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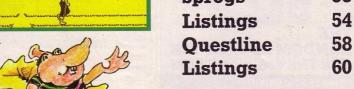
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RECENTLY we received an angry letter at *Sinclair Programs*. "I, and lots more ZX-81 owners, do not think there is enough support from you", it said. The writer then went on to lament the lack of hints, tip. maps, solutions and listings for the ZX-81 published in *Sinclair Programs*.

This is a common complaint from ZX-81 owners. "Everyone hates us!" they cry, and point to the lack of software for their machine, and the lack of coverage they receive in magazines.

Here in the editorial office, things look slightly different. Mail from Spectrum owners pours in, and there is a healthy pile of programs submitted for publication waiting for our attention. ZX-81 owners, on the other hand, are almost invisible. Readers' programs, which used to arrive by the sackful, now appear rarely. Letters are even more infrequent.

We know that you are out there. We know that thousands of people have bought ZX-81s, and that thousands more are still buying them. We know we used to hear from you regularly. Apart from this, all we have discovered recently is that you all love **Rocket Man**, and that you are all very quiet. Come on, let's hear from you. Send us programs, send us letters, send us hints

and tips. Let us know that you are still programming, and let other ZX-81 owners know that there are other people out there.

Editor Rebecca Ferguson

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67 Clerkenwell Road, London EC1R 5BH

Programs should be on cassette. We cannot undertake to return them unless a stamped, addressed envelope is included. We pay £25 for the copyright of listings published and £10 for the copyright of listings published in the Beginners' section.

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Cover Design-Craig Kennedy

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. Do not attempt to underline the characters, the underlining is used specifically to point out a graphic character.

Inverse characters are represented by the letter "i" and graphics characters by "g" on the ZX-81. 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" sip" means six inverse spaces and "(g4:4 \* i4:g3)" would be entered as a graphic force, in inverse four repeated four times, followed by a ring graphic struce.

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 and 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 and 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 and 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 programm has been RUA.



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**Fantastic** factory

SINCE reading your October Softspot game review, I have bought Factory Breakout from Poppysoft, for the 48K Spectrum. I, and many other owners, think that the game is fantastic. It has great graphics, animation, movement and sound. It also has great musical tunes.

It seems to me that those concerned with Softfocus have reviewed games too much through the eyes of an adult, and not of the children who are going to buy it. The game is very addictive, and is well worth the money. You forgot to mention that it is quite difficult, the further you get into the game.

Some people, including myself, would compare it to such classics as Manic Miner and letpac. highly recommend it to all arcadegames maniacs, such as myself. I am sure that they will recommend it.

Russell Moxham. Blandford Forum. Dorset.

#### Midnight master

I WOULD be pleased to whether know any reader of Sinclair Programs has finished the game Lords of Mid- know whether anyone

assume that I am the first to do so.

For anybody who is stuck, here are a few hints. First, gather as many Lords as possible. and guide them to Xajorith. Eventually Doomdark will run out of armies and you will be able to attack.

Richard Bastow. aged 12. Pontefract. West Yorkshire.

#### **Dynamic** decathlon

I AM writing to tell you that I have achieved a score of 164 263 on Daley Thompson's Decathlon. It is a brilliant game. I would like to know if anyone has beaten me.

I think that Sinclair Programs is great, even though I do not submit programs. Please, publish the magazine once a fortnight.

> Andrew Milner. Flint, Clwyd.

#### Rocketman record

I AM writing to tell you that I believe myself to be the holder of the highest score on the game Rocket Man from Software Farm. My high score is now 110 570 points. The game lasted almost an hour. I did. however, have a break. using the hold feature included in the game. I would be interested to

beaten my high score.

Rocket Man is an absolute gem of a game and I recommend it to anyone. If you have not bought it, then I strongly recommend that you go out and do so.

Nicholas Mann. Dirgelen, West Germany.

#### Hi-res hints

I NOTICED in your October issue a letter from a reader requesting a high resolution Draw gram for the 16K ZX-81

My program Hi-Sketch allows the user to draw in eight different directions. The screen can be inverted at any time, and half-finished pictures may be saved to tape to be loaded and continued later.

Perhaps you would be kind enough to print my name and address so that the person concerned, and anyone interested, can contact

Finally, while on the subject of 81 hi-res, let me just add that, after several months of serious mining, my high score on Forty Niner is 118 574.

#### M. Phillips. 35 Elliston Road. Redland, Bristol,

 If anyone is interested in writing to Mr Phillips. please enclose stamped, addressed envelope.

#### **Pointless** pokes

I WISH it was that simple. Having read the letter from A Horrocks in your November issue I had to put pen to paper in order to save Mr Horrocks all the trouble of POKEing a number into every conceivable location in the ZX-81 with the hope of somehow mirac-



ulously transforming his beloved machine into a hi-res beastie. Oh, how I wish it was that simple. If it were, it would not have taken me six months to develop and write the hires routines for Fortyniner and Rocket Man.

I am afraid that Mr Horrocks is labouring under a misapprehension. I do not know which utility he is using, as we do not vet market one, but I would guess that the POKE to which he is referring, far from being all that is needed, is simply a switch to turn on a rather powerful piece of programming.

Sorry and all that . . J N Chappell.

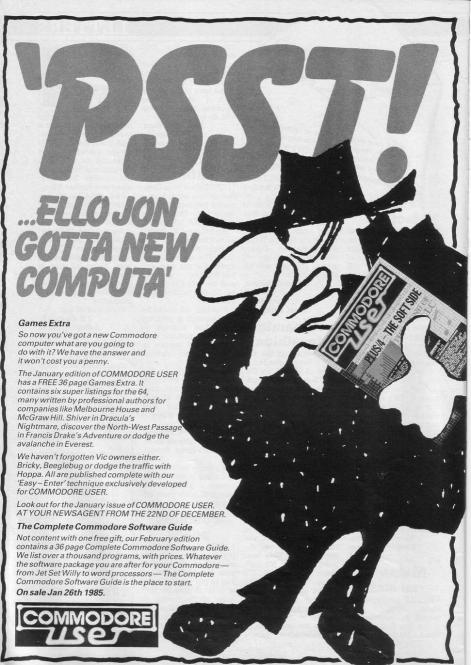
Software Farm. Bristol.

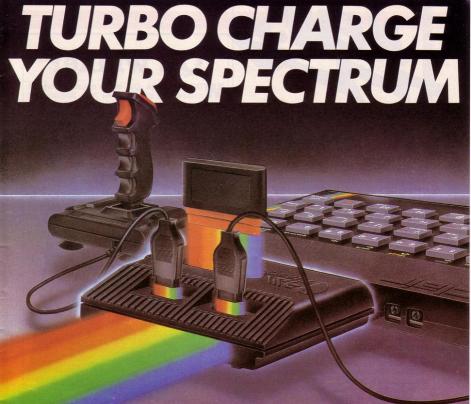
#### Error

THE graphics were omitted from the program Goldmaze in the October issue of Sinclair Programs. The following listing should be saved on tape after the main part of Goldmaze.

- 1 REM graphics for goldmaze
- 5 RESTORE
- 10 FOR a= USR "a" TO USR "n"+
- 15 READ b
- 20 POKE a,b 30 NEXT
- 40 SAVE "goldgrafix" CODE USR
- 50 PRINT "rewind tape for veri fication
  - 60 VERIFY "" CODE
- 70 PRINT "D.K." 100 DATA 0,0,14,21,41,114,140,2 48,0,14,21,41,113,138,140,248,28
- 110 DATA 20,34,127,190,220,232, 248,226,194,129,126,255,195,192, 206,195,255,126,126,255,195,195
- 120 DATA 195,195,255,126,192,19 120 DATH 195,195,255,126,192,19 2,192,192,192,192,255,127,254,25 5,99,99,99,99,255,254,195,231 130 DATA 255,219,195,195,195,19 5,126,255,195,195,255,255,195,19 5,255,255,14,28,56,112,255,255

140 DATA 127,255,192,248,248,19 2,255,127,0,53,37,50,37,53,0,0,0,92,72,72,72,72





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# It's boring

RECENT reports of man for WH Smith who Spectrum owners said that, although some having problems with their machines and returning them as soon as they are bought were dispelled recently by Julian Goldsmith, spokesfor Research. It would appear that the 'major' problems are actually trivial matters in which the most frequent cause for return is the keys falling off the machine. "The Spectrum is selling exceedingly well. The problem with the keyboard is the boring that keeps the keys on is in the Gallup figures that need of adjusting. If anything had to go wrong this is the best thing as it can easily be repaired."

The same comment was made by a spokes-

machines had been returned it was mainly due to the keyboard fault.

One obvious problem with the Spectrum is the position of the interface Sinclair port. The Kempston joystick interface does not fit but Kempston have produced a low-priced extender cable to allow the interface to be connected to the Spectrum.

On the subject of the possible withdrawal of the 16K Spectrum Goldsmith would only say "one recognises from the 16K is falling in demand but it is still going great guns overseas. Its sale over here will depend on public demand."

# **OL** winner

clair Program was 14 Redditch. Worcestershire. Andrew was the only entrant who put the same order as that chosen by the panel of keen". judges. On hearing the

TINNER of the QL ing to upgrade from my competition run in ZX-81 to a Spectrum at the October issue of Sin- Christmas but now I'll be able to get something year old Andrew Keen of else." He plans to use his QL to improve his programming and he also hopes to get his family given options in the involved "although I'm not sure they'll be too





### A Wally question

IKRO-GEN creation, Wally Week star of Automania and Pvjamarama would like readers to put the record straight by voting for the best ever arcade adventure. Wally believes the three main contenders are Pyjamarama by Mikro-Gen, Jet Set Willy by Software Projects and Kokotoni Wilf by Elite. Put the three games in what you consider to be the correct order and send to Mikro-Gen, 44 The Broadway, Bracknell. Berkshire.

#### Software savers

THE Nationwide Building Society has decided that Spectrum users and young investors should go hand in hand. They are hoping to lure young savers by offering a £3 voucher to any child putting at least £25 into a new or existing account in England and Wales.

W H Smith are also in on the promotion of Nationwide Building Societies. They will honour the vouchers and accept them as part payment on any software available from their computer departments.



## Football mad

THE THEME music true heritage. As a young from Match of the Day is incorporated in Match Day, a recent release from Ocean Software. Retailing at £7.95. Match Day provides a camera eye view "with the camera automatically scanning the pitch". Play is either against the computer for one player or up to eight players against each other. Tackling, passing, heading, blocking and extra time are all featured.

Greek Mythology and a hero called Orestes are the subjects in Gift from the Gods from Ocean Software. Orestes has recently been told of his

boy his mother Clytaemnestra and her lover Aegisthus murdered his father Agamemnon. He was smuggled out of the palace at Mycenae and now, on his 21st birthday, he must visit the summit of Mount Parnassus where Zeus and Apollo will tell him how to avenge his father's death and return to the palace of Mycenae. Orestes must enter the catacombs beneath Mvcenae and find the solution to Agememnon's Puzzle in order to prove his heritage to people of Mycenae. The

program retails at £9.95.

# Beyond go mad

PRING will see the re-Dlease of two new games for the Spectrum from Beyond Software. The first, Spy vs Spy, is already available for the Commodore 64 and is produced by American company First Star. Beyond has taken over the marketing of the game which is based on the comic strip of the same name which appears in the magazine MAD. Spy vs Spy is a game for one or two players and the action is shown on a split screen. According to Clive Bailey of Beyond "the players explore the maze like rooms setting traps for their opponents and endeavouring to

find the secret plans". The second game has a working title of Shadow Wars and will be re-

leased for the Spectrum and Commodore 64 simultaneously. "Shadow Wars is an intelligent adventure in which the characters confer amongst themselves within the computer. You can see what they are doing and also affect their actions"

#### Driven round the bend

Bug-Byte will soon be releasing Auto Man for the 48K Spectrum. Auto Man will be a maze-cum-platform type animated game with, according to Tony Milner of Bug-Byte "a 3D car chase sequence, with line graphics". The retail price will probably be £6.95.

# Asian pirates

'pursuing various actions" against piracy after recently visiting the Percomp Asia exhibition in Singapore. Said Mark Eyles, of Ouicksilva, "we found the piracy really prevalent, not just with the software side but with the hardware as well. Several of Ouicksilva's games had been pirated. At the moment the home computer industry is really exciting over there and it seems that companies are pirating everything possible" One thing must be certain and that is that detecting pirated products must be difficult overseas as customers are often unaware that they are not buying the genuine article

On the light side, Ant Attack and Zombie Zombie programmer. Sandy White was recently presented with a gold cassette after sales of Ant Attack topped 50,000 units. Although software companies can hand out gold cassettes at will Eyles does not think it necessary for a recognised body to control the distribution and presentation of such awards as this would mean "companies having to provide evidence of sales"

Hewson Consultants programmer Mike Male. author of Nightflite II and Heathrow ATC was recently awarded a gold cassette bv Andrew Hewson after sales of the games topped 100,000.

# Something else

cently been released by Design Design. According to Brian Edward, a spokesman for Design Design, "Return of the Things is an animated graphic adventure which has been waited

THE SEQUEL to Halls for for some time so it of the Things has reshould be well received". In Return of the Things you begin your quest in the swamp having just left the tower of the three evil lords. Find the Ankhs of Osiris and return them to Osiris at the Altar in the City. Retail price £7.50.



#### UNDERWURLDE AND KNIGHT LORE

TRANGE cries fill the "Aargh, the office. blue parrot strikes again", "Zap that flying iellyfish". "What does it mean, special effects: chest of drawers?" It can only mean one thing. Ultimate have released the final parts of their Sabretrilogy, Underman wurlde Knight and Lore.

Both games are brilliant, original and highly They must inventive. both confirm Ultimate in its place as number one manufacturer of consistently excellent Spectrum games. It is here that the similarities between the games end.

Underwurlde takes up the maze theme of earlier Ultimate games, in a strikingly new way. You begin on level fifteen of a labyrinthine series of underground caverns. Your aim is the Ultimate palace of darkness, where your final escape lies. In the first place. though, your aim is to survive long enough to find out what is going on.

Strange animals dive at you, knocking you from your perch. Falling too far will kill you, and extra

lives are not easy to find. Bubbles emerge from craters and float upwards. If you jump carefully, you can float up on them. Jump too high at the roof, and you will catch on a rope. Swing down quickly on it, and beware the falling stalac-

To go anywhere in reasonable safety you will need the bubble gun which you will find in the first room. To move further into the maze, and to kill creatures such as the giant beetle, you will need to find a sword.

The game is brilliant, the graphics are superb. and the program is surpassed by very few Spectrum programs.

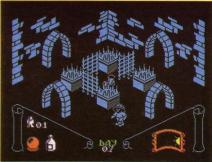
One game which does surpass it is Knight Lore. In this game, three dimensional graphics are used to greater effect than ever before on the Spectrum. Once again the maze and quest theme combine, but the breathtakingly good graphics, and the creativity which has gone into every room, make this a game which stands and head shoulders

above the rest, a game by which all future maze games, and most other games, will be judged.

Three-dimensional graphics have had their problems in the past.

a werewolf every night. and which will leave you trapped in wolf's form for ever in forty days if you cannot break the spell. Finding the wizard's cauldron is one problem, finding the objects and getting them there are several more.

Each room has a puzzle within it. Some rooms have skittering ghosts, some taciturn soldiers. others balls of fire, huge spiked blocks, vanishing stairways obstinate



Perspective slides in and out of focus, attributes seem to go totally haywire and you are left, after half an hour, with crossed eyes, a blinding headache and a vocabulary of a few, very short words.

Ultimate have overcome all these problems. Their perspective is flawless, their outlines and colours sharp. Each room is shown in one colour only, and your character changes to that colour as it enters the room, so there is no colour clash, or merging of detail. The rooms are a pleasure to see, and they remain so, again, and again, and again,

Your aim, in Knight Lore, is to find the wizard's cauldron and to throw into it certain objects which will break Rating: 98%(U), 99%(K) the spell on you; the spell which turns you to

flames. Most have deadly combinations of these problems. To make matters worse you change to a wolf as the moon rises. and to a man as the sun rises. Annoying at the best of times, change is lethal if it occurs in the middle of some delicate manoeu-

Underwurlde and Knight Lore would have been strong contenders for the Soft Spot if they had been launched any earlier in the month. They are both excellent games. If you can raise the money, buy them.

Produced for the 48K Spectrum by Ultimate. The Green, Ashby de la Zouch, Leicestershire.

Price: £9.95 Game type: Arcade adventure



#### STRONTIUM DOG

THE killing begin. There you condemned to death, doomed to kill or be killed, with only a comic strip in 2000AD which you may or may not have read, and a cassette insert, to help you.

Strontium Dog, the killing, from Quicksilva is based on the story in 2000AD. In practice, this means you must travel through a maze, avoiding the parts of the maze which flash, and killing all the aliens you meet, before you can finally escape.

The maze is relatively simple. Draw a grid, number the first row 1 to 16, and the second row 17 to 32. Continue until 256. You are now ready to start mapping.

Killing the aliens is far more difficult. On the first three levels, at least, they appear in two basic types of room. One. where they run down the sides and shoot you, and a second where they appear in doorways at the top of the room and shoot at you. Shooting them appears to be largely a matter chance.

Moving from one section to another is done by way of the Medis. These are ambushed, and require you to stand in exactly the right place, throw a flare bomb and start firing. If you are in the right place you reach at least box you will get through, if



not, you are doomed. Moving to the fourth level means passing the hanged man. The technique for shooting him is even more difficult to grasp, and failure means returning to the beginning again. So, what are you left with? A simple to map, if intricate, maze; and a series of aliens which can only be killed by a combination of luck and skill. Not everybody's idea of fun.

Produced for the 48K Spectrum by Quicksilva, 13 Palmerston Road, Southampton.

Price: £6.95 Game type: Maze Rating: 60%

#### **GILLIGAN'S GOLD**

HERE you were, innocently prospectin the mine. collecting bags of gold and putting them in your barrow, when things began to be much more difficult. Green with envy. outlaws are trying to knock you out and steal your booty. It would be easy to avoid them except that the mine is maze-like in its intricacy. and there are pit trucks running out of control along many passages.

Gilligan's Gold has you racing against the clock to collect your gold and avoid the outlaws. There are some points in your favour. You can leap into the pit trucks at some points, and thus avoid the outlaws. You can also knock out the outlaws by dropping bags of gold on them as they climb ladders, or by taking a pickaxe and smashing them over the head with it.

There are a few minor irritations to the game. Picking something up is very difficult. You seize a pick, rush towars an outlaw with it, only to discover the pick is still lying on the ground and you are defenceless. Moving from screen to screen does seem to confuse the outlaws. One minute they are following you along straight passage, next they have vanished. Conversely, one can appear, hot on your trail, as vou run onto a screen.

Gilligan's Gold is both enjoyable and infuriating. You will either be fascinated by the challenge of collecting the gold, or annoyed by the constant repetition of the three screens and your inability to pick things up when you need them.

Produced for the 48K Spectrum by Ocean Software Ltd, Ralli Building, Stanley Street, Manchester M3 5FD

Price: £5.90 Game type: Arcade Rating: 50%

#### SPORTS HERC

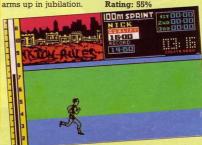
AVE YOU ever dreamt of building your way up from the status of local neighbourhood sports hero to internationally acclaimed Olympic hero, competing for vour country? If so, try playing Sports Hero from Melbourne House.

Sports Hero is a very good demonstration of animation and has excellent graphics. It features the 100m sprint, 110m hurdles, long jump and pole vault. Breaking a record results in the figure on-screen throwing his

When you start the game as a street runner you run through the city and jump over dustbins. Once your skills have been recognised and you win a sports scholarship you get to run with a pleasanter background and real hurdles. The competition at this stage is much stiffer but this is only to be expected as the next step is a place in the Olympic team.

Sports Hero is produced by Melbourne House, Church Yard, Tring, Hertfordshire. Price: £6.95

Rating: 55%



To date, Atari's most astonishing game is Pole Position... If you are only going to buy one game, then this is the one you should get.

COMPUTER & VIDEO GAMES.

...Pole Position gives a very strong sense of speed as you hurtle round the track. The super-realism of the three-dimensional effect adds a lot to the game. It is a three-dimensional effect adds a lot to the game. PRACTICAL COMPUTING. great graphics demo.

Brilliant!
WHICH MICRO? AND SOFTWARE REVIEW.

...a terrific version of the arcade motor racing game...graphics are superb...sound, too is very good as brakes screech and engines rev-up.

PERSONAL COMPUTER GAMES.

Exciting, exhilarating, excellent, Pole Position takes the lead as the best Atari race game around.

PERSONAL COMPUTER NEWS.

## What can we say?



Were overwhelmed. Though we should just add that with Atarisoft, you can now play Pole Position\* on the Commodore 64, BBC and Spectrum computers, as well as on all Atari® **POLE POSITION** systems. And you'll also find available other games such as Galaxian,\*

Robotron! Moon Patrol\* and Ms Pacman.

#### KING ARTHUR'S QUEST

THERE are months and you will be showing when mapping averthe same symptoms. sion overcomes software reviewers. Indications of this are desks covered with enormous, badlyglued-together sheets of paper, a worn 'hold' button on the keyboard, and reviewers sitting in the corner of the room, murmuring through gritted "Take the right teeth; fork at the lion's den. swallow the mouldy cheese, bounce across the lake, turn left . . .

Time comes. of course, when the editor drags them screaming to their type writers. "Show you know the game". she hisses, "but don't go on about the maps". It is true, though. Buy any good game this month

They all need maps.

King Arthur's Quest and Aztec: hunt for the sun god are cases in point. They are both maze adventures, with excellent graphics. You move from one location to the next, able to see those locations a short way in front of you. You collect objects, and use them as you think necessary. Some will kill you. some are essential to your progress.

You can never see objects in a location, until you have been there. Each game has 800 locations, the majority of which can be visited. To avoid missing objects or walking round in circles.



each location. Make a mistake, and making the right decision is based largely on chance, and you will have to begin again.

The story lines are charming, the graphics effective, but the games themselves are little more than tests of your Rating: 50%

patience and mapping ability

Produced for the 48K Spectrum by Hill Macgibbon, 92 Fleet Street. London.

Price: £7.95 Game type: Maze adventure

#### BACKPACKER'S GUIDE

remember giant Pyramid, and Dooms- He can beam his way day Castle. Now he is back, using his back-back, in a game entitled pack, but this is only Backpacker's Guide to possible four times. Eithe Universe, part 1. A ther he must find the key title very similar to that of which will allow him to a well-known radio pro- pass the stalactite, or he gram, book, record and must be very careful television program.

although method of doing so is a little bizarre. Moving around a maze of underground passages, he must collect all the strange creatures he finds there, and return them to his ship.

As Ziggy left his ship, a

stalactite Ziggy, star of The blocking his way back. which animals he stores Ziggy's aim is, nat- in his backpack. Some urally, to save the uni- will kill each other, some his will kill themselves, and some will simply die.

> Produced for the 48K Spectrum by Fantasy 27a Software. George's Road, Chelten-

Game type: Maze Rating: 75%



#### SUPER SAVERS

COFTWARE projects have launched a new, cheap range of software known as the Software Super Savers. Both adand venture arcade games are included, although the arcade games predominate.

Fred's Fan is an ingenious game in which the balloon men float upwards. By rushing along the bottom passage you can switch fans on and off to blow them safely past dangerous spikes and whirling enemies, through the safe passages, and up to freedom. The gentle pace at which the balloons move is no guide to the speed of the game, for you will have to sprint from one switch to the next in order to save all your balloons

Moonlighter is an unimpressive version of the block-pushing game genre. Defend yourself against the rogue, radioactive tennis balls by blasting them before Price: £2.99

they move, or pushing boxes over them as they move around the screen. The key response is slightly too slow to give the feeling of playing at your best, and the difficulty of distinguishing between fire and push when using a joystick makes this a very tricky game

Flip Flap is a computerised version of pinball. The graphics are smooth and clear and the score combinations are inventive. Pinball enthusiasts will certainly enjoy this. The keys, though, are very confusing. Moving the left hand flipper of each pair with you left hand, and the right hand flippers with your right hand looks good on paper, but feels very nasty in practice.

Software Super Savers are produced by Software Projects. Brand Complex, Allerton Road, Woolton, Liverpool L25 7SF.

#### **TIR NA NOG**

REAT were the he-Troes of Celtic lore, and greatest of all was the hero, Cuchulainn. When he was but a boy druid Cathbhadh prophesied that any who took arms on a certain would do great deeds, and be renowned for ever, but would be fated to be short-lived. Cuchulainn took arms that day, his deeds were great, but his fate came upon him swiftly. Now, in Tir Na Nog, the land of youth, Cuchulainn faces his greatest challenge. He must find and unite the four sections of the Seal of Calum.

Great too are the programmers of Gargovle games, and great is the animation they have wrought. Through the four views mortal watchers have of the land of Tir Na Nog can be seen the

hero Cuchulainn, a character of the epic height of 56 pixels. As he walks the labyrinthine paths of the land, mortals can change both his direction, and their view.

In the records we read of the fabled characters animated in Valhalla and Oracle's Cave but. verily, the animation of this game doth surpass all those of which we know. Those who are privileged to see the hero's hair blowing in the wind, to meet the other denizens of this strange land and see the range and variety of the smoothly scrolling landscape will agree that here is the animated adventure in its most complete form.

Pity the poor seeker after truth who must chart the wanderings of the paths through the regions of Badheim, of Tir



Clechan and Stormbase. The seeker who must show the undercover ways, the customs of the characters and the uses and positions of the many objects. The seeker who must make sense of the ramblings of the Bard of Sidhe, who must face the cave wights and the sidhe, pass by the olcweed and uncover the mysteries of the standing stones of Stormbase. Such seekers must Rating: 87%

be pitied, but also envied, for it is they who will see the rich life of Tir Na Nog and they who will finally help Cuchulainn to the Seal.

Those eager searchers after truth who wish to visit Tir Na Nog will find it produced by Gargoyle Games, 74 King Street. Dudley, West Midlands. Cost: £9.95

Game type: Adventure



#### **EUREKA**

ITH all the hype and the publicity Eureka. there must be few Spectrum owners who do not yet know that the Eureka games have been billed as containing "250K of pure mystery", and that a £25,000 prize is offered to the first person to solve the adventures before the end of 1985.

The arcade games are all fun, easy enough to be played by those who never normally touch artricky games, enough to keep the experienced fighting for those essential points. The main problem with them is that all the moving objects on the screen flash on and off. Acceptable at first, this quickly becomes an eve-straining nuisance.

The adventures are also enjoyable. Difficult, of course, and you will not see even a hint of a clue in this review. It would not be fair, would it? Suffice it to say that the adventures are all set in different time periods. from prehistoric time, to the modern Caribbean. They have accompanying graphics, which can be frightening, as when the Pterodactyl swoops in for the kill.

Produced for the 48K Spectrum by Domark Ltd, 228 Munster Road, London SW6

Price: £14.95 Game type: Arcade and adventure Rating: 70%

#### GILLIGAN'S GOLD

in the collecting bags of gold barrow, when things beficult. Green with envy, outlaws are trying to knock you out and steal your booty. It would be easy to avoid them except that the mine is maze-like in its intricacy, and there are pit trucks along many passages.

Gilligan's Gold has you racing against the clock to collect your gold and avoid the outlaws. There are some points in your favour. You can leap into the pit trucks at some points, and thus avoid the outlaws. You can also knock out the outlaws by dropping bags of gold on them as they climb lad- Rating: 55%

THERE you were, in- ders, or by taking a picknocently prospect- axe and smashing them mine, over the head with it.

There are a few minor and putting them in your irritations to the game. Picking something up is gan to be much more dif- very difficult. You seize a pick, rush towards an outlaw with it, only to discover the pick is still lying on the ground and you are defenceless. Moving from screen to screen does seem to confuse the running out of control One minute they are following you along straight passage, next they have vanished. Conversely, one can appear, hot on your trail, as you run onto a screen.

Produced for the 48K Spectrum by Ocean Software Ltd, Ralli Building, Stanley Street, Manchester M3 5FD.

Cost: £5.90 Game type: Arcade





## LOOK!

# **NOW THERE ARE**

HI-RES PROGRAMS FOR THE 16K ZX-81





#### **FORTY NINER**

In 1849 the Great American Gold Rush started. Almost everyone who could sold up everything and dashed to the west coast to look for this precious metal – including you!

You must excavate this precious metal – but can you survive the giant rats and that vicious Gremlin which will come to infest your mine? Can you trick the snakes into leaving their comfortable nests and destroy the rats for you? Can you keep the Gremlin at bay?

Riches await you - but so do the hazards!

#### **ROCKET MAN**

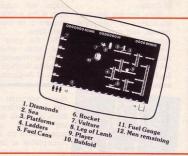
Get rich quick by collecting Diamonds that are simply lying there waiting for you!

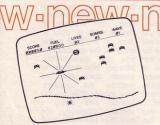
Oh ... I forgot to mention that there are one or two problems!

There is an expanse of shark infested water between you and the Diamonds and a strange breed of Bubble that seems hell bent on getting you in it! Somehow you must cross it .....

You have a Rocket Pack to help you (a Vulture on higher levels) but you must rush around the platforms and ladders collecting cans of fuel (legs of lamb with the Vulture) and cursing that weird Bubble. Once you have enough fuel then it's Chocks Away!

Oh ... but don't run out of fuel on the way - otherwise it's ... SPLASH!





#### **Z-XTRICATOR**

A long time ago, in a galaxy far, far, away a terrible war took place between two hostile races. Any prisoners taken could not expect to live very long in the hands of their captors. Their only hope lay with a group of valiant warriors – the XTRICATORS – whose task it was to rescue fellow beings from the alien planet's surface. You are about to take on the role of such a warrior, . . .

Available from all good computer shops or send cheque/P.O. for £5.95 (inc. P&P) to:

Software Farm,

FREEPOST (No stamp required) (BS3658), BS8 2YY.

Software Farm, 155 Whiteladies Road, Clifton, Bristol BS8 2RF. Telephone (0272) 731411. Telex 444742 AFMADV G

# TOOTLES

Poor Tootles is stuck in a deep pit. What is more, enormous concrete blocks are raining down upon her. Luckily, she is a resourceful girl and, if she is careful, and dodges all the blocks she will be able to use them as a ladder up which she can climb. She can only climb one block at a time so must try to stop the blocks forming a wall. Guide Tootles left using Q and right using W.

Tootles in the pit was written for the Spectrum by John Lonsdale of West Ferry, Dundee.

ER 5. POKE 23658.8: BORDER 0: PAR 10 GO SUB 2000 2000 SCREEN SET UP 25 LET D=5: LET X=19: SET UP 30 FDR N20 10 20 - (L44) STR 11 PRINT AL NA01 IN BEEF 1.1 12 PRINT AL NA01 IN BEEF 1.1 14 THE TOTAL 70 LET RTTR (D+1,8) <> 6 THEN
100 TE RTTR (D+1,8) <> 6 THEN
100 TE RTTR (D+1,8) TE RTTR (D+1,8 150 LET H=H+1: IF H-150 LET H=H+1: IF H-150 LET H=H+1: IF H-150 PRINT AT X 1 X 1 W 1 NND Y 1 Y 1 NND Y 1 NN Y 1 NND Y 1 NN Y 1 N 230 IF INKEY THEN LET AND LET ATTR (X, Y) = 2 THEN LET 250 IF ATTR (X+1,Y) <> 2 THEN 250 PRINT AT X,Y; INK 6;C\$(H) 400 IF D+1=X AND B=Y THEN GO T 1760 IF X=20-(L+5) THEN GO TO 1 9220 DATA 26,26,126,88,88,36,68, 9999 CLS : SAVE "TOUTLES" LINE A

# HERE'S WHAT YOU'VE SAID....

"The standard of the programme is far, far better than we were expecting" ALAN DAIRE.

"Eureka! is superb. It's marvellous to have computer software of such high standard from Ian Livingstone" CAROLE SKAIFE.

"It's taken over my life — I only have three hours sleep a night. I hated adventure games before this but Eureka! is brilliant!" ANONYMOUS CALLER.

"Congratulations on producing such an entertaining and stimulating package" J. GOODENOUGH.

"I would like to thank all involved for making such an interesting game, especially the riddles"

NORMAN SCOTTER.

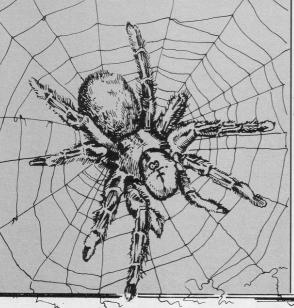
"Please, give me a clue to the £25,000"

CHARLES COOPER. (Sorry, Charles)

"I hate this game. I seem to be missing all my favourite TV shows" ADAM BOWLES. (Poor old Adam)



TELL US WHAT YOU THINK.



150	LET	A=4	
150 150 170 180 190 210	LET	144	
170	LET	A#="	W D
180	LET	B#="	7 4
190	LET	C#="	TI
200	FFT	D#="	of D
210	FET	F#-"	

120 LET SHOT=0 130 LET SC=0

210 LET ES=" 220 LET FS=ES , 8; Es; AT R+1; 8; AS 230 PRINT AT A , 8; Es; AT R+1; 8; AS AT A+2, B; BS; AT R+3; B; CS; AT R+4; 3; DS; AT A+5; B; FS 240 LET V=15 250 PRINT AT 18; Y; " (AT 1 250 PRINT HT 18,Y;" ...,H! 1 250 PRINT HT 0,0; "SCORE ",SC,AT 0,11; "HI ",HI;TAB 21; "LIVES ",L

280 PRINT AT 20,0;"]

310 PRINT AT A.B.E\$, AT A+1, B.A\$, AT A+2, B; B\$, AT A+3, B, C\$, AT A+4, C, D\$, AT A+5, B.F\$, 320 LET L=INT (RND+4)+1 330 IF L=1 AND A<12 THEN LET A= +1 340 IF L=2 AND A>3 THEN LET A=A 350 IF L=3 AND B>1 THEN LET B=B 360 IF L=4 AND B<24 THEN LET B= 11 370 LET Y=Y+(INKEY\$="2" AND Y<2 )-(INKEY\$="1" AND Y>1) 380 IF INKEY\$="0" THEN GOSUB 50

390 LET Z=INT (RND+5) 400 IF Z=3 THEN GOSUB 500 410 GOTO 300 500 PRINT AT 17,7+2;" ",AT A+6, 72;" ",AT 17,7+2;" AT A+6,7+2 

S THE spider moves across the Ascreen you must shoot him ten times using key 0. Avoid the webs' which the spider fires at you as, if you are hit three times, you will die. You have to hit the spider ten times before he is killed.

Spider Attack was written for the 16K ZX-81 by Michael Fear and Garry Davenport of Cranleigh, Surrey.

A PRINT THE OBJECT OF THE IS GAME IS TO DESTROY THE SPID OF THE SCREE FR. HE MOUSS A GOUND THE SCREE OF THE THE STREET OF THE ST

SO BRINT . MOVE WITH KEYS"
30 BRINT . RIGHT"
30 BRINT . RIGHT"
30 BRINT . PIRE"
30 BRINT . PIRE"
100 BRINT . PIRE"
100 BRINT . PIRE . PRESS ANY KEY
100 BRINT . PRESS ANY KEY
100 BRINT . PRESS ANY KEY
100 BRINT . PRESS ANY KEY
101 BRINT . PRESS ANY KEY
101 BRINT . PRESS ANY KEY

510 IF 8+4=Y+1 OR 8+4=Y+2 OR 8+ ==Y+3 THEN GOTO 530 520 RETURN 530 LET LT=LT=1 535 FOR F=1 TO 20 540 PRINT AT 18,Y; AT 19,Y

SO NEXT F

600 PRINT AT 0.21/ "SHIPS "/LI

600 PRINT AT 0.21/ "SHIPS "/LI

600 PRINT BOT 0

600 LET SHOT 0

60

1990 FF SCHILTHEN LET HITSO
1990 FF SCHILTHEN LET HITSO
1100 PRINT "SCORE" SO
1100 PRINT "SCORE" SO
1100 PRINT "SCORE" HEN GOTO 1120
1130 PRINT "SHOULD HAVE DIED."
2010 PRINT "SHOULD HAVE DIED."
2020 PRINT PRINT SECOND SCHILT SO
2030 PRINT SCHILT SECOND SCHILT SCHILTHEN SECOND SCHILTT SCHILTHEN SCHILTH



In space no one can hear you scream.



NAVIGATOR



**EXECUTIVE OFFICER** 



SCIENCE OFFICER











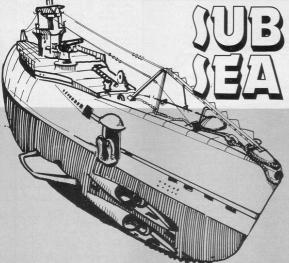
MND GAMES SPECTRUM 48K · CBM64



Featuring the unique Personality Control System







5 RESTORE 5: FOR f=0 TO 167 READ a: POKE USR "a"+f,a: NEX

10 DATA 16,16,124,84,70,118,24 6,255 20 DATA 63,127,255,127,63,16,1

30 DATA 255,255,255,255,255,0,

255,255,0,207,232,254,252,232,20

40 DATA 24,126,118,243,251,114 ,126,24

50 DATA 255,136,136,136,255,13 6,136,136,24,24,24,60,90,153,255 ,36,0,129,195,60,24,60,90,255 60 DATA 133,74,8,107,92,138,82

,133,4,65,8,128,1,72,0,34 70 DATA 251,195,127,63,31,12,7 ,3,251,195,254,252,248,48,224,19

80 DATA 0,16,124,84,124,40,254 ,254,1,1,31,255,31,6,127,255,1,1 0,28,190,124,60,22,6

90 RESTORE 90: LET TOT=0: FOR E=42500 TO 42545: READ a: LET TO T=TOT+A: POKE E,a: NEXT E: IF TO T <> 4156 THEN BEEP 1.0: PRINT

"ERROR LINE 10" 100 DATA 33,0,0,14,10,22,4,126, 230,30,211,254,65,16,254,35,21,3

2,244,12,32,239,201 110 DATA 33,0,0,14,3,22,2,126,2 30,25,211,254,65,16,254,35,21,32

,244,12,32,239,201 120 PRINT AT 21,0; INK 7;" PRESS ANY KEY TO BEGIN": PAUSE O

: LET HIGR=5 130 POKE 23658,8: LET T=1: LET GR=0: LET LI=3: LET E=0: LET FIR ED=0: LET X=18: LET MIS=19: LET GA=1: LET MX=10: LET MIX=20: LET B=0

140 LET BOAT=0: LET BO=2

150 LET W=5: BORDER 1: BRIGHT O FLASH 0: PAPER 2: CLS: INK 7
160 FOR F=2 TO 21: PRINT AT F,
0; INK 5; "(27\*ig8)": NEXT F
170 PRINT AT 0,0; PAPER 1;" "
; AT 1,0;" "; AT 20,27;" ";

AT 21,27;" 180 IF T=1 THEN GD TO 940 190 PAPER 2: INK 7: FOR R=1 TO 710 PRINT AT 14,28; PAPER 1; I NK 7; BRIGHT 1; "HIT"; AT 17,28; PAPER 0; "LVS": PRINT AT 18,28;"

220 PRINT AT 10,28; PAPER 1;"1 "; AT 11,28; "2"; AT 12,28; "3" 230 PRINT AT 21,0; INK 2; PAPE R 6; "<u>JJJJJJJJJJJJJJJJJJJJJJJJ</u>

240 PRINT AT 9,28; PAPER 4; IN

K 7; BRIGHT 1; "CNV" 250 PRINT AT R+9,28; OVER 1; F

250 PKINI AI R+9,28; UVER 1; F LASH 1; BRIGHT 1; " "; AT R+8,2 8; FLASH 0; BRIGHT 0; " " 260 PRINT AT 2,28; PAPER 7; BR IGHT 1; INK 1; "SUB"; AT 4,28; IN K 3; "MNE"; AT 6,28; INK 0; "ZAP"

270 FOR F=0 TO 17: PRINT AT F.

)KCCCCCCCCL (4\*sp)KCCCCCCL (7\*s p)KCCCCCCCL (4\*sp)KCCCCCCCCL (37

\*HE missile base on the sea bed is under your control. Fire missiles, avoiding the red submarine and mines, through the electric grill. You have to calculate the shot so that, when the missile passes through the grid, it hits one of the ships in the convoy.

Sub Sea was written for the 48K Spectrum by Leigh Howells of Deeping St James, Peterborough.

290 LET B\$="(35\*sp)NAM(sp)O(10\* sp)O(sp)AM(7\*sp)NA(6\*sp)A(sp)O(8 \*sp)OO(2\*sp)A(sp)NM(16\*sp)NAO(9\*

SpiN(sp)NAU(12\*sp)U(sp)A(sp)N(8\* sp)NN(sp)NDU(37\*sp)" 310 FOR a=0 TO LEN a\*-32 STEP T: PRINT AT 4,0; PAPER 5; INK O

;a\*(a+1 TO a+27) 320 PRINT AT 3,0; PAPER 5; INK 1;b\$(a+1 TO a+27)

330 PRINT AT 15,28; PAPER 2; I NK 7; BRIGHT 1;GR: IF LI <> 3 TH EN PRINT ; AT 18,28+(LI); PAPER

340 IF LI=0 THEN GD TO 0710 350 PRINT ; AT 21,x; INK 2; PAP ER 6; "JHJ

360 PRINT AT 7,29; PAPER 1; W 370 IF E <> 1 THEN IF INKEYS "P" OR IN 31=1 THEN LET x=x+1 380 IF E <> 1 THEN IF INKEY\$ ="0" OR IN 31=2 THEN LET x=x-1 390 IF X >= 24 THEN LET X=24

400 IF X <= 0 THEN LET X=0 410 IF RND <.05 THEN LET BOAT

=1 420 IF RND >.85 THEN PRINT A T RND \*5+10, RND \*26; INK 3; PA

PER 5; "E"
430 IF RND >.98 THEN PRINT A T RND \*5+10, RND \*26; FLASH 1;
INK 4; PAPER 5; "\*"
440 PRINT AT 17,MX; INK 2; PAP
ER 5; "BCCD "; AT 16,MX+2;" A "

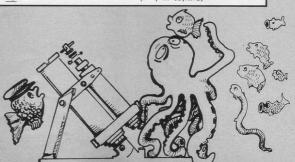
450 BORDER 1: IF GR >= 19 THEN GO TO 0710

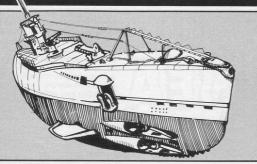
460 IF BOAT=1 THEN PRINT AT 6 ,BO; PAPER 5; INK 4;" KCCCL"; AT 5,80;" A 0"

470 IF BOAT=1 THEN BEEP .001,B 0+10: BEEP .001,20: PRINT AT 5, BO-1; PAPER 5; INK 5;" "; AT 6,8 0-2;" ": LET BO=BO+1: IF BO >= 22 THEN LET BOAT=0: PRINT AT 6 ,BO; PAPER 5;" "; AT 5,BO;" ,BO; PAPER 5;"
": LET BO=2

480 RANDOMIZE : LET Q= INT ( RN D \*2)+1: IF Q=1 THEN LET MX=MX+ 1: PRINT AT 17,MX-1; PAPER 5; I NK 5;" "; AT 16,MX-1;" "

490 IF Q=2 THEN LET MX=MX-1: P RINT AT 17, MX+6; PAPER 5; INK 5 " "; AT 16, MX+5:" "





500 IF MX >= 21 THEN LET MX=21

510 IF MY (= 0 THEN | IFT MY=0

INKEY\$ ="A" OR 520 IF IN 31=2 4 AND W>O THEN LET W=W-1: FOR F =20 TO 10 STEP -1: PRINT AT F,0 ; PAPER 5; INK 5;"

": RANDOMIZE USR 4 2523: NEXT F

530 IF BA>2 THEN PRINT AT 8,6 A-1: "F": AT 9.GA-1: "F

540 PRINT AT 9,6A; PAPER 5;"
"; AT 8,6A;" ": LET 6A=6A+.2: INT GA=23 THEN LET GA=1: P

RINT AT 8,22; "FFFF"; AT 9,22; "F 550 IF E <> 1 THEN IF IN 31=16 THEN RANDOMIZ "0" OR

E USR 42523: GO SUB 0660 560 IF FIRED=1 THEN PRINT AT

MIS, X+1; PAPER 5; INK 0; "G": PRI NT AT MIS+1, X+1; INK 5; "(ig8)"

570 IF FIRED=1 THEN LET MIS=MI S-1: BEEP .007, MIS-20

580 IF ATTR (MIS, X+1) =42 THEN GO SUB 0680: PRINT AT 2,28; FL ASH 1; OVER 1; BRIGHT 1; "(3\*ig8) : RANDOMIZE USR 42500: RANDOMI ZE USR 42523: LET LI=LI-1: GD S UB 1280: PAUSE 100: PRINT AT 2, 28; FLASH 0; DVER 1;" ": GO TO 500

590 IF ATTR (MIS, X+1)=172 THEN LET W=W+1: PRINT AT MIS,X+1; PAPER 5; INK 5;" ": FOR F=20 TO 25: BEEP .007,F: NEXT F

ATTR (MIS, X+1)=23 THEN

GO SUB 0700 610 IF AITR (MIS, X+1)=44 THEN

60 SUB 0680: RANDOMIZE USR 425 00: RANDOMIZE USR 42523: RANDOM IZE USR 42500: RANDOMIZE USR 4 2523: RANDOMIZE USR 42500: LET BOAT=0: LET BO=1: LET GR=GR+4

620 IF ATTR (MIS, X+1)=43 THEN PRINT AT 4,31; BRIGHT 1; FLASH ": GO SUB 0680: PRINT AT 4 .31:" ": IF GR <> 0 THEN LET GR

=GR-1 630 IF SCREEN\$ (MIS,X+1) <

AND ATTR (MIS,X+1) <> 44 THEN RANDOMIZE USR 42500: RANDOMIZ USR 42523: PRINT AT 6,31; BR IGHT 1; FLASH 1; "(ig8)": GO SUB 0680: LET GR=GR+1: PRINT AT 6,3

640 IF MIS (= 2 THEN LET MIS=1 9: LET FIRED=0: LET E=0

650 NEXT a: NEXT R: GD TD 0710

AAO LET MISEIR: PRINT AT MIS.X +1; PAPER 5; INK 0; "G": LET E=1: LET FIRED=1

670 RETURN 680 RANDOMIZE USR 42500: FOR F PER 5; INK F; "I"; AT MIS+1, X+1; PA ; AT MIS-1, X+1; "I"; AT MIS-1, X+1 ;" "; AT MIS-1, X; "; AT MIS+1, X +1; ""; NEXT F

690 LET FIRED=0: LET MIS=19: LE T E=0: RETURN

700 RANDOMIZE USR 42500: PRINT AT MIS+1,X+1; PAPER 6; INK 2;"
": FOR F=1 TO 100: NEXT F: PRIN AT MIS+1.X+1: PAPER 5: INK 5: " ": LET FIRED=0: LET E=0: LET M

IS=19: RETURN 710 POKE 42506,50: RANDOMIZE U SR 42500: IF LI=0 THEN PRINT

T 10,9; PAPER 0; FLASH 1; "GAME D VER": REM \*\*\*HIT MIS\*\*\*\*\*\*\* 720 IF GR >= 19 THEN LET A\$="W ORDS FAIL ME.. "

730 TE GROS THEN LET A\*="CARRA GE FEATURES!

IF GR >= 3 TH 740 IF GR<6 THEN

EN LET A\$="GO BACK TO SLEEP" 750 IF GR<9 THEN IF GR >= 6 TH EN LET AS="PRETTY FEEBLE" 760 IF GR<12 THEN IF GR >= 9 T

HEN LET AS="NOT BAD AT ALL"
770 IF GR<15 THEN IF GR >= 12 THEN LET A = "AMAZING- W D W!!

IF GR >= 15 THEN IF GR<19 LET A#="FANTASTIC-W 0 W!!"

790 PRINT AT 0.3: INK 5: PAPER 1; "RANKING=

800 PRINT AT 0,3; INK 7; PAPER 3; "RANK="; A\$ 810 FOR F=0 TO 18: PRINT 27; PAPER 2;" ": NEXT

": NEXT F 820 PRINT AT 0,27; "MISS"; AT 1 9.29: "HIT"

830 FOR F=18 TO 1 STEP -1: PRIN T PAPER 1: AT F.27: "---": NEXT

840 FOR F=24 TO 24+((18-GR)\*7): PLOT 218,F: DRAW 5,0: DRAW INK 5; 4, 4: NEXT F

850 FOR F=24 TO 24+((GR)\*7): PL DT 234.F: DRAW 5.0: DRAW INK 5: 4,4: NEXT F 860 GD SUB 0900

870 IF GR>HIGR THEN LET HIGR=G

880 RANDOMIZE USR 42500: POKE 42506,4: IF LI=0 THEN GD TD 130

890 LET T=T+.5: LET GR=0: LET R =0: GO TO 20

900 RESTORE 0900: FOR F=1 TO 29 : READ A,B: BEEP A,B-12: NEXT F

910 RETURN 920 DATA .5,0,.15,7,.15,0,.15,7 ,.15,7,.15,0,.15,7,.15,7,.15,0,. 15,7,.5,9,.5,7,.5,6,.5,2

930 DATA .5,0,.15,7,.15,0,.15,7,.15,7,.15,0,.15,7,.15,0,.15,7,.15,0,. 15,7,.5,14,.5,12,.5,11,1,7,1,0

940 REM ////TITLE SCREEN/////

950 FOR F=0 TO 10: PRINT AT F ND \*17+2, RND \*26; INK 3; PAPER

5; "E": NEXT F 960 FLASH 1: BRIGHT 1: PAPER 2: INK 6: FOR F=6 TO 16 STEP 5: PR INT AT F,4; "FFFF": NEXT F 970 FOR F=9 TO 15 STEP 2: FOR G =6 TO 10: PRINT AT G,F; "C": NEX

T G: NEXT F 980 FOR F=7 TO 10: PRINT AT F, 4; "F": NEXT F: FOR F=12 TO 15: F RINT AT F,7; "F": NEXT F: PRINT AT 10,9; "CCC"; AT 10,13; "CCC"

990 PRINT AT 6,14; "C"; AT 8,14; "C"; AT 12,9; "III"; AT 12,13; INK 1; PAPER 5; "III"; AT 14,9; "II I"; AT 14,13; "III"; AT 13,9; "I" 1000 PRINT AT 16,9; INK 2; PAPE R 6; "III"; AT 15,9; "I": FOR F=13 TO 16: PRINT AT F, T3; "I"; AT F ,15;"I": NEXT F 1010 TNK 1: FLASH 0: BRIGHT 0: P

APER 5: PRINT AT 9,17; "KCCCCCCCC L"; AT 8,17;" N NMA 0" INK 2: "BCC

TO20 PRINT AT 14,17; CCCCCD"; AT 13,21; "A" 1030 PRINT INK 5; PAPER 1; AT 1 9.2: "PRESS -ENTER- TO START." 7,2; PRESS - ENTER TO STATE OF THE STATE OF

1060 PRINT INK 7; PAPER 2; BRIG HT 1; AT 16,28; "HI:"; AT 17,28; H IGR

1070 RESTORE 1070: FOR F=0 TO 47

: READ A: BEEP .12,A+B 1080 IF INKEY# = CHR# 13 DR IN 31=16 THEN GO SUB 1110: BEEP 1,0: GD TD 190

INKEY\$ ="I" OR IN 31=2 1090 IF 4 THEN GO SUB 1110: GO SUB 1180

1100 NEXT F: LET B=B+2: GO TO 10 1110 FOR F=2 TO 21: PRINT AT F

0; INK 5; "(27\*igB)": BEEP .007,F 1120 DATA -1,11,-6,6,-2,10,11,-1

1130 DATA -1.11,-6,6,-2,10,-6,6

1140 DATA -3,9,-6,6,-2,10,11,-1

1150 DATA -3.9.-6.6.-2.10.-6.6

1160 DATA -5.7, -5.7, -2, 10, 11, -1 1170 DATA -5.7.-5.7.-2.10.11.-1

1180 PAPER 5: INK 1: PRINT AT 4 ,1; "SUB IF SUB IS HIT, FLASHES"

1190 PAPER 5: INK 1: PRINT

,8; BRIGHT 1; FLASH 1; "BRIEFING"

AT 5.1: "MNE IF MINE 1200 PRINT HIT, FLASHES" 1210 PRINT AT 9,1; "LVS BASES RE

MAINING"; AT 6,1; "ZAP ZAPS LEFT" ; AT 7,1; "CNV NO. OF CONVOYS LEF T."; AT B,1; "HIT NO. SHIPS HIT.

1220 PRINT AT 11,1; "KEYS: O=LEF T P=RIGHT"; AT 12,7; "Q=FIRE A= 7AP"

1230 PRINT AT 13,1; "KEMPSTON JO YSTICK: "; AT 14,1; "UP AND FIRE=Z

AP"

1240 PRINT AT 17,1; INK 2;"BCCC

D KCCCCCCCCCC; AT 16,3;"A

N AM 00;" AT 16,2; INK 4;"A

0"; AT 17,21;"KCCCL"

1250 PRINT AT 18,1;"DEADLY

1 PT 4 PTS"

1260 PRINT AT 20,1; INK 3;"E";

INK 1;" -1 POINT "; FLASH 1; IN

K 4;"""; FLASH 0; INK 1;" EXTRA

ZAP 1270 GD TD 1070 1280 BEEP .5,0: BEEP .15,7: BEEP .15,0: BEEP .15,7: BEEP 1,7: BEEP .5,12: BEEP .5,7: BEEP 1,0: R

ETURN 9000 SAVE "SUR SEA" LINE 1



# AN APPOINTMENT NOT TO BE MISSED EVERY MONTH!

1984 Tuesday 20-71 Work C

Sinclair User magazine hits the street on the 16th of every month packed with enough material to keep both you and your Sinclair machine fully occupied until the same time next month.

Sinclair User magazine, is devoted entirely to the Sinclair ZXB1 and Spectrum. Everything you need to know about the latest peripherals and software releases, as well as letters, book reviews, program listings and competitions. Plus special sections for beginners business and education. We even have a special telephone 'notline' for those problems that just can't wait.

No wonder **Sinclair User** is the UK's top selling Sinclair magazine.

Available from your newsagents now, only 85p





ckedall

# You've got it

EACH month we pubries or vans (loitering lish your hints and with intent). tips. These can be either programming sugges- in jail then go to the sertions or help with par- geant, wearing dungaticular programs. We rees and carrying the hat pay £2 for each letter if you have removed it published. Send your from the suggestions to: GOT IT LICKED, Sinclair Programs, 67 Clerkenwell Road, London, EC1R 5BH.

I AM replying to the letter published in the November issue concerning Urban Upstart.

ban Upstart several times and have found that if you get stuck in the cell you need to go to the Police Sergeant's desk and type WAIT. til the telephone rings and the Sergeant pops out to answer it. As he does so you automatically go out of the police station. Then, to complete the adventure, you things: red tape, book, a ten official papers, small key and a flying suit.

have a nasty accident.

RE Urban Upstart (C P Ball), I offer the following advice.

You will only be arrested if:

1. You are not wearing dungarees in the street (indecent exposure).

If you do find yourself wasteland Type WAIT. After an interval it may be necessary to type WAIT again.

Beware. There are 23 items. The additional one must be given up to escape with 22 points.

E Smith. Brentford, Middlesex.

I have completed Ur- I AM writing with regard to C P Ball's letter in the November 1984 issue about the game Urban Upstart. To escape from prison you must first take a can of beer out of the You continue waiting un-fridge while you are in the kitchen. While in prison drink the beer and you will find you are taken to hospital.

> Craig Carter. Leeds. West Yorkshire. · Many thanks to all the following readers who have writconcerning game Urban Upstart.

Please remember to IN ORDER to make a read the book before buzzing sound with your taking off or you may ZX-81, use RAND USR 821 to 829. This works by S Jav. aged 14, using the SAVE routine. Bristol. as this short program will

demonstrate: 10 FOR A = 821 TO 829 20 RAND USR A 30 NEXT A

40 GOTO 10

A small tip, if your television has a separate tone control, turn this full up but not the volume. You will then be able to you to jump from room to hear much better. This room, let you fall from will also make the ZX-81, any height, clear the atgive out sounds while tic bug, suck you up you are playing games. This also works for POKEs, for example:

POKE USR 1.1 which will give a high-pitched screech.

I Archer, aged 14. Southampton, Hants.

I PURCHASED Rocket Man from Software Farm several weeks after its release. Within a week I had passed through all six screens and started back on screen one. I passed have now through all six screens over fifteen times, achieving a high score of 1,019,796. The program crashed before I finished because I had over 30 lives.

I have discovered that if POKE 23698.0 is entered, the fourth diamond does not need to be collected.

M Pleasance Brampton.

I BOUGHT let Set Willy last month, and I have already found a lot of useful POKEs. For instance:

MERGE the first part (called Jetset) and then NEW. Then ENTER:

10 CLEAR 32767: LOAD CODE 20 FOR A=43780 TO 45823: POKE A.O: NEXT

30 FOR A=46080 TO 49151: POKE A,O: NEXT A

40 POKE 36477.1 50 RANDOMIZE USR 33792

Now RUN

This will eliminate all moving objects, allow walls as if in a lift and, of course, give you infinite lives.



If you want to get sucked up a wall, stand beneath it and press jump. This takes getting used to, and does not work on all walls. In the nightmare room, as soon as you get in, move left and jump to get the single, high-up object. Leave straight away as there is nothing else there.

Alex Kruczkowski, Nottingham.

· Of course, if you enter PRINT "YOU HAVE IUST FINISHED JET SET WIL-LY", you can avoid all this trouble.

HERE is a note for all let Set Willy fans. To skip stages you have to go into the first landing room, jump through the ladder and press keys WRITETYPER. Then press any number key with key 9. Example: keys 9 and 8 will take you to the off-licence.

To skip stages on Manic Miner, press enter to play the game, then press 6031769 followed by any key with 6. Keys 6 and 1, for example, will take you to the cold room.

> Kevin Gale, aged 11, Sandy, Bedfordshire,





THE easiest part of programming is learning to print characters on the screen. Simple PRINT statements, though, will not produce many games. To program most good games it is necessary to have your character move around the screen.

Professional programmers, of course, are able to produce large, flicker-free graphics, using machine code routines. These are complex, and can take weeks or months to perfect. Luckily, it is not always necessary to program such complicated routines. Simple Basic statements will produce clear, trouble-free movement with a little thought.

Print a character on the screen,

for example:

100 PRINT AT 2,2;"O" In order to make your "O" move. it is necessary to amend the above line a little:

80 LET X = 290 LET Y=2

100 PRINT AT X,Y;"O"

The effect is the same, but the introduction of the variables X and Y makes line 100 much more flexible. Line 100 will always PRINT the "O" at co-ordinates X and Y, but the values of X and Y can easily be altered.

Add lines 110 LET Y = Y + 1 120 GOTO 100

The position of the O will now change much more easily than it



would have done if you had entered a series of PRINT statements. It can also be changed much more quickly. Try changing line 110 to alter the value of X, or to let Y increase by a larger amount each time.

Despite the speed of printing there is, as yet, no illusion of movement. This can be changed by inserting a space just before the O on line 100:

100 PRINT AT X,Y:" O"

Your O will now streak across the screen, to end with an error code as the computer tries to print it off-screen.

Very simple movement but, as yet, nothing for a player to control. Control can be introduced by using the INKEY\$ statement. Replace lines 110 and 120 with: 110 IF INKEY\$="5" THEN LET

Y = Y - 1

120 IF INKEY\$="8" THEN LET Y = Y + 1130 IF INKEY\$="6" THEN LET

X = X + 1140 IF INKEY\$="7" THEN LET

X = X - 1150 GOTO 100

Suddenly the O is under your control, and can be moved by pressing the cursor keys 5 to 8. Each time you press a key, the value of X or Y will be changed and so, next time the O is printed. it will appear in a different place.

Tidy up these lines, and avoid the problem of trying to print off screen by replacing lines 110 to 140 with the following two lines which serve the same purpose, but are slightly less easy to understand:

Y = Y + (INKEY\$ = "8")110 LET AND Y < 27)-(INKEY\$="5" AND Y > 0

LET X = X + (INKEY\$ = "6"120 AND X < 20) - (INKEY\$ = "7" AND X > 0

Running with this version will give you an O which runs to the right, and leaves a trail behind it in all other directions. Experiment to make it run in all directions without leaving a trail, and then to run in all directions leaving a trail behind. Try using two characters instead of a single "O", or producing a horizontal line as you move across the screen, and a vertical line as you move up and down.

Addition of a few more lines develops the rudiments of movement into a simple hurkle game. A and B are the co-ordinates of the invisible hurkle. Line 10 counts how many turns you have had, and line 11 checks whether or not you have found the hurkle.



N gives the number of turns which have been had. Note how the space has been removed from line 6 in order to mark where you have been.

1 LET N = 0

2 LET A = INT (RND\*28) 3 LET B = INT (RND\*21)

4 LET X=2 5 LET Y=2

6 PRINT AT X,Y;"O"

7 LET Y=Y+(INKEY\$="8" AND Y < 27) - (INKEY\$ = "5" AND Y > 0) 8 LET X=X+(INKEY\$="6" AND X < 20) - (INKEY\$ = "7" AND X > 0)

9 PAUSE 4E4 10 LET N=N+1

11 IF Y=A AND X=B THEN GO-**SUB 1000** 

12 GOTO 6

13 CLS: PRINT "WELL DONE, YOU TOOK ":N:" TURNS"

Turn over for Beginners' programs

# Programming--Slow and easy will Computer Sloth

THE CUE ball appears on the table together with a hole into which the ball must be played. Enter the force at which you wish the cue to hit the cue ball. The higher the entry, the farther the cue ball will travel.

Pot the Ball was written for the 16K Spectrum by Philip Todhunter, aged 14, of Whitehaven. Cumbria.

This game uses special graphics characters and you should turn to page five to find out how to enter them. Take care, especially with the underlined letters A and B. These are not ordinary capitals, as they must be entered by pressing a and b in graphics mode.

A variable is the name given to a location in memory used by a program to store information. As the value of a variable changes when a program is RUN, so the contents of the memory location are altered. A list of the important variables follows, which will help you to understand how Pot the Ball works.

SC: holds your score

force used to strike the ball

start position of the ball position of pocket

graphic a: user defined graphic

graphic b: user defined graphic for pocket T: number of warm-up cue position of moving ball

#### LINE NUMBERS

5-80: Print score (you are given a five point start) and draw the table excluding the pocket.

100-165: Print title and play tune (data giving the pitch and duration of the notes are contained in line 1000).

Sets the start position of the ball. As the ball can only travel from right to left across the screen (along row 11 down the



screen), it is only necessary to set the column number 29. Position of the pocket along the line of travel is randomly selected as a number between 0 and 27.

Reads the data for the user defined graphics which is held in lines 1010 for the ball and 1020 for the pocket. The data is in decimal format. Such numbers are easier to enter than the BINary format explained chapter 14 of the manual. information POKEd into the 16 bytes representing graphics characters A and B.

80-190: Print ball and pocket. 200-202: Request player to enter strength of cue stroke.

205-250: Draw cue strokes as alternative one and two character lengths of graphic 3.

260-282: Draw ball at each character position from start to end of travel (29-P),

5 LET sc=5 10 REM Screen 30 LET a=0

50 FOR b=5 TO 15

60 PRINT AT 0,23; "SCORE ";sc

70 PRINT AT b,a; INK 4;"(32\*i g8)" 75 PRINT AT 5,a; INK 2; PAPER

7;"(32\*ig3)" 77 PRINT AT 15,a; INK 2; PAPE R 7;"(32\*g3)" 80 NEXT b

100 PRINT AT 0,7; INK 0;"(3\*ig 8:sp:3\*ig8:sp:3\*ig8:sp:ig8)" 110 PRINT AT 1,7;"(ig8:sp:ig8: sp:ig8:sp:ig8:sp:ig8:sp:ig8:sp:i

q8)"
120 PRINT AT 2,7;"(3\*ig8:sp:ig8:sp:ig8:sp:ig8:sp:ig8:sp:ig8:sp:ig8)"

erasing each ball after a pause.

285-287. If the ball is in pocket these lines make a noise, re-draw pocket, increase and print score.

292-293: If the ball is not in the pocket, ball and pocket are redrawn, a noise is produced, and the score is reduced by one and printed.

294-295: If the score is zero, then PRINT "GAME OVER" and return to start. If the score is not zero, then return for the next shot. 130 PRINT AT 3,7;"(ig8:3\*sp:ig 8:g4:ig8:sp:ig8:g4:ig8:sp:ig8)"

140 PRINT AT 4,7;"(ig8:3\*sp:3\* ig8:sp:3\*ig8:sp:3\*ig8)" 152 RESTORE A

155 FOR N=1 TO 10 160 READ A,B: BEEP A,B

165 NEXT N 170 LET Q=29: LET R= INT ( RND

\*28)
175 FOR N= USR "A" TO USR "B"+
7: READ B: POKE N,B: NEXT N
180 PRINT AT 10.Q: INK 7; PAPE

R 4;"A"
190 PRINT AT 10,R; INK 0; PAPE

R 4; "B" 200 INPUT "WHAT FORCE ? 1 TO 28

";P 202 IF P>28 THEN GD TD 200 205 FOR T=0 TD 4

210 PRINT AT 10,30; PAPER 4; I NK 6;"(2\*g3)": PAUSE 10 230 PRINT AT 10,30; PAPER 4;" "; PAPER 4; INK 6;"(g3)": PAUSE

10 235 NEXT T

240 PAUSE 20 250 PRINT AT 10,30; PAPER 4; I

NK 6;"(2\*g3)"
260 FOR I=29 TO 29-P STEP -1
265 PRINT AT 10,1; PAPER 4; IN
K 7;"A"
270 PAUSE 3

280 PRINT AT 10,1; PAPER 4;" "
282 NEXT I
285 IF I=R THEN PRINT AT 10,R

285 IF I=R THEN PRINT AT 10,R ; INK 0; PAPER 4; "B": BEEP .5,20 : LET sc=sc+1

287 PRINT AT 0,29;sc 292 IF I <> R THEN PRINT AT 1 0,R; INK 0; PAPER 4;"E": PRINT AT 10,I; INK 7; PAPER 4;"A": BEE P. 5,-10: LET sc=sc-1 293 PRINT AT 0,29;sc

294 IF sc=0 THEN PRINT AT 10, 12; FLASH 1; "GAME OVER": PAUSE 0 : CLS : G0 T0 5 295 PAUSE 0 : CLS : G0 T0 10 1000 DATA .1,0,.1,0,.1,0,.25,5,.25,0,.25,6,.25,2,.25,7,.25,2,.25

1010 DATA 60,126,255,255,255,255 ,126,60 1020 DATA 0,0,0,0,126,255,126

1030 GD TD 10

THE CROSSING

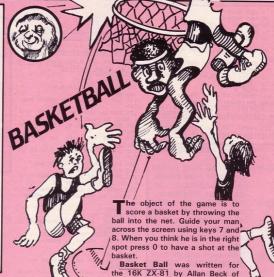
To reach your bank you have to cross a dangerous road, dodging the trucks and lorries. If you manage to cross without being hit you can collect your money from the counter. The only drawback is that you can only collect one pound on each trip, so several journeys have to be made before a reasonable amount of money is collected.

The Crossing was written for the 1K ZX-81 by Kieran Mayo of Ballymena, Co Antrim.





240 PRINT AT 10.5; ANOTHER SAME 250 IF INKEYS="" THEN GOTO 250 250 IF INKEYS="" THEN GOTO 250 260 APTC 4



Knightswood, Glasgow.





pray as many flies as possible with your aerosol can before you run out of squirts. When all the Fly-spray has been used you are given a score and told how many flies you managed to eliminate. Use keys 6, 7 and 0 to play.

Written for the 16K Spectrum by Gaynor Fletcher of Irlam, Manches10 REM FLY-SPRAY 20 BORDER 0: PAPER 0: INK 7: C

30 PRINT AT 0,11; "FLY-SPRAY"; AT 2,0; " Shoot as many flies as possiblebefore the spray runs o ut."; AT 7,8;"(16)-move down"; A ut."; AT 7,8;"(16) -move down"; A T 9,8;"(17) -move up"; AT 11,8;"( 19) -fire"; AT 16,0; "Press any ke y to begin combat."; PAUSE 0: RE H inverse FLY-SPRAY 70 FOR a=0 TO 23; READ b: POKE

USR "a"+a,b: NEXT a

80 CLS : LET s=10: LET e=0: LE sc=0: GD TD 260

90 PRINT AT 5,0;" "; AT 5+1,0 100 IF INKEY\$ ="6" THEN LET S

110 IF INKEY\$ ="7" THEN LET S =5+1 120 IF INKEY\$ ="0" THEN LET e

=e+1: GO SUB 500 130 IF s<0 THEN LET S=0 140 IF \$>19 THEN LET \$=19 150 BEEP .01,40; PRINT AT 5,0;

B"; AT s+1,0;"C" 160 RETURN 270 LET x=17: LET y=10 280 LET xo=x: LET yo=y 290 LET m= INT ( RND \*8) 300 IF m=1 THEN LET x=x+1: LET

y=y-1

THEN LET 320 IF m=3 THEN LET x=x+1: LET

330 IF m=4 THEN LET y=y+1 340 IF m=5 THEN LET x=x-1: LET

350 IF m=6 THEN LET x=x-1 360 IF m=7 THEN LET x=x-1: LET 370 IF m=8 THEN LET y=y-1

380 IF x>30 THEN LET x=30 390 IF X S THEN LET X=5 400 IF y>19 THEN LET y=19 410 IF y<0 THEN LET y=0 420 PRINT AT yo, xo;" "; AT y, x

1 INK 6; "A" 430 GO SUB 90: GO TO 280 500 FOR C=1 TO 30

510 BEEP .002,50: PRINT AT s,c ;".": IF s=y THEN LET sc=sc+1: PRINT AT 0,11; "SCORE=";sc: REM inverse SCORE= 520 NEXT C: PRINT AT S,0;"

530 IF e>30 THEN GO TO 600

600 CLS : PRINT AT 10,10; "CAN INPUT 2: IF z=1 THEN GO TO BO

700 DATA 36,24,90,126,126,90,24

710 DATA 124,127,124,124,255,12

720 DATA 189,189,189,189,189,18 9,189,189 9,129,255



REM STOPPI

2 PRINT "The object of the ga me is to stop the cursor at t he arrow for fifety points"
10 PRINT AT 10,1; "@ STOPPIT B
Y KEVIN WILSION 1984"

15 INPUT "Press ENTER to play

16 IF a\$="p" OR a\$="P" THEN D TO 20

20 PAUSE 10: LET sc=50

39 FOR h=0 TD 7 40 READ b: POKE USR "b"+h,b: NEXT h 42 DATA 0,126,126,126,126,126,

126.0 48 99 CLS

100 FDR n=0 TD 31

вваввавававававава

| 200 PRINT AT 2,17;"\*"
| 200 PRINT AT 2,17;"\*"
| 250 IF INKEY\$ ="0" AND n=18 THEN BEEP .25,20; PRINT "GOOD"; PRINT "SCORE ";sc: G0 T0 996 | 260 IF INKEY\$ ="0" AND n <> 17 THEN LET sc=sc-50: BEEP .25,-1

1: PRINT AT 3,0;"
": PRINT AT 4,0;"HARD LUCK FIN

AL SCORE "; SC: STOP

400 PRINT AT 1,n;" "
410 IF n >= 30 THEN LET n=1

420 NEXT n 9995 IF sc >= 500 THEN PRINT 3,0;" ": PRINT AT 3,0;"

VERY GOOD" 9996 IF SC >= 1000 THEN PRINT

AT 3,0; "VERY GOOD" 9997 IF sc >= 1500 THEN PRINT AT 3,0; "EXCELLENT"

9998 IF sc >= 2000 THEN PRINT AT 3,0; "BRILLIANT" 9999 LET 'sc=sc+50: GD TD 100



REM LASER TRAIL 5 REM LABER TRATE 20 BORDER O: PAPER O: INK 7: L 30 GD SUB 270

40 CLS : LET 11=0: LET 12=4: L 13m0: LET 14m4: LET x1m85: LET 12m4: L y1=83: LET x2=169; LET x1=00: 50 PLDT 1,3: DRAW 253,0: DRAW 0,172: DRAW -253,0: DRAW 0,-172 60 IF IN 64510=190 OR IN 645 10=254 THEN LET 11=0; LET 12=4

70 IF IN 65022=190 OR IN 650 22=254 THEN LET 11=0; LET 12=-4 80 IF IN 65278=183 DR IN 652 78=247 THEN LET 11=4; LET 12=0 90 IF IN 65278=187 DR 78=251 THEN LET 11=-4: LET 12=0

42=254 THEN LET 13=0: LET 14=4 IN 573

IN 49150=189 OR IN 491 50e253 THEN LET 13=0; LET 14=-4 120 IF IN 32766=187 OR 120 IF IN 32/60=18/ UR IN 32/66=251 THEN LET 13=4: LET 14=0

130 IF IN 32766=183 OR IN 327 IN 327 130 IF IN 32/00=183 UN IN 32/ 66=247 THEN LET 13=-4; LET 14=0

140 IF POINT (X1+11, Y1+12) = 1 T JEN PLOT X1, Y1: DRAW 11, 12: 60 TO 230 HE POINT (x2+13, y2+14) =1 TO 210 X2, y2: DRAW 13,14: GO

ASER TRAIL is a game for two players, written for the 16K Spectrum by A Parsons and R Dallas of Bedford, Bedfordshire. You have both been deposited in an arena and must fight for your

lives. The laser bikes you ride leave trails as you move. Avoid your opponent's trail and try to force the other bike into the wall. The keys for each player to use are included in the program.

190 IF  $\times 2 <= 1$  OR  $\times 2 >= 253$  OR  $\times 2 >= 175$  OR  $\times 2 >= 253$  OR  $\times 2 >=$ 

200 GD TO 60 210 FDR t=1 TO 20: FDR b=1 TD X 210 FDR t=1 TO 20: FDR b=1 TD X EEEP.001, 30: NEXT b: BEEP.01,20: VI AT 10,4; "PLAYER 1 WINS!" PRI 220 GD TD 240

230 FOR i=1 TO 20: FOR b=1 TO 7 ASS PUR 1=1 TO 20: FOR b=1 TO 7 S. BORDER b: NEXT b: BEEP 01,15: NEXT b: FOR D: 10,7: NEXT b: 10,7: 240 PRINT AT 21,1; "PRESS ANY K EY TO TRY AGAIN" 250 IF

INKEY\$ ="" THEN GO TO 250 260 RUN 270 PRINT "LASER TRAIL" 280 PRINT "IN THIS GAT

E TRAIL LEFT BY A LASER CYCLE 290 PRINT "YOU LOSE IF YOU F THE BORDER, YOUR OPPONENT'S TR AIL, DR YOUR AIL, OR YOUR UWN: 300 PRINT FLASH 1; "PRESS ANY KEY TO CONTINUE"

A DOWN X

330 PRINT FLASH 1; "PRESS ANY INKEY# ="" THEN GO TO 350 RETURN







Simply clip in a programmed card for immediate customised control. You can even change or reprogram the cards without affecting the game in the computer so that you can get exactly the responses you want. With the addition of extra cards you can build up a whole library of 'CustomCards' for all your favourite names.

Utilising Hardware Programmed technology you have the benefit of automatic eight direction control, no power-down programming loss, guaranteed conflict-free operation with other peripherals, including microdrives, and no extra software to load or awkward jovstick movements and key presses to make each

It is also perfectly possible to connect up to five Protocol 4's on one Spectrum, each programmed separately, for multiple player control — only possible with the hardware programmed design.

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Fully guaranteed for 18 months, Protocol 4 comes supplied with five CustomCards, ten Quick Reference Programming Cards and complete instructions.



As the first fully hardware programmed joystick interface, this product has become well established over the past year and will accept ALL standard joysticks or trackballs, including Quickshot li with 'rapid fire,' for use with ALL Spectrum or ZX81 software — not just those with a joystick option.

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- \* Programming is *not* lost when power is disconnected between games.
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  - \* Several interfaces can be separately programmed and fitted to one computer for multiple player games.

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#### INTERFACE II

The AGF Interface II represents the best low cost introduction to joystick control.

The AGF' control standard is now offered by over 100 games or utility programs for use with any joystick or trackball.

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The new AGF RomSlot is designed for anyone who already owns a programmable joystick interface, or prefers to use the keyboard to control games, and would like to add the facility of ROM cartridge software to their system.

RomSlot will accept the Sinclair range of instant loading games and will also be compatible with the new releases from Parker Software — exciting new games only to be available in ROM format.

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RomSlot is guaranteed for 12 months and has a full width expansion connector to accept joystick interfaces, speed units and printers etc.

#### QUICKSHOT

The Quickshot joystick is an excellent value game controller incorporating suction cups for sure-footed precision with a comfortably contoured handle offering a convenient top firing button as well as one on the base.

#### QUICKSHOT II

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# TURMO

TURMOIL is quite simply a game in which you have to help Mic the Mechanic to steal oil from the Arabs' oil refinery in order to build a car. This is not as easy as it sounds as you are chased by the Arabs who are incensed at the thought of their oil being stolen.

At the beginning of the game players have a quick view of all 26 stages if they do not choose to start playing or to sample the training mode. I am glad to see that the author retains some sympathy for the player and allows Mic the Mechanic to fall from any height without meeting with death. Unless, of course, he collides with an Arab in mid-flight. It also makes a change not to have to watch a time and fuel limit as you can devote more concentration to the game. For those of you who feel a sense of achievement whenever a high score is obtained you can collect the tools that appear at intervals and return them to the shed at the bottom of the screen

I chose to ignore the tools and aimed to fill my oil can with five drops of oil. Once the oil was collected I poured it through a grid and watched my car grow. We all know it takes six drops of oil to build a car so I was compelled to risk life and limb once again by returning to the refinery for a refill. At this point it is best to collect another five drops of oil as the extra drops can be spilt in front of the Arabs when the going gets hot. The pursuing Arab, and his skirts, are consequently sent flying and you can then finish building your car.

After playing the game for a very long time I was determined to surpass myself and send the car off to the fourth screen, screen D. I had completed the first three levels numerous times and finally managed to access screen D. It was not long, however, before I was whacked on the head by an angry Arab wield-

SCORE LIVES LEVEL HIGH

ing a lethal weapon. The last of my five lives was gone and I was back to the beginning. Feeling dejected, I sat for five minutes debating whether or not to pull the plug. All thoughts of saving my sanity were soon abandoned when I pressed the START key and headed for another bout. Through screen A, and then B with the help of the rope and then on to screen C and the moving platforms.

All three screens were nearly as difficult as the first time I played Turmoil which shows that the game will still be playable should all 26 screens be completed, and not discarded to a drawer marked 'Conquered'.

I moved on to screen D with three lives to hand and rather fancying my chances of completing the level. Success at last, and I was on to screen E and then F. At this point I decided to give the game a rest.

The next time I played I was lucky enough to have a reviewer's copy which allowed me to practise on all the levels. Moving platforms, disappearing walls, lifts, lift shafts, ropes and conveyor belts were rife. I found some screens harder than those following them and at times could not work out how to drop the oil onto the grid. The refinery, jug and grid were often difficult to reach and these points combined with the obstacles added up to make the game more challenging. As you complete each harder level you get a different car so you are able to work up from Mini and Volkswagen to a flash sports car.

The playing keys are easy to master and the game can also be controlled via a joystick. The animation and graphics are good although there do appear to be a couple of problems. You can often walk up ladders when not properly positioned and on the screens where a rope is involved it is possible to stand in mid-air whilst waiting for the rope. Obviously a fault but it makes for easier playing.

Anyway, there's no point crying over spilt oil, as they say, oil's well that ends well.



June Mortimer travelled to Manchester to meet David Turner, programmer of Turmoil.

David is currently one of Manchester's 60,000 students. He shares a flat with eight others in gram? "No, I had a game published by dk'tronics last year called **Galactians**, but I decided for one reason and another to see if I could get **Turmoil** accepted by a different software house. I sent the game to Bug-Byte and they sent it back saying they would be interested if I made some modifications. I had to change the keys and add some background music. Bug-Byte finally accepted the game after I had sent it in five times."

Were you influenced by Manic Miner whilst writing Turmoil? "I started writing Turmoil shortly after finishing Galactians which was about a year ago. I hadn't seen Manic Miner and was really influenced by the arcade games Kong and Popeye. In all it took me about nine months to complete Turmoil."

Where did the idea for Turmoil originate? "A friend worked in a garage which was taken over by Arabs and that's quite simply where the idea came from." Did you have any help with the sound, graphics or machine code? "No, as I said the idea originally started with the garage but all the programming was done by me. Bug-Byte gave me the title as Turmoil was originally called Pit-stop, a title that they felt immediately conjured up visions of a car racing game." Have you been asked by Bug-Byte to convert Turmoil for any other machines? "I'm not committed to Bug-Byte in any way. They haven't asked me to convert Turmoil for any other computers. They've left me to get on with what I want to do." In between studying, homework and indulging in Manchester night life David is working on an arcade adven-

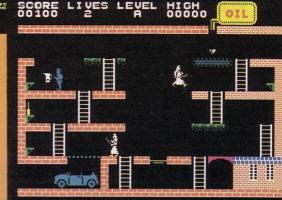
David's computing career started at school where he joined the computer club and was able to use a PET. "Then I saw the advert for the ZX-81 and things went on from there. I upgraded to a Spectrum eventually and have stuck with it." David had his first program published when he was 17. Now at 18 he has had two games accepted by leading software houses. Who knows, maybe this time next year, the arcade adventure will be finished and David will have another game to his



the students' residences.

"My studies aren't directly connected with my computing interests but they join up somewhere along the line. I'm actually doing a three year course in electronics at UMIST (University of Manchester Institute of Science and Technology). I don't really know what I want to do at the end of the course but it's something in computing, maybe programming or hardware, I can't say yet."

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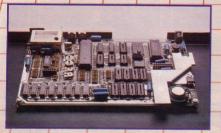
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### **Getting more from** your print statements



YOU have ever wondered how to program your Spectrum to switch output from TV screen to printer and vice versa, then this article is for you.

A typical example of the kind of situation where you might reguire an optional switch is in the printing of instructions. With a printer connected, users of your program might prefer to have a hard copy of instructions, although you must also provide for screen printing. Your manual



would have you believe that the only solution is to write separate subroutines, identical in all respects except that one set use PRINT and the other LPRINT. Microdrive owners, however, will have become acquainted with File Devices and streams, and it is these concepts which open up more possibilities for the PRINT statement.

A file device is any piece of hardware attached to your Spectrum. Peripheral is an equivalent term. This might be TV screen, printer, cassette or microdrive.



You might also be surprised to learn that the keyboard is a peripheral in the sense that it is an input device which is peripheral to the brain or CPU (central processing unit) of your machine.

A stream is simply an integer between 0 and 15 which tells the computer which file device to use each time the CPU receives

an I/O (input or output) instruction. In other words, this is an identification number to earmark where data is coming from or going to (though not to be confused with labels identifying the hardware; these will be explained lat-

We shall confine ourselves for the moment to just the screen and printer for the purpose of examining the PRINT statement. The default stream numbers (those which are automatically recognised by the ROM on power-up)

Screen: default stream no. = 2 Printer: default stream no.=3

ent file devices, ie screen and printer. It should also convince you that PRINT is an abbreviation for PRINT #2. Similarly, LPRINT is shorthand for PRINT #3. Although you could change line 20



to LPRINT #S and receive the same result, to all intents and purposes, LPRINT is really not needed as a separate command on your keyboard.

The same applies to LIST and LLIST as LIST #S or LLIST #S, line number (where S=2 for screen



So, to switch from screen to printer and vice versa, all that is required is to switch these stream number. Microdrive owners will have been enlightened on the use of the PRINT# command to achieve this. The fact is, though, that the microdrive manual is only making up for an important oversight in the Spectrum manual in this respect. For the benefit of non-microdrive users, here is a note you can pencil into Chapter 15 of the Spectrum manual "More about PRINT": "Any PRINT statement can be followed by the expression '#S' where S is any integer number in the range 0-3 (or equivalent expression)"

Actually, streams 4 to 15 can also be used, but only in conjunction with an OPEN# command which I shall deal with shortly. For the present though, assuming you have a printer connected, try this program:

10 FOR S=2 TO 3

20 PRINT #S; "MESSAGE ON STREAM";S 30 NEXT S

This will clearly demonstrate how the same PRINT statement can be used for at least two differand 3 for printer as before), is the universal format for directing program listings to the screen or printer.

So who needs LPRINT and LLIST anyway? In defence, it might be argued that the shorthand forms built into the ROM require less memory (one byte only, against three bytes for the universal forms). Personally, though, I feel that the Spectrum



ROM might have been designed to do even more if such unnecessary commands had been omitted

Anyway, if you are now satisfied that PRINT #S is what you should now be writing, how can you use it? Taking the situation I suggested earlier about optionally "switching" a print-out of instructions between screen and printer, try this program:

10 REM Print Instructions 20 INPUT "Screen (S) or Printer (P) ?": LINE a\$

30 IF a\$="S" THEN LET S=2 GO



40 IF a\$="P" THEN LET S=3 GO TO 60 50 GO TO 20

60 PRINT #S; "Instructions..."
Lines 30 and 40 set the stream number to correspond to either

screen or printer as required.
You may also find this kind of

option useful for printing lengthy tables of data/results. Scrolling

10 REM print instructions
20 INPUT "Screen (S) or Printer (P)?";LINE a\$
30 IF a\$="S" THEN OPEN #2,
"S": GO TO 60
40 IF a\$="P" THEN OPEN #2,
"P": GO TO 60

40 IF a\$="P" THEN OPEN #2
"P": GO TO 60
50 GO TO 20

60 PRINT "Instructions . . ."
100 OPEN #2, "S"



through long lists of figures on the screen may be alright for a quick check: for analysis, a hard copy would be better. Now you can have either or both with very little extra programming. An important point to remember though, when setting up dual purpose PRINT statements for tables, is that TABS serve both screen and printer equally well whereas ATs do not and should be avoided.



Apart from switching stream numbers, another possibility is to keep the stream numbers at their default values and switch the file devices attached to them by changing the labels of "device mnemonics" assigned to them. First, though, here is another little addendum you might like to pencil in to Chapter 22 of the manual for "Other Equipment" (as this wrongly states that OPEN# "cannot be used without the extra attachments". referring microdrives):

"OPEN #: To OPEN screen, printer or keyboard to any stream use a command of the type: OPEN #S. "dev"

Where S=stream number (0-15), dev=device mnemonic, (P= Printer: S=Screen: K=Keyboard)"

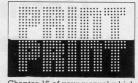
The OPEN # command can be used to upgrade programs for optional screen or printer without changing each PRINT statement to incorporate the "#S". Try this program:



We can imagine line 80 to be many lines with PRINT in them, which would take some time to change to PRINT #. So all we do instead (in lines 30 and 40) is to provide two alternative file devices for stream two, this being the standard for the PRINT statement. Line 100 ensures that any other PRINTs (apart from instructions) go to the screen only, thereby restoring default conditions on Stream two.

To cover all possibilities, an existing program which you wish to upgrade may also contain large sections of LPRINTS. To obtain optional printing without changing all these, you will see how this is done by making the following changes to the previous program: Lines 30-40, change OPEN #2 to OPEN #3: Line 60, change PRINT to LPRINT.

So far, I have not said much



Chapter 15 of your manual which says "You cannot print on the bottom two lines (22 and 23) on the screen because they are reserved for commands, INPUT data, reports and so on."

To fully satisfy yourself that this statement is manifestly untrue, try running this program

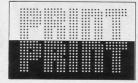
10 FOR N = 0 to 23 15 LET Y = N

20 IF Y < 22 THEN LET S = 2 30° IF N > = 22 THEN LET S = 0;

LET Y = N - 22

40 PRINT #S; AT Y,O,"THIS LINE ";N

50 NEXT N 60 PAUSE 0



In this example, the stream number has been set to zero for

about the keyboard as a file device, and associated stream numbers 0 and 1. Those of you who do not own a printer will be pleased to learn that further improvements in your PRINTing are possible by exploiting these streams.



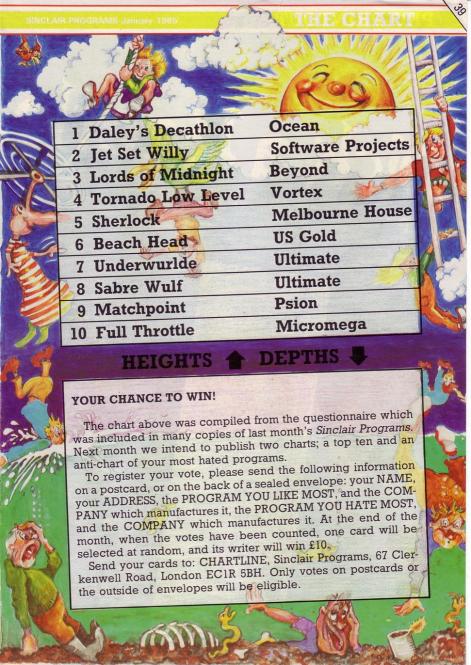
First, I suggest you change line 10 of the first example program to read:

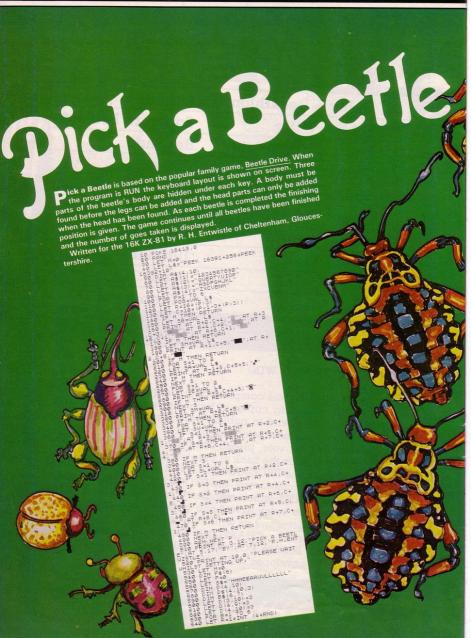
10 FOR s=0 TO 1 and re-run. You may be surprised to find that you are PRINTing on lines 22 and 23 of the screen. Yet again, you might like to pencil in some suitable correction to the section of

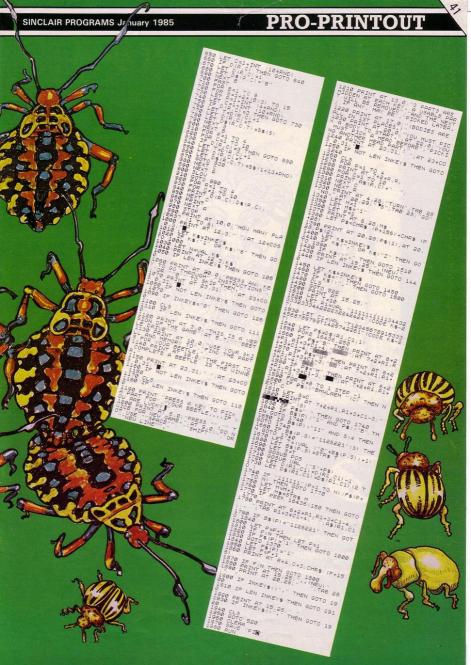
printing on the bottom two lines, although PRINT #1 would achieve the same result.

The keyboard is assigned two stream numbers 0 to 1 as it is connected to the bottom two lines of the screen via the INPUT command. Provided we use PRINT #s; AT... however, it does not matter whether we make S 0 or 1. It is important to observe, though, that the Y coordinate for the AT must be 0 or 1 or PRINT the bottom two lines separately. Hence the need to make Y dependent on N in the above program.

You should also note that the PAUSE 0 at the end of this program (causing an indefinite stop until any key is pressed) is essential to avoid having the bottom two lines immediately overwritten by the "O/OK" message.







# tírnanòg





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# ZZZZZZZZZ

Dear Diary

Today being a wet Sunday we spent what mother calls a "real family day", which consists of dad lying on the settee and worrying and going bald, mum cooking and complaining in the kitchen, my snobby sister Eustacia constructing 6th generation computers in her bedroom, and me killing aliens courtesy of the Sinclair Spectrum.

Usually I try to repress any desire to understand computers, but today was deadline day for the Sinclair Programs problem page

(amazing how quickly it started to feel like homework), so I thought I might ask myself technical questions about this alien-zapping game.

Then I thought there was no point asking myself technical questions.

if I couldn't answer myself. I went upstairs into Eustacia's room. "Don't you ever knock?" she said in her squeaky ten-year-old voice.

"You know in that program Death Rays of Doomdark," I said, leaning against her Wham poster, "when you fire the thermo laser rockets and blast the alien Star Cruisers and then go into hyperspace drive?"

"No."

"How does the picture move sideways so smoothly?"

Eustacia sighed but didn't stop programming.

"Each Spectum character square

has 8  $\times$  8 dots, called pixels. The screen has 32 columns and 24 lines, so there are clearly

(she paused for about a second) "49152 of these pixels

"By no coincidence whatever, this is also the number of bits in the 6K of RAM which controls the display; every bit between memory addresses 16384 and 22527 corresponds to one pixel. Try POKE 16384,255 — the line in the first character square is 8 pixels long because all 8 bits of one byte have been set.

"A smooth scroll means moving the display one pixel at once, and this requires machine code. The following routine can be adapted for any of your programs."

And very quickly she said,

5 CLEAR 64000: LET S=0 10 FOR I = 1 TO 21: READ X: POKE 63999 + I,X: LET S = S + X: NEXT I 15 READ T: IF S<>T THEN PRINT

"ERROR IN DATA ENTRY": STOP 20 DATA 33,0,64,62,192,203,62, 6,31,35,203,30,16,251,35,61,254, 0,32,241,201,2012 30 LIST

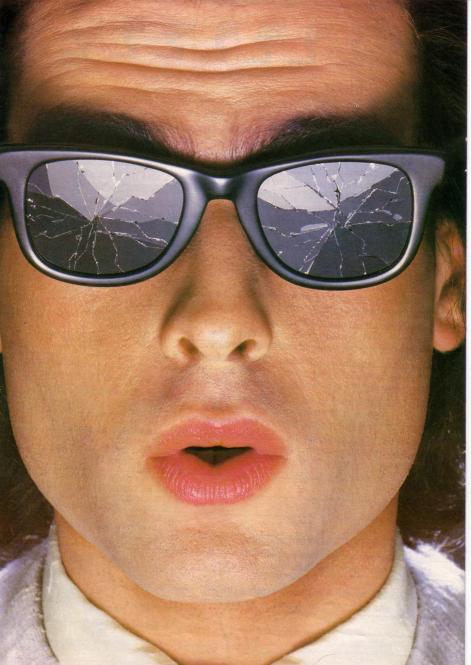
40 FOR I=1 TO 256: RANDOMIZE U SR 64000: NEXT I

"Very helpful," I said sarcastically, wrinkling her Wham poster slightly as a kind of warning. "But do you think I could have it in paper form?"

"You still owe me for last month's problem page," she said. "I'll take that in paper form, too.

Sid





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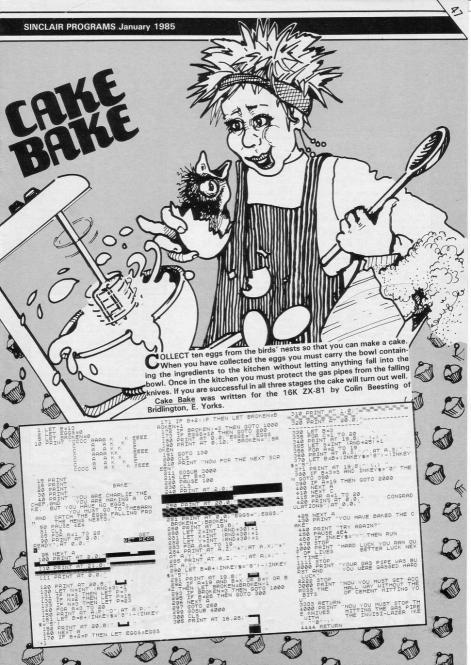
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10 LET X=15: LET Y=10: LET SC= O: LET MN=3: LET DRG=0: LET CLK=

11 LET E#="Q": LET R#="A": LET T\$="0": LET Y\$="F 30 INK 7: BORDER 1: PAPER 0: C

40 PRINT ; BRIGHT 1; INK 1; AT 8,8: "THE FROLICS OF A

42 PRINT ; BRIGHT 1; INK 1; AT 10,10: "CHUCKLEBUTTY"

45 PRINT ; FLASH 1; INK 3; PAP ER 0; AT 5,4;"(24\*ig6)"
46 PRINT; FLASH 1; INK 3; PAP

ER 0; AT 15,4;"(24\*ig6)" 47 FOR Q=6 TO 14: PRINT FLASH

1; INK 3; PAPER 0; AT 0,4; "(196 "; AT 0,27; "(196)": NEXT 0 50 PRINT; INK 2; AT 12,5; "Pre is ""S"" key to start" 100 LET A#="The Frolics of a Ch

icklebutty by Timothy Dunn @..Gu ide your Frollicing Chucklebutty to collect Tukkers.. Avoid going above or below the Uckbags or t hey will chomp you up"

200 PAUSE 50: RESTORE 1000: FOR Q=0 TO LEN A\$-32: PRINT PAPER O; INK Q- INT (Q/4) \*4+4; AT 18, 0; A\$ (Q+1 TO Q+32); / IF Q/3= INT

(Q/3) THEN READ N 300 BEEP .1,N: LET N=N-12: IF INKEY\$ ="S" THEN GO TO 312

311 NEXT Q 312 FOR T=1 TO 1000: IF INKEY\$

="S" THEN GD TO 2000 313 NEXT T: GD TD 200

1000 DATA 4,4,4,4,2,0,0,-1,-3,-3 ,0,4,9,9,9,9,7,5,5,4,2,2,4,5,4,5 ,4,8,5,4,4,2,0,0,-1,-3,-1,-1,-1, -1,0,-1,-3,0,4,9,99

2000 CLS : INK 7 2010 RESTORE 2020: FOR F=0 TO 7: READ INVADER: POKE USR "I"+F,I

NVADER: NEXT F 2013 RESTORE 2029: FOR F=0 TO 7: READ BLOW: POKE USR "B"+F,BLOW

· NEXT E

2015 RESTORE 2030: FOR F=0 TO 7: READ DROID: POKE USR "D"+F, DRO ID: NEXT F

2016 RESTORE 2025: FOR F=0 TD 7: READ BRICK: POKE USR "M"+F,BRI CK: NEXT F

2017 RESTORE 2035: FOR F=0 TO 7: READ SHIP: POKE USR "S"+F,SHIP NEXT F

2018 RESTORE 2027: FOR F=0 TO 6: READ INTEL: POKE USR "P"+F, INT EL: NEXT F

2019 RESTORE 2028: FOR F=0 TO 7: READ INTLE: POKE USR "O"+F, INT LE: NEXT F 2020 DATA 24,60,90,126,24,36,66,

DATA 0,63,0,252,0,63,0,252

2027 DATA 36.126.219,189,165,36 2028 DATA 36,189,219,126,60,66,1

2029 DATA 137.74.36.27.216.36.82

,145 2030 DATA 0,56,84,56,124,170,170

,170 2035 DATA 24,36,24,90,189,153,16 5,129 2050 REM \*\*\*\*1ST SHEET\*\*\*\*

2055 CLS : LET BGIN=2050: LET X= 15: LET Y=10: LET DRG=0: LET CLK =15: LET SHEET=5000: LET SH1=306

2060 REM

2065 GD SUB 2070: GD SUB 3000: G D TD 3050

2070 INK 5: DRAW 255,0: DRAW 0,1 75: DRAW -255,0: DRAW 0,-175 2075 INK 6: PLOT 0,18: DRAW 255,

2078 INK 7: PRINT AT 18,1;"DXY: MEN="; MN; AT 18,12; "SC="; SC; AT 18,21; "HIGH="; HSC:

2080 INK 6: PLOT 0,40: DRAW 255, 0: INK 1: FOR T=15 TO 240 STEP 2 : PLOT T,8: DRAW 0,5: NEXT T 2090 RETURN

3000 REM

3010 REM

3020 FOR T=1 TO 30: PRINT : INK 6; AT RND \*14+1, RND \*29+1; "D":

NEXT T 3030 FOR T=1 TO 35: PRINT ; INK 4; AT RND \*14+1, RND \*29+1; "I": NEXT T

3040 RETURN 3050 FOR E=245 TO 8 STEP -1: INK

0: PLOT E,12 3060 GD SUB 8000: GD SUB SH1

3065 NEXT E: 4000 REM

4010 CLS : REM \*\* REM NO MEN \*\*

4015 IF E <= 8 THEN PRINT AT 7 ,9; INK 2; "OUT OF OXYGEN"

4020 PRINT ; INK 6; AT 10,2; "E N D D-F G A M E !!"; AT 1 2,4; INK 5; "BETTER LUCK NEXT TIM E"; INK 7; AT 15,9; "SCORE = "; SC : FOR Q=3 TO 40: FOR S=1 TO 69 S TEP Q: BEEP .001.S: NEXT S: NEXT

4030 IF SC >= HSC THEN LET HSC=

4040 PAUSE 0: GO TO 10 5000 REM \*\*\*\*2ND SHEET\*\*\*\* 5010 LET BGIN=5000: LET X=15: LE

Guide your from the screen, coluide your frolicking chucklelecting tukkers as you go. Avoid going under or above the green uckbugs as they will kill you. The tukkers should be collected from the left or right as they will disappear if you approach from the top or bottom. To destroy the uckbugs. run into them from the side. A certain number of tukkers have to be eaten before you can advance to the next screen. Use keys Q, A, O and P to play.

Frolics of a Chucklebutty was written for the 48K Spectrum by Timothy Dunn of Wallasey, Mersevside.

ET SHEET=5100 5015 CLS : 60 SUB 2070: 60 SUB 5

030: GD SUB 3050 5025 GD TO 5020 5030 FOR Q=4 TO 12: PRINT ; INK 6; AT Q,Q;"D"; INK 4; AT Q,7;"I" NEXT Q

5035 FDR Q=10 TO 28: PRINT AT 8 ,Q; INK 4; "I"; AT 9,Q; INK 6; "D"; AT 10,Q;; INK 4; "I"; NEXT Q 5040 RETURN 5100 REM \*\*\* TRD SHEET\*\*\*

5110 LET BGIN=5100: LET Y=11: LE T X=2: LET DRG=0: LET CLK=52: LE T SHEET=5190: LET SH1=5130 5120 CLS : GO SUB 5140 5125 GD SUB 2070: GD TD 3050

5130 IF E=200 THEN PRINT AT 3, 5; INK 7;" "; AT 4,5;" "; AT 5,5 5135 RETURN

5140 INK 6: PRINT AT 3,12; "DDDD DD"; AT 4,11; "DDDDDDDD"; AT 5,12; "D DD DD,"; AT 6,12; "DD DD", AT 6,12; "DD DD", AT 6,12; "DDDDDD"; AT 8,13; "DDDDD"; AT 9,12; "DDDDDDD"





## 5372 1F X2 <= X THEN LET X2=X2+ 5160 FOR Q=10 TO 13: PRINT AT Q

,12; "D DD D": NEXT Q 5170 FOR Q=2 TO 14 STEP 1: PRINT AT Q,5; INK 4; "I"; AT 0,23; "I" NEXT D

5180 RETURN

\*\*\*4TH SHEET\*\*\*\* 5190 REM 5200 LET BGIN=5190: LET Y=10: LE T X=2: LET DRG=0: LET CLK=1: LET SHEET=5310: LET SH1=5280

5210 CLS : GD SUB 5260 5220 GD SUB 2070: GD TD 3050 5260 FOR Q=2 TO 14: INK 4: FOR W =3 TO 24 STEP 3: PRINT AT Q,W;" ": NEXT W: NEXT Q 5270 PRINT AT 10,27; INK 6; "D"

5280 IF E=90 THEN PRINT; AT 2, 6;" "; AT 3,6;" "; AT 4,6;" "



5290 IF E=230 THEN PRINT ; AT 1 1,24;" "; AT 12,24;" "; AT 13,24

5293 IF E=200 THEN PRINT : AT 3 ,21;" "; AT 4,21;" "; AT 5,21;"

5295 IF E=150 THEN PRINT AT 7, 15;" "; AT 8,15;" "; AT 9,15;"

5296 IF E=120 THEN PRINT ; AT 3 ,9;" "; AT 4,9;" "; AT 5,9;" "

5297 IF E=100 THEN PRINT ; AT 4 "; AT 5,3;" "; AT 6,3;" ,3:"

5298 IF E=85 THEN PRINT; AT 11,12;" "; AT 12,12;" "; AT 13,12; 5299 IF E=70 THEN PRINT ; AT 11 ,18;" "; AT 12,18;" "; AT 13,18;

5300 RETURN \*\*\*5TH SHEET\*\*\*

5320 LET BGIN=5310: LET Y=10: LE T X=10: LET DRG=0: LET CLK=20: L ET SHEET=5400: LET SH1=5362

5325 CLS : GD SUB 5340 5330 GO SUB 2070: GD SUB 3050 5340 LET Y1=2: LET X1=2: LET Y2=

14: LET X2=29 5345 PRINT AT X,Y; AT Y1,X1; IN K 4; "P"; AT Y2, X2; "0"

5350 GD SUB 3000

5360 RETURN 5362 PRINT AT Y1,X1;" "; AT Y2, 5365 IF Y1 >= Y THEN LET Y1=Y1-

. 4 5366 IF Y1 <= Y THEN LET Y1=Y1+ LET Y2=Y2+

5368 IF Y2 <= Y THEN 5369 IF Y2 >= Y THEN LET Y2=Y2-

5370 IF X1 >= X THEN LET X1=X1-5371 IF X1 <= X THEN LET X1=X1+ 5373 IF X2 >= X THEN 'LET X2=X2-

5375 PRINT AT Y1,X1; INK 4;"0"; AT Y2,X2;"0"; AT Y1,X1;"P"; AT Y2. X2:

5380 RETURN 5400 REM \*\*\*SHEET 6\*\*\*

\$410 LET BGIN=5400: LET Y=14: LE X=9: LET DRG=0: LET CLK=15: LE T SHEET=5450: LET SH1=5420: LET Y1=15: LET X1=28: LET TI=.4

5415 CLS : GO SUB 5030 5417 GD SUB 2070: GD TD 3050 5420 PRINT AT Y1,X1; INK 4;"0"; AT Y1,X1; INK 0;" " 5422 IF Y1 <= Y THEN LET Y1=Y1+ 5425 IF Y1 >= Y THEN LET Y1=Y1-

5430 IF X1 >= X THEN LET X1=X1-5435 IF X1 <= X THEN LET X1=X1+

5437 PRINT AT Y1, X1; INK 4; "P" 5450 REM \*\*\*SHEET 7\*\*\* 5460 LET BGIN=5450: LET Y=11: LE

X=2: LET DRG=0: LET CLK=42: LE T SHEET=5481: LET SH1=5420: LET Y1=11: LET X1=28: LET /I=.5 5470 CLS : GO SUB 5140: FOR Q=3 TO 6: PRINT AT 0,5; /INK 7;" ":

5480 GD SUB 2070: GD TO 3050 5481 REM \*\*\*SHEET 8\*\*\* 5482 LET BGIN=5481: LET TI=.3: L

ET Y=11: LET X=2: LET DRG=0: LET CLK=1: LET SHEET=5495: LET SH1= 5485: LET X1=25

5483 CLS : GO SUB 5260 5484 GD SUB 2070: GD TD 3050 5485 GD SUB 5280: PRINT AT 11,X 5486 IF X1 >= X THEN LET X1=X1-

5487 IF X1 <= X THEN LET X1=X1+

5488 PRINT AT 11, X1; INK 4; "0": RETURN

5500 REM \*\*\*LAST SHEET\*\*\* 5510 LET BGIN=5500: LET Y=14: LE T X=15: LET DRG=0: LET CLK=1: LE

T SH1=5700: LET SHEET=6000 5515 CLS : GO SUB 2070 5520 GO SUB 5550: GO TO 3050 5550 FOR Q=1 TO 4: INK 4: PRINT

AT 0,26; "IIII": NEXT Q: PRINT AT 2,28; INK 6; "D" 5560 PRINT AT 12,1; INK 4; "MMMM мммммммммммммммммммм, ал 

MMMMMMMMMM"
5570 PRINT AT 12,2; INK 0;" ": FOR Q=5 TO 11: INK 4: PRINT AT Q,1; "M"; AT Q,3; "M": NEXT Q 5580 FOR Q=1 TO 8: PRINT AT Q,5

;"M"; AT Q+3,13;"M": NEXT Q 5590 FOR Q=3 TO 9 STEP 3: PRINT AT Q,10; "MM"; AT Q+1,6; "MMMM": 5595 FOR Q=4 TO 11: PRINT AT Q,

12; "M": NEXT Q: PRINT AT 6,10; INK 0; " "; AT 4,6;" " 5600 FOR Q=2 TO 8 STEP 1.5: PRIN T AT 0,15; INK 4; "MMMMMMMM": NE YT D

5615 PRINT AT 3,22; "M"; AT 6,22 5620 PRINT AT 7,28; INK 7; "D" 5700 IF ATTR (Y,X+1)=7 THEN FO R Q=3 TO 4: PRINT AT Q,26; INK 3; "PPPP": NEXT Q: PRINT AT 2,21; BRIGHT 1; INK 1; "0" 5710 IF ATTR (Y,X+1)=65 THEN PRINT AT 1,26; INK 3; "PP"

5720 RETURN 6000 FOR Q=0 TO 255: INK 4: PLOT 0,0: DRAW 0,175: NEXT Q 6010 FDR W=1 TD 3: FDR S=30 TD 2

0 STEP -1: FOR Q=30 TO 40: BEEP .01,S: BEEP .01,Q: NEXT S: NEXT Q: NEXT W

6020 CLS : PRINT AT 10,2; INK 2 ; "C D N G R A T U L A T I D N S" ; AT 12,8; INK 7; "YOU'VE DONE IT

6030 FDR Q=0 TD 300: NEXT Q 6040 PRINT AT 15,27; INK 2; "S" A050 FOR Q=0 TO 100: NEXT Q 6060 FOR Q=0 TO 24: PRINT AT 15 Q; INK 6;" D ": PAUSE 30: NEXT Q: PRINT AT 15,12; INK 5;"MY HE RO": FOR S=1 TO 3: BEEP .1,40: N EXT S

6065 FOR Q=28 TO 2 STEP -1: PRIN AT 17,Q; INK 7; "P ": PAUSE 20 NEXT Q

6070 FOR Q=1 TO 100: NEXT Q 6075 PRINT AT 17,5; INK 4; "NOW TRY AGAIN...EARTHLING": FOR Q=1 TO 300: NEXT D: IF SC>HSC THEN LET HSC=SC

6080 LET E\$="A": LET R\$="Q": LET T\$="P": LET Y\$="0": LET SC=SC+1 000: LET MN=MN+1: INK 7: GD TD 2 050

7000 STOP

8000 PRINT AT Y, X; " " 8002 LET X=X+( INKEY\$ =Y\$)-( INK EY\$ = T\$) + (X <= 1) - (X >= 30)8005 LET Y=Y+( INKEY\$ =R\$)-( INK EY\$ = E\$) + (Y <= 1) - (Y >= 15)8016 IF INKEY\$ ="\*" THEN GO TO 10

BO20 PRINT INK 2; AT Y,X; "S 8026 IF ATTR (Y, X+1)=6 THEN T SC=SC+25: PRINT AT Y,X+1; INK 7; "B": FOR S=1 TO 69 STEP 7: BE EP .001,S: NEXT S: LET DRG=DRG+1

8028 IF ATTR (Y,X-1)=6 THEN LE T SC=SC+25: PRINT AT Y,X-1; INK 7; "B": FOR S=1 TO 69 STEP 7: BE EP .001,S: NEXT S: LET DRG=DRG+1 8030 IF ATTR (Y+1, X)=4 THEN LE T MN=MN-1: FOR S=69 TO 40 STEP -1: BEEP .001,S: NEXT S: LET DRG=

0: CLS : GO TO BGIN 8035 IF ATTR (Y-1,X)=4 THEN LE T MN=MN-1: FOR S=69 TO 40 STEP -1: BEEP .001,S: NEXT S: LET DRG= 0: CLS : GO TO BGIN 8085 PRINT ; INK 7; AT 18,10; MN;

AT 18-15:SC 8087 IF MN <= 0 THEN GD SUB 400

8090 IF DRG >= CLK THEN FOR Q=E TO 15 STEP -1: BEEP .001,50: IN K O: PLOT Q.8: LET SC=SC+3: PRIN AT 18,15; INK 2; PAPER 6; FLA SH 1:SC: NEXT Q: GO TO SHEET 8100 BEEP .01,Y+X 9020 RETURN : REM ANOTHER THINGS

9030 GD TD 4010 9999 INK 7



# HE'S HERE! HE'S MADE IT!

Son of Blagger for 48K Spectrum

Relive the daring exploits of Roger the Dodger through his prodigy Slippery Sid. More skill, more nerve, this cool little character seeks not only to follow in his famous parent's footsteps, but to establish some amazing feats of his own. Money's not his game. Espionage is his middle name and having forced his way into the National Security HQ he's faced with a no return journey through one of the most dangerous, most complex buildings in the land. Can he successfully

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#### COMPETITION



Read the review of Tir Na Nog in the Soft Focus section of this magazine, and use the information you find there and on this page to answer the five questions below. Write the answers to the competitions, together with your name and address, on a postcard, and send it to us at TIR NA NOG competition, Sinclair Programs, 67 Clerkenwell Road, London ECIR 5BH. If you would also like to be eligible for the CHART competition, add the name of your favourite game, and of your least favourite game below, your answers to the five questions.

The winners of the competition will be first correct answers selected after the closing date of January 31st, 1985.

Employees of EMAP and Gargoyle are not eligible to enter. The editor's decision in all matters concerning the competition is final.

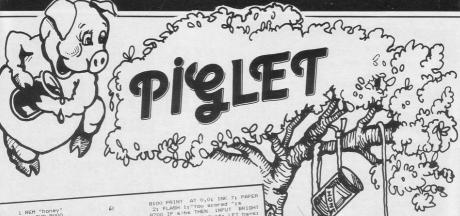
- 1. What is Tir Na Nog, besides being a computer game?
- 2. Who is the hero of Tir Na Nog?
- 3. Name two enemies the hero must face.
- 4. What is the hero's greatest challenge?
- 5. Name one other game produced by Gargoyle.

## TIR NA NOG COMPETITION

FIRST PRIZE: Five first prize winners will win a framed copy of the map of Tir Na Nog RUNNERS UP: Fifty runners-up will win a copy of the game Tir Na Nog



Tir Na Nog is the latest release from Gargoyle Games, producers of Ad Astra. It takes as its theme the heroes of Celtic folklore, and the fabled world in which they exist. These powerful mythical images are brought together in a superbanimated adventure. Both the hero and the enemies he must face are large-scale animated graphics, which can be moved by the player across a massive, complex landscape which scrolls smoothly across the screen



1 REM "honey" 10 GD SUB 9000 20 GD SUB 9500

25 LET HS=0 30 INK 0: PAPER 5: BORDER 1

35 LET s=0: LET p=0 40 LET z=11

50 LET stones=0 105 GD SUB 5000 110 LET x=17: LET y=30 120 PRINT AT 21.0; INK 2; PAPE 7; "Score" is: IF hs=0 THEN GD TD 150 130 PRINT AT 21.0;

130 PRINT AT 21,15;hs;" by ";n 150 PRINT AT x,y; INK 2; "A";"

150 PRINI AI X171 III
"; AT X+1,171 "B"; "F Y=0 THEN PRI
160 LET Y=Y=1: IF Y=0 THEN PRI
NT AT X,1; ": IF Y=0 THEN PRI
NT AT X+1,1; ": LET Y=30
NT AT X+1,1; ": LET Y=30
170 IF INKEY\$ <> "" AND D=0 T

170 IF INKEY# <> "" AND p=0 T HEN LET p=11 LET sysy: LET swsy: LET street i LET stones stones: I fe stones i LET stones street i LET stones street i LET street i

1020 IF ATTR (sx-1,sy)=42 THEN LET p=0: PRINT AT sx,sy;" ":

ETURN

1030 IF sx-1=4 THEN LET p=0; PR

INT AT sx,sy; ", RETURN

1040 IF ATTR (sx-1,sy)=48 THEN

LET sm=100; LET p=0; PRINT AT

sx,sy; "; AT x,y;" "; AT sx-1,

sy; PAPER 5; INX 2; HH; BEEP .05

\_50; LET p=0; D=1

,50: LET pc=pc+1 1050 IF pc=t THEN GO SUB 2000

1070 RETURN

2000 LET p=0: LET z=z-1: GO TO 1

2010 RETURN 4999 STOP

5000 REM set up screen

DDDDDDDDDDDD"
5110 PRINT AT 19,0; INK 4; "IIII

1997.

5200 FDR 1=1 TO 27: LET w= INT (
RND \*4+2): FOR 8=5 TO w: PRINT (
AT e.i: INK 0: F": NEXT e: PRIN
T AT e.i: INK 0: F": NEXT e: PRIN
T AT e.i: INK 0: PAPER 6: "E": L
ET t=t+1: LET i=i+ INT ( RND \*5)
+1: NEXT\*\*\*

5500 RETURN

BOOO REM end routine BOSO BEEP .05,0: BEEP .05,1: BEE P .05,2: BEEP .05,3: BEEP .05,4: BEEP .05,5: BEEP .05,6: BEEP .0

8100 PRINT AT 0,0; INK 7; PAPER 2; FLASH 1; "You scored "is 8200 IF s>hs THEN INPUT BRIGHT 1; "Name please! ";n\*: LET hs=s: IF LEN n\*>12 THEN GO TO 8200

8500 PRINT FLASH 1; "Do you want another game? (Y/N) 8505 PAUSE O INKEYS ="y" OR INKEYS

8510 IF THEN GO TO 30 8520 IF INKEY\$ ="n" DR INKEY\$

#520 IF INKEY\$ ="N" UN INKEY\$ ="N" THEN STOP #530 IF INKEY\$ <> "y" OR INKE \*"Y" OR INKEY\$ <> "N" OR INKEY\$ <> "n" THEN GO TO 850

8600 STUP 9000 RESTORE : FOR a=1 TO 9: REA D a\$: FOR b=0 TO 7: READ c: POKE USR a\$\*+0,c: NEXT b: NEXT a 9010 RETURN

9100 DATA "A",0,0,20,28,28,28,8,

9110 DATA "B",255,62,62,62,28,20 ,20,20 9120 DATA "C",129,195,247,255,25

9120 DATA "E",129,195,247,235,25 5,255,255,255 9130 DATA "B",255,255,255,255,25 5,195,195,129 9140 DATA "E",129,129,129,129,12

9,129,129,255 9150 DATA "F",16,16,16,16,16,16, 9160 DATA "6",8,28,62,28,8,0,0,0

9170 DATA "H",129,129,129,129,12

9,129,129,231 9,129,129,231 9180 DATA "1",170,170,255,255,25 5,255,255,255 9200 RETURN

9500 REM instructions 9503 INK 1: PAPER 5: BORDER 1

9510 PRINT TAB 9; INVERSE 1; #1

9520 PRINT: PRINT "Pooh Bear ha s gone on holiday": "and left all s gone on holiday"

his honey pots"
9530 PRINT "hanging from the bra
nch of his "favourite tree in t
he Hundred" "Acre Wood."

9540 PRINT : PRINT "However, Pig let is hungry: food" "is scarce.
He has collected" "100 stones

Me has collected 100 stones with which he intends" 9550 PRINT "to knock down the po ts of honey." 9560 PRINT : PRINT "You help Pig

9560 PRINT : PRINT "You help Fig let by pressing stone" "key to gask kins throws she runs across the 9570 PRIN "under the branch." e grass" under the branch." 9580 PRINT: PRINT "You will sco 9580 PRINT: PRINT "You will sco proposed by the stone of the print of the

re 100 points to at Piglet hits." 7590 PRINT : PRINT INK 7; PAPER 2; "GOOD LUCK!";; PRINT TAB 17; "Any key ... 9592 PAUSE 0

9595 CLS 9600 RETURN

POOH BEAR has gone on holiday and left all his honey pots hanging from the branch of a tree. Help Piglet to knock the honey pots off the branch using one of the one hundred stones he has collected. As Piglet runs across the grass underneath the tree press any key to throw a stone.

-11/////

Written for the 16K Spectrum by Cathryn Corns of Enfield, Middx.





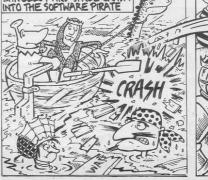




LANCELOT

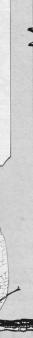
DISARMED, BUT UNARMED





LANCELOT AND SPROG CRASH





10 GD SUB 9000 15 BORDER O: PAPER 4: INK O: C 18 60 LET hs=0 65 LET u=0 70 BORDER O: PAPER 4: INK O: C 75 PRINT AT 0,0; PAPER 1;" AT 21,0; PAPER 1;" BO | FT t=1000 85 PRINT AT 21,17; INK 6; PAP ER 1; "HIGH SCORE= 90 PRINT AT 21.29: INK 6: PAP ER 1:hs 100 PRINT AT 21,1; INK 6; PAPE R 1; "TIME" 110 PRINT AT 0,0; INK 6; PAPER 1: "CAUGHT: " 190 LET x=3: LET y=29 200 LET b= INT ( RND \*19)+1 210 LET c= INT ( RND \*29)+1 220 LET z= INT ( RND \*4)+1 230 IF z=1 THEN LET b=b+1 240 IF z=2 THEN LET b=b-1 250 IF 7=3 THEN LET CEC+1 260 IF z=4 THEN LET c=c-1 270 IF b=0 THEN LET b=1 280 IF b=21 THEN LET b=20 290 IF c=-1 THEN LET c=0 300 IF c=32 THEN LET c=31 310 PRINT AT b,c; INK 3; "A" 315 PRINT AT 21,6; INK 6; PAPE ": LET t=t-1 R 1:t:" 320 IF t=-1 THEN GD TD 6000

340 IF INKEY\$ ="6" THEN LET x INKEYS ="5" THEN LET V 350 IF 360 IF INKEY\$ ="8" THEN LET y 370 IF x=0 THEN LET x=1 375 IF x=20 THEN LET x=19 375 IF X=20 INEN LET Y=0 380 IF y=31 THEN LET Y=0 385 IF y=31 THEN LET Y=30 390 PRINT AT X,y; INK 1; "BC"; AT X+1,y; INK 1; "DE" 400 BEEP .0001,60

INKEY# ="7" THEN LET >

330 IF

+1=c OR x+1=b AND v=c OR x+1=b A ND y+1=c THEN GD TO 600 420 PRINT AT x,y;" ": AT x+1,

410 IF x=b AND y=c DR x=b AND y

430 PRINT AT b,c; INK 5; "F" 440 GD TD 220 600 FOR j=1 TO 4: BEEP .02,20: BEEP .02,40: BEEP .02,20: BEEP 02,40: BEEP .02,20: PAUSE 15: NE

620 LET u=u+1 650 PRINT AT 0,8; INK 6; PAPER 1:4

660 PRINT AT x,y;" ": AT x+1, 670 GD TD 200 6000 PRINT AT 0,12; PAPER 1; IN K 6; FLASH 1; "CALCULATING SCORE"

6005 LET d=0: LET e=0: LET f=0: LET SC=0 6010 FDR g=1 TO 20: FDR h=0 TO 3

6015 IF ATTR (g,h)=37 THEN LET d=d+1

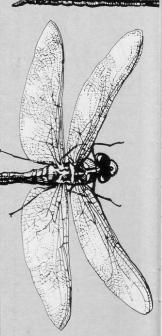
6020 NEXT h: NEXT g 6030 LET e=(d+d): LET f=(u\*20)

6040 LET sc=(f-e) 6050 IF sc>hs THEN LET hs=sc 7000 GD SUB 9500

7020 BORDER O: PAPER O: INK 6: C 7035 PRINT AT 5,4; "YOU CAUGHT "
:u: " DRAGONFLIES": BEEP .25,12:

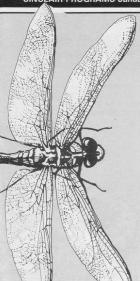
PAUSE 50 7040 PRINT AT 7,7; "BUT LEFT "; d ;" BITES. ": BEEP . 25,12: PAUSE 5

7050 PRINT AT 9,6; "YOUR FINAL S CORE IS:-": BEEP .25,12: PAUSE 5



he dragonflies have hatched and are hunting for food. Some of them have found your lily-pad and are eating it away. To prevent them from ruining the lily-pad you have to hop after them in an attempt to catch them. The holes left by the Dragonflies can be repaired by going over them. You have 999 time units in which to eat as many dragonflies as possible.

Written for the 16K Spectrum by P. E. Thompson of Westgate, Kent.



7060 PRINT AT 11-13: "POINTS f: BEEP .25,12: PAUSE 100: PRINT AT 12,13; "PENALTY ";e: BEEP .2 5,12: PAUSE 50: PRINT AT 12,21; OVER 1; "\_\_\_": BEEP .25,12: PAU SE 50: PRINT AT 13,13; "SCORE= ";sc; AT 13,21; OVER 1;".\_\_": B

25,12 7070 PAUSE 100: PRINT AT 16.7:"

HIGHEST SCORE: "; hs 7080 PRINT AT 21,3; FLASH 1; "Pr ess any key to play again"

7085 GO SUB 9500 7090 IF INKEY\$ ="" THEN GO TO

7090 7100 PAUSE 50

7110 GO TO 65

9000 FOR k=1 TO 6: FOR n=0 TO 7: READ a: POKE USR ( CHR\$ (143+k ))+n,a: NEXT n: NEXT k

9010 DATA 36,24,255,126,16,8,16, 8,120,236,126,191,123,61,30,29,0 ,0,0,0,128,224,248,252,27,30,29, 27,39,63,94,56,252,126,190,223,2 39,255,254,124,8,60,126,252,124, 120.40.0

BURDER O: PAPER O: INK 6: C .

9040 PRINT AT 11,6; FLASH 1; "IN STRUCTIONS? (y/n)" INKEY\$ ="" THEN GO TO 9050 IF 9050

9060 IF INKEY\$ ="v" OR INKEY\$ ="Y" THEN GD TO 9100 9070 IF INKEY\$ ="n" DR INKEY\$

"N" THEN RETURN 9080 GD TD 9050 9100 GD SUB 9900

9110 CLS

9120 GO SUB 9850

9130 PRINT AT 8,0; "The Dragonfl ies have hatched, andare hunting for food. Some of them have fo und your lily-pad,

and are busi ly munching away your home. Not only do

you have to eat the dragonflies. but also repair the holes they have made by moving over them.

Move using t he following keys:-"

ne following keys:9140 PRINT AT 18,6; "LEFT '5'
RIGHT '9'"; AT 19,6; "UP
7' DUMN '6"
9150 PRINT AT 21,3; FLASH 1; "Pr
ess any key to continue"
9160 IF INKEY\$ ="" THEN GO TO

9160 9170 GO SUB 9900

9180 CLS : GD SUB 9850 9190 PRINT AT 8,0; "Every dragon

fly you catch is worth 20 points, but every hole you leave at the end of the gamewill lose yo u 2 points. You start wi th 1000 time units, and the game is over when you run out of t ime. At the end of the game your

score will be calculated and displayed." 9200 PRINT AT 19,10; FLASH 1;"
'GOOD LUCK' "; AT 21,5; INVERSE

1; "Press any key to play" 9210 IF INKEY\* ="" THEN GO TO

9210 9500 FOR q=0 TO 31 9510 BEEP .04,q: NEXT q

9520 RETURN AT 1,11; INK 5; "\*\*\*\* 9850 PRINT

\*\*\*\*\*\*\*; AT 2,11; INK 5; "\*"; AT 2,12; INK 4; "DRAGONFLY"; AT 2,2 INK 5; "\*"; AT 3,11; INK 5; "\*\* \*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\* 9860 PRINT AT 2,9; INK 3;"A"; A T 2,23; INK 3;"A"; AT 5,16; INK 5;"BC"; AT 6,16; INK 5;"DE" 9870 RETURN

9900 FOR a=0 TO 14

9910 BEEP .1,a: BEEP .05,a+3 9920 NEXT a 9930 BEEP .1,20

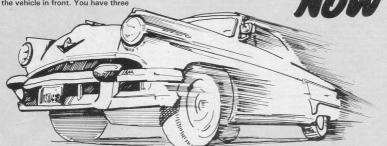
9940 RETURN

THE SPEED at which a car is travelling is shown on the screen. Input the distance you think is needed for the car to brake without stopping short or hitting the vehicle in front. You have three

attempts at each speed and are told if your guess is too big or too small. Brake Now was written for the

16K ZX-81 by Leo Sullivan, London





100 CL5 200 LET J=0 300 LET M=10\*INT (RND\*7) 400 LET M=10\*INT (RND\*7) 400 IF M.20 THEN GOTO 20 500 LET X=M\*IN-20)/10\*.5\*M\*M 600 PRINT "UHRT IS THE MINIMUM TOPPING" 700 PRINT "DISTANCE IN FEET FOR PRINT "TRAVELLING AT ".M. "M .P.H. ?" 900 INPUT R 1000 FOR N=5 TO 7 1100 PRINT AT N,0," 1200 NEXT N 1300 PRINT AT 5.0;R;" FEET" 1400 LET J=J+1

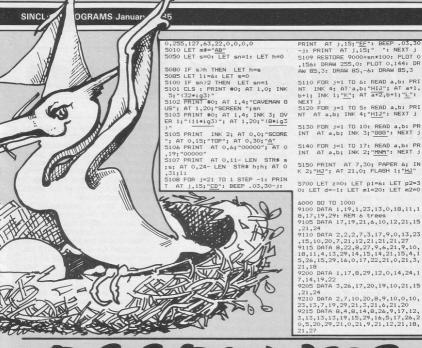
1500 IF X=R THEN GOTO 3100 1500 PRINT AT 7.0 "WRONG-" 1700 IF R:X THEN PRINT "TOO FAR. 1800 FF RY THEN PRINT NOT FRAG BOODER 1 3.3 THEN GOTO 2200 2000 FRINT TRY AGRIN 2100 GOTO 900 2000 FRINT RY 917, PS, RT 10, 16; Y 5.17 G. 175, RT 10, 10; Y 2000 FRINT RY 917, PS, RT 10, 20; Y 2000 FRINT RY 93, PS, RT 10, 20; YS; RT 96; PS, RT 10, 4; YS, RT 97, PS, RT T 10, 20; PS, RT 10, 20; YS; RT 96; PS, RT 10, 4; YS, RT 37, PS, RT T 10, 20; YS, RT 99, PS, RT 10, 20; YS;

,AT 00,10;Y\$,AT 9,13,P\$ ;Y\$,AT 9,15,P\$,AT 10,14 17;" \_\_\_\_";AT 10,15;" IT 9.17"
CRUNCH"
PRINT "CORRECT DISTANCE = "
FEET"
GOTO 3400
IF JOI THEN LET P\$=" ATTEMP 3200 IF U=1 THEN LET PS=" RTTEMP 3300 PRINT AT 10.0; "RIGHT, YOU 3300 PRINT HT 10,0 RIGHT, YUU NEEDED ", P\$ 3400 PRINT AT 13,0 PRESS N/L FO R ANOTHER TRY" 3500 INPUT P\$ 3500 RUN

# Gus the Caveman

ELP <u>Gus the caveman</u> climb the cliff to the pterodactyl's nest so that he can collect twigs. Once he has collected a twig he can take it back to his campfire before he advances to the next screen. Do not let Gus bump into the ledges or other obstacles and look out for the angry pterodactyl.

Written for the 16K Spectrum by Anthony Sherwood of West Bromwich, West Midlands. 1 RESTORE : LET kk=0: PAPER 7 1100 LET p1=p1+((p1<m1)-(p1>m1)) INK O: BORDER 7: CLS 1110 LET p2=p2+((p2<m2)-(p2>m2)) 1120 IF ATTR (p1,p2) <> 56 DR ATTR (p1,p2+1) <> 56 DR RND >.6 2 GD TD 4000 6 FOR j=1 TO 2: BEEP .02,5+10 \*i: IF -m2=0 DR m2=31 THEN LET d OR p2=31 OR p1<5 THEN LET p1=p y; LET p2=px 1125 IF RND >.7 THEN PRINT AT py,px;" "; INK 1; AT p1,p2;"EF ": GO TO 1131 7 PRINT AT m1,m2;" ": LET m1 =m1-1: BEEP .02,10+10\*j: LET m2= m2+d: IF ATTR (m1,m2) <> 56 THE N GO TO 200 1130 PRINT AT py,px;" "; INK 1 8 PRINT AT m1, m2; m\$(j): NEXT ; AT p1,p2; "CD" 1999 NEXT i 9 FOR j=0 TO 2: BEEP .02,35-1 2000 GD TD 1000 4010 CLS : PAPER 5: PRINT AT 0, 041 10 IF m2=0 DR m2=31 THEN LET 10: "CAVEMAN GUS" d=04015 PRINT AT 0,0; OVER 1; INK 11 IF ATTR (m1+1,m2) <> 56 TH 1;"(32\*ig3)" EN RETURN 4020 PRINT "HELP GUS TO CLIMB T 12 PRINT AT m1, m2; " ": BEEP . HE CLIFF TO THE PTERODACTYL NES 02,30-10\*j: LET m1=m1+1: LET m2= T. HE NEEDS TOBRING TWIGS DOWN FR m2+d OM THE NEST TO KEEP HIS CAMPFIR 13 IF ATTR (m1, m2) <> 56 THEN E BURNING. 60 TO 200 14 PRINT AT m1,m2; "A": NEXT j 15 RETURN 4025 PRINT " 4030 PRINT " DON'T LET HIM BUM 20 LET ct=ct+1: PRINT AT m1,m P INTO ANY OBSTACLES OR FALL 2;" ": LET m1=m1+1: PRINT AT m1 ,m2;"A": BEEP .05,3\*(21-m1): IF TOO FAR. HE ALSO HAS TO AV ANGRY PTERODACTYL OID THE ct=6 THEN PRINT AT m1.m2:" GD TD 200 4040 PRINT " IF HE GETS A TWIG 22 IF ATTR (m1+1,m2) <> 56 TH AND PUTS IT ON HIS CAMPFIRE, HE WILL THEN MOVE TO SCREEN TW EN GO TO 1061 24 GD TD 20 200 BORDER 2: FOR j=1 TO 30 STE 4050 PRINT '" LEFT-9 RIGHT-0 P 3: BEEP .005, j: NEXT j: BORDER JUMP-1 " 4200 FOR i= USR "a" TO USR "n"+ 210 PRINT AT p1,p2;" 215 LET li=li-1: PRINT AT 0,31 4201 READ j: POKE i,j: NEXT i ;li: IF li=0 THEN GD TD 300 4210 PRINT INVERSE 1;" 220 GD TD 5700 ESS A KEY TO START 300 PRINT FLASH 1; INK 2; AT 7 4255 PRINT FLASH 1; INK 2; PAPE GAME DVER "; AT 9,9;" PRE R 6; AT 7,15; "HJ" 4257 IF RND > 8 THEN PRINT SS KEY 8 ": FOR k=10 TO -5 STEP -1: FOR j=k+2 TO k-1 STEP -1: BE 12,21; "CD"; AT 7,14; "A"; AT 7,1 EP .03,j: NEXT j: NEXT k 310 IF INKEY\$ <> "8" THEN GO 4258 IF RND >.9 THEN PRINT AT TO 310 311 LET sn=1: GO TO 5080 12,21; "EF"; AT 7,14; "B"; AT 7,1 1020 FOR i=1 TO 2 1025 IF INKEY\$ ="1" THEN GO SU 4259 IF INKEY# ="" THEN BEEP 00012, RND \*60: GD TD 4257 4260 PAPER 7 1030 PRINT AT m1, m2; " " 5003 DATA 56,56,16,56,124,186,40 1039 IF INKEY\$ ="9" THEN LET d ,68,56,56,16,56,40,40,16,16 5004 DATA 224,241,123,25,15,7 1040 IF INKEY\$ ="0" THEN LET d 2,15,159,188,48,224,192,128,128 5005 DATA 0,1,3,1,15,127,242,226 1045 LET m2=m2+d: IF m2<0 DR m2> ,0,128,128,0,224,252,159,143,40, 31 THEN LET m2=m2-d 28,56,20,4,53,30,4,3,47,55,127,2 1050 IF ATTR (m1, m2) <> 56 THEN 51,127,63,25,183,255,255,63,123, GO TO 200 243,223,191,174,255,246,254,223 1060 IF ATTR (m1+1,m2)=56 THEN 247,254,176,255,62,60,60,60,60,6 LET ct=0: GD TD 20 1070 PRINT AT m1, m2; m\$(i) 1075 BEEP .005,i\*15+10 5006 DATA 255,255,190,62,20,4,0 1085 IF ATTR (m1+1,m2)=50 THEN LET z=1: FOR k=-20 TO 20 STEP 5 : BEEP . 04.k: NEXT k 1087 IF ATTR (m1+1,m2)=178 THEN IF z=1 THEN LET s=s+50: FOR 1 =40 TO 0 STEP -1: BEEP .03,1: NE XT 1: LET z=0: LET sn=sn+1: GO T D 5090 1093 LET py=p1: LET px=p2 1095 IF RND >.7 THEN LET p1=p1 -1: 60 TO 1110



# 23658,8:

ER 7: CLS : FOR U= USR "B" TO U SR "C"+7: READ W: POKE U,W: NEXT U: DATA 145,82,0,192,3,0,74,137 

; INK 1; "B": NEXT t: NEXT r 20 INK 0: FOR R=2 TO 30 STEP 2 : PRINT AT 3+ INT ( RND \*15),R;

": NEXT R 24 INK 0: LET T=0

25 PRINT AT X,Y; "C" 35 BEEP .01,Y 38 PRINT AT X,Y;" "

40 IF INKEY\$ ="8" THEN LET Y

45 LET T=T+.07

48 PRINT AT 21,0; "TIME: "; T 50 IF INKEY = "7" THEN LET X mY-1

60 IF INKEY\$ ="6" THEN LET X

70 IF Y=31 THEN BEEP .1.5: BE EP .1,5: GD TO 200 BO IF ATTR (X,Y) <> 49 THEN

GO TO 25: BEEP .2,2
100 LET Y=Y-1: GO TO 25
200 CLS: PRINT AT 10,0; "YOU E SCAPED IN ":T; " SECONDS"
210 INPUT "WOULD YOU LIKE ANOTH

ER GAME (Y/N)"; A\$

220 IF A\$="Y" THEN CLS : RESTO RE 1: 60 TO 1

230 BEEP .1,1: BEEP .1,1

FIFTEEN doorways appear randomly in the corridors on the screen. Run up or down the corridor to reach the doorway and the next corridor. When you have been through all fifteen doorways and along each corridor you will be told how long you took.

Doorways was written for the 16K Spectrum by Barry Jones of Handsworth, Birmingham.



# CONTROL Hampstead and Kentilla

HAMPSTEAD has a totally unreasonable grip. If I find my feet aching during the day this is automatically put down to my having wandered all round Piccadilly Circus last night. It takes a conscious effort to recall that I was in fact doing nothing more arduous than typing.

In my usual daze, I got up to sign on and was struck by the desire to succeed for a change. I resolved to claw my way up the social ladder, from a tacky two-up two-down in what estate agents manage to call West Hampstead, and attain Hampstead — res veritas. Mind you, I suppose I could always settle for Richmond instead, take a trip to Waterloo, and thence by bus to a round of wine bars and bistros, or take the train to Kings Cross for the trip of a lifetime!

After about fifty dismal failures (and a few intriguing ones) I have managed to take a job with a company car with which I can get to Islington, St John's Wood, dear old West Hampstead, or go up the M11 to Cambridge. I have still not attained Hampstead, but at least they no longer throw me out

If you want to impress him you have to brave the estate, where you find a really tempting item for an art critic.

The decisions you make in your job are crucial. They can earn you a bonus but even THAT does not impress Pippa, another social climber.

A pity the key to your filing cabinet has been lost — maybe a visit to the shops is needed.

DO make a saved copy of the earlier parts of the game. Once you have investigated that thoroughly it swiftly becomes a bit of a bore getting to where you REALLY want to be.

Early in the first evening I made 28% — by settling down elsewhere — but remained stuck at 38%, with Hampstead remaining a tantalising and unattainable glow on the horizon, until late last night and early this morning when, in a group effort, we made 85%.

The game was developed using the Quill interpreter, but then re-written entirely. Strangely enough, it does not so much demonstrate how much one can improve Quill adventures, as how much can be done within them, since at times it almost seems like a graphic game.

As if the game itself were not enough, the SCREEN\$ when loading is one of the best I've ever seen.

Addiction Factor 9

Kentilla has the misfortune to be in the same review as Hampstead. It is less compelling, but only just! The aim of the game seems to be to match twisted minds with the author. Maps have a tendency to work one way, if then. The topology of this world is quite somethind!

I still have a preference for some sort of visual input to help me think — only in this does Kentilla rate more highly than Hampstead. One of my friends was not impressed by the SCREENS but the rest of us beg to differ! As you go through the game you find more and more that apart from the excellence of the loading screen in its own right, Image Systems have chosen a scene that brilliantly evokes Derek Brewster's world.

The input routine is a little unusual and has some very useful features, especially the use of EDIT (CAPS SHIFT 1) to recall the previous command — other programmers please copy.

Back in the Mists of Time Grako wrought his evil and was vanquished, and was returned to the flames of the Abyss. The world rejoiced . . Too soon — for Velnor found the Tomes of Grako and, using these, brought evil again to the land. He, too, was consigned to the flames — but Grako escaped with the Moonstone of Algrath . . the cassette insert carries on like this for quite some time.



of my club.

Do not go naked into the industrial estate — maybe there is no ball or string, but it is still useful to remember Theseus. Everybody gets lost in places like this — they can be mapped provided you are not too committed to Euclidean geometry.

The gentleman on the train — you know the one if you have been to Waterloo — IS important.





To continue the story .

For all the menace of his name, the first character met, Ogeron, is a nice guy, hung up on the thought that he has to trust yours truly to save the world! Maybe he has a point there! Apart from his gift of the sword, Ogeron offers some necessary background information: the evil Grako has moved into the Black Tower shown in the distance, beyond the vile swamps of Caradoom on the loading screen - and is discovering the secrets of Velnor's power. Unless I can reach the Tower and stop Grako the world will enter eternal darkness!

The order of events in the Cavezat cavern is crucial, since Cavezats dislike thieves and will not allow one to leave; benefactors, on the other hand, are extremely well treated (just find THE TORCH in that well-lit cavern and anything available is yours for the taking).

The river can, and must, be crossed ... there is no boat, so do the logical thing — swim! Again, careful attention to detail gets the desired results, much depends on the exact word used. Two interesting, if completely useless facts — the sword floats, and the rope catches up in an invisible tree. The rope you can regain, but the sword vanishes

forever down the rapidly flowing river.

In Carawood there is an Oracle which has a message for you. If you explore this strange wood and the adjacent swamps you will also find a castle and a maiden to save. You can avoid death at the hands of the Urga-maul in their caverns. In order to do this, the best idea is to arrange to be somewhere else as soon as they open the door.

Avoid ambiguity and be as precise as possible — for instance, since you cannot be sure that your first blow will end the fight, "kill", though valid in so many adventures and in Role Playing Games similar to this, is not accepted here. No need to depair, though, "attack" serves quite well! As with The Hobbit, life goes on whether or not you do anything. The correct actions, if you can think fast enough, can change alignments, making enemies into friends, which can be more useful than hacking your way through with your trusty sword!

This is not an adventure to complete in an evening — it could take weeks, or even months to plumb its depths, so Happy Adventuring, and Good Luck! More Adventures in Caraland please!

Addiction Factor 8

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The second contract to

### COLLECT-A-KBY

WORK your way up the screen collecting the keys as quickly as you can. A monster, a hammer, an electrified wall and a moving wall have joined forces in an attempt to hamper your progress, and they should be avoided. If you manage to collect all fifty keys, you must return to the flashing wall at the bottom of the screen.

Collect-a-Key was written for the 16K Spectrum by Mark Freeman of Colchester, Essex.

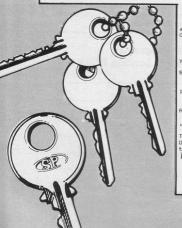
- 1 GD SUB 9000 5 GD SUB 4000
  - 6 LET hi=3000
- 10 LET a=18: LET t=0: LET b=1: LET VEO
- 15 BORDER O: PAPER O: CLS
- 20 GO SUB 800; GO SUB 1000 40 FOR f=14 TO 20; PRINT AT 7 f; INK 7; BRIGHT 1; "E"; AT 17, f-10; INK 3; "B"
  - 50 GD SUB 500
  - 54 LET t=t+1
- 55 IF INT ( RND \*20)=5 THEN GD SUB 200 AO NEXT 4
- 70 FOR f=20 TO 14 STEP -1: PRI NT AT 7,f; INK 7; BRIGHT 1; "F ; AT 17,f-10; INK 3; "H "
  - BO GD SUB 500
- 85 IF INT ( RND \*20)=10 THEN GD SUB 200
- 90 NEXT 4
- 100 GD TD 40
- 200 FOR n=13 TO 15: PRINT AT n ,16; INK 2; PAPER 6; "AAA": BEEP
- 205 IF ATTR (a,b)=50 THEN FOR f=0 TO 10: BEEP .1,-30: NEXT f: PRINT AT 10,9; INK 3; "Killed b y wall": GD TO 2000
- 206 NEXT n 210 FOR n=15 TO 13 STEP -1: PRI AT n,16;" ": BEEP .01,30:
- NEXT n 220 RETURN
- 299 PRINT AT a,b; BRIGHT 1; IN
- 7; "<u>D</u>" 300 LET a=2 320 IF b<2 THEN LET b=1: 60 TO
- 322 PRINT AT a,b;" "
- 326 IF INKEY# ="0" THEN PRINT

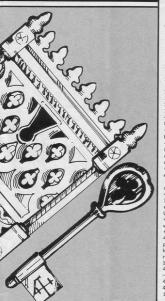


- 331 PRINT AT a,b; INK 6; "I" 335 BEEP .05,-30 340 GD TD 300 350 IF ATTR (a,b)=50 THEN GD
- TO 590 360 IF ATTR (a,b)=70 THEN BEE P .01,50: BEEP .01,60: LET k=k+1
- 370 PRINT AT 20,4; "KEYS: "; k 380 PRINT AT 20,20; "TIME: "; t 390 RETURN
- 400 IF t<hi THEN LET hi=t 410 PRINT AT 0,0; INK 3; "BEST
- TIME: "; hi; AT 2,0; INK 5; "YOUR T IME: ";t: RETURN
- 500 IF a=3 THEN IF b=30 AND I NKEY\$ ="q" THEN GD TO 299 505 IF ATTR (a,b)=71 THEN BEE P.1,3: BEEP.1,0: PRINT AT 10, INK 5; "Killed by ghost": GO T 0 2000
- 510 IF ATTR (a,b)=67 THEN BEE P .1,0: BEEP .1,3: PRINT AT 10, INK 4; "killed by monster": GD TO 2000
- 515 PRINT AT a,b:" 520 LET a=a+( INKEY\$ ="a")-( IN
- KEY\$ ="q") 530 LET b=b+( INKEY\$ ="p")-( IN
- KEY\$ ="o") 540 IF ATTR (a,b)=2 THEN BEEP
- .01,50: LET k=k+1 550 IF ATTR (a.b)=3 THEN BEEP 01,40: LET k=k+1
- 540 IF ATTR (a,b)=4 THEN BEEP 01.30: LET k=k+1 BEEP
- 570 IF ATTR (a,b)=5 THEN .01.10: LET k=k+1 580 IF ATTR (a,b)=1 THEN BEEP .01,10: LET t=t+100: PRINT AT
- a,b; INK 1; "C": LET a=3: LET b=3 ATTR (a,b)=50 THEN FOR
- f=0 TO 10: BEEP .1,-30: NEXT f: PRINT AT 10,9; INK 3; "killed b wall": GO TO 2000 595 IF ATTR (a,b)=71 THEN GO
- SUB 1000 596 PRINT AT 20,4; "KEYS: "; k 597 IF k=50 THEN PRINT AT 17, 1; PAPER 7; INK 1; FLASH 1; "AA"
- ATTR (a,b)=185 THEN FO R f=0 TO 60: BEEP .01,f: NEXT f: FOR f=60 TO 0 STEP -1: BEEP .01 ,f: NEXT f: PAUSE 100: CLS : FOR f=0 TD 10: BEEP .01,f: PRINT A T 10,10; INK INT ( RND \*6+1);"C DNGRATULATIONS!"; AT 12,9;"your task is over!": NEXT f: GO SUB
- (400: GD TD 2000) 599 PRINT AT 20,20; "TIME: "; t." 600 LET a=a+(a<1)-(a>1B)
- 610 LET b=b+(b<1)-(b>30) 620 PRINT AT a,b: INK 6: "I" 630 RETURN



- 810 FOR f=0 TO 31: PRINT AT 0, f; "A"; AT 21,f; "A"; AT 19,f; "A"; AT 20,f; "A"; AT 4,f; "A"; AT 8,f ; "A"; AT 12,f; "A"; AT 16,f; "A";
- 820 FOR f=0 TO 21: PRINT 0; "A"; AT f,31; "A": NEXT f 830 FOR f=3 TO 28 STEP 4: PRINT
- AT 2,f; "A"; AT 3,f; "A"; AT 1, ; INK 6; PAPER 0; BRIGHT 1; "B": NEXT +
- AT 10,2; "AAAAAAAAAAA 840 PRINT
- AA"; AT 10,18; "AAAAAAAAAAAAA" 850 PRINT AT 11,7; "A"; AT 11,2 2; "A"; AT 18,7; "A"; AT 17,3; "A"; AT 17,12; "A" 855 PAPER O
- 860 FOR f=4 TO 27 STEP 4: PRINT
  AT 3,f; INK 1; "CCC": NEXT f: P
  RINT AT 3,28; INK 1; "CC"; AT 3, 1; "CC"
- 920 PRINT AT 5,3; INK 3; "B"; A
- 920 PRINT AT 5,3; INK 3; "B"; A T 5,112"; AT 5,114"; "B"; AT 5,14; "B"; AT 5,14; "B"; AT 5,12; "B"; AT 5,23; "B"; AT 7,28; "B"; AT 7,28; "B"; AT 7,24; "B"; AT 7,24; "B"; AT 7,24; "B"; AT 7,24; "B"; AT 7,14; "B"; AT 1,14; "B";
- 8"; Al 11,4"; "B"; Al 11,1"; "B"; 740 PRINT AT 13,3; 1MK 2; "B"; AT 13,11; "B"; AT 13,15; "B"; AT 13,20; "B"; AT 14,55; "B"; AT 15,22; "B"; A
- AT 18,8; "B"; AT 18,18; "B"; AT 18





,27; "B"; AT 17,30; "B"; AT 17,22; "B"; AT 17,15; "B" 960 RETURN 1000 INK 7: BRIGHT 1 1010 PRINT AT 3,30;"D"; AT 4,30; "D"; AT 5,30; "D"; AT 6,30; "D"; AT 7,30; "D"; 1020 PRINT AT 8,17; "D"; AT 9,17; "D"; AT 10,17; "D"; AT 11,17; "D"

1030 PRINT AT 12,8; "D"; AT 13,8 ; "D"; AT 14,8; "D"; AT 15,8; "D" 1040 PRINT AT 16,24; "D"; AT 17, 24; "<u>D</u>"; AT 18,24; "<u>D</u>" 1050 PRINT AT 16,24; "<u>D</u>"; AT 17, 24; "<u>D</u>"; AT 18,24; "<u>D</u>"

1060 BRIGHT O: RETURN 2000 INPUT "Another go? " tas 2010 INPUT "ANOTHER GD 7"; a\$
2010 IF a\$="y" THEN GD TD 10
2020 IF a\$="n" THEN STOP
2030 GD TD 2000

4000 BORDER O: PAPER O: INK 7: C 15

4010 PRINT AT 0,10; "COLLECT-A-K EY"; AT 1,9; "-4020 PRINT AT 3.0: "You must wor k your way up the screen colle cting the keys as fast as you can.

4030 PRINT AT 6,0; "When you hav back too the e all 50 keys go bottom of the screen and t ouch the flashing wall.

4040 PRINT AT 10,0; "The game wi 11 end if you touch the: - monst er, hammer, wall or thefalling WAL

4050 PRINT AT 13,0; "100 points will be added too your TIME i f you touch the blue girders." 4060 PRINT AT 16,0; "On the top part of the game the computer ta kes control of your direction a nd you just have too jump the wa 11s and get the keys." 4065 PRINT #1; FLASH 1;"

PRESS A KEY-4066 PAUSE O: CLS

4070 PRINT AT 8.5: "KEYS: -": AT 10,5; "o-left"; AT 11,5; "p-right"

; AT 12,5; "q-up"; AT 13,5; "a-dow n"; AT 14,5; "0-jump (top section only)" 4080 PRINT AT 21.7: FLASH 1: "PR ESS A KEY TO START": PAUSE O

4090 RETURN 9000 FDR i=0 TO 71: READ a: POKE

USR "a"+i,a: NEXT i 9010 DATA 251,251,251,0,191,191, 191.0 9020 DATA 28,34,17,30,48,96,208, 9030 DATA 255,255,36,66,129,255. 255,0 9040 DATA 129,129,129,129,255,12 9,129,129 9050 DATA 24,60,62,31,63,115,227 ,198

7060 DATA 24,60,124,248,252,206, 199.99 9070 DATA 14,15,12,30,62,60,124.

204 9080 DATA 112,240,48,120,124,60, 62,115 9090 DATA 0,24,24,126,90,90,60,1

9100 RETURN

WHILST hunting in the jungle you are confronted by a huge snake. Above you is a large net which you can use to trap the snake. To reach the net you have to climb up six vines to cut it down. The vines are frail and can only be climbed once before they collapse. Watch out for the four large birds who can knock you off the vines.

Vine Climb was written for the 16K Spectrum by Andrew Clark, Queensland, Australia.

2 PRINT AT 11,0; "DO YOU WANT INSTRUCTIONS??(Y/N) ": PAUSE 0: IF INKEY\$ ="v" THEN GD TO 700

3 RESTORE : GD SUB 3000

4 LET hi=0: LET h\$="SPECTRUM" 5 LET z=0

6 LET k=0 9 LET q=31

10 RESTORE : GO SUB 3000

20 LET score=0 30 LET lives=3 100 CLS

105 GD SUB 2410 110 GO SUB 8005: GO SUB 8010: G O SUB 8015

120 LET a\$="A" 210 LET x=14: LET y=0 310 GD SUB 8000

320 PRINT AT 0,1; INVERSE 1; "L IVES: ";lives;" SCORE: ";scor e;" HI: ";hi;: PRINT #0; INVERSE 1; AT 0,0; "HI-SCORER: ";h\$

410 PRINT AT x,y; INK 0;" z=1 THEN GO TO 590 500 LET x=x+( INKEY\$ ="6" AND x <14)-( INKEY# ="7" AND x>1): LET y=y+( INKEY# ="8" AND y<30)-( I

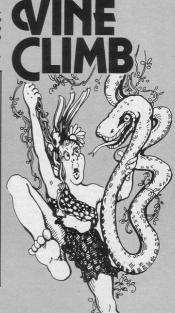
NKEY\$ ="5" AND y>0) 510 IF INKEY\$ ="7" THEN BEEP .01.-x+10

511 IF INKEY# ="8" THEN LET a

\$="A": BEEP .01,8 512 IF INKEY\$ ="5" THEN LI \$="F": BEEP .01,5 513 IF k=6 THEN GD TD 5000 514 IF x<2 THEN GD TD 6000 515 IF SCREEN\$ (x,y)=" " A " AND x <> 14 THEN IF SCREEN\$ (x-1,y) =" " THEN GO TO 4000 516 IF x<14 THEN LET a\$="G" 517 IF x=14 AND a\$="G" THEN LE T a\$="A" 520 PRINT AT 0,20; INVERSE 1;s core; INVERSE 1;" HI:";hi 590 IF z=1 THEN LET x=x+1; BEE .02,x-5: IF x=14 THEN LET z=0 THEN GO SUB 8010

"5" THEN LET A

: GO TO 410 610 PRINT AT x,y; INK 1;as 710 LET bird1=bird1+1: IF bird1 >31 THEN GD SUB 8000 810 LET bird2=bird2+1: IF bird2 >31 THEN GD SUB 8005 910 LET bird3=bird3-1: IF bird3 1010 LET bird4=bird4-1: IF bird4 CO THEN GO SUB 8015 1110 IF ATTR (a,bird1)=57 OR A TTR (b,bird2)=57 OR ATTR (c,bir d3)=57 OR ATTR (d,bird4)=57 THE GD TD 4000 1115 LET q=q-1: IF q<0 THEN LET q=30: PRINT AT 14,0;" 1120 PRINT AT 14,q; "E 1130 IF q-1=y AND x=14 OR q=y AN



x=14 THEN GO TO 2210 1210 GO SUB 1410: GD SUB 1410 1310 GD TD 1610

1410 OVER 1: PRINT AT a,bird1; B"; AT b,bird2; "B"; AT c,bird3; "
C"; AT d,bird4; "C";

1510 DVER O: RETURN

2210 FOR z=10 TO -10 STEP -1: PR AT x,y; FLASH 1; a\*: BEEP .1 ,z: NEXT z: LET k=0: LET lives=1 INT

2220 IF lives <= 0 THEN PRINT AT 11,12; "GAME OVER"; AT 0,7; IN VERSE 1; lives: PRINT AT 14,0; "S CORE IS "; score: IF score>hi N LET hi=score: PRINT AT 15,0; "YOU HAVE THE HIGH SCORE !!!

PLEASE ENTER YOUR NAME": INPUT

2230 IF lives <= 0 THEN PRINT 2230 IF lives <= 0 THEN PRINT AT 17,0; "HI SCORE IS ";hi; AT 18 ,0; "BY ";h#: PRINT AT 19,6; "Ano ther game ??": PAUSE 0: IF INKE Y# = "Y" THEN GO TO 5

1 THEN GO TO 5 2300 IF lives (= 0 AND 1NKEY\$ (> "n" THEN GO TO 2230 2310 IF INKEY\$ =""" INKEY\$ ="n" OR INKEY\$ ="N" THEN INK O: PAPER 7: BRIGH T O: FLASH O: INVERSE O: BEEP 1,

0: CLS : SIUP 2320 80 TO 100 2340 IF lives <= 0 THEN STOP 2410 FOR z=0 TO 32 STEP 6: FOR q =1 TO 13: PRINT AT q,z; "D"; AT 1,z; OVER 1; "0": OVER 0: NEXT q:

NEXT z 2510 FOR z=15 TO 21: PRINT AT z ,0; INK 5;"(32\*ig8)": NEXT z ,2610 PRINT AT 0,0; INK 5;"(32\*i

98)" 2710 RETURN

2710 RETURN 3010 FDR a= USR "a" TO USR "a"+ 7\*8-1: READ d: POKE a,d: NEXT a

3020 DATA 24,24,16,60,80,24,40,4 0,128,224,48,184,158,125,16,44,1 ,12,29,121,190,8,52

,/,12,24,121,140,8,52 3040 DATA 16,16,76,16,16,8,16, 0,248,40,200,17,34,66,60,24,24,8 ,60,10,24,20,20,66,90,90,52,24,9 0,189,129

4000 FOR Z=X TO 14: BEEP .05,-X+ 10: PRINT AT z,y; "6"; AT z-1,y;

0; NEXT 2 4099 LET x=z-1; GD TD 2210 5000 FDR z=2 TD 14; PRINT AT z, 0; "(32\*g6)"; PRINT AT z-1,0;"

BEEP .01,z: NEXT z: LET score=s 5020 PRINT AT 9,11; "GOOD PLAY!!

""Now try and capture them aga

": PAUSE 0: PAUSE 0: 5030 LET z=0: LET k=0: LET q=31:

6000 BEEP .6,8: LET k=k+1: LET z =1: LET score=score+100: GO TO 4

7010 CLS : PRINT AT 11,11; FLAS H 1; BRIGHT 1; INK 0; PAPER 5; "V INE CLIMB": PRINT AT 13,11; "any

7015 PAUSE 0: PAUSE 0: CLS : PRI AT 0,11; BRIGHT 1; "VINE CLIM

7020 PRINT AT 3,4; "Hunting in a jungle, you are suddenly attack ed by a huge snake!!" 7030 PRINT '"Looking into the sk

y, you see a large vine net hi gh above. To reach the net, y ou must climba series of six vin gh above. es and cut down the net to tra p the snake." "Unfortunately, the

7040 PRINT very frail and once over them they coll vines are apse. You may advance one step u p a vine before it becomes on high too reach and then you before it becomes t release the net." cannot







1 LET hi=1000: LET time=30: L ET b1= INT ( RND \*80+2)\*2-1: LET b2= INT ( RND \*15)\*2: PDKE USR "a"+0. BIN 00011111

"a"+0, BIN 00011111 2 POKE USR "a"+1, BIN 111111 11 3 POKE USR "a"+2, BIN 000100

3 POKE USR "a"+2, BIN 001101

4 POKE USR "a"+3, BIN 001100

5 POKE USR "a"+4, BIN 001100

6 POKE USR "a"+5, BIN 000111

7 POKE USR "a"+6, BIN 000111

8 POKE USR "a"+7, BIN 000100 9 POKE USR "b"+0, BIN 111110

00 10 POKE USR "b"+1, BIN 111110

00 11 POKE USR "b"+2, BIN 000010

12 POKE USR "b"+3, BIN 000010 13 POKE USR "b"+4, BIN 000010

13 POKE USR "b"+5, BIN 000010

00 15 POKE USR "b"+6, BIN 000010 16 POKE USR "b"+7, BIN 000010

00 17 POKE USR "c"+0, BIN 110010

00

Defuse the bomb by moving over it before the time runs out. The screen is filled with squares and the bomb can appear in any of these squares. After you have walked over a square it turns black and cannot be walked over again until the level has been completed. Avoid the skulls, for they will cause instant death upon contact.

Deadly Dynamite was written for the 16K Spectrum by Christopher Roper, aged 10, of Blackwood, Gwent.

+1, BIN 000010 19 POKE USR BIN 111110 21 POKE . BIN 011110 22 POKE 00 +5, BIN 011110 23 POKE 6, BIN 000000 24 POKE +0, BIN 000111 25 POKE BIN 000110 26 POKE +2, BIN 000111 27 POKE 00 +3, BIN 000110 28 POKE USR BIN 011110 29 POKE +5, BIN 011110 +6, BIN 000000 31 POKE +0, BIN 000001 BIN 001111 BIN 011000 34 POKE USR +3, BIN 011000 35 POKE USR "e"+4, BIN 011101

36 POKE USR "e"+5, BIN 001111 37 POKE LET col=col+2: LET score=score USR "e"+6, BIN 001111 38 POKE USR "e"+7, BIN 001111 270 IF INKEY\$ ="m" AND ATTR ( 270 IF INKEYS = "m" HND ATTN ( col, row+2) <> 71 AND row<31 THEN 39 POKE USR "f"+0, BIN 111000 LET row=row+2: LET score=score 00 40 POKE 280 IF COI=b1 AND FOW=b2 THEN USR "f"+1, 00 GD TD 6000 41 FOKE USR "f"+2, BIN 110001 BIN 111111 285 IF 285 IF INKEYS =""" AND ATTR col, row-2) <> 71 AND row>1 THEN 42 POKE LET row=row-2: LET score=score+ USR "f" ATTR ( +3, BIN 110001 43 POKE 5 USR "f"+4, BIN 011011 01 290 IF ATTR (col,row)=70 THEN 68 POKE USR "i"+3, BIN 000000 GO TO 5000 44 POKE 300 PRINT AT b1,b2; INK 3; time (1,0); AT b1+1,b2; INK 2; "KK": IF time (1,0); THEN PRINT AT (1,0); (1,USR "f"+5, BIN 101111 69 POKE USR "i"+4, BIN 000000 45 POKE USR "f" oc "+6, BIN 111111 46 POKE 301 PRINT AT 0,0; "Score "; scor USR "i"+5, BIN 000000 00 USR "f"+7, BIN 111111 71 POKE 47 POKE 302 PRINT AT 0,11; "Level USR "g"+0, BIN 000100 01 USR "i"+6, BIN 000000 el; AT 0,22; "LIVES";: FOR U=1 TO 48 POKE 72 POKE USR "i"+7, BIN 111111 lives: PRINT INK 6; "A";: NEXT USR "g"+1, BIN 000100 49 POKE 73 POKE 303 PRINT AT COL, FOW; INK 6; "A USR "g"+2, BIN 000111 USR "j"+0, BIN 000000 01 B"; AT col+1, row; INK 5; "DC" 74 POKE USR 50 POKE 304 LET time=time-1 USR "g"+3, BIN 010000 01 "j"+1, BIN 000000 305 IF time<1 THEN GO TO 5000 75 POKE 51 POKE USR "g"+4, BIN 001111 01 306 FOR a=20 TO 20-level: NEXT USR "j"+2, BIN 000000 52 POKE 76 POKE USR "j"+3, BIN 000000 307 BEEP .001,3: BEEP .001,38 USR "g"+5, BIN 010000 or 77 POKE 53 POKE USR "g"+6, BIN 000000 USR "j"+4, BIN 000000 309 FRINT AT col, FOW; " col+1, FOW; " " 00 01 78 POKE 54 POKE USR "j"+5, BIN 000000 USR "g"+7, BIN 000000 01 on 79 POKE USR "j"+6, BIN 000000 400 GD TD 250 55 POKE 5000 BEEP 1,-20; BEEP 1,1; BEEP 00 USR 01 "h"+0, BIN 000010 80 POKE USR "j"+7, BIN 000000 1,-10: BEEP 2,2: BEEP 1,1: BEEP EP .001,3B 56 POKE USR "h"+1, BIN 000010 00 01 90 BORDER O: PAPER O: INK 7: B EF .DUI, 38 5001 PRINT AT COI, FOW; INK 6; "E 57 POKE USR "h"+2, BIN 111110 RIGHT 1: CLS F"; AT col+1, row; "GH": PAUSE 700 100 PDKE USR "k"+0, BIN 010101 58 POKE USR "h"+3, BIN 000000 5002 LET lives=lives-1: IF lives 01 101 POKE USR "k"+1, BIN 001000 3002 LET 11VES=11VES=1: 1F 11VES
(1 THEN GO TO 9000
5003 LET b1= INT ( RND \*9)\*2+1: 59 POKE USR "h"+4, BIN 111111 102 PDKE LET b2= INT ( RND \*15) \*2+1: time=30: G0 TO 207 60 POKE USR "k"+2, BIN 011101 USR "h"+5, BIN 000000 103 PDKE USR "k"+3, BIN 011101 times(): 80 TO 207
6000 BEEP 1, 5; BEEP 1,0: BEEP
6001 PRINT 11,10
6001 PRINT AT Col, FOW; "; AT 61 POKE USR "h"+6, BIN 000000 104 POKE USR "k"+4, BIN 011101 62 POKE USR "i"+0, BIN 000000 1 63 POKE USR "i"+1, BIN 000000 105 POKE USR 6002 LET score≃score+time\*10: LE T bombs=bombs-1: IF bombs<1 THEN "k"+5, BIN 011101 106 PDKE USR "k"+6, BIN 011101 67 PDKE USR "i"+2, BIN 000000 5003 LET b1= INT ( RND \*9)\*2+1: 107 PDKE USR "k"+7, BIN 011101 SOUS LET DI= INT ( RND \*9)\*2+1: LET D2= INT ( RND \*15)\*2+2: LET time=30 200 PRINT 6004 GD TO 250 6700 FDR a=0 TD 21 STEP 2: PRINT AT a,0; INK 6; "ABABABABABABABABA ы=1 TO 20 STEP 2: PRINT 201 FRINT AT 10,0; "A UP N N LEFT M RIGHT" WN WN N LEFT M KIGHT.

202 FRINT AT 12,0; INK 7; "AB

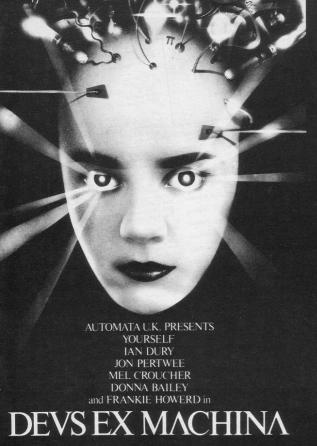
YOU : AT 13,0; INK 5; "DC"

203 FRINT AT 15,0; INK 6; "EF

FADI V DAVIDS. AT 14,0; "GER Z DO DCDCDCDC°: NEXI a: FDR g=0 1U 1U 0 O: NEXT g: LET time=30: CLS: PR INT AT 15,5; "LEVEL ": 12ve]; "CO AT a,0; 203 PRINT AT 13.0; INK 6; "EP DEADLY DAVID"; AT 16.0; "GH"
204 PRINT AT 19.0; "Press any k
ey to play. ": PRINT 17.0; "HI MPLETE !": LET level=level+1: LE T b1= INT ( RND \*9) \*2+1: LET b2= ( RND \*15) \*2+2; BEEP 1,1; B EEP 1,2: BEEP 1,-1: BEEP 1,-2: SCORE=";hi;" BEAT THAT!" 205 PAUSE 0: CLS 205 PAUSE O: CLS 206 LET level=1: LET score=0: L 6810 LET score=score+600 6920 GD TD 207 9000 FDR a=0 TD 7: FDR b=0 TD 7: 207 LET bombs=3 PRINT AT COL, FOW; INK b; "AB"; AT COL+1, FOW; INK b; "DC": NEXT b YOUI PRIN! HI COL, FOW; INK 6; E FOR a=0 TO 20 STEP 2: PRINT 210 FOR C=-6 TO 1evel 230 LET as INT ( RND \*9+1): LET DE INT ( RND \*15): PRINT AT A\* RESTRICTED TO THE PROPERTY OF 2+1,5\*2; INK 6; "EF"; AT a\*2+2,5\* stipes; ink 6; "EF"; AT a\*2+2,b\* 2; "GH"; NEXT C 240 PRINT AT COL, FON; INK 1; I WERSE 1; FARER 6; "J"; AT COL; 15 COL; "I" INKEY\$ ="a" AND ATTR ( SCORESHI THEN LET his core: 60 TO 2 9020 GD TD 2

col-2, row)

LET col=col-2: LET score=score+ 250 11 INKEY# ="2" AND AITR ( col+2, row) <> 71 AND col<20 THEN



WRITTEN AND DIRECTED BY MEL CROUCHER

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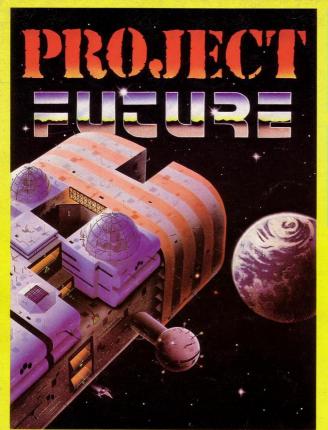
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