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YOUNG  
ONES**

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FRIDAY THE 13<sup>TH</sup> MAP • MATTHEW SMITH INTERVIEW • GAMES REVIEWS**



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01-631 1433

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## Physics

7 programs TOTAL 140K

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## Biology

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## Computer Studies

7 programs TOTAL 140K

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## Chemistry

8 programs TOTAL 150K

Matter states, action of heat and electricity, reaction with air, water, acids, alkalis, halogens, oxygen, sulphur, nitrogen, phosphorus, carbon, hydrogen, alkali metals, alkaline earth metals, transition metals, organic chemistry, atoms, formulae, molar mass, equations, ions, periodic table, bonding, gases, metal extraction, polymers, fertilizers.

## French

8 programs TOTAL 160K

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## Electronics

8 programs TOTAL 150K

Energy and its sources, power distribution, e.m.f. p.d., charge, current power, r.m.s. values, resistors, series and parallel, capacitors, time constants, inductors, transformers, resonance, microphones, loudspeakers, heat and light sensitive devices, diodes, transistors, logic circuits, multivibrators, meters, CRO, amplifiers, feedback.

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YS 2/86



This girl is dangerous.



This boy is a fugitive.





# NOW YOU CAN EXPLOIT SPECTRUM GRAPHICS TO THE ULTIMATE.

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Or you can use them just for the fun of producing computer art.

Each of the programs are inter-active and together they form the most accomplished graphics toolkit you will find on the market today.

But you can also use each of them separately, as each are self-contained and cover a specific area of graphics programming.

With Print 'n' Plotter's 'GRAPHICS SUITE', everything is made so simple you won't believe it.

## Just a few of the things you can do...

### PAINTPLUS (GRAPHICS SUITE 1)

If you want to produce fantastic screen graphics or UDG's on your Spectrum, then you will find PAINTPLUS not only a complete graphics toolkit... but also the simplest to use at every level.

Facilities include: DRAW, PLOT, ARC, CIRCLE, FILL IN SOLID OR PATTERNS, FILL IN OVER MODE, DRAW RADIALLY, ARC RADIALLY, ENLARGE TO EDIT, PAPER WASH, BOX DRAW and so on...

As well as drawing, PAINTPLUS has a tremendous UDG section. It also has UDG 'grabbing' from screen as well as full facilities for defining, saving and loading UDG sets.

The Organiser section of the program enables you to automatically store multiple screen graphics or multiple UDG banks.

PAINTPLUS comes with a demo of screens, animation and alternative character sets, plus a copy of Print 'n' Plotter PICTURE BOOK - 100 pages of instructions, hints, tips, listings and related graphics information.

### SCREEN MACHINE (GRAPHICS SUITE 2)

SCREEN MACHINE is the graphics manipulator.

Use it when you want to take your graphics and turn them into professional machine coded data for use in BASIC or M/Code programs.

For instance:

SCREEN MACHINE will compress the memory consumption of your graphics to cram even more into the computer's memory -

As well as memory compression, SCREEN MACHINE allows you to put your graphics through a series of highly-sophisticated graphics manipulations.

These include ENLARGE, REDUCE, RELOCATE TO OTHER PARTS OF THE SCREEN, STEP AND REPEAT, BLEND SCREENS TOGETHER, RECOLOUR SELECTIVELY OR GLOBALLY, FLIP SCREEN, etc.

And SCREEN MACHINE also has a dedicated Text Compiler - ideal for anyone who uses lots of text for instructions or menus on screen.

SCREEN MACHINE also comes with a copy of PICTURE BOOK and a demo that's so good you can't believe it.

### ART-O-MATIC (GRAPHICS SUITE 3)

Ever wanted to produce screen graphics for Adventure Games, Educational, Training, or Scientific programs and run out of memory because the graphics handling consumed too much memory?

If so, you need ART-O-MATIC, Print 'n' Plotter's great new graphics compiler.

With ART-O-MATIC you can draw, define and store an incredible number of screens or parts of screen in your programs as compiled instant machine code which is usable from BASIC or M/C.

The exact amount of compression possible depends on your graphics, but up to 99% is possible and an average of 85%-90% is usual.

ART-O-MATIC is a complete graphics drawing program, so you can produce your works of art and compile at the same time.

The instruction book and demo that comes with the program show you *everything* you need to know about cramming great graphics into your Spectrum.

### SPRITE MACHINE (GRAPHICS SUITE 4)

There have been a number of programs called Sprite Generators. Most of these are self-contained and not a great deal of use to people who want to use Sprites in their own programs. SPRITE MACHINE is different. This program was written with *you* in mind - whether you are a professional, amateur or beginner.

There's never been a simpler Sprite program to use. All you have to do is draw your Sprite and then choose from a fantastic range of options to get it doing what *you* want.

You can: animate your Sprites, choose any direction and starting position, adjust speed, adjust height, choose running time, decide on edge actions such as bounce, wraparound, reflect or stop, make intelligent decisions like strike and collision actions, colour your Sprites or take colour from the screen, trace or non-trace, etc.

The program comes complete with a cursor-operated Sprite drawing board and catalogue/store function.

Instruction booklet and demo are included with the program.

Now *you* can have professional Sprites in *every* program you write.



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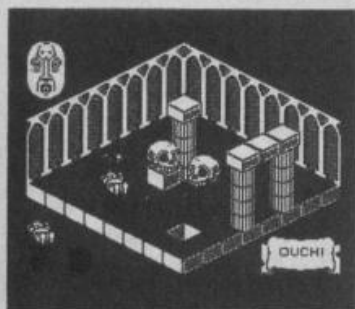


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# FRONTLINES



Confused? You will be, when you read this zany bit of prose. Come on in and enter the world of Sweevo, a cute but absolutely clueless robot. This brainless heap of metal is extremely intelligent, clumsy, accident prone and has a lot of faith in apples.

Gargoyle invites you to help poor 'ol Sweevo reach Active Status by getting rid of the widgets (don't ask) and clean up Knutz Folly. It sounds completely Knutz to us!



You can tank Ariolasoft for this game. Called *Skyfox*, it's a flight and combat simulation that's defected from those Commie devils onto the winning side, ours! The Speccy version costs £8.95 and is due for release on January 6th. So, strap yourselves in and take off in your *Skyfox* to shoot up tanks and shoot down planes. That'll show those Commies!



Hey, Jude. Yesterday, all my troubles were so far away. Now it seems there here to stay. Help! I wanna hold your hand. Remember the fab four? No 9 Software has just released *Beatle Quest*, a text and graphics adventure for the Spectrum specially designed for all you children of the Sixties. It's based on the song lyrics by John, Paul, George and Ringo, 'cept he never wrote any, and features puzzles involving thirteen of their most famous songs. Quite a Magical Mystery Tour.

• Calling all technobrain! Maplin Electronics has just released the 1986 edition of its catalogue that gives you all the gen on the latest spidery bits and bobs you can solder together. That's components to all you hi-tech bods — you've got hundreds of the devils living under your keyboard. If you want to know more about their feeding habits the Maplins book will tell you all for £1.45.



D Harwood's batty idea gets second prize.

## WHAT A SAGA!



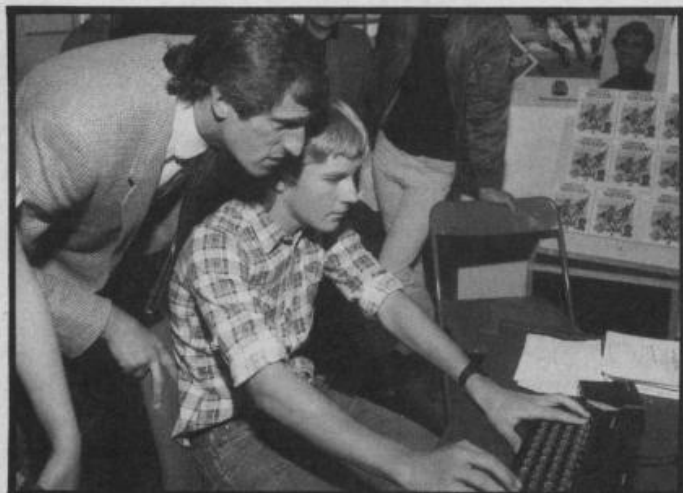
Stop holding your breath — the winners of the *Saga Compo* are about to be announced! Gasp! Cor! Wow! Calm down for a minute and cast your minds back to Your Spectrum 19 where we asked you what you'd do with your Speccy's rubber keyboard.

The four first prize winners certainly came up with the goods. Adam Norton of Farnborough said "I'd have it framed" and enclosed illustrations of 101 uses for a dead Speccy keyboard. Alan Bristow of Grimsby sent in a poetic use for his faithful friend. S P Kaliszak sent in a rather sadistic suggestion, "I'd cut it up and use it to enter a Your Speccy compo" and that's just what he did — a blackmail type letter made up of the keys! And finally A Burton from Barnsley who produced an excellent drawing. (Another keyboard gone for a Burton, eh? Ed.) Congratulations to you all, you'll all be receiving a *Saga 3 Elite* keyboard.

Don't go away just yet though. The three second prize winners who each get a *Saga 2* keyboard are Colin MacLaren of Paisley, for his tipped message, Trevor White and D Harwood who sent in cartoons. Take a look for yourself and see what you think!

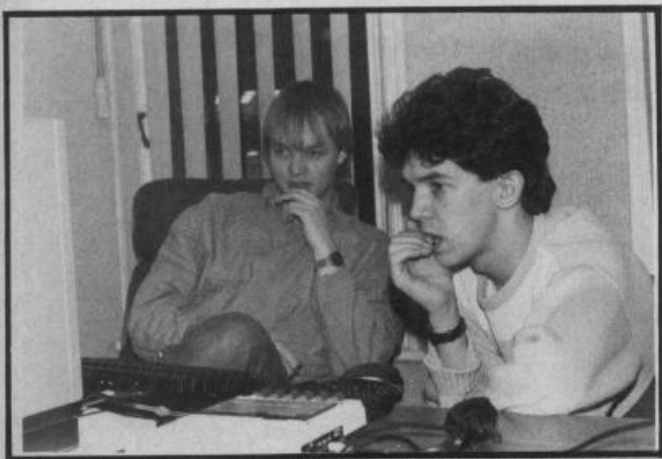
Finally, the three *Saga 1* keyboards go to P Camp of Cowley, Colin Reekie of Fife and Jose Alexandre Casteo of Portugal for their visual offerings.

And that just leaves us time to say a big thanks to everyone who entered — you'll all be receiving your £5 discount vouchers soon.



Ray Clemence, top international goalie and professional football hunk launches MacMillan Software's new game, *World Cup Soccer*. Nice one Ray!





Here's one for the Guinness Book Of Records — Troubleshootin' Pete thinking? Well, he needed to 'cos he had to take on macho man Chris Palmer at the recent launch of Ariolasoft's Think. And shock, horror, gasp, Pete won!

# FANGS a million

Get your teeth into this! Domark has donated 100 pairs of falsies (teeth, silly!) to Frontlines and we're gonna give 'em to you. Just tell us whether people with wisdom teeth are cleverer than others and send your answer on a postcard to Your Sinclair, 14 Rathbone Place, London W1P 1DE. And if you forget to tell us your name and address, you won't get no fangs from us!



What an amazing discovery! Opus's sales fall mainly in Spain and Italy and Germany and Sweden... Well that's what John Harris, Opus' Sales Director says. "We've made a tremendous impact in Spain and secured contacts in other countries too!" And the baby behind all this success? Well, that's a Discovery.



What a posy pair! Wonder-boy Stevie Smith and Yehudi White here are playing at the Black and White Minstrels and singing a merry note, to the tune of a cool one million, Saga's latest turnover. P'raps someone should teach them a thing or two about their instruments. The only noise their keyboards are likely to let out is a little wine!

Eek, it's a mouse. Mice were never really a problem that Frontlines worried about too much. But now the place is overrun with them. Fortunately, the one that AMS sent us has a lead attached to stop it running away from the Speccy. The idea is to grasp it in the palm of your hand and move it around while pressing its ears. Cruel but after all it's only plastic.

The AMX mouse, from AMS, costs £69.95 — for that you'll get body, tail and interface with a Centronics printer facility and a fully illustrated operating manual.

Much more important is the software — AMX Art is a drawing program that uses trendy icons and pull-down menus. For more details about the feeding and breeding habits of your mouse, call AMS on 061-483 2737.



# Tizers...

The **YS** team has certainly been zipping about the country this month — it's a wonder we've had any time to write the magazine! I've been to see the Spectrum version of **The Young Ones** (see the amazing preview this issue) at Orpheus' headquarters in Bedfordshire. And what a hike that was — still I was well looked after by those nerddies at Orpheus. It's actually in Gamley, near Sandy and the office is a converted mill. There's even the original pigsheds — maybe that's where it locks up its programmers while they're writing new games!

Troubleshootin' Pete had a flying visit to Bury St Edmonds (wise man) to see Martech's new game, **Zoids**. It's a strategic wargame where you have to pit your wits against the evil robot Zoids. More of that next issue.

So what else is new this month? Well, Saga is about to release a word processor that it says is better than **Tasword** — we shall see! It's also going to bring out another keyboard, the Saga 2+ but that's all I know at the moment.

Domark is keeping busy. It plans to release eight to ten games next year and there's a good chance that you'll be seeing **Eureka II** amongst them. There'll be prizes too, though not on the scale of **Eureka** — sorry chaps. Oh, and I nearly forgot, Domark is also hoping to secure the rights to the new James Bond film. Let's hope it'll be better than the last one — game that is!

Electric Dreams is bringing out **Back To The Future**. Funny that, since it didn't know anything about it last month. Well, you know where you read it first.

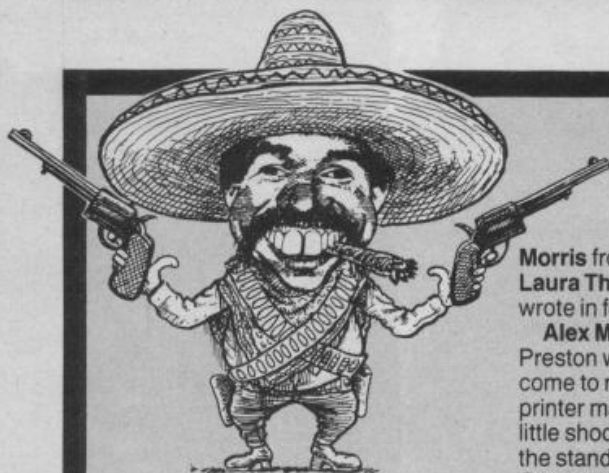
Ocean has plans to release absolutely zillions of games next year. You should see the appearance of **Cosmic Wartones**, a shoot'em up. **Nomad**, another shoot'em up and **Hunchback II**, not a shoot'em up (it's an adventure) before Christmas. Things should hot up even more in 1986. January sees the release of **NFL Superbowl** to coincide with the final of the Superbowl.





These two wenches were out promoting Sir Fred when they fell into the hands of programmers David Perry and Nick Jones. Now who's gonna rescue these poor damsels in distress?

Seems that Quicksilver has joined the wargames bandwagon. Set in the final stages of a terrible war (aren't they all) Death Wake will have you quaking in your shoes. You play the part of the Admiral in Chief with the awesome task of restoring the homelands' morale and helping his army reclaim lost territory. But it ain't easy — the enemy is only a step away from producing, da da, an atom bomb! Sharp intake of breath. Arm your battleship The Undaunted and prepare to destroy the enemy. This is your last chance.



Eh, gringos come an' sip a tequila with me in the shade of that cactus for a fistful of faux pas — oops sorry wrong language!

D'you know, I woke up this morning with a dreadful feeling of foreboding — something was going to be drastically wrong. Just shows how wrong you can be. Something didn't go wrong — everything went wrong!

Apart from treading in the remains of a Tandoori take-away from the night before, I found the postbag choc-a-bloc with letters from frustrated readers who couldn't suss out the *Nightshade* POKEs from Hacking Away in the last ish.

Okay, nip off and dig out a pen — you're gonna have to do some writing as well this month. Done that? Right, turn to page 28, proceed to the bottom of the first column and make an emergency stop at the 'see final screen when you die' POKE. Now all you've gotta do is add '0' after the last POKE in the block of three. Simple innit? That should sort you out and Ian

## FROM EL HIP

Morris from Hemel Hempstead and Laura Thompson from Epsom who wrote in for help.

Alex Miller of New Longton, Preston wrote me a note saying, "It's come to my attention that certain printer manufacturers are getting a little shoddy in their work. Gone are the standards of the British Industry..." Get to the point Alex. "I can't suss out the listing of *The Grid*, *Your Spectrum* 21. The offending lines are on the bottom of page 72." Hmmm, I see what you mean. Line 49576 should read:

BB 34 10 F5 21 4F BB 34 = 851

More printing problems come from Daniel Golder from Benbulbin, Co. Sligo. Daniel's having difficulty reading line 4740 in the *Worm* listing in last issue. It actually reads:

4740 IF T:2 THEN LET T=25:

PRINT AT 20,2 " "

Got that Daniel? I hope that solves all your worries.

Well that just about puts the lid on it for another month. If you have any problems with the programs or the POKEs in the mag, drop me a line and I'll try to come up with the cure. Send your missives (*Or your missiles! Ed*) to From 'whatever-language-he's-into-this-month' Hip, YS, 14 Rathbone Place, London W1P 1DE. Adios pardners.

TROUBLESHOOTIN' PEDRO.

## SEE YA LATER, GLADIATOR

IT'S NOT MUCH FUN BEING A SLAVE...

...SO I TRAINED LIKE MAD TO BE A GLADIATOR



Now you know just what it's like working on YS — not much fun! Slaving away over a hot typewriter, thrown to the lines, being instantly whipped by his imperial majesty, the Editor. Doesn't he know that Rome wasn't built in a day? Who's ya hero, Nero? (Get on with it, slave. Ed) Well, in Roman times, nobody and nothing was free — unless you fought for it. Domark has recreated the atmosphere of the Coliseum in its new game, *Gladiator*, reviewed in this ish. But fortunately you won't have to fight for the freebie that's on offer. To find out if our gladiator here ever makes it to the top, just fill in the coupon (or a photocopy of it) and send it to Domark. In return, you'll receive a huge full colour poster of the complete cartoon. That gets the thumbs up from us!

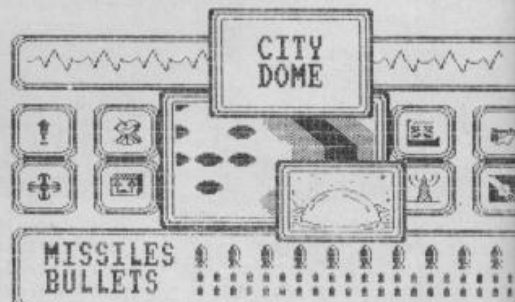
Those of us who are about to receive a full colour poster of a *Gladiator* in action, salute you.

Name.....

Address .....

Postcode .....

Now send it to Domark Ltd, 204 Worpole Road, London SW20 8PN.



The Zoids are coming to a Spectrum near you. Mighty metal monsters locked in mortal combat in Martech's new megagame. Mmmm. You can get a good idea of the game from this exclusive preview screen shot. Your mind has been merged with the Zoid and what you see on the screen is exactly what the Zoid sees. Your mission is to find the scattered pieces of Zoidzilla and restore him to wholeness!

Hey this is really off the wall or maybe off the floor. The Stock Exchange has just surfaced as a new software company and its first offering is *Bulls And Bears*. And no it's not a platform game set in a zoo! It's an investment game. Cor maybe you get a free copy of the FT with it!





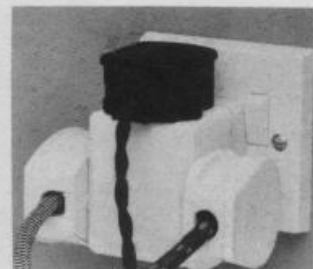
# FRONTLINES



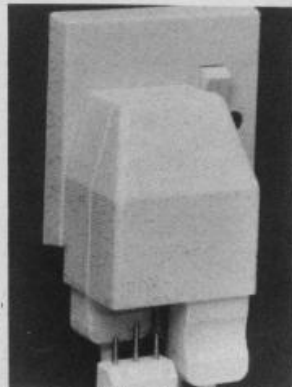
**Crikey, Virgin games has made so much dosh out of Now Games that it's decided to bring out a sequel, Now Games 2. Virgin Games' MD Nick Alexander said, "We were so pleased with the Now Formula that we're doing it again!" This time round Virgin's sticking on Elite's Airwolf, Tir Na Nog from Gargoyle, Cauldron from Palace, Chuckie Egg 2 from A'n'F and World Cup from Artic. Hang on though where's the Virgin game then? On second thoughts maybe it's not such a bad move to leave it out! Just a ioke, guys.**



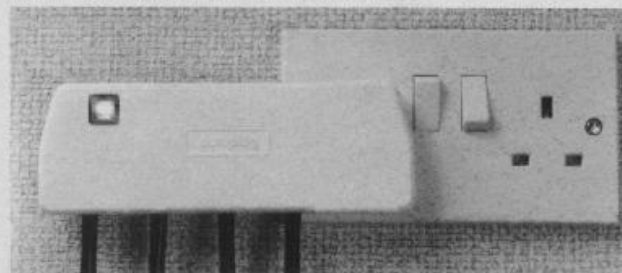
Hot on the heels of *The Art Studio*, Audiogenic has released *Icon Graphix* just in time to sneak onto the shelves before *Artist II*. It looks very much like a Commie conversion and lacks the one thing that everyone's screaming for — a mouse! Everything else is there, though — pull down menus, icon-driven commands and amazing fill structures. At £9.95 it's not a bad buy — even better if they'd included a rodent option.



*Crikey! Those little devils at Conblock have been taking sneaky photos of the YS office power point. Bit messy we admit. Still at least we've now got the chance to buy Conblock's new four-way adaptor. It could knock your block off!*



And if that doesn't switch you on, what about Duraplug's new four-in-one plug — the MultiLine? No need for four separate plugs — just wire up four appliances into the one megaplug. What will they think of next? (A five-in-one-plug? Ed).

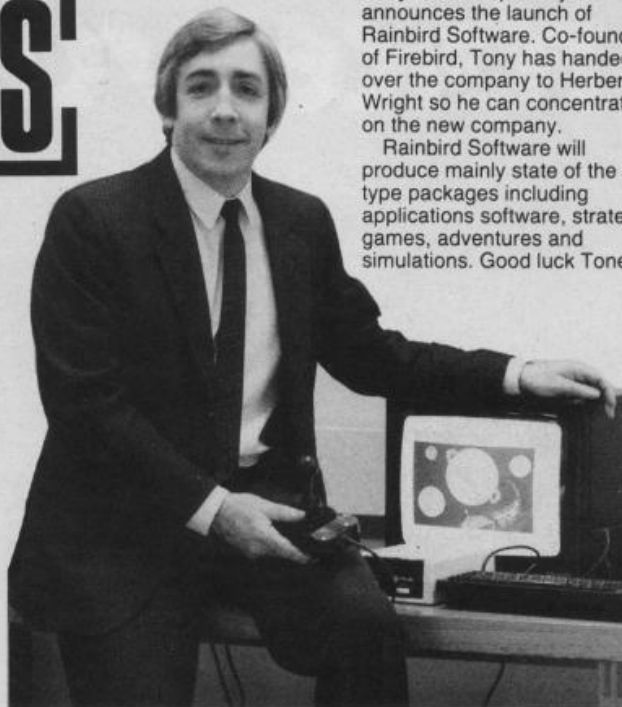


**Wacky software house, Global Software, is on the verge of releasing some new games. There's The Beer Hunter, calm down all you CAMRA fans, and Attack Of The Mushroom People — hey that's really heavy man. Look out for them early next year.**

Buenos dias Juan, gotta new motor? Lucky old Juan Manuel Perez Vazquez picked up a cool £12,800 as the prize winner in Firebird's Gyron competition. He decided against the Porsche. A wise choice — imagine the insurance for a 16 year old!

Tony Rainbird proudly announces the launch of Rainbird Software. Co-founder of Firebird, Tony has handed over the company to Herbert Wright so he can concentrate on the new company.

Rainbird Software will produce mainly state of the art type packages including applications software, strategy games, adventures and simulations. Good luck Tone.



Here's an interesting little fact. If you unroll all the **Rasputin** tapes we gave away last issue and lay them end to end they'll run to 2106 Kilometers. Wow! Ed reckons that's the distance between here and Russia, but then he's never been very good at geography.

What else? Oh yeah, **Movie** — an interactive 3D adventure. The action takes place in gangland New York and you've gotta find a cassette tape that contains vital info. Sounds fab! And for sci-fi addicts there's **V**. It's based on the TV series. Ocean is also rewriting **Street Hawk** 'cos it thought it was too dreadful to market. For once it's the first to admit it.

The rights to **Superman** outside the UK have been snapped up by software giants US Gold.

Argus Press Software hasn't exactly taken the charts by storm this year even with its subsidiaries Quicksilver, Bug Byte and Lothlorien but it looks set to release simply squillions of games next year. Let's see how good it is at keeping its New Year resolution.

One of the first of these games will be about telly's favourite plastic presenter, **Max Headroom**. It's due to stutter out s-s-sometime soon.

And finally we've a detective story with a happy ending — but don't try this yourselves kids. Odin had a break-in about a month ago and thieves got away with a lot of old deleted titles and eight copies of **Nodes Of Yesod**. Paul McKenna said, "Villains smashed down the door of Bug Bytes' premises where we were storing some software and helped themselves. We put the feelers out and got info that the goods were out on the streets in Manchester and Liverpool only an hour later." Odin actually recovered nearly all the software and six of the eight copies of **Nodes Of Yesod** but not with the help of the Police as I'd assumed. "Once we knew who had stolen the stuff and where it was located it was fairly straightforward. We just paid a little visit to these villains at 1 o'clock in the morning and got back all the stuff. They certainly won't do it again." That sounds ominous. Paul added, "Incidentally we weren't insured." Good job you got your stuff back then, eh lads?

**Teresa Maughan**

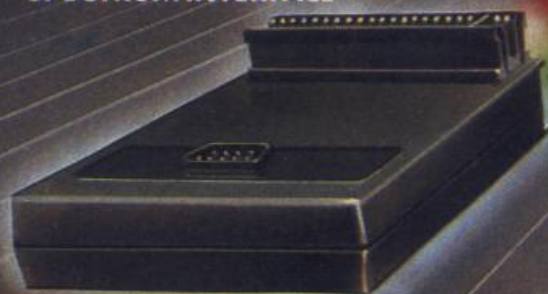




# We'll take you beyo

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**This lady is deadly.**



**This man is harmless.**

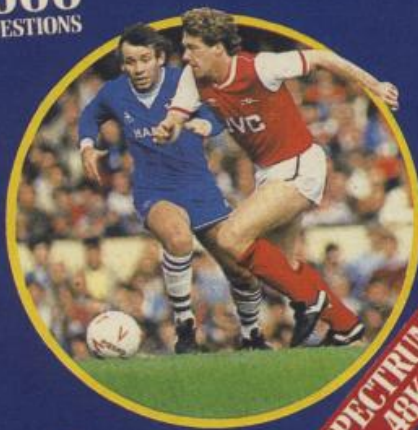


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Editor: Peter Dunk

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Cassell Software from HOLT SAUNDERS



# QL NEWS

What the Q 'ell's going on for the QL? Find out here...

**Metacomco is delighted** with sales of its latest product **QL C** which was launched in September. A Metacomco spokesman told *Frontlines*, "QL C has sold extremely well since its release and is now one of our most successful products."

**CDS has just** released the QL version of **Steve Davis Snooker** — right on cue. And very playable it is too. Among its features you'll find computer play options with demo games, editing facility so you can set up your own tricks, three table speeds, accurate control over the degree of spin, joystick option and a variety of skill levels. And all for £14.95

The only trouble is we reckon it cheats. C'mon, even our Steve couldn't have pulled off some of the stunts the computer was throwing at us. There was this trick shot... (*Hmmm, sounds like someone's a bit of a bad loser. Ed*)



All looks jolly interesting, Steve!

**Psientific Software** has just released **Q Calc** at £9.95. It gives you an on-screen calculator that multi-tasks with other programs and is available at any time. It runs perfectly happily with programs such as Metacomco's *Editor* and there's even a cut-down version called *Mini-Calc* for

use with programs that require a lot of memory like the Psion packages.

**Marriage a la** modem. This complete communications package from Tandata is designed to colour co-ordinate with your QL. Called QL-Comms it consists of three modules that stack together. Q-Connect is an intelligent serial port that includes all the software you need for full viewdata and Prestel emulation. Q-Mod is a matched modem operating at 1200/75 bps and 1200/1200 half duplex. Finally, Q-Call completes the system with an auto-dialler that also works as an auto answer modem. And the cost of this little lot? £173.90 plus VAT. Tandata's just bought the system off another company, so if you'd like to buy one off them, give 'em a ring on 01-940 6211.



**Firebird Software** has finally decided to leap on the QL bandwagon with its first offering for the QL — **Booty**.

*Booty* sold over a 100,000 copies on the Spectrum and Firebird reckons the time's right for more games for QL owners, so it's decided to convert it. It's a platform game that takes place on board a ship. You play the part of Jim, the cabin boy, and have to wander round the ship collecting a number of keys that'll enable you to open the pirate's treasure chest.

*Booty* costs £9.95 on microdrive — more than other Firebird games, but to offset this Firebird has decided to throw in another game, *Grin Wars*, completely free. When asked why Firebird had decided to move into the QL market, Phil Pratt said, "We've been approached several times by hardware dealers urging us to bring out QL material and it seemed a logical step as many of our games are already available on the Spectrum." He added, "Many QL users have been left in the cold when it comes to games as there simply aren't that many available. We think it's good to have a presence in the market."

*Booty* should be available shortly before Christmas for all those hankering after some QL game madness.

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"If you have a microdrive the Microdriver is the most important piece of hardware you could buy." *John Lambert - Sinclair User*  
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"I much preferred the Microdriver for speed and ease of use." *Iolo Davidson - Your Spectrum*

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YS



# THE HIT LIST

**Wanna know who's chasing who up the charts? What bubblers have burst on the scene or what raves from the grave are still grooving around? Then cast your opticals no further — all that's hot is here in the YS Hit List.**

## Chart Chat 2

This month's chart sees *Fairlight* dropping down from the top spot to number 6. Melbourne House's two martial arts games, *Way Of The Exploding Fist* and *Fighting Warrior*, have also been chopped down to size dropping from number 2 to 5, and 4 to 7, whilst *Daley Thompson* is holding his own at number 3. *Frank Bruno's* own particular brand of exploding fist still lurks around the nether regions of the chart (*Bit below the belt that! Ed*)

The chart's high flyers have gone underground this month. *Monty Mole* has burrowed his way straight up the chart and surfaced in the number 1 slot with *Monty On The Run*. Close on his heels (or should that be paws?) is the underground bunker game, *Impossible Mission*.

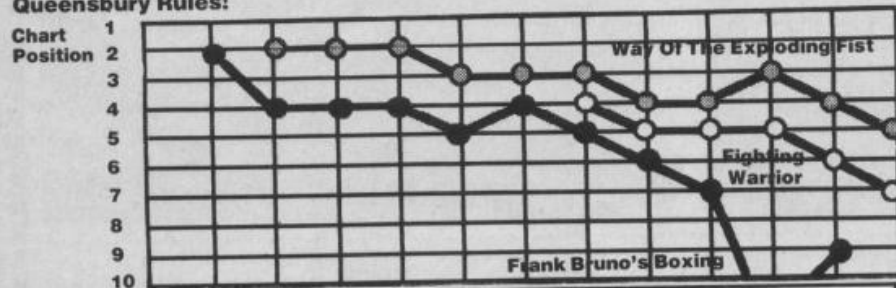
Adventures seem to be out of favour though. *Starquake*, *Gyroscope* and *World Series Basketball* all enter this month, whilst *Shadow Of The Unicorn*, *Bored Of The Rings*, *Nightshade* and *Sorderon's Shadow* all 'Go West'.

## This Month's Top Ten Titles

Position	Last month	Weeks in Chart	Title/Publisher
1	—	5	● <i>Monty On The Run</i> /Gremlin Graphics
1	—	3	● <i>Impossible Mission</i> /US Gold
3	3	8	● <i>Daley Thompson's Super Test</i> /Ocean
4	—	2	● <i>Starquake</i> /Bubble Bus
5	2	11	● <i>Way of the Exploding Fist</i> /Melbourne House
6	1	8	● <i>Fairlight</i> /The Edge
7	4	6	● <i>Fighting Warrior</i> /Melbourne House
8	—	1	● <i>Gyroscope</i> /Melbourne House
9	—	2	● <i>World Series Basketball</i> /Imagine
10	8	10	● <i>Frank Bruno's Boxing</i> /Elite

## Fist Fight

This chart shows the ups and downs of the fighting freesome (shome mishtake shurely! Ed). Those inscrutable oriental types seem to have the droop on our own Frank Bruno — but then again, they don't play by the Queensbury Rules!



This chart is based on the *MicroScope* chart as compiled by Gallup.

# MicroScope GALLUP

*MicroScope* is the weekly trade paper of the microcomputer industry. If your computer store doesn't display the latest *MicroScope* chart, ask the manager to call Mark Salmon on 01-631 1433 — we'll send a copy every week.

## 12 Months Ago

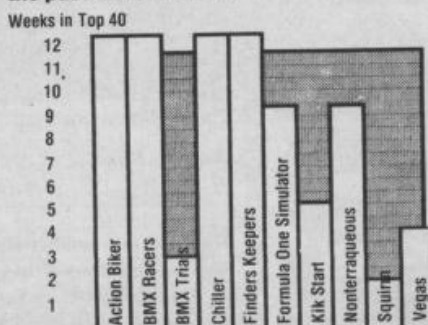
Position	Title/Publisher
1	● <i>Underwurde</i> /Ultimate
2	● <i>Daley Thompson's Decathlon</i> /Ocean
3	● <i>Eureka</i> /Domark
4	● <i>Knightlore</i> /Ultimate
5	● <i>Tir Na Nog</i> /Gargoyle
6	● <i>Combat Lynx</i> /Durell
7	● <i>Pyjamarama</i> /Mikro-Gen
8	● <i>Avalon</i> /Hewson
9	● <i>Travel with Trashman</i> /New Generation
10	● <i>Battle Cars</i> /Games Workshop

## 18 Months Ago

Position	Title/Publisher
1	● <i>Mugsy</i> /Melbourne House
2	● <i>Sabre Wulf</i> /Ultimate
3	● <i>Psytron</i> /Beyond
4	● <i>Codename Mat</i> /Micromega
5	● <i>Jet Set Willy</i> /Software Projects
6	● <i>Trashman</i> /New Generation
7	● <i>Fighter Pilot</i> /Digital Integration
8	● <i>Solo Flight</i> /Microprose
9	● <i>Blade Alley</i> /PSS
10	● <i>Atic Atac</i> /Ultimate

## Masterful Ten

In recent months Mastertronic has had ten hit titles. Five of these have helped Speccy owners get their show on the road, on either two wheels or four. In particular, Mastertronic's *Action Biker* and *BMX Racers* have both had a sustained period of success. The bar chart below shows how each of Mastertronic's games has fared over the past three months.







# COMPO

*When Mr Bobo Baggybelly of Rathbone End announced he was about to celebrate his eleventy-first birthday and the launch of Melbourne House's Lord Of The Rings with a magnificent compo there was much talk and excitement in Speccyton.*

## LORD OF THE RINGS

**W**otta we gotta do?" said Dilli and Divvi with one voice. "Something about summarizing *Lord Of The Rings*."

"Bored of the Things?" asked Frond, Basildon Frond.

"No, *Lord Of The Rings*, the Tolkien book — we have to tell the whole story in less than 25 words."

"What's it worth?" asked Dildo

"Yikes — it says here a wow, whizzo, a-maze-ing, absolutely fave rave and fab hologram worth squillions of readies"

"What? You mean one of those fabarama 3D amazingly life-like images that you can hang on your hut wall?"

"Who's it of?" cried the assembled mass of Rathbone fairy folk.

"Er ... the Dark Rider"

"Spooo — keee" said Gland Alf, silently.

"Groo" said Baggybelly "Who's coming to the goblin party?"

"After we've filled in the coupon — even thirty runners up get copies of the game" So send your entries to Bobo's hole in the ground — not a nasty, dirty wet hole you understand, oozing with worms, but because it's an editor's hole, one that means comfort — its address is *Lord Of The Rings Compo, Your Sinclair 14 Rathbone Place, London W1P 1DE*.



*Lord of the Rings Runes, sorry, Rules*

1. Entries should reach us no later than February 28, 1986, earthling calendar, that is.
2. There is no rule 2.
3. Bobo Baggybelly's decision is final. No correspondence will be entered into because the postman won't go to Middle-earth — he won't even go to Middle Wallop.

Honest Injun, I don't live or work in Rathbone End. The complete story of *Lord of the Rings* in less than twenty five words is .....

.....  
.....  
.....  
.....

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Lord of the Rings Compo, *Your Sinclair*, 14 Rathbone Place, London W1P 1DE

If you don't fancy cutting off Bilbo in his prime use a photocopy instead.



# GLADIATOR

IT'S NOT MUCH FUN  
BEING A SLAVE...



...SO I TRAINED LIKE MAD  
TO BE A GLADIATOR



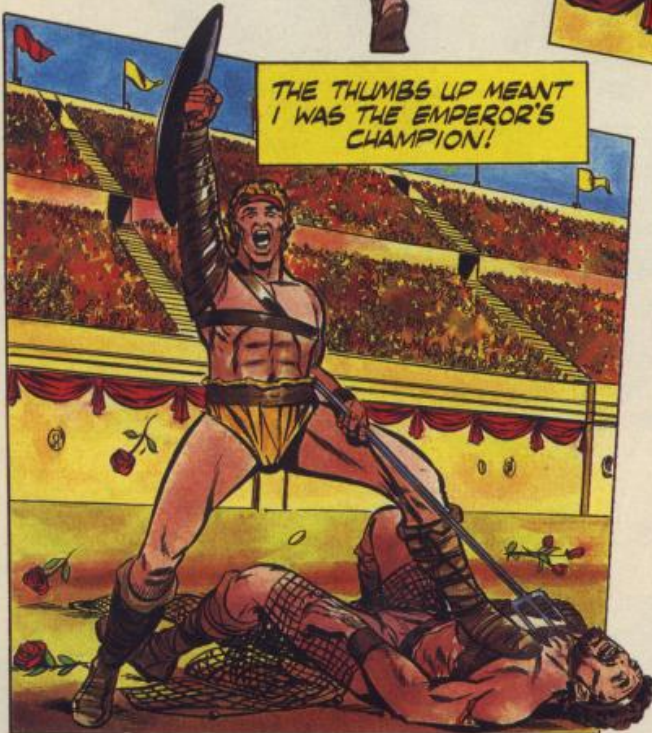
I WAS SHAKING LIKE  
A LEAF IN MY FIRST FIGHT...



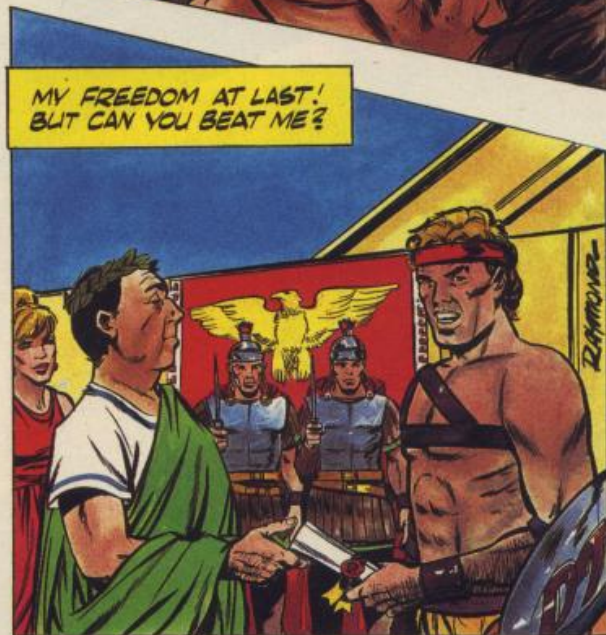
... BUT I SOON GOT  
THE KNACK



THE THUMBS UP MEANT  
I WAS THE EMPEROR'S  
CHAMPION!



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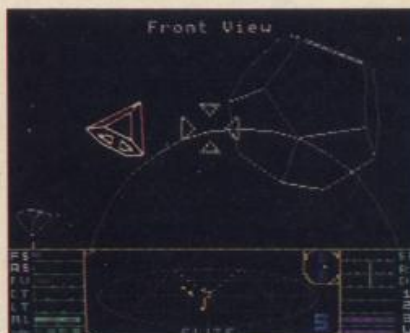






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It's dangerous all the way.

"To play it is to be entranced, enthralled and ensnared... stunning." (Computer & Video Games Magazine).

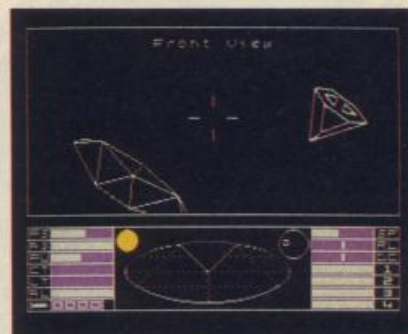
"A brilliant game of blasting and trading... **truly a mega-game**" (Gold Medal Award, Zzap! 64 Magazine).

"One of the most imaginative games ever designed to run on a home computer..." (Crash 'Smash', Crash Micro Magazine).

Elite is here now for the **Commodore 64** and **128** and **Spectrum**, and (very soon) for **Amstrad** and **MSX** too – complete with Manual, Novel, Control Guide, Ship Identification Chart and more.

**Elite.**

Be dangerous.



SPECTRUM 48K

\*Zzap! 64 Magazine.

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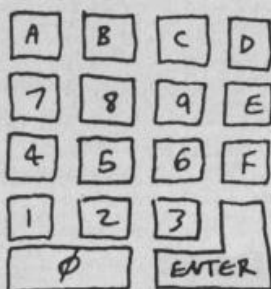
# LETTERS

YOUR SINCLAIR, 14, RATHBONE PLACE LONDON W1P 1DE

## A HEX ON YOU

I see that the new 128K Speccy has a small keypad attached to it. That set me wondering why a manufacturer hasn't yet come up with a hexadecimal format keypad to make typing programs in hex format into the Spectrum easier.

Such a device could plug into the interface port and simulate the relevant keys. It could look like this:



The arrangement of the keys with hex letters A-F on it, would certainly be more useful than a keypad with just numbers on it.

Perhaps YS Enterprises could market it. I'd certainly buy one! **SG Wylie**  
**Ramsgate, Kent**

Now there's an idea. Pass the soldering iron, Pete. But what do we do with all those left-over letter transfers — the ones that run from G-Z? Anyone else got any more bright ideas? **Ed.**

## STAR CROSSED

I was very pleased to see my letter in your September issue made Star Letter.

I was even more pleased to see that a bundle of free software was on its way to me. Is it waiting — or where is it waiting — or what is it waiting for? I've just got the October YS and I see there's a bundle of free software for HIM too. Do I have to write 'more' Star letters and build up a 'bundle of free software' worth posting? Is all this in my mind? Am I dreaming? Does YS really exist? (All these questions will come under discussion in Philosophy — What's It All Mean and Why Are We Watching Channel Four At A Quarter Past Midnight? **Ed.**)

Please write soon or I'm

sending my wife to stay at your office for a month. Then you'll know what hassle is and why I need my Speccy so badly!

**Mac Pittman**  
**Newark, Notts**

I just hope your wife doesn't read this or that's one less reader for YS. As for the main drift of your draft, I'm very tempted to make this the Star Letter again and not send you two lots of free software but I s'pose it's somebody else's turn not to receive 'em.

Oh, alright, so someone here's been a bit lax but I'm not going to say exactly who — it might just be me. I'll get one of the minions to look into it. Peeeee-ter! **Ed.** Who're you calling a minion — I am not a vegetable! **T.P.**

## IT'S NO LAUGHING MATTER

This is going to be a sensible letter. (It'll be the only one in the mag then! **Ed.**) It therefore follows that I shouldn't mention Peet Shore's name and indeed I haven't.

The Troublemaker (shouldn't that be shooter? No, he always misses!) has been makin' trouble lately, though.

Take From The Hippy in Your Spectrum 19. Here Pete tells us how to 'deal with' dec/hex conversion. He tells us to put the number we want 'dealt with' into the A register and call the shadow routine. Notice he never actually says that this is the number that'll be converted — which is just as well since he doesn't tell us where the hex value can be found.

Maybe this is partially

caused by his physical disability — I wondered who the 'Invalid' in all those error messages was! Apparently, he doesn't have a 'beak to sip me coffee' either. I've always managed perfectly well without one... I don't feel sorry for Gollum!

Has anyone tried using the USR call from Codebusters on the YS MegaBasic input command? Nope? Well try it!

Can I say hello to Carl Whitwell? (No, you ruddy well can't. What d'you think this is? Radio 1? **Ed.**)

**Paul Taylor** (Hacker Extraordinaire)  
PS I'd use my old Speccy keyboard as a rubber fly swatter (CW). Don't get many rubber flies around here (PT).

Is there a doctor reading the mag? Quick, I think the **Ed's** just had a nasty attack of philanthropy. This — the Star Letter? Can you blame me for not sending out those bundles of free software! **Trouble-shootin' Pete** Yes! **Ed**

## WE-EIRD!

Hey you. Yes you, the purple frog with the six heads, nineteen eyes and the little sign on your desk reading 'Ed'. (I do hope you're not referring to our illustrious leader — well, it is the time of the year for my pay rise! **Trouble-shootin' Pete**). You will:

1. Please send me full details of this new game, *Alien 9* you seem to have invented in *Input/Output* ish 21. Or could it be... No... it can't be... yes, it's a cock up! What am I on about? Put a sarcastic comment here

and you won't receive another one of my wonderful letters. (Quick Pete, pass the file of sarcastic comments before he sends us more scribbles like this. **Ed.**)

2. Please award this Star letter or a Trainspotter 'cos this is my third attempt. (Going for the sympathy vote, eh? **Ed.**) Failing that, start up a new award like Weirdo of the Month and give the first to me! It'd shut me up for the next few issues.

Yours for ever crawling from the bottom of my elbow.

**Mark J Weirdo Jnr OBE**,  
President of the Hugo is a weird name society.  
(Membership 2)

PS Did you know that the controls for Ocean's new game Rambo are O to go left, P to go right and S to stop firing.

Weird? You're a positive fruitcake! And no, I'm not going to start an award for you and the other nutty member of the Hugo society. You need help, not encouragement! **Ed.**

## RIGHT LETCHER

I've got a little gripe for you. (What, only one? I'd just love a bunch of gripes. **Ed.**) About a week and a half ago while I was out shopping in a town known to most of us as Stevenage (a small area on Venus for the uninitiated) what did I come upon but a copy of Your Speccy ish 20.

Now I would've bought a copy there and then if it wasn't for the fact that I've already got an order placed on the other side of the galaxy with a Letchworth newsagent. Well, I've just got back from said newsagents holding a copy of my precious mag (creep, creep) and what do I find? A couple of compos in Frontlines that say 'and the first twenty people to send in the correct answers to these questions could win...'

Isn't that just a bit unfair to all Letchworthians? I bet that at least nineteen of the right answers came from Stevenage!

## DOODLEBUGS

If you don't want to send in a long drawn out letter, draw it out instead and send it to Doodlebugs, Your Sinclair, 14 Rathbone Place, London W1P 1DE



These cartoons are part of Adam Norton's winning entry in the Saga Keyboard Compo from Your Spectrum 20. Plus Adam, you've now won a game from Doodlebugs!



# LETTERS

Oh, I suppose that making this the star letter will put all these things to right.

**David Willmott**  
**Letchworth, Herts in the right place.**

PS While you're at it you could persuade the delivery bloke to come here first!

When it comes to compos the Ed's decision is final and he is unable to enter into correspondence on this matter ie the lazy old coot wants me to give you an answer. And the reason for running compos in YS that so obviously discriminate against Letchworthians is because... we've got it in for you, we're running a vendetta against the town, we just can't stand you. Happy, now? **Troubleshootin' Pete.** And now tell 'em the real reason. **Ed.** Oh okay, what we really meant to say was that the first twenty people out of the Ed's hat win a prize — they'd just better not come from Letchworth that's all! Well, not all of them anyway! **T.P.**

## WILDGOOSE CHASE

flying doctor.

me a Trainspotter's Award by deserve compensation so rush Castlemaine XXXX. I think I something other than from my hat. I almost drank nearly maimed by flying corks jump backwards and I was shock of this mistake made me Great Fire of London. The except for a screen shot of The mag was printed upside down, eyes, I noticed that the whole with tears welling up in my final Your Spectrum (sob, sob) While browsing through the What are you Poms up to?

**Nuneaton, Warwickshire Wildgoose)**

**An Irate Wallaby (Karl)**

**Ed** You to XXXX Castlemaine so. Gone already it's — T.A. no. Like more wally — wallaby about dunno. Special Antipodean an was Spectrum Your of issue last the that realise you didn't. Sport down kangaroo me tie well.

## THAT WAY MADNESS LIES

I want to tell you how much I like YS but there's one thing that's driving me mad. As I live miles from civilisation — and photocopiers — I'm forced to buy two copies of the mag so that I can enter the compos and take advantage of your features like DigiTape and Program Power. By the time I've cut out all the forms, the magazine is dead and I have to go and buy another copy.

Is this a plot on YS's part to

## TRAINSPOTTER AWARD



Seen the newest adventure from Mosaic House lately? **Terror-Mole-nos!** You have to construct a diary of your Spanish hols. But beware, you must bring back ten out of twelve successful pages of the diary.

Confused? Take a quick look at page 59 of Your Spectrum 21 and see what I mean. Come off it Ed, surely

make more money? The death of a copy of YS is a serious matter and so is my financial position. My solution to this problem is either to give me the 95p to buy another copy or include a pull-out booklet of entry forms.

**Dennis Carroll**  
**Howwood, Renfrewshire**

It seems obvious to me that living miles from civilisation is indeed driving you mad. But look at it this way — out there in the back of beyond without even the fun of the photocopier to fill the hours between dawn and dusk, what else is there to fritter your money away on? No discos, no Smarties, no Wham records — hmmm, not so bad after all! All those pound coins jangling around in your pocket means you'll eventually grow up lop-sided which is useful for walking up the sides of heath-covered mountains but not much cop for forming deep and meaningful relationships, and then you'll end up a bitter and twisted old miser. No, all things considered, YS is doing you a great favour. Ever considered buying three copies a month? **Ed.**

## AGONY AUNTIE

I have a problem. Perhaps you can help me Pete? (You really do have a problem if you think Pete can help you! **Ed.**) Well, actually, it's not me personally but a mate of mine. It's like this. He doesn't know whether to buy a Spectrum or a BBC or even a Commie 64.

I've told him a million, million times to get a Speccy but he's

you can come up with something a bit harder. I don't care anyhow 'cos I claim my Trainspotter Award so there!

**Stephen Trask**  
**Rochdale, Lancashire**

Herumph. I think you're just making a mountain out of a Mole-hill but you don't terrorfy me. Let's see what the next contender for the Trainspotter Award has to say for herself...

I've just read Your Spectrum 21 upside down for the first time ever — it's worth doing this when you get to page 51 as it's the only way to get a good look at the screen shot of The Great Fire Of London even if you do miss out on the rest of the info on that page! I thought I'd be safe for the rest of this issue. Surely, even you would not subject your readers and fans (?) (?? Ed) to yet more complicated contortions.

Who could have guessed that you — in your wisdom (??) (??? Ed) — had planned

still unsure. D'you think he's bankers? I mean when I got my computer I went straight to a Speccy dealer. Could you give him a few words of inspiration to make him buy a Spectrum?

**Nigel Clarkson**  
**Durham**

Well, Nigel dear, I can see you really do have a problem. Oh, sorry... your 'friend' really has a problem. But if we're lucky, you may have caught it just in time — another couple of weeks and it could've proved fatal. The trouble is that if your 'friend' can't see that the Speccy has the best games, the best graphics, the best... well, it maybe that surgery is the only answer! There maybe a hope, though — even your 'friend' will be able to see at a glance that the Spectrum has one great advantage over the other machines. It has by far the best mag on the market — this one. So, get round there and show him a copy now. Will

## SMALL PRINT

...Owing to a shortage of brain cells in vital areas, I am totally machine code illate... illrate... blind — see, when they were giving out brains, I thought they said trains so I lashed out for a small, slow one! (Yep, you've got all the makings of a first-class trainspotter! **Ed.**)

**David M Gibbon**  
**Salisbury, Wilts**

...and before I run (from Ed's claws) I think DigiTape should have programs on it that are too long for publication in the magazine. This way programmers would feel free to create 30K games. (Feel free! Sounds like a

on driving us all up the wall by printing another screen shot of Adrian Mole's Diary under the heading of Terrormolinos?

Now, hanging from the ceiling and confused as to which way up to read your mag, I'm in urgent need of a restorative for the nervous tension caused by this issue of YS — so how's about a Trainspotter Award... or two?? (??? Ed)

**Mrs L O'Neill**  
**Transylvania**

All that hanging upside down must have driven you completely batty! As for pointing out our mistakes, all I can say is fangs for nothing — you really got your teeth stuck into them, didn't you? Still, this month's Trainspotter Award will have your name on it — written in blood! You can stake your life on it, in fact. Now pass the garlic, Pete. **Ed** I suppose you're going to tell me my job's at stake now... **Art Ed.**

you do that for me? Will you, dear, will you? **Troubleshootin' Pete.**

## SPACED OUT

Here's an incredibly simple idea that everybody probably knows already. But I'll tell you anyway. If you want to put a lot of instructions in a Print statement, after the first quotes fill the remainder of the line with spaces and start writing on the next line as you want it to appear. When you've finished all the information you want to print, you can erase the first line of spaces. This saves a lot of time searching and justifying half words and the like.

**Steve** (useless programmer and games player) **Osborne Carlton, Notts in my hankie**

As Mr Caine would say, norra lot of people know that! **Troubleshootin' Pete.**

good idea. We've got the tape if you've got the time! **Ed)**

**Freddie Lewis**  
**A Barton lad from Bedford**

...I was thumbing through issue 21 of Your Speccy — yes, that's the one with a picture of the Ed on the front cover, gravel, gravel. (Ho, ho, who're you trying to kid. The Ed as Rambo? Dumbo, more like! **Troubleshootin' Pete.** Uuurgh...if I could only pick up this Bullworker I'd clobber you with it. **Ed)**

**Fraser B Wallin**  
**Ramsgate, Kent**

...Is it true that only Groan-ups can crack jokes as badly the Ed? (Oh, groan. **Ed.**)

**Andrew McGutchion**  
**Earlsdon, Coventry**







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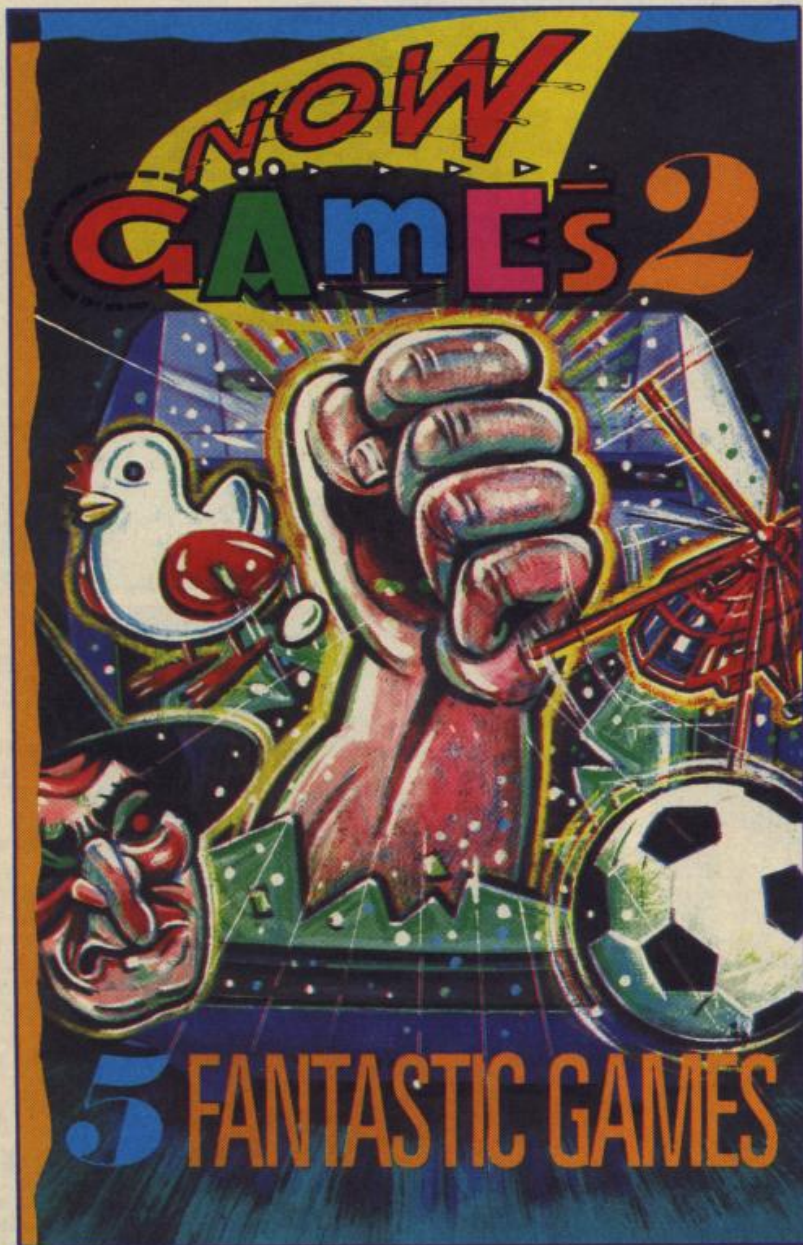


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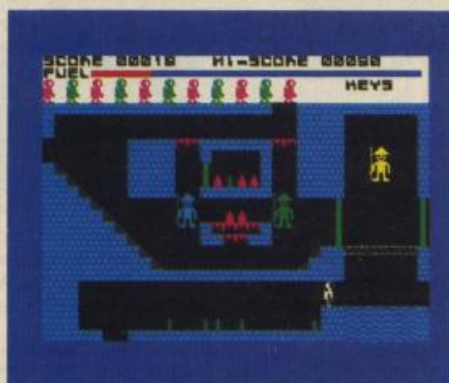
All screenshots from the Commodore 64.



# SECRET SHOTS

That motley crew **Rick Robson, Rachael Smith, Steve Malone, Luke C. and Alison Hjul**, are back with their joysticks at the ready to bring you a bumper collection of the latest games.

# CAVES OF DOOM



## Microsphere/£6.95

**Rachael** Oh God, 'orrible Eric's back! Why they didn't expel him at the end of last year I'll never know — he makes that Adrian Mole of 4C look like a saint. But he didn't end his Skool Daze when he stole his report and now he has to sneak it back into the headmaster's safe. That's not just a question of catching masters with a crafty catapult either. Oh no, the alterations to the building have made life a whole lot more difficult and he's even saying he'll come over here into the girl's school. And do you think that the threat of lines from our headmaster will stop him? No! He'll just suck up to his girlfriend and get her to do them.

The reason he's coming over here is because the key to the headmaster's safe hangs round the headmistress's neck.... and we'll be gossiping about that behind the bike sheds, I can tell you! But the spotty little Rambo is well armed and he thinks it's funny to release a frog or a mouse here.

## Mastertronic/£1.99

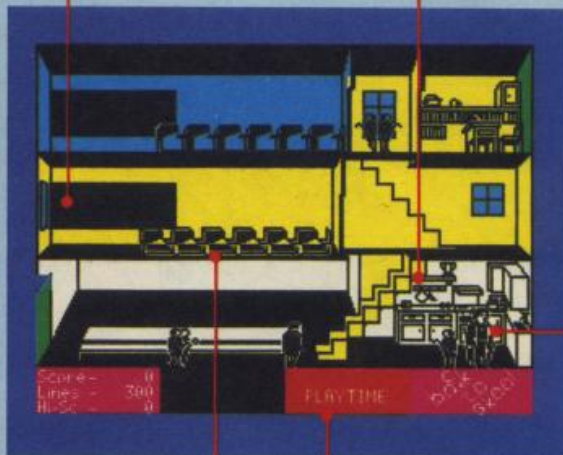
**Steve** Despite its title, this game is not a philosophical discourse on whether a machine has a soul — score 100 points for each deterministic fallacy disproved. It's instead one of those games where you enter the lair of an evil genius in order to save mankind.

On the face of it, Soul is an ordinary arcade adventure featuring Mastertronic's improved graphics. There's the usual series of obstructed rooms to get through, filled with mobile nasties, and commands to fire and pick up useful objects. However, you won't get out of a section until you find the key. Since both these objects are fairly well hidden, players might find themselves doing a lot of wandering around before

# BACK TO

Blackboards are for writing on. In fact, they're the only way to enter the combinations that free the bike and open the biology store.

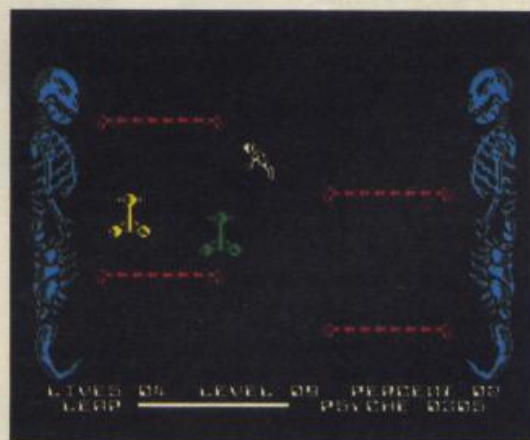
How to deliver an amphibious chapeau. Drop the frog in here then topple it onto the head's head with a catapult. Sneaky, huh?



You'll find armoury scattered around the desks. When you first enter a room try as many as possible before others occupy them.... and don't forget the girls' school.

Miss Take, our headmistress, and woe betide if she catches you here. Mice can provide a satisfactory diversion though.

Every school has its timetable — and chances are Eric will be ignoring it. However if he gets caught he'll need to go at double speed because the lines add up if he dawdles.



# SOUL OF A ROBOT

finding them.

Luckily, the constant buffering you get from the nasties doesn't mean you lose a life, it just diminishes your energy. But be warned! I had to restart the game when my

robot got itself stuck between a platform and a spaceship!

Graphics	■■■■■■■■■■	6
Playability	■■■■■■■■■■	
Value for Money	■■■■■■■■■■	
Addictiveness	■■■■■■■■■■	

## Mastertronic/£1.99

**Alison** Imprisoned in a maze of caves, embedded in the planet of Doom, you must collect five keys to escape the evil clutches of the villainous Lord of Darkness whilst avoiding the usual selection of traps and nasties.

Well, if that induces the same feeling of impending comatose in you as it did in me, you'll be surprised.

*Caves of Doom*, with its little boiler-suited hero, may look like a poor-man's *Jet Set Willy*

//, but it's a battle of dexterity and wits as you zoom through forty locations, dodging marauding minions, in pursuit of your ultimate escape.

Well, I'm told there are forty locations — I couldn't even get through half that number. Cheaper than the price of a cinema ticket, it'll certainly keep you glued to the screen for a helluva lot longer!

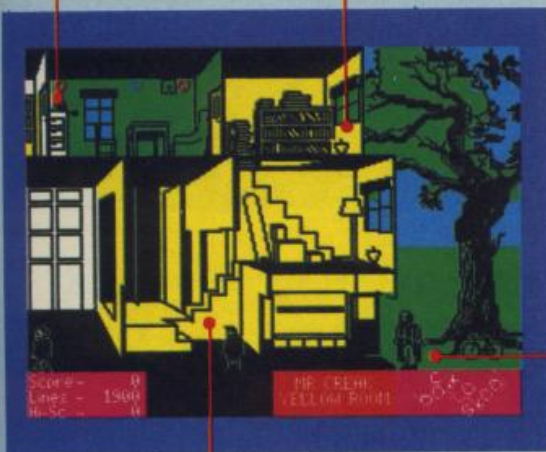
Graphics	■■■■■■■■■■	8
Playability	■■■■■■■■■■	
Value for Money	■■■■■■■■■■	
Addictiveness	■■■■■■■■■■	



# SKOOL

The target of Eric's struggle, the safe. 'Fraid that door remains shut till the head unlocks it.

Watering the pots makes the plants grow. Could producing a flower at the school gates win a female heart... and help with lines?



How to conker Albert, the caretaker. Drop a stink bomb here when the head's around then knock a horse chestnut out of the tree onto the oddjob man's noggin. But it'll mean more lines.

● Eric's inventory. The well equipped schoolboy never travels without at least one mouse, some stink bombs and a water pistol... but try to avoid the lines that appear to the left.

Stairs can present a control problem unless you remember that Up or Down, if pressed early, will still move you forward until you reach the steps.

That boys school still looks like an ant colony and all the old masters, ugly as paintings, are back trying to keep Eric where he should be. Only Eric has to get the bike and get the teachers drunk and to do that he's got to get our headmistress's sherry — which gives him even less time for studying than before.

I've always found Eric a bit uncontrollable and there are times when he seems to be going his own sweet way. And the masters are as bad as ever. They don't give you time to move before dishing out even more lines, which might mean that Eric's education comes to an abrupt end. But on the whole I'm sure he'll live to try again, and a lot of people won't be sorry.

I will though. You see, I only know so much about Eric because... yes, I'm his girlfriend. And if he asks me to write out any more lines I think I'll hand him over to the head myself.

Graphics	□□□□□□□□	9
Playability	□□□□□□□□	
Value for Money	□□□□□□□□	
Addictiveness	□□□□□□□□	

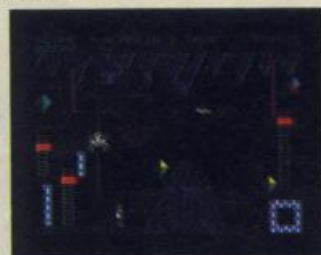
## ALADDIN'S CAVE

Artic/£6.99

**Steve** Just when you thought it was safe to go back into the Mansion, those awfully nice people at Artic have brought out another JSW clone.

Actually *Aladdin*, Son of Willy isn't all that bad. There are some fairly fiendish rooms to get through and Artic has added stings to the tail.

Firstly, you can change into a dolphin, genie or whatever, which makes collecting objects much easier. The old trick of picking up the easy pieces and coming back won't work on this one. If you leave a room before you've picked it clean, you lose all your other pieces.



Graphics	□□□□□□□□	5
Playability	□□□□□□□□	
Value for Money	□□□□□□□□	
Addictiveness	□□□□□□□□	

## CHICKEN CHASE

Firebird/£3.95

**Rick** This may be a Gallic two screen cheepo that you won't need to buy on higher perches but it's high on the pecking order of this type of game. Essentially you have to direct your petit cock round his coop, upstairs, downstairs and occasionally in his lady's chamber, where the little red rooster learns all about the bees and the humans. Along the way he must eat to keep his strength up to satisfy his Frenchmen's 'apetite'.

However, rotten rodents ranging from rats to stoats keep ripping off Madam's eggs. This harrasses the hen to the point where she wallops our game cock about the wattles. Most amusing.



Graphics	□□□□□□□□	7
Playability	□□□□□□□□	
Value for Money	□□□□□□□□	
Addictiveness	□□□□□□□□	

## GLADIATOR

Domark/£7.95

**Rachael** The stench of blood in the hot sun. The roar of voices. A battle where victory means freedom from slavery... and defeat means death! Never before has a game captured the spirit of Castle Rathbone so well. *Gladiator* may be set in a Roman arena but the mechanics are much the same. And above all the bloodshed sits Emperor Ed, the man who can give the thumbs down to our efforts.

Domark's addition to the D.S.D. (Do Someone Damage) genre is divided, like Gaul, into three parts. First you can watch a bout or two in the arena, perhaps laying the odd bet, though you'll have to do this in pence rather than denarii because the gambling option isn't any more than a flashing message saying 'Bet Now', as far as I could see. Despite the cheeky suggestion that betting is a programmed part of the game it's a compliment that the fights appear realistic enough to make them worth watching.

Once you've lost all your change by buying Gladiators it's time to practise in the woods. Choose the two player option then leave your opponent static as you dance



around him before dealing a nifty thrust with a sword. Or a spear or dagger, or throw a net, or whatever, because equipping yourself for combat from the complete classical arsenal is an important part of your preparations. Then it's back to the arena for the best of three falls and the emperor's thumb, which turns at the end of each combat.

It's an interesting addition to combat games with 25 moves available, though the pre-production copy's method of control, using two prods of the fire button for some blows, is highly unsatisfactory. While

Domark promises to replace it, the alternative remains to be judged. Providing it works better than this it should give you real involvement with your fighter. I felt cheated that two player combat is not available in the arena so, in this mode you cannot win your freedom.

Perhaps not the most enduring of games, but with superb animation, it's certainly different and it gets my qualified thumbs up.

Graphics	□□□□□□□□	7
Playability	□□□□□□□□	
Value for Money	□□□□□□□□	
Addictiveness	□□□□□□□□	



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PART 1

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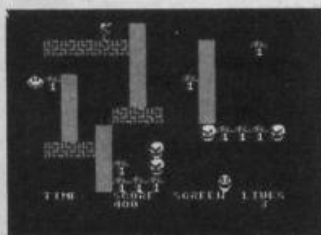
**Luke** Here's yet another addition to the long line of *Manic Miner* clones where the game's addictiveness more than compensates for the lousy graphics.

As the Rockman, you have to tear around the screen eating mushrooms and avoiding the ghoulish smiling faces that seem to follow you wherever you go. I say 'seem to follow you' because they do have quite a strict routine of movement which can, after a while, be predicted.

Rockman can move incredibly fast when he wants to, but he can also be controlled accurately.

Once you reach certain levels, you're assigned a password which means you can bypass the easy and familiar levels and start on unknown territory right away.

Overall, not one of the best arcade games I've seen but, if you're looking for a game to while away an hour or two, *Rockman* comes highly recommended.



Graphics Playability Value for Money Addictiveness		8
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**Rick** Our 'Nery'd enjoy this one. Activision's made a noble effort at presenting the ignoble sport for the small screen in a game that puts as much emphasis on the pre-fight training as it does on the bruising bout. You play both trainer and boxer. So it's brains as well as brawn that'll decide whether you're champ or chump.

Your first task is to create your own boxer. You have the technology, but do you have the imagination? He can be endowed with all sorts of qualities — not just the obvious ones of stamina and strength but also image and attitude. You can even choose hair colour.

Through the promotor (who will appreciate your rapidly rising winnings) you can choose your opponent — either from the title contenders or the new pro-listings. The further up the listing you go the tougher your fight. Aware of his qualities, you can have up to twelve weeks in the training camp, where you have to choose how much time to spend on each part of your program — light bag, heavy bag, hand bag, weights or whatever.

Let's hope you get it right 'cos now it's the Real McCoy. A bout can last up to twelve three minute rounds. You're able to use a good number of pugilistic punches and counters — and again you'll have to decide your best strategy — keep your guard up or go for the kill. Beware — three clean blows could mean the end of the bout.

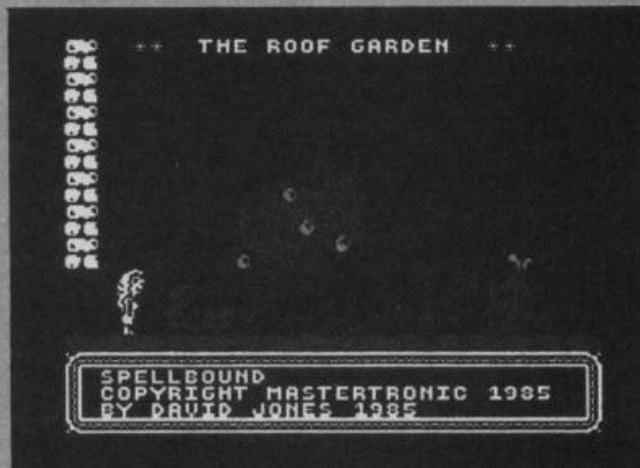
My only minor criticism is the lack of manoeuvrability — the boxers scuttle crabwise about the ring. And where's the skipping rope in the training camp? No wonder these boys aren't so light on their feet! All in all a top-ten contender in the software boxing championships.

# SPELLBOUND

**Rachael Finders Keepers** was the game that proved that budget need not mean cheap and nasty. While it lacked state of the art graphics it was playable way beyond its £1.99 price tag. Now here's David Jones again, with our old friend Magic Knight, and a far better looking game, but at a higher price. A whole pound more! Questions will be asked in the House because, despite the 50 per cent price increase.... this is probably even better value!

Now we are talking larger sprites, though with no less charm; more detailed settings, with less of the platforms element; and a far more complex game but one that is wonderfully playable.

At the heart of *Spellbound* are the nested menus, summoned by Fire. Using them you can pick up, drop, examine, read, interact with characters, throw things.... in fact there seems to be an option for virtually every situation! Just as in a traditional adventure you spend a lot of time searching for objects. You'll always need to check what you're carrying because many things contain clues. The speed of the menu



system makes this almost effortless. And it won't take long to discover that some objects, however fishy they may seem, can be very helpful!

But to the plot. As Magic Knight, you have to enter the castle of that mad, bad mage, Gimbal who has got his necromancy in a twist once again. And as well as trapping himself in a soul bleaching spell, he's taken seven other highly individual characters with him. You must free them as well as the incompetent illusionist before time runs out. This is all presented with a

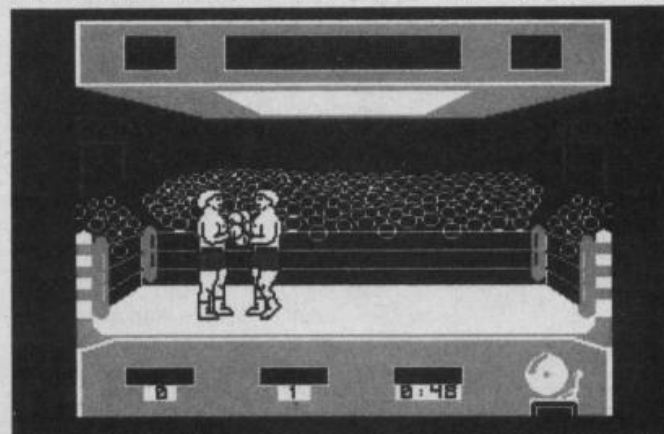
wonderful selection of logical puzzles and humorous touches and even the odd bit of arcade action thrown in for good measure.

It doesn't take the Crystal Ball I found in the lift to predict that this will be at least as big a success as Jones the Programmer's previous chart topper. But the really crucial puzzle I still can't solve is.... how do they do it at the price?

[illegible]

# BARRY McGUIGAN'S

## WORLD CHAMPIONSHIP BOXING

[illegible]



# COSTA CAPERS

Firebird Software/£7.95

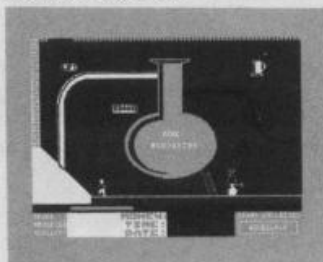
**Luke** Call this a holiday? It's more like a nightmare!

Poor ol' Ted has lost all his luggage on his way to Spain, and he's first got to find his credit card and then buy back all his belongings... especially his camera so that he can take snapshots to show his workmates back home. Drinking cans of lager help him in difficult moments... but a drunken Ted is not easy to control, and the hangover's even worse!

At first sight, *Costa Capers* really looks the biz. Modelled on *Jet Set Willy*, there are loads of screens cluttered with various nasties as well as useful items, such as parasols to keep the sun off. Trouble is, you can't tell which objects are useful to pick up and which ones kill you — you often just have to lose a life to find out and then remember which objects to avoid. The programmers have also opted to include the 'die for ever' syndrome from *JSW*, in which you keep falling through screens to your death. (If you get as bored as I do with this, an undocumented tip is to press the Break key and return to the beginning.)

Another little tip is to switch off the accompanying theme music as soon as you can — playing *Costa Capers* with the plaintive strains of *Viva Espana* in the background is no fun at all!

Overall, the idea of *Costa Capers* is an awful lot better than its execution.



Graphics  
Playability  
Value for Money  
Addictiveness

6

Elite/£7.95

**Alison** If you've started to miss those mindless shoot'em ups that marked the start of Speccy game playing — you'll be dying to have a crack at *Commando*. Super Joe is the ultimate killing machine, his sole mission to wipe the enemy forces from the face of the earth. And he's armed only with his sub-machine gun and six hand grenades.

The game is an almost exact copy of *Commando*, the arcade hit. I say almost, as the programmers were forced to leave out some of the little touches from the original — like the chopper that drops our hero off at the start. The only thing you may miss is the sound — the taktaktaktak of the machine guns and the kerpow of the grenades.

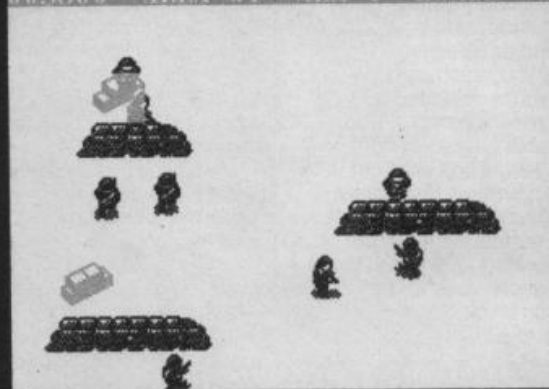
Once on terra firma, the game's the same — it's kill, kill, kill all the way to the end. Then it's straight back to the beginning where the slaughter starts all over again.

There are no real rules — just get in there and blast away, slaying the stormtroopers, gunning the grenadiers and blowing up the enemy battalions. Your machine gun's got unlimited fire power so spray those bullets about like a man with no arms — and after an hour or so's keyboard bashing your arms'll ache so much, you'll wish you didn't have any either!

The graphics are really neat but you'll hardly have time to admire the scenery — hang around too long in one place and the enemy sends in the heavy mob.

# COMMANDO

005000 AREA 01 MEN 1 BOMBS 08



*Commando* won't stretch your mind and if you've got a downer on mercenary militarism then give it a miss. But if you like your shoot'em ups simple, they don't come much simpler than this. Play it

and blast away a few brain cells — yours and the enemies'!

Graphics  
Playability  
Value for Money  
Addictiveness

9

# INTERNATIONAL KARATE

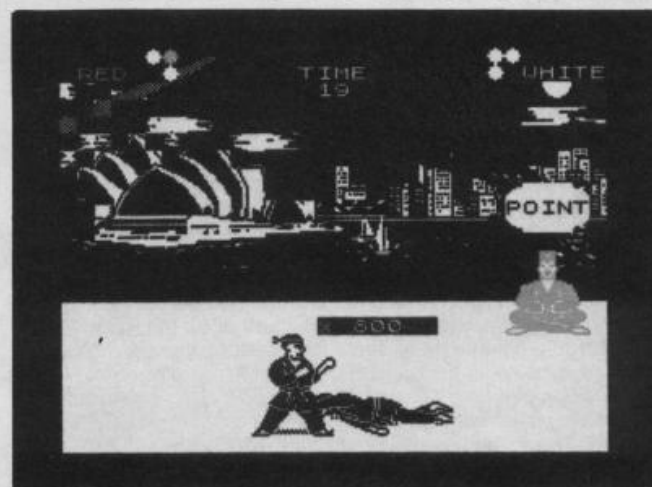
System 3/£6.50

**Luke** With so many games based on the thrills and spills of the old Kung Fu movies, *International Karate* is definitely a worthy attempt at being the best.

Animation's fine, but the backdrops of the various countries you fight in get pretty boring after a while. But then graphics isn't what the game's all about. Clobbering your opponent hard and fast's the aim of the game... *International Karate* has its Bruce Lees positively leaping all over the shop!

The fighters can choose from sixteen different movements but, as you can imagine, the logistics of carrying out these sophisticated moves — especially in a two-player bout! — is more than a set of weary fingers — or even a jaded joystick — can contemplate.

The judge of the fight announces — yes, the



program speaks... and it's almost understandable too! — the scores, and puts the players back to the starting grid if the fighting gets too silly.

It's an enjoyable game — but getting the maximum out of your fighting figure is a little difficult. All the same, it's fairly addictive and, if you just

restrict yourself to a well-chosen routine of kicks and punches, you can generally get good enough to fight your way through the levels.

Graphics  
Playability  
Value for Money  
Addictiveness

7



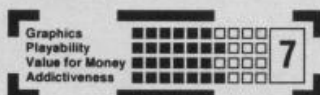
**New Concept/£11.95**

**Rick** Wax down the three-fin thruster, break out the factor five and the Ray-Ban sunnies, surfies... mmm, zinc oxide is so becoming.... This is it, the Big One, New Concept's square deal surf game *Surfchamp*, endorsed, no less, by the Irish Surfing Association — are they the one's who looked for a downhill lake for the water skiing team?

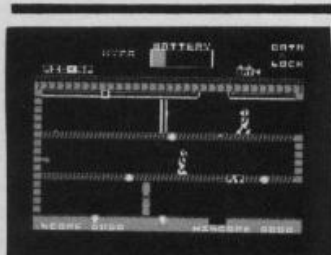
Credit where it's due. This really is a whole new concept in computer games, centred around the new Dublin based company's tactile interface that makes a joystick redundant. Well, in fact, it's a bit of plastic shaped like an ironing board you put on top of the keys. Then instead of pumping keys you simulate the movement of a surfboard — with your fingers, not your pins, you understand.

Titter not. It's not as silly as it sounds. In fact, for your average player it's too much like surfing and not enough of a computer game. A lot of time will be spent just paddling out looking for a wave and then mastering the skills to stand up, ride it, aerial, hang five and hang ten. Multiply this by weather variations, choice of board and gear (five of each) and you'll see there is plenty of game variation. There's also a choice of a ten speed practice mode or actual competition (with real life compo possibilities). And you've got to put your vital statistics in to increase the lottery.

So, nottalotta people might like this, but I loved it.



## SURFCHAMP



## HYPA RAID

**Atlantis/£1.99**

**Rachael** Platforms and ladders provide the basis for *Hypa Raid*, but as it's at a budget price we need not complain. It's a case of completing screens by travelling from floor to floor via teleport lifts, opening doors by walking across panels with your fire button pressed, or pushing buttons on the walls and collecting pieces of an object — all while avoiding the wandering baddies. Later rooms include booby traps, which can only be crossed when they flash blue, and teleports to other rooms.

Those with an eagle eye will have realised that I've only described this in the most abstract terms (thought I'd slipped up, huh?). That's because I quite like the game on this level. What I don't like is the plot that's been tagged on. 'The Russians have built.... a MIG Starfighter.... As a top CIA Agent.... you are the natural choice to.... save the West from Russian domination.' Gee, well, it's quite a thrill to be helping Uncle Ronnie further his Star Wars project and ensure that those Reds have no counter measure.... I don't think.



## SWORDS AND SORCERY

**PSS/£9.95**

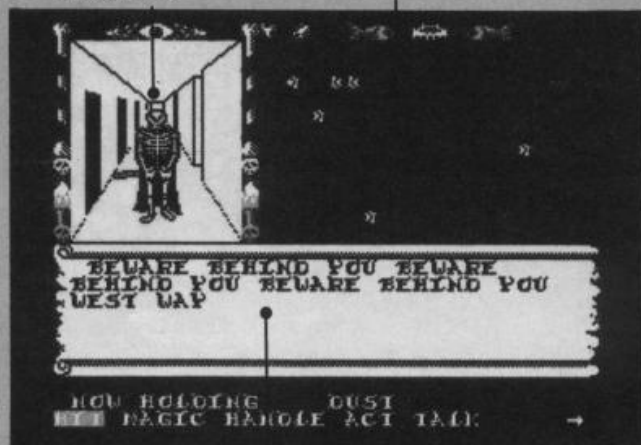
**Rachael** Through the mists of time in the dim and distant past a proclamation was made throughout the land.... Yea, verily, PSS will produce a true computerised role playing game and it shall be called *Swords And Sorcery*, to follow the alliterative vogue. But as time passed many scoffed and said that such a task was beyond the heroes of the age. And then one day the clouds rolled and the heavens thundered and the earth shook and the postman delivered a package. Only two years late S & S had arrived.

The great thing about *Dungeons and Dragons* and the like as far as I'm concerned is that they fire the imagination and draw you into a convincing world created by the games master. A lot of that involvement comes from playing with like minded people (or for those who have never become involved, loonies). Obviously you loose that element with only the hum of the computer to keep you company.

Role playing games are also notorious for the involved mechanics of running a world; constant dice rolling, looking up tables and consulting charts is conducted by the referee. But a good dungeon master will make it all look effortless and create an ongoing narrative with the players. Again the computer fails because the cluttered screen is far too busy. Familiarity will help you accustom yourself with the relevant windows, but even then I'd have preferred less of the bones showing.

The visual display. Here's a skeleton who's mindless, antagonistic, and illustrated in rather blocky graphics.

Here's your map, showing where you're going and where the wandering monsters are.



The best part of the game. Your chance to threaten the nasties with the cutest curses going and they can give as good as they get — only too few to choose from!

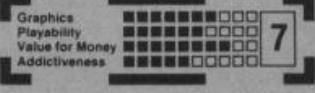
The scrolling action menus which are surprisingly easy to get into and amazingly versatile. But beware — eat without first dropping your sword and though you'll be told it wasn't edible it'll have gone!

All the latest news, from what you're carrying to how that last jab with a sword did. During combat you'll find your eyes crossing as you try to watch this, the command menu and the status panel all at once.

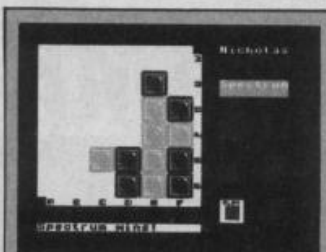
Above all though, the dungeon should be believable, and it's the curse of bad players to create chamber after chamber of monsters. Unhappily the computer reproduces this 'hotel corridor' syndrome perfectly, replacing subtle traps and vivid description with continuous battles.

Not that it's all bad, and I'm sure S & S will become a cult of sorts. There's room for better dungeons as later levels are added to the core MIDAS system. And the true spirit of the game starts to come

through if you get a chance to indulge in a little casual conversation with a monster before combat — the battle cries and insults are great. You also train your warrior at the start in various skills and attributes can be increased. But in the end I found it all too mechanical to do what it set out to, which is indulge the player in role playing.







## THINK

**Ariolasoft/£7.95**

**Alison** So much for good old fashioned thinking, you'll need a PhD in applied mathematics to get one over the computer in this souped up version of Connect 4. Well, at least that's what I thought 'til the Ed thrashed me... so what better incentive to persevere with the game?!

It all sounds pretty mindless — get four counters in a row on a six by six board. But, although it's easy to learn, it's a devil to master.

You can only push your counters in from the bottom or right of the board and, to heighten your frustration, as soon as you make a move, all the counters on that row or column budge along one.

But, just to ease things along, Ariolasoft has provided not only natty little icons with which to select the type of game you wish to play but also a tutorial mode where the computer will only let you select winning moves. Trouble is, on the lower levels, since the computer refuses to think ahead, the game's likely to get itself into a loop as you both place your counter in the only conceivable winning position!

If you're into zapping and killing, give this one a miss — strictly one for the strategists.



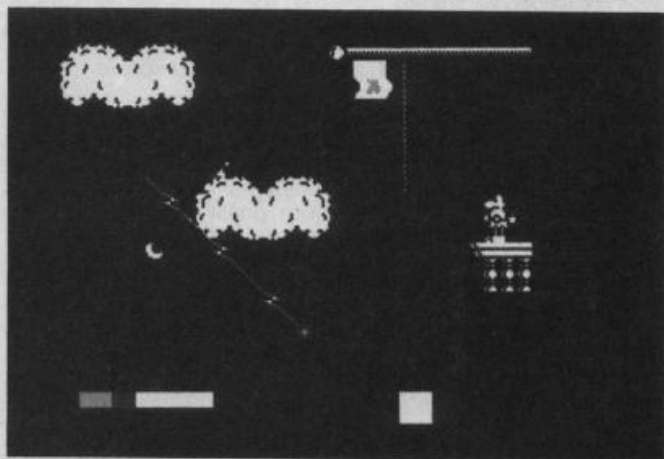
**Mikro-Gen/£9.95**

**Rick** Mikro-Gen's *Sir Fred* has nothing to do with running an airline but a lighthearted adventure set in medieval times. It should provide a surfeit of laughs for even the most surly of Specy users.

Your quest, as Sir Fred, is to rescue the damsel in distress. Although you'll get to see her you won't know in which of the seven rooms she's held — until you've completed the whole adventure. What's more, each time you start a quest, the computer will select any one of fifty-eight game patterns. This gives you plenty of game play option — and plenty of objects to seek and use in your mission. Some can be used once, some over and over again — do you really want to?

A sertain sirprise is Sir Fred's amazing gymnastic abilities — despite — all his armour! He runs, jumps, swings on ropes and swims realistically. His in-built inertia means he gets puffed, falls over and drowns pretty realistically as well! He's a crack swordsman and brill

# SIR FRED



bow man. Makes yer sick, don't it — no wonder he always gets the girl...

There's not a lot you won't have seen before, but it won't always have been so well packaged. The graphics aren't cosmic (nor medieval, mind)

— like the game it's good and solid. You could well while away a few knights with *Sir Fred*.



## WILLOW PATTERN

**Firebird/£3.95**

**Rachael** Perhaps somebody should tell Firebird that it isn't all Fu Manchu and Chow Mein east of Dover. Their latest game includes Chinese Mandarins and Japanese Samurai, all out to stop our hero. He must be a mighty important guy to have the whole weight of the orient thrown against him as he



indulges in that cliched quest to rescue a princess.

Traditional Japanese houses have paper walls. The same goes for this game because behind the admittedly pretty graphics lies no more than yet another maze game, and one that's tissue thin at that. Its major gimmick is a stone jumping routine that's so easy that the few times you do fail it will be because you're nodding off.

Difficulty comes in the hape of the warriors who block your path and must be disposed of by knives found lying around. The fact that there are barely enough of these makes life harder. But don't throw one then dodge off screen to avoid the Samurai's sword because you'll have wasted a weapon — they don't carry through. With scoring in the three figure range it won't even please the high number freaks.

Why Firebird are putting this out in the Super Silver Range I have no ideas, but Confucius, he say, don't buy this road of oriental Coberers.

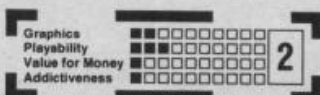


**Micro-Computer/£7.95**

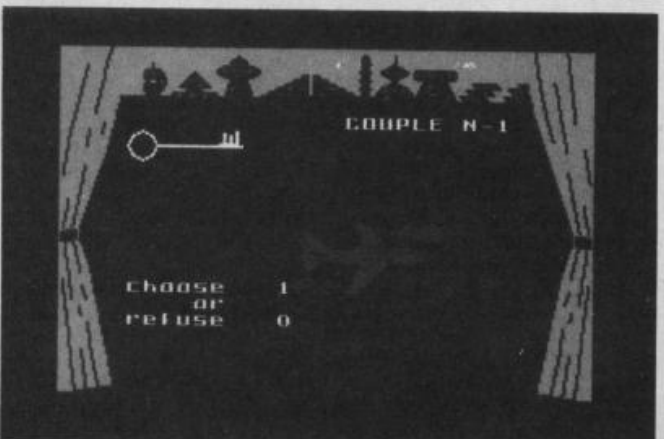
**Rick** Remember how *Hampstead* starts — you're stuck in a grotty bedsit, watching 3-2-1 — it's the height of the social deprivation. Well, I've no desire to attain *Hampstead*, but Micro-Computer's cheap adaption of a cheap TV game just adds insult to injury.

It begins with a moronic True or False quiz which simply repeats the same questions with each round of the game. It moves on (though it's flattering to suggest this game has any sense of progress) with the wit and vision of a dead anchovy to a platform game of such unremitting mediocrity that I cannot even crack jokes of Ted Roger's standard to alleviate the gloom. The jolly chap chats away on the tape between sections explaining the rules. I'd never have thought I'd be glad to hear his voice!

Despite the massively inappropriate blurb the point is not to encourage family harmony via the home computer "avoiding the isolation that is so often caused by the machines that we are presented with in the modern world," but greed. By sending off your winning scores you can qualify for prizes which include a seven day holiday in Spain. And that's where all the money's gone folks — not on the program. Assign this one to Dusty Bin. It's so bad that if I was offered a choice between this and a season ticket at Highbury I'd seriously waver before buying it. The game, that is.



# 3-2-1





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## ROBIN O' THE WOOD

Martech/£7.95

**Rachael** When Castle Rathbone's very own Charles Atlas, the Ed, said that in just seven days he could make a strong woman out of me I guessed he'd bought me a chest expander! Instead it turned out to be Martech's muscle bound micro-game. Now I must confess that ever since a certain Daley Thompson was responsible for the demise of my second joystick in a weekend I've had an aversion to Sinclair sports, but they say that a healthy body makes a healthy mind, so here goes...

Unlike the *Track and Field* mob, Geoff Capes concerns himself with displays of awesome strength. He pulls trucks, chops logs, rolls cars, loads barrels and rings the fairground bell... then he relaxes with a bit of Sumo wrestling! Or rather, you do and, sigh of relief, it's not all joystick bashing.

Obviously before you can even punch your way out of a paper bag you'll need to build some muscle, which you can do either energetically, with ten seconds of wrist action or the lazy way, by pressing fire and accepting what God gives you. You then allocate the strength between eight muscle areas, from ankles to shoulders.

Achieving each of the stunts calls for different skills. The ones involving vehicles consist of chasing the illuminating muscle icon with a pointer and pressing fire as an animated Mr Capes (be very polite here — he's bigger than me) flexes centre screen. Barrel loading sees the addition of joystick pumping and bell ringing could kill yet another Quickshot, but chopping and wrestling call more for timing. In each case you can apply more effort to the activity to speed it up though this uses muscles more quickly. As any remainder is added to muscle replenished it's worth aiming for efficiency.

It's not perfect, but it should keep a lot of people happy with its variety and difficulty. And here's a playing tip — if you really want to build muscles like Geoff's... do some press ups while the game's loading!



Graphics  
Playability  
Value for Money  
Addictiveness

□	□	□	□	□
□	□	□	□	□
□	□	□	□	□
□	□	□	□	□

7

Odin/£9.95

**Luke** This is a funny sort of game — and you don't realise just how addictive it can be until you've been playing it for at least two hours!

Okay, it must be admitted... there are certain cynical gamers who might point a finger at the format of the game and mention a couple of Ultimate titles, but *Robin O' The Wood* is certainly in a category of its own. For instance, the first time I played the game, it was over 40 minutes before I realised I hadn't yet been killed and tossed back to the beginning. Not that the game's easy...

You get to play the part of Robin, hurtling around the castles, woods and open land searching for keys, flowers, and all sorts of other medieval knick-knacks. The Normans trudge around the scenery relentlessly firing off crossbows at you, but they're fairly easy to dodge and they don't do that much harm anyway. The real menaces are the red rats — they kill... and quickly too! If you catch sight of one of them rushing towards you, there's no point in trying to kill it with your spear — it's just a waste of time.

Your life energy is measured by a white strip beneath the playing area. As you suffer crossbow bolts and encounters with rats, it gradually turns mauve and then blue... which means you're dead. Of course, find the white-bearded sage and you not only gain a new life but all your ills are cured. Watch out though for the green goddess that appears



out of nowhere, steals some of your treasure and naffs off.

Graphics are good and movement around the screen is both fast and smooth. And, although the screens are all fairly similar — which is how the programmer has managed to cram so many into the game — there are familiar landmarks every now and then

to get your bearings from.

It doesn't really bear much similarity to the Robin Hood stories we all know and love — but that doesn't matter a bit. A great game — buy it!

Graphics  
Playability  
Value for Money  
Addictiveness

□	□	□	□	□	□	□	□	□	□
□	□	□	□	□	□	□	□	□	□
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9

## BRAINSTORM

Bubble Bus/£1.99

**Rachael** Back in the land of arcade adventure, you control Robin Banks, an interplanetary alien zapper who's been sucked down the plughole into Professor Brainstorm's castle. You can escape by walking, or using your jetpack, through a 650 screen maze where you collect keys and special weapons to do away with the eight guardians.

All fairly standard stuff, though nicely done, as you'd expect from the ever improving Bubble Bus. There's a nice touch too in the use of momentum when steering Robin, and loss of life results in him flying around like a burst balloon.

So far, so good, but either

I'm losing my touch or the game is just too difficult. The problem lies in the Clone's 28 varieties — that's almost half as many as Heinz! — whose ability to fill the airspace is worse than jets at Heathrow. Though they're easy to kill there're so many, and they replenish so often that it's

nearly impossible to avoid them, even while shooting. What I saw I liked but its sheer difficulty eventually made me lose interest.

Graphics  
Playability  
Value for Money  
Addictiveness

□	□	□	□	□	□	□	□	□	□
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6





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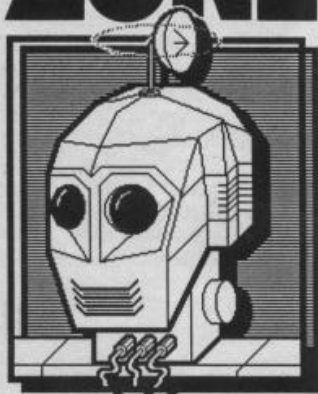
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YS 2/86



# HACK FREE ZONE



**He's back — Hex Loader — that hex fiend hextraordinaire, with more hexcellent hints'n'tips for fast hack free action.**

Click, bzzzzzt. Ow! I must get that chip fixed. It's givin' me gyp, I can tell you. Anyway, how the hell are ya? Awright! Good. Now, to business. This time I've been getting a lot of comeback (Keep them letters comin', chummies!) from my pleas for mail from you carbon based gamers. I'm pleased to say the response has been staggering. Well, Pete staggered in with the sack, anyroad.

Pushing right off, we have a note here from one **Andrew Menzies of Bradford**. "I thought I'd send in a few tips..." About time too! Sorry... "Here are some codes to tap in to **Frank Bruno's Boxing**: (Use the name AND)

Boxer 2	Code	MM710F49B (FUNG CHOP!)
Boxer 3	Code	B7X100L05
Boxer 4	Code	FK51N0A07
Boxer 5	Code	CE91N9817
Boxer 6	Code	IHC1N96A8
Boxer 7	Code	ML61ON4B6
Boxer 8	Code	BFA1NN2L5

To see the final effect, enter the code **CGAINA5CA**" Thanx a squillion Andy. Now I can really take it on the jaw. (BFFF! Argh!) If I had one, that is...

I left you all in suspenders last month by giving you half **Keith Gronneberg's** epic solution to Fairlight.

Hah! Powerrrrrr! Ha-ha-ha. Oops. Erm. With no further ado here is the final solution.

"Take the Book of Light, two small stoppered bottles, and the cross hidden under the throne, to the room with the monk standing at the top of the stairs. Drop the cross in front of him and push it at him — he'll disappear. Do the same with the next two monks this time with the stoppered bottles. At the top of the stairs pile up a barrel and a chair, and using the Book of Light, jump into the room above. Here you'll find the key to the castle gate. If you drop the Book, the figure here changes into a monk, but this seems to be a good thing, as I've only been able to get back out with him in this state." That's it, well, the bare bones of an explanation! This'll illustrate the difference between knowing how to complete a game, and actually doing it. (Teacherly tone or what!) But the averagely brilliant gamer should complete the game using these clues. Thanks Keith, pure gold.

Hello, what's this? A missive from my old mate **Russell Olieff of Armthorpe**. What's that he says? He's

found loads of mistakes in Hyper Sports? Well, tell us about it, **Russie!** "For a start." (This boy means business!) "If you're going fast in the swimming your man freezes. And not only that, I had a strange experience in the shooting. I scored 10,100 and the computer gave me an X and I failed to qualify. The score of 10,100 also didn't become the first in the world. I was playing my best game ever with 500,000 points! The weight lifting said 240kg but I thought it should've been 260kg. So I lifted 240kg twice" S-T-R-A-I-N... Snap! "Twice, and still failed to qualify. I thought after the weight lifting the swimming would go back to 45 seconds, but it doesn't! Does anybody know what's going on?"

Nope! Well, actually, there are two possibilities. One, your copy of Hyper Sports is corrupted, or two, there are some bugs in it. My advice to you, my little fruit juice, is to two-step your way back to the dealer you bought it from and get him to swop it for you. Having eliminated that possibility, you're then free to have a go at the manufacturer if it continues to work against you! Okay, me old chutney?

Right, face front! If you look across the page, you will notice we have more screen shots from my very own

monitor. Cast a beady eye over the hints'n'tips therein and ask yerself a question — could I do this? Well, yes you could. If you have tips on how you became an arcade hero, a hi-score, and a mug-shot of yourself, you're in! Your score'd better be good, though. I'll match it, point for point and you'll see the results — my score against yours. Hex's Heroes. Be there or be, like me, square. You can also write to me about your current fave games.

Fave games of the month are the totally marvellous, Of The Mask and the program which could out-Elite Elite, Tau Ceti. I can't leave these babes alone, and neither will you! Go get 'em, and let me know what you think.

That's it. My mailbox is ready, my printer is powered up and ready to print out your letters (Brrrr! Roger, Hex! — Peter the Printer) and my optical pickups are polished and waiting for your words. See you there. I'm waiting... Click. Bzzzzzzzzzzzz.

**Buzz, wirrr. Can Hex Loader be turned on by you? He's just waiting for your hints 'n' tips to get all charged up. But remember when you send them to include a sketch of the screen, clearly labelled with your suggestions. Hex holes out at Hack Free Zone, Your Sinclair, 14 Rathbone Place, London W1P 1DE.**

## HEX'S HEROES

Whheeeeeee! Phizzz, Phutt... Phew, it's lucky that Pete plugged me back in, or else I wouldn't have had time to tell you about this month's Hex's heroes. Mmmmm...

Well, seasonal greeting an' all that are obviously floating around the mind of **Snowy White** from Westbury-On-Trym who claims to have scored the big zilcho in Durell's Scuba Dive, 'cos he melted! Seriously though (what does that mean?), Snowy managed a respectable score of 17-0 in Match Day, which ain't too bad for a snowman.

Across the water in the Needer-lance (that's Holland, huh?), **Jeroen Molenach** (hope I spelt your name right, Jeroen!), has knocked up a wonder-fuel score of 59550 on Pole Position. But I think it's time for a gear change!

Hurdie-hurdie-hur-di-hoe. Ahhh... We must be in Sweden. See de good score on Exploding Fist, 29600. Must be the wonder-haircut himself, **Per Holm**. Maybe his hair took that position after he bumped into a mad reindeer.

But that's all I can tell you, because I think Pete wants to use my power point to plug in the coffee machine. Two sugars please Pe...



**Snowy White**  
Match Day/17-0



**Per Holm**  
Exploding  
Fist/29600



**Jeroen Molenach**  
Pole  
Position/59550



## NODES OF YESOD

These tips might help you with *Nodes Of Yesod* — courtesy of Hex!

When the red astronaut appears, press the gravity stick key.

If a gravity stick doesn't appear, though, you're in tuh-rouble! Run for it!

When you play the game, collect every alchiem, until you've filled the alchiem box. You probably won't have collected all the alchiems just by going through the maze in one go. Once you've been through the maze, go through it once again. This'll give you a higher percentage, and a better chance of winning.



● When you have the eight alchiems, go straight to the equivalent marker alchiem. You'll fall down a hole and come face to face with a monolith. Gasp! Walk into this, and you'll have won! Yee-ha!!!

Try and keep the marker alchiems to the right of the box. If your useless alchiems are on the left, the red astronauts will take one of them, leaving your stash of markers untouched!

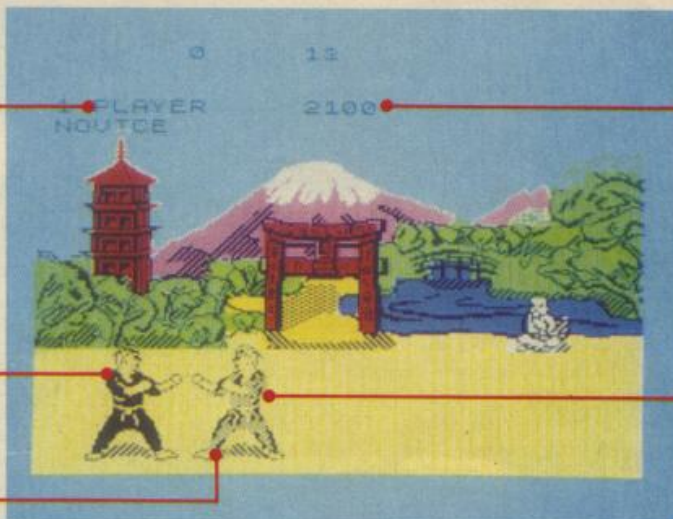
## WAY OF THE EXPLODING FIST

Way of the Exploding Fist punched in by Graham Cairns

How to cheat the hop! First switch the game from One to a Two player game. Then, as nobody's operating your opponent beat the living ping-pongs out of him. Unethical, yes. But enormously satisfying!

This is you. Now, kneel down and lunge out, punching him when he's in range. This works with almost every opponent of every Dan.

Another good move, if you're a little bit tired of being beaten to a pulp, is the low sweep of the leg. This topples your opponent, no matter what colour belt he is.



Hi-score equals 10th Dan for the 36th time.

This is Dan. He's not invincible — first take three steps toward him.

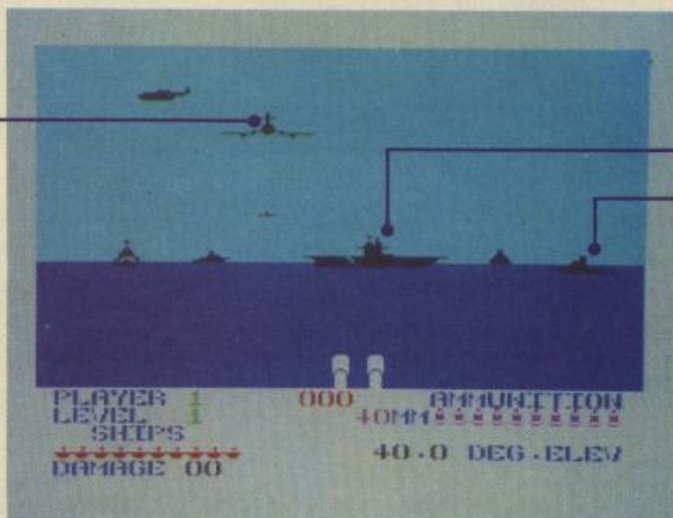
## BEACH HEAD

Kevin Matthew of Middlesbrough, Cleveland, gets tanked up for *Beach Head*

When shooting the planes, don't hold the trigger down or use an auto fire. Let your ammunition build up when the sky is relatively clear.

● Should you decide to fight on land don't shoot the tanks and move straight away. The other tank will follow and you'll miss. After firing try and hold your course.

● If you're on your last shot, but have three or four tanks left, don't hit the fortress. Run your tanks through the system toward it. Try to avoid hitting it until you're down to your last tank.



In the ship to ship battle, the carrier is usually at 48 degrees, the little ship on the extreme right is at 24-28 degrees and the following one at 69-73 degrees. On the extreme left you'll find another ship at 59-62 degrees, and finally one at 54-58 degrees. This is the best order to hit them in 'cos this is the order they fire.



# FINE YOUNG CANNIBALS

Prepare for a taste of Paradise — only trouble is the Weeks family is on the menu. But rather than make a right Wally of yourself, read Rachael Smith's review of *Three Weeks in Paradise*, the new feast from Mikro-Gen. Dinner is served!

YOUR SINCLAIR  
MEGAGAME

Every year thousands of wallies go on their hollies, but there's only one Wally and neither he nor the missis nor even Herbert, the nipper, come within that notorious 18-30 age range. So Wally, being wally, decided on a pleasure cruise... on the HMS Pedalo!

Eventually the gormless mariner was washed up on a desert island, and when the natives said come to dinner he was thrilled. But he didn't realise that the first course was to be Boiled Baby followed by Sautéed Spouse. And as Wilma's always been a game old bird they were keeping her hanging around first. Her parting cry was to call her hubbie a stupid pudding, but that was the last

Well, well, well - I'm wishing for an easy passage so I'd better jump down below.

Choosing left, right or going into this building is such a headache I've got a pain in my temple.

Here I am, out on a limb again. Eggsactly how I got here I'm not saying.

Eek - an 'orrible arachnid and it's stopping me reaching that skeleton key.

I hope that's a bottle of bubbly because these fatal floaters are driving me up the wall.

Brrr - it's cold as the North Pole - oh. To feel a hole lot better suck it and see.

I may be thick as two short planks but I know I'll find a use for deux sticks if I scout around.

Now what does this mean? I'll need to be a sharp cookie to solve this clue. Maybe I should axe.

Old faithful flushed if I reached later.

Out of my way you say or I'll knock the stuffing out.

stop to rest it looks like another

Oh no - paw Herbert's stock in the pot and I'd be lion if I said it wasn't a thorny problem.

I knew the night had a thousand eyes but this is blinking odd.

I started here but I'd be bats not to look for Wilma. If I spied 'er perhaps we could go bowling.

Service moves at a snail's pace here, and it's deadly. Must be a restaurant.

Pity this chopper is blunt. I'd try the bees but hive an idea they're unfriendly buzzers.

I'll have my fill of the empty billy can, because if that geezer billy can, so can Wally.



thing he wanted to be — and he was already hot-footing it into the jungle.

And that's where this episode in the Wally saga begins. You're helping him rescue his family and stopping him getting... sorry, becoming somebody's just desserts. You just have the man (man?) himself to control this time, but other features make the game an advance.

Instead of just swopping objects you can now choose to pick up and drop things as well as having to use them in the right places. That means Rambo-wally's rescue mission calls for even more ingenuity. There's also a nice selection of puzzles, from the fairly obvious to the maddeningly difficult, but

they all depend on acute lateral thinking and horrible puns.

In return there's less of the arcade element this time with fewer things to dodge. But the thing I liked best about *Three Weeks* was its humour. There's a speech bubble *Ouch* as he rubs his behind. And look out too for the scrolling message line at the bottom of the screen that conveys some screamingly cryptic clues, as well as the family's cries of help.

And finally fed up with reviewers' constant grumbles about attribute problems, Mikro-Gen has included the option of switching off Wally's colouring.

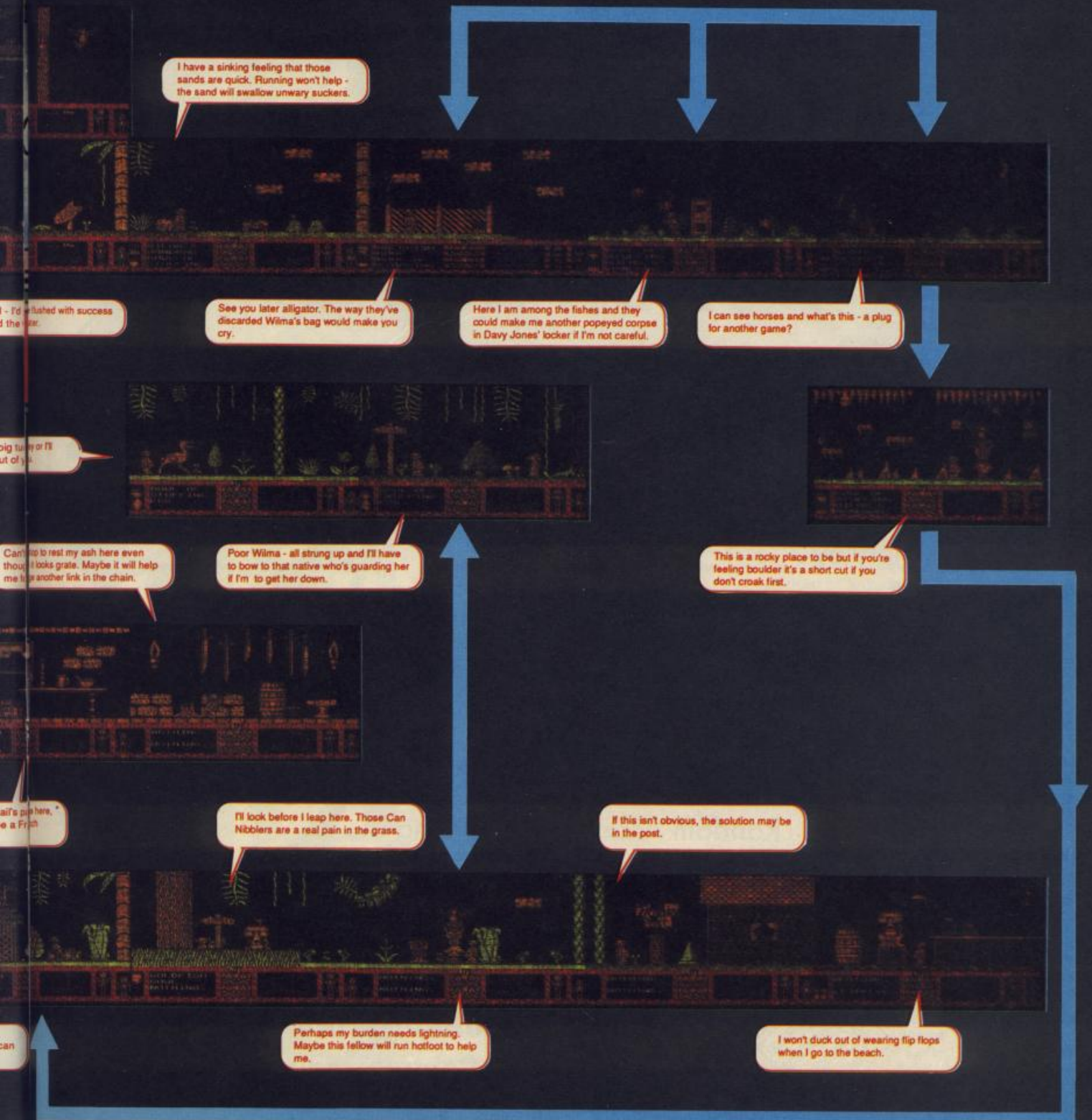
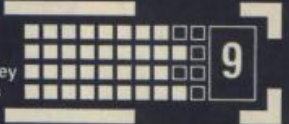
A word too for the music — it's great, and it adds a lot to the humour. A great

game that just goes to show that even if he's too old for Club 18-30, Wally's not past it yet.

#### FAX BOX

Game .....	Three Weeks in Paradise
Publisher .....	Mikro-Gen
Price .....	£9.95
Joystick .....	Sinclair, Kempston
Keys .....	Alternate Top Row
	Left/Right, Bottom Row
	Jump, Middle Row
	Go Into Screen/Swim/Shoot/Climb/
	Use Object, 1/2 Pick Up/Drop Object 1/2

Graphics  
Playability  
Value for Money  
Addictiveness





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# YS BUBBLE COMPO



**CHOP**  
**FUEY!**

**D'you fancy yourself as a real ah so? Well here's your chance to win a Kung Fu suit or one of 30 copies of Durell's games — then you'll be Kung Fu fighting!**

Ah so! What's this? Another hiiii yaaaagh, chop suey, Confucius he say, velly velly amazing competition for *Your Sinclair* readers to enter. Yes, in conjunction with Durell Software we're offering three genuine Kung Fu suits for the lucky winners. And if you're not into Kung Fu you can always use them as pyjamas!

Stop ninjing you at the back, even if you're not a winner you've got the chance to win a Durell T-shirt and a copy of one of its games — that's right, any one of its games. Happy now?

The master of Kung Fu, Bruce Lee has been known to utter words other than Ho Lee Fook! What do you think he's saying in the picture above? Okay grasshoppers, jump to it. Fill in the speech bubble and send the whole caboodle to Kung Fu Fighting Compo, *Your Sinclair*, 14 Rathbone Place, London W1P 1DE.

**Cutting remark:** If you don't want to spoil your issue don't karate chop this page use a photocopy instead.

## RULES OF THE MASTER

Employees of Sportscene Specialist Press and Durell are not allowed to enter this competition and neither is Lee Van Cleef, The Master.

Entries must reach us by March 31st 1986 — Year Of The Gerbil (no not Kevin the gerbil).

The Editor's decision is final and no amount of arguing will change his mind. (*Unless of course you're a Black Belt! Ed*)

## SPECIAL FRIED COMPO

Name .....

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Address .....

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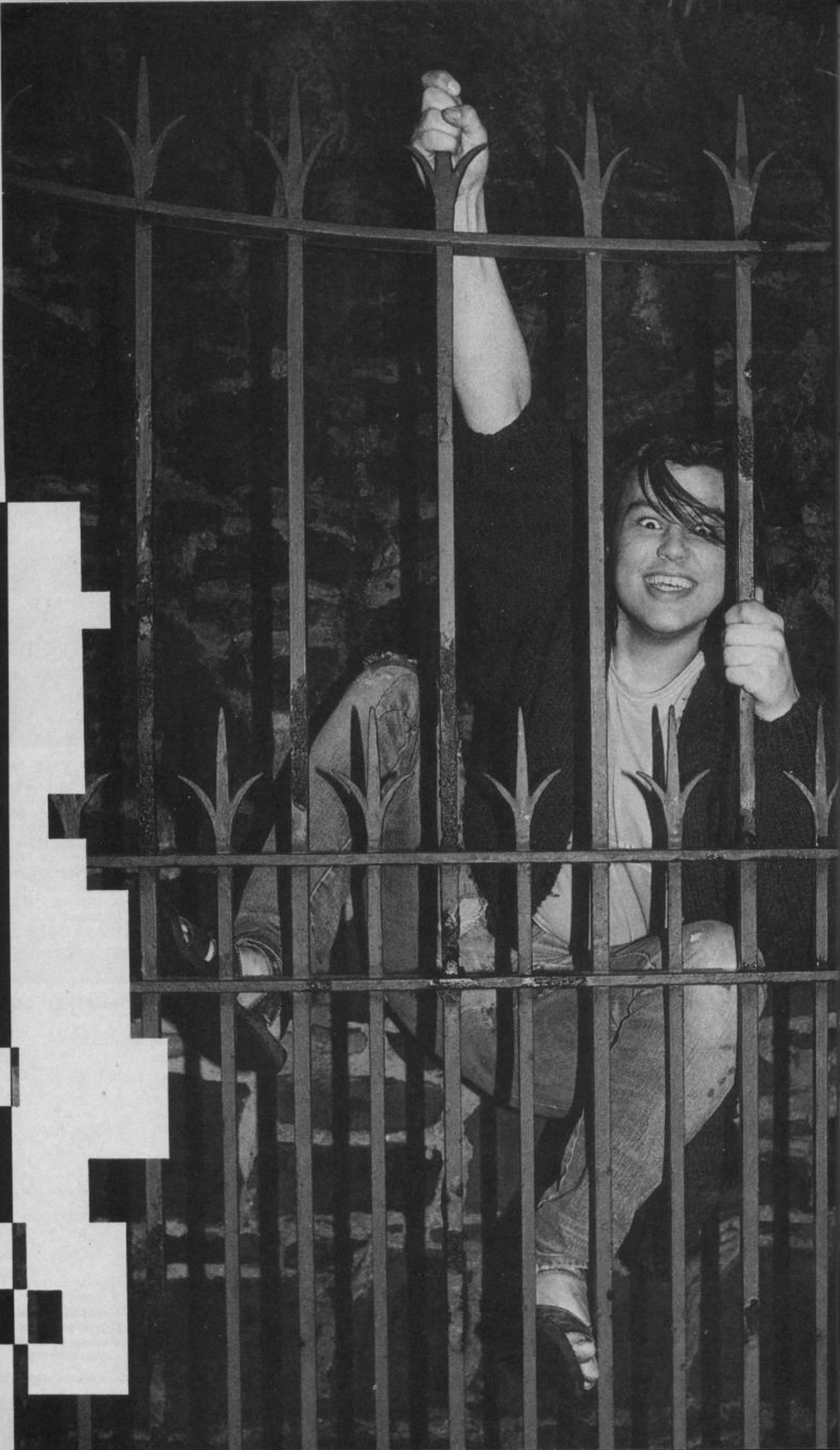
.....Postcode .....

If I'm one of the lucky runners-up I'd like the following game:

- ☐ Turbo Esprit
- ☐ Saboteur
- ☐ Critical Mass
- ☐ Combat Lynx
- ☐ Harrier Attack & Scuba Dive (Two games)

Please tick the appropriate box







# Show us your Willy!

**"I s'pose there's not much sex in Jet Set Willy. Maria's a bit on the stocky side and as for Esmerelda, she zaps you when you touch her."**

**M**atthew Smith isn't the tidiest of programmers. Take the time he went to a posh restaurant in the Sears Building in New York. No corduroys, no cut-offs, no sweat-shirts, no sandals — that was the house rules. Bit of a shame really 'cos that just about describes Matthew's wardrobe! Yep, he's a right scruffbag on the outside, but on the inside — well, that's another matter. Beneath the crumpled clothes and the hippy hair is a razor sharp wit and a phenomenal programming talent. Well, what d'you expect from the man who created every (well, nearly every) Speccy owner's favourite comic character — that's right, the manic jetsetter himself, Miner Willy.

**What are you working on at the moment?**

A Spectrum. (*Big grin!*)

**Let's rephrase that. Is it true that you're working on Willy Meets The Taxman?**

No comment. (*Even bigger grin!*) Oh, okay yes. I'm designing it and doing the graphics and there's a team on the programming. This time Willy's going to be taller than before — he's grown up since JSW.

**Will it be another platforms and ladders job like Manic Miner and JSW?**

There are things that could be described as platforms but they'll be ridden. And the baddies, about fifty of em, won't be the stupid bouncing up and down type. They'll be intelligent — well, all except for the stupid ones that is!

**Is this the end of Willy as we know him?**

Yep. He won't even be brought back by public demand. The platform game's finished — JSW was the best ever. There's no new programming ideas in this game — well, it's not really anything to do with me. They won't even program the game as I've designed it — must be 'cos I can't design properly! The only way to get results is to program myself.

**So, what are you working on at the moment?**

No comment. (*There's that grin again!*) Well, I *am* working on a project. It's not just a game — more a way of life...

state of the art... fast loader... interactive... it's a mental challenge controlled by the computer and... pheweee... Everything but the game's called *Limbo* — in fact, everything's in *Limbo*. And when you stop playing, you go into *Limbo* too! It's also an expandable game so don't think you'll get away with just buying the one tape. And it'll take advantage of different Spectrum memory sizes. It'll work on a normal Spectrum but it'll use the extra memory of a 128K if you've got one.

**Have you got one?**

Yeah... er, no! Sorry Sinclair! I saw one on my holidays in Italy... er, Spain.

**What's your favourite new game?**

The only decent game recently is *Fairlight*.

**Do you mind people taking the mickey out of JSW?**

No, I take the piss myself. That's what he's there for — he's a bit like Charlie Chaplin.

**Isn't JSW a bit like a waking nightmare?**

A woken-up too early nightmare! Most of the game was planned under the influence of alcohol and written under the influence of other noxious substances.

**D'you think there's anything deeply psychologically disturbing about your games. All those Willies and toilets?**

No. But you'd better ask my analyst. I s'pose there's not much sex in JSW. Maria's a bit on the stocky side and as for Esmerelda, she just zaps you when you go to touch her. Originally you were going to have to take her to bed — and then she'd kill you. But I dropped that for deep psychological reasons. Hmmm.

**D'you still live at home?**

(*An eavesdropper: I thought everyone lived at home.*) Wherever I lay my hat, that's my home!

**Have you got any fluff in your navel?**

No... oh, hang on, yes there is some.

**What colour is it?**

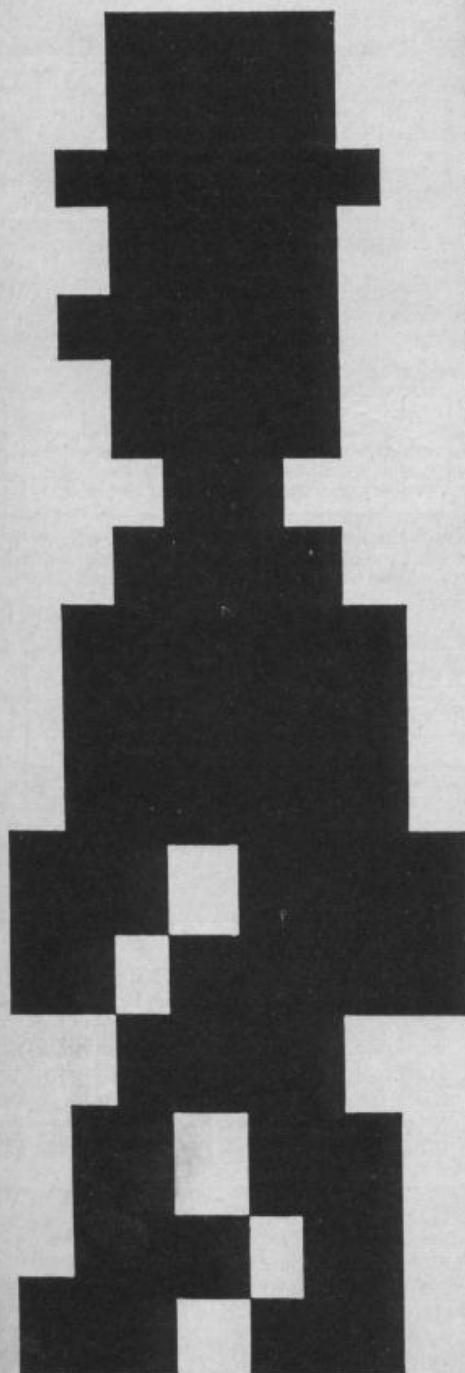
Purple.

**How old are you now?**

Nineteen. No longer the boy wonder, eh? Not over the hill yet though!

**Are you a trainspotter?**

Not since I lost my paintbrush.





# ART ATTACK

**All artists should be hung — and Peter Shaw is no exception! His pictures may not make it to the Tate just yet but with the help of Rainbird's Art Studio he reckons he's on his way.**

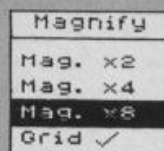
Now I know what you're going to say 'cos I said it myself. What? Another art package? Well, it's gonna have to come up with something a bit special if it's going to drag me away from *Melbourne Draw/PaintPlus/The Artist* (\*delete as applicable). Well, prepare for a surprise.

*Art Studio*, the new package written by OCP but marketed under BT's Rainbird label, has more than a few features to recommend it. The first thing you'll notice is the 'pull-down menu system' — and it's not just a gimmick but the basis of all that makes this program so user-friendly. Yes, I know that word's overworked but you'll find you hardly need to refer to the manual.

So, how does it work? Well, it prints a menu bar across the top of the screen from which you can choose a comprehensive second menu that gives you access to the feature you want. Just move the cursor to your chosen option and press fire. If a feature has even more on offer, then you'll be presented with a third and sometimes a fourth menu on-screen. If you choose to use a joystick or even a mouse, you never need touch the keyboard at all!

But all this is still not the be-all and end-all of an excellent art package. To challenge the current competition a new package must offer a wider range of features than the rest — and be able to perform them quickly. *Art Studio* comes out shining on both counts. In fact, it works on the Spectrum with all the charm of a program like *MacPaint* on the Macintosh. Not altogether surprising as that program was obviously the main source of inspiration for *Art Studio* — the same pull-down menus, many of the same features and all of the flexibility.

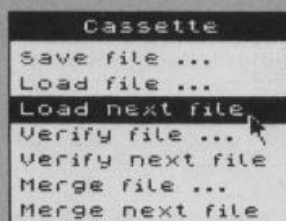
Plus both programs can be operated with a mouse. More than likely you'll have come across the mouse before — it's similar to an upturned trackerball that you roll around the table top to move the on-screen cursor. The combination of *Art Studio* and a mouse will make it nigh on untouchable — and even without, the competition's gonna have to go a long way to beat such an excellent package.



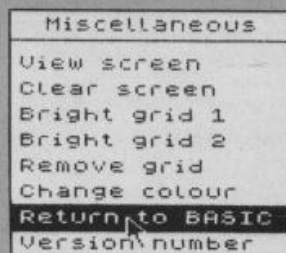
The magnify feature is the best yet — it beats the Macintosh! Just choose the level of magnification you want and you'll be given a magnifying glass icon that you can position over the area you want to see. Natty, eh?

In x4 magnification you can change specific pixels without losing sight of the overall piccy. To scan across the screen, use the arrows on the x and y axes.

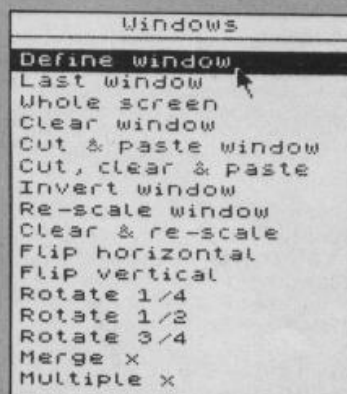
On the highest level of magnification (x8), you're presented with an on-screen grid option — it's well worth sticking with it if you don't want to get lost when you're getting down to detail.



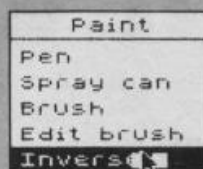
The file option will automatically give itself a header corresponding to the system you've chosen — I was using cassette but microdrive and disk options are also available. The most interesting item on the menu is for merging your screen creations with each other.



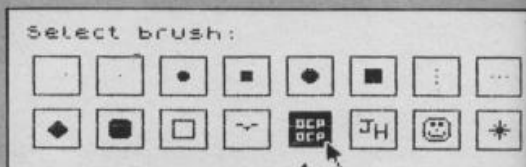
Here's a ragbag of goodies that don't sit happily anywhere else. You can see the whole screen using View Screen, for instance, and the Bright Grids will superimpose a grid so you can set the colour just right. You'll find the rest of the menu options are fairly self-explanatory.



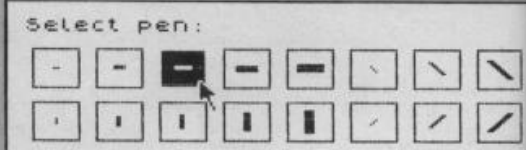
Look at the window that makes this package different. Yes, windows allow you to cut and paste your piccy until you're completely happy with it. *Art Studio* also allows you to rotate, flip and invert your windows. Well, flip me!



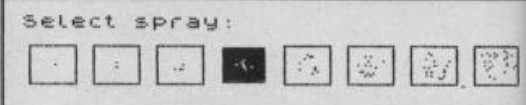
How's this for paint power? In Edit Brush mode you can define any shape you like, yes anything, and then use that to paint the drawing area. The Pen option even allows you to draw with a pen of differing thicknesses.



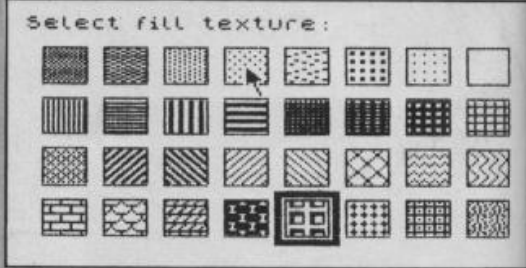
The brush is perhaps the most flexible way of covering the screen. And apart from the sixteen you see here, you can redefine any of them to your liking.



Here's the menu that greets you when you're in pen mode. The sixteen preset nibs produce some very interesting patterns and they're just great for writing italics.



Now, the spray can selection may seem limited, what with only eight choices compared to the other menus, but remember they act as a random spray. So, each of these choices only acts as a guide to how large an area the spray will cover.

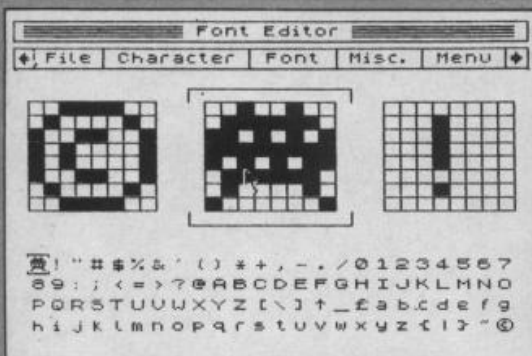


This is the choice of present designs that you're presented with in Textured Fill mode. There are thirty-six of them in all but remember you can always define your own.

## FAX BOX

Name..... Art Studio  
Publisher..... Rainbird  
Price..... £14.95





The Font Editor is a package in its own right. It's extremely easy to use — well, I've yet to find one to match it.

Attributes
Set ink
Set paper
Set border
Bright
Flash
Over x
Inverse x
Transparent
Standard

Art Studio's attribute handling's very good though you may find it a touch confusing at first. Say you want to paint an area in red — you'll need to choose Set Ink from this menu, then the red palette from the menu behind this, next into the brush menu where you can choose an empty brush to paint with. Not strictly Mac structure but it knocks spots off other Spectrum graphics packages.

Text
Left to right
Downwards
Normal height
Double height
Treble height
Normal width
Double width
Treble width
Sideways
Bold
Caps. lock x
Snap hrz.
Snap vrt.
Font editor

The Text option isn't quite as clear cut as you'd think. You don't have to stick to boring ol' left to right script — how about trying the Chinese way of up'n'down. You can also have a whirl on anything up to treble height and width and even redefine the character set. The definition isn't too hot once you're into really big characters — but there I go wanting miracles again!

Print
1 x 1 dump
2 x 2 dump
3 x 3 dump
4 x 4 dump
5 x 5 dump
Grey-scale dump
Single density
Double density ✓
Sideways x
Left justify
Centre ✓
Right justify
Line feed ✓
ZX/Alphacom

Just take a look at the mega-print features on offer with Art Studio — grey-scale dumps and sizes never seen before on the Speccy. The printer option wasn't implemented on the version we saw so I can't judge how good it is — sounds promising though...

Fill
Solid fill
Textured fill
Wash texture
Edit texture

The Fill option is very powerful. The textured fill lets you choose from a wide range of pre-set choices but if you prefer you can always define your own with the Edit Texture feature. Now Wash Texture is very clever. With it you can texture the last thing you drew — text, single lines or circles it doesn't matter what.

Shapes
Points
Lines
Cont. line
Rectangles
Triangles
Circles
Rays
Elastic ✓
Snap hrz. x
Snap vrt. x

You'll find you keep coming back to the Shapes option. It hands you the power to draw lines, circles, triangles and rectangles. The Elastic option draws lines using the rubber band method to allow easy position. Snap horizontal and vertical puts your lines within the limits of the nearest character cell. That way it gets round any attribute problems when you come to colouring.

To achieve that 'jumping-out-of-the-picture-at-you' feel, I drew this box with solid-fill lines and the basic textured fill.

I drew this hatch shading by roping off the area with lines and then texture filling it. I then tidied up the edges with the x4 magnification.

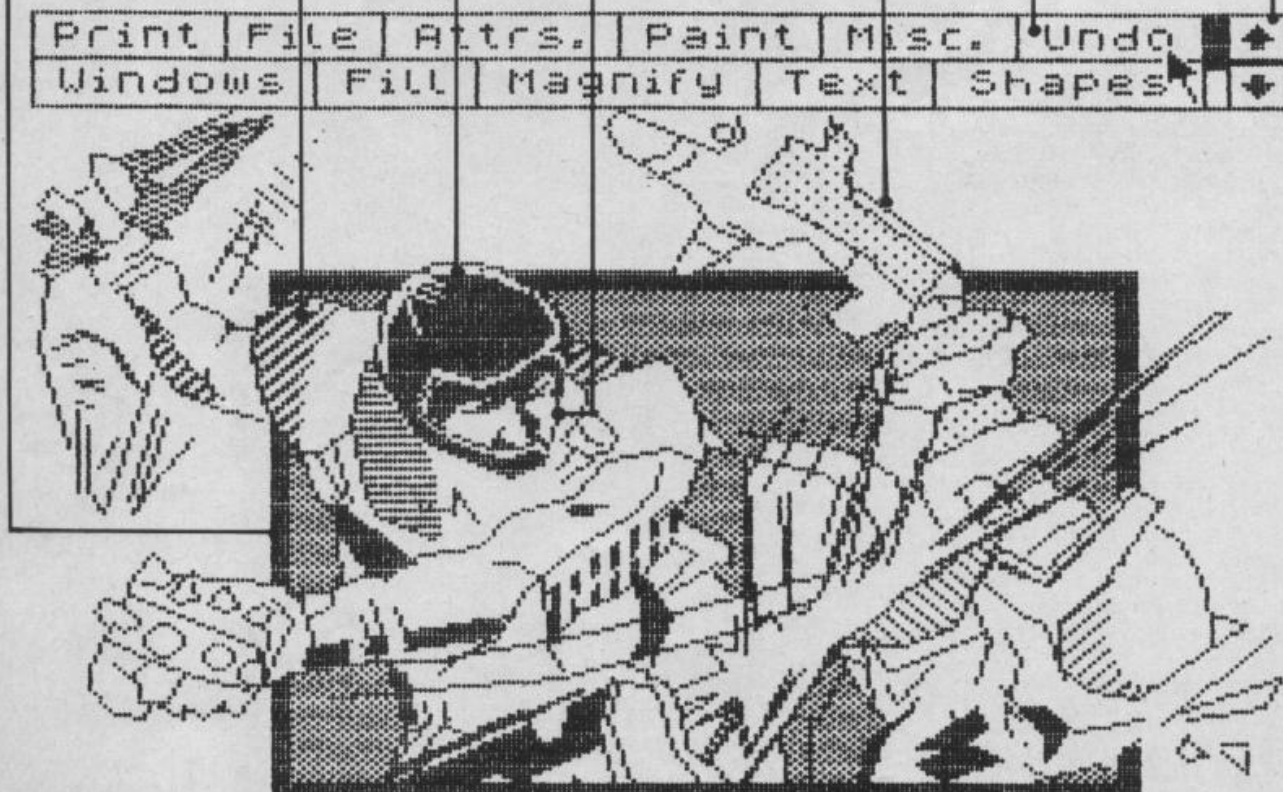
I used the brush to paint in the helmet and then used the inverse lines to create the shine on the top. Not bad, eh?

This just cried out for x8 magnification — it's one of the most important focal points of the piccy and had to be spot on.

Most of the basic lines were created with the continuous line option.

Now this is probably the most important option of them all — undo. It erases the last operation so that all those little (!) boobs can be put right.

With these arrows you can move the picture up and down to view what lies beneath the main menu.







# FRIDAY



[YOUR  
SINCLAIR]



# PROGRAM POWER



# 8 PAGE PULL-OUT



# OPPORTUNITY KNOCKS!

That's all folks! Opportunity is now on its last knockings. Yep, this is the last chance for your code to be up there with the best six Speccy programs under 5K. So, can *Hot Shot* shoot to the top of the programmer's poll? Or will it be one of the five previous programs that you'll find in back issues of *YS*? It's all down to you as you'll be the ones doing the voting. Next month, you'll find a run down of all the programs and a chance to buy them all on one DigiTape. Then you'll be asked to cast your vote. Bit more sophisticated than the old clapometer, eh what?

# HOT SHOT

By M Wallis

How can a game with so few bytes (just 3854) have so many features? Ask M Wallis. His Centipede-style game has eight directional movements — it's leggier than your average octopus — Kempston compatibility, optional extra lives, hold/restart and automatic fire. In all it scores more points than Torville and Dean!

Oh, by the way, don't think you've slipped up if your Speccy appears to crash after the main selection screen — just take another look at that copyright message. Once you've got that sussed, you'll just need to know that the control keys are Q for up, Z for down, I for left and P for — well, you can work that one out yourselves.

To get the game in, enter the Basic loader and save it, followed by the machine code.

## The Basic Loader

Basically, this is the Loader. It's just there to load in the code.

```
0>REM ~~~~~
1 REM ^ HOT-SHOT ^
2 REM ^ BY M.WALLIS ^
3 REM ^ 1985 ^
4 REM ~~~~~
1 CLEAR 27999: BORDER 1: PAPE
R 1: INK 5: CLS : PLOT 10,150: D
RAW 130,0: DRAW 0,-20: DRAW -130
,0: DRAW 0,20
2 PRINT AT 3,2;"HOT-SHOT"
T"
3 PRINT AT 9,9;"IS STILL"
L"
4 PRINT AT 15,15;"LOADING"
G"
```

## The Hex Loader

Hexperts will already have one of these on tape but for the rest of you, enter it and use it to type in the code.

```
20 PLOT 66,110: DRAW 122,0: D
RAW 0,-20: DRAW -122,0: DRAW 0,2
0
21 PLOT 110,60: DRAW 118,0: D
RAW 0,-20: DRAW -118,0: DRAW 0,2
0
30 PRINT INK 1: AT 0,0:
40 LOAD ""CODE
50 LET t=USR 28000
100 SAVE "HOT-SHOT" LINE 1
```

## The Hex Data

Enter the code into the Hex loader eight bytes at a time. The start address is 28000 and the length 3854. Okay?

```
28000 21 5C 78 25 22 36 5C 3E =524
28008 00 3E 00 32 01 5B CD 4A =483
28016 75 3E 1F DB 1F FE 00 20 =746
28024 41 3E 1F 32 80 74 32 A0 =662
28032 74 32 BE 74 32 DE 74 32 =910
28040 7E 74 32 9E 74 32 BC 74 =920
28048 32 DC 74 21 00 00 22 83 =584
28056 74 22 A3 74 22 C1 74 22 =806
```

```
28064 E1 74 21 CB 5F 22 81 74 =951
28072 21 CB 57 22 A1 74 21 CB =870
28080 47 22 BF 74 21 CB 4F 22 =761
28088 DF 74 3E C9 32 83 75 3E =962
28096 02 CD 01 16 3E 00 CD 9B =652
28104 22 3E 00 32 8D 5C 06 18 =409
28112 CD 44 0E 21 5D 7B 22 7B =693
28120 5C 01 3C 00 21 85 73 11 =451
28128 49 73 ED 80 3E 0A 32 02 =725
28136 5B 3E 16 32 03 5B 21 00 =352
28144 00 22 00 5B 3E 07 32 0E =258
28152 5B 3E 04 32 0D 5B CD 6F =627
28160 6E 3E 00 CD C3 73 CD 03 =895
28168 71 3A 0D 5B 47 C5 CD 42 =814
28176 71 CD FF 73 CD 1C 70 CD =1238
28184 84 6F CD D2 6E CD 42 71 =1152
28192 3A 0D 5B C1 8B 20 0C FE =845
28200 00 CA 80 7B 3E 00 CD 03 =771
28208 73 18 19 11 05 00 21 D0 =427
28216 07 CD B5 03 11 05 00 21 =451
28224 C8 00 CD B5 03 CD CA 72 =1110
28232 FE 01 20 BD 01 3C 00 21 =570
28240 85 73 11 49 73 ED 80 3A =924
28248 0E 5B 3C FE 14 2B 03 32 =532
28256 0E 5B 3A 0D 5B 3C 32 00 =390
28264 5B 18 93 0D 5B 18 94 E5 =767
28272 C5 D5 F5 CD 6B 0D CD CD =1390
28280 1F CD 7F 72 3E 00 32 6B =696
28288 5C 3E 4F 32 8F 5C 21 A0 =711
28296 6E 7E FE FF 28 04 D7 23 =1039
28304 18 F7 97 32 8F 5C 3E 02 =771
28312 32 6B 5C F1 D1 C1 E1 C9 =1318
28320 16 16 00 53 43 4F 52 45 =424
28328 06 4C 49 56 45 53 06 7F =526
28336 20 20 31 20 39 20 38 20 =322
28344 35 20 20 42 20 59 20 20 =368
28352 4D 20 2E 20 57 20 41 20 =403
28360 4C 20 4C 20 49 20 53 FF =659
28368 00 00 E5 C5 D5 F5 21 07 =924
28376 5B 7E 23 5E 23 56 4F FE =800
28384 00 20 36 3A 7B 5C E6 A8 =754
28392 FE 00 28 05 F1 D1 C1 E1 =1167
28400 C9 36 1E 2B 3A 7B 5C E6 =828
28408 03 C6 12 77 2B 36 FF ED =927
28416 5B 0B 5B 4E D5 CD 2A 75 =845
28424 FE 06 C8 03 71 14 CD 2A =847
28432 75 15 FE 06 CC 03 71 D1 =927
28440 00 3E 10 D7 97 D7 3E 16 =743
28448 D7 7B D7 7A D7 3E 20 D7 =1199
28456 3E 20 D7 15 7B 81 5F FE =931
28464 15 20 02 0E FF FE 11 20 =627
28472 02 0E 01 D5 C5 CD 2A 75 =791
28480 FE 06 C8 03 71 14 CD 2A =847
28488 75 15 FE 06 CC 03 71 C1 =911
28496 D1 7A FE FF 20 0A 3E 00 =944
28504 32 07 5B F1 D1 C1 E1 C9 =1217
```

```
28512 ED 53 0B 5B 79 32 07 5B =688
28520 3E 10 D7 3E 05 D7 3E 16 =659
28528 D7 7B D7 7A D7 3E 97 D7 =1318
28536 3E 9B D7 F1 D1 C1 E1 C9 =1498
28544 D1 C1 E1 C9 E5 C5 D5 F5 =1712
28552 3A 0A 5B FE 00 24 3A =539
28560 7B 5C FE FD 2B 05 F1 D1 =1214
28568 C1 E1 C9 21 0A 5B 77 3A =930
28576 79 5C 47 3A 7B 5C C6 AD =925
28584 10 FC E6 0F 3C 3C 23 77 =787
28592 23 36 00 ED 5B 0B 5B 3E =581
28600 10 D7 3E 00 D7 3E 16 D7 =807
28608 7B D7 7A D7 3E 20 D7 3E =1046
28616 20 D7 14 14 CD 2A 75 FE =905
28624 00 20 28 15 3E 1D BA 30 =418
28632 09 97 32 0A 5B F1 D1 C1 =954
28640 E1 C9 7A 32 0C 5B 3E 10 =779
28648 D7 3E 05 D7 3E 16 D7 7B =919
28656 D7 7A D7 3E 95 D7 3E 96 =1190
28664 D7 18 E2 FE 03 20 06 ED =997
28672 5B 0B 5B 18 CF 3E 10 D7 =717
28680 3E 04 D7 3E 16 D7 7B D7 =918
28688 7A D7 3E 91 D7 14 18 EB =1038
28696 D1 C1 E1 C9 F5 E5 D5 C5 =1712
28704 3A 0E 5B 47 3E 01 CD 35 =555
28712 70 3C B8 20 F9 C1 D1 E1 =1264
28720 F1 C9 00 00 00 E5 D5 C5 =1081
28728 F5 21 46 73 11 03 00 47 =554
28736 19 10 FD 22 36 5B 5E 23 =602
28744 56 23 4E 3E 02 B9 20 05 =485
28752 F1 C1 D1 E1 C9 3E 10 D7 =1362
28760 97 D7 3E 16 D7 7B D7 7A =1125
28768 D7 3E 20 D7 3E 03 B9 20 =806
28776 04 1C C3 BD 70 D5 7A 81 =992
28784 57 CD 2A 75 D1 FE 00 20 =946
28792 0E 79 82 FE 20 28 0B FE =853
28800 FF 2B 04 57 C3 BD 70 7A =1004
28808 81 FE 20 28 04 FE FF 20 =1000
28816 0B 79 ED 44 4F 1C C3 BD =925
28824 70 D5 79 82 57 CD 2A 75 =1027
28832 D1 FE 04 20 06 0E 03 1C =550
28840 C3 BD 70 FE 06 20 06 79 =915
28848 82 57 C3 BD 70 79 ED 44 =1139
28856 4F 1C C3 C6 70 CD 2A 75 =976
28864 FE 04 20 02 0E 03 3E 16 =393
28872 BB 20 06 1E 11 16 1F 0E =339
28880 FF 3E 15 0B 20 07 3E 03 =629
28888 B9 20 02 0E 01 CD 2A 75 =598
28896 FE 06 CC 03 71 2A 36 5B =767
28904 73 23 72 23 71 3E 10 D7 =705
28912 3E 03 D7 3E 16 D7 7B D7 =917
28920 7A D7 3E 90 D7 F1 C1 D1 =1401
28928 E1 C9 00 E5 D5 C5 F5 3A =1368
28936 0D 5B 3D 32 0D 5B 47 3E =452
28944 01 32 6B 5C 3E 16 D7 3E =611
28952 16 D7 3E 16 D7 3E 4F 32 =727
28960 8F 5C 3E 00 B8 28 06 3E =589
28968 94 D7 05 18 F5 3E 20 D7 =946
28976 3E 02 32 6B 5C 3E 00 32 =425
28984 8F 5C CD ED 72 F1 C1 D1 =1434
28992 E1 C9 E5 C5 D5 F5 CD 56 =1601
29000 71 ED 5B 02 5B CD FA 74 =1105
29008 F1 D1 C1 E1 C9 00 E5 D5 =1511
29016 C5 F5 3A 04 5B FE 00 20 =881
29024 03 C3 64 71 3A 04 5B FE =818
29032 00 20 11 3E 01 21 04 5B =240
29040 77 23 ED 5B 02 5B 73 23 =725
29048 72 2B 00 00 3E 10 D7 3E =512
29056 00 D7 3E 16 D7 2A 05 5B =652
29064 7D D7 7C D7 3E 20 D7 2D =1033
29072 5D 54 CD 2A 75 FE 00 20 =827
29080 32 22 05 5B 3E 10 D7 3E =535
29088 07 D7 3E 16 D7 7D 7C 7C =985
29096 D7 3E 93 D7 3E 00 BD 20 =922
29104 15 3E 10 D7 3E 00 D7 3E =653
29112 16 D7 7D 7C D7 7C D7 7C =1010
29120 D7 3E 00 32 04 5B F1 C1 =856
29128 D1 E1 C9 F5 3E 01 CD 03 =1151
29136 73 97 32 04 5B 2A 05 5B =549
29144 2D F1 FE 04 2B 04 FE 02 =844
29152 20 19 3E 10 D7 97 D7 3E =778
29160 16 D7 7D 7C D7 3E 20 =1010
29168 D7 3E 01 CD C3 73 F1 C1 =1227
29176 D1 E1 C9 FE 05 20 22 2A =1002
29184 0B 5B 3E 10 D7 97 32 0A =606
29192 5B D7 3E 16 D7 7D D7 7C =1069
```



29200	D7	3E	20	D7	3E	20	D7	3E	=895	29648	F5	16	00	5F	19	44	4D	22	=566	30048	76	CD	5E	76	CD	A6	75	CD	=1228
29208	0A	CD	C3	73	F1	C1	D1	E1	=1393	29656	00	5B	3E	01	32	6B	5C	3E	=465	30056	02	76	AF	DB	FE	E6	1F	FE	=1283
29216	C9	FE	01	20	0D	2A	08	5B	=642	29664	16	D7	3E	16	D7	3E	07	D7	=820	30064	1F	28	F1	3E	0F	32	6A	76	=663
29224	3E	10	D7	3E	00	32	07	5B	=503	29672	44	4D	CD	1B	1A	3E	30	D7	=728	30072	CD	D3	76	CD	5E	76	06	64	=1057
29232	18	D7	21	49	73	06	14	7E	=612	29680	3E	02	32	6B	5C	3E	00	32	=425	30080	76	10	FD	00	3E	07	CD	9B	=816
29240	23	BB	20	04	7E	BA	28	09	=619	29688	8F	5C	F1	C1	D1	E1	C9	E5	=1533	30088	22	3E	00	32	8D	5C	06	18	=409
29248	23	23	10	F3	F1	C1	D1	E1	=1197	29696	C5	D5	F5	01	FE	BF	ED	78	=1458	30096	CD	44	0E	06	46	76	10	FD	=750
29256	C9	23	7E	FE	02	28	F2	36	=954	29704	E6	10	FE	10	28	6B	21	00	=696	30104	3E	38	32	8D	5C	06	18	CD	=636
29264	02	3E	05	CD	C3	73	3E	10	=662	29712	5A	11	6D	7C	01	E0	00	ED	=802	30112	44	0E	CD	ED	77	C9	06	04	=854
29272	D7	3E	02	D7	3E	16	D7	7B	=916	29720	B0	21	00	5A	36	00	11	01	=371	30120	76	10	FD	3A	00	5B	47	CD	=812
29280	D7	7A	D7	3E	91	D7	18	DC	=1218	29728	5A	01	DF	00	ED	B0	3A	00	=785	30128	F6	75	78	32	00	5B	21	00	=657
29288	3E	05	CD	C3	73	3E	10	D7	=875	29736	5B	32	15	7B	3A	01	5B	32	=482	30136	5B	0E	20	70	23	CD	F6	75	=849
29296	3E	02	D7	3E	16	D7	7B	D7	=916	29744	16	78	3E	00	32	00	5B	CD	=550	30144	0D	C2	8B	75	0E	0D	2B	11	=598
29304	7A	D7	3E	91	D7	18	E	E5	=1237	29752	34	78	CD	02	76	3E	FD	DB	=1031	30152	20	00	19	70	CD	F6	75	0D	=750
29312	D5	C5	F5	2A	78	5C	7D	E6	=1264	29760	FE	E6	02	FE	02	28	02	18	=808	30160	C2	CA	75	19	0E	20	70	2B	=739
29320	1F	57	7C	E6	0F	5F	06	00	=588	29768	19	3E	7F	DB	FE	E6	04	FE	=1175	30168	CD	F6	75	0D	C2	D6	75	37	=1161
29328	3E	10	D7	3E	02	D7	3E	16	=656	29776	04	28	E7	3E	FB	DB	FE	E6	=1291	30176	3F	ED	52	0E	0D	23	70	11	=573
29336	D7	7B	D7	7A	D7	3E	91	D7	=1312	29784	02	FE	02	28	0D	CD	A6	78	=1013	30184	20	00	37	3F	ED	52	CD	F6	=920
29344	7B	C6	07	5F	7A	C6	03	57	=833	29792	18	D8	21	6D	7C	11	00	5A	=613	30192	75	0D	C2	E6	75	C9	78	C6	=1190
29352	83	57	7B	02	5F	3E	1F	8A	=845	29800	01	E0	00	ED	B0	3A	15	78	=837	30200	02	FE	40	C2	00	76	3E	10	=710
29360	30	06	7A	D6	20	57	18	F5	=778	29808	32	00	5B	3A	16	78	32	01	=392	30208	47	C9	06	04	76	10	FD	3A	=727
29368	3E	12	BB	30	06	7B	D6	11	=675	29816	5B	ED	5B	02	5B	3E	FB	DB	=1044	30216	00	5B	47	CD	52	76	78	32	=737
29376	5F	18	F5	10	C8	F1	C1	D1	=1226	29824	FE	E6	01	FE	01	28	12	10	=827	30224	00	5B	21	00	5A	0E	20	70	=372
29384	E1	C9	E5	D5	C5	00	21	48	=1173	29832	7B	FE	02	28	0C	CD	2A	75	=795	30232	23	CD	52	76	0D	C2	17	76	=788
29392	73	3A	0E	5B	3D	47	7E	FE	=790	29840	FE	00	20	05	CD	FA	74	18	=886	30240	0E	05	2B	11	20	00	19	70	=248
29400	02	20	0C	23	23	23	10	F6	=413	29848	1E	ED	5B	02	5B	3E	FE	DB	=986	30248	CD	F6	75	0D	C2	26	76	19	=956
29408	3E	01	00	C1	D1	E1	C9	97	=1042	29856	FE	E6	02	FE	02	28	10	1C	=826	30256	0E	20	70	2B	CD	52	76	0D	=619
29416	18	F8	00	00	00	2A	02	5B	=407	29864	7B	FE	17	28	0A	CD	2A	75	=814	30264	C2	32	76	37	3F	ED	52	0E	=813
29424	3E	10	D7	3E	00	D7	3E	16	=654	29872	FE	00	20	05	CD	FA	74	ED	=1097	30272	05	23	70	11	20	00	37	3F	=319
29432	7D	D7	7C	D7	3E	20	D7	=1203	29880	5B	02	5B	3E	DF	DB	FE	E6	=1172	30280	ED	52	CD	52	76	0D	C2	42	=997	
29440	C9	00	00	E5	D5	C5	F5	FE	=1339	29888	01	FE	01	28	12	14	7A	FE	=710	30288	76	C9	78	C6	02	FE	40	C2	=1151
29448	01	20	16	21	01	00	06	32	=145	29896	20	28	0C	CD	2A	75	FE	00	=702	30296	5C	76	3E	10	47	C9	0E	20	=606
29456	11	01	00	E5	C5	CD	B5	03	=833	29904	20	05	CD	FA	74	18	1E	ED	=899	30304	21	00	5B	06	18	11	20	00	=200
29464	C1	E1	23	23	23	10	F0	18	=803	29912	5B	02	5B	3E	DF	DB	FE	E6	=1172	30312	E5	36	12	19	10	FB	C5	21	=823
29472	21	21	00	00	06	14	C5	06	=295	29920	04	FE	04	28	10	15	7A	FE	=715	30320	D0	00	11	20	00	CD	B5	03	=646
29480	00	C5	7E	06	07	C5	01	FE	=788	29928	FF	28	0A	CD	2A	75	FE	00	=923	30328	C1	E1	E5	06	18	11	20	00	=726
29488	00	F5	EE	10	ED	79	F1	17	=1121	29936	20	03	CD	FA	74	D1	C1	=1249	30336	36	0F	19	10	FB	E1	23	0D	=634	
29496	C1	10	F2	23	C1	10	EA	C1	=1122	29944	E1	C9	E5	D5	C5	F5	3E	16	=1394	30344	20	D9	C9	3E	02	CD	01	16	=742
29504	10	E4	F1	C1	D1	E1	C9	00	=1313	29952	D7	2A	02	5B	7D	D7	7C	D7	=1029	30352	11	DD	76	01	16	00	CD	3C	=644
29512	00	24	2B	FF	11	19	FF	01	=632	29960	3E	10	D7	3E	00	D7	3E	20	=664	30360	20	11	81	74	11	F5	76	01	=675
29520	14	02	12	1E	01	11	1C	FF	=371	29968	D7	ED	53	02	5B	3E	10	D7	=921	30368	0B	00	CD	3C	20	11	02	77	=446
29528	11	1D	FF	11	1E	FF	11	1F	=651	29976	3E	06	D7	3E	16	D7	7B	D7	=920	30376	01	20	00	CD	3C	20	11	23	=382
29536	FF	15	1F	01	00	0A	01	00	=319	29984	7A	D7	3E	94	D7	F1	C1	D1	=1405	30384	77	01	20	00	CD	3C	20	11	=466
29544	09	01	00	08	01	00	07	01	=27	29992	E1	C9	E5	D5	C5	97	21	00	=1249	30392	44	77	01	20	00	CD	3C	20	=517
29552	00	06	01	00	05	01	00	04	=17	30000	5B	BB	28	09	D5	43	11	20	=653	30400	11	65	77	01	21	00	CD	3C	=536
29560	01	00	03	01	00	02	01	00	=8	30008	00	19	10	FD	D1	5A	16	00	=615	30408	20	11	AC	77	01	20	00	CD	=578
29568	01	01	00	00	01	00	13	01	=23	30016	19	7E	C1	D1	E1	C9	00	38	=1038	30416	3C	20	C9	11	CD	77	01	20	=667
29576	00	12	01	00	11	01	00	10	=53	30024	00	00	3E	02	CD	01	16	3E	=354	30424	00	CD	3C	20	C9	16	02	00	=522
29584	01	00	0F	01	00	0E	01	00	=32	30032	01	CD	9B	22	3E	09	32	8D	=657	30432	20	20	20	20	20	20	20	20	=256
29592	0D	01	00	0C	01	00	0B	01	=39	30040	5C	06	18	CD	44	0E	CD	8B	=753	30440	20	20	20	48	4F	54	2D	53	=459
29600	00	0A	01	00	09	01	00	08	=29											30448	48	4F	54	20	20	16	04	00	=325
29608	01	00	07	01	00	06	01	00	=16											30456	20	20	20	20	48	45	59	53	=444
29616	05	01	00	04	01	00	03	01	=15											30464	20	20	16	06	00	20	20	50	=236
29624	00	02	01	00	01	01	00	00	=5											30472	20	3D	20	52	49	47	48	54	=507
29632	01	00	00	E5	D5	C5	F5	3E	=947											30480	20	20	49	20	3D	20	4C	45	=407
29640	4F	32	8F	5C	2A	00	5B	F1	=738											30488	46	54	20	20	51	20	3D	20	=424





# ALIEN



by Stewart Green

Eat your heart out, Buck Rogers — Stewart Green's self-styled megagame puts you up there with those other star war heroes — Flash Gordon, Luke Skywalker, Ronnie Reagan... *Alien* is an Arcadian shoot'em up, it lets you arm a photon craft and exterminate squillions of aliens — and between remorseless waves you can slope off to capture a fuel pod to replenish your power packs. And then you're hot in pursuit of pulse after pulse of alien attackers. Go on, shoot 'em up!

The machine code is in two parts so entry is a bit out of the ordinary — follow the instructions carefully.

## The Basic Loader

Type this in and save it with  
**SAVE "ALIEN" LINE 10**

```
1 GO TO 100
10 BORDER 0: PAPER 0: INK 0: C
LEAR 29999:
12 PRINT INK 9: FLASH 1: AT 10,
10: "LOADING: "; INVERSE 1: "ALIENS
": LOAD "CODE : RANDOMIZE USR 3
0000
15 DIM A$(32): INK 7: FOR A=0
TO 7: PRINT AT A,0: OVER 1:A$: N
EXT A: PRINT BRIGHT 1: AT 12,10: "
by S.GREEN": AT 14,6: "for YOUR SP
ECTRUM": AT 16,10: 1.10.85"
20 FOR A=0 TO 10: BEEP .01,A:
NEXT A: BEEP .1,A: INK 0: LOAD "
CODE
35 RANDOMIZE USR 35193: LET hs
=0
40 POKE 23606,145: POKE 23607,
250
50 REM define keys
55 BORDER 5: PAPER 5: INK 3: C
LS
60 PRINT INK 2: AT 6,4: "PLEASE"
; AT 7,4: "SELECT"
65 PRINT AT 2,0: "=====
===== ": FOR A=3 TO
18: PRINT AT A,0: " ": AT A,31: "
": NEXT A: PRINT AT 19,0: "=====
===== "
67 PRINT INK 1: AT 10,10: "1 - S
INCLAIR": AT 12,10: "2 - KEYBOARD"
70 LET S$=" PRESS KEY '1' TO U
SE THE SINCLAIR TYPE INTERFACE -
--- OR KEY '2' TO USE THE KEYBOA
RD "
75 LET A=0: LET S$=S$+S$: LET
X=1
80 PRINT INK 2: AT 18,1: S$(X TO
X+29): LET X=X+1: IF X=LEN S$/2
THEN LET X=1
85 LET K$=INKEY$: IF K$>"2" OR
K$<"1" THEN BEEP .03,0: GO TO 7
9
90 POKE 23728,VAL K$
99 CLS
100 LET score=10*USR 32100: PAP
ER 0: INK 7: CLS
102 RANDOMIZE USR 30000: PRINT
INK 7: PAPER 0: AT 10,10: "SCORE="
; SCORE
105 FOR A=0 TO 20: BEEP .01,A:
BEEP .01,A+10: NEXT A
109 IF SCORE<HS THEN GO TO 116
110 GO SUB 200
115 BORDER 0: PAPER 0: INK 7: C
LS : RANDOMIZE USR 30000
116 FOR A=0 TO 20: BEEP .01,A:
BEEP .01,A+10: NEXT A
120 PRINT FLASH 1: AT 12,10: "HIG
H SCORE": FLASH 1: AT 14,13: HS
130 LET I=0
```

```
131 INPUT "": PRINT #1: " PRES
S 'K' TO CHANGE KEYS": POKE 2365
8,8
140 IF INKEY$="N" THEN INK 0: P
APER 1: FLASH 1: CLS : PAPER 7:
FLASH 0: PRINT AT 10,11: "CHICKEN
": FOR A=50 TO 0 STEP -1: PRINT
AT 12,13:A: BEEP .01,A: NEXT A:
PRINT USR 0
141 PRINT INK 1: AT 20,2: "DO YOU
WANT ANOTHER GO Y/N": LET I=I+1
-(7 AND I=8)
142 POKE .65186,29: RANDOMIZE US
R 65000
145 IF INKEY$="K" THEN GO TO 40
150 IF INKEY$<>"Y" THEN : GO TO
132
160 GO TO 100
195 PRINT INK 7: PAPER 0: AT 10,
10: "SCORE="; SCORE
200 INK 6: PAPER 1: BORDER 1
201 CLS : PRINT INK 7: PAPER 0:
AT 10,10: "SCORE="; SCORE
210 FOR L=0 TO 2: GO SUB 8000:
NEXT L
220 LET hs=score: CLS : LET n=2
0: FOR L=0 TO 20: PRINT INK (RND
*8): PAPER 8: AT 21,RND*14: "A NEW
HIGH SCORE.": BEEP .01,n: LET n
=n+5-(20 AND n=45): LET A=USR 35
82: NEXT 1
230 RETURN
```

## The Hex Loader

Use this loader to enter both  
sets of Hex data.

```
8000 RESTORE 8050: FOR I=1 TO 8:
READ T,N: BEEP T,N: NEXT I
8050 DATA .1,11,.1,11,0.8,16,.05
,11,.05,16,.05,11,.05,16,1,20
8060 RETURN
9999 SAVE "ALIEN" LINE 10: SAVE
"SCREEN"CODE 30000,1899: FOR A=0
TO 100: NEXT A: SAVE "ALIEN"COD
E 32100,3990: BEEP 1,0: GO TO 35
```

## The Hex Data I

This is the first set of Hex data,  
named SCREEN. Enter it and  
save it after the Basic loader  
with SAVE "SCREEN" CODE  
30000,1899.

```
30000 CD 56 75 3E 40 21 00 58 =655
30008 E5 D1 13 01 FF 00 77 ED =1069
30016 B0 F5 06 0A C5 60 11 0A =757
30024 00 CD B5 03 C1 10 F5 F1 =1084
30032 3C FE 48 20 E0 C9 11 00 =860
30040 40 DD 21 54 00 DD 09 7A =754
30048 FE 48 C8 DD 7E 00 A7 28 =1080
30056 0A FE FF 28 06 12 13 DD =823
30064 23 18 EC DD 46 01 12 13 =624
30072 10 FC DD 23 DD 23 18 DF =1027
30080 00 00 00 00 00 23 7F FF =417
30088 01 80 00 01 01 FF 01 F0 =627
```

```
30096 00 01 03 FF 01 FC 00 02 =514
30104 FF 03 F8 00 01 01 FF 01 =764
30112 80 03 FC 00 01 01 FF 01 =641
30120 F0 00 04 03 FF 02 F8 00 =752
30128 01 07 FF 01 FC 00 02 1F =549
30136 FE 00 01 03 FF 01 FC 00 =766
30144 03 07 FF 01 F0 0F FE 07 =782
30152 FF 02 FC 00 04 07 F8 03 =771
30160 FF 01 00 01 1F FE 00 03 =545
30168 1F FF 01 00 01 07 FE 00 =549
30176 04 0F FF 03 FE 0F F8 00 =794
30184 06 FF 02 81 FF 01 C0 1F =871
30192 FE 00 03 0F FF 01 00 01 =529
30200 03 FF 02 F8 00 02 3F FF =828
30208 03 80 07 FF 02 E0 00 03 =622
30216 07 FF 04 F0 1F FE 00 03 =794
30224 07 FF 01 80 03 FF 01 00 =650
30232 03 01 FF 01 FC 07 FE 00 =773
30240 02 07 FF 01 F8 00 03 1F =547
30248 FE 00 01 1F FF 01 F8 0F =805
30256 FF 01 C0 00 02 07 FF 01 =713
30264 80 03 FF 03 F0 07 FF 01 =892
30272 F0 03 FF 01 07 FF 01 80 =890
30280 7F FE 00 03 0F F0 00 01 =640
30288 01 FF 01 C0 03 FF 03 F8 =958
30296 07 FF 01 F0 00 01 FF 03 =762
30304 80 1F FF 01 80 00 03 0F =561
30312 FF 02 FC 00 25 FF 02 E0 =1027
30320 00 01 03 FF 01 F8 00 01 =509
30328 07 FF 01 FC 00 02 FF 03 =775
30336 F8 00 01 01 FF 01 E0 07 =737
30344 FC 00 01 07 FF 01 F8 00 =764
30352 04 03 FF 02 FC 00 01 07 =524
30360 FF 01 FC 00 02 1F FE 00 =795
30368 01 03 FF 01 F8 00 03 07 =518
30376 FF 01 F0 0F FE 07 FF 02 =1029
30384 FC 00 04 07 F8 03 FF 01 =770
30392 80 1F FC 00 03 1F FF 01 =701
30400 00 01 07 FE 00 04 0F FF =536
30408 03 FE 0F F8 00 06 FF 04 =785
30416 C0 1F FE 00 03 0F FF 01 =751
30424 00 01 03 FF 02 F8 00 02 =511
30432 3F FF 03 80 07 FF 02 E0 =937
30440 00 03 07 FF 04 F0 1F FE =794
30448 00 03 07 FF 01 80 03 FE =651
30456 00 03 03 FF 01 FC 07 FE =775
30464 00 02 07 FF 01 F8 00 03 =516
30472 1F FE 00 01 1F FF 01 F8 =821
30480 0F FF 01 E0 01 E0 07 FF =982
30488 01 80 03 FF 03 F8 07 FF =900
30496 01 F0 03 FF 01 03 FF 01 =759
30504 E0 FF 01 FE 00 03 0F E0 =976
30512 00 01 01 FF 01 80 03 FF =644
30520 03 F0 03 FF 01 F0 00 01 =743
30528 FF 02 FC 00 01 1F FF 01 =797
30536 80 00 03 07 FF 02 F8 00 =643
30544 24 01 FF 02 E0 00 01 03 =522
30552 FF 01 F8 00 01 07 FF 01 =768
30560 FC 00 02 FF 03 F8 00 01 =761
30568 03 FF 01 E0 07 FC 00 01 =743
30576 0F FF 01 F8 00 04 07 FF =785
30584 02 FC 00 01 07 FF 01 F8 =766
30592 00 02 1F FE 00 01 03 FF =546
30600 01 F8 00 03 07 FF 01 F8 =763
30608 0F FE 0F FF 01 87 FC 00 =927
30616 04 07 F8 03 FF 01 80 1F =677
30624 FC 00 03 1F FF 01 80 01 =543
30632 07 FE 00 04 1F FF 03 FC =806
30640 0F FC 00 05 01 FF 04 E0 =756
30648 1F FE 00 03 0F FF 01 80 =687
```





```
30656 03 FF 02 F8 00 02 7F FF =892
30664 03 00 01 03 FF 02 F0 00 =504
30672 03 0F FF 04 F0 1F F0 00 =802
30680 03 07 FF 01 80 03 FE 00 =651
30688 03 03 FF 01 FC 07 FF 01 =777
30696 00 02 07 FF 01 FC 00 03 =520
30704 1F FE 00 01 07 FF 01 F8 =797
30712 0F FF 01 FE 03 F0 07 FF =1030
30720 01 80 03 FF 03 F8 07 FF =900
30728 01 E0 01 FF 01 03 FF 03 =743
30736 FE 00 03 0F E0 00 01 01 =498
30744 FF 01 80 00 01 7F FF 02 =769
30752 E0 03 FF 01 F0 00 01 FF =979
30760 02 F8 00 01 1F FF 01 00 =538
30768 04 01 FF 02 F8 00 24 01 =547
30776 FF 02 F0 00 01 03 FF 01 =757
30784 FC 00 01 03 FF 01 FC 00 =764
30792 02 FF 03 F8 00 01 03 FF =767
30800 01 E0 07 FC 00 01 0F FF =755
30808 01 FC 00 04 07 FF 02 FC =773
30816 00 01 07 FF 01 F8 00 02 =514
30824 1F FE 00 01 03 FF 01 C0 =737
30832 00 03 07 FF 01 F8 0F FE =783
30840 0F FF 01 03 F0 00 04 0F =533
30848 F8 01 FF 01 80 1F FC 00 =916
30856 03 1F FF 01 00 01 07 FE =552
30864 00 04 1F FF 03 F8 0F FC =808
30872 00 05 03 FF 04 E0 1F FE =776
30880 00 03 0F FF 01 80 03 FF =660
30888 02 F8 00 02 7F FF 03 00 =637
30896 01 03 FF 02 F0 00 03 0F =519
30904 FF 04 F0 1F FE 00 03 07 =794
30912 FF 01 80 03 FE 00 03 03 =647
30920 FF 01 F8 07 FF 01 00 02 =769
30928 07 FF 01 FC 00 03 1F FC =801
30936 00 01 07 FF 01 F0 0F FF =774
30944 02 0F F8 07 FF 01 80 03 =659
30952 FF 03 F8 0F FF 01 E0 00 =1001
30960 01 FE 01 FF 03 FE 00 03 =771
30968 0F C0 00 02 7F 00 02 1F =369
30976 FF 02 80 00 01 FF 01 E0 =866
30984 00 01 7F FF 01 F0 00 01 =625
30992 0F FE 00 05 7F FF 01 E0 =881
31000 00 24 01 FF 02 F0 00 01 =535
31008 03 FF 01 FC 00 01 01 FF =768
31016 01 FC 00 01 01 FF 03 E0 =737
31024 00 01 03 FF 01 E0 07 FE =745
31032 00 01 1F FF 01 FC 00 04 =544
31040 07 FF 02 FC 00 01 0F FF =787
31048 01 E0 00 02 1F FE 00 01 =513
31056 07 FF 01 80 00 03 07 FF =656
31064 01 F8 1F FE 0F FF 01 01 =806
31072 E0 00 04 0F F8 01 FF 01 =748
31080 C0 1F FC 00 03 1F FF 01 =765
31088 00 01 07 FF 01 00 04 1F =299
31096 FF 03 F8 0F FF 01 00 05 =782
31104 03 FF 04 E0 1F FE 00 03 =774
31112 0F FF 01 80 03 FF 02 E0 =883
31120 00 02 FF 04 00 01 03 FF =520
31128 02 F8 00 03 0F FF 04 F0 =767
31136 1F FE 00 03 07 FF 01 80 =679
31144 03 FF 01 E0 00 02 03 FF =743
31152 01 F8 07 FF 01 00 02 03 =517
31160 FF 01 FC 00 03 1F FC 00 =794
31168 01 07 FF 01 F0 07 FF 02 =768
31176 DF F8 07 FF 01 80 01 FF =1118
31184 03 F8 0F FF 01 E0 00 01 =747
31192 7E 00 01 FF 03 FE 00 03 =642
31200 07 C0 00 02 3E 00 02 03 =268
31208 FF 01 FE 00 02 3F 80 00 =703
```

```
31216 01 3F FC 00 02 07 C0 00 =517
31224 05 3F FF 01 00 0F 07 E0 =570
31232 00 03 7F FF 01 80 00 0E =528
31240 01 FF 02 F8 00 01 03 FF =765
31248 01 FC 00 02 3F FE 00 01 =573
31256 01 FF 02 C0 00 02 03 FF =710
31264 01 E0 07 FE 00 01 7F FF =869
31272 01 FC 00 04 07 FE 07 FC =777
31280 00 01 0F FF 01 80 00 02 =402
31288 1F FE 00 01 07 FF 01 80 =677
31296 00 03 0F FF 01 FC FF 01 =782
31304 FE 0F FE 01 80 00 04 0F =671
31312 F8 01 FF 01 C0 1F FC 00 =980
31320 03 1F FF 01 00 01 07 FF =553
31328 01 F8 00 03 1F FF 03 F8 =789
31336 0F FF 01 E0 00 04 03 FF =757
31344 04 E0 1F FE 00 03 0F FF =786
31352 01 80 03 FF 01 FC 00 03 =643
31360 FF 04 00 02 FF 02 F8 00 =766
31368 03 0F FF 04 F0 1F FE 00 =802
31376 03 07 FF 01 80 03 FF 02 =654
31384 E0 00 01 03 FF 01 F8 07 =739
31392 FF 01 03 F0 01 FF 01 FC =1008
31400 00 03 1F F0 00 01 03 FF =533
31408 01 F0 07 FF 03 F8 07 FF =1016
31416 01 80 01 FF 03 F8 0F FF =906
31424 01 E0 00 01 3E 00 01 3F =352
31432 FF 02 FE 00 03 07 00 07 =528
31440 0F FC 00 05 07 80 00 09 =416
31448 07 FC 00 08 03 C0 00 02 =467
31456 3F F8 00 02 0F FF 02 E0 =809
31464 00 02 38 00 02 F8 00 02 =310
31472 07 80 00 04 03 FF 02 F8 =647
31480 00 01 07 FF 01 FC 00 02 =518
31488 1F FE 00 01 01 FF 02 00 =544
31496 03 07 FF 01 F0 07 FE 00 =767
31504 01 FF 02 FC 00 04 07 F8 =769
31512 07 FE 00 01 0F FF 01 00 =533
31520 03 1F FE 00 01 07 FE 00 =550
31528 04 0F FF 03 FE 0F FC 00 =798
31536 06 1F F8 01 FF 01 C0 1F =765
31544 FE 00 03 1F FF 01 00 01 =545
31552 07 FF 02 00 03 1F FF 03 =556
31560 E0 07 FF 02 00 04 07 FF =754
31568 04 E0 1F FE 00 03 07 FF =778
31576 01 80 03 FF 01 E0 00 02 =614
31584 01 FF 02 9F FF 01 00 02 =675
31592 07 FF 01 F8 00 03 0F FF =784
31600 01 F8 3F FF 01 F8 1F FF =1102
31608 01 00 03 07 FF 01 80 03 =398
31616 FF 02 FC 00 01 03 FF 01 =769
31624 F0 07 FF 01 03 F8 00 01 =755
31632 FF 01 FC 00 03 1F F0 00 =782
31640 01 03 FF 01 C0 07 FF 03 =717
31648 F8 07 FF 01 E0 01 FF 03 =994
31656 F0 1F FF 01 E0 00 01 1C =780
31664 00 01 1F FF 02 FE 00 25 =580
31672 1B FC 00 03 3F E0 00 02 =571
31680 FF 01 F8 00 02 3F FF 02 =826
31688 F8 00 02 FF 01 00 01 01 =508
31696 F8 00 02 FF 01 F0 00 04 =750
31704 03 FF 02 F8 00 01 07 FF =771
31712 01 FC 00 02 1F FE 00 01 =541
31720 01 FF 02 00 03 07 FF 01 =524
31728 F0 07 FE 01 FF 02 FC 00 =1011
31736 04 07 F8 03 FE 00 01 1F =548
31744 FE 00 03 1F FF 01 00 01 =545
31752 07 FE 00 04 0F FF 03 FE =792
31760 0F F8 00 06 1F FC 01 FF =808
31768 01 C0 1F FE 00 03 1F FF =767
31776 01 00 01 03 FF 02 E0 00 =486
31784 02 3F FF 03 80 07 FF 02 =715
31792 80 00 03 07 FF 04 F0 1F =668
31800 FE 00 03 07 FF 01 80 03 =651
31808 FF 01 C0 00 02 01 FF 02 =708
31816 0F FF 01 00 02 07 FF 01 =536
31824 F8 00 03 1F FF 01 C0 3F =793
31832 FF 01 F8 1F FF 01 00 03 =794
31840 07 FF 01 80 03 FF 03 C0 =844
31848 03 FF 01 F0 03 FF 01 07 =765
31856 FE 00 01 FF 01 FC 00 03 =766
31864 1F F0 00 01 03 FF 01 C0 =723
31872 07 FF 03 F8 07 FF 01 F0 =1016
31880 01 FF 03 C0 1F FF 01 C0 =930
31888 00 01 C0 00 01 1F FF 02 =302
31896 FC 00 FF 00 00 00 00 00 =507
STOP
```

## The Hex Data II

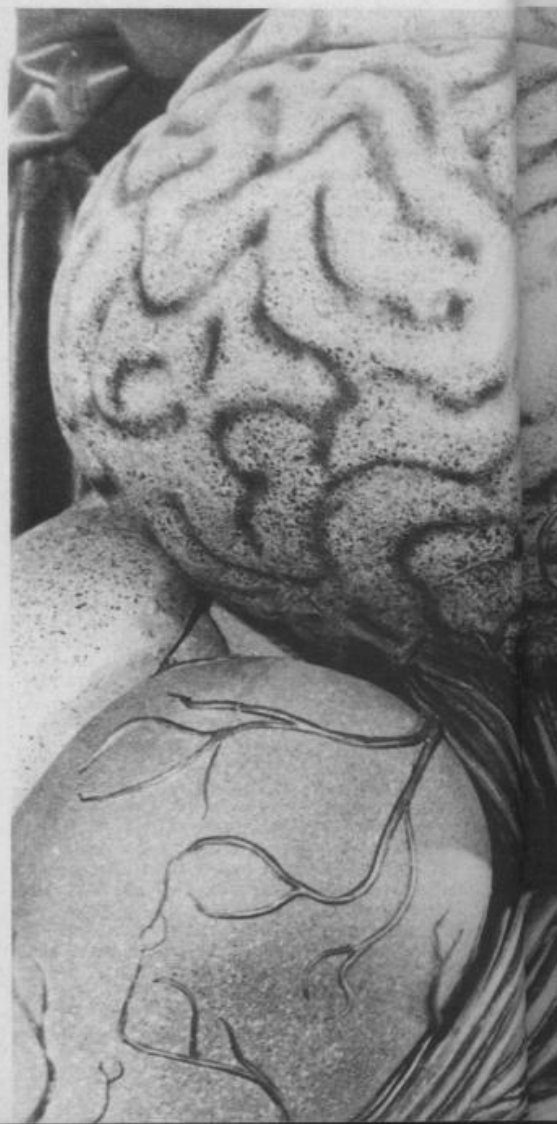
Here's the second set of Hex data, named ALIEN. Enter it and save it five seconds after the SCREEN data with SAVE "ALIEN" CODE 32100,3990.

```
32100 CD F4 84 3E 64 32 19 87 =953
32108 3E 03 32 07 87 21 00 00 =290
32116 22 17 87 21 25 87 06 06 =409
32124 36 30 23 10 F8 3E 0F 32 =531
```

```
32132 48 5C 06 19 21 73 89 36 =534
32140 00 23 10 F8 21 90 5C 36 =625
32148 FF 2B 2B 36 1F 3E 32 32 =812
32156 1D 87 AF 32 FF 87 21 30 =636
32164 30 22 2E 87 3E 30 32 2E =469
32172 87 32 2F 87 3E 05 32 14 =504
32180 87 3E 13 CD EF 7E 21 30 =867
32188 87 22 20 87 CD 9B 85 CD =1034
32196 EB 7D CD F4 84 3E 18 CD =1232
32204 EF 7E ED 4B 17 87 C9 3E =1098
32212 19 CD EF 7E 06 0A C5 60 =904
32220 11 0A 00 CD 85 03 CD 0F =636
32228 85 CD 69 85 C1 10 EF 3A =1082
32236 14 87 C6 03 32 14 87 32 =611
32244 1C 87 3A 19 87 D6 04 30 =647
32252 02 3E 01 32 19 87 32 0A =335
32260 87 3A 1F 87 3C 32 1F 87 =635
32268 2A 2E 87 7C FE 39 38 03 =717
32276 2C 26 2F 24 22 2E 87 18 =404
32284 00 CD FF 7E 21 92 88 11 =918
32292 03 00 3A 14 87 36 01 19 =296
32300 3D 20 FA CD 2A 84 CD F4 =1171
32308 84 06 11 21 73 89 11 05 =462
32316 00 36 00 19 10 F8 3A 14 =424
32324 87 47 DD 21 92 88 C5 DD =1160
32332 7E 00 FE 00 28 CD E1 =890
32340 84 16 40 5F CD 4C 84 FE =988
32348 0F 20 F3 ED 4B 1A 87 DD =984
32356 70 00 CB 43 28 03 DD 71 =759
32364 00 DD 73 01 DD 36 02 40 =678
32372 2A 05 87 CD F5 83 01 03 =767
32380 00 DD 09 C1 10 C8 3E 10 =717
32388 32 9E 86 11 CF 50 ED 53 =966
32396 80 87 ED 53 0F 87 CD 93 =970
32404 7F CD 22 85 CD F3 80 3A =1133
32412 07 87 11 FF 50 F5 05 21 =985
32420 9B 86 0E 0F CD C8 84 01 =1064
32428 1D 10 F1 3D 20 EF CD 9B =991
32436 85 06 20 C5 CD EF 85 C1 =1138
32444 10 F9 21 61 88 CD E1 84 =1093
32452 FE 80 38 03 21 79 88 22 =765
32460 20 87 ED 5B 0D 87 0E 0F =672
32468 21 9B 86 CD C8 84 AF DB =1253
32476 FE E6 1F FE 1F 20 F7 AF =1254
32484 DB FE E6 1F FE 1F 28 F7 =1306
32492 C3 BF 7C 32 A2 FE CD E8 =1416
32500 FD C5 0E 96 10 FE 0D 20 =929
32508 FB C1 C9 3E 12 32 1E 87 =940
32516 CD 13 7F ED 43 1A 87 22 =850
32524 05 87 ED 53 20 87 C9 3A =886
32532 1F 87 11 9B 87 21 3D 86 =701
32540 06 CC 0E C4 3D C8 11 85 =879
32548 07 86 CC 0E C5 3D C8 11 =834
32556 D0 87 21 63 86 06 CD 0E =833
32564 CC 3D C8 11 FC 87 06 C5 =1072
32572 0E C5 3D C8 F5 3E 11 32 =846
32580 1E 87 F1 14 88 21 A3 =775
32588 86 06 84 0E 84 3D C8 06 =685
32596 8C 0E 88 3D C8 F5 3E 12 =876
32604 32 1E 87 F1 11 9B 87 21 =796
32612 3D 86 06 C4 0E CC 3D C8 =876
32620 F5 3E 12 32 1E 87 F1 11 =798
32628 4B 88 21 87 86 06 CC 0E =737
32636 C5 3D C8 06 CC 0E C5 3D =940
32644 C8 3A 14 87 C6 0A 32 14 =691
32652 87 AF 32 1F 87 18 80 21 =711
32660 8E 03 06 64 E5 C5 4E 23 =790
32668 7E 23 E6 7F 47 E5 CD E5 =1252
32676 22 E1 C1 10 F0 06 1E E1 =969
32684 05 4E 23 7E 23 E6 1F C6 =930
32692 80 47 E5 CD E5 22 E1 C1 =1314
32700 10 EE C9 3E BF DB FE CB =1384
32708 67 20 08 3E FD DB FE CB =1134
32716 4F 20 F8 CD F3 80 CD 9F =1299
32724 81 CD E1 84 FE FE CC FB =1654
32732 81 CD 69 85 CD 93 7F 3A =1109
32740 1C 87 FE 00 CA D3 7D 3A =1013
32748 1D 87 FE 00 0A 0C DD 21 =742
32756 C3 89 DD 7E 00 FE 00 CC =1137
32764 10 82 CD 7B 83 CD BD 82 =1129
32772 CD 2A 84 3A 0A 87 32 15 =653
32780 87 CD BD 82 3A 13 87 FE =1125
32788 8A 2B 11 ED 5B 0D 87 CD =876
32796 4C 84 FE 7A CC 3E 81 FE =1233
32804 0F C2 62 82 CD 4A 80 ED =1081
32812 5B 0D 87 CD 4C 84 FE 7A =1028
32820 D5 CC 3E 81 D1 3A 13 87 =1029
32828 4F 21 9B 86 CD C8 84 CD =1143
32836 54 1F D0 C3 BF 7F 3E 0F =913
32844 32 13 87 3A 80 5C FE 01 =785
32852 20 44 3E EF DB FE CB 47 =1148
32860 CC 87 82 3E EF DB FE E6 =1473
32868 06 FE 06 28 11 3A 1D 87 =545
32876 FE 00 2B 0A D6 01 32 1D =598
32884 87 3E 8A 32 13 87 3E EF =840
32892 DB FE CB 67 20 C0 3E EF =1124
32900 DB FE CB 5F CB CB DB C3 =1585
32908 DB 80 3E EF DB FE CB 5F =1419
32916 CB CB C0 C3 DB 80 3E E7 =1422
32924 DB FE CB 4F CC 87 82 3E =1286
```

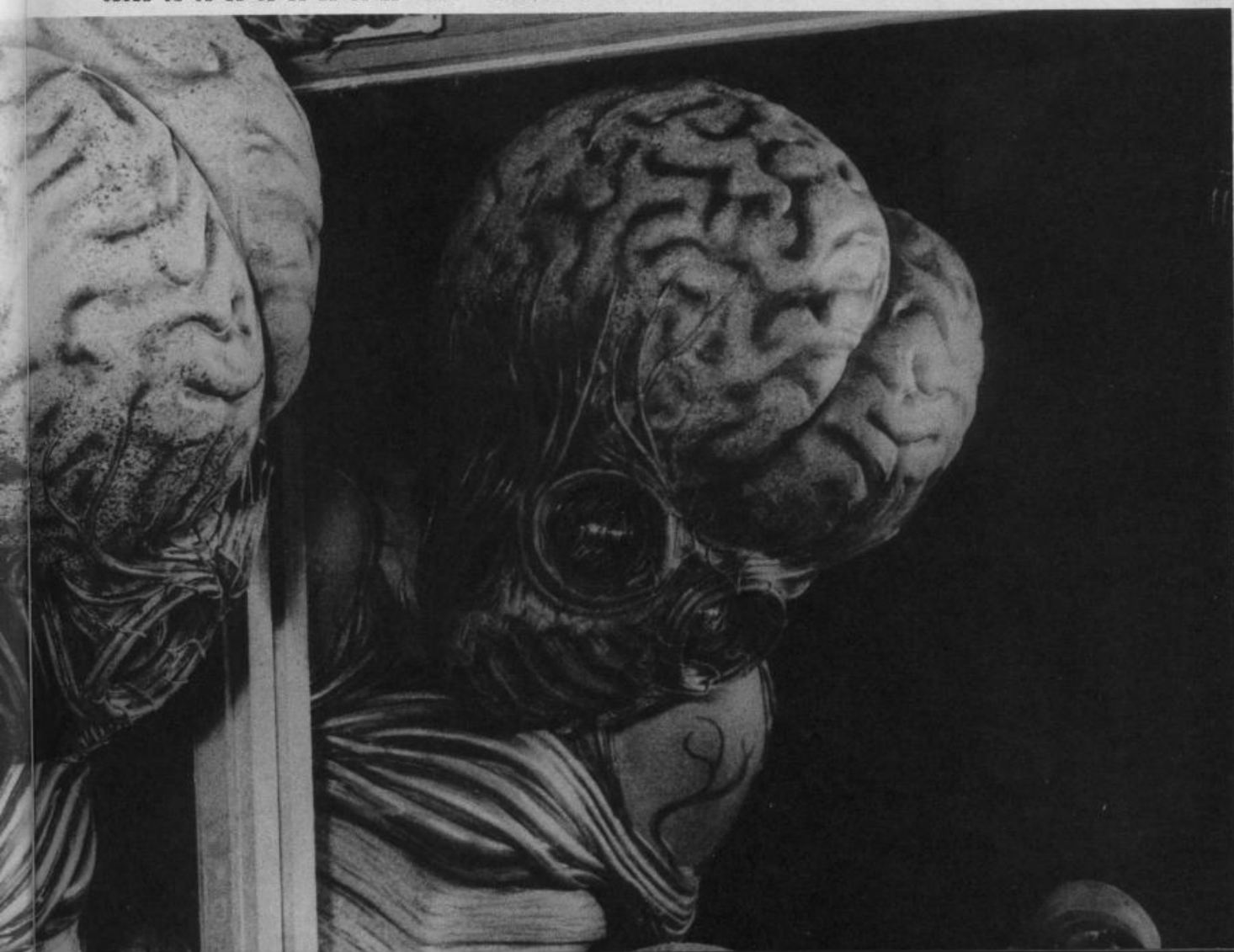


32932 7E DB FE E6 1F FE 1F 28 =1185  
32940 11 3A 1D 87 FE 00 28 0A =543  
32948 06 01 32 1D 87 3E 8A 32 =679  
32956 13 87 3E F7 DB FE CB 47 =1210  
32964 20 0C 3E EF DB FE CB 47 =1092  
32972 CB CB DB C3 DB 80 3E EF =1462  
32980 DB FE CB 47 C0 CB C0 ED =1571  
32988 5B 0D 87 0E 0F 21 D5 86 =648  
32996 D5 C5 CD CB 84 C1 D1 CD =1554  
33004 38 84 ED 53 0D 87 C9 3A =915  
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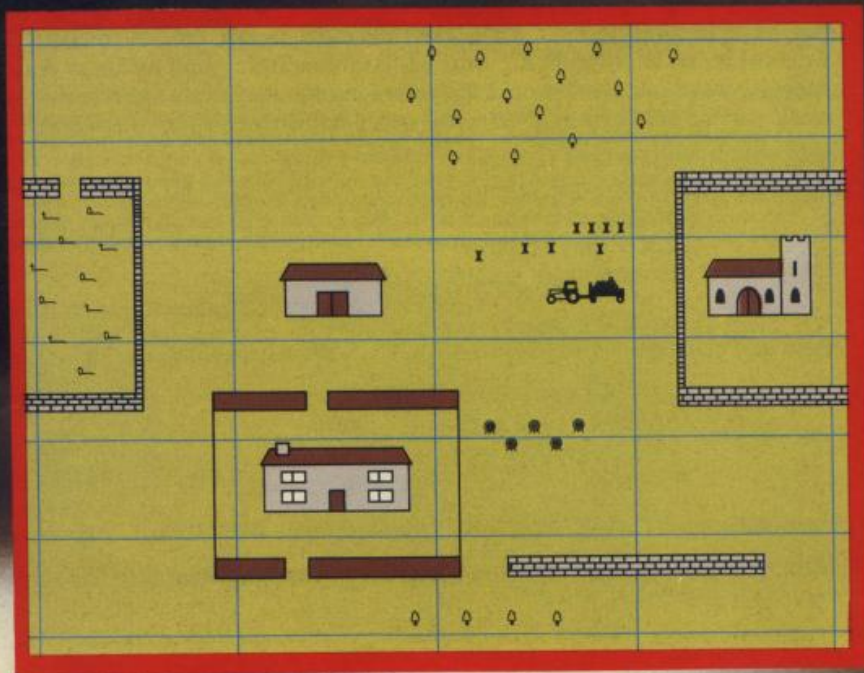
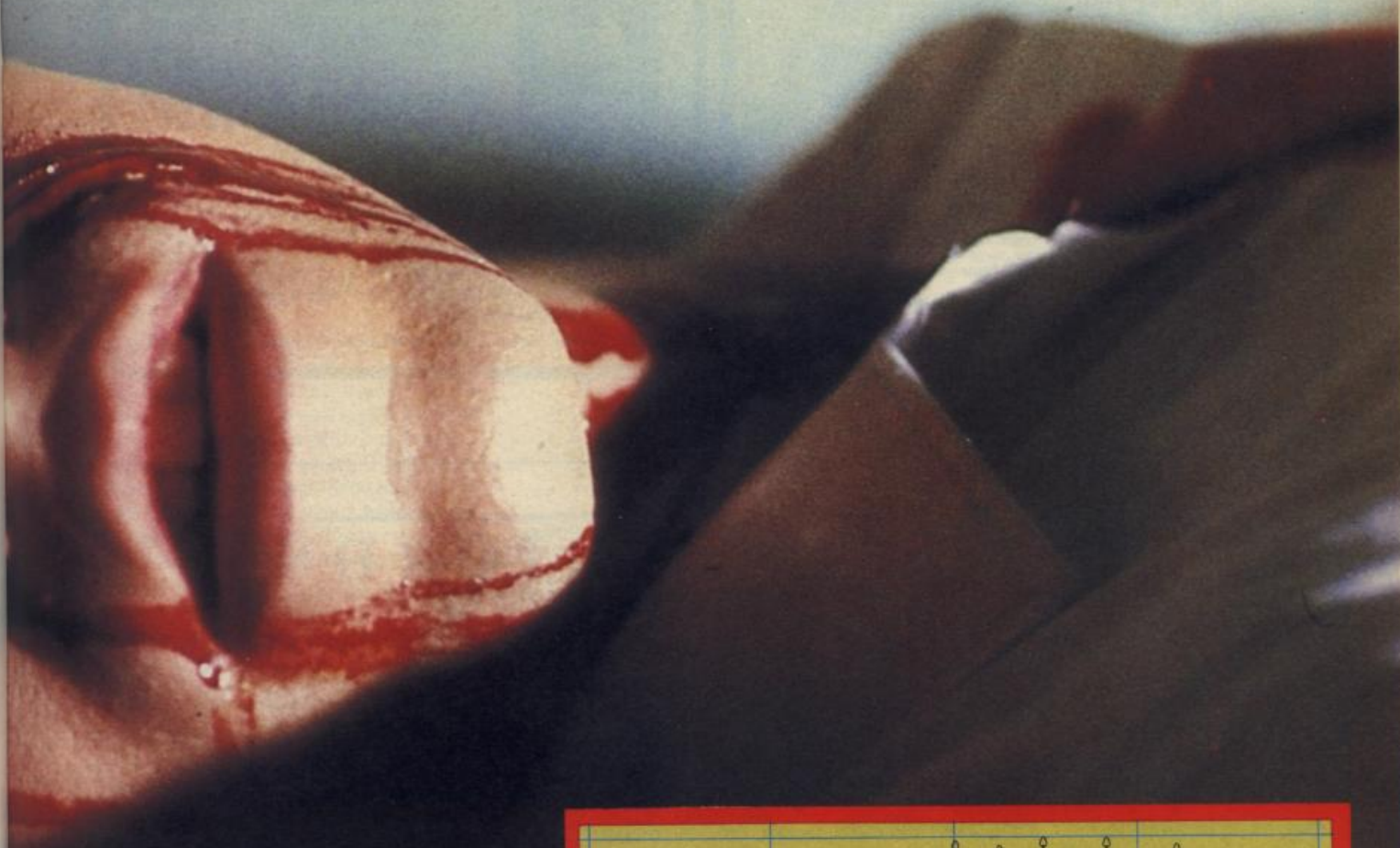




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30576	4F	4E	20	4A	4F	59	53	54	=598	31032	00	10	10	20	00	00	04	08	=76	31488	20	20	38	00	00	00	CC	=392	
30584	49	43	48	20	43	4F	4D	50	=550	31040	10	08	04	00	00	00	00	3E	=90	31496	44	44	7E	00	00	00	CE	=536	
30592	41	54	49	42	4C	45	16	11	=472	31048	00	3E	00	00	00	00	10	08	=86	31504	44	28	38	00	00	00	D6	=462	
30600	00	20	20	20	43	6F	70	79	=507	31056	04	08	10	00	00	7C	44	1C	=248	31512	54	54	7E	00	00	00	C6	=532	
30608	72	69	67	68	74	20	31	39	=680	31064	10	00	10	00	3C	42	8D	85	=480	31520	10	28	C6	00	00	00	CC	=526	
30616	38	35	20	42	79	20	4D	2E	=483	31072	BD	A5	BE	78	00	3C	42	42	=856	31528	44	7C	04	7C	00	00	7E	=514	
30624	57	41	4C	4C	49	53	20	20	=524	31080	7E	42	E7	00	00	FC	42	7C	=865	31536	18	22	7E	00	70	10	10	=344	
30632	20	20	20	20	16	13	00	20	=201	31088	42	42	FC	00	00	7E	42	40	=640	31544	10	10	10	0C	10	10	10	=124	
30640	20	50	52	45	53	53	20	41	=526	31096	40	42	7E	00	00	FE	42	42	=642	31552	10	10	1C	00	10	10	10	=124	
30648	20	48	45	59	20	54	4F	20	=492	31104	42	42	FE	00	00	FE	42	78	=826	31560	10	10	70	00	1C	10	10	=220	
30656	42	45	47	49	4E	20	47	41	=525	31112	40	42	FE	00	00	FE	42	78	=824	31568	10	10	10	60	3C	42	BD	A1	=620
30664	4D	45	20	20	20	16	15	00	=285	31120	40	40	E0	00	00	7C	42	40	=608	31576	A1	BD	42	3C	00	3C	66	FF	=893
30672	20	20	20	20	20	20	20	54	=308	31128	4E	42	7E	00	00	E7	42	7E	=693	31584	A5	A5	FF	66	3C	24	66	E7	=1116
30680	48	41	4E	48	20	59	4F	55	=575	31136	42	42	E7	00	00	7C	10	10	=519	31592	38	38	E7	66	24	00	3C	42	=607
30688	20	20	20	20	20	20	20	20	=256	31144	10	10	7C	00	00	7C	08	08	=298	31600	40	40	42	3C	00	08	2A	1C	=332
30696	20	20	20	20	20	3E	02	32	=274	31152	08	48	78	00	00	E6	48	70	=614	31608	7F	7F	1C	2A	08	18	18	7E	=506
30704	68	5C	3E	01	CD	01	16	CD	=695	31160	58	44	E6	00	00	E0	40	40	=738	31616	7E	FF	FF	FF	C3	C0	23	E3	=1540
30712	6E	0D	3E	7F	D7	11	17	78	=687	31168	42	42	FE	00	00	C3	66	5A	=773	31624	1F	1F	E3	23	C0	C0	F8	CC	=1160
30720	01	1C	00	CD	3C	20	3E	02	=390	31176	42	42	E7	00	00	C7	62	52	=742	31632	F7	F7	CC	F8	C0	07	0F	11	=1177
30728	CD	01	16	AF	DB	FE	E6	1F	=1137	31184	4A	46	E7	00	00	7E	42	42	=633	31640	15	11	3F	EF	47	E0	F0	88	=1011
30736	FE	1F	28	F7	C9	00	00	20	=805	31192	42	42	7E	00	00	FE	42	42	=644	31648	A8	88	FC	F7	E2	00	11	86	=1180
30744	31	39	38	32	20	53	69	6E	=542	31200	7E	40	E0	00	00	7E	42	42	=672	31656	77	01	20	00	CD	3C	20	C9	=650
30752	63	6C	61	69	72	20	52	65	=738	31208	42	52	7E	08	00	FE	42	42	=668	31664	21	00	5A	36	00	11	01	5A	=285
30760	73	65	61	72	63	68	20	4C	=738	31216	7E	44	E7	00	00	7E	40	7E	=741	31672	01	FF	00	ED	80	11	0A	7C	=820
30768	74	64	20	20	11	3E	78	01	=480	31224	02	42	7E	00	00	FE	92	10	=617	31680	01	1F	00	CD	3C	20	11	2E	=392
30776	1C	00	CD	3C	20	C9	16	13	=567	31232	10	10	38	00	00	CE	44	44	=430	31688	7C	01	1E	00	CD	3C	20	11	=469
30784	00	20	20	20	20	20	20	20	=224	31240	44	44	7E	00	00	E7	42	42	=625	31696	4D	7C	01	1E	00	CD	3C	20	=529
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30800	57	20	50	41	55	53	45	44	=569	31256	92	92	6C	00	00	EE	44	38	=762	31712	3E	05	D7	CD	02	76	3E	7F	=796
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30824	10	00	10	00	00	24	24	00	=104	31280	10	22	7E	00	1C	10	10	10	=252	31736	3E	DF	DB	FE	E6	10	FE	10	=1274
30832	00	00	00	00	14	14	7E	28	=206	31288	10	10	1C	00	00	00	40	20	=156	31744	28	E1	3E	09	32	FA	6D	C3	=940
30840	FC	50	50	00	10	7C	50	7C	=756	31296	10	08	04	00	38	08	08	08	=108	31752	69	6D	16	12	00	20	20	4E	=396
30848	14	54	7C	10	42	A4	48	10	=562	31304	08	08	38	00	00	10	38	54	=228	31760	49	43	45	20	53	43	4F	52	=552
30856	24	4A	8A	00	00	10	28	10	=314	31312	10	10	10	00	00	00	00	00	=48	31768	45	20	59	4F	55	20	47	4F	=536
30864	2A	44	3A	00	00	08	10	00	=192	31320	00	00	00	FF	00	3C	24	70	=463	31776	54	2C	42	55	54	20	43	41	=527
30872	00	00	00	00	00	18	20	20	=88	31328	20	20	7C	00	00	00	7C	04	=316	31784	4E	20	59	4F	55	20	16	13	=436
30880	20	20	18	00	00	30	08	08	=152	31336	7C	44	7E	00	C0	40	7C	44	=766	31792	00	20	20	59	4F	55	20	55	=434
30888	08	08	30	00	00	00	14	08	=92	31344	44	44	7C	00	00	00	7C	44	=452	31800	53	45	20	41	20	46	45	57	=507
30896	3E	08	14	00	00	00	08	08	=106	31352	40	40	7C	00	0C	04	7C	44	=460	31808	20	4D	4F	52	45	20	4C	49	=520
30904	3E	08	08	00	00	00	00	00	=78	31360	44	44	7E	00	00	00	7C	44	=454	31816	56	45	53	21	20	16	14	00	=345
30912	00	08	08	10	00	00	00	00	=32	31368	7C	40	7C	00	3C	24	70	20	=552	31824	20	20	50	52	45	53	53	20	=493
30920	3E	00	00	00	00	00	00	00	=62	31376	20	20	7C	00	00	00	7C	44	=368	31832	45	49	54	48	45	52	20	28	=521
30928	00	18	18	00	02	04	08	10	=78	31384	44	7C	04	7C	C0	40	7C	44	=768	31840	59	29	65	73	20	6F	72	20	=635
30936	20	40	80	00	00	7C	4C	54	=508	31392	44	44	E6	00	10	0													



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How d'you go about choosing a joystick? We're all guilty of believing that a joystick is a joystick — so why not plump for the cheapest. After all, they all work in the same way, don't they? No, they jolly well don't. Even leaving aside an obvious novelty like the Suncom Joy-sensor, you'll find that each 'stick has its own feel, almost its own personality. (*What's yours called? Ed*). There are big 'uns and little 'uns, some with flexible shafts, others stiff. You'll come across some real neat ones and some that are just plain ugly.

And, to make things even more complicated, you'll soon suss out that a joystick that hits the heights on one game is of no earthly use on another. In an ideal world, you'd have a different joystick for every game in your collection — but then in an ideal world we'd be picking pound notes off the pavement! So, if you play more than one game, you're now faced with a very tricky bit of decision making. Do you pick a joystick that'll allow you to excel on your fave rave but only lets you plod along with pedestrian scores on the rest — or do you choose an all-rounder that'll give you better than average scores on a variety of games? But then you'll have to resign yourself to the fact that you may never receive the ultimate accolade of being chosen as one of Hex's Heroes.

Of course, for most of us, our mind's are made up by the weight of our wallets. (*What's a wallet? Ed*). But whichever way you want to choose a joystick, you'll find all the information you need in our comprehensive review of the top ten. Each 'stick; has been thoroughly put through its paces by three great games players who've been hand picked from Hex's Heroes. And then they did the rough stuff on three very different types of game — a platform, *Monty On The Run*, a hand-to-hand combat, *Way Of The Exploding Fist* and a joystick wagger, *Daley Thompson's Supertest*.

So, if you're in the market for a new 'stick, turn the page and get stuck into the full reviews from our team of joyriders.

# IT'S A STICK UP!

**Are you still scraping by using a keyboard on the latest arcade games — and scraping the skin off the ends of your fingers into the bargain? What you need's a 'stick to bring the joy back to your gamesplaying. To help you choose the right one for the job, we asked three YS readers to take a grip of themselves and review the top ten. Peter Shaw joined them and came in for some stick!**



**Yikes — here's the poor YS readers who're in for some stick. There's Martin Covill, a 15-year-old self-confessed Madonna fan (OK you can turn the tap off and take the matchsticks out now) who hails from Canterbury. In the middle is Darren Stephens who's 13 and brought his whole family plus pets to see the YS office. Finally, meet Noel Wallace who lives a 55p bus ride away — so, we made him walk home, and before you tell us, we know that Noel sometimes gets hold of the wrong end of the stick. After all, anyone who needs two hands to pull on a Quickshot and can injure himself on a Joysensor is brilliant enough to replace Troubleshootin' Pete!**

## GIVE 'EM STICK

Talk about too much of a good thing! Even with all the reviews in front of you, it's still tricky choosing the right one for you. One way is to add up all the scores, of course. But if you're really clever, you'll use Chris Somerville's program, *Second Opinion* that appeared in YS 19. We tried it and came up with some very interesting results. Le Stick got into the quarter finals before being toppled and the Quickshot II and Formula II tied until reaching the final. Just take a look at our top five raves after they'd come through the mincer.

**1st Command Control** Wico/CGL  
**Formula II** Kempston

**3rd Quickshot** Spectravideo

**4th Le Stick** Lightwave Leisure

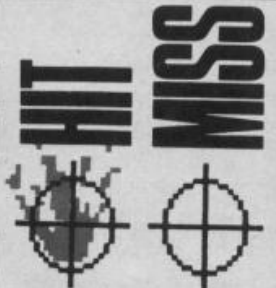
**5th Micro Stick** Datex

## GETTING SOME STICK

Joystick name	Price	Manufacturers name and phone number
Quickshot II	£10.95	Spectravideo Ltd. 01-330 0101
Gunshot I	£7.95	Vulcan Electronics. 01-203 6366
Kraft	From £12.95	
Formula I	£16.95	Kempston Micro. 0234 856633
Formula II	£11.95	
Micro Stick	£	Datex Ltd.
The Champion	£11.99	CGL Ltd. 01-508 5600
Command Control	£27.95	
LeStick	£12.99	Lightwave Leisure. No number available.
Joysensor	£19.95	Consumer Electronics. 061-682 2339

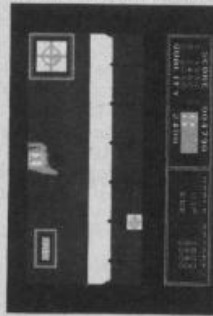


# HIT & MISS STICKS



THE GAMES

## Daley Thompson's Supertest Ocean



This is the ultimate game that'll push any joystick to its limits. If a stick can cope with a day's pounding from *DT* then you can be sure it's tough. And it's not just the shaft — The fire buttons need to be good too — easily accessible and very responsive for that last minute press before taking a penalty or diving from the spring board.

## Monty On The Run Gremlin Graphics



For a platform game like this, a joystick's gonna need pinpoint accuracy so you can get as close to the edge as possible. And as you'll expect to spend a fair few hours meeting Monty's goal, you don't want a grip that'll leave you with sweaty palms and a slippery shaft. And the button had better be big so a thumb can easily be dumped on it for those long jumps.

## Way Of The Exploding Fist Melbourne House



If you're ready to face the karate challenge, your joystick will need the combined powers of both shaft and button. If the shaft won't react quickly enough, or its directional flexibility is dodgy, then a joystick can be considered worthless with a game like this. Plus you'll need a fire button that's easily accessible and very responsive — or it's the chop for you, matey!

## THE 'STICKS

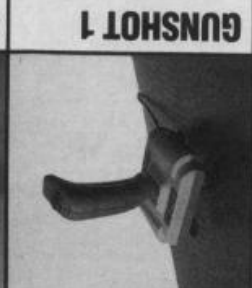


QUICKSHOT II

Martin I like the reactions with this one, an' it's got some of the best positioned fire buttons of all the sticks.  
On the stickometer ..... 8/10  
Darren I don't think this joystick wanted to co-operate — and building up speed was very tricky.  
On the stickometer ..... 2/10  
Noel The length of the shaft tires your arm out too quickly with all that wagging. Not keen on this one at all.  
On the stickometer ..... 6/10

Martin This joystick definitely works well with platform games. It's nice and accurate with a well-designed shaft.  
On the stickometer ..... 9/10  
Darren This is the one I've got at home, and I'm used to the action but that's not to say it's the best there is.  
On the stickometer ..... 9/10  
Noel OK, so it's not bad at coping with platform games, but I still reckon that the shaft is too flimsy.  
On the stickometer ..... 6/10

Martin Hmm, it's really easy to use with *Fist*. The reaction is good and the buttons are just right.  
On the stickometer ..... 8/10  
Darren Can't say I like this combination. Maybe it's me but it sure seems a bit unresponsive.  
On the stickometer ..... 3/10  
Noel It's got a well designed grip and fire button positioning, but the movement feels too limp and flimsy.  
On the stickometer ..... 5/10



GUNSHOT 1

Martin Quite a good design but not as good as most joysticks. I don't think the omission of rapid fire matters.  
On the stickometer ..... 6/10  
Darren Not exactly a special joystick — very standard 8-directional. Still I did get some good scores with it.  
On the stickometer ..... 7/10  
Noel Looks too much like the Quickshot for my liking, and I don't reckon it'll take the strain of *Supertest*.  
On the stickometer ..... 5/10

Martin Quite a good joystick to use on the old platforms — everything seems easy to control.  
On the stickometer ..... 8/10  
Darren It's got an average response and all-in-all it's a pretty average joystick. Nothing to write home about.  
On the stickometer ..... 8/10  
Noel Stem seems too spindly and the grip gets as sweaty as a Bumpy's armpit. Not for me this one.  
On the stickometer ..... 5/10

Martin Nothing special, but the reactions are fast enough to keep up with *Fist* and the fire buttons are OK.  
On the stickometer ..... 9/10  
Darren Well I like it. I found it very co-operative an' I'd be quite happy having one on my Speccy. So there!  
On the stickometer ..... 9/10  
Noel The shaft's too spindly and I reckon it'll break if you sneeze on it. Please take it away!  
On the stickometer ..... 5/10



FORMULA I

Martin A good joystick with a good reaction time. The fire buttons are also well positioned. Where can I find fault?  
On the stickometer ..... 9/10  
Darren It's a good joystick — what else can I say? The colour's a bit garish but that doesn't bother me.  
On the stickometer ..... 9/10  
Noel On dear, this one's deafening me! The reaction's OK, but the size of the shaft made my arm ache.  
On the stickometer ..... 8/10

Martin Very easy to get used to. I like the design and its accuracy overwhelmed me. I'll take one!  
On the stickometer ..... 8/10  
Darren Nice shaft though it could be longer and the reaction is OK. The overall effect is good.  
On the stickometer ..... 5/10  
Noel This one went very well with *Monty*. Its reaction is very fast — not bad at all.  
On the stickometer ..... 7/10

Martin Not so good for use with *Fist*. The size of the shaft seems a disadvantage. Fire buttons are nice though.  
On the stickometer ..... 5/10  
Darren I think it gives you a lot of control. The fire buttons are in exactly the right position and they're BIG!  
On the stickometer ..... 8/10  
Noel Reacts quite well and the size of the fire buttons are a big plus in this joystick's favour.  
On the stickometer ..... 8/10









FORMULA II

Martin Wonderful design job and a really good response to back it up. This has it all apart for big buttons.  
On the stickometer ..... 8/10  
Darren Great stick. Well designed, good response and above all, the fire buttons are in the right place!  
On the stickometer ..... 9/10  
Noel This one's too flimsy. I prefer a good stiff stem, and this joystick definitely hasn't got what it takes.  
On the stickometer ..... 3/10

Martin Very good. The fire buttons react very well. Overall, perfect for this kind of game.  
On the stickometer ..... 9/10  
Darren It's very similar to the Gunshot. I like it, the design's very hi-tech and the reaction's fast.  
On the stickometer ..... 8/10  
Noel It's still too flimsy for my liking but it works well with *Monty* though.  
On the stickometer ..... 6/10

Martin This one seems made for *Fist*, the reaction time is good — control is easy and the fire buttons are fab.  
On the stickometer ..... 8/10  
Darren It's great. The case design is very smart and the reaction time is good too — I'm tempted to get one.  
On the stickometer ..... 10/10  
Noel It's really too flimsy. I know I keep going on about it but I rather hold a piece of raw liver than this joystick.  
On the stickometer ..... 6/10



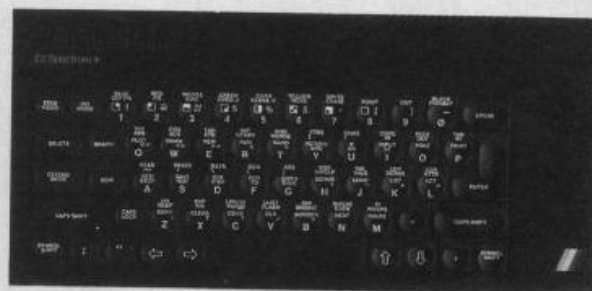
	KRAFT	Martin Don't think much of this one. The design's too fragile and it just ain't good with <i>Supertest</i> . On the stickometer . . . . . 3/10		Martin I don't rate this joystick at all. The response is OK but I find it too fragile for the game. On the stickometer . . . . . 2/10		Martin Reactions are quick enough but the shaft's too small. You won't find me buying one. On the stickometer . . . . . 3/10		Martin Terrible! Very hard to judge where it is and diagonals are nigh-on impossible to achieve. On the stickometer . . . . . 2/10		COMMAND CONTROL	Martin A good stick with an easy-to-handle shaft but the choice of either top or bottom fire button is naff. On the stickometer . . . . . 7/10		Noel Reacts really well. I've just beaten my all-time high score. I might even buy one! On the stickometer . . . . . 9/10
		Darren I reckon it's good. I prefer the small 'sticks as long as the control's still in there. On the stickometer . . . . . 9/10		Darren It's a good joystick. I like this design more than most and the shaft's very comfortable. On the stickometer . . . . . 10/10		Darren Another one of the joysticks has packed up on me this time the directional controls are up the spout! On the stickometer . . . . . 3/10		Darren I think it's quite good but if you get too excited then you might lose track of where you are. On the stickometer . . . . . 8/10			Darren The buttons are good although I'd have preferred to use both. Works well with <i>Fist</i> though. On the stickometer . . . . . 9/10		Darren Seems to work better with <i>Fist</i> than with any of the other games. Quite a good score with this one. On the stickometer . . . . . 8/10
		Noel This joystick is just right for <i>Supertest</i> . A short shaft means less work for me and it's tough enough. On the stickometer . . . . . 8/10		Noel Oh, it's horrible — <i>Monty</i> , just doesn't work with it. I'd get more response from a garden gnome. On the stickometer . . . . . 4/10		Noel It's quite good. It's got fast action and a good grip design. I like it even if they don't. On the stickometer . . . . . 8/10		Noel Very slow reacting — I reckon it's a miss for <i>Fist</i> . ( <i>More, Adrian Mole poetry huh? Ed</i> ) On the stickometer . . . . . 4/10			Noel You can really kick the proverbial out of the other player with this stick. Very responsive! On the stickometer . . . . . 9/10		Martin It's not really very practical. As joysticks go, this one's more of a novelty than anything. On the stickometer . . . . . 2/10
		Martin Not much cop for this sort of game. The rotation of the shaft makes it pretty awkward to use. On the stickometer . . . . . 5/10		Martin It's too stiff, very slow and unresponsive. But the design is quite good so I'll be gentle. On the stickometer . . . . . 5/10		Martin It's very pretty but I don't think much of the overall effect. The controls seem a bit dodgy. On the stickometer . . . . . 4/10		Martin A good stick with an easy-to-handle shaft but the choice of either top or bottom fire button is naff. On the stickometer . . . . . 7/10			Noel The joystick is good although I'd have preferred to use both. Works well with <i>Fist</i> though. On the stickometer . . . . . 9/10		Martin It's not really very practical. As joysticks go, this one's more of a novelty than anything. On the stickometer . . . . . 2/10
		Darren Don't really like this one — the fire button is much too stiff to be of any use in this game. On the stickometer . . . . . 7/10		Darren Better in this game, possibly because everything doesn't go so fast. Still not impressed. On the stickometer . . . . . 7/10		Darren It's a smooth joystick, but I don't reckon it works too well with this game. On the stickometer . . . . . 6/10		Noel Very slow reacting — I reckon it's a miss for <i>Fist</i> . ( <i>More, Adrian Mole poetry huh? Ed</i> ) On the stickometer . . . . . 4/10			Noel You can really kick the proverbial out of the other player with this stick. Very responsive! On the stickometer . . . . . 9/10		Martin It's not really very practical. As joysticks go, this one's more of a novelty than anything. On the stickometer . . . . . 2/10
	Noel Well it's very nice but it tires your arm out after only a few waggles of the shaft. On the stickometer . . . . . 7/10		Noel It's quite good. It's got fast action and a good grip design. I like it even if they don't. On the stickometer . . . . . 8/10		Noel It's the best designed joystick of the pack and to top that the reaction speed is fast too. On the stickometer . . . . . 8/10		Noel Very slow reacting — I reckon it's a miss for <i>Fist</i> . ( <i>More, Adrian Mole poetry huh? Ed</i> ) On the stickometer . . . . . 4/10		Noel The joystick is good although I'd have preferred to use both. Works well with <i>Fist</i> though. On the stickometer . . . . . 9/10		Martin It's not really very practical. As joysticks go, this one's more of a novelty than anything. On the stickometer . . . . . 2/10		
	Martin It's got nice fire buttons and a good reaction but it doesn't seem to work with <i>Supertest</i> too well. On the stickometer . . . . . 5/10		Martin Even worse than with <i>Supertest</i> . The movement control is absolutely tosh. Double ugh! On the stickometer . . . . . 1/10		Martin It's very pretty but I don't think much of the overall effect. The controls seem a bit dodgy. On the stickometer . . . . . 4/10		Martin A good stick with an easy-to-handle shaft but the choice of either top or bottom fire button is naff. On the stickometer . . . . . 7/10		Noel The joystick is good although I'd have preferred to use both. Works well with <i>Fist</i> though. On the stickometer . . . . . 9/10		Martin It's not really very practical. As joysticks go, this one's more of a novelty than anything. On the stickometer . . . . . 2/10		
	Darren Well it's easy to grip and easy to fire. I quite like the stylish design too. On the stickometer . . . . . 7/10		Darren It's not quite right for platforms somehow, but it was great fun trying! On the stickometer . . . . . 6/10		Darren It's a smooth joystick, but I don't reckon it works too well with this game. On the stickometer . . . . . 6/10		Martin A good stick with an easy-to-handle shaft but the choice of either top or bottom fire button is naff. On the stickometer . . . . . 7/10		Noel The joystick is good although I'd have preferred to use both. Works well with <i>Fist</i> though. On the stickometer . . . . . 9/10		Martin It's not really very practical. As joysticks go, this one's more of a novelty than anything. On the stickometer . . . . . 2/10		
	Noel It's got very quick reactions and an excellent grip. I'll go for this one any day. On the stickometer . . . . . 8/10		Noel It's useless with platforms as you can't change direction accurately enough. On the stickometer . . . . . 4/10		Noel It's the best designed joystick of the pack and to top that the reaction speed is fast too. On the stickometer . . . . . 8/10		Martin A good stick with an easy-to-handle shaft but the choice of either top or bottom fire button is naff. On the stickometer . . . . . 7/10		Noel The joystick is good although I'd have preferred to use both. Works well with <i>Fist</i> though. On the stickometer . . . . . 9/10		Martin It's not really very practical. As joysticks go, this one's more of a novelty than anything. On the stickometer . . . . . 2/10		
	Martin Oh it's so easy to win on <i>Supertest</i> — you only have to shake the joystick vigorously! On the stickometer . . . . . 10/10		Noel It's useless with platforms as you can't change direction accurately enough. On the stickometer . . . . . 4/10		Martin It's very pretty but I don't think much of the overall effect. The controls seem a bit dodgy. On the stickometer . . . . . 4/10		Martin A good stick with an easy-to-handle shaft but the choice of either top or bottom fire button is naff. On the stickometer . . . . . 7/10		Noel The joystick is good although I'd have preferred to use both. Works well with <i>Fist</i> though. On the stickometer . . . . . 9/10		Martin It's not really very practical. As joysticks go, this one's more of a novelty than anything. On the stickometer . . . . . 2/10		
	Darren Excellent joystick to use with <i>Supertest</i> — I've got my best score ever on nearly all the games. On the stickometer . . . . . 10/10		Noel It's useless with platforms as you can't change direction accurately enough. On the stickometer . . . . . 4/10		Darren It's a smooth joystick, but I don't reckon it works too well with this game. On the stickometer . . . . . 6/10		Martin A good stick with an easy-to-handle shaft but the choice of either top or bottom fire button is naff. On the stickometer . . . . . 7/10		Noel The joystick is good although I'd have preferred to use both. Works well with <i>Fist</i> though. On the stickometer . . . . . 9/10		Martin It's not really very practical. As joysticks go, this one's more of a novelty than anything. On the stickometer . . . . . 2/10		
	Noel Ideal for this game, you only need to wiggle the joystick — it's that simple! On the stickometer . . . . . 10/10		Noel It's useless with platforms as you can't change direction accurately enough. On the stickometer . . . . . 4/10		Darren It's a smooth joystick, but I don't reckon it works too well with this game. On the stickometer . . . . . 6/10		Martin A good stick with an easy-to-handle shaft but the choice of either top or bottom fire button is naff. On the stickometer . . . . . 7/10		Noel The joystick is good although I'd have preferred to use both. Works well with <i>Fist</i> though. On the stickometer . . . . . 9/10		Martin It's not really very practical. As joysticks go, this one's more of a novelty than anything. On the stickometer . . . . . 2/10		
	Martin Well it's a good joystick and it's got a decent sized base to grab hold of. Bigger is better, eh? On the stickometer . . . . . 8/10		Noel It's useless with platforms as you can't change direction accurately enough. On the stickometer . . . . . 4/10		Darren It's a smooth joystick, but I don't reckon it works too well with this game. On the stickometer . . . . . 6/10		Martin A good stick with an easy-to-handle shaft but the choice of either top or bottom fire button is naff. On the stickometer . . . . . 7/10		Noel The joystick is good although I'd have preferred to use both. Works well with <i>Fist</i> though. On the stickometer . . . . . 9/10		Martin It's not really very practical. As joysticks go, this one's more of a novelty than anything. On the stickometer . . . . . 2/10		
	Darren I don't think the vigorous action of <i>Supertest</i> is going to do this one any favours! On the stickometer . . . . . 5/10		Noel It's useless with platforms as you can't change direction accurately enough. On the stickometer . . . . . 4/10		Darren It's a smooth joystick, but I don't reckon it works too well with this game. On the stickometer . . . . . 6/10		Martin A good stick with an easy-to-handle shaft but the choice of either top or bottom fire button is naff. On the stickometer . . . . . 7/10		Noel The joystick is good although I'd have preferred to use both. Works well with <i>Fist</i> though. On the stickometer . . . . . 9/10		Martin It's not really very practical. As joysticks go, this one's more of a novelty than anything. On the stickometer . . . . . 2/10		
	Noel Brilliant joystick to use with <i>Supertest</i> — very sturdy and reactions are fast. On the stickometer . . . . . 9/10		Noel It's useless with platforms as you can't change direction accurately enough. On the stickometer . . . . . 4/10		Darren It's a smooth joystick, but I don't reckon it works too well with this game. On the stickometer . . . . . 6/10		Martin A good stick with an easy-to-handle shaft but the choice of either top or bottom fire button is naff. On the stickometer . . . . . 7/10		Noel The joystick is good although I'd have preferred to use both. Works well with <i>Fist</i> though. On the stickometer . . . . . 9/10		Martin It's not really very practical. As joysticks go, this one's more of a novelty than anything. On the stickometer . . . . . 2/10		
	Martin Ugh, it's terrible. Too much like using a ZX81 keyboard. There's no real control at all. On the stickometer . . . . . 1/10		Noel It's useless with platforms as you can't change direction accurately enough. On the stickometer . . . . . 4/10		Darren It's a smooth joystick, but I don't reckon it works too well with this game. On the stickometer . . . . . 6/10		Martin A good stick with an easy-to-handle shaft but the choice of either top or bottom fire button is naff. On the stickometer . . . . . 7/10		Noel The joystick is good although I'd have preferred to use both. Works well with <i>Fist</i> though. On the stickometer . . . . . 9/10		Martin It's not really very practical. As joysticks go, this one's more of a novelty than anything. On the stickometer . . . . . 2/10		
	Darren It's really useless for this game — how can you do left/right quickly on a membrane? On the stickometer . . . . . 4/10		Noel It's useless with platforms as you can't change direction accurately enough. On the stickometer . . . . . 4/10		Darren It's a smooth joystick, but I don't reckon it works too well with this game. On the stickometer . . . . . 6/10		Martin A good stick with an easy-to-handle shaft but the choice of either top or bottom fire button is naff. On the stickometer . . . . . 7/10		Noel The joystick is good although I'd have preferred to use both. Works well with <i>Fist</i> though. On the stickometer . . . . . 9/10		Martin It's not really very practical. As joysticks go, this one's more of a novelty than anything. On the stickometer . . . . . 2/10		
	Noel It reacted well but took the skin off the end of me finger while rubbing. On the stickometer . . . . . 6/10		Noel It's useless with platforms as you can't change direction accurately enough. On the stickometer . . . . . 4/10		Darren It's a smooth joystick, but I don't reckon it works too well with this game. On the stickometer . . . . . 6/10		Martin A good stick with an easy-to-handle shaft but the choice of either top or bottom fire button is naff. On the stickometer . . . . . 7/10		Noel The joystick is good although I'd have preferred to use both. Works well with <i>Fist</i> though. On the stickometer . . . . . 9/10		Martin It's not really very practical. As joysticks go, this one's more of a novelty than anything. On the stickometer . . . . . 2/10		
	JOYSENSOR		JOYSENSOR		JOYSENSOR		JOYSENSOR		JOYSENSOR		JOYSENSOR		JOYSENSOR



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Transported to the 21st century, Peter Shaw braved the icy wastelands of Carpenters Road, Stratford. There he stole the storyboard for CRL's new megagame, Blade Runner.

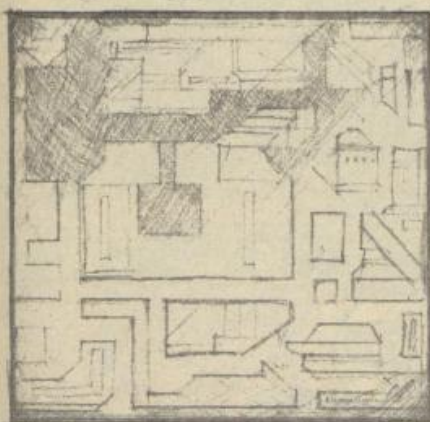
# BLADE RUNNER

SCOOP  
PREVIEW

Los Angeles, Sector 5. The match sputtered to life, briefly illuminating the interior of my Spinner. I drew deeply on the Marlboro. This was gonna be tough — tougher than the Fats Cox Caper. Outside the rain slunk down. A night to rust any replicoids circuits. If only it was that easy to air out those more than human robots... Somewhere in the dark four droids were out to eliminate their creators, the cyberneers. It was my job to 'retire' them before the deed was done. It would be a dirty business. But then, for me, Deckard, killer, cop and bladerunner, dirt was my business. I was a bin man.



It'd be a messy mission. I was all ready to cash my chips for an early retirement when the Reps alarm sounded. And now they'd called me up for just one hit more before I could draw my pension. If I wasn't successful with this then they wouldn't let me hang up my retros.



Here's the main on-screen view of your Spinner's control panel. You'll find here your own location and that of the reps and cyberneers.

There's nine sectors to this hell hole of a town. Of all the sectors, of all the cities in all the cosmos the Reps have to hang out there. The monitor in my Spinner will locate them, but only if I'm in their sector... I gotta go... there's one now...

Down on the sidewalks you have to avoid the oncoming Spinners and pedestrians. Over the years as cop and killer there's not a lot you don't pick up on the streets. Savvy? Your best bet is to run along the gutter. They don't teach green horns that at the Academy. The Reps will usually run into your firing line through pure ignorance.

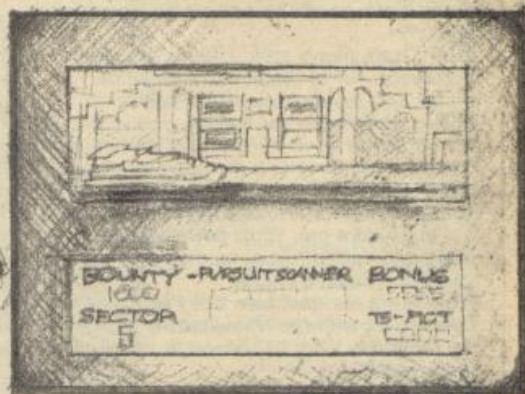
The city streets are full of danger. Avoid other Spinners and being trampled by the confused crowds.



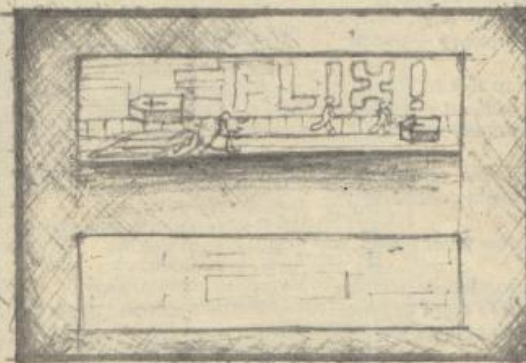
And another one bites the dust. The Reps go down on Nexus 1 faster than Bacall does on Bogart in The Big Sleep. But to reach my retirement salary, I have to pass Nexus 6. Blade Running is really bounty hunting with a fancy name. I give Replidroids a taste of paradise.



Before landing, your Spinner gently hovers down to street level. Now run along and locate your targets.

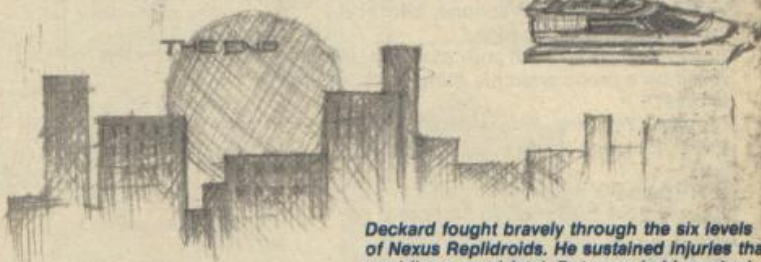


I pulled up the Spinner here. On this level the Reps are pretty dumb... pretty, but dumb... like the blonde I met down at Rick's place... heh, now where's my wallet? These Reps get very confused at corners — so catching up with one is as easy as taking candy from a baby.



The Nexus 1 Replidroids are really slow — so slow it takes fifty of 'em to change a light globe — you don't need me to tell you why. On level 4 they start firing back. She was good, real good — but then you don't need me to tell you why. On top level, Nexus 6, you've got to be the best of Bladerunners to get any of them.

All the info a Bladerunner needs appears at the bottom of the screen — most importantly the bounty that he'll earn on a kill.



Deckard fought bravely through the six levels of Nexus Replidroids. He sustained injuries that could've proved fatal. But once he'd reached that retirement figure he slipped aboard his Spinner to level the city for the last time. Ex-cop, ex-killer, ex-bladerunner... until the next time.

Screenplay  
Research, Best Boy and Grip  
Camera  
Continuity  
Gaffer

Rick Robson  
Pete Shaw  
Martin Dixon  
Teresa Maughan  
The Ed



# THE YOUNG ONES

**Hey guys! This is really heavy man — I dreamt I was put into a computer game. Oh wow, technofear! YS girlie Teresa Maughan gets into the groove, man!**

**Rick** "Hi there kids. It's me Uncle Rick just itching to tell you about The Young Ones game that's gonna be out on the Spectrum soon!"

**Neil** "Yeah, heavy man. Seems, like, we've gotta race out of the house with all our things and the first one out wins."

**Mike** "Steer clear you guys — you've got the choice of controlling any of us but take it from me Mike's the coolest!"

**Vyvyan** "Shut up pizza-face! Those complete-and-utter-bastards are trying to get out before me. You'd better get me out first or I'll cut both your legs off and then you'd be 'armless. Ha Ha!"

**Neil** "It's a real bummer 'cos I've been dumped on with the wheelbarrow to put my things in. What happened to peace and unity, man?"

**Rick** "That's 'cos you're a stupid hippie-pants and you smell. Ha Ha Ha eh you nerdies?"

**Mike** "Cool it guys, just cool it!"

**Vyvyan** "Well I'd just like to say if anybody moves out of this house before me I'll kill him. Yes and then I'll mash up his brains and feed them to SPG!"

**Rick** "Crikey I think I'm going to be sick!"

**Vyvyan** "Shut-up you girly-face pervert!"

**Neil** "Oh wow! We can talk to each other, like, with speech bubbles. Heavy — this is communication man."

**Rick** "Why would I want to talk to you farty breath? Ha! This is brilliant — I can open nearly everything and see what's inside. Right mates?"

**Mike** "Ugh! Like a pair of your soiled underpants. The idea is to stay cool and grab what you need."

**Vyvyan** "Scumbags! I know what I need, a drink!"

**Mike** "Mike the cool person would just like to say we've got to complete eight or nine tasks in order to get all the objects we need."

**Neil** "Wow there's everything in this game, my lentils, bogies, a telephone, kitty and yeah Rick's anarchy badge."

**Rick** "I can try and get your stuff too, that would be a pretty anarchic thing to do eh nerdies?"

**Vyvyan** "You girly. You wouldn't know if your belongings came and farted in your face."

**Neil** "Yeah, he would. This game is full of clues and the poster gives hints too. Wow!"

**Mike** "But you've gotta be cool to spot them. I need the loud tie."

**Rick** "And I need the girly dress."

**Neil** "Heavy, heavy, heavy."

**Vyvyan** "Well I would like the bomb to kill everyone with. Brilliant!"

**Rick** "Nob-face! What did you set it off for?...aaaaaarrrrggggghhh!"



Wow! If this is what the game looks like I'll eat my festering socks. Yeah, it's amaaazing. It's a total freakout with plenty of heavy vibes. Far out, like me. Wow I feel like I'm floating above my body looking down on what I'm doing... really transcendent!!



Each screen is split into two with one room on the top and one on the bottom. Here's Mike's room and the lounge. Neil is wandering around looking for objects to put into his wheelbarrow. The speech bubble tells you what he's thinking. These will provide clues throughout the game.

Wow! This is Narnia, a truly beautiful place — the only way to get in here is the wardrobe. You'll find all sorts of interesting objects like the Ankh for example.

**WARNING!**

FOR ALL YOU NAMBY PAMBIES WHO MAY FIND THIS PREVIEW OFFENSIVE SWITCH OFF YOUR MAGAZINE NOW!

It's totally anarchic in Rick's bedroom. There's a piggy bank, guitar and girly dress amongst other things. The dress'll come in handy if you're a transvestite — crikey!

Fantastic, a record player. If you don't fancy the musical accompaniment just turn it off. Rick will keep turning it on again so you'll just have to smash it to pieces. Serve that girly right!

Rick's bed — pooh! If you've got a strong stomach try opening it. Bet you wish you hadn't now — it's a pair of filthy underpants — sick!

These guys are so mad they don't care what they do! They've got an animal — SPG even though the lease says 'no pets'. Maybe he'll come in handy for one of the tenants.

● Switch on the TV for a clue as to what to do. The adverts are often more interesting than the programmes and give you hints.

Life is for living 100 percent  
Feed your cat don't pay the rent  
He will love our frozen peas  
It'll open the sluices and kill the fleas.  
This ad gives you a bird's eye view on what to do with the peas.

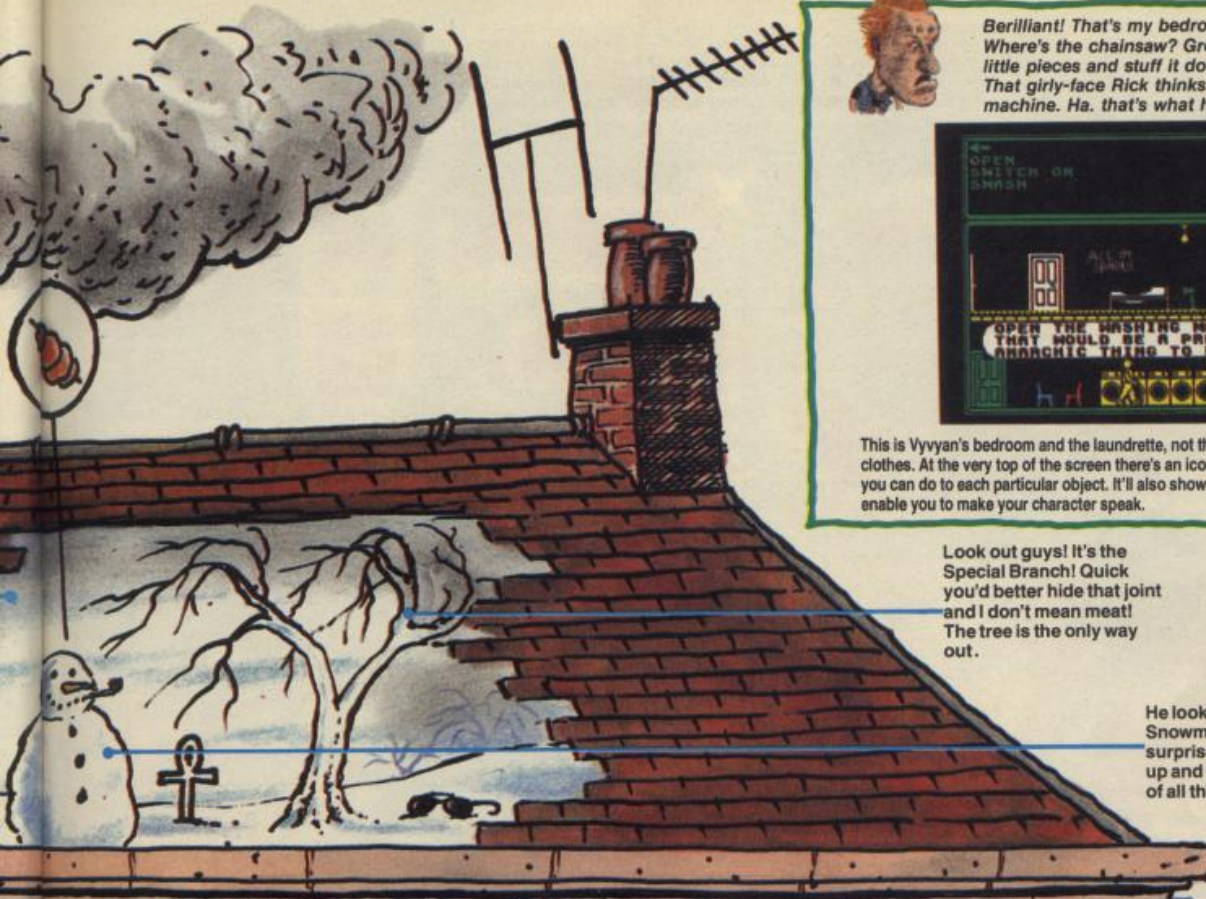
Each character needs the right container to carry all his belongings out of the house. Vyvyan uses the bin liner for his junk. Maybe he could get rid of Rick, Mike and Neil too!

This room certainly looks pretty lived in — more like died in really. Oooh a sofa, lamp, walkman and television.

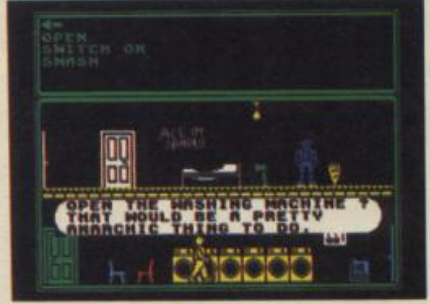
Hah! The video recorder. Brilliant — now Vyvyan can watch video nasties all day long. Really, gruesome, sick, bloody ones — yum.

NICK DAVIES





Berilliant! That's my bedroom... and that's my bed. Where's the chainsaw? Great! I can smash it up into little pieces and stuff it down hippy-pant's throat. That girly-face Rick thinks he can open the washing machine. Ha. that's what he thinks!



This is Vyvyan's bedroom and the laundrette, not that The Young Ones wash their clothes. At the very top of the screen there's an icon box that'll show you what you can do to each particular object. It'll also show you where you can walk to and enable you to make your character speak.

Look out guys! It's the Special Branch! Quick you'd better hide that joint and I don't mean meat! The tree is the only way out.

He looks really cool! Mr Snowman is full of surprises — just open him up and you'll find a kebab of all things. Crazy!

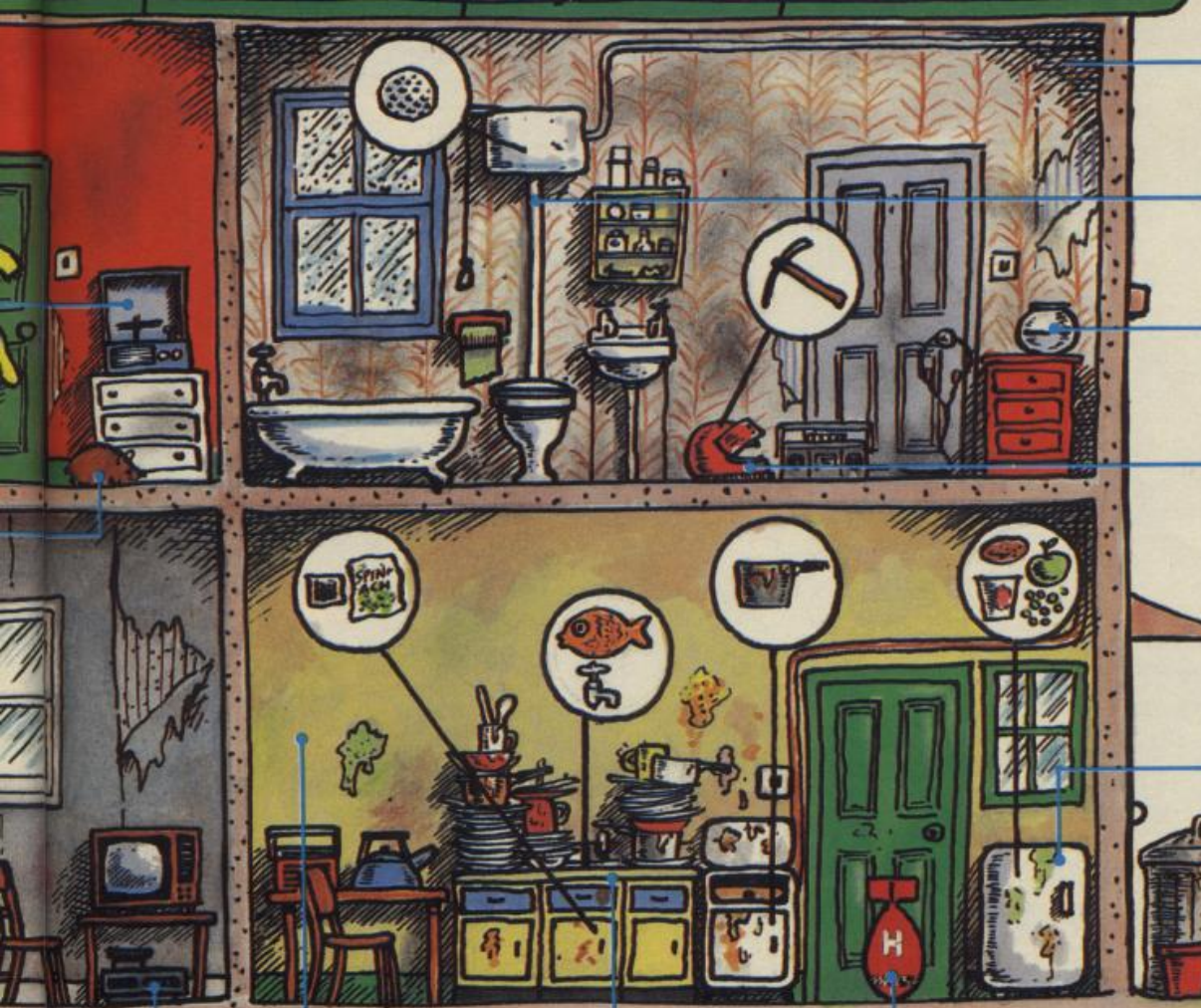
The smallest room in the house, and the dirtiest, is the bathroom — fully fitted too! You'll find all manner of foreign bodies in here. There are 16 different rooms in the game.

Ugh! It's the bog! Open it and you'll find a very peculiar sight — a golf ball. Wacky!

Something fishy's going on here! Or maybe it isn't? There's a fish bowl but no goldfish — that can be found in a most unusual place. There's also a pair of headphones, a cassette and a toilet roll.

Heavy! A crash helmet — in the bathroom? Vyvyan needs this in order to complete one of his tasks. Open it and you'll find a pickaxe, what else?

Cor it's freezing! Open the fridge and you'll find a yoghurt, vegeburger, apple and some frozen peas. The peas'll come in very useful — there's a clue in the TV commercial.



Hey, this is the room where Neil sows the seed and produces all sorts of lentil delights. You'll find a cooker, sink, fridge and cupboards — all mod cons! But just look at that washing up!

What next? You can even open the sink — heavy! Blimey, there's a tap and a goldfish inside. Berilliant!

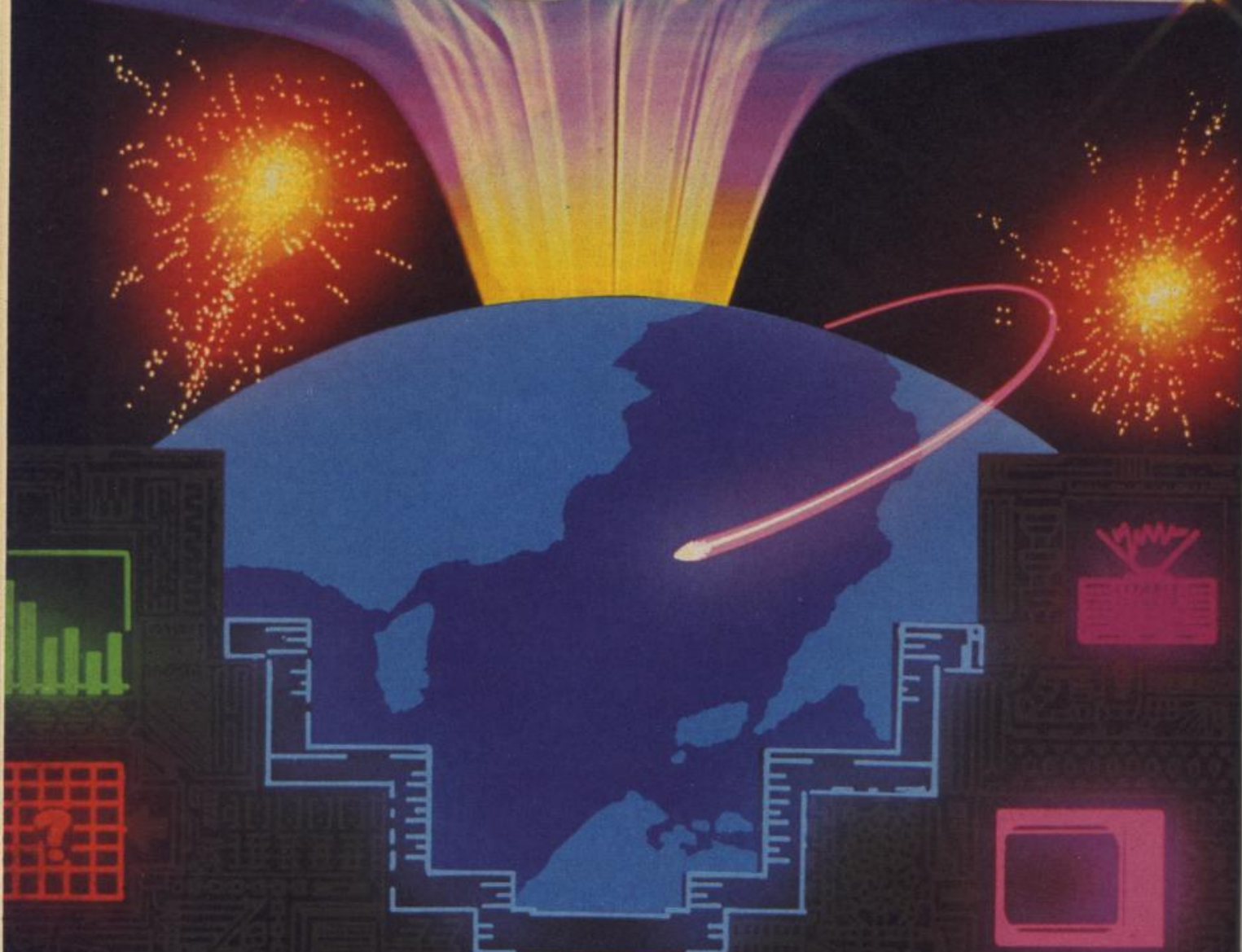
Crikey it's a bomb! Probably one of Vyvyans — you'd better watch your step! There's a radio in the kitchen too — this might come in handy.

FAX BOX		
Game	.....	The Young Ones
Publisher	.....	Orpheus
Price	.....	£7.95



# Program Techniques

# XCEL



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**DEFY THE LEGEND!**



PROGRAM

# TIME TRAVEL



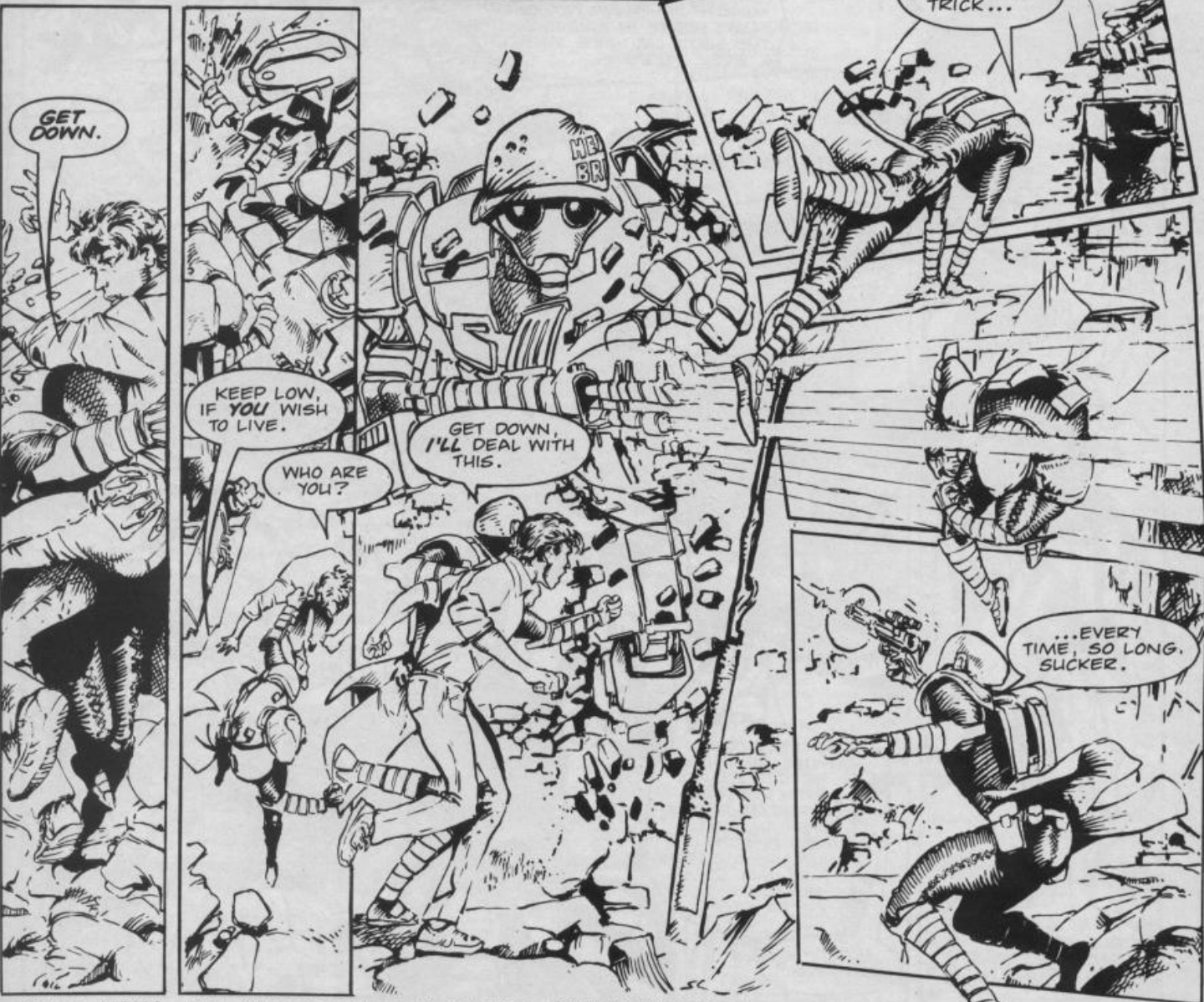
"DAVE ROGAN LIVED IN LONDON 1986, HE WROTE A TIME TRAVEL GAME PROGRAM WHICH TURNED OUT TO WORK MUCH BETTER THAN HE EXPECTED. IT SENT HIM TO THE LONDON OF 2086."



○ LOCATE RANGE - VECTOR 2  
○ ARM... LASER.  
○ TERMINATE.

WHERE  
THE HELL  
AM I?

○ SPECIMIN. ORGANIC #. 6 - NON ESSENTIAL



GET  
DOWN.

KEEP LOW,  
IF YOU WISH  
TO LIVE.

WHO ARE  
YOU?

GET DOWN,  
I'LL DEAL WITH  
THIS.

THEY FALL  
FOR THIS OLD  
TRICK...

...EVERY  
TIME, SO LONG,  
SUCKER.

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SCRIPT: MAMO, ART: WILLIAM SIMPSON, LETTERS: ANNIE HALFACREE.





I DON'T BELIEVE IT, I'VE BEEN RESCUED BY A WOMAN.

TEN OUT OF TEN FOR OBSERVATION, SHORTY.



WHO ARE YOU? WHERE IS THIS PLACE? WHAT THE HELL IS GOING ON AROUND HERE?

TAKE IT EASY, SHORTY, ONE QUESTION AT A TIME OKAY.



IN ANSWER TO THE QUESTION THAT YOU SHOULD HAVE ASKED, YES, I'M OKAY AND THERE'S NO NEED TO THANK ME FOR SAVING YOUR LIFE.

I'M SORRY, IT'S JUST THAT I'M SO CONFUSED, ONE MINUTE I'M IN MY WORKSHOP IN MY HOUSE IN EALING AND THE NEXT I'M HERE, WHEREVER HERE IS.



DO YOU HAVE A NAME?

OH YEAH, I'M SORRY, MY NAME'S ROGAN, DAVE ROGAN, AND YOU?

MINE IS LETA, BUT COME WE CAN'T STAY HERE IT'S NOT SAFE.



WAIT, I MUST GET THE COMPUTER OR I CAN'T GET HOME AGAIN.

OKAY, BUT WE MUST BE QUICK BEFORE WE ARE SPOTTED BY ANY OF THE MACHINES, EVEN THOUGH THEY DON'T HUNT HUMANS ANYMORE, THEY WILL STILL KILL US IF WE'RE SEEN.

HUNT HUMANS?



I WILL EXPLAIN EVERYTHING WHEN WE ARE SAFE.



OH NO IT'S SMASHED. THAT MEANS I'M STUCK HERE WITH NO WAY TO GET HOME.

TO BE CONTINUED.







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# TASK

## FORCE

**Are your routines just a little too routine? Are your listings feeling listless? Task Force, the programmer's noticeboard, can aid your recovery.**

One of the great things about YS readers is that you can never refuse a challenge! Last month I asked you to show off your great programming skills and wow!

First past the post was **Renato Campos** from Portugal. He's sent in a snippet that'll blow the minds of all those brainboxes who say you can't have recursive functions in Basic — that is, a function that'll calculate the factorial of any number. And what's a factorial? Well, type it in and work it out for yourself! It's only one line.

```
10 DEF FN f(n)=n*VAL ((
  "1" AND n<1)+("FN f(n-1)
  " AND n>1))+n
```

And you'll be chuffed to know that this is one in the eye for \*@! owners, 'cos their Basic can't do that! Renato also asks why DEF FN f(n)=n\*((n=1)+VAL ("FN f(n-1) AND n>1)) won't work. Well I don't know? Have you any ideas? Oh yes, and one last question from Renato — has anybody ever found a use for VAL\$?

**Next comes Paul Brain** in search of a favour — does anybody have a short mc routine to do graphics dumps via Interface 1 to an Epson-type printer. So, all you other brains out there, what about it? To give you all a start, here's a short program from **Philip Barton** of Camberley. It'll do a hi-res screen dump to a Brother HR5 printer from Basic! I guess it'll work just as well

with an Epson or Epson-compatible printer, though you find it a little bit on the slow side — so come on all you machine code freaks...

```
10 OPEN J3:"b"
20 LET op=22496: LET op
p=20480
30 LET nop=20448: LET n
opp=18432
40 LET lop=18400: LET l
opp=16384
50 FOR a=0 TO 31
60 LPRINT CHR$ 27;"A";C
HR$ B;CHR$ 10
70 LPRINT CHR$ 27;"K";C
HR$ 192;CHR$ 0
80 LET p=op: LET pp=opp
90 FOR b=0 TO 7
100 FOR c=p TO pp STEP
-256
110 LET n=PEEK c
120 LPRINT CHR$ n
130 NEXT c
140 LET p=p-32: LET pp=p
p-32
150 NEXT b
160 LET np=nop: LET npp=
nopp
170 FOR b=0 TO 7
180 FOR c=np TO npp STEP
-256
190 LET n=PEEK c
200 LPRINT CHR$ n
210 NEXT c
220 LET np=np-32: LET np
p=np-32
230 NEXT b
240 LET lp=lop: LET lpp=
lopp
250 FOR b=0 TO 7
260 FOR c=p TO pp STEP
-256
270 LET n=PEEK c
280 LPRINT CHR$ n
290 NEXT c
300 LET p=p-32: LET pp=p
p-32
310 NEXT b
320 LET op=op+1: LET opp
=opp+1
330 LET nop=nop+1: LET n
opp=nopp+1
340 LET lop=lop+1: LET l
opp=lopp+1
350 NEXT a
360 LPRINT CHR$ 13;CHR$
10
370 CLOSE J3
380 STOP
```

Right, hands up all those who've noticed that the above program can be shortened a bit by using a GOSUB? You haven't? Well look at lines 90 to 150; 170 to 230 and 250 to 310. The only problem is that c is initialised to different variables. If Philip had recast his program only slightly, you could have saved yourself a bit of typing. Try this.

```
80 LET p=op: LET pp=opp
100 GO SUB 1000
110 LET p=nop: LET pp=no
pp
120 GO SUB 1000
130 LET p=lop: LET pp=lo
pp
140 GO SUB 1000
150 LET op=op+1: LET opp
=opp+1
160 REM etc...
1000 FOR b=0 TO 7
1010 REM same as lines 90
-150
1060 NEXT b
1070 RETURN
```

**Next comes a** couple of readers with the same problem — they both want to save the whole screen. **David Crawford** from Edinburgh had a great idea

for a way to save the whole program as mc with the screen. So here goes:

- 1 prepare screen and save as SCREEN\$
- 2 load Basic prog. and add a line 9999 SAVE "name"
- 3 load SCREEN\$ then GOTO 9999.

The only trouble is, it won't work if you have the Interface 1 connected or if the program's longer than about 1100 bytes! Why? Well 16384+8500 = 24884. And Basic starts at 23755 and that's without Interface 1. It'll also get into a tangle with Interface 1 connected, since it creates special system variables, and they would confuse an unexpanded Spectrum. Still, if the Speccy were expanded, you wouldn't need it anyway, would you?

**Jim Grimwood** has a similar idea. He wants to save the screen (including the bottom two lines) without getting into a tangle with the "Press any Key" message. He's written some machine code to do it.

If we combine the two ideas, we can get a piece of code that'll save a whole program to tape as machine code, including the whole of the screen without overriding the bottom two lines.

```
0010 ORG 40000
0020 START LD HL,LEN-START
0030 ADD HL,BC
0040 EX HL,DE
0050 LD HL,SPARE
0060 LD (HL),E
0070 INC HL
0080 LD (HL),D
0090 LD HL,HDR-START
0100 ADD HL,BC
0110 PUSH HL
0120 POP IX
0130 XOR A
0140 LD DE,(ELINE)
0150 LD HL,16384
0160 EX HL,DE
0170 AND A
0180 SBC HL,DE
0190 EX HL,DE
0200 LD HL,(SPARE)
0210 LD (HL),E
0220 INC HL
0230 LD (HL),D
0240 LD DE,17
0250 CALL SAVE2
0260 LD B,50
0270 WAIT
0280 DJNZ WAIT
0290 LD IX,16384
0300 LD A,255
0310 CALL SAVE2
0320 RET
0330 HDR DEFB 3
0340 DEFS 10
0350 LEN DEFW 00
0360 DEFW 16384
0370 DEFW 0
0380 ELINE EQU 23641
0390 SAVE2 EQU 1218
0400 SPARE EQU 23726
0410 END
```

I've changed Jim's program slightly so that it's totally relocatable. And now it'll save the whole Basic program including the variables. To use the machine code, type in:

```
9000 INPUT "what name?";
#
9010 LET mc=(code location
n)+58
9020 LET len=LEN #; IF 1
>len OR len>10 THEN PRIN
T J0;AT 1,0; FLASH 1;"Inv
alid filename - No save";
PAUSE 0; GO TO 9000
9030 FOR a=1 TO len: POKE
mc+a,CODE #$(a); NEXT a
9040 FOR a=a TO 10: POKE
mc+a,32: NEXT a
9050 LOAD ""SCREEN$: PAU
SE 0
9060 RANDOMIZE USR (code
location)
9070 GO TO start of progr
am
```

As Jim says in his letter, we hope your minds are suitably boggled! If you're wondering why you save the program as if it were code. It's simple — it can't be Merged and that makes it just a bit harder to hack into.

Before you use it, position a tape with the required screen and when the border starts flashing for a Load, start the tape. Once it's loaded, the program will wait for a keypress, *without a prompt*, and as soon as a keypress is given, Save the lot — so be sure you've started the tape in Record mode before pressing a key.

**Peter Craik** from St Andrews sent in a crafty little snippet but I found an interesting little bug in it. See if you can find it and then send me in your corrections.

```
10 LET ad=60160
20 LET a$="The fastest
BASIC scroll around!"
30 FOR b=1 TO LEN a$: L
ET c=ad+(b*16)=16: LET a
CODE a$(b): LET f=15616+(
a$*8)-256: FOR d=1 TO B: P
OKE d+c-1,PEEK (f+d-1): N
EXT d
40 NEXT b
50 POKE 23607,(ad/256)-
1
60 LET b$=""; LET c$=""
70 FOR a=32 TO 32+(LEN
a$*2)-1 STEP 2
80 LET b$=b$+CHR$ a: LE
T c$=c$+CHR$ (a+1): NEXT
a
90 LET c$=c$-(TO 32)
100 FOR a=20 TO 0 STEP
-1: REM 20=start position,
0= finish
110 FOR b=1 TO B
120 POKE 23606,b
130 PRINT AT a,0;c$;AT a
+1,0;b$
140 NEXT b: NEXT a
150 POKE 23606,0: POKE 2
3607,60
```

Hmmm, a very nifty way of doing the impossible in Basic!

Now, let's see if any of you can improve on this month's routines — or add some of your own. By the way, some of the programs are still a bit long, so try and keep 'em short and interesting.

Send your programs to Ian Hoare, Task Force, Your Sinclair, 14 Rathbone Place, London W1P 1DE.



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# BLADERUNNER COMPO

Are you a better bladerunner than Harrison Ford? You'll need a steady hand and a sharp eye if you're to spot all the robots in the picture and win one of the great prizes on offer from CRL.



I pulled up my Spinner at the diner. The name's Shovel. Sam Shovel. Private dick and amateur bladerunner. I took a draught of root beer. All night now I'd wandered the city sidewalks in search of a Master Set. Then I could build my own robot, complete with four motors. Worth a hundred bucks of anybody's money. But I'd had no luck — I'd just have to win it in the YS compo based on CRL's new game *Bladerunner*. I might even walk off with one of the thirty copies of the game on offer to the runners-up.

All I had to do was be a bladerunner — right up my street. I'd just take a look at the picture and identify how many different robots are tucked away in it — not just the whole ones 'cos they're a piece of cake but also the sneaky devils that try to disguise themselves. You can have a go too — put a ring round each robot you spot then clip the page and send it to Bladerunner Compo, *Your Sinclair*, 14 Rathbone Place, London W1P 1DE. There are plenty of prizes for everyone — just so long as I take off with the main one, mind. I'll show that Harrison Ford!

Now was that a replidroid mugging that little old lady? I took another bite of pastrami. Hell fire, a bladerunner's never off duty, I raised my mega-magnum. "Make my day droid." "Aren't you in the wrong film?" it squealed. But I still blew it away. Hell, no one likes a smartass. And dead droids tell no tales.

## Replidroid Rules OK

Entries must reach us by February the...em...ur...thirty days has September...er, ah...yes — the 28th. All entries must include the number of droids you've spotted ringed on the piccy and that number should be on the back of the envelope.

The Ed won't enter into any correspondence about the competition. Robots can't write!

I've spotted .... droids in the piccy and anyway I'm a lot hunkier than Harrison Ford.

Name.....

Address.....

.....

.....Postcode.....

Now cut the page (or a photocopy) and send it to the Bladerunner Compo, *Your Sinclair*, 14 Rathbone Place, London W1P 1DE. And remember to write the number of robots on the back of the envelope.



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Pyrotron	Beyond	7.15	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95	SURE SHOT JOYSTICK				
Shadowline	Beyond	8.95	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95	SPECTRUM PVC COVER				
Spy v Spy	Beyond	8.95	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95	SAGA EMPOWER PVC COVER				
Masterfile & MF Print	Campbell	13.50	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95	CURRAN MICROSOFT				
Amibeam	Campbell	18.90	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95	EXTENSION TO KEYWAY (Ribbon)				
Steve Davis Snooker	CDS	7.15	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95	MICRODRIVE EXTENSION LEAD				
Astronomer	CP Software	8.95	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95	SLOWO (Game speed controller)				
Backgammon	CP Software	5.35	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95	ON/OFF SWITCH				
Bridge Player 2	CP Software	8.95	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95	SPECTRADIS TO CENTRONICS PRINTER				
Bridge Tutor	CP Software	5.35	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95	lead				
Advanced	CP Software	5.35	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95	WAFADRIVE TO CENTRONICS PRINTER				
Bridge Tutor Beginner	CP Software	5.35	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95	lead				
Daughters	CP Software	5.35	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95	DISCOVERY I				
Extended Basic	CP Software	8.95	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95	ZK EXPANSION SYSTEM (includes Microdrive/Interface 1/Tasword 2/Masterfile/Art Attack/Games Designer)				
Floating Point Fort	CP Software	8.95	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95	ZK INTERFACE 1				
Pinball Wizard	CP Software	5.35	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95	ZK MICRODRIVE				
Small Logo	CP Software	8.95	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95	SPECTRADIS DDOS				
Superchess 3.5	CP Software	8.95	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95					
Supercode II	CP Software	11.95	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95					
Supercode III	CP Software	11.95	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95					
ZK Reversi	CP Software	8.95	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95					
Leonardo	Creative	7.15	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95					
Derby Day	CRL	3.80	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95					
Formula One	CRL	3.80	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95					
Rocky Horror Show	CRL	7.15	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95					
Dungeon Master	Crystal	3.50	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95					
Hearts of Things	Crystal	3.50	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95					
Romance Revenge	Crystal	3.50	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95					
Highway Code	Crystal	6.25	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95					
Mini Office	Database	5.35	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95					
Red Arrows	Database	8.95	Way of Exploding Fish	Gilsoft	7.15	Shenbok	Melbourne	13.50	Trans Express (cost)	Romantic	13.50	Ultimate	Ultimate	8.95					
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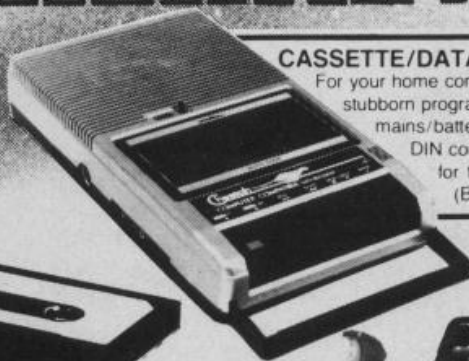
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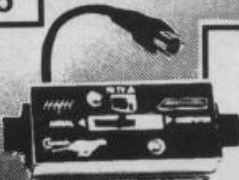
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Cheetah's neat splitter unit complete with self adhesive pad allows you to keep your T.V. and computer aerial leads plugged in without disturbing the picture

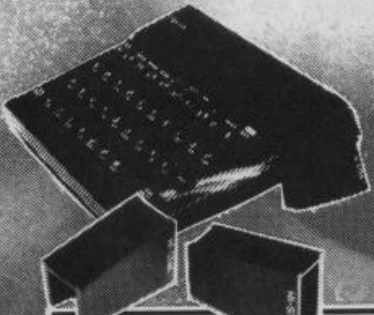
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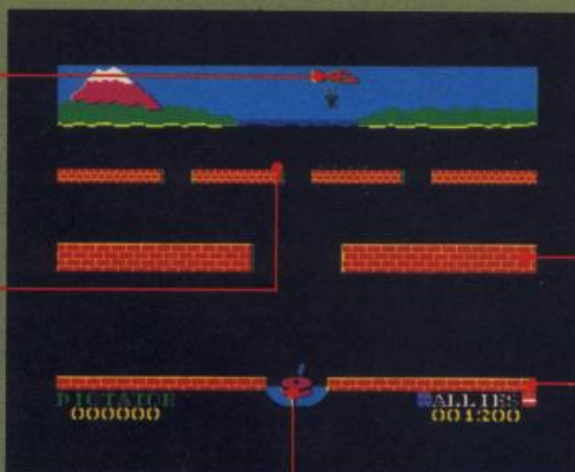
## ATTACK



Okay you guys, go get 'em — hit 'em fast, hit 'em hard and give 'em hell. And for chrissakes, don't muss your hair up — CBS T.V. is here.

Fly high and your men will be vulnerable — too low and their chutes won't open — or you might be fated to a forced landing. Press fire to drop your men — and change direction to confuse the machine gunner.

Once your men are established, watch for the lights — when they're on you can make a dash for it from here. You can only choose your direction — once sprinting you can't change your mind — so don't run into the rain of death.



The pill box — mum always said to keep away from these! Just one gun, but it's not the soft underbelly of the dictator's defences. When on the enemy side it rotates and elevates automatically.

Having got to this wall your men will either go round it directly — they can hurl grenades and manoeuvre but they're also very vulnerable — or scramble over the flanks. Most of these soldiers will make it to safety, but they can't attack the gun. Now select your strategy...

Each soldier you land scores 200 points, each one to the second wall 2000, and if you make it to the last wall, notch up another 1,000. Blowing up the pill box gains you 4000 — but at what cost to your own men? Dare you take the risk?

Eh, cara mia and caramba — why don't these gringos leave me alone to chew my cheroot and cause chaos in the cosmos!



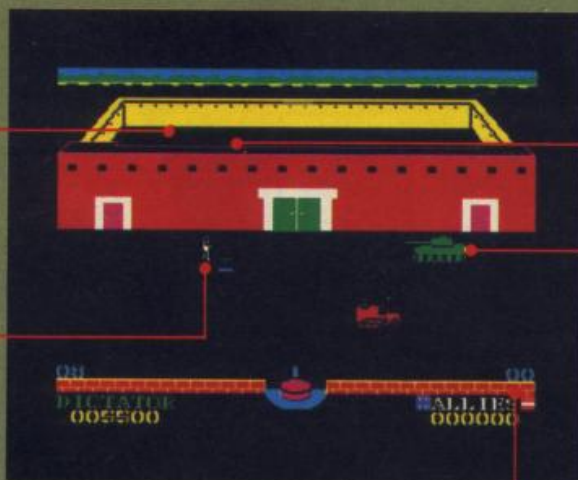
## RESCUE



We gotta get our boys out before they forget the taste of Budweiser and stop loving Minnie Mouse.

Unfortunately the fortress takes up a big chunk of screen. Looks pretty but it's really a waste of space — just like watching Arsenal, everything takes place on one half of the pitch!

Your men, nine of 'em, have to be rescued but presumably they're blindfolded, and deaf as they can only walk in a straight line across the screen. It's your job to blast away the obstacles — tanks, tunnellers and mines.



The extra line doesn't tell you who's winning the Superbowl. But it does let you know how many of your good buddies have made it to the other side. Can you make it to the next screen?

This little bloke whizzes along the ramparts and drops things on you. If that's not enough of a headache manholes and mines appear beneath your feet — unless that covering fire is hot, hot, hot!

Nothing subtle about this tank. He doesn't use his guns — just flattens your forces. He's easy to hit, but don't waste too much time on him — he's not worth many points. Make tracks for the mines and tunnellers.

**US Gold came with the classic, Beach Head, saw it was a winner and now it's set to conquer the world with Beach Head II. Rick Robson rallies his reinforcements and prepares to fight...**

he evil Dictator from Beach Head is back again — but this time there's not a beach in sight. Even if he can't kick sand in the faces of the weak and defenceless it'll take all your Stallone skills to overcome him in his new jungle setting.

This final battle takes place over four screens. First you must parachute your troops behind enemy lines from a helicopter. Just take care to avoid the raking fire of the dictator's pill box. Desperately your men take cover behind the first rampart. Mustering your forces you make a dash for the second wall. Beleaguered by the blitz of lead you must then combine bravery with brains, guts with guile. Some of your men will act as decoys, others will make futile suicide dashes, a brave few will succeed in bombing the machine gun only to die in the rapid rattle of lead.

But once under your command, you can turn the pill box against the dictator's jungle fortress. Use it to give covering fire against tanks,

Santa Maria, Ardiles and Villa — will they never forget the Alamo?



## FAX BOX

Game	Beach Head II
Publisher	US Gold
Price	£7.95
Joystick	Kempston/Sinclair/Protek
Keys	Define your own



# HEAD II

# AIR

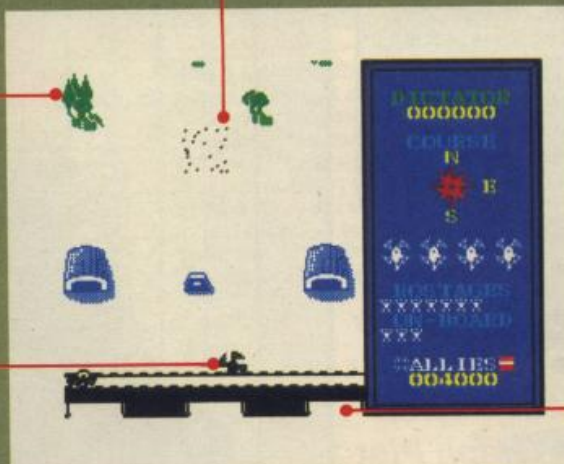
# RAIDS

## BATTLE



Remember, no \*!%\*/ won a war by laying down his life for his country but by killing the \*&\$?% on the other side.

Scattered over the jungle are various hazards. Radio towers need smashing, hangars harassing, cars pranging. But don't get too carried away — tree top landings are not advised!!



The screen scrolls convincingly but with no radar, terror comes literally out of the blue. But there's still time to evade the dictator's missiles and fire off a few of your own.

The bridge is a major obstacle. Do your *Airwall* aerobatics and fly through the arches for maximum effect. It's not exactly *Cyclone* but you could get blown away with this phase of the act'on.

Don't let your chopper cop it! Your aim is threefold. Stay alive, blast the dictator's installations and get those hostages abroad.

You crazeeee Anglo-Saxons — what's with this Day of Death? All zap, zap, Zapata! Jus' jump in your Fiesta an' come over for tequila an' a siesta.



land mines, tunnellers and even masonry dropped from the fortifications. In this way you can rescue your long-imprisoned comrades.

And now it's time to pursue the fleeing forces of evil. Back in your whirring attack chopper you hug the contours of the jungle escarpment, evading the natural hazards and missing the missiles. Success in this phase will take you to the end.

And as in all great battles — Vader vs Obi-wan Kenobi, Holmes vs Moriarty, Border vs Botham — the climax is a head to head, an eyeball to eyeball confrontation, just you and the dictator, glaring across a cavernous gulch, your only weapons knives, your wits and your will to win ... between you the raging torrent roars, soon to claim its victim, you ... or the dictator.

Of course if there's a touch of evil within you, there's no reason why you can't be the dictator. You can even use the game's fine one-to-one facility for a duel to the death.

Technically it's hard to find fault with a game forged as formidably as any of US Gold's armoury. I found the final screen a bit wet (in more ways than one) after the furious hardware of the previous screens. But if you've got this far on all three levels of difficulty maybe you need the rest. And perhaps the fairly average graphics don't quite match up to the game play. But now I'm splitting hairs where most people'll just want to get in there and start splitting heads.

## ESCAPE



Well, it's just you and me, kid. This screen ain't big enough for the two of us, and the only way out is down.

Graphics are more Alpine than Andes. They make a pretty backdrop though, as you struggle not to drop back into the gulch of death.

Your man has movement along the platform. He can also duck and leap his opponent's weapons. At the 'easy' level this is a doddle — but it's a touch of the old hot shoe shuffle on the hard stage.



What's this? Antipodean archery! They look like boomerangs but they never come back. And nor will you — 'cos if you're hit enough times it's a real pain in the neck — and then it's the early bath for you!

The platform limits your manoeuvrability — no backward steps allowed. At least the dastardly dictator can't stab you in the back!

The two score boxes let you know whether you're winning the battle but losing the war. Each hit is notched up here but the important thing is to win most of the five rounds.

You teenk you can catch Sancho with his Panza down? You must teenk I'm Caracas.



Graphics	9
Playability	
Value for Money	
Addictiveness	



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### Easiledger

Consists of invaluable routines to allow the creation of any type of financial ledger system. Its usefulness lies in its ability to produce account balances instantly for debtors and creditors together with an audit trail of all entered transactions, with dates and references. A year-to-date summary is included of sales, purchases, receipts and payments over a 12 month period, and most importantly, a completely interactive bank account database is featured.

### Graph Plot

At last, superb graphs, bar charts and pie charts on your Spectrum! With a complete data entry section and the ability to load and save files, this is really one of the fun programs to use. Represent numbers and data in clear diagrams with this package, and print them out on your printer to accompany reports, budgets, etc. Very highly recommended for the office, home and school. Also includes capability to provide mathematical function plotting.

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# HACKING AWAY

More joke POKEs and hack cracks from the man with the POKEst, **Chris Wood**.

Okay, so you're bulging with Christmas pud, turkey and trifle and don't feel like moving. Well, get out your Speccy and those new games you got for Chrissy 'cos they're dying for a POKE and you need a bit of mental exercise too.

## HALL OF THINGS

This little routine for *Hall Of Things* has been around for quite a while. Andy attempted to publish it in *Your Spectrum* 17 but failed and I must confess I took a little while to get around to it. Still, **Bruce Phipps** from Chadbury sent in the routine again so here it is:

```
10 LOAD ""CODE 61263
20 FOR X=61441 TO 61454
: POKE X,0: NEXT X
30 POKE 61440,201: POKE
61650,249
40 POKE 61724,27: POKE
61725,241
50 POKE 61549,64: POKE
61550,148
60 RANDOMIZE USR 61441
70 FOR X=61440 TO 61451
: READ Z: POKE X,A: NEXT
X
80 DATA 17,0,96,33,64,1
56,1,0,64,237,176,201
90 RANDOMIZE USR 61440
```

After you've finished this, POKE 32717,0 for no wounds or infinite energy or you can POKE 35923 with your starting magic. RANDOMIZE USR 24567 will start the game.

## MANIC MINER

Ooops! Even the greatest make mistakes and I'm afraid there's one in *Your Spectrum* 20. **Maxwell Clark** sent in a revised POKE for confusing the aliens in Bug Byte's *Manic Miner*, accusing me of getting the original wrong. Well, that certainly confused me 'cos when I looked out his letter I found it was all his fault. The POKE should've been:

**POKE 65132,0**

Sigh at least it shows who's still the greatest. On with the POKes...

## NODES OF YESOD

Yes, I know it's knocking on a bit but the programmers did include a message 'YS keep

out' in the loading sequence, so how could I resist? Well, we did it, so there! **Pete Smith** of Burton, **Phil Nosirnayme** from Hartlepool and **Lee Bathgate** from Fife all sent in routines and here's the one I chose entirely at random:

```
10 LET S=30000: LET N=2
1: GO SUB 20: RANDOMIZE U
SR 30000
15 LET S=63218: LET N=7
: GO SUB 20: RANDOMIZE US
R 63201
20 FOR X=6 TO S+N-1: RE
AD Y: POKE X,Y: NEXT X: R
ETURN
30 DATA 17,17,0,175,205
,60,117,17,250,2,62,255,2
21,33
40 DATA 188,244,55,205,
86,5,201,175,50,149,127,1
95,0,226
```

## WAY OF THE EXPLODING FIST

**Lee Griffiths** from Merseyside sent in this snippet of a program to give you 255 time units instead of 30 in *The Way Of The Exploding Fist*:

```
10 LOAD ""SCREEN# : LDA
D ""CODE : POKE 44793,255
: RANDOMIZE USR 39982
```

Funny but my copy has a RAND USR address of 34816. Could there be as many different versions of this as there are of *Starion*?

## PUD PUD

Yes it's a game and not a Christmas left-over — or at least according to **Andrew Jones** from Cheshire and just to prove it he's sent in a POKE for infinite Pud-Puds — POKE 49287,0. Andrew reckons he's a fifteen year old geriatric — is hacking bad for your health? Cough, cough!

## ABU SIMBEL PROFANATION

Unos trios paranoias di Portugalos! Well, three blokes from Spain namely **Fausto Carvalho**, **Luis Pereira** and **Carlos Vieira** who've sent in a few POKes for *Abu Simbel Profanation*.

**POKE 49290,x where x=**  
**to 255**

**POKE 47684,0 for eternal madness and boiling nerves**

**POKE 45877,201 to transform objects**

**POKE 47656,0 to transform yourself**

What you transform yourself or the objects into is anybody's guess but those who've played the game should know.

## ALIEN 8

**Robert Brown** from Gloucester has been having a few problems with my *Alien 8* program *Your Spectrum* 14. Well, as far as I know there's only one version of this game on the market so it's possible you could've made two errors in the DATA that cancelled each other out. That way the checksum could've missed them — for example, 24,35,6 instead of 6,24,35. I have found that the program only loads one out of five times and it can be cured by adjusting the volume.

Finally, if you finally got *Sprite High*, *Your Spectrum* 19, to work you may still find problems. I really am sorry. I forgot to mention that you should load the main SPRITE CODE before anything else when you're testing your sprite movement etc. This is

because the first 14 bytes of the SPRITE CODE contain data for a dummy sprite which will overwrite your first one. You could resave it with: **SAVE "SPR CODE" CODE 57270+14, 584-14.**

Persevere and the results will be worth it...

## AD ASTRA

Another mega-hack from a lady keep 'em coming girls!

This one's from **Mrs J Brown** from Cheshire for *Ad Astra*:

**POKE 29907,0: POKE 29908,0: POKE 29909,0: alters the formation of the aliens**  
**POKE 28591,0: POKE 28592,0: POKE 28593,0: gives you better fire power**  
**POKE 28793,0: POKE 28794,0: POKE 28795,0: ships that need multiple hits will now only need one**  
**POKE 380847,0: POKE 30848,0: POKE 30849,0: one ship comes across the screen instead of four**  
**POKE 35852,0: POKE 35853,0: POKE 35854,0: infinite lives**

To get all these in simply type:

**CLEAR 24000:LOAD "A" CODE: LOAD "B" CODE**



Kipper Williams' cartoon is taken from his new book *Warning! This Computer Bytes*. It'll be published by Blandford Press on March 24th, price £1.95.



Type in the POKES you want and then RANDOMIZEUSR 3,3000 to start the game.

### EVERYONE'S A WALLY

Still having mega problems with *Everyone's A Wally*? You must have infinite endurance already! There's a POKE to make all the characters stand still so they don't nick all the objects you want.

As if that wasn't enough you can change to another character even when it's not on the same screen. Don't type in any data lines you don't want:

```
100 CLEAR 29999: MERGE "
": POKE PEEK 23627+256*PE
EK 23628+33,33
110 FOR z=65313 TO 1E9:
READ X: IF X<999 THEN PO
KE Z,X: NEXT Z
120 GO TO 0
130 DATA 24,2,0,199,205,
128,91
140 DATA 62,201,50,67,22
7: REM INDESTRUCTABLE
150 DATA 62,24,50,184,23
1: REM CHANGE TO ANY CHAR
ACTER ANYWHERE
160 DATA 62,201,50,44,16
9: REM STOP OTHER CHARACT
ERS MOVING
170 DATA 195,151,91,999:
REM DATA END MARKER. IMP
ORTANT.
```

These few POKES are from a person who comes from the 'Wolbidoob', Lancashire. Hmm. Merge in the loader and enter these POKES before the USR call

**POKE 28982,0: POKE 28983,0: POKE 28984,0**

and continue loading. A small tip for budding hackers, if you're NOPing out a call routine, a RET at the actual call address saves on the typing and is neater.

### GYROSCOPE

Are you going potty playing *Gyroscope*, the Speccy version of *Marble Madness*? Well just enter this as a direct command:

**CLEAR 24063: LOAD ""SCREEN**

and load it in. Then all you've gotta do is enter the POKES you feel like. POKE 53922,0 for infinite lives, POKE 54033,201 to roam around the screen at will and POKE 54354,201 to walk through the wobbling nasties getting in your way.

If you're really feeling lazy you can use one POKE that does all three features and that is POKE 53887,201.

When you manage to finish all the screens the surprise is ... ta dah... you can travel up the slopes instead of down them, wow! Oh an' a useless bit of info — the two voice sound routine in this game is the same as in *Fairlight*.

# MICRODRIVIN'

**Hey, is your microdrive making you miserable? Drop Andrew Pennell a line and he'll sort out your problems. Now we're motoring!**

Hi, it's me. Yeah me, Andy. S'pose you've forgotten me 'cos I wasn't in last issue. Rather large oversight by the Ed. (Me? Ed) Anyway now I'm here let's kick off with a big thanks to all those who wrote in about the corrected version of the routine that allows you to see which Interface 1 ROM you have. Oops, sorry I know it was a corrected version but we (You! Ed) made another blunder. Line 40 should have read:

```
40 IF a=129 THEN LET z=1
Most of you who wrote said that PRINT z gave the result of 129 so you've all got version 1 of the ROM. One reader, however, got 128! Well, I'll look into that and give you more details next month.
```

And now on with all your problems — oh, I do so enjoy playing at agony aunt.

❖ **I'm having a bit of bother with my Epson printer and Interface 1. Have you found the cure yet?**  
**Christopher Birkett, Solway**

Yup! I have, thanks to **Hugh Wilding** who told me that Epson knows all about the problem and, better still, the cure. First set the Spectrum and Epson to 4800 baud (not 9600). You'll then have to get your soldering irons out and add a couple of components to the Interface 1 plug to get rid of all those glitches that cock up the printer. Connect a 1K, 1/4 watt resistor between pin 3 on the I/F 1 plug and the cable going to it. Next, connect a 2000pF capacitor between the cable end of the resistor and pin 7 on the plug. Easy innit?

❖ **I've got a Brother HR5 that's Epson compatible. How can I use its features via the Interface 1?**  
**John Taylor, Grantham**

Right, for straight text output OPEN #3,"T", then LPRINT, LIST will work on the printer. In order to use the special features you'll have to send control codes, and you can only do this with a "B" type channel that can be created

with a line like OPEN #4,"B". Then PRINT #4 statements for the extra features.

If you wanted to go into condensed mode, for example, you'd use PRINT #4, CHR\$(15);. More advanced features require Escape codes which use the ESC character. In the manual setting the perforation skip is described as ESC N:x, so, to set it to ten lines you'd use the following command:  
PRINT #4; CHR\$(27);  
"N";CHR\$(10);

Another tip — it's useful to have both B and T type channels open simultaneously, B for control codes and T for text.

❖ **What's all this about a dec/hex converter in my Interface 1 ROM?**  
**Paul Daamen, Netherlands**

In version 1 of Interface 1 there were some subroutines for printing blocks of memory in hex that were used by the authors to debug it. When the Interface was finished they were left in and there they remained until version 2 came along. The hex routines were removed 'cos room was rather tight. You learn something new every day.

❖ **Several disk drive interfaces claim 'Microdrive compatibility' but many items of software don't run on them — why's that?**  
**David Saint, London**

The disk interfaces are usually compatible in the sense that they use the same syntax from Basic to use the extra features but the problems occur because from machine code none of them is compatible. Machine code software has two ways of calling the Interface 1 ROM — via hook codes and directly. As yet there is no interface that has compatible hook codes and it would be impractical for one to have the same actual subroutines.

❖ **What's my problem? Well, I've got a Kempston Interface E but I**

**can't load array data files from microdrive, though I can save them. Masterfile is the worst as I can't save anything to it.**

**R Dearden, Harlow**

I don't have one of those interfaces but I think I know what the problem is. What a megabrain, eh? It has a ROM which is mapped out in the low 16K of the Basic ROM. It's also mapped out when the shadow ROM is in place but it normally doesn't obstruct it. Judging by the symptoms it appears that it's mapping into the Load array routine in the microdrive ROM that's obviously causing big trouble. Try contacting the guys at Kempston and see if they've got any ideas. If that brings no joy try using a different version of the Interface 1 ROM. Good Luck!

❖ **How can I easily produce the error 'Hook code error' from the Interface 1?**  
**Keith Symonds, Essex**

I can't think why you'd want to do that but each to their own I s'pose. Do an RST 8 followed by a byte from #33 (ROM1) or #34 (ROMs 2&3) to #FE inclusive. It produces the error because those byte values are neither Basic error messages or valid hook code calls.

❖ **I've used the copier program supplied with the Expansion System to great effect but whatever I do I cannot get it to copy the games cartridge supplied with it. Why is this?**  
**Paul Daamen, Netherlands**

Ahah! The reason is quite simple. When I wrote Copier, I was asked to write a protection routine so that the games cartridge couldn't be ripped off. Cartridges that have been duplicated using this special routine can't be copied with the official program, though other copiers will back them up with no problems. Copying should only be used for backing up and not to reproduce original software as this is illegal!



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# YS ADVENTURES

Heave a scythe of relief - the Grim Reaper's here to offer help in all your adventures drop him a line at Death's Door, YS Adventures, 14 Rathbone Place, London W1P

Death speaking! Seems that a few of you mere mortals reckon you've overcome my deadly hand and have actually managed to complete some adventures. The worst offender is John 'El Supremo' (till proved otherwise) Wilson who claims he's finished more adventures than anybody else. "Yet another adventure has fallen foul to my ruthless

adventuring... Robin of Sherwood. Just so you wouldn't feel left out this month here are some megatips for all you namby pambies who can't complete it.

"To escape the dungeon you've gotta first have a look at the grating, talk to the prisoners, stand on their shoulders and examine the grating again. Wait until you hear footsteps above you and then grab the ankle, choke the guard, examine him, take his sword and examine the grating yet again. Then you've got to slide the bolt, open the grating and go to the door. Easy ain't it?"

"I've got even more hints, there are a few general tips: go via Marion's bedroom window when escaping from the castle. You can try 'Go Bed' in any room and you'll be told 'No time for sleeping' except of course Marion's room where you're told 'Not allowed'. Some people are no fun!"

Even better! A poor soul who's come to a dead end and will hopefully come to an even deadlier one. Nuno Miranda from Portugal has been playing

Fairlight by The Edge although he's having a few problems. "What do you do with the crown? I tried to put it on the throne but nothing happened. How do you open the southeast gate in the courtyard? In the dungeons there's something strange on the floor but I don't know what to do with it, the killer plants are giving me a few headaches too.

"Please, please, please help me or else I'll go mad!"

Well, I'm not so sure I should help you really - I am Death! Okay just this once. You must be wearing the crown in order to enter the tomb. As for the strange thing on the dungeon floor I think that's a red herring. No more hints from me as I'm feeling a bit tired, a bit like death warmed up really!

But if you need any more help have a look at the list of people offering hints and if you reckon you've got a few tips pass them on to the people who need them. And the fight is on to tell that John 'El Supremo' Wilson a thing or two. Mark Thomas from Plymouth reckons John Wilson wrote to him for help! Things are looking good - maybe you're gonna be the new 'El Supremo' Mark? A certain James Elliott reckons he is the 'El Supremo', just take a look at the Kings Of The Castle.

Stop sitting around, send those cries for help and claims to fame to Death Sentence, Your Sinclair, 14 Rathbone Place, London W1P 1DE.

## KINGS OF THE CASTLE...

Mountains Of Ket, Temple Of Vran, The Hobbit, Inca Curse, Ship Of Doom, Espionage Island, Urban Upstart, Lords Of Midnight, Hampstead and more. Nuno Miranda, Av. Emidio Navarro, 19-A, 1 2750 Cascais, Portugal.

Robin Of Sherwood and a load more. John 'El Supremo' Wilson, 26 Spotland Tops, Cutgate, Rochdale, Lancashire OL12 7WX.

Stop The Express, Oracles Cave, The Hobbit, Atic Atac and Sabre Wulf. Alan Saunders, 8 Marybell, Sedbergh, Cumbria LA10 5AR.

Dungeon Adventure, Red Moon, Planet Of Death, Ship Of Doom, Ground Zero, Erik The Viking, Sherlock, Temple Of Vran, Denis, Emerald Isle and more. Mark Thomas, 47 Elford Crescent, Colebrook, Plymouth, Devon PL7 4BT.

Robin Of Sherwood, The Hulk, Spiderman, Heroes Of Karn, Valkyrie 17, Mountains Of Ket, System 15000 and more. James 'El Supremo' Elliott, 266 Carseview, Tullibody, Alloa FK10 2SU.

## ON THEIR DEATH BEDS...

Espionage Island - How can I move the rock to enter the mine shaft or drive the tipper truck? Manor Of Doom - How do you get the motorbike started? T Barnard, 44 Blackdown, Hilltop, Stony Stratford, Milton Keynes.

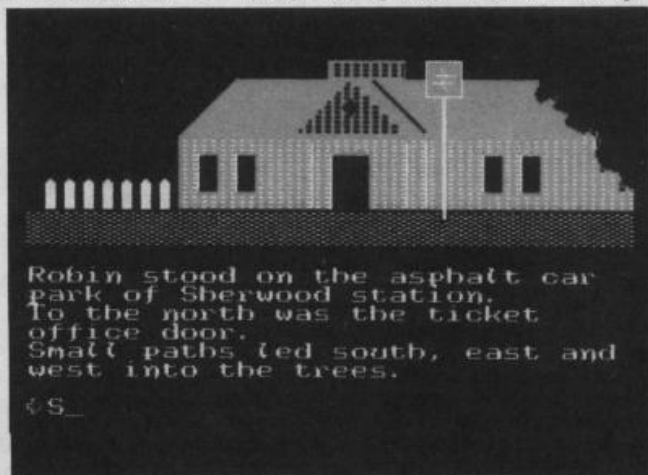
The Ship Of Doom - How do you pick up the key once you've shot the glass cover in the key room? R Shepherd, 64 Rickards Avenue, Knoxfield, Victoria, Australia 3180.

The Fourth Protocol - Any help you've got. B Buck, 12 College Close, Portslade, Sussex BN4 2WT.

Hampstead - When I get to Waterloo, why is my best course of action to board the train back to northwest London? Marc Holliday, 7 Holland Road, Stamford, Pequisia.

Tir Na Nog - How do you get in doors with letters written on them and where are the four things? Harry Lynn, 11 Hillhead Crescent, Belfast, Northern Ireland BT11 9FS.

Valhalla - Help! Daniel George, 2 Braeside Gardens, Acomb, York YO2 4E2.



Robin stood on the asphalt car park of Sherwood station. To the north was the ticket office door. Small paths led south, east and west into the trees.

### ROBIN OF SHERLOCK Silversoft/£7.95

Thou art Robin of Sherlock in yon Sherwood Forest - there thou shalt find a dead Doctor Watson, a pot of vaseline and Maid Marian's clothes! Go forth and solve the many mysteries that have brought chaos to this realm.

Yessir, it's a cracker! Well written, with some very neat touches (considering it was written with the Quill), excellent graphics, and a tremendous sense of humour. Authors Jester and Desperado have come up with a brilliantly funny game that extracts the Michael out of both Sherlock and Robin of Sherwood.

Here in Sherwood Forest you'll find your merry men, Maid Marian (who's always ready for a quick cuddle), Friar Gorbachetnik (who eats so much he explodes), and the Yellow Brick Road to the Emerald City of Huddersfield. And if that's not enough for you,

### MINDSHADOW Activision /£7.99

What a graphics adventure! Great pics, great puzzles - something for everyone!

The program is in two parts, Mind 1 and Mind 2. Mind you, you can only play the second part if you've completed the first. And that's not easy. It all starts on a desert island. It's idyllic except for the fact that you haven't the faintest idea who you are, where you are, and what the hell you're doing there.



Still, you're helped by an excellent program. Although the location descriptions are quite

there's even a Kentucky Fried Squirrel take-away, a railway station, and a portable phone. And it comes with brill sound - when did you last hear your Speccy chugging into a station.

As well as a dead Doctor Watson, the Smurphs are up to something dirty, and there's a hideous conspiracy involving candles and vaseline! There's also a hideous bug. Typing GO WINDOW - or BREAK WINDOW for that matter, get's the message SWEAR NOT followed by a system reset.

Robin of Sherlock's a hoot if you want something different. You can talk to the characters (unusual for a Quilled game), listen to them talking amongst themselves, and do a RAMsave if things look tricky. Go for it, and avoid the fried squirrels at all costs.



short, the detailed large-scale graphics do wonders for creating atmosphere. You'll soon be off and sailing the seas, visiting other islands until you make it to the mainland.

To help you work out what's happening, there's an unusual command - THINK. Use it at the right time and in the right place and it'll drop you hints as to what's going on. And as the game progresses you'll stumble across further clues - thinking about them will also reveal a little more.

As a bonus for novices, there's a special Tutorial file on the tape. This'll give you an excellent training in adventuring, making it an enjoyable splash-out for first-timers. Experienced adventurers may find the game limited in its locations, but even so the puzzles are fairly tricky.



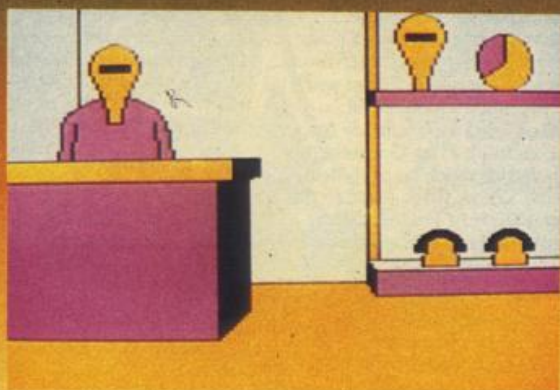


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# BEA



Yes come to Enoch, the capital of Eden. Level 9 Tours is offering 200 colourful locations packed full of fun, night-life and wild surprises and if you don't believe it just take a look at the brochure.



## DESTINATION Capital Investment

You arrive in Eden, with the special Trans-Ident Soul-Swap facility, in the body of a typical Eden dweller who's drinking in the pleasure of Reveline's Dream Parlour — dreamy eh? Well not everything's as dreamy as Eden isn't always a paradise.

Throw away your Eden-English, English-Eden pocket dictionary for a start. These guys aren't Neanderthals — they speak a rather simplified standard Galactic English. Your Speccy Bio-Trans facility features a thousand word vocabulary that'll give you more rabbit than a well-known Enoch supermarket chain.

If you fancy a visit to one of Enoch's emporiums you'll need the standard currency unit — the Cred. Sorry but American Express Inter-Galactic Traveler's cheques won't do nicely here. Prices are a bit higher than on Earth but a good thing's worth paying that bit extra for.

Here are some of Eden's heavenly prices:

Reveline's Dream Parlour	9 creds
Pleasure Dome Entrance	9 creds
Newspaper	free
Museum	free
Casino	1 cred
Pie	9 creds

In fact all's fine in Eden, 'cept of course, the fines. You may be offered a few things on the streets for free. That's 'cos they're illegal.

Yeah, it is the other way round on Earth. Fines, like the Space Patrol Group, can be heavy but don't worry there's always a way to recoup your losses in Eden.

### Fines

For being in debt	50 creds
Possession of an illegal object	9 creds
Theft	500 creds

## MONEY A wealth of health

Many travellers fear the unknown. Will I be able to drink the water? Do I need vaccines? Relax! The inhabitants of Eden have discovered the secret of almost eternal life — thanks to the transplant of worm-out bodily organs.

So if you fancy a filling in the Pleasure Dome or you want to buy a pet (or pay a fine!) it could cost you an arm and a leg — literally! A limb'll bring in about 500 creds cash-in-hand — that's if you've got a hand to hold it in! Enoch Hospital, south of City Square will do a quick clean job, cut price!



# EAST OF EDEN

Level 9's new adventure **The Worm In Paradise** is set on the far-distant planet of Eden. But all is not well in the Garden. Join Death as he takes you on the trip of a lifetime — or rather several lifetimes. Nothing is impossible in Paradise...

## PEOPLE

### See the natives in their local habitat!

Eden's inhabitants are a friendly bunch. Many of them are robots who're going about their daily lives oblivious of the curious tourists around them — yes you! Fuzbots, the local constabulary, are on hand to keep you out of trouble. But if you do get up to naughties — buying illegal items, shoplifting, insolvency — the gates of Eden's gaol won't close on you, you'll only be fined.



## ROUND AND ABOUT IN EDEN

No great big red double decker turbo buses here — just the smooth sophistication of the pedway that connects each city district. Earthling's find it all a bit disorienting as the roundabouts are numerous and they all look the same! And with forty million colour-coded destinations don't blame it on us if you end up off the beaten pedway. The Michelin guides are a bit thin here so your best bet is to draw yourself a map. If all else fails Level 9 Tours can provide you with a simple program that'll enable you to get where you're going.

## STREET CRED

Part of our bumper package is a set of Trad-Clads — well we don't want you arrested for indecency do we? — and 100 creds. We also supply you with a personal designer tattoo, a device that'll tell you the time and also keep a check on your finances. Every Eden hour it'll buzz — like those quaint 20th Century ones that used to go off all over the cinema when the film was just getting to a good bit. Should you succumb to the magic of Eden then you could have a spaceman's holiday — and do a job of work. But don't forget that you must be properly registered.

## TOURS

### Sites and sounds

Frankly, you start at the Pleasure Dome. If you really want some fun you can throw crap in the Casino, muse in the museums and visit the pet shop. It'll cost you, but for a holiday like this it's worth going out on a limb even if you're left without a leg to stand on.



## THE MUSEUM

See the inflatable Kim Kimberley, complete with bowl of lentil porridge! Keep your hands off her, or you won't keep your hands on! Remember here on Eden they can remove organs other planets can't reach.



## The Casino

Great fun this! Just select a colour and pull the arm of the One-Armed-Bandit, watch his eyes light up and your credit balance drop! It's a scream and you might even win some money — there's a twenty cred jackpot waiting for some lucky tourist.

## Reveline's Dream Dome

Just the thing for the weary travellers! Enter your choice of chamber, don the visor, and enjoy a brief but invigorating sleep with a special pre-programmed nightmare! Eeeekkk!

## The City Plaza

A tribute to modern civil engineering, this is one location every tourist should have on his or her list. You should also visit the Municipal Buildings and the Monument on Glory Road. And when you're ready to go further afield, try the Eden Transport System.



## FAX BOX

Game: The Worm in Paradise  
Publisher: Level 9  
Price: £39.99



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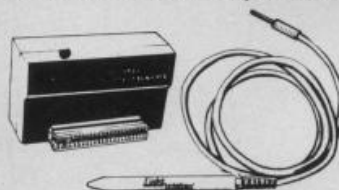
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**T**here's a bandwagon doing the rounds at the moment that everyone's hitching a ride on — and it's called the Apple Macintosh. You only have to take a look at SofTechnics' *The Writer*, reviewed in last month's YS, or OCP's *Art Studio*, reviewed in this, to see the influence it's having — all those drop-down menus and icons. Now just so you don't feel left out in the code, I've written my own Mac influenced program.

*Maclone* is a collection of three pull-down utility programs that are related to the Desk Accessories on the Mac — perhaps you've seen the calculator, puzzle and scrapbook that can be pulled down over the top of the screen you're working on. My three programs are similarly transparent to the Speccy so the screen won't be permanently corrupted. That means, for example, if you're bored with the program you're working on, you can call up one of these utilities and it'll sit on top of your program until you're ready to get going again.

### CLONE RANGER

As soon as you're ready to use your saved copy of *Maclone*, type CLEAR 61950: LOAD "Maclone" CODE and start the tape. There are three main RAND USR calls to *Maclone* — 63256 sets the program up, 63278 switches it off and 63269 turns it back on again. You'll only need to set up *Maclone* after you've loaded it in or after NEW.



**Nope, it's not the latest fast food fry-up from McDonalds — though that's how we sold the idea to Tony 'Slim' Samuels! Maclone's an amazing utility package that packs the power of the Macintosh into your Speccy.**

```

- OR KEY '2' TO USE T
"
75 LE ABCDE S$=S$
1 FGHIJ
80 PR KLMNO T 18,
+29): PQRST IF X
HEN L UVW
85 LE : IF
$<"1" THEN BEEP .03,0

```



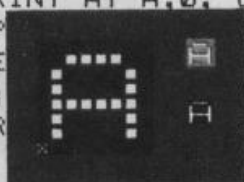
### THE LETTER SQUARE

Imagine you're writing a program and inspiration has deserted you. You've made enough cups of coffee to keep Brazil in credit for the next ten years but still nothing'll come. Nope, there's nowt for it but drop everything and play a game — if only you weren't already using the Speccy. Well, now, at the press of a key, you can jiggle your brains with this letter square puzzle. Just use the keys Q,A,O and P to move the blank tile around the letter square. As on as you get bored or inspiration returns, just press Space and bingo, you're back into Basic.

```

5 DIM A$(32): INK 7: F
7: PRINT AT A,0: OVER
A: P : AT
S.GRE : for
RUM": 0.85
0 FOR : BEEP
T A: INK 0:
DE
5 RANDOMIZE USR 35193:

```



### THE UDG EDITOR

Here's a real time-saver — well, you can make up all the time you've wasted playing the word square. It's a UDG editor that you can call up and use from within the Basic program you're writing. It lets you change any one of the Speccy's 21 UDGs just by moving the cursor round the UDG with the Q,A,O and P keys. You can flip it on or off with the M key and change a UDG using Enter. Once back in Basic (press Space), your UDGs'll appear just as you defined them in the *Maclone* routine. Save your data before you shut down with SAVE "udg data" CODE USR "a".21\*8.



### THE LOCK-UP

Phew, that megaprogram's nearly finished but you've just got to go out/sleep/eat/go for a pee. And what happens — Sod's law, that's what! Someone's dusted and well, my hand slipped, honest. Sorry just doesn't seem to say enough. Plus you've got to keep a constant vigil against all those industrial spies just waiting to rip off your program-mig. Panic no more 'cos this program provides the answer. Select option 3 and the screen will go black with just six question marks in the centre of the screen. Now type in your six letter password — no repeats are allowed so if your name's Aardvaark, you'll have to find an alternative. When all six are in, press Enter and a message appears on the screen that should deter all intruders — DON'T TOUCH. Even if someone has a go, they'll find the Speccy completely locked up — and it'll stay that way without the password. Clever eh?

When you're ready to begin again, type in your password to take you back to Basic — But if you get it wrong you'll have to go right back to the beginning.

## MAC MIMICRY

Here's a run-down of the three Macalike programs that mimic the desk accessories. Two grand computers — who needs 'em?



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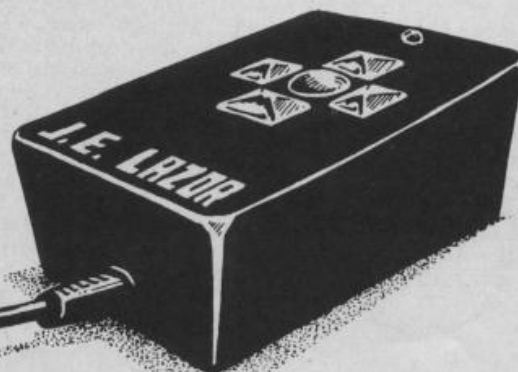
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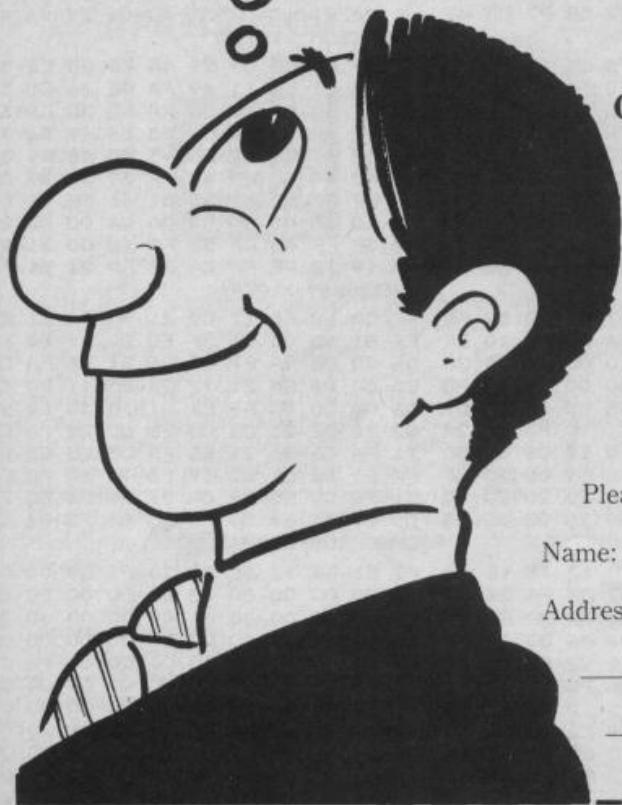
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## The Hex Loader

Is it a bird? Is it a plane? Nope, it's a Hex loader. Use it to type in the Hex data below.

```

10 CLEAR 32768
15 LET cqs=110
20 LET s1=62451
40 LET A=10: LET B=11: LET C=1
21 LET D=13: LET E=14: LET F=15
30 LET CQ=0
60 LET T=0
98 LET nue=0
100 INPUT H$
101 IF H$="END" OR H$="end" THEN
    N GO TO 300
    105 IF LEN H$<>2 THEN GO TO 10
    110 LET H=0
    120 LET H=H+16*VAL H$(1)
    130 LET H=H+VAL H$(2)
    140 POKE BL,H: LET BL=BL+1
    145 LET CQ=CQ+H
    150 PRINT TAB (T);H$; LET T=T+
    3: IF T=33 THEN LET T=0: PRINT
    155 LET nue=nue+1: IF nue=cqs THEN
        THEN GO TO 200
        160 GO TO 100
        200 INPUT "CHECKSUM >";CS
        210 IF CS<>CQ THEN PRINT : PRI
        NT "DATA ENTRY ERROR": LET s1=s1
        -cqs: GO TO 230
        220 PRINT : PRINT "DATA OKAY"
        230 LET t=0: PRINT : LET nue=0:
        LET cq=0: GO TO 100
        300 PRINT "ALL DATA ENTERED": S
        TOP

```

## The Hex Data

Type in the code one byte at a time and enter the checksum after each block. When it's all in, type END 'cos that's where you are. Now you've got 1980 bytes of machine code just sitting there in high memory — better save it using SAVE "Macrone" CODE 62451,1980. So, are you clonesome tonight?

```

F5 C5 D5 E5 DD E5 CD 05 F4 DD E1 11 EC F4 21 05 F5 1A BE 20 1B 23 13 2B 7C B5 20 FB C1 10 ED CD BE
E1 D1 C1 F1 C3 3B 00 3A 00 00 FE 13 10 FB 06 64 21 D0 07 11 03 00 02 3A B1 F4 BB 2B C5 7B 32 B1 F4
F3 C0 3E 7F DB FE E6 03 FE 00 C0 ED 52 C5 E5 CD B5 03 F3 E1 C1 10 FE 21 20 10 3A BF FB 3C FE 15 20
21 60 09 22 B2 F4 2A B2 F4 11 05 F1 C3 B2 F6 C3 2F F6 21 0C 4B 06 02 3E 00 32 BF FB C3 C1 FE FE 10
00 CD B5 03 F3 2A B2 F4 2B 22 B2 3B 11 4A FB C5 E5 01 0B 00 ED B0 20 17 ED 5B 8D FB CD EE F7 3E 01
F4 3E 02 BC CA 14 F4 CD BE 02 F3 E1 CD 09 F7 C1 10 F2 21 0C 59 06 43 04 04 1F 10 FD 2A 90 FB AE 77
7B FE 0C CA 31 FB FE 24 CA 4D F4 07 C5 01 0B 00 ED B0 01 1B 00 09 C3 F2 FB FE 20 CA BD F9 FE 25 C2
FE 1C CA D2 F7 FE 14 CA C4 F9 C3 C1 10 F3 C9 11 0C 4B 06 3B 21 4A 7D F9 3A BE FB 3C FE 0B CA F2 FB
1A F4 CD AF F6 21 05 05 22 7F F5 FB C5 D5 01 0B 00 ED B0 D1 CD 03 32 BE FB 21 90 FB 35 C3 F2 FB FE
22 B1 F5 21 B4 F3 22 54 F7 11 91 F7 C1 10 F2 11 0C 59 06 07 C5 01 26 C2 95 F9 3A BE FB 3D FE FF CA
CHECKSUM >15923 CHECKSUM >11614 CHECKSUM >15770
F4 06 09 CD 9A F7 06 05 C5 7B C6 0B 00 ED B0 01 1B 00 09 EB 09 EB C1 F2 FB 32 BE FB 21 90 FB 34 C3 F2
0B 32 9E F4 06 0B 11 9D F4 CD 9A 10 F1 C9 EB CD 09 F7 EB C9 24 3E FB FE 1A C2 A9 F9 3A BD FB 3D FE
F7 C1 10 EE 06 0B 11 A7 F4 CD 9A 07 A4 C0 7D C6 20 6F DB 7C D6 0B FF CA F2 FB 32 BD FB C3 F2 FB FE
F7 21 EC F4 11 05 F5 01 19 00 ED 67 C9 21 00 F2 11 01 F2 01 00 01 22 C2 F2 FB 3A BD FB 3C FE 0B CA
B0 C3 1C F6 10 06 16 0B 0C 21 23 36 F3 ED B0 F3 3E F2 ED 47 ED 5E F2 FB 32 BD FB C3 F2 FB CD 31 FB
23 23 23 23 24 16 00 0C 23 20 20 FB C9 F3 ED 56 FB C9 60 49 22 52 CD DB F6 C9 21 00 5B 11 4A FB 01
20 20 20 23 16 0E 0C 25 23 23 23 F7 7B E6 1B 67 CB F4 0F 0F 0F F6 00 03 ED B0 3E FF 32 B1 F4 21 30
23 23 26 FF 00 00 00 00 00 00 00 5B 57 7B E6 07 0F 0F 0F 81 6F 5F 75 2B 7C B5 C2 D7 F9 06 0B 21 6D
00 00 00 00 03 0F 1F 3F 3F 7F 7F 1A 22 56 F7 C9 00 00 00 3C 00 40 4B C5 01 06 00 ED B0 01 FA 00 09
00 00 00 00 00 00 00 FF FF FF 30 00 6F 26 00 29 29 29 ED 5B 54 C1 10 F3 CD 22 FA C3 D9 FA 21 4A
CHECKSUM >8391 CHECKSUM >12545 CHECKSUM >16434
FF FF FF FF FF 00 C0 F0 FB FC FC FE FE 7F 7F 3F 3F 1F 0F 03 00 FE FB 11 00 5B 01 00 03 ED B0 11 6D
FE FC FC FB F0 C0 00 41 42 43 44 14 10 FA 7A 0F 0F 0F 3D E6 03 F6 4B 06 0B C5 01 06 00 ED B0 01 FA
45 46 47 48 49 4A 4B 4C 4D 4E 4F 53 F7 34 CB 6E 2B 04 CB AE 2B 34 00 EB 09 EB C1 10 F1 3A 4B 5C CB
50 51 52 53 54 55 56 57 58 20 00 21 56 F7 34 C0 23 7E C6 0B 77 C9 2F CB 2F CB 2F E6 07 D3 FE C9 21
00 00 00 00 00 00 00 00 00 00 00 E5 C5 1A FE 20 DA AD F7 D5 CD 5A 00 5B 36 00 11 01 5B 01 FF 02 ED
00 00 00 00 00 00 00 00 00 00 00 F7 D1 13 C1 10 F0 E1 C9 FE 16 CA B0 3E 00 D3 FE C9 06 14 C5 06 0B
00 00 16 09 0D 11 1E F5 06 01 CD BA F7 FE 10 CA C9 F7 C3 AB F7 13 1A 13 C5 CB 27 30 01 71 23 C1 10
9A F7 C9 16 00 0D 06 01 11 2A F5 EB 46 23 4E 23 EB D5 CD 33 F7 D1 F6 C1 10 EE C9 1C 61 26 70 12 91
CD 9A F7 C9 CD 21 F5 21 00 3C 22 C3 AB F7 13 1A 13 32 5B F7 C3 AB A9 20 12 91 69 20 12 91 29 20 1C
CHECKSUM >9869 CHECKSUM >14495 CHECKSUM >10275
54 F7 21 05 F5 06 05 C5 3E 0F 90 F7 CD AF F6 C3 41 FB C5 CD AA 22 09 29 43 CB 09 29 4A 40 0B C6 32
32 2B F5 06 05 3E 20 BE CA 77 F5 47 04 3E 01 0F 10 FD AE 77 C1 C9 4B 21 61 5B 11 49 FA 0E 36 CD 34
CB 46 CA 6F F5 3E 3A 32 5B F7 7E 3E FF 32 8C FB 1B 05 3E 00 32 BC FA 21 A0 59 11 5D FA 0E 2D CD 34
E5 C5 CD 5A F7 C1 E1 23 10 E5 CD F8 D5 CB 22 CB 22 CB 23 CB 23 3E FA C9 42 4B 59 36 35 54 47 56 4E
2D F5 C1 10 D6 C9 3E 17 32 5B F7 6B 83 5F 3E 49 B2 57 3A BC FB FE 4A 55 37 34 52 46 43 4D 4B 49 3B
C3 5D F5 3E 00 32 5B F7 C3 5D F5 FF CA 24 FB 06 03 C5 D5 C1 CD DB 33 45 44 5B FF 4C 4F 39 32 57 53
05 05 05 05 00 3A B3 F5 FE 03 C2 F7 0C CD DB F7 0C CD DB F7 0D 0D 5A FF FF 50 30 31 51 41 FF 16 0B
99 F5 3A 7F F5 FE 01 CB 3D 32 B1 14 C1 10 EC D1 C9 D5 C1 CD DB F7 0D 10 3A 00 00 00 00 00 00 CD BE
F5 C3 C7 F5 FE 02 C2 AB F5 3A 7F 0C 04 CD DB F7 0C 04 CD DB F7 0D 02 3E FF BB CA BB FA 16 00 21 BB
F5 FE 05 CB 3C 32 B1 F5 C3 C7 F5 0D CD DB F7 0C 0C 05 05 CD DB F7 FA 19 7E FE FF CA BB FA 21 B1 F4
CHECKSUM >14662 CHECKSUM >15107 CHECKSUM >10741
FE 01 C2 BD F5 3A B0 F5 FE 01 CB D1 C9 06 06 C5 3E 07 B0 32 59 FB BE CA BB FA 77 C9 F7 21 B5 FA 11 B6
3D 32 B2 F5 C3 C7 F5 3A B2 F5 FE 06 0A 11 5B FB CD 9A F7 C1 10 EE FA 01 05 00 36 3F ED B0 11 B0 FA
05 CB 3C 32 B2 F5 2A B1 F5 CD F0 C3 BC FB 16 0D 0C 10 00 20 20 20 06 0B CD 9A F7 06 06 21 B5 FA C5
F5 7E F5 E5 2A 7F F5 CD F0 F5 EB 20 20 20 20 20 11 00 00 2A BA FB E5 CD BB FA E1 77 23 E5 11 B0 FA
E1 36 20 F1 12 2A B1 F5 22 7F F5 06 0B C5 7E E5 06 0B C5 A7 CB 07 06 0B CD 9A F7 01 C1 10 EB CD BE
CD 36 F5 21 D0 07 11 04 00 CD B5 F5 DC EE F7 F1 1C C1 10 F3 E1 2B 02 7B FE 21 C2 0B FB CD 22 FA CD
03 F3 C9 2D 7D CB 27 CB 27 B5 25 14 7B D6 0B 5F C1 10 E4 C9 00 00 71 FA 06 06 21 B5 FA C5 E5 CD BB
B4 26 00 6F 11 05 F5 19 C9 00 06 00 00 00 00 00 16 09 0D 10 0F FA E1 BE C1 C2 17 FB 23 10 F2 CD
FF C5 ED 5F 6F 3A 7B 5C E6 3F 67 20 20 20 20 16 0A 0D 20 20 20 20 31 FB CD F5 F9 C9 21 64 00 E5 21
25 7E E6 03 32 B3 F5 CD B4 F5 C1 16 0B 0D 20 20 20 20 16 0C 0D 20 D0 07 11 64 00 CD B5 03 F3 E1 E5
CHECKSUM >15076 CHECKSUM >8B40 CHECKSUM >15945
10 E9 C9 CD 36 F5 CD BE 02 F3 7B 20 20 20 16 09 12 10 17 41 16 0B F3 E1 23 3E 6E BC 20 F7 C9 00 00
FE FF CA 1F F6 CD 02 F6 C3 B5 F6 12 10 0F 41 3E 00 32 BF FB 21 00 00 00 00 00 00 00 00 00 00 00 00 00
CD BE 02 F3 7B 21 B1 F4 BE CA 2C 00 22 BD FB 2A 7B 5C 3A BF FB CB 00 00 00 00 00 00 00 00 00 00 00 00
F6 32 B1 F4 FE 25 C2 4E F6 3E 03 27 CB 27 CB 27 C6 07 06 00 4F 09 00 00 00 00 00 00 00 00 00 00 00
32 B3 F5 CD B4 F5 C3 2C F6 FE 26 22 BA FB 22 90 FB 11 92 FB 06 1B 00 00 00 00 00 00 00 00 00 00 00
C2 5E F6 3E 02 32 B3 F5 CD B4 F5 3A BF FB C6 41 32 B5 FB CD 9A F7 00 00 00 00 00 00 00 00 00 00 00
C3 2C F6 FE 1A C2 6E F6 3E 01 32 CD 65 FB 2A 7B 5C 25 22 54 F7 11 00 00 00 00 00 00 00 00 00 00
B3 F5 CD B4 F5 C3 2C F6 FE 22 C2 B6 FB 06 03 3A BF FB C6 20 32 BB 00 00 00 00 00 00 00 00 00 00 00
7D F6 AF 32 B3 F5 CD B4 F5 C3 2C F8 CD 9A F7 21 00 3C 22 54 F7 06 00 00 00 00 00 00 00 00 00 00
F6 FE 20 C2 2C F6 C3 BD F9 06 19 02 C5 ED 5B 8D FB CD E7 F7 21 BB 00 00 00 00 00 00 00 00 00 00 00
CHECKSUM >17097 CHECKSUM >11841 CHECKSUM >1343

```



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💡 I've got a Kempston Centronics E printer interface and would like to produce a full width screen dump and get rid of all the blank lines between the text.  
**Lawrence Owen, Brighton**

💡 Well, you can get rid of those nasty blank lines by using the CR (carriage return) setting on the printer, it's probably on LF (line feed) at the moment. Andrew Pennell's article *Dumps Of Distinction*, Your Spectrum 4, should help you with the full width problem.

💡 When I connect up my Spectrum Plus, Currah MicroSpeech, ZX printer and Currah MicroSlot nothing works, though they work individually. Why?  
**D. Piper, Blackwater**

💡 Sounds to me that you're experiencing what we in the trade call a power supply problem. Your best bet is to clean the contacts at the back of the ZX Spectrum and the MicroSlot.

💡 I can't load *Hyper Sports* or *Daley Thompson's Decathlon* on my Spectrum version 2 although they load on my friend's Spectrum version 3. It's driving me potty.  
**Simon Rabbell, Lancashire.**

💡 The games you mention use hyperload routines and the number that's read from the keyboard port is different on the version 3 Spectrum. Unfortunately the programmers haven't considered old users! There's only one answer — take the offending software back to the shop and ask for your money back.

💡 Where can I buy the add-ons mentioned in *Bits And Pieces*, Your Spectrum 18?  
**R Reed, Somerset**

💡 Most of the peripherals in *Bits And Pieces* cannot be purchased through retailers but you should be able to get them on mail order from the firms that supply them.

💡 I recently moved to Canada and would like to use my Spectrum with a Canadian telly.  
**Marco Nogueira, Canada.**

💡 Well, if the system used is NTSC, 525 lines your Spectrum will need a new VHF modulator and a different ULA to change the line frequency to 60HZ, 525

lines. I reckon you ought to get a second hand monitor or TV that works to British Standards (PAL, 625 lines, 50HZ). I don't think Sinclair will Americanise it.

💡 Do you know of any 300 Baud terminal program that I can use for my Interface 1's port.  
**Jean-Pierre Gibbard, Yaraville, Australia.**

💡 As a matter of fact I do! Paul Griffiths, (13 Andrews Road, Gospel Oak, Tipton, West Midlands DY4 0AW) has a version for text only transfer and a Dutch company called Microsource (Postbus 1243, 8001 BE Zwolle, Netherlands) sell a Prestel type program for the Interface 1. Drop 'em a line for details.

💡 I'm a keen songwriter and want to use my Spectrum as a programmable synthesiser. Can you give me some advice on what equipment and software to use?  
**Paul Allen, Liverpool**

💡 Sure can do! The MIDI interface would be the best as it'll allow you to interface many different synths and use the Spectrum to record and playback the sounds generated from the keyboard. You can control more than one synth so it'll be a good investment. You'll have to get software to suit the interface so you'd be well advised to look at combinations that'll suit your requirements.

💡 My Spectrum works fine with a colour TV when connected up with a Currah MicroSpeech but it won't work properly with a Sony 124UB black and white TV. Why am I getting all this interference?  
**Glynne McDonald, Dunbartonshire, Scotland**

💡 It sounds to me that the black and white TV should go in for a service. I reckon the sound and video signals are too close to each other causing the 'sound on vision' type of interference you describe.

💡 Help! My poor Speccy is very sick indeed. It only produces black and white pictures. How can I get the colour back?  
**J Beaton, Inverness**

💡 If you've got an issue 1 or 2 Spectrum then there's no problem — they've got a small capacitor inside that can be twiddled to adjust

# HARD FACTS

**Having hard times with your hardware? Write to Steve Adams and he'll give you a good time!**

the colour. However, if you've got an issue 3 it could be anything in the colour circuit so it'd be best to get it looked at by a good repair firm.

💡 How do you connect a Trend Printer 800 to a Spectrum?  
**F Newberry, Portslade**

💡 Easy! You'll have to buy an Interface 1 and RS232 lead. Connect pins 5, 6 and 8 together inside the plug to make sure it works.

💡 I know this sounds crazy but I'd like to turn an Ingersol XK696 data recorder into a tape recorder. Can it be done?  
**J Robinson, Romford, Essex.**

💡 Well, you can try! The Load control can be used as a playback volume control but you'll need a separate pre-amplifier to plug into the AUX input. That way you can get the tone and volume you'll need to work from a MIC input. There's already an

AC erase and AC bias for recording on the unit so you shouldn't have any difficulties there. Have a look in the Maplins or AMBIT catalogue for the kit.

💡 I have a problem. The trouble is I never know when to stop piling on the interfaces on my faithful ol' Speccy. I've already got five peripherals stacked on the back. Will I be pushing my luck if I add an RGB monitor interface?  
**Graham Woodcott, Dorchester**

💡 I recommend you get an upgraded power supply and a MicroSlot interface as well 'cos all the RGB interfaces are dead-ended. Both Adapt Electronics and Ferguson do ones that are both pretty popular.

💡 If I acquired an Interface 1, a microdrive and disk drive interface, such as OPUS or Kempston, that use microdrive commands, would I be able to transfer tapes to disk?  
**R Grattan, Retford, Nottinghamshire**

💡 It's not very sensible to use two devices that use the same commands for a start. The Kempston interface (KDOS) would be the best bet 'cos it doesn't use the same microdrive commands — they're all prefixed by PRINT #4. It also uses a command that'll allow you to transfer tapes to disk without needing another interface.

💡 How do I connect up a Spectrum Plus, microdrive and VTX5000?  
**Malcolm Rose, Lytham, Lancs**

💡 Well, the Spectrum's connected to the Interface 1, the Interface 1's connected to the VTX5000 and the VTX5000 can then sit vertically behind the Interface 1 and that's the word of the Lord.

💡 I've got a solution to the dot crawl problem you get with a Spectrum and monitor. Put a switch in series with the colour tuning capacitor (version 1 and 2's only). To eradicate dot crawl simply turn it off! This removes the colour and gives a perfect black and white signal to the monitor.  
**T Van de Wart, Holland**

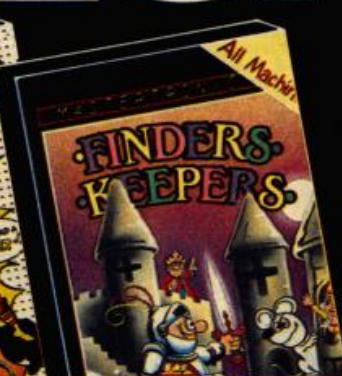
💡 Nice to see a tip for a change, thanks T. If anybody else has got a few hardware hints send 'em along to me at *Hard Facts*

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A comic book cover for Mad Games. The cover features a red car, possibly a race car, in a dynamic pose. The text "MAD GAMES" is prominently displayed at the bottom in a stylized, bold font. Above the car, there are sound effects like "BOOM" and "POW" in a jagged, explosive font. The overall style is reminiscent of classic comic book art.



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## SOFTWARE

■ **Swop:** *Raid Over Moscow*, *Blue Max*, *Battlecars*, *Combat Lynx*, *Delta Wing*, *Mugsy*, *Shadowfire*, *Forth*, *Nodes Of Yesod*, *Backgammon* and *Othello*. Any offers. Tel. (04024) 70148 after 6 pm and ask for Kier.

■ I will swop *Hungry Horace*, a 16/48 tape, *Penetrator*, *Bear Bover*, *Voyage into the Unknown* for *Spy Hunter* and *Match Day* or *Starion* and *Match Day*. Tel. (0592) 774562 and ask for John.

■ **Swop** *Jumping Jack*, *Chess*, *Castle Quest* and *3D Combat Zone* all for *Fantastic Voyage*. Tel. (81) 4728 and ask for Robert.

■ Will swop *Transformer* tape for *Lern MD 16 program* (incl manual) original only! Write to: J Diender, Huismaistrat 12, 8266CW, Kampden, Holland.

■ **Swop** *Fall Guy*, *Chequered Flag*, *Byte Bitten*, *Deathchase*, *Crazy Crane*. All originals for *Minder*, *Skool Daze*, *JSW II* and *Bruce Lee* or swop individually. Tel. (0342) 24540 and ask for Paul.

■ **Software** to swop. *Wriggler*, *Magic Packs*. Tel. (0703) 767580 after 6 pm and ask for Steve.

■ **Swop** *Fantastic Voyage*, *Tranz Am*, *Lunar Jetman*, *Pitfall II* for a *Currah MicroSpeech*. Tel. 01-853 4817 and ask for Nick.

■ Latest *Spectrum* titles to swop. Over 300 titles. Your list for mine. Rely on a reply. Send to Nik Wragg, 35 Flaxley Road, Selby, North Yorkshire YO8 0BW.

■ **Software** to swop — send your list for mine. I have 200 games including many new releases. Write to Gary Walvin, 32 Caunts Crescent, Sutton-In-Ash, Notts NG17 2FH.

■ **Swop** my *Boulder Dash II* (Rockford's *Riot*) for your *Way Of The Exploding Fist*. Also want printer — will swop for some software and *Personal Stereo*. Tel. Croborough 62393 and ask for Chris.

■ **Software** to swop. Over 120 titles, send your list for mine. Nicholas Downton, 113 Palmyra Road, Elson, Gosport, Hants PO12 4EF.

■ **Swop** *Monty* is *Innocent*, *Technican Ted*, *Raid Over Moscow* and *Psytron* for *Blue Max*, *Zaxxon*, *Shadowfire* and *Alien*. Craig Seaton, 14 Dixon Terrace, Pitlochry, Tayside, Scotland PH16 5QX.

■ **Swop** *Atic Atac*, *Daley's Decathlon*, *Jack and the Beanstalk*, *Automania*, *Skool Daze*, and *Cookie* for *Currah MicroSpeech*. Euan Terras, 9 Leslie Terrace, Prestwick, Ayrshire, KA9 1LN.

■ Will swop *Tapper* for *Return Of The Jedi*. Tel. Stephen Junior on (041) 649 2183 between 4 and 6. Originals only, please!

■ I will swop *Sabre Wulf* for *Night Shade*. Tel. Ian on Sunderland 489856.

■ **Swop** *Hyper Sports*, *The Way Of The Exploding Fist*, *Ghostbusters*, *Blue Max*, etc., for *Tapper*, *Beach Head*, *Up'n'Down*, *View To A Kill*, *Boulder Dash*. Write to Juri Jolkonen, 37, Landdowne Crescent, London W77.

■ **Swop** any games one for one. Also hints and tips. Tel. Alan on (0703) 735104 between 4 and 6.

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■ I will swop *Halls Of The Things for Pole Position* or *Underwilde* — write to Andrew Friday, 56 Holtdale Avenue, Leeds LS16 7SG West Yorks. Originals only please!

■ I need *White Lightning*. Swop for *Softaid*, *Pi Eyed*, *Skool Daze*, *Zipper Flipper*. I also need *Quill*. Write to M Pettit, 8 Poole Road, Salterback, Workington, Cumbria. Tel. Harrington 832 593.

■ *Shadowfire* wanted. Will swop *Gobble A Ghost*, *Splat*. Tel. Thomas on Earl 3076.

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■ **Software** to swop. *Exploding Fist*, *Finders Keepers*, *Millionaire*, *Atic Atac*. Wanted *Alien 8*, *Night Lore*, *Underwilde* or similar ring Jason on Barnsley 763192.

■ **Swop** my *Airwolf* for your *TLL*, my *Daley's Decathlon* for your *JSW II*. Tel. Damien on Chelmsford (0245) 358473.

■ **Swop** one of *River Raid* for *Hurg* for one of *Hypersports* *Spy v Spy*, *Grand National* or *Chiller*. Will swop separately.

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■ I have a lot of programs. Old ones, new ones, and in between — Hurry! Write to Richare Allenburg, Duizendknoopstraat 46, Emmeloord, the Netherlands, 0302. VF. Wanted — *Hypersports*, *Bruce Lee*, *Spy Hunter* and more.

■ Will swop *Brain Damage*, *Embassy Assault* and *Zip Zap* — without inlay card — for *Elite* and *Street Hawk*. Tel. Nicholas on Billericay 54495 after 4.

■ I would like to swop software with anyone living in Switzerland. Have 40 brill games. Tel. H. Dubois 0227474146 or write to Emily Gourd, 7206 Geneva. I speak French/English.

■ **Swop** *World Cup*, *Sherlock Holmes*, *Match Day*, *Crypt*, *Black Crystal*, *Everest Ascent*, *Doomsday Castle* for any adventures especially *Doomsday's Revenge* and *Lords Of Midnight*. Tel. Alec on Beith 2197.

■ Will swop *On The Run*, *TLL* and *Plus One* — all this for *Fairlight*, *Halls Of Things* or *Gyron*. No copies. Tel. James on St Albans 54644 after 4.

■ I have *Blade Alley*, *Planetoids*, *Space Raiders*. Want *Knight Lore* or *Alien 8* or *Raid Over Moscow*. Write to Steve Wylie, Sunray, Newlands Lane, Ramsgate, Kent CT12 6RJ.



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■ **DT Decathlon**, *JSW*, *Technician Ted*, *Chequered Flag* — swop for any *Monty* games, *Backgammon*, *Hunchback II*, *Blockbusters*, *Tapper*, *Witches Cauldron* — all originals. Write to Mike Coombes, 61 Clarkes Avenue, Worcester Park, Surrey, KT4 8QA.

■ **Swop** *Heathrow* for any one of *Pinball Wizard*, *Brian Bloodaxe*. Must be originals with instructions. Darryl Teggart, 11 Willow Park, Clonmel, Co Tipperary, Eire. Tel. (052) 23372.

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■ **Swop** my *Quickshot 2* joystick for either *elite* or *Exploding Fist*. Ring (0734) 25988.

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■ **Spectrum +**, *Currah Speech*, *Turbo Interface*, *Quickshot 2*. £122 of originals. Sell for £150 or swop for *Commodore 64* and accessories. Tel. 01-530 4784 after 5 and ask for Robert.

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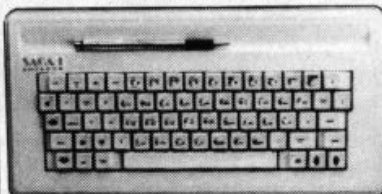
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■ Brother EP 22 printer and typewriter with RS232 lead. Never used but may need adjustment to RS232 connections £90. Keithayton, 8 Raleigh Drive, Burncross, Sheffield, S30 4WR.

■ 48K Spectrum Interface I and microdrive, Currah speech and slot Kempston joystick interface, DK Tronics light pen and software £225 ono. Tel. (0296) 712848.

■ Microdrive and Interface I, still boxed, perfect condition £75 Sanyo cassette recorder, also perfect £12. 200 plus magazines £25. *Your Spectrum* 1, 2, 4 — £3 each. Tel. (061) 7739842 weekends only.

■ Spectrum 48K for sale plus to profile keyboard, joystick interface, two portable cassette recorders, magazines plus over 250 games. £200. Buyer will collect or straight swap for Commodore 64 plus C2N. (Hmmm! Ed). Paul Newall, 72 Dalmington Crescent, Ayr, Scotland.

■ VTX 5000 Modem plus software — hardly used, boxed and includes *The Hackers Handbook* £50 ono. Tel. Bognor Regis 823540.

■ Cassette recorder with volume, tone, auto level, tape counter, mains lead, VGC. Similar to BBC recorder, but silver/grey. Only £20. Write to John Heywood, 19 Molyneux Rd, Maghull, Liverpool.

■ Saga keyboard, boxed, £25. Currah microSpeech plus Mystic Tower tape £15. Currah MicroSlot, unused, £7. Or swap the lot for microdrive and Interface 1. Tel. (0734) 332604 and ask for Ben.

■ VTX Modem. Five months old, as new, plus extra software £40. Software for running bulletin board with T-soft MBX, Cug's and much more £15. Also Currah MicroSpeech £15. Tel. (051) 4233381.

■ ZX Spectrum +, tape recorder, joystick interface, £80 worth of software incl. *JSW II*, *Way Of The Exploding Fist*. All for £150. Tel. Chardlers Ford 61062 and ask for Paul.

■ Spectrum 48K, 10 months old, with Kempston Interface and joystick, data recorder, over £150 worth of software, many recent titles, mags. All worth around £350. Tel. (093874) 310.

■ 48K Spectrum, radio cassette recorder, Kempston joystick interface. Scalextric with four cars, extra track, £20 or swap for C64 software. Tel. Ely 740672.

■ ZX Interface I, microdrive, three carts incl. *Ant Attack*. Brand new £65. Phone Runcorn 713498 after 4 pm. Also brand new unused boxed Interface I. £33.

■ Spectrum + printer, Protek Interface plus over 70 games. All guaranteed, brand new £250 ono. All games originals, many more. Tel. (0758) 612748 for details.

■ Spectrum 48K, turbo interface, Kempston compatible interface plus £180 worth of software, swap the above for a Commodore 64 and accessories. (*Double hmmm! Ed*). Tel. (0437) 5959 ask for Victor.

■ 48K Spectrum, Saga Emperor keyboard, microdrive and interface I, Kempston joystick interface with £300 of software including *Frankie, Fist*. Tel. (0423) 865418 ask for James. Offers around £250.

## PEN PALS

■ Penpal wanted to swap adventure games and tips. I have lots of them! Send your list for mine. Hurry! Nuno Miranda, Av., Emideo Navarro, 19-A/1, 2750 Cascais, Portugal.

■ Penpal wanted aged 14. Into POKES and arcade games — will swap games. I have the latest titles, *Super Test*, *Nightshade* and lots more. Darren Culley, 24 Gayland Avenue, Luton, Beds. LU2 0RR.

■ 17 year old Speccy owner wouldn't mind writing to a good looking female who likes Speccy's synths and Depeche Mode and music. Julian Phelps, 27 Workshop Road, Swallownest, Sheffield, S. Yorks. S31 0WA.

■ Penpal wanted. I like making graphics and m/c utilities. Also got lots of the latest games. Write to Peter van den Kooi, Bekkinghof 9, Hoogeveen, Holland 7908 BS.

■ Male penpal wanted, about 13 years old, to swap games, POKES and hints. I like arcade-type games and football. Tel. Craig (0382) 25076.

■ 15 year old Spectrum owner wants female or male Spectrum owner to swap software, POKES etc. Tel. 850760 or write to Adrian Roberts, 75 Elvaston Road.

■ Penpal wanted male or female, aged 14+, for male Speccy wrecker. Interested in music, (pop), anything to do with micros etc. 39 West Lane, Burn, nr. Selby, N. Yorks. YO8 8LR, Richard Shore.

■ Foreign penpal wanted to swap games. I have a very large selection of English games. Please send your wish list letter. Write to Dave Wild, 22 Lansbury Road, Edinstowe, Notts. NG21 9QJ.

■ Female penpal wanted to exchange hints and tips etc., and for general correspondence. Must be 17. Write to Daryl Baughan, 12 The Island, Steedie Claydon, Buckingham, Bucks. MK18 2NU.

■ I would like a penpal who is good at playing and finishing adventure games to give hints and swap games. Martin Gormley, 51 Walter Street, Dennistown, Glasgow G31 4PX.

■ Penpal wanted, male aged 15-16. Must be beginner in Basic. Write to Michelle Farrell, 5 York House, Beech Road, Sowerby Bridge, W. Yorks. HX6 2LH.

■ Hi there, anny Aussies wanna swap software, POKES, etc.? Please send list. All letters answered. Any under-Spectrumized countries may apply. Dean Paradise, 5 South Road, Block 10, Broken Hill, Australia, 2580.

■ I am 17 and would like a penpal to write about all topics but especially the old ardently loved Speccy. All letters guaranteed answered. Please write to Eckhard Rodel, Leharstr. 13, 7535 Ko. — Stein 2, West Germany.

■ Hi! I'm Nabeed and would like a penpal aged 12-14 to swap games, POKES, hints, games and anything else. Please write to me, someone! Nabeed Ramzan, 25 George Street, Dunplane, Perthshire FK8 9HE.

■ Penpal wanted, male/female, aged 13/14, interested in swapping sci-fi and combat games and POKES for the Spectrum. I also like pop music. Please write to Andrew Small, 6 Fairway, Chatteris, Cambs. PE16 6ST.

■ Sensible person sought, 21+ for trivial and not so trivial programming and Spectrum use. Preferably with VTX 5000 modem and in London. Richard Brown, 14C Saint Paul's Terrace, London SE17 3QH.

■ Female penpal 16-18 wanted for swapping games, hints, ideas. I'm 18 and interested in all kinds of music, football, tennis, basket ball. I'm waiting for your offers. Please write, Arthur Sepien, P.M.B. 5437, Department of Pathology, M.M.H. Kano, Nigeria.

■ I'm 15 and would like a female penpal who is about 15-16. I'm interested in all Speccy stuff and Madonna. Please send a photograph. Alex Taylor, 7 Halifax Way, Newmarket, Suffolk, CB8 0DH.

■ 17 year old Australian who loves his Spectrum wishes to correspond with dedicated British Spectrum games buff to swap games, hints, news, etc. Please write to Ian Newman, 97 Springdale Road, Killara, 2071, N.S.W., Australia.

■ Dutch boy, 16, wants a penpal to swap games, tips etc. Write to Rene Klootwijk, Eliotplaats 199, Rotterdam, Holland. 3060 EK.

■ I'm a female Speccy lover, and would like a male penpal, 15+. My likes include computers, discos, FGTH, — please send photo to Louiz Wright, 42 Bickham Park Road, Peverell, Plymouth PL3 4QL.

■ 14-17 year old penpal required into games, programming and Madonna. Male or female to swap games etc. I have about 500 games. Will return all letters received (tape or letter). David Moore, 5 Burdett Close, Skegness, Lincs. PE25 2NY.

■ A 15+ female penpal required. Write to John Clarke, 55 St. Mary's Stratford upon Avon, Warwickshire, CV37 6XG. I love hacking and adore pop music. Give a bloke a chance.

■ Penpal, male or female, 15+ to swap POKES, hints and tips. Must have some knowledge of machine code. Steve Kidd, 88, Whitefield Loan, Whitefield, Dundee.

■ Penpal wanted to swap POKES, hints, games. I have over 200 incl. *H Encounter*, *Nodes Of Yesod*, *Dambusters*. Write to Jonathan Cook, 217 Crescent Road, Brentwood, Essex, CM4 5JB.

■ Speccy user just got a microdrive. Would like a girl penpal abroad. Should be my age — 13. Phone soon, please! Gregory Pound, (0944 946.)

■ Girl penpals wanted. We are interested in computers, music, reading, water polo and fun. Tim and Marc, 5 St Brelades Road, Ballantyne Park, Harare, Zimbabwe.

## WANTED

■ Wanted — Interface 1 plus microdrive. Will swap £110 worth of software. M. Leah, 20 Oakworth Grove, Halfway, Sheffield, S19 5SE or phone (0742) 485736 after 4 pm and ask for Mark.

■ ZX Printer + paper. Will swap your Spectrum copies 1-12. Write to Gary Davison, 80 Barn Rise, Seaford, East Sussex.

■ ZX Printer wanted in good condition. Have light pen or programmable sound generator to swap or cash. Tel. (0438) 354177, ask for John.

■ Willy meets the *Taxman* wanted to complete *Miner Willy Saga*. Swap for *Runes Of Zandos* and/or *Ghostbusters*. Write to Peter Brown, 53 Windsor Road, Cambridge, CB4 3JL.

■ Will swap collection of railway books and

magazines for Commodore 64 computer system. J. C. McNeill, 15 Dainottar Drive, Old Kilpatrick, Strathclyde, G60 5DP.

■ Wanted. A broken WH Smith's data record CPD8300. For spares. Please write with details to Alan Salmon, 422 Nore Road, Portishead, Bristol, BS20 8HA.

■ Currah MicroSpeech or Quickshot 2. Will swap *Frank Bruno's*, *Spy Hunter*, *Match Day*, *Ghostbusters*, *Broad Street*, *Moon Alert* and loads of others. Tel. 01-471 1983 and ask for Neil.

■ Wanted. Tronic light pen. Will swap *Mugsy*, *Cookie*, *Super Spy* and *Election*. Tel. 01-459 5496 and ask for John.

■ Wanted. Interface 1: would consider one with a microdrive working or non-working order. Must be very reasonable. Also wanted, *Hunter Killer*. Tel. (0843) 68522 Evgs.

■ Wanted. Crash issues 1 and 2 plus issues of *Your Spectrum* 2 and 3. Will give anything up to £2.50 per issue. Darren Say, 40 Rutland Place, Maidenhead, Berkshire SL6 4JA.

■ *Moon Cresta*, *On The Run*, 007 spy latest. Send your list for mine. Write to Dave Wild, 22 Lansbury Road, Edinstowe, Notts NG21 9QJ.

■ *Understanding Your Spectrum* and the *Complete Spectrum ROM Disassembly*. Both from Melbourne House — name cond and price. M. Coombes, 61 Clarks Avenue, Worcester Park, Surrey KT4 8QA.

■ Interface plus microdrive plus stringy things or Opus Disk drive or letter quality sheet printer plus interface and software for Sony pocketsize cordless telephone/intercom with up to 1500ft. range. Almost new. Boxed. Tel. Wickford 63884 Evenings.

■ *Your Spectrum* issues 2, 6, 7 and 11 wanted. Will swap for any two of *Gremkins*, *Sabre Wulf*, *Knight Lore* or *Alien 8*. Tel. 042483 and ask for Danny.

■ The illustrator urgently wanted. Will swap for *Sabre Wulf*, *Hung and Hunchback*, *Philippe Dirckx*, *Maaszicht 9*, *Neer*, *Holland*, 6086 NL.

■ Issue 11 of *Your Spectrum* wanted. Will pay £2. Tel. Steve on Chelmsford 81525 after 5.30 pm.

■ Urgent!!! Spectrum rubber keyboard wanted. Will pay up to £3.50. Tel. Halifax 203739 and ask for Neil Kendall. Or write to 12 The Avenue, Hipperholme, Halifax, West Yorkshire. HX3 8NP.

■ Wanted. Ket Trilogy by Level 9 — swap for *Sherlock* by Melbourne House, and *Black Crystal*. G. Bournier, 77 Crewe Road, Airedale, Castleford, West Yorkshire, WF10 3NG.

■ Wanted. Interface 1 and microdrive. Will swap for DK Tronics light pen. Will Command Control joystick and Kempston compatible interface. Tel. (0326) 290459 and ask for Sean.

■ ZX Jet Set Willy map and POKES wanted for *Alien 8*, *Dun Darach* and *Dynamite Dan* maps or Timegate. Write to Graham Miller, 49 Constance Street, County Durham DH8 5DN.

■ Wanted — guide book or solution book to *The Hobbit*. Any help accepted. A. Mulhall, 2 Upper Lord Street, Oswestry, Shropshire SY11 1LT.

■ Extensive ZX81 System, must have lots of hardware, tons of software and be in perfect working order. Will give my perfectly working Spectrum. Tel. Andrew on (0639) 750952.

■ Microdrive and Interface 1 will swap for some VTX 5000, Currah MicroSpeech, Ram Turbo Joystick Interface. Phone Andrew after 5 pm on (0639) 750952. Also interested in swapping software.

■ Interface One wanted and microdrive for ZX Spectrum. Tel. (0227) 720654.

■ Wanted! Your hardware for my games. Interested in interfaces, lightpens, joysticks etc. Write to Calle Nordlund, Barkspadegaven, 75247 Uppsala, Sweden. Your list for mine.

■ Required — issues 2, 7, 9, 11 to complete set. Pay £1.50. Tel. David (031) 449 5315.

■ Wanted — Video Digitiser or schematic diagram for linked video monochrome camera to Spectrum. Write to Alan Cupif, Langeasse 97 CK-4104, Oberwil, Switzerland.

■ Wanted — Crash issues 19 & 20 and *Your Spectrum* 17 & 18. Will swap for any two of new software, including *Exploding Fist*, *Dambusters*. Write to Palosika Zelko, Ho-Si-Minova 5, 11070 Novi Beograd, Yugoslavia.

■ Wanted — manual for Spectrum, old style. Please Tel. Chelmsford (0245) 358473 and ask for Ian.

■ Digital sound sampling unit wanted (Date! Electronics). Will swap for Currah MicroSpeech and software games (*Frankie*, *Nodes Of Yesod* etc.). Tel. (0686) 28730 and ask for Paul.

■ *Carnival* by Eclipse wanted — will swap. Please write to T. Longstaff, 1 Worcester Road, Durham. Tel. (0385) 66606.

■ Wanted. Hisoft or Oxford Pascal, Machine Lighting, Beta Basic 3, Crystal disassembler, (goes with Zeus). Send address and phone no. and details to Andrew Burnham, William Morris Hall, Ashby Road, Loughborough, Leics LE11 3TQ.

■ Wanted: Currah MicroSpeech, light pen or other accessory. Will swap for *Pool*, *Byte Bitten*, *Booby*, *Mr Wimpey*, *Lunar Jetman*, *Angler*, *Nifty Lifty* and more... Tel. (0326) 785767 between 6 and 8.

■ Wanted: Kempston Turbo Interface, Quickshot 2 plus circular robot arm. Willing to pay reasonable prices. Write to Andrew Campbell, 413 Enniskillen Craigavon, Northern Ireland.

■ 4 x 2 Wanted: *Your Spectrum* issues 1 to 11 — please write to Edmund Behrendorf, Uuelhemmer Weg 14 5401 St. Sebastian, West Germany.

■ Wanted. Epson P-40 printer with adaptor, paper and suitable interface for Spectrum. Will swap for hand held Palman, some games and radio cassette recorder. Tel. (0535) 44302, ask for Clive.

■ Wanted. Microdrive Demo cartridge as supplied with expansion system. Tel. JR Greenwood on (0282) 65154.

■ Wanted. Alphacom 32 or Floyd 40 printer. Will swap 6 games worth £47. *Automania*, *Pyjamarama*, *Boulderdash*, *Gyron*, *MATC* and *Ant Attack*. Tel. Rainham 54333 and ask for Neil.

■ Date! sound sampler wanted. Will swap for Currah MicroSpeech, DK Tronics light pen, *Sherlock*, *Nightshade* and *Starion*. Tel. (061) 7158 after 5.

■ Wanted Ram Turbo Interface. Will swap for programmable interface and *Alien 8*. Tel. (0782) 620770 and ask for Paul.

## MESSAGES, CLUBS & EVENTS

■ International Beta-disk User Club. Want to join or get details? Contact Per H. Kristensen, Norresobakken 111, 8800, Viborg, Denmark. Phone + 456 61 2968.

■ POKES, maps and tips FREE! Loads and loads of POKES, maps and tips. You will not be disappointed. Send an a/c to Mark Cairns, Glenfield House, 246 Comber Road, Lisburn, Co. Antrim, BT27 6XZ.

■ I have all YS issues. Send cash offers, software or hardware swaps, etc. A Steen, 194 King Street, Dukinfield, Cheshire, SK16 4TY.

■ Hi Hak and Leigh. I love you Leigh. Happy hacking Hak and I hope your Speccy coots down for Christmas. How's Mark, Tina? Bye for now, love from Joe. Mark Harris, Flat 4, Freshford Mansions, Atlantic Road South, Weston-Super-Mare, Avon.

■ YS issues 1 to 18 except 9. Ant poster. All as new. Any offers for all or buy issues. Joe Bakewell, Barrow-in-Furness, Cumbria.

■ Happy birthday Katy and Andy. Butch broke his Speccy so, Sophie, buy him another don't you think? Tracy, Jonny and Quincy.

■ Here's a message for anybody with a broken joystick. I repair them cheaply — mostly Quickshots. Send sae Wayne Griffin, 27, Melling Road, Aintree, Liverpool, L9 0LE.

■ Help wanted. Studying Ideal Schools Computer Course and help needed with lessons 6 to 10. Any help rewarded. Contact Irene Blackhall, 48 Polmuir Road, Aberdeen.

■ Spectrum High Score magazine. Loads of tips, POKES and scores. For latest issue send 20p piece plus stamp to Anthony Marshall, 41 Loders Green, Eastfield, Scarborough, N. Yorks. YO11 3LB.

■ I have all YS issues. Anyone interested? Offers in writing to Robert Lawes, 4 Meadow Croft, Rogiet, Newport, Gwent, Wales NP26 3SR.

■ Your Spectrum magazine collection (1 to 18) on offer. Phone Tom during evening meals. Phone 202116 (Brighton code).

■ Hi Darren Rabbit Hornsby. My poor eraugs has a common code. Please make it "new" again. No sarky comments from this so called Ed. T.P. for Editor. (*Hooyay! T.P.*). Robert Excellent Bell.

■ Back issues! *Your Spectrum*, nos 1 to 18, *Sinclair User*, *Crash*, *Your Computer*, 16/48 etc. For complete list and prices write to Keith Johnston, 3 Navar Court, Bangor, Co. Down, N. Ireland BT19 2PS. Enclose sae.

■ I would like to know POKES for all the games. I'm waiting for your hints. Mario Manuel Silva Cunha, Outeiro — Calendario, 4760 U.N. F. Malicao, Portugal.

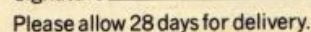
■ I've got millions of POKES, tips'n'maps to swap for games or will sell separately. Phone Hindley 55633 after 4 pm and ask for James.

■ Your Spectrum copies 1 to 12. I'd like a ZX printer, if possible, with paper. Write to Gary Davison, 80, Barn Rise, Seaford, East Sussex, BN25 3DD.

■ Problem? No problem! Bored genius seeks mental exercise. Any Speccy related problem guaranteed solved. Write and/or tape with sae to Mick West, 205 Palatine Road, Manchester, M20 8TU.

■ Alan Hassall from Lisburn Lane, Liverpool please answer my tape 1 letter. I don't think you play fair game in this way. Arie Baars, J. Steenstr. 95, 7606XW Almela, Holland.









# BACKLASH

Iolo Davidson — On the Other Hand . . .

**T**he financial crisis at Sinclair Research must have been dire indeed for Sir to have publicly stated that he thought Robert Maxwell would be better than himself at running the business side of the company. And just to get the egotistical magnate to front up a few readies. (We can't be sued for revealing that Maxwell is an egotist, can we?)

According to the *Sunday Times*, the Mirror Group's heading for a twenty-five million pound loss this year, after an unprecedented drop in circulation on all three of its national newspapers. Perhaps this is the reason that the Sinclair/Maxwell deal fell through. Maxwell may have suddenly realised that he didn't have ten million to spare. Or Sinclair may have realised that Maxwell didn't have ten million to spare. Sir is not, after all, as hopeless at business as he sometimes makes out — even if he does hang round with that Mensa crowd!

It's become almost obligatory for journalists to snipe at Sinclair. Even the television people seem to have changed over from 'entrepreneurial genius' to 'unsold stocks of C5s'. I predict that this means the badmouthing phase is now over. Once the telly gets hold of something it's dead as a story, and we visionaries in the specialist press have to write articles that go 'On the other hand . . .'. I mean, you don't want me to tell you the same rubbish you hear every night on the box, do you? So we'll just lose likeable Uncle Clive the bumbling inventor, and in his place find Sir Clive 'Fifty Pence on the Pound' Sinclair, close-mouthed tycoon.

When you think about it, Sir

Clive's most successful innovations haven't been the genuinely new technology, such as the folded cathode ray tube in the miniature flat telly, but the hard-headed businesslike cost cutters like the membrane keyboard. Hands up everyone who actually likes the Spectrum (or QL) keyboard. Gosh, what a strange looking hand! Of course you were never meant to like the keyboard, you were meant to like the price, and millions of you did.

Sir didn't invent the home computer, but he did manufacture the first one that everyone could afford. The membrane keyboard and the ULA are the things that made the hundred quid computer possible, and they were available to any manufacturer. But Sinclair was the quickest to see the business possibilities of what were essentially compromises rather than technical advances.

The general public had no reason to notice Sir Clive until the advent of the home computer boom, but he's been around for a very long time. If you think Sinclair's first computer was the ZX81 — or for those who remember it, the ZX80 — then you're wrong.

The first was the mail order MK 14 Computer kit in 1978. It had a hexadecimal membrane keyboard, a quarter K of RAM, a calculator style display, and the cassette interface was an optional extra. Admittedly, it wasn't sold under the Sinclair name but as a product of Science of Cambridge Limited. But this company later marketed the Sinclair ZX80, so we can jump straight to the obvious conclusion — it was Sir Clive all along. When the ZX81 came along, Science of

Cambridge disappeared and Sinclair Research was born.

But Sinclair's history goes back long before that. Hardly anyone in the computer generation will remember the Black Watch fiasco. What looked like a highly desirable product, an early LED digital watch, couldn't be supplied in sufficient numbers because the maker of a vital chip let Sinclair down. Sinclair did much better out of the calculator boom of the mid seventies, producing half a dozen different models that sold in large numbers. There was even one that would strap on your wrist, but that was available only as a kit! The wrist calculator was sold by a company called Sinclair Instrument Limited.

You have to be one of the older electronics nuts to remember Sinclair Radionics Limited of the late sixties and early seventies. It sold Hi-Fi amplifier modules, odd polystyrene foam speakers, and the 'world's smallest' transistor radio, the Micromatic. This was a very successful company, one that regularly booked lyrical four page advertising spreads in the electronics mags. The equipment itself was very much what we've come to expect from Sinclair — high specifications, compact size, suspect reliability, and a bargain price.

Sinclair Radionics moved out of Hi-Fi into calculators and digital multimeters. They got the Queens Award to Industry in 1978, then became Sinclair Electronics Ltd, making oscilloscopes, frequency meters, and even logic analyzers, under the brand name 'Thandar'. Last I noticed it was Thandar Electronics Ltd. and still going strong.

Only the incredibly ancient

will remember Sir Clive's first business, and I don't admit to being as old as all that. The story goes that he earned a crumb or two in the days when semi-conductors were exotic and expensive by buying up manufacturer's out-of-spec transistors, sorting out the useful ones with a transistor tester and selling them at knock-down prices to electronics hobbyists. This make-do-and-mend beginning has stood our entrepreneur in good stead through the years. Even in the Spectrum, manufacturers' fallouts were used to keep memory costs down by using just the good halves of partially functioning memory chips.

So Sir has a record of business success going back more than twenty years. Those of you who admire this record and who wouldn't mind emulating it are now in luck. Before giving himself over fully to business activities, Sir Clive did a little writing. Naturally, he quickly realised that this was no activity for a grown-up person and desisted, but like Joanna Lumley's early video appearances, the evidence remains.

An afternoon's scholarly research through his adolescent indiscretions has revealed to me the whole secret of Sinclair's success. With a single cantrip he combines science and art and produces gold from dross. Here it is, from Clive Sinclair's own book *Transistor Subminiature Receivers Handbook for the Home Constructor*\*, and I quote: 'Simplifying circuits and obtaining the maximum performance from a limited number of components is an intriguing pastime.'

Now those are the words of a born businessman.

\* Bernards Radio Manuals No. 174, (C) 1961, six shillings and sixpence at all good back street valve wireless emporiums.

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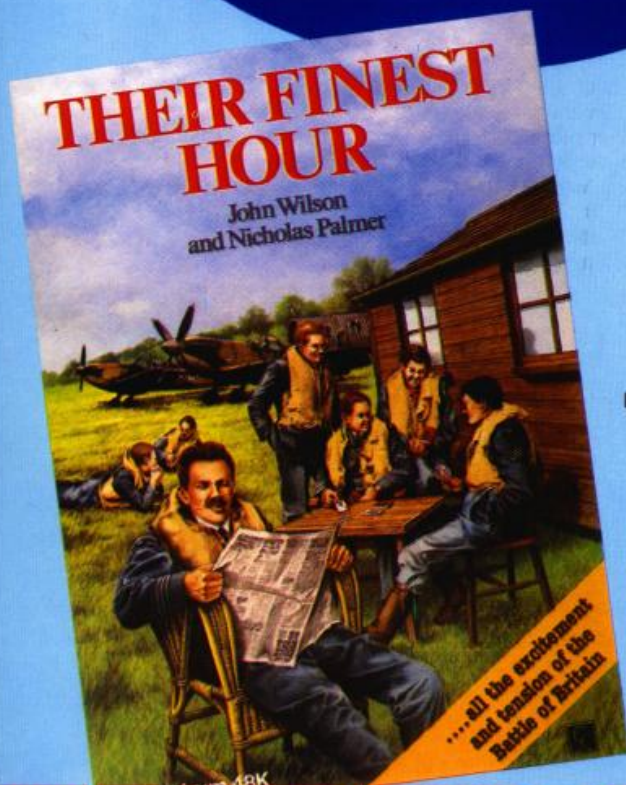
"What's that picture supposed to be?"

"Er, eye-catching, that's what it's supposed to be."

"But it doesn't tell you anything about the great new icon-driven Battle of Britain strategy game, **THEIR FINEST HOUR**, from Century Communications, publishers of **THE FOURTH PROTOCOL**. I mean, what's it got to do with using your skill and judgement to stem the almost inexorable advance of Goering's Luftwaffe? Does it tell you anything about the deployment of Spitfire squadrons and ack-ack batteries, the allocation of fresh pilots, or keeping in touch with the weather forecast? How about the daily reports you have to make to Winston Churchill, and the pulse rate feature where you control the speed of the game?"

"Well, er ..."

"Right, we'd better hurry up and design a new ad before the game hits the streets on 9 December, and people start writing to and phoning Century Communications at 62-65 Chandos Place, London WC2N 4NW, Tel: 01-240 3411 and asking for copies."



# THEIR FINEST HOUR



Their Finest Hour — a great strategy game simulating The Battle of Britain, by Nicholas Palmer and John Wilson. Published by Century Communications for the 48K Spectrum at £9.95.

**48K Spectrum**

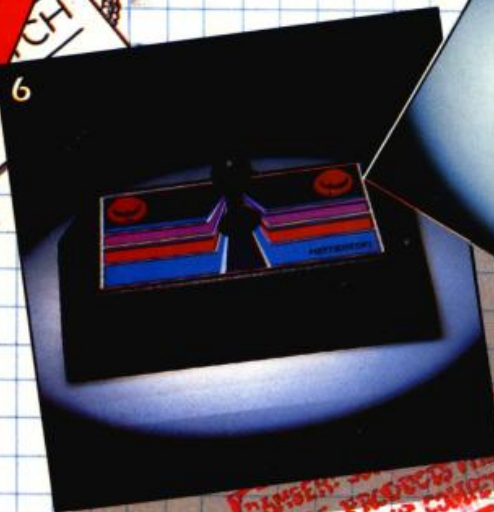
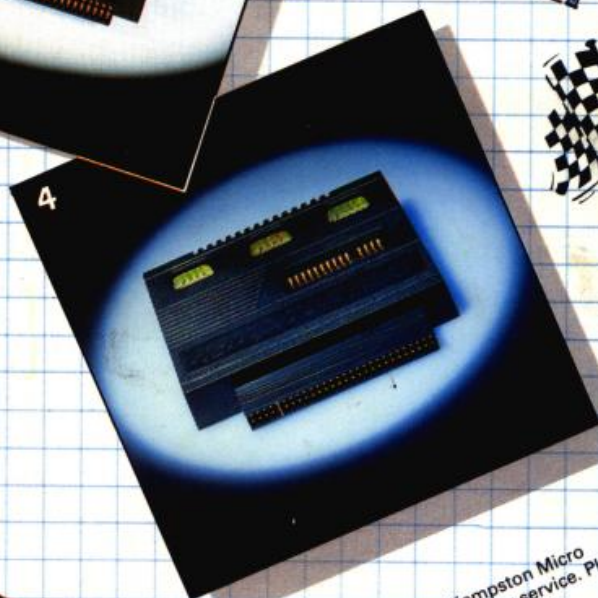
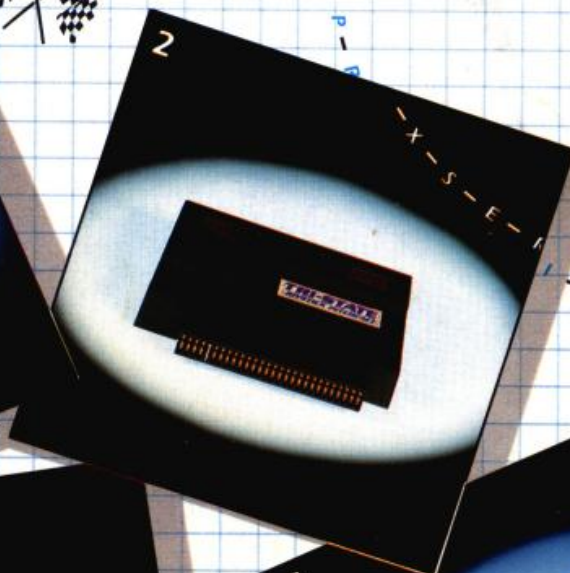


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