C*(
2,1 TO 7)<>N# AND C*(3,1 TO 7)<>
N# THEN GOTO 20
1015 IF C*(1,1 TO 7)=N# THEN GOT
0 1030
1020 IF C*(2,1 TO 7)=N# THEN GOT
0 1040
1025 IF C*(3,1 TO 7)=N# THEN GOT
0 1050
1030 LET C*(1)=V#
1035 GOTO 1070
1040 LET C*(2)=V#
1045 GOTO 1070
1050 LET C*(3)=V#
1070 PRINT AT 17,0;"O.K."
1072 IF V=0*(3) THEN LET S=S+5
1073 IF V=0*(8) THEN LET S=S+50
1074 IF V=0*(8) THEN LET P=1
1075 GOSUB 9900
1077 LET V=N#
1080 GOTO 20
2000 REM DRUP
2005 PRINT AT 17,0;"DRUP WHAT(1,
2,3)"
2010 INPUT DR
2015 IF DR<1 OR DR>3 THEN GOTO 2
010
2017 IF C*(DR)=0*(3) THEN LET S=
S-5
2020 LET C*(DR)=N#
2025 GOSUB 9900
2030 GOTO 20
3000 REM QUIT
3005 FAST
3010 CLS
3015 SLOW
3020 STOP
3025 GOTO 10
4000 REM PRESS
4005 IF RO<>2 THEN GOTO 20
4010 GOSUB 9900
4015 PRINT AT 17,0;"-----b1
ast off-----"
4020 FOR F=1 TO 6
4025 GOSUB 9900
4030 NEXT F
4035 LET S=S+50
4037 IF P=0 THEN LET S=S-30
4040 IF P=0 THEN GOTO 8700
4050 IF P=1 THEN GOTO 8500
5000 REM SHOOT
5005 IF V<>0*(2) AND V<>0*(5)
AND V<>0*(7) THEN GOTO 20
5010 IF C*(1)<>0*(1) AND C*(2)<>
0*(1) AND C*(3)<>0*(1) THEN GOTO
20
5015 IF C*(1)<>0*(9) AND C*(2)<>
0*(9) AND C*(3)<>0*(9) THEN GOTO
20
5020 IF INT (RND*3)=1 THEN GOTO
5300
5025 PRINT AT 17,0;"ZZZZZAP YOU
VAPORIZED HIM"
5030 LET V=N#
5032 LET S=S+10
5033 GOSUB 9900
5035 GOTO 20
5300 PRINT AT 17,0;"I HAVE BEEN
SHOT..CROAK..GROAN...."
5305 FOR F=1 TO 6
5310 GOSUB 9900
5315 NEXT F
5320 GOTO 8700
6000 REM HIT
6005 IF INT (RND*3)=1 THEN GOTO
6500
6010 PRINT AT 17,0;"YOU SMASHED
HIM"
6015 GOSUB 9900
6020 FOR F=1 TO 3
6025 IF C*(F)=0*(1) THEN PRINT A
T 17,0;"HE DENTED YOUR BLASTER"
6030 IF C*(F)=0*(6) THEN PRINT A
T 17,0;"HE HEAD BUTTED YOUR SIGN
"
6035 IF C*(F)=0*(9) THEN PRINT A
T 17,0;"HIS HEAD CRUNCHED YOUR A
MMO"
6040 SCROLL
6045 NEXT F
6050 GOSUB 9900
6052 LET S=S+10
6053 LET V=N#
6055 GOTO 20
6500 PRINT AT 17,0;"HE HURT ME,T
HE BULLY"
6505 FOR F=1 TO 6
6510 GOSUB 9900
6515 NEXT F
6520 GOTO 8900
7000 REM RUN
7001 IF V<>0*(2) AND V<>0*(5)
AND V<>0*(8) THEN GOTO 20
7005 IF INT (RND*3)=1 THEN GOTO
7500
7010 PRINT AT 17,0;"I OUT RAN HI
M"
7015 GOSUB 9900
7020 LET RO=RO+2
7025 IF RO>27 THEN LET RO=1
7030 GOTO 10
7500 PRINT AT 17,0;"HE HAS CAUGH
T ME"
7505 GOSUB 9900
7510 PRINT AT 17,0;"I WILL HIT H
IM"
7515 GOSUB 9900
7520 GOTO 6000
8000 REM MOVE
8005 PRINT AT 17,0;"F/B/S"
8010 INPUT Z#
8015 IF Z#="F" THEN LET RO=RO+1
8020 IF Z#="B" THEN LET RO=RO-1
8025 IF RO<1 OR RO>27 OR Z#="S"
THEN LET RO=INT (RND*27)+1
8027 LET S=S+1
8028 GOSUB 9900
8030 GOTO 10
8500 REM WIN
8501 PRINT AT 0,0;
8505 PRINT "WE HAVE SAVED THE PR
INCESS AND ";AT 5,0;"WE ARE NOW
HEROS"
8510 PRINT AT 15,0;"SCORE=";S
8515 PAUSE 9000
8520 GOTO 3000
8700 REM NO PRINCESS
8701 PRINT AT 0,0;
8705 PRINT "WE WILL BE HATED BY
EVERYONE ";AT 5,0;"BECAUSE WE FO
RGOT THE PRINCESS"
8710 GOTO 8510
8900 REM FAIL
8901 PRINT AT 0,0;
8905 PRINT "WE HAVE FAILED OUR M
ISSION"
8910 GOTO 8510
8999 STOP
9000 FAST
9002 DIM D*(27,60)
9005 LET D*(1)="IN THE STORAGE C
OMPARTMENT THERES AN ELEVATOR HE
RE"
9010 LET D*(2)="IN MY SPACE SHIP
,A RED BUTTON SAYS<<BLAST OF
F>>"
9015 LET D*(3)="NEXT TO MY SPA
CE SHIP"
9020 LET D*(4)="ON THE FLIGHT DE
CK OF GENERAL DOOMS BATTLE
CRUISER"
9025 LET D*(5)="IN A HALLWAY"
9030 LET D*(6)="IN THE SUPPLY DE
POT"
9035 LET D*(7)=D*(5)
9040 LET D*(8)="IN THE STRATEGY
PLANNING ROOM"
9045 LET D*(9)="IN THE DECONTAM
INATION CENTRE"
9050 LET D*(10)="IN THE TRACTOR
BEAM CONTROL ROOM"
9055 LET D*(11)="IN THE WOMENS T
OILETS"
9060 LET D*(12)="IN THE WOMENS B
ATHROOM"
9065 LET D*(13)="IN THE INTERROG
ATION ROOM"

```



WICKED GENERAL DOOM has captured Princess Leya. Your mission is to find her and take her to safety in your spaceship. Commands to use are T(take), D(drop),

Q(quit), P(press), S(shoot), H(hit), R(run), M(move). Once you have entered M you will be asked F/B/S? (forward, backward, sideways).

You can shoot only when you have a

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

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

```

9070 LET D*(14)="IN THE LOUNGE"
9075 LET D*(15)="IN THE COMPUTER
ROOM"
9080 LET D*(16)="IN A TESTING LA
B"
9085 LET D*(17)=D*(5)
9090 LET D*(18)="IN THE DEVELOPM
ENT LAB"
9095 LET D*(9)="IN A LONG CORRID
OR"
9100 LET D*(20)="IN THE RESEARCH
LAB"
9105 LET D*(23)="LOST"
9110 LET D*(21)="NEAR THE VAULT
ENTRANCE"
9115 LET D*(22)="IN THE VAULT"
9120 LET D*(24)="IN THE JAIL"
9125 LET D*(25)="IN A JAIL CELL"
9130 LET D*(26)="AT THE SECURITY
DESK"
9135 LET D*(27)="IN AN ELEVATOR"
9140 DIM C*(15,25)
9145 LET U*(1)="A BLASTER"
9150 LET U*(2)="A SURPRISED GUARD
"
9155 LET U*(3)="A SHINESTONE NEC
KLACE"
9160 LET U*(4)="PRINCESS LEYAS C
APE"
9165 LET U*(5)="AN EVIL SCIENTIS
T"
9170 LET U*(6)="AN<<OUT OF ORDER
>>SIGN"
9175 LET U*(7)="AN ATTACK ROBOT"
9180 LET U*(8)="THE PRINCESS"
9185 LET U*(9)="SOME AMMUNITION"
9190 LET U*(10)="SOME GRAFFITI"
9195 LET U*(11)="AN APPLE CORE"
9200 LET U*(12)="A CRISP PACKET"
9205 LET U*(13)="SOME FALSE TEET
H"
9210 LET U*(14)="A MAGAZINE"
9215 LET U*(15)="NOTHING"
9220 LET S=0

```



```

9222 LET N#="NOTHING"
9225 DIM C*(3,25)
9230 FOR F=1 TO 3
9235 LET C*(F)=N#
9240 NEXT F
9245 LET P=0
9250 LET RO=INT (RND*27)+1
9255 SLOW
9500 RETURN
9900 SCROLL
9910 SCROLL
9915 SCROLL
9999 RETURN

```

DAMSELS IN DISTRESS



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

```

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

```

AGF PROGRAMMABLE JOYSTICK INTERFACE



for
Spectrum
or **ZX81**

ABOUT OUR PROGRAMMABLE INTERFACE

Surpassing the outstanding specification of our Interface Module II which still offers the best software support at its price, a Joystick Interface that is compatible with ALL SOFTWARE through its unique hardware programmable design.

The Interface plugs on to the rear connector of your ZX81 or ZX Spectrum.

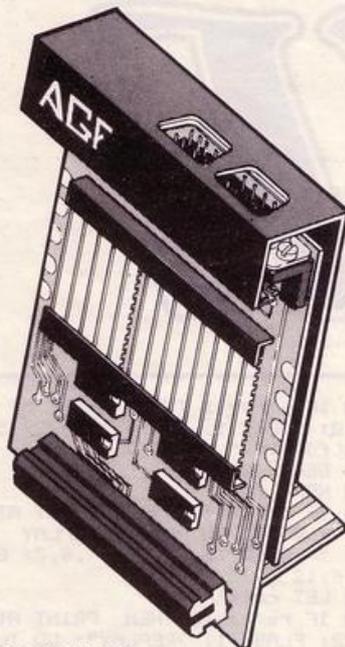
Quick clip-on connections, which are configured from a reference card supplied, allow you to define which of the forty keys are simulated by which action of the Joystick. A pack of ten Quick Reference Programming Cards makes setting for your favourite games even easier. These can be filled in to show at a glance the configuration required and stored in the cassette case of the particular game. When you change to a game using different keys the module is re-programmed in a few seconds.

As with our Interface Module II the Programmable Interface accepts all standard switch Joysticks that are Atari-compatible. Two sockets are available which are connected together for two player games which use the same keys for both players.

The Interface resides in the keyboard address space and does not affect its operation or interfere with any other add-ons. A rear extension edge connector will accommodate expansion of your system.

The unique AGF key simulation principle makes it extremely easy to incorporate Joystick action in your own programs. All eight directions and fire are read by simple BASIC.

With every order comes a free demonstration program called 'Video Graffiti' plus a full set of instructions.



KEY FEATURES

- ★ Programmable design gives TOTAL software support.
- ★ Accepts Atari, Competition Pro, Wico, Starfighter, Quick Shot, Le Stick etc.
- ★ Rear extension connector for all other add-ons.
- ★ Free demo program and instructions.

PACKAGE CONTENTS SUPPLIED

- Programmable Interface Module as illustrated, complete with clip-on programming leads.
- Self adhesive programming chart detailing how to define which key is simulated by UP, DOWN, LEFT, RIGHT, and FIRE. This can be fixed on to the case of your computer or if preferred the protective backing can be left on. The chart is made of a very durable reverse printed plastic and is extremely easy to read.
- One pack of ten Quick Reference Programming Cards for at-a-glance setting to your games requirements. The card allows you to mark the configuration in an easy to read fashion with space to record the software title and company name.
- Video Graffiti demonstration program which is written totally in BASIC to illustrate how all eight directions and fire can be read. This is also a useful high resolution drawing program.
- 12 months guarantee and full written instructions.

JOYSTICKS ATARI CONTROLLERS

FOR USE WITH OUR INTERFACE Module or VIC 20, Commodore 64, Atari VCS, Atari 400, Atari 800

If you require extra Joysticks for our original interface module mark order 'OLD' Joysticks

ONLY £7.54 inc VAT + P&P

FROM: MR/MRS/MISS			
ADDRESS			
SEND C.W.O. (NO STAMP NEEDED) TO: A.G.F. HARDWARE, DEPT. SPR			
FREEPOST, BOGNOR REGIS, WEST SUSSEX, PO22 9BR			
QTY	ITEM	ITEM PRICE	TOTAL
	PROGRAMMABLE INTERFACE	33.95	
	JOYSTICK(S)	7.54	
	PACK(S) QUICK REFERENCE CARDS	1.00	
ONE	VIDEO GRAFFITI	FREE	
ZX81 <input type="checkbox"/> ZX SPECTRUM <input type="checkbox"/>		Please tick	FINAL TOTAL
DEALER ENQUIRIES WELCOME		EXPORT PRICES ON APPLICATION	



```

610 FOR f=0 TO 32
620 PRINT AT 0,0;:a#( TO 32)
630 LET a#:=a#(2 TO )+a#(1)
640 BEEP .01,00DE a#(f+32)/3
650 NEXT f
660 BEEP .5,36: RETURN
1000 BORDER 2: PAPER 1: BRIGHT 1
: INK 6: CLS
1010 PRINT "-----LEAVE-ONE
-----"
1020 PRINT TAB 10; INK 4;"(11*19
3)"
1030 PRINT : PRINT TAB 2;" Leav
e-one is a version of Solita
ire. The object of the game i
s to JUMP over Pieces horizo
ntally, vertically or diagon
ally, until only one Piece
remains."
1040 PRINT : PRINT " DON'T CHER
T...the SPECTRUM will recog
nise any illegal move and
ignore you."
1050 PRINT : PRINT " To make a
move you type the number of
the column then the number
of the row. You do this tw
ice once for the Piece you
wish to move and then fo th
e Place you wish to JUMP it
to."
1060 PRINT (0; PAPER 1;"PRESS AN
Y KEY
1070 IF INKEY#(">)" THEN GO TO 1
090
1080 BEEP .1,0: PAUSE 100: GO TO
1070
1090 FOR f=1 TO 3: BEEP .1,0: BE
EP .1,19: BEEP .1,24: BEEP .1,7:
NEXT f: BEEP .1,0
1100 DIM z#(640): PRINT AT 2,0;
PAPER 1;:z#( PRINT AT 6,0;" If v
ou find yourself in the Posi
tion that you cannot JUMP
another Piece you must Pres
s ~q~.This will abort the
game and you will see an a
ction replay of your move
s. If you succeed the SPEC
TRUM will know and you will
be congratulated.
1130 IF INKEY#="" THEN GO TO 11
30
1140 FOR f=1 TO 3: BEEP .24,0: B
EEP .1,19: BEEP .1,12: BEEP .1,1
9: NEXT f: BEEP .1,24
1150 RETURN
9999 SAVE "LEAVE-ONE" LINE 10

```

FOOTBALL POOLS PROGRAM

- The program lists out, in order of preference, the sixteen most likely score-draws: also the sixteen most likely homes, draws and aways.
- It picks out the results on the bookmakers' FIXED ODDS coupons that have been given over-generous odds. Calculates your expected profit!
- The program will be initialised to the English and Scottish league tables. You will be able to update these league tables week by week as results come in — or enter a complete new set of league tables in other words, the program will never become 'out of date'!
- All programs are recorded on a top quality cassette (usually Sony) and are accompanied with an instruction leaflet giving a brief explanation of the theory.

Available for the ZX-81 16K (Price **£8.95**) and the ZX Spectrum 48K (Price **£9.95**) from:

HARTLAND SOFTWARE
(Dept. R), 8 Penzance Place,
London W11 4PA.

SPECTRUM

DUAL FUNCTION JOYSTICK INTERFACE

£13.95 INC

WHY PAY £35 FOR 2 INTERFACES WHEN YOU CAN BUY OUR DUAL INTERFACE FOR JUST £13.95 INC.



FEATURES

- ★ Compatible with any software that list the Kempston Joystick.
- ★ Compatible with any software that uses cursor keys.
- ★ Compatible with most Psion/Melbourne House games e.g. Terror Daktil, Horace Goes Ski-ing etc.
- ★ Allows the use of Atari/Le Stick type joystick.
- ★ Eight directions can be programmed in simple basic.
- ★ Free draw programme and full instructions supplied.

STANDARD INTERFACE FEATURES

Same as Dual Interface

- ★ But only compatible with any software that lists the Kempston Joystick

ZX-81/SPECTRUM

LOADING PROBLEMS SOLVED WITH

The **CODER** as reviewed in the Sinclair User August '83 **£9.95 INC**

DUAL INTERFACE£13.95 inc
STANDARD INTERFACE£10.95 inc

£1 discount if joystick ordered with any interface e.g. Dual/Int & Joystick £19.45 inc

Send Cheques/P.O. to:

JILES ELECTRONICS

48 Parkway, Chellaston, Derby DE7 1QZ. Tel: (0332 703892)

Overseas orders add £2.00

More

fun & games from your Spectrum with the intelligent interface+program+joystick and for only **£34.90**

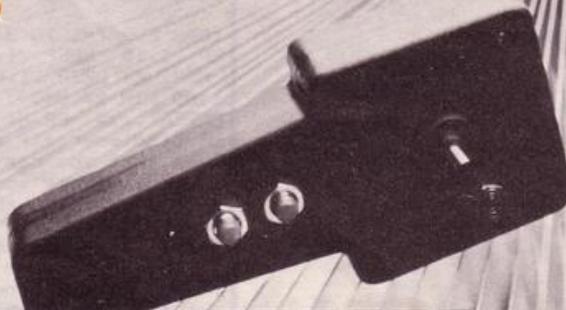
Interface: * for Spectrum * 1k on board memory * own rear edge connector — for printers etc * compatible with ALL standard joysticks
Joystick: * self centring * 8 directional microswitched action * 2 independent fire buttons **Tape:** * easy to use program, the interface WORKS ON ALL SOFTWARE * keeps a record of all your games — so you only need to tell it about each game once!

Special Christmas offer
order two complete sets and pay only £59.90



CAMBRIDGE COMPUTING

Cambridge Computing
1 Benson Street, Cambridge CB4 3QJ
Telephone: 0223 322905



To Cambridge Computing
1 Benson Street, Cambridge CB4 3QJ
Telephone: 0223 322905

Name _____

Address _____

Please send me:
Joystick, Interface and Tape at £29.90 — Interface and Tape at £24.00
— Joystick only at £7.90 — For Spectrum

I enclose cheque/postal order * for £ made payable to Cambridge Computing.
* delete as necessary.

SP1

BARGAIN-HUNTERS READ THIS!

Whatever your model of Sinclair computer—you can get HOURS of fun, intellectual satisfaction and education for just 95p per month!

A bargain?

That's **Sinclair Programs** magazine—the fat, glossy magazine that's **PACKED** with original, tested programs for you to load and run.

With **Sinclair Programs** every month you can build the library of programs that suits your mood: in recent issues we have challenged our readers with programs to test their skill at Sharpshooter or Laser Cannon . . . jolt their brain cells with Quadratic Equation or Monster Maths . . . or take a practical turn with their own word processor program or graphic generator.

That is just a fraction of what you get from **Sinclair Programs**. Each month we have 40 programs for owners of ZX80s, ZX81s and Spectrums. But make sure you don't have to hunt TOO far for your bargains—**Sinclair Programs** always sells out quickly, so order yours TODAY from your newsagent, or fill in the form below and we will send it direct to you, every month.



Mail to: ECC Publications Limited, 196-200 Balls Pond Road, London N1 4AQ Yes — I'd like to subscribe to
Sinclair Programs (12 issues — price £13.20) I enclose a cheque for £ _____ Please charge my
 credit card Card: name _____ Number _____
 Name _____ Address _____
 Signature _____ Date _____

NB This offer applies to UK subscribers only. Overseas rates available on request

Now you can take a new

AMERICAN look at your Sinclair!

With the new **Timex Sinclair User** magazine to link YOU into a huge network of American enthusiasts

Published monthly since May, Timex Sinclair User has taken the States by storm. It is packed full of news, reviews, programs and user information . . . linking you into the vast Timex Sinclair User network.

Remember, this is a new magazine written from the American viewpoint — but it could open up whole new horizons for you on your Sinclair enjoyment. Take the new American view by ordering right away and see how the U.S.A. welcomed the Sinclair!

The success of the Sinclair ZX80, ZX81 and Spectrum in the U.K. has been phenomenal. But in the States the Sinclair has been given a real American welcome — making the Sinclair range the biggest seller in the world! The American ZX81 equivalent: "The Timex Sinclair 1000" from the giant Timex organisation, has been bought by hundreds of thousands of enthusiasts.

The success of 'Sinclair User' magazine in the U.K. followed a similar pattern — so now we have matched the U.S.A. enthusiasm with a brand new U.S.A. magazine — *the Timex Sinclair User!*

Annual subscription rate is £20. Single copies are £2 (including P & P).

Fill in the order form NOW to discover the American way of computing!

Send to: **TIMEX SINCLAIR USER, ECC Publications Ltd., 196-200 Balls Pond Road, London N1 4AQ**

Yes, I want to subscribe to **TIMEX SINCLAIR USER** at the special U.K. rate of £20 for 12 issues delivered to my door.

Name _____

Address _____

I enclose a cheque/P.O. for £ _____

Please charge my credit card

Card Name _____

Card Number _____

Signature _____

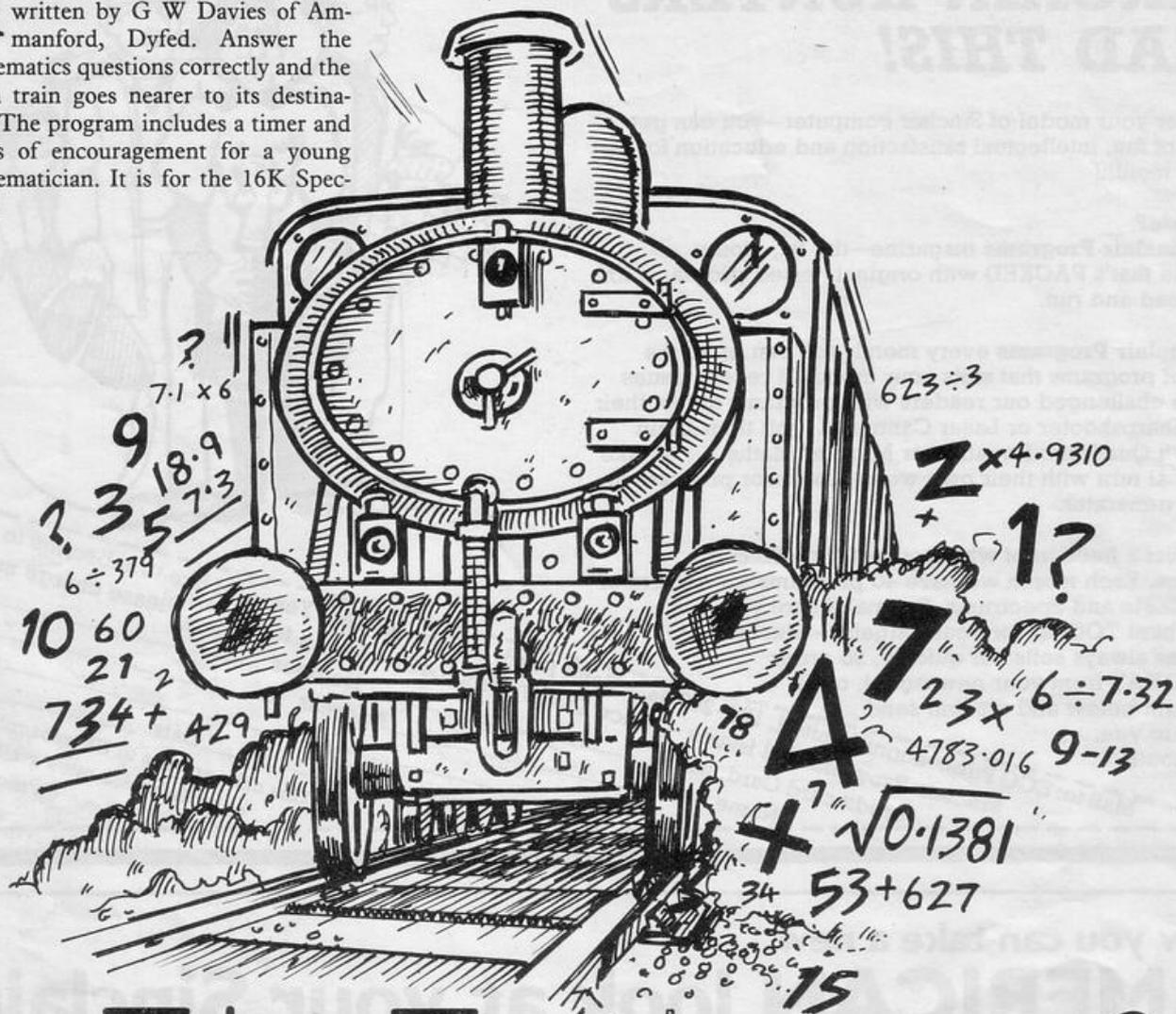
Date _____

N.B. This offer applies to UK subscribers only. Overseas rates available on request.

N.B. Subscribers to Sinclair Programs or Sinclair Projects should be aware that Timex Sinclair User will occasionally reproduce top articles that have appeared in our U.K. magazines.



ARITHMETIC EXPRESS was written by G W Davies of Ammanford, Dyfed. Answer the mathematics questions correctly and the steam train goes nearer to its destination. The program includes a timer and words of encouragement for a young mathematician. It is for the 16K Spectrum.



ARITHMETIC EXPRESS

```

1 GO SUB 305
2 PRINT AT 6,0;"PLEASE TYPE Y
OUR NAME AND PRESS ENTER"
4 INPUT N#
5 CLS
6 PRINT TAB 2;"HELLO,";N#
10 LET Y=10
20 LET X=0
30 PRINT AT 3,0;"SKILL 1,2 UR
3?"
40 INPUT A#
50 LET A=INT (RND*10)
60 LET B=INT (RND*10)
70 LET C=INT (RND*10)
80 LET D=INT (RND*10)
85 LET E=INT (RND*10)
87 LET F=INT (RND*10)
90 CLS
100 PRINT AT Y,X;"(197'194' 195
)"
110 PRINT AT Y+1,X;"(195'3*1sP)
"
120 PRINT AT Y+2,X;"(197'94'1sP
'193'94)"
130 PRINT AT 13,0;"-----
"
140 PRINT AT 0,0;"GET TO THE EN
D"
150 IF A#="1" THEN PRINT AT 5,
0;A;"+";B
160 IF A#="2" THEN PRINT AT 5,
0;C;"*";D
165 IF A#="3" THEN PRINT AT 5,
0;E;"-";F
170 LET H=A+B
180 LET K=C*D
185 LET M=E-F
190 INPUT Z
200 IF A#="1" AND Z=H THEN GO
TO 250
210 IF A#="2" AND Z=K THEN GO
TO 250
215 IF A#="3" AND Z=M THEN GO
TO 250
218 FOR J=1 TO 3: BEEP .1,-30:
NEXT J
220 PRINT AT 15,0;"WRONG"
225 LET X=X-1
226 IF X<0 THEN CLS : GO TO 10
230 PAUSE 100
240 GO TO 50
250 PRINT AT 9,X+2;"(1sP'93)"
252 IF A#="1" AND Z=H THEN PRI
NT AT 5,3;"=";H
253 IF A#="2" AND Z=K THEN PRI
NT AT 5,3;"=";K
254 IF A#="3" AND Z=M THEN PRI
NT AT 5,3;"=";M
255 LET X=X+1
265 IF X=10 OR X=13 OR X=15 THE
N PRINT AT 15,3;"Good ";N#
266 IF X=10 OR X=12 OR X=15 THE
N PRINT AT 16,3;"keep going"
270 IF X<24 THEN GO TO 300
272 BEEP .4,19: BEEP .2,10
275 PRINT AT 12,29;"(95)"
278 PRINT AT 13,29;"(95)"
280 PRINT AT 14,15;" WELL DONE
"
285 PRINT AT 15,15;N#
286 LET t=FN t()
288 PRINT AT 20,5;"Time taken =
";t-t1;"seconds"
290 STOP
300 PAUSE 50
302 GO TO 50
305 PRINT AT 7,11;"ARITHMETIC"
306 PRINT AT 9,11;"EXPRESS"
307 PAUSE 300
308 CLS
311 PRINT AT 0,3;"The train is
now waiting for the driver"
312 PRINT
313 PRINT "You must obtain corr
ect answers to move the train"
314 PRINT
315 PRINT "Wrong answers put th
e train into reverse"
316 PRINT : PRINT "You should t
ry to improve your time of ar
rival"
317 PRINT
318 PRINT "Time taken is shown
on arrival"
319 PAUSE 800: CLS
320 DEF FN t()=(65536*PEEK 2367
4+256*PEEK 23673+PEEK 23672)/50:
REM secs since start
325 LET t1=FN t()
350 RETURN

```

BMX

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

RIDER

```

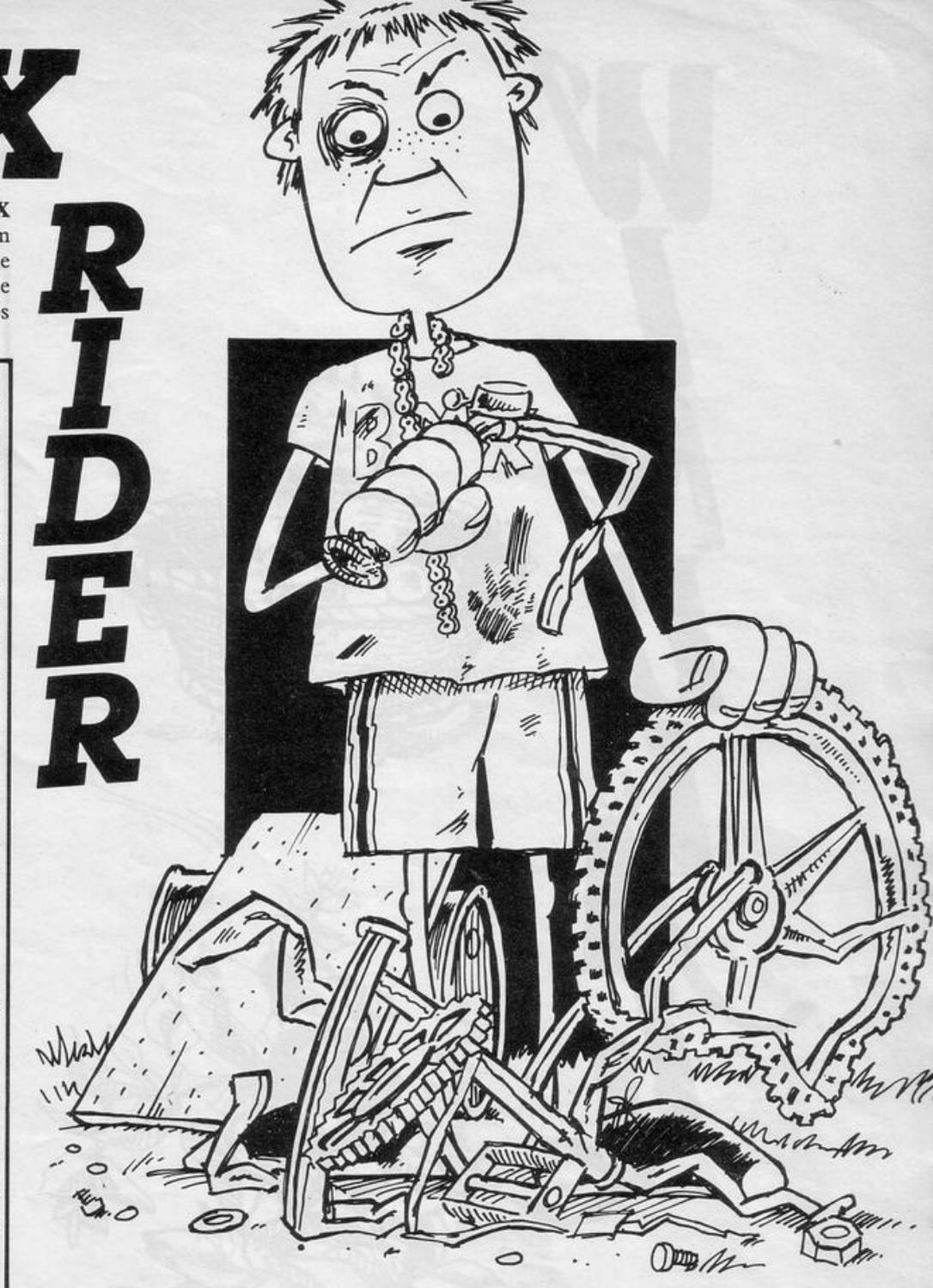
100 CLS
110 PRINT AT 0,10;"(9a: BMX:9d)
"
120 PRINT AT 2,0;" The object o
f the game is to jump 7 death
defin9 ramps.You control your
BMX with keys 'B' to go right
and increase your speed by 2 a
nd '5' to go left and decrease
your speed by 1. You must hit
the ramp at the right speed
to clear it.Each time you cle
ar it the ramp increases in
length.If you clear all 7
ramps you become a BMX rider.Go
od luck!!!"
130 PRINT AT 10,2;"Press any ke
y to start"
140 PAUSE 0
1001 CLS
1005 LET s=10
1010 LET j=1
1015 LET sc=0
1025 PRINT AT 0,0; FLASH 1;"SPEE
D:";s
1030 PRINT AT 0,12; FLASH 1;"SCO
RE:";sc
1035 PRINT AT 0,22; FLASH 1;"JUM
P:";j
1045 PLOT 0,95; DRAW 255,0
1050 PLOT 0,94; DRAW 255,0
1060 LET b#="(9b:93:9c)c"
1065 PRINT AT 9,15;b#
1070 PAUSE 50; BEEP .00,10; BEEP
.01,-2; BEEP .5,3; BEEP .00,10
2005 LET a=0
2010 LET b=9
2015 LET a#="(9a) " : IF INKEY#="
5" THEN LET a#="(9d) "
2020 LET a=a+(INKEY#="B" AND a<2
9)-(INKEY#="5" AND a>0)
2025 PRINT AT b,a;a#
2035 IF INKEY#="B" THEN LET s=s
+2; IF s>99 THEN LET s=99
2040 IF INKEY#="5" THEN LET s=s
-1; IF s<10 THEN LET s=10
2045 PRINT AT 0,0; FLASH 1;"SPEE
D:";s
2050 IF j=1 THEN GO TO 6000
2055 IF j=2 THEN GO TO 6000
2060 IF j=3 THEN GO TO 6000
2065 IF j=4 THEN GO TO 6000
2070 IF j=5 THEN GO TO 6000
2075 IF j=6 THEN GO TO 6000
2080 IF j=7 THEN GO TO 6000
2100 GO TO 2015
3005 PRINT AT b,a;" "
3010 LET b=8; LET a=a+1
3015 PRINT AT b,a;a#
3020 FOR a=14 TO j+15
3025 PRINT AT b,a;a#; PAUSE 3
3030 NEXT a
3035 PRINT AT b,a;" "
3040 LET b=9
3045 PRINT AT b,a;a#
3050 LET J=J+1; LET sc=sc+10; LE
T s=10
3055 PRINT AT 0,22; FLASH 1;"JUM
P:";j; PRINT AT 0,12; FLASH 1;"S
CORE:";sc
3060 IF j=2 THEN LET b#="(9a:2#
93:9c)"
3065 IF j=3 THEN LET b#="(9b:3#
93:9c)"
3070 IF j=4 THEN LET b#="(9b:4#
93:9c)"
3075 IF j=5 THEN LET b#="(9b:5#
93:9c)"

```

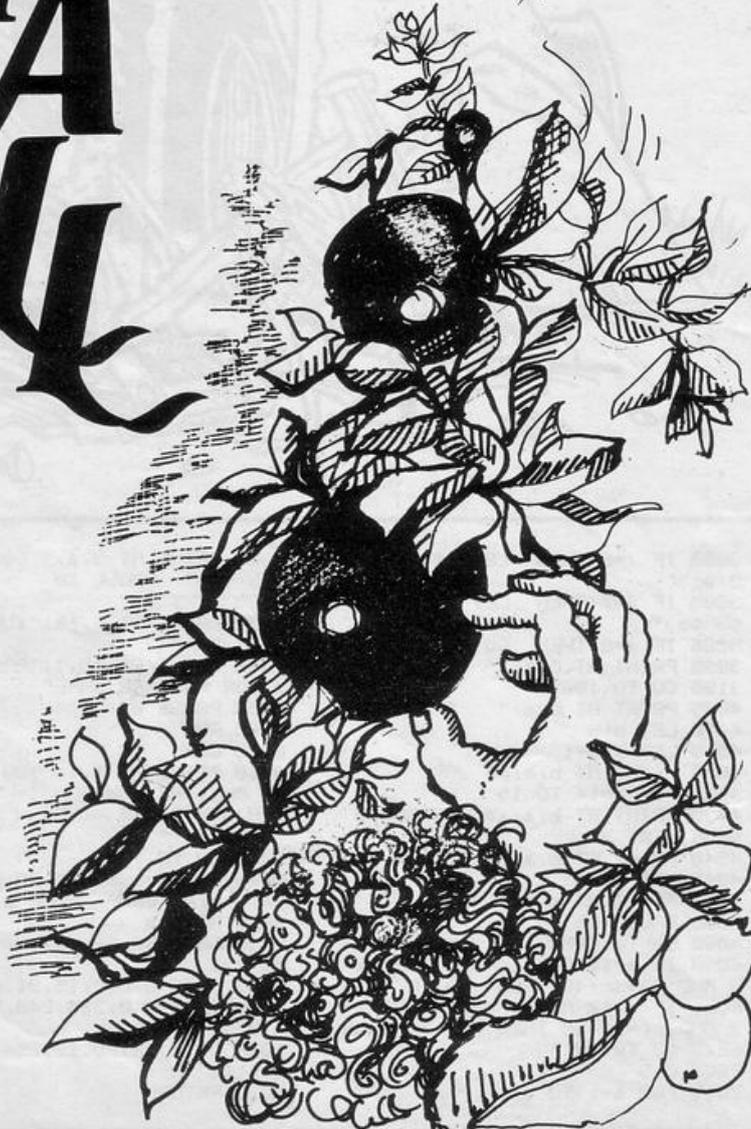
```

3080 IF j=6 THEN LET b#="(9b:6#9
3:9c)"
3085 IF j=7 THEN LET b#="(9b:7#
93:9c)"
3090 IF j=8 THEN GO TO 8000
3095 PRINT AT b,a;" "
3100 GO TO 1065
4005 PRINT AT b,a;" "
4010 LET b=8
4015 LET a=a+1
4020 PRINT AT b,a;a#
4025 FOR a=14 TO 15
4030 PRINT AT b,a;a#; PAUSE 10
4035 NEXT a
4040 PRINT AT b,a;" "
4045 LET b=9
4050 PRINT AT b,a;"(9a.)"
4055 PAUSE 50
4060 GO TO 7000
6000 IF a=12 AND s<sc+32 OR a=1
2 AND s>sc+40 THEN GO TO 4000
6005 IF a=12 AND s>sc+40 OR a=1
2 AND s<sc+50 THEN GO TO 3000
6010 GO TO 2015
7005 CLS
7015 FOR a=1 TO 9
7020 PRINT AT 3,a;" (9a:YOU CRAS
HED:9d)"; PAUSE 10
7025 NEXT a
7030 PRINT AT 9,10;"YOU SCORED:"
;sc
7040 PRINT AT 15,1;"PRESS ANY KE
Y FOR ANOTHER GAME"
7050 PAUSE 0
7060 RUN
8005 CLS
8010 PRINT AT 5,1;"YOU HAVE JUMP
ED ALL THE RAMPS YOU ARE NU
W A BMX RIDER WELL
DONE!!!!"
8020 GO TO 7030
9000 FOR z=USR "a" TO USR "d"+7
9010 READ user: POKE z,user
9020 NEXT z
9030 DATA 48,56,48,127,118,153,1
53,102
9040 DATA 0,0,7,15,31,63,127,255
9050 DATA 0,0,224,240,248,252,25
4,255
9060 DATA 12,28,12,254,110,153,1
53,102
9070 RETURN

```



WINDFALL



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

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

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

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

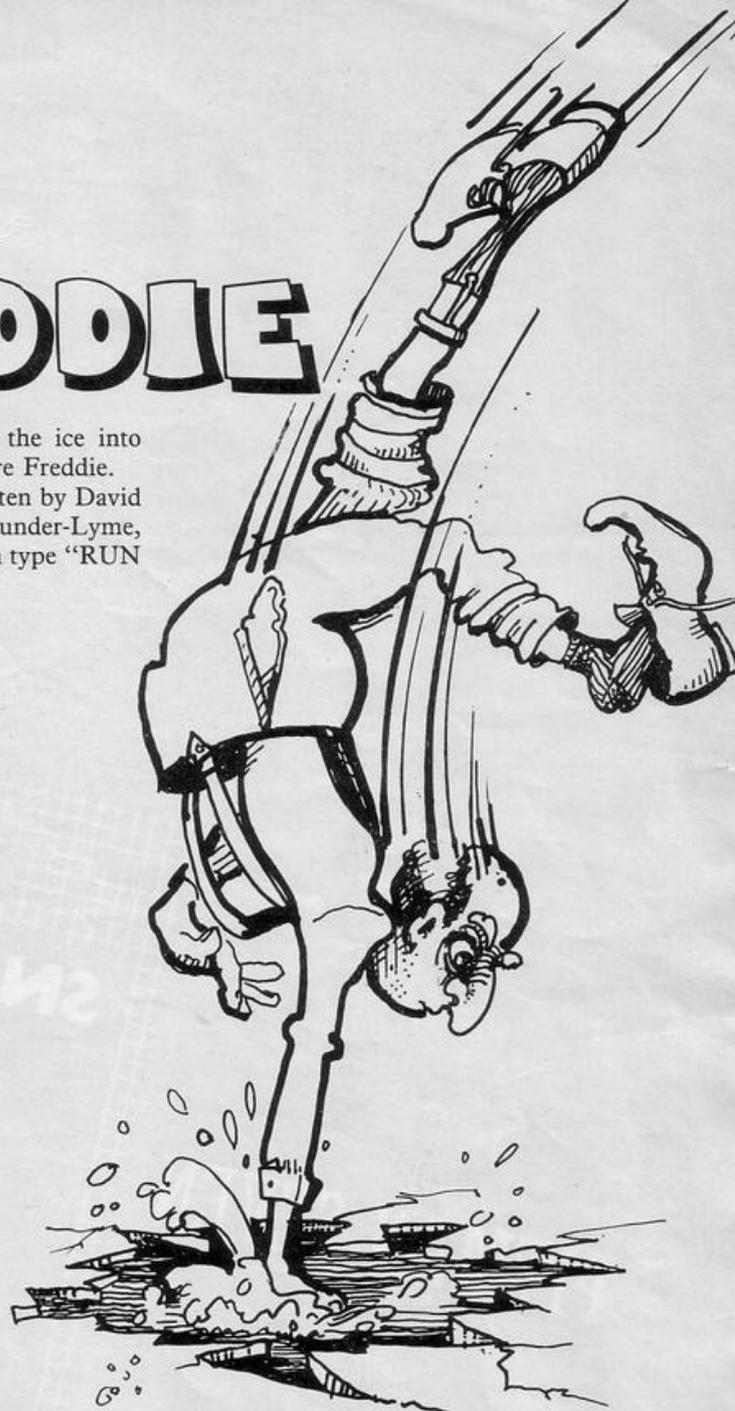
185 IF B=X AND A=Y+1 THEN GOTO 300
186 IF B=X AND A=Y+2 THEN GOTO 300
190 IF Y<1 THEN LET Y=Y+1
192 PRINT AT 19,8;"
"
200 IF Y>26 THEN LET Y=Y-1
205 IF B=21 THEN GOTO 400
210 PRINT AT X,Y;" (9W:9H) "
220 GOTO 157
300 LET Z=Z+5
305 PRINT AT 0,0;"SCORE=";Z
310 GOTO 154
400 CLS
410 PRINT "YOU DROPPED AN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

SAVE FREDDIE

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

there is a small break in the ice into which you must manoeuvre Freddie.

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



```
50 PRINT AT X,Y;"A"
60 LET Y=Y-(INKEY#="5")+<INKEY
#="8")
70 LET X=X+X/X
80 PRINT AT X,Y;"(1)"
90 IF X<>L THEN GOTO 50
100 IF Y<>Q THEN GOTO 500
150 PRINT "BRRR,ITS COLD IN HER
E..."
160 LET T=T+L/L
170 PAUSE L*L
180 CLS
190 LET X=L/L
200 PRINT T
210 LET Y=INT (RND*L)+L/L
220 LET Q=INT (RND*L)+L/L
230 PRINT AT L,Q;"(isp:21*ah:
isp)"
240 PRINT AT L,Q;" "
250 GOTO 50
300 LET L=19
310 LET T=L-L
320 GOTO 180
500 PRINT "SPLATTU"
```

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

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

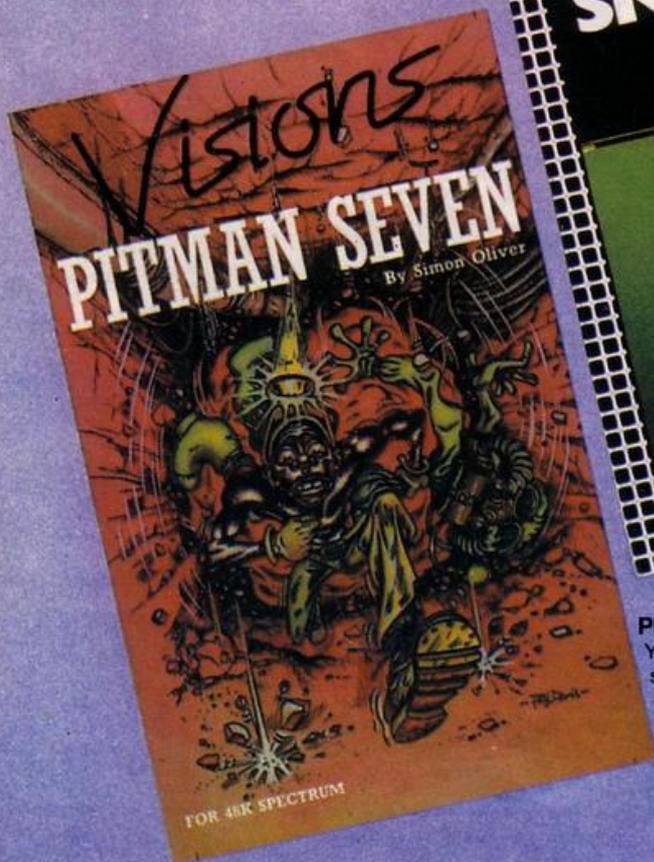
```
10 LET A=11
20 LET S=0
30 PRINT AT 21,INT (RND*26);"*
**"
40 PRINT AT 0,A;
50 IF PEEK (PEEK 16398+256*PEEK
K 16399)=23 THEN GOTO 120
60 PRINT "V"
70 SCROLL
80 IF INKEY#="5" THEN LET A=A-
1
90 IF INKEY#="8" THEN LET A=A+
1
100 LET S=S+10
110 GOTO 30
120 PRINT AT 0,0;S
```

IT'S SNOWING AGAIN



HAVE A HAPP

Here's a sure-fire way of making certain 1984 is packed full of fun for you and your friends. We've searched for brilliant new program sources throughout the U.K. and North America to find an exciting collection of new games — and business programs — many of which cannot be bought by mail order from any other source! These are our latest exclusive offerings.

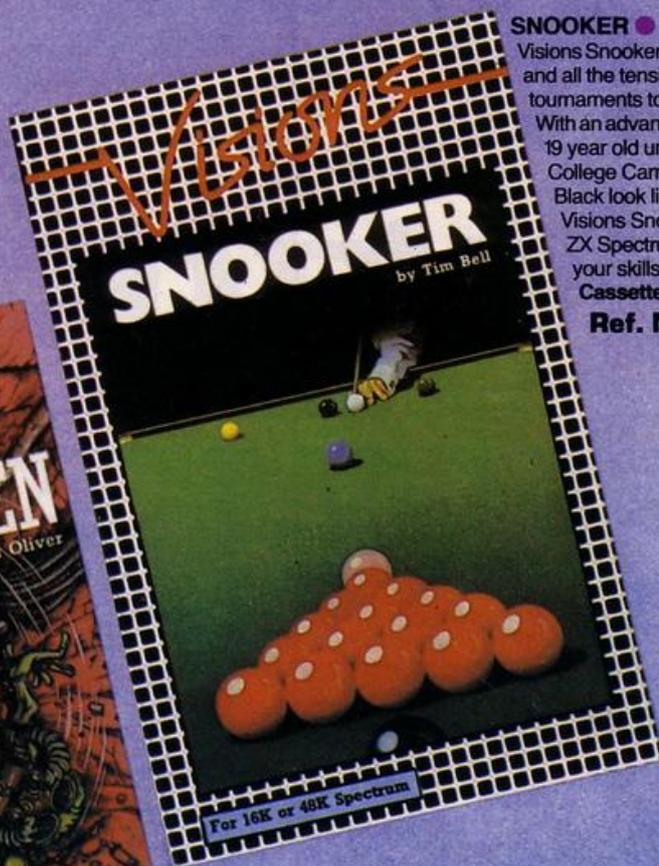


PITMAN SEVEN ●

Your mission is to rescue two teams of seven desperate men, trapped underground on level five. You must bring each man to the surface, surviving the dangers you meet en route.

ZX Spectrum 48K.
Cassette price: £6.95.

Ref. No: 2-52



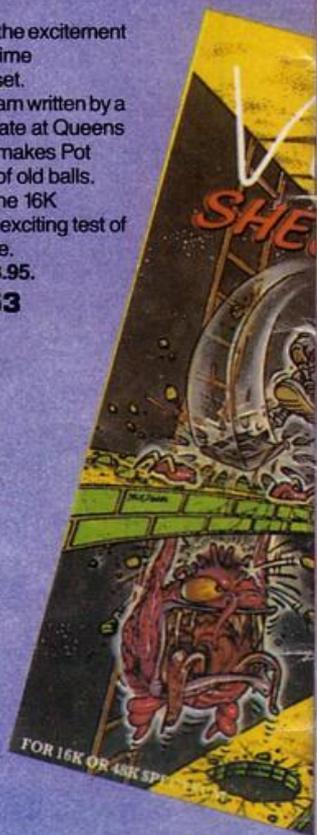
SNOOKER ●

Visions Snooker brings all the excitement and all the tension of big time tournaments to your TV set.

With an advanced program written by a 19 year old undergraduate at Queens College Cambridge, it makes Pot Black look like a load of old balls. Visions Snooker for the 16K ZX Spectrum. It's an exciting test of your skills on the cue.

Cassette price: £8.95.

Ref. No: 2-53



**FREE BLANK C15 COM
WITH EVERY TWO CAS**

Remember there's no limit
cassettes you receive if your c
why not get together with
members and share

GUARA

Order with complete co
not entirely satisfied v
your purchase return
days and we will provi

GREAT VALUE! TREMENDOUS SELECTION! PLUS A FREE OFFER EVERY TIME!

Fill in the order form right away — we're guaranteeing fast delivery, quality and satisfaction [after all, we want you to come back for more!]

**The Software Workshop, Yew Tree, Selborne,
Hants GU34 3JP**

Y NEW YEAR!

And here's a further selection of the latest games, the best-value software for your ZX-81 or Spectrum.

ZX81 Software

1-01 Stock Market

Buy and sell your way to millions! 16K RAM

£3.95

1-02 Football League

First division fun for the soccer enthusiast. 16K RAM

£3.95

1-03 Test Match

Match your wits alongside the superstars. 16K RAM

£3.95

1-12 Avenger

Avoid missiles and bombs to become the ruler. 16K RAM

£4.95

1-13 Protector

Defend your own ship from oncoming attackers. 16K RAM

£4.95

1-31 Comp-U-Share

Investment management program for unit trusts, shares and loan stocks. Complete documentation included. 16K RAM

£9.95

2-14 Meteor Storm

Spectrum version of the ever-popular arcade game. 16K or 48K RAM

£4.95

2-15 Star Trek

Popular space program brought to life by excellent graphics. 48K RAM

£4.95

2-21 Frogger

Manoeuvre the frog across the road avoiding heavy traffic. 48K RAM

£5.95

2-22 Crazy Balloons

Guide the balloons round the maze without bursting. 48K RAM

£5.95

2-23 Arcadia

The expert's version of the popular 'Invaders' game. 16K or 48K RAM

£5.95

2-24 Golf

The finest of golf handicap games. 48K RAM

£5.95

2-25 Test Match

More exciting than the real thing! 48K RAM

£5.95

2-26 Derby Day

This favourite has to be a winner. 48K RAM

£5.95

2-41 Comp-U-Share

See 1-31 under ZX81. 48K RAM

£4.95

£9.95

Spectrum Software

2-13 Sentinel

Guard your mother ship against alien attacks. 48K RAM

£4.95



SHEER PANIC

Mining for Magnetic Quartz is a hazardous business. You have to ensure that there is plenty of oxygen to breathe, fight off the local monsters with only a shovel and counter interference with your consciousness. ZX Spectrum 16K or 48K. Cassette price: £5.95. Ref. No: 2-51

COMPUTER CASSETTE TAPES YOU ORDER!

to the number of free order justifies them — so friends or user group the freebies?

WARRANTY

confidence. If you are with the quality of it to us within 7 days a replacement.

To: The Software Workshop, Yew Tree, Selborne, Hants GU34 3JP

I wish to order the following programs. I understand that:

- * I will receive a FREE blank cassette with every 2 programs ordered
- * I can return products within seven days if not entirely satisfied and receive a replacement.

Ref No	Qty	Title	Price

Postage, packing and handling: add 45p for the first cassette, and 25p for each additional cassette. Non-UK orders add extra 50%

Total

I enclose a cheque/postal order for _____

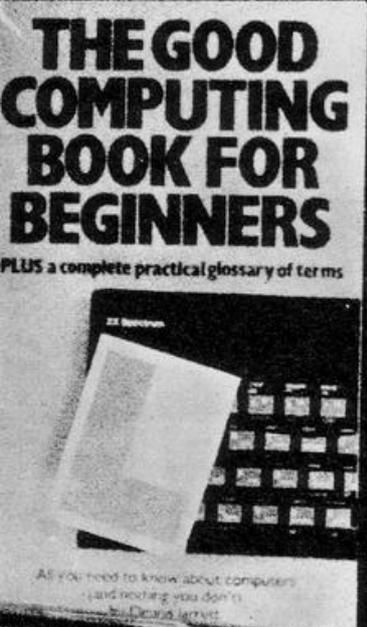
Name _____

Address _____



(Allow 28 days MAXIMUM FOR DELIVERY)

Second Edition Just published



If you only buy ONE computing book

THIS IS THE CLASSIC!

An entertaining, but **thorough** reference source with the most readable, comprehensive glossary you'll find anywhere. The Good Computing Book for Beginners is an essential A-Z of all the facts you need to know about computing — and none you don't!

Whether you're brand new to computing, or an old hand keen to stay ahead, you'll score by keeping this classic, top-selling book within reach to use again and again.

The author, Dennis Jarrett, is a successful journalist who was also founder editor of Which Computer? magazine — so his first edition quickly became a standard work. Now this new, substantially enlarged and revised edition covers the latest trends, terms and technology with the relevant facts — and **ONLY** the relevant facts — in **plain English**.

Here's another fact you'll find fascinating: it will only cost you £2.95!

Use the coupon below to get your copy right away — or buy it soon from your bookshop. It's the **one** book you'll turn to again and again.

Please send me _____ copy(ies) of The Good Computing Book for Beginners by Dennis Jarrett at £2.95 each plus 50p post and packing. I enclose a cheque for _____
 account Visa/Access/Diners/Amex number _____
 Signature _____ Name _____ Address _____
 Send to: _____ (please print clearly)
 ECC PUBLICATIONS LIMITED
 196-200 Balls Pond Road
 London N1 4AQ



fantasy SOFTWARE

DOOMSDAY CASTLE

is an arcade style game
with the feel
of a real adventure

Doomsday Castle consists of a labyrinth of 76 complexly inter-connected Halls and Passages where you will meet a whole host of adversaries serving the infinitely evil Scarthax, the Garthrogs, the Orphacs, the phenomenally nasty Googly Bird and the Urks which manifest themselves in over fifty unbelievably weird and wonderful guises.

Scarthax has scoured the Universe to bring together the six ancient stones of life force. United in Doomsday Castle they are being used to wield an irresistible power over the cosmos, emanating waves of corruption through every galaxy.

To save the Universe, you must battle your way through the Castle to find and collect the six stones and use their force against Scarthax to destroy Doomsday Castle, hopefully escaping yourself before the final cataclysmic explosion. The task is not easy (saving the Universe never is!) and it will take you many games to unfold the structure of Doomsday Castle and discover the locations of the ancient stones. The addictive arcade style action will keep you coming back to play but the overall challenge should still keep you occupied for months.

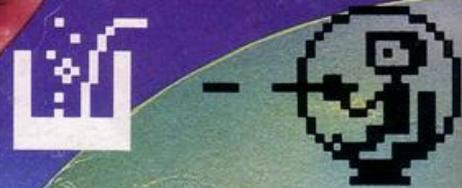
FANTASY SOFTWARE
is available from
**W.H.SMITHS, JOHN MENZIES,
LASKYS, GREENS, RUMBELOWS,
SPECTRUM GROUP,
COMPUTERS FOR ALL and all other
good software retailers.**

**For 48K
Spectrum**

DOOMSDAY CASTLE

is available at £6.50 from

FANTASY SOFTWARE, FALCONBERG LODGE, 27A ST GEORGES ROAD, CHELTENHAM, GLOS GL50 3DT
despatched by return first class post together with free membership and current newsletter of the Fantasy Micro Club.
Trade Enquiries welcome - telephone 0242-583661.



You take on the role of our super hero ZIGGY shown here above in his exploratory capsule in combat with an Urk disguised as a pangalactic gargleblaster (!!!) This is a true representation of the on-screen graphics.