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CRASH

ZX SPE

A NEWSFIELD PUBLICATION
NO. 42 JULY 1987
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James Bond is back!

THE LIVING DAYLIGHTS

We look at the SFX and the game from DOMARK

Zapped by

ZYNAPS

from Hewson

Tau Cetian and Academician

PETE COOKE

talks about MICRONAUT ONE

AN ARCADE MACHINE IN YOUR HOME

Mattel's NINTENDO arrives!

EXTRA!

A REAL TROTTERS-ON EXPERIENCE IN OUR EXCLUSIVE 16-PAGE PULL-OUT COMIC!

THE OINK! COMPUTER SPECIAL

And the Story behind *Oink!* on page 76

OINK! OINK! OINK!

SPECTRUM

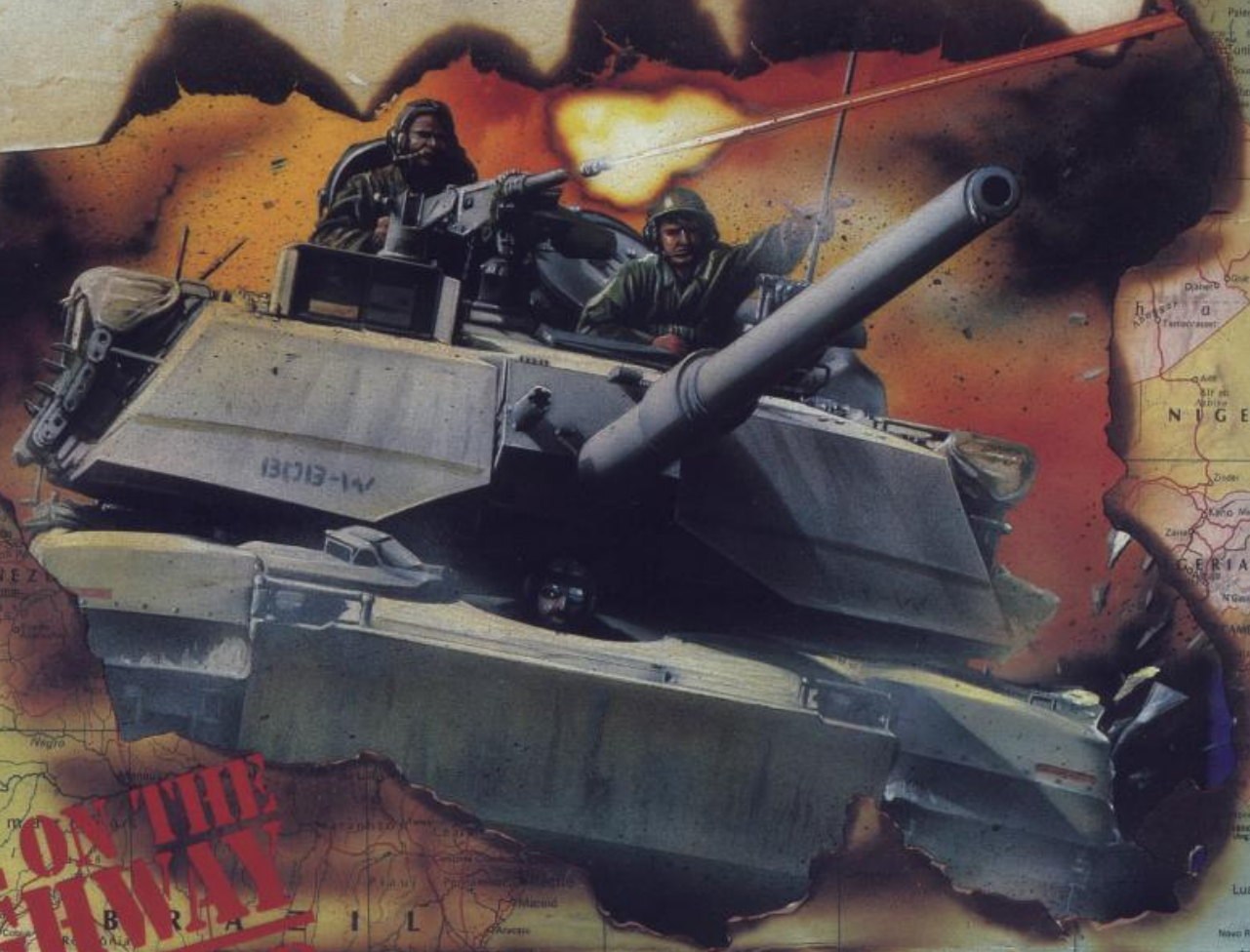
MONTHLY SPECTRUM SOFTWARE REVIEW

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CRASH

ZX SPECTRUM

ISSUE 42 JULY 1987

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Cover by Oliver Frey

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The comic cover framed! mugged! dressed! and pigged!

92 DRILLER THRILLER
Incentive have an exciting new technique for *Driller*, and you can be a part of it. £300 worth of computer equipment in return for special FX!

Mattel's Nintendo unveiled





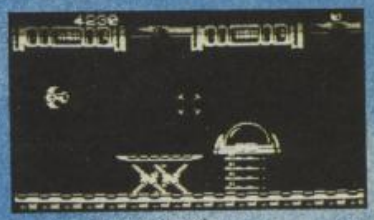
OINK! Special – pull out comic and game preview



Killed Until Dead – Smashed mind- bender



James Bond – the Special FX



Zynaps – Smashed action

The next issue of CRASH goes on sale from 30 July, simply stuffed and bunged full to the brim with little letters arranged in comprehensive groupings which, to the intelligent, sort of mean quite a lot. So if you're clever, buy it – if you don't, well . . . you'll always be unhappy. That's told you.

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It's been a busy month at CRASH Towers, and the results of all the dashing about is reflected in these pages . . .

OINK!

. . . not least being our extra special 16-page *Oink!* supplement in the centre. It's the first time we've joined forces with a completely different sort of publication as a means of offering even more value to you, the CRASH reader.

Everyone knows there's a game coming out soon (from CRL) based on the famous top-selling IPC 'alternative' comic, but perhaps not so many know how *Oink!* came about in the first place. So we thought rather than just do the usual preview we would go into more background detail about the product from which the game is licensed – and wrap that round the preview. You can find the *Oink!* Inside Story on page 76. And following on from that . . .

DOUBLE OH SEVEN

. . . comes our big feature on another licensed game, *The Living Daylights*, being programmed by Des Des for Domark. Once again, we thought, why stop at a preview? The new James Bond film opens in London a in few days (29 June), and to get everyone's adrenalin running for new Bond Timothy Dalton's athletic debut, we've parcelled up an article about the film's special effects around the preview, plus some details about Bond's latest Aston Martin super car. That starts on page 86.

I hope you find these expanded 'previews' enjoyable, and that providing more general material that isn't computer-specific in CRASH valuable. And certainly you can look out for more joint ventures with other publishers in the near future which will provide you with supplements like the *Oink!* Special in this issue, and increase the magazine's . . .

VALUE FOR MONEY

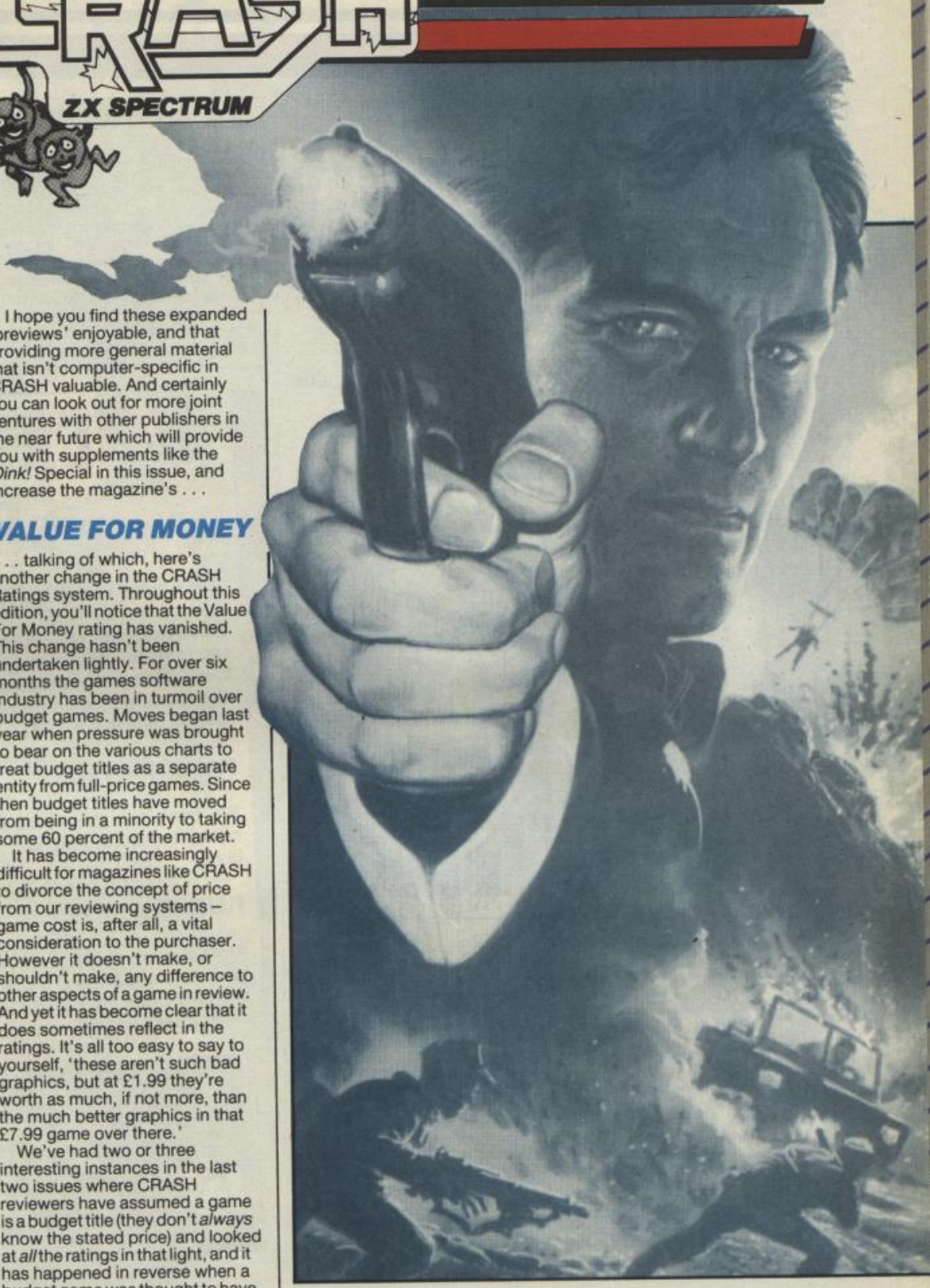
. . . talking of which, here's another change in the CRASH Ratings system. Throughout this edition, you'll notice that the Value For Money rating has vanished. This change hasn't been undertaken lightly. For over six months the games software industry has been in turmoil over budget games. Moves began last year when pressure was brought to bear on the various charts to treat budget titles as a separate entity from full-price games. Since then budget titles have moved from being in a minority to taking some 60 percent of the market.

It has become increasingly difficult for magazines like CRASH to divorce the concept of price from our reviewing systems – game cost is, after all, a vital consideration to the purchaser. However it doesn't make, or shouldn't make, any difference to other aspects of a game in review. And yet it has become clear that it does sometimes reflect in the ratings. It's all too easy to say to yourself, 'these aren't such bad graphics, but at £1.99 they're worth as much, if not more, than the much better graphics in that £7.99 game over there.'

We've had two or three interesting instances in the last two issues where CRASH reviewers have assumed a game is a budget title (they don't *always* know the stated price) and looked at *all* the ratings in that light, and it has happened in reverse when a budget game was thought to have been full price.

We think that a game should be reviewed on its own merits – a good budget game is still a good game, not a marvellous one, and an average full-price game is still average, not awful. There are the reviews for you to read and digest, the price is at the top of the reviews, we think it's up to you to make up your own minds as to the value they offer for the money. What do you think?

And on the score of CRASH reviewers . . .



EDDYSTONE LIGHTOUT

. . . Richard Eddy and Ben Stone have been a bit absent this month, the reason being that they were both packed off to London to attend a four-week course on journalism (a sort of advanced keh-ah-teh spells 'cat' thing). Bit of a pain really, as it left us very light-handed. But some Ludlow locals came to the rescue, and there are two new names and one very familiar one attached to many of the reviews.

New first: **Nick Roberts** lives in Ludlow and attends the local school. He's been a CRASH reader since the year dot, so there's a wealth of gaming experience behind his comments. **Mark Rothwell** has just moved to Ludlow (he's a friend of Jonathan Rignall who works in our film planning department, and of the infamous ZZAP! person Julian Rignall). An ex-Spectrum games

player turned Atari owner, Mark has found the return to Z80 programs a fascinating one, and he has certainly brought some refreshing insights to his reviews.

Last, but not least, the third name is that of **Robin Candy**, notorious for running the CRASH Playing Tips section for well over a year. Robin's now at the Ludlow Sixth Form College studying how to make money. He's also member of a band with the unpretentious name of Ad Lib To Fade – they're also unpretentiously short of loot for new equipment and Robin was elected to raid the Newsfield coffers in return for some review comments. *C'est la guerre.*

And finally . . .

NINTENDO

. . . if you're wondering why CRASH is featuring a games console in its pages – well read the article and reviews on pages 102 and 103. No doubt Lloyd will be interested to hear everyone's views on the subject. Is a games console a replacement for your Spectrum, or an exciting and complementary addition?

ROGER KEAN

OUR MISTAKE

These beautiful people were incorrectly identified in the feature on Mike Singleton published in June's CRASH. They are . . . front row, left to right: Singleton, Jo Meads (Melbourne House) and Dave Sharp (Consult); back row, left to right: Glenn Benson (Consult), Jane Denning (Melbourne House) and Dave Kelly (Consult). What could be clearer?



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34 **Ball Crazy** M.A.D.
15 **Best of Vortex** Vortex
71 **Conflict** PSS
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95 **Down To Earth** Firebird
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19 **F-15 Strike Eagle** Microprose
62 **Frightened Fantasy** Dented Designs
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20 **Mag Max** Imagine
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DJL SOFTWARE

In last month's article IS SMALL BEAUTIFUL, we erroneously said that DJL Software had ceased trading. The company is, of course, well and truly alive. They did stop marketing Spectrum software under their own name, but then tunred to games development for other publishers. DJL programmed the recent Amstrad conversions of *Super Cycle* and *Monty on the Run* among several others. And in conjunction with David Aubrey Jones (the man looking after the Spectrum *Mercenary*), DJL's Dave Looker is responsible for *Speedlock*, a protection system used for games by companies such as US Gold, Ocean and Activision. Dave says to watch out for a DJL Spectrum product soon, but the releasing software house is still a secret.

IN NEXT MONTH'S CRASH

CRASHTIONNAIRE RESULTS

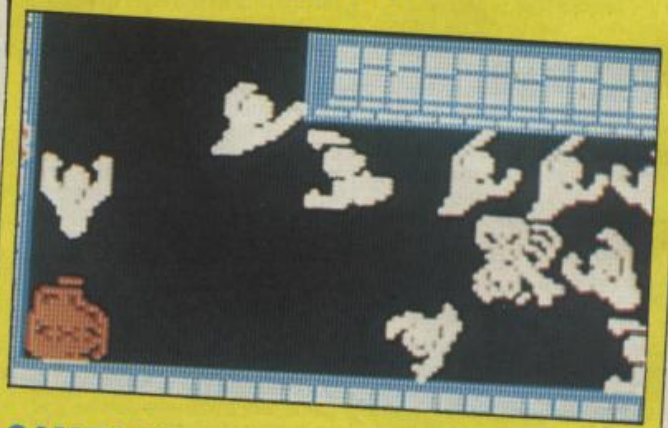
We reveal your replies to the 1987 questionnaire. What's top feature? Which mags do you read the most? Why is Lloyd Mangram underpaid? One or two of these vital questions will be answered, along with many others, next month, only in CRASH.

FANZINE FILE

We open the third drawer down in the left-hand filing cabinet and examine state-of-the-zine art at grass roots level.

RUN IT AGAIN

After a mere three and a bit years, the ancient CRASH games comparison article returns. Robin Candy and Richard Eddy lay some *Gauntlet* clones alongside each other to see which comes out top.

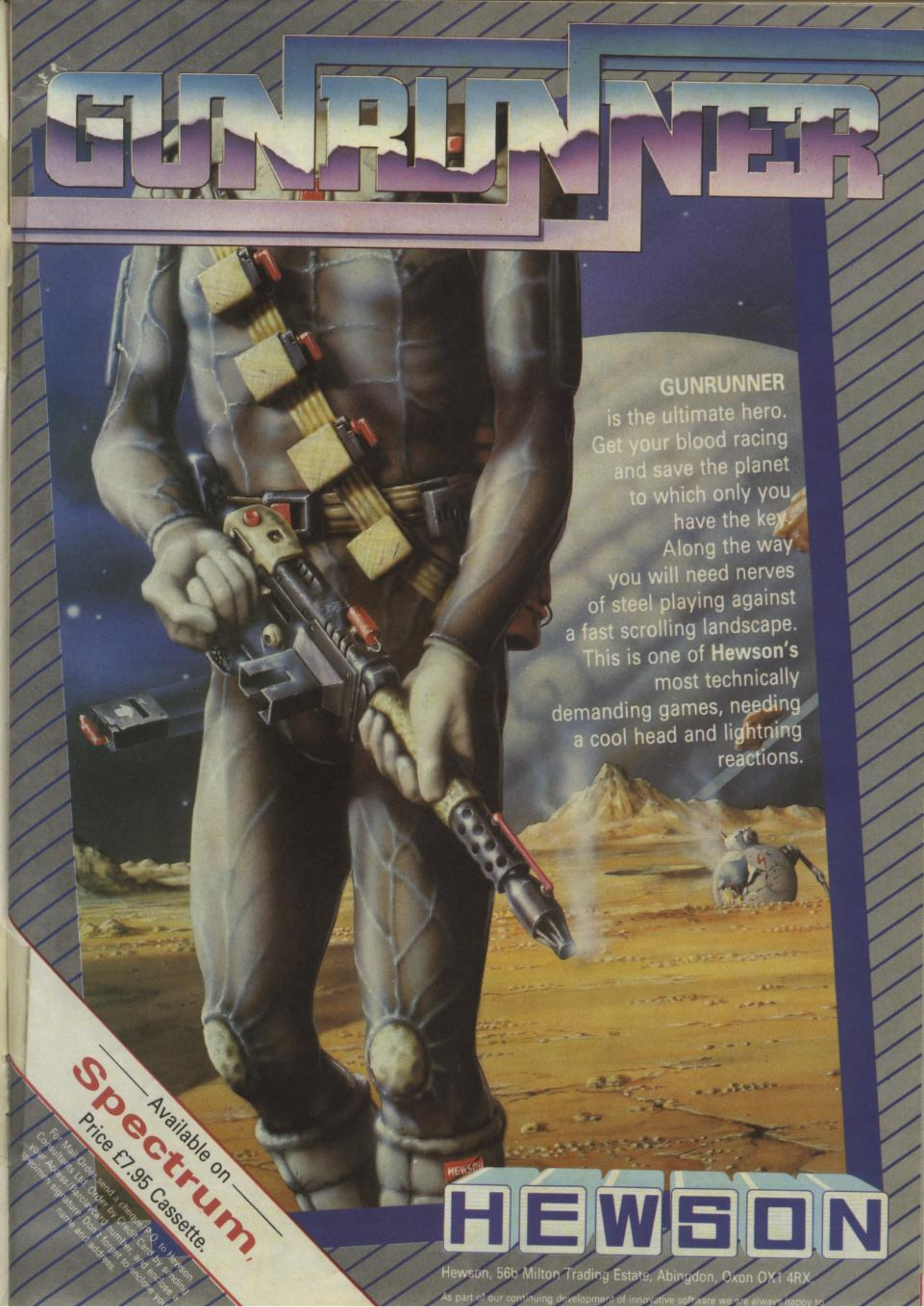


GAMES IN 3-D

Isometric 3-D games at the touch of some keys – we look at CRL's *3-D Game Maker*.

And of course there's all the rest in another packed issue of CRASH, the mag that finds it hard to contain all the words it generates – who will win next month's award for the journalist most likely to use words like EPONYMOUS or EXACERBATE . . . ? Find out on 30 July (the day after -Ed's birthday).

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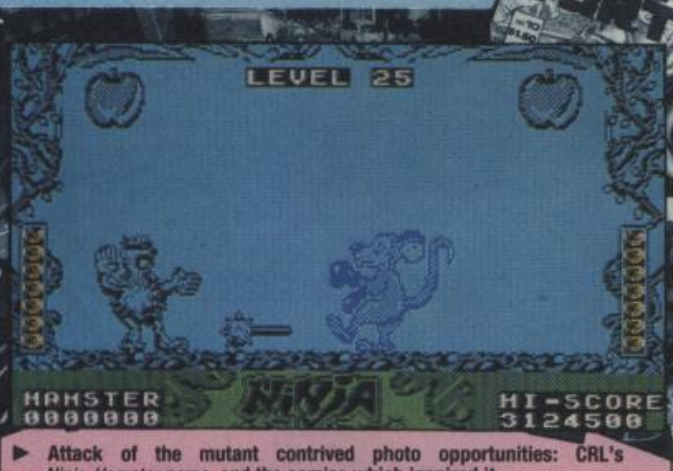
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N·E·W·S



► **Attack of the mutant contrived photo opportunities: CRL's *Ninja Hamster* game, and the comics which inspired it**

NEWSFIELD PLANS NEW GAMES MAG

NEWSFIELD LTD, the publishers of CRASH, will launch a major new computer magazine at the PCW Show in September – covering 16-bit machines like the Atari ST and Amiga, games consoles, and the major 8-bit machines (including the Spectrum).

THE GAMES MACHINE, a 116-page monthly costing £1.25, will join CRASH and ZZAP! 64, the country's best-selling machine-specific titles.

'THE GAMES MACHINE will offer readers the widest coverage of *any* home-computer mag,' stressed Newsfield Director Franco Frey, 'as well as the honest, fair reviews which are the secret of CRASH and ZZAP!'s success. There'll really be no competition.

'We've got access to some of the country's most experienced computer journalists, and they'll pool their talents for THE GAMES MACHINE. Of course, we'll also be going ahead with some exciting projects we've got cooking for CRASH and ZZAP! . . . '

NINTENDO PRICE CUT

MATTEL has slashed the prices of its new Nintendo games consoles (reviewed on page 102). The simple version is down to £99.99 from £129.99, and the Deluxe (which features a light gun, a robot and two games) to £155 from £199.99.

The move follows trade criticism of the high original prices, but Mattel warns that shops can still set their own prices for the console.

THAT'S ENOUGH HAMSTERS– ED

BEHIND every great hamster there's a turtle. At least, that's what CRL found with their new name-'em-up *Ninja Hamster*, scheduled for release at the end of June.

The man behind the turtle was Ian Ellery, Creative Director at CRL when *Ninja Hamster* was conceived (he's now at Nexus).

'It actually started off as a practical joke on *Your Sinclair* magazine,' admits Ian. 'We just made up a load of things we were releasing, and *Ninja Hamster* stuck. I was only doodling . . . '

And behind the doodles, of course, was the trendoshop of 1987 – your local comics outlet. 'It was making fun of the comic *Teenage Mutant Ninja Turtles*,' recalls Ian. 'I was in the shop and everyone else was making fun of ninja comics, so I decided 'why not'?' (Thanks to London's Forbidden Planet store for providing the comics in our picture, by the way.)

The black-belted warrior of CRL's new game (programmed by Colin Ajayi 'Obe) battles with eight opponents, including Sinister Rat and The Lizard Of Death, in a struggle to keep his village safe for decent rodents to live quiet lives.

According to Mike Hodges in the software house's 'Zen room', where men are men and hamsters are gerbils, 'it's an ordinary karate game with a hamster' . . . which kind of says it all.

A STAR IS BORN

RAINBIRD'S first CRASH Smash, *Starglider*, will be the first British computer game to enter the arcades. Top coin-op manufacturer Bally/Sente has been licensed to convert the 3-D space shoot-'em-up.

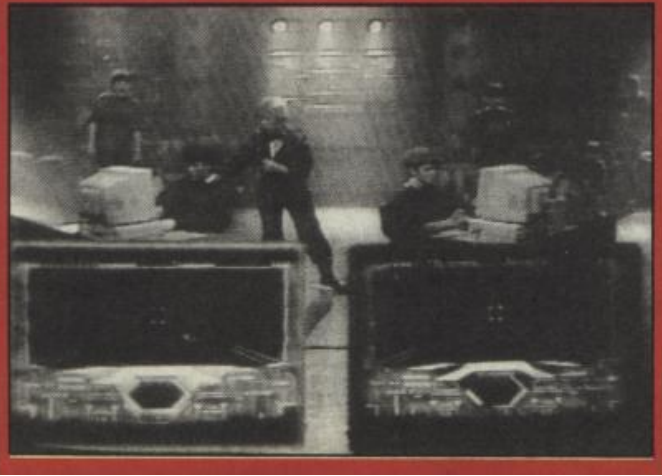
'This is only the beginning,' predicted Rainbird boss Paul Hibbard. '*Starglider* has broken the barrier of computer conversions to coin-op games.'

And 'it's always been my dream to have one of my games in the arcades', says programmer Jez San.

Not satisfied with this fame and fortune, *Starglider* (released last Christmas) is also appearing weekly on ITV's popular Saturday-morning show *Get Fresh*.

The game stars in a nerve-racking team contest – from now till the end of August, competitors must blast away to save their friends from getting sludged in front of 4.8 million viewers.

Going places: Rainbird's *Starglider* features on ITV's *Get Fresh*



WORLD ENDS



Martech boss David Martin gives Reagan a POKE for *The Armageddon Man*

IT'S nukes with everything in two apocalyptic new games – Activision's *High Frontier* and Martech's *The Armageddon Man*.

High Frontier, rather quietly proclaimed as 'one of the most controversial pieces of software yet', puts you in charge of the American Strategic Defence Initiative (President Reagan's proposed Star Wars system, which would use weapons in orbit to wipe out nuclear attacks).

Written by Alan Steel, coauthor of the grittily realistic *Theatre Europe*, it'll be out in July for £7.95.

Also in July comes *The Armageddon Man* (£12.95), a peacegame set in the year 2032. As the eponymous controller of an omniscient satellite, the player has to keep 16 superpowers happy and avoid war by preserving a balance of power.

PLUS WHAT?

SPRING came late to the Spectrum this year; the 'spring' Microfair didn't arrive till the penultimate day of May. Ardent micromaniacs ignored the sunshine and crowded into London's (not very) New Horticultural Hall, seeking out the latest in Spectrum and QL goodies.

The Spectrum + 3, with a built-in disk drive, made an appearance on several stands, though manufacturers Amstrad didn't turn up themselves.

But all the + 3s at the show were development prototypes. The new beast isn't expected in the shops before mid-July, and the user manual hadn't been printed in time for the fair.

It comes in a black box, like the + 2 launched last autumn. The cassette unit is replaced with a three-inch disk drive, as used on other Amstrad computers, Tatung's Einstein, and very little else.

Each side of a plastic-cased + 3 disk holds almost 180K of programs or data, in the format used by drive A of Amstrad's PCW-8256 glass typewriter.

The software to control the drive is held in an extra 32K of ROM. The disk system, written by Locomotive Software, is derived from that of earlier Amstrads, though you can access it with the standard ZX BASIC commands that used to refer to the cassette.

The other 32K of ROM is similar to that of the + 2, though hackers will be pleased to find that the NMI bug has been fixed. The + 3 is NOT compatible with Interface 1 or Microdrives.

The audio and video outputs mimic those of the + 2. The audio socket is also used to load and save cassette files, and the video connector is now labelled 'Peritel'; many new TVs have 'Peritel' inputs. The same socket supports colour and black-and-white monitors.

Telephone sockets are still used for the MIDI/Serial port and the nonexistent keypad, now labelled 'Aux'. There's a reset switch, but you still have to control the power at the mains, as there's no on/off switch.

The joystick sockets have scrambled connections, as on the Plus Two, so you'll need an adaptor from Frel or Cheetah before you can plug in a normal stick.

The + 3 is supplied with a 'free' SJS-1 joystick. This is compatible with Amstrad's scrambled socket wiring, but has little else to recommend it.

At long last there's a Centronics parallel printer port built in – this is easier to wire up and compatible with more printers than the serial socket which earlier 128s had, and may make the + 3 suitable for simple word processing.

But there are two problems.

The old concentric nine-volt power slot has been replaced by a five-pin DIN socket carrying power for the disk as well as the computer. The new plug is bulky, and fits just three millimetres away from the edge-connector. Many peripherals extend into this area, so it will be impossible to plug them directly into the + 3. Other add-ons have plastic loops intended to trap the old power plug in place; you may have to remove those to make room for the new plug.

And the + 3 edge-connector also lacks a vital signal called ROMCS (ROM Chip Select). That signal is used by press-button copiers such as Multiface 1 and the Mirage Microdriver to switch in new ROM and RAM and allow 'protected' programs to be saved.

The + 3 comes with six games on disk: *Supertest 1*, *Supertest 2*, *Cosmic Wartoad*, *N.O.M.A.D.*, *Gift Of The Gods* and *Mailstrom*, all from Ocean.

But it'll be a while before popular titles are available in the format, and you'll probably have to pay extra for the convenience of disk loading. Software houses haven't responded very positively to Alan Sugar's suggestion that they supply games for the machine in groups of four titles for £10!

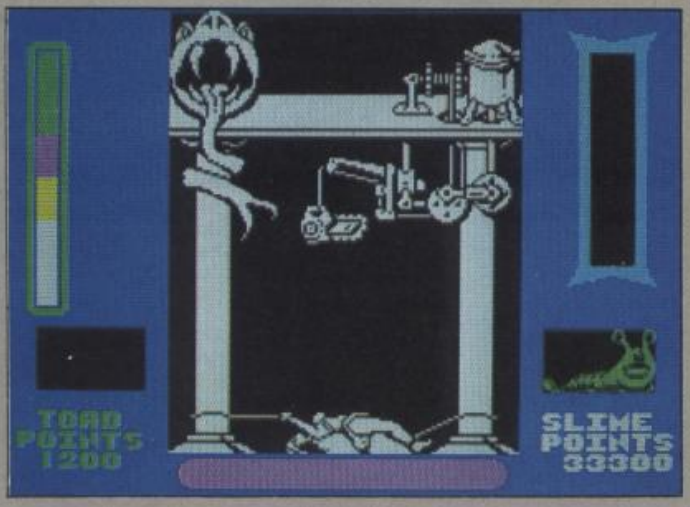
Publishers could cut their overheads by providing Amstrad CPC and Spectrum games on the same disk, but it's unlikely that many will publish material on disk till tens of thousands of machines have been sold.

In the meantime, compatibility with tapes for the original Spectrum and earlier versions of the 128 should be good. The hardware includes two 'lock bits' to make the machine impersonate a 48K Spectrum or a + 2.

And there's another way of getting cheap disk software for the + 3. At long last, the new hardware lets the Spectrum run as a 64K RAM machine, with the screen display held in a switched page. This setup will support the old business operating system CP/M, from Locomotive Software – conversion work is almost complete.

The machine will sell for £249, but trade rumour has it that Amstrad intends to cut it to around £200 by Christmas. The company refuses to comment.

SIMON N GOODWIN



► **The first of the few: Ocean's *Cosmic Wartoad* is among six games packaged with the + 3**

In NEWS INPUT next month – the prognosis for the + 3: technical problems and trade doubts. Issue 43 of CRASH goes on sale 30 July.

TECHNICAL SUPPORT

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Fear & Loathing



MINSON BUYS DRINKS SHOCK

It's trebles all round as the software industry just survives another month of Minson – the man, the appetite, the water pistol. CRASH Smash *Zynaps* makes a good excuse for a fight . . .

I thought it was bad in Stockholm when a round of four beers came to 13 quid, but at last I've found somewhere here in London to challenge it.

'What,' you exclaim, 'Minson buying drinks?' Well, yes, because after last time's prophecies of screaming paranoid doom I thought I'd better diversify in my ligging, and when the free invite to the hip Limelight nightclub arrived (to celebrate the start of the **Piccadilly Film Festival**) I started polishing up my new boots and panties.

So, there's a sort of a buzz as the bouncers, armed with their dinky little walkie-talkies, clear you a path through the poor, ordinary punters whose admission will depend on whether they're victims of the week's 'def' (hip street talk, probably out of date as you read it . . .) fashion.

But nothing can compensate for bar prices like those, even if the décor *is* carefully contrived to look like the builders haven't moved out yet.

Then there was my brush with smooth Stringfellows, site of the launch of a new society magazine – by 'society' we mean Debs and Sloanes, not the Chipping Sodbury Spectrum Users' Group. The construction workers have finished off properly here, but somebody should buy the waitresses legwarmers – they'll catch their deaths running round half-naked like that.

We kept looking out for famous people but the best we did was some bimbo with a miniature dog stuck on her shoulder, like a living fur collar. I just hope it was house-trained.

The sight of the highly sophisticated **Lesley Mansford** from Headlines PR was much more welcome, and when the free wine had run out and we decided none of us could afford a second mortgage for a half of weak lager shandy and four straws, we did a runner to a local hostelry.

In the comfort of the smoky bar, Lesley whispered in my ear that there were nasty doings in the East End. Prostitutes have been found murdered. Could it be the work of Jack The Ripper? No, it's the work of the good ladies of St Brides, who are hard at work on the third of CRL's trilogy of ghoulish adventures, and this time they're hoping to go the whole hog and get an 18 certificate from the BBFC.

After all this frantic nightlife, it was a relief to come back to earth and attend three lunch-time ligs in a row, casting off with a boat trip, courtesy of **Microprose** and **Origin Systems. Major 'Wild Bill' Stealey** wasn't there but that didn't stop speculation that he'd make a sudden appearance, performing a perfect landing on the deck of the Thames pleasure cruiser.

Those of you with long memories, and the infinite patience needed to suffer this column for more than six issues, will remember that once, in the halcyon days of yore, Mastertronic held a party on the *Pridella*. A delight, therefore, to find that it was the very same ship – and that the food is still as good.

There can be few ways of spending a lunch time as civilized as running up and down the murky waters of the Thames, from the Houses Of Parliament to Docklands and back. Add to this the unexpected delight of an appearance by **Roger Kean**, and the day is made. The editorial one kept mumbling something about how he'd only come down to conduct an interview with Origin, but I have my suspicions he fancied a nautical luncheon too.

I've no doubt he got all the heavy stuff, but I'll just mention that as well as the appearance of Microprose simulations *F-15 Strike Eagle* and *Gunship* on the Spectrum, the company has a range of joysticks on the way. And I reckon any hardware that satisfies Wild Bill has to be tough.

A more modest setting for the next launch – **Hewson** held another of their regular gatherings above a trendy Covent Garden pub. Hewson launches are like parties, though, where you meet friends, chat in a relaxed fashion, look at a few games and go home happy, with a goodie bag containing a press kit and a prezzie.

The prezzie this time was a water pistol to match the theme of the launch, which was shoot-'em-ups. With **Christian Urquhart**'s *Gunrunner*, which I've mentioned before, and *Zynaps*, which I've not, both on show this seemed a fairly logical decision. *Zynaps* is the first original game by **Dominic Robinson**, the genius who did the impossible and put *Uridium* on the Spectrum. It's fast and tough for all you quick-on-the-draw artists out there.



► **A genius who did the impossible, slobber, worship, Smash:** *Zynaps* **designer Dominic Robinson**

Talking of quick-on-the-draw, I'm not sure whether it was debonair **Debbie Sillitoe** or jaunty **Julia Coombs** who had the bright idea of the water pistols, but with a well-stocked bar the temptation was too much for the increasingly increasingly well-stocked journos. Character assassination has nothing on the real thing when you can send your opponents to a watery death, and many a duel was fought along Long Acre that afternoon.

This trilogy of free lunches concluded with a visit to **Ken Lo's Memories Of China** near Victoria station . . . and what a conclusion. An **Ocean** launch is a rare and wonderful event. Last time I made this observation **Jeni Beattie** promised to send me luncheon vouchers. This time she offered an alternative of a Vesta instant chop suey, but nothing would keep me away from food of this calibre.

The reason for the Oriental setting was the imminent launch of *Tai Pan*. (Thank God they didn't call it *Deep Pan* or we'd all have been guzzling pizza.) Like I said, Ocean bashes are fairly infrequent, but when they go to town they do it in style. The game looks like it will be as good as the food undoubtedly was.

You start the game as a penniless peasant, but if you borrow money and buy your own junk, you can sail away to sell junk around the China Seas. It looks like it could be one of those totally engrossing experience that become a way of life, much like Elite.

The meal also marked the second appearance in a week of one of the Newsfield mafia. 'Does this mean that London has attractions which Ludlow doesn't?' I asked **Graeme Kidd** as he tucked into his Bang-Bang Chicken.

'No,' the bearded one chuckled. 'It's just that we thought we'd better check up on you!'

Well, I'm glad to report that I never let the side down – my table manners are always impeccable, even with chopsticks.

Okay, then, so maybe I should change my tune. After my soothsaying of last month the software industry has produced three superb products to prove me wrong. Perhaps the end isn't nigh . . . at least not quite yet!

HUNTER S MINSON



Now from the hit T.V. series REAKTOR brings you ultimate Gobots action! You play the part of Leader 1 – defending the planet Moebius from the evil Gog.

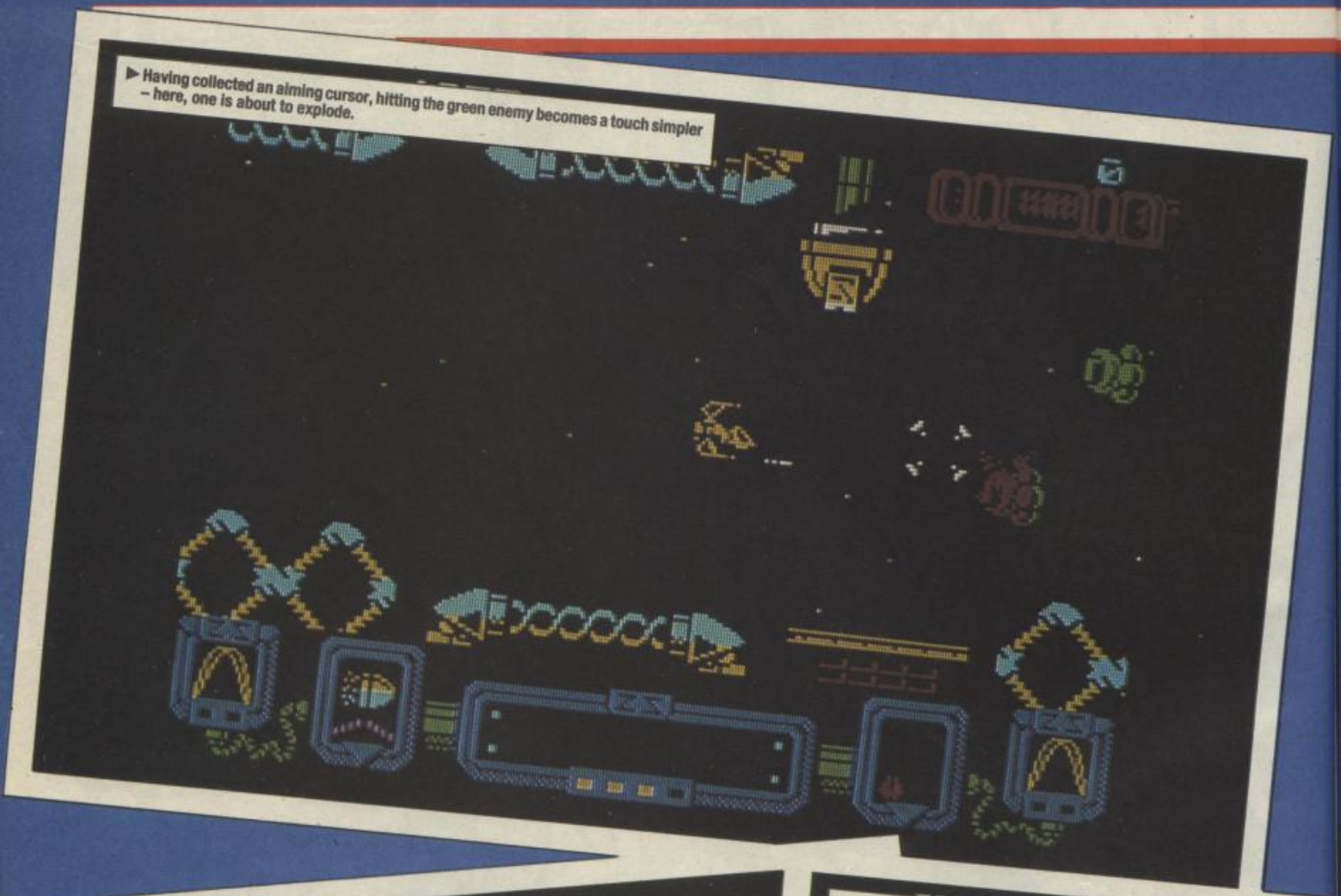
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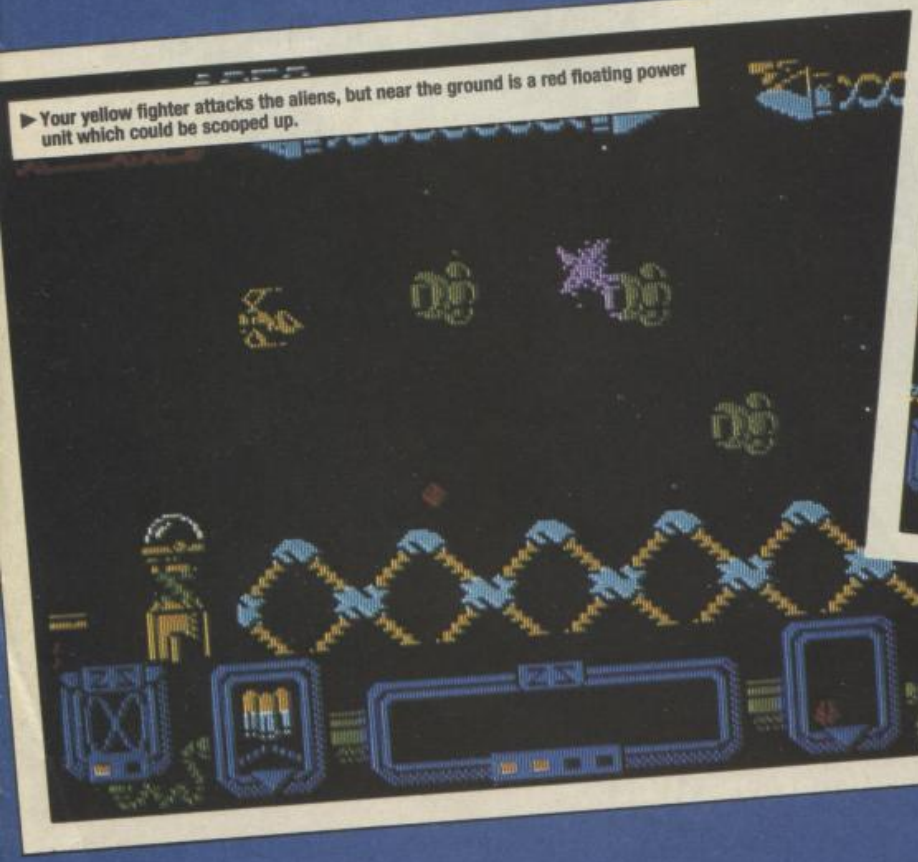
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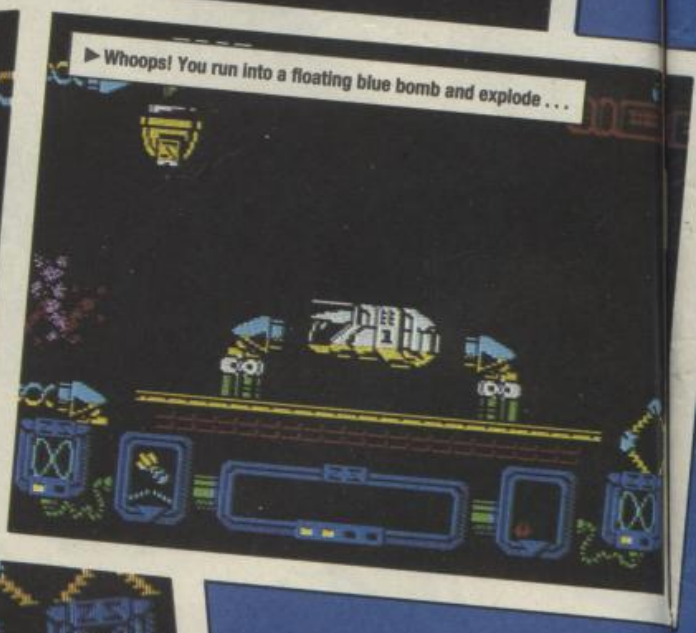
Z·Y·N·A·P·S



▶ Having collected an aiming cursor, hitting the green enemy becomes a touch simpler – here, one is about to explode.



▶ Your yellow fighter attacks the aliens, but near the ground is a red floating power unit which could be scooped up.



▶ Whoops! You run into a floating blue bomb and explode . . .

Producer: **Hewson**
Retail Price: **£7.99**
Author: **Dominic Robinson**

3D THE BEST OF VORTEX

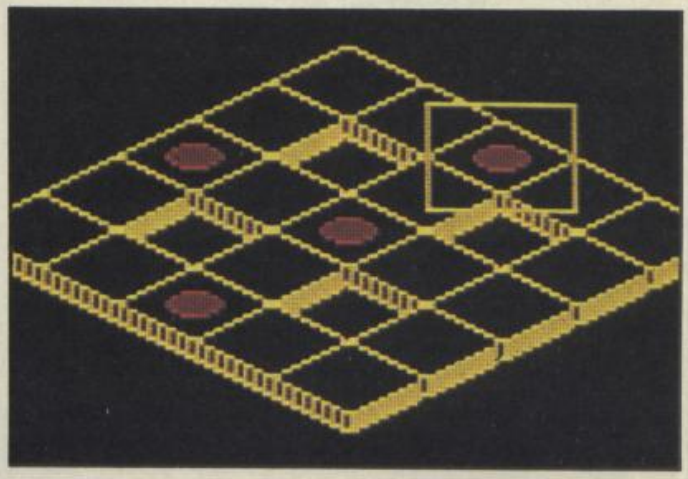
Producer: **Vortex**
Retail Price: **£8.99**
Author: **Costa Panayi**

Gathering together the unique Costa Panayi's best-known efforts, Vortex has released a four-game package of past hits. In reverse chronological order the compilation comprises *Revolution* – smart-headed ball solves problems on a suspended block platform, CRASH Smash October 1986 (Issue 33, page 16, 91%); *Highway Encounter* – pepper-pot droids nudge an alien-destroying device down the only motorway left in town, CRASH Smash September 1985 (Issue 20, page 122, 95%); *Tornado Low Level* – enemy-blasting jet-fighter game, CRASH review August 1984 (Issue Seven, page 14, 81%); and *Android Two* – metallic hero seeks enlightenment in a maze swarming with nasties, CRASH Game Of The Month March 1984 (Issue Two, page 13, 90%).

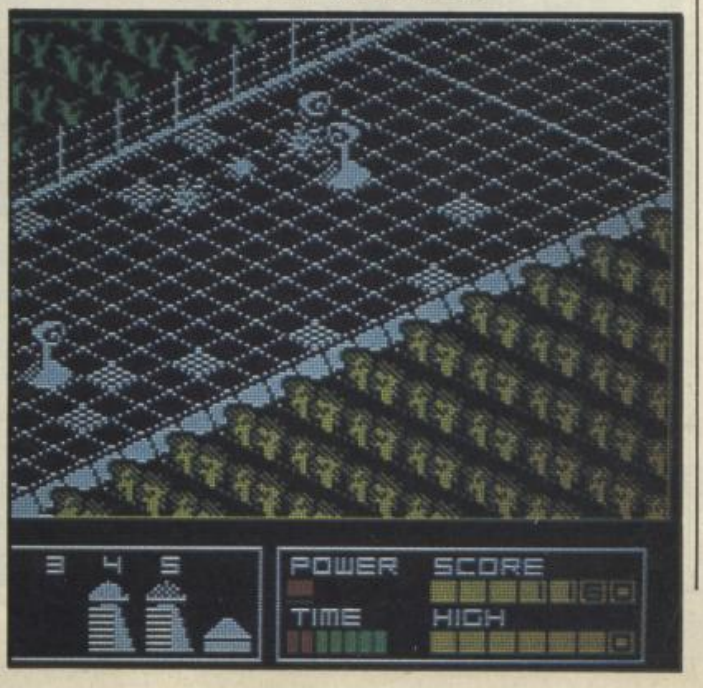
As a software house Vortex has been with us since the earliest days; there have been few, but highly selective, releases from the hands of their main man, Costa Panayi. The record of success is indeed impressive – the average of the CRASH Overall ratings for the four games included in this parcel is an astonishing 89.25%.

There's little else to add to what we've said in the past about each game, except that *3D The Best Of Vortex* is well worth getting even if you're missing just one of the games included.

► ***Smart ball in Revolution*, Costa Panayi's most recent hit.**



► **A screen from *Highway Encounter* – *pepperpots are GO!***



A CRASH Smash

Flying a manoeuvrable fighter through 16 levels of horizontally-scrolling space environments, you encounter four types of enemy craft.

The small flying ships are easily destroyed, but ground installations are tougher and command ships are heavily armed. Giant mother ships appear at later levels; asteroids and flying debris also threaten your fighter.

But for protection you have a speed-up facility, pulse lasers, plasma bombs to destroy ground bases, homing missiles and seeker missiles.

Apart from a basic laser system, all weaponry is activated – or its power increased – by scooping floating fuel units into the craft.

An indicator shows what equipment will be activated when another unit of pink fuel, made available when alien ships are destroyed, is taken onboard. But each weapons system is only activated for a limited time . . .

The seeker missiles are the most powerful: when they're activated, you earn a thousand-point bonus and the cycle of weapon-acquisition begins again.

Destroying alien ships and bases earns you points, of course; bonus lives are given when you reach 10,000 points and with every further 20,000 points.

CRITICISM

" It seemed like ages since I had a really enjoyable alien-blasting session; Hewson came to the rescue with Zynaps. **The graphics are great, the sound's fine, and the use of colour is excellent, though the concept – collecting add-ons for your ship – is hardly original.** Zynaps **is really enjoyable; it has reams of playability and stacks of addictivity, and I like it, okay? "**

MIKE

CRITICISM

" What starts out looking like a glorified shoot-'em-up almost instantly mutates into a satisfyingly frustrating and highly addictive action-packed game, with that 'just one more go' feeling that the old arcade Scramble **generated. Add to that Dominic Robinson and Steve Crow's unique touch with graphics and a suitably blasting soundtrack, and you have some fun-filled hours. If you're bored with mindless blasting stay well clear; but healthy hands, clear eyes and steady minds will find with** Zynaps **that a classy shoot-'em-up can still be fresh and exciting. "**

RICKY

CRITICISM

" If you resisted buying Nemesis, **you'll be happy to hear Hewson have come up with the ultimate in** Nemesis **clones:** Zynaps **is one of the most attractive shoot-'em-ups. Colour is used to its full potential – but fortunately every character holds onto its own colour blocks. The action is fast and furious, with collision-detection very precise, and the baddies are very well animated in the greatest detail.** Zynaps **is total blast-'em-up fun – I wouldn't mind paying full price for a game as slick as this. "**

PAUL

COMMENTS

Control keys: definable; left, right, up, down and fire required
Joystick: Kempston, Interface 2, Cursor
Use of colour: excellent
Graphics: good size and detail, lovely explosions, smooth scrolling
Sound: great upbeat title tune by Steve Turner (even on 48K) and plenty of arcade spot FX
Skill levels: one
Screens: scrolls through 450
General rating: a first rate shoot-'em-up with the magical ingredients for high addictivity

Presentation	90%
Graphics	93%
Playability	92%
Addictive qualities	91%
Overall	**91%**

STORMBRINGER

Producer: **M.A.D.**
Retail Price: **£2.99**
Author: **David Jones**

While the Magic Knight is using a time machine without a valid guarantee which he acquired in *Knight Tyme*, his bad alter ego – the Off White Knight, or Stormbringer – splits from him. And to return to normality the Magic Knight must merge again with his other half . . .

In this flick-screen adventure-style game the Magic Knight moves through 56 locations in a world peopled by the hindering or helpful characters of Aramis, Robin, Reggie, Rachel, Barker, Organon and Grunter. Their characteristics and abilities – magic and strength levels, happiness and skills – can be called up to help the Magic Knight on his way.

Old MK can also keep himself going by taking a drink or acquiring beneficial objects. He's a multitalented knight – he can pick up, drop, take, give, read, smell, drink and throw the objects he finds on his travels, and carry up to five at a time.

These include an advert, gadget X, a bottle of liquid, silver and golden eggs, and disguises. Each object can be examined, with an onscreen display giving an item's weight, readability, wearability or blowability – but the Magic Knight loses them once he's used them.

He can also cast spells to melt granite, or to allow him to travel quickly to other characters. And to get past hostile creatures he can don a disguise – from wizard to chambermaid – and command another character to sleep, go away, or be happy.

But be warned – not all these commands are obeyed, and sometimes this fighting man doesn't have the spell-power or wisdom to achieve what he wants.

And should our do-gooding hero run out of strength, or be hit by too many lightning bolts hurled down by Stormbringer (concealed in a cloud above), it's good night, good Knight.

This is Magic Knight's fourth adventure; he first appeared in *Finders Keepers* (CRASH Issue 13, February 1985) and went on to earn CRASH Smashes for *Spellbound* (Issue 24, Christmas 1985) and *Knight Tyme* (the first ever 128 Smash – Issue 29, June 1986).



► **Windivision returns in the Magic Knight's latest adventure, giving great flexibility in play.**

MARK

" What a great game this is! Nearly all the features of the previous Spellbound **games are here, including window vision. The graphics are up to David Jones's usual high standard, with Magic Knight sproinging round the screen in search of fame, fortune, the odd damsel or two and the Off White Knight. It's quite hard to get into, but it becomes easier after you've done a bit of exploring. "**

ROBIN

" Naturally enough, Stormbringer **is in the same vein as** Spellbound **and** Knight Tyme**. The graphics are up to the same high standard, but with little animation. The game itself is fiendishly difficult to get into, especially if (like me) you're new to the whole Magic Knight series. It has arcade elements in the sense that sometimes you have to react quickly (like when the cloud starts zapping you); The main theme of** Stormbringer**, though, is that of an arcade adventure. The problems require you to move between screens collecting objects and interacting with other characters; it's highly recommended to play** Stormbringer **with friends to help you solve the problems! It'd be worth buying even as a full-price game – my only reservation is that** Stormbringer **is a bit too similar to** Spellbound **and** Knight Tyme. **"**

NICK

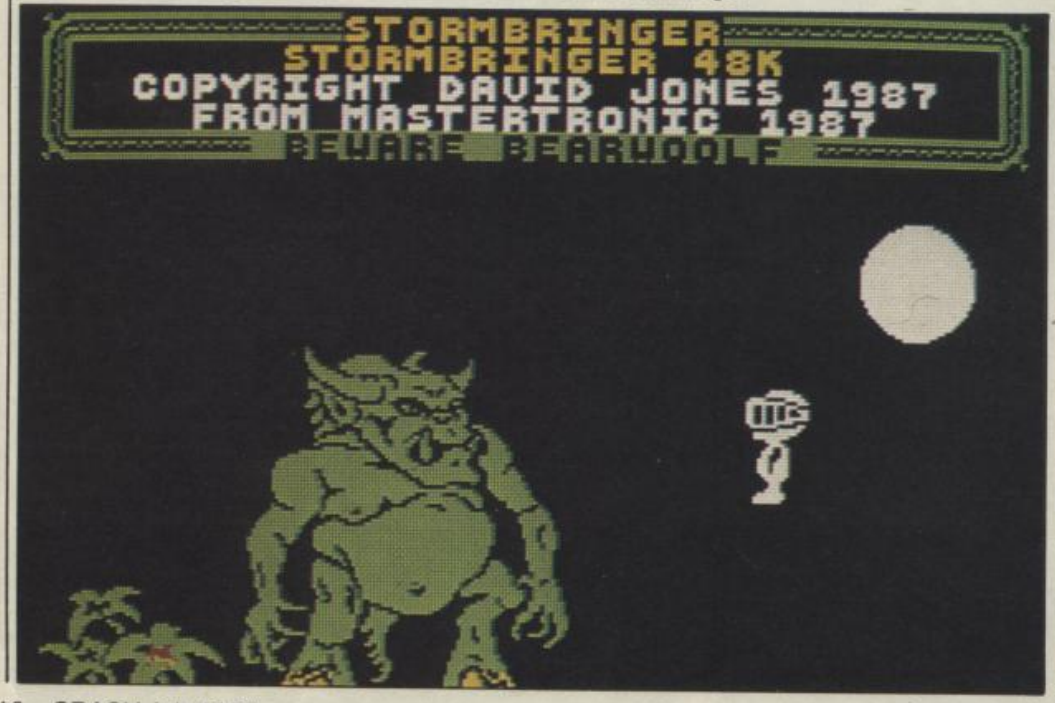
" Stormbringer, like the other games in the Magic Knight series, has well-defined graphics; the backgrounds are the best I've seen on the Spectrum for quite some time. But the old colour-clash problem is still with the backgrounds changing to white as you go past them. There are some neat touches – like clouds throwing lightning out as you walk beneath them. Unfortunately, there's no tune on the title screen and just the old beeps and blips while going through the menus. This game will only appeal to the arcade-adventure freaks who like David Jones's style of programming; for them it'll be well worth the money. "

COMMENTS

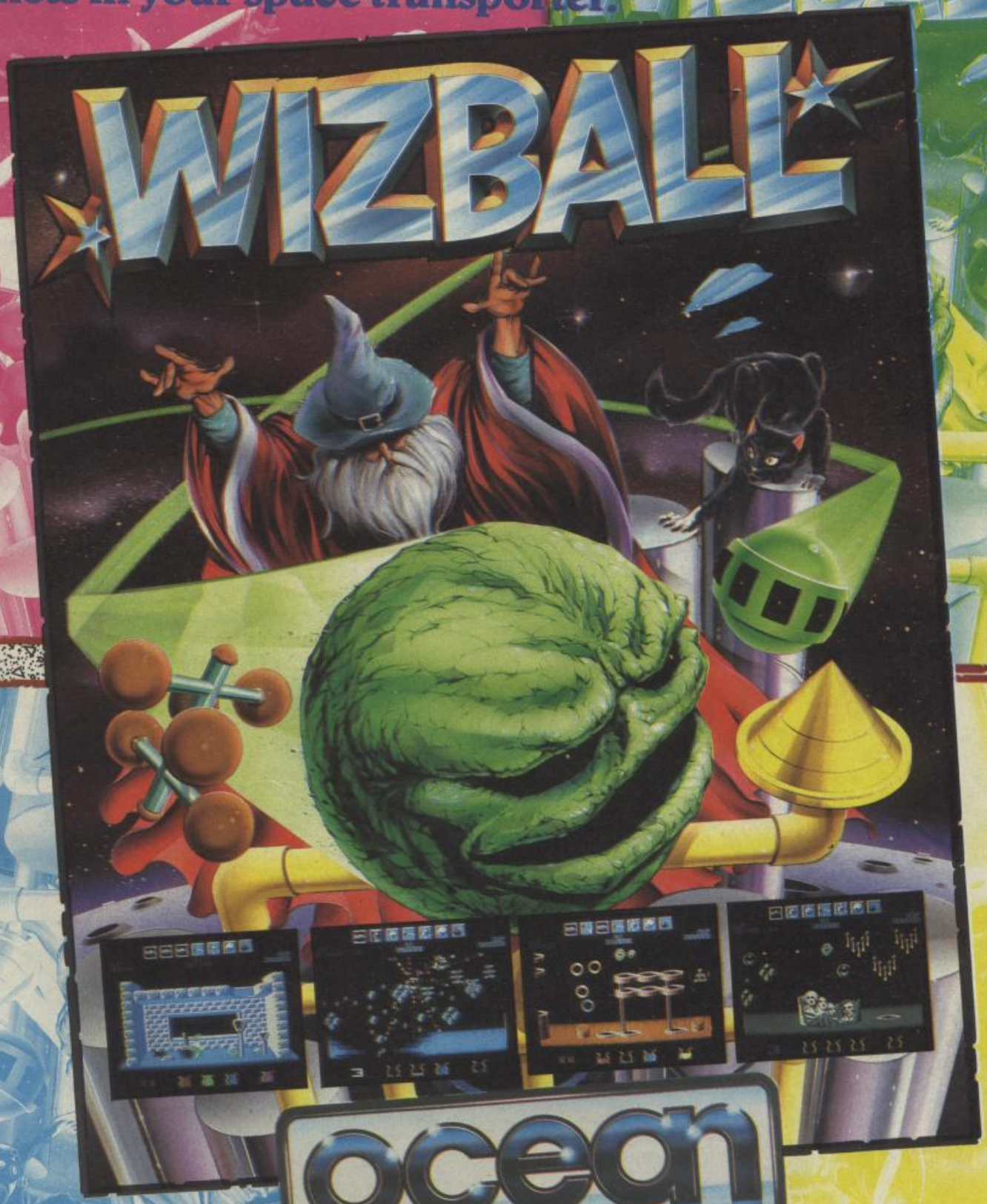
Control keys: definable, or preset: A for up/jump, N/M left/right, SPACE to fire
Joystick: Kempston, Interface 2, Cursor
Use of colour: as bright and jolly as ever
Graphics: great visual imagination in the characters, and special treat for 128 owners – 'disguise' function allows you to alter the Magic Knight graphics
Sound: good spot FX, great background tune by David Whittaker on 128
Skill levels: one
Screens: 56 locations (48K), 64 locations (128K)
General rating: Nick and Robin gave it just over 90 per cent; Mark thought lower because it added little new or more challenging to the last Magic Knight game

Presentation	82%
Graphics	82%
Playability	89%
Addictive qualities	80%
Overall	86%

► **An example of the large and imaginative characters from David Jones's *Stormbringer*.**



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F-15 STRIKE EAGLE

Producer: **Microprose**
Retail Price: **£9.95**
Author: **Sid Meier**

Once again you stroll across the tarmac, don your flying helmet, and climb into your waiting aircraft. But this is no ordinary jet fighter – this is the proverbial *it*, the all-weather air-superiority ground-attack fighter, the frightening F-15. And you being a big macho hero and all, Uncle Sam has asked you to undertake some very important operations.

You're asked to select a mission: to Libya, Egypt, Haiphong, Syria, Hanoi, Iraq or the Persian Gulf. Libya is the simplest, and the Persian Gulf damned near impossible (especially at higher levels).

Up to four players can take turns, and there are three levels of play: Arcade, where you can only turn the plane left and right; Rookie; Pilot; and Ace, where such delightful manoeuvres as high-speed yo-yos, lag pursuits, breaks and reverse and scissors can be put to good use.

Once your choices have been confirmed, the next screen asks for an authentication code, which must be entered correctly or none of the weapons systems will work.

Strike Eagle is played from within the cockpit, which incorporates the latest in head-up display (HUD for short). Over the 3-D view details such as speed, altitude, direction, weapons-aiming and messages are displayed.

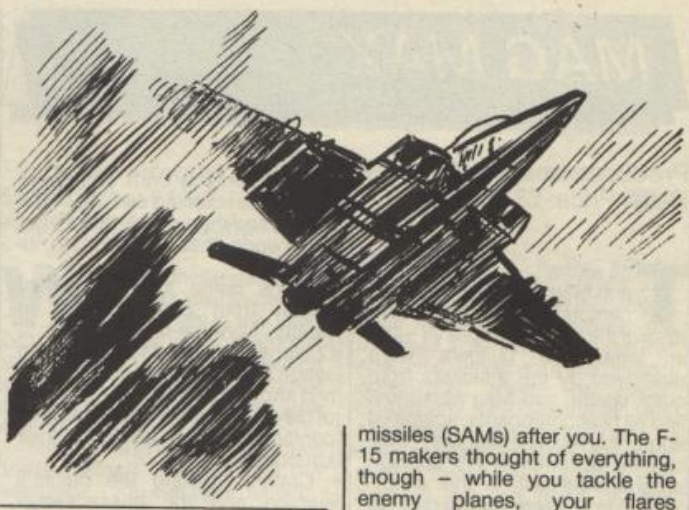
After HUD perhaps the most useful piece of equipment is the radar, which can easily be changed between short, medium, and long range. And from the Weapons Status Display you can keep tabs on bombs, missiles and flares.

The keyboard controls weapons – guns, Sidewinder missiles, medium-range missiles and bombs – and the throttle.

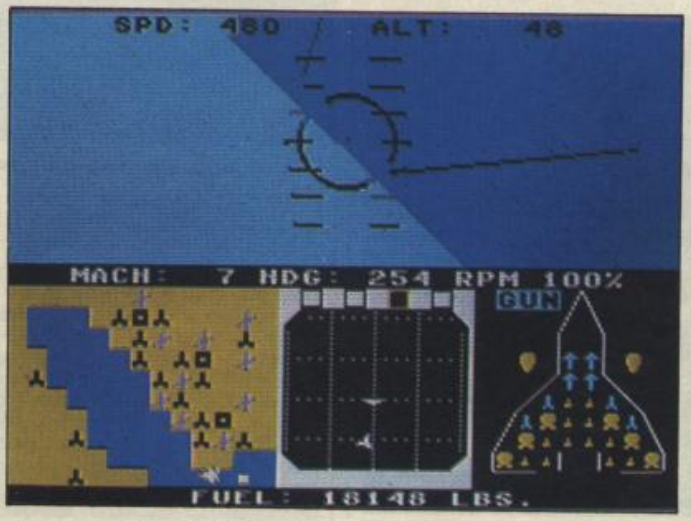
The mission for this super-duper multimillion-dollar plane is, of course, destructive. You're required to fly in over enemy territories, under their radar, and bomb 'primary targets'.

The enemy send their own fighters and surface-to-air missiles (SAMs) after you. The F-15 makers thought of everything, though – while you tackle the enemy planes, your flares sidetrack their missiles, and chaff and ECM jamming foils their SAMs. But later it gets much harder to destroy enemy aircraft, because some have their own flares and electronic jammers.

Every minute it gets more dangerous, and less likely you'll return to base for that hero's welcome and your *n*th medal . . .



► **At a dangerously low 48 feet above the sea, the F-15's head up display shows you doing 480 knots (about 550mph), as the fighter rolls over heading for the horizon.**



► **9,600 feet above the Libyan desert at over 650 knots: lower left panel (Horizontal Situation Display) shows positions of enemy bases, SAM sites and the F-15's naviagtional cursor. The central block is the Radar-Electronic Warfare Display, while on the right the Weapons Status Display indicates the F-15's awesome firepower potential.**



ROGER

" F-15 Strike Eagle **is one of my favourite games on the Atari, so I was intrigued to see it on the Spectrum. And considering the vast differences between Atari and Spectrum graphics, it's surprisingly similar in appearance and gameplay. Microprose have done an excellent job on the conversion, though the intro-screen tune is a bit weak. "**

MARK

" People who say all flight sims are the same, 'seen one, seen 'em all', become critically blind when faced with the fiftieth version of THEIR favourite shoot-'em-up. If you enjoy good simulations, each has its own flavour and particular problems. A sim should attempt as much authenticity as is possible in a few K of memory, and F-15 Strike Eagle **achieves that handsomely. The graphics work smoothly, the displays and instrumentation are fast and involving, and with seven very different missions across four difficulty levels there are many playing hours in this package. "**

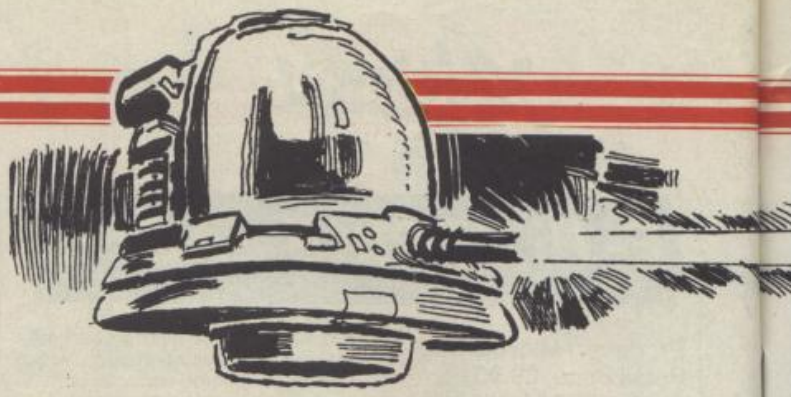
RICKY

" Flight-simulation games have been with us for many an aeon now, some good, some bad and some indescribable. F-15 Strike Eagle **is good. Visually the game is neat: the wireframe enemy planes and missiles move around the screen convincingly, though the planes are hard to see in a high-speed chase. The instrumentation panel with the head-up display, radar and weapons display is extremely useful, as are the bomb and the air-to-air-missile-targeting boxes. With all its documentation, this is a good game for simulation fans. "**

COMMENTS

Control keys: multiple-key input
Joystick: not stated
Use of colour: sensible
Graphics: reasonably fast, smooth 3-D
Sound: very little, weak gunfire FX at most
Skill levels: four
Screens: seven missions
General rating: polished programming makes this conversion from Atari a must for flight-simulation addicts

Presentation	85%
Graphics	84%
Playability	78%
Addictive qualities	86%
Overall	84%



MAG MAX

Producer: **Imagine**
Retail Price: **£7.95**

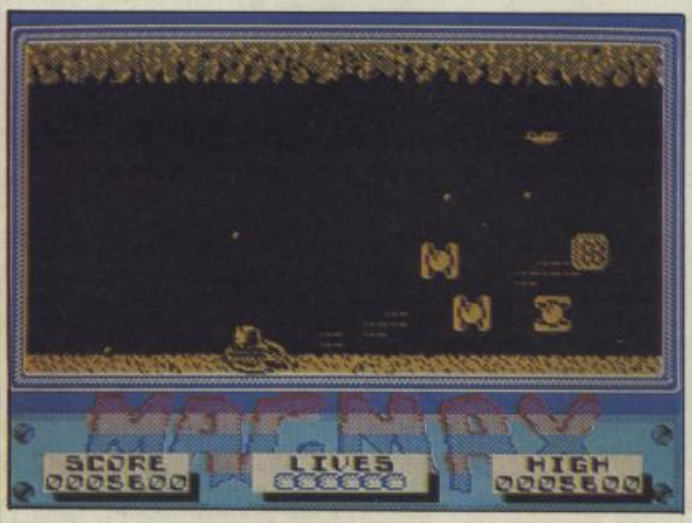
The aliens are invading and Mag Max, a robo-centurion, has been created to save the threatened planet – just in time. His builders were destroyed by the attackers from outer space, and Mag Max must find all his components, scattered about the continents. Only then can he accomplish his ultimate programmed task in this shoot-'em-up from a Nitchibutsu coin-op original.

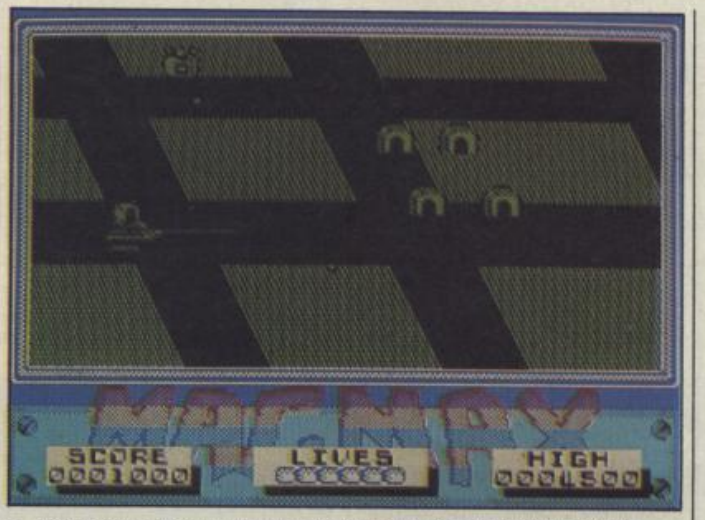
His defending craft can move across the scrolling surface of the planet, and through the cavernous underworld that lies beneath its skin.

Aliens come in a myriad of forms: from death masks to yachts, from ice-cream cones to Cyclopean balls. Mag Max can evade but not destroy their blasts and shots, and he risks losing one of his six lives when he comes into contact with the aliens or their structures.

Craters pocking the planet's surface and the passageways

► In one of the subterranean levels, Max encounters a variety of alien fighters.





► Left of screen, Max on wheels roars along using the laser he's just acquired.

ROBIN

" The brilliant loading screen raises expectations, but the first time you play it Mag Max **looks absolutely terrible; the graphics are simple and monochromatic. BUT the game itself is very playable.** Mag Max **is basically a shoot-'em-up with a few frilly extras. Collecting the robot's parts adds a new dimension to the game: with each part your ship becomes more powerful but more vulnerable, because you increase in size. For all this, it's not particularly addictive – there just isn't enough depth.** Mag Max **is let down by its graphic presentation and lack of addictive qualities, and is certainly overpriced for an average shoot-'em-up. "**

MILK RACE

Producer: **Mastertronic**
Retail Price: **£1.99**
Author: **Icon Design**

Summer sees bikers take to the roads in Britain's prestigious Milk Race. 84 entrants, you included, pedal and pant through 13 stages, displayed on a map screen, over the thousand-mile route from Newcastle-Upon-Tyne to London.

As the road scrolls along horizontally, you can move from side to side to avoid potholes. other riders and the marshal's cruelly errant car. The bike has 12 gears; the higher the gear the faster you go, but the greater your energy loss in comparison with lower gears, especially when climbing uphill.

Gradients are indicated onscreen, and ascending steeper hills uses more energy. Complete exhaustion drops you out of the tour, but reserves can be restored by picking up milk bottles standing beside the road – pints for points, so to speak.

Hazard collisions cause time loss, with some more serious than others, and you can be eliminated altogether on time-trial stages where a specified distance must be covered in a set time.

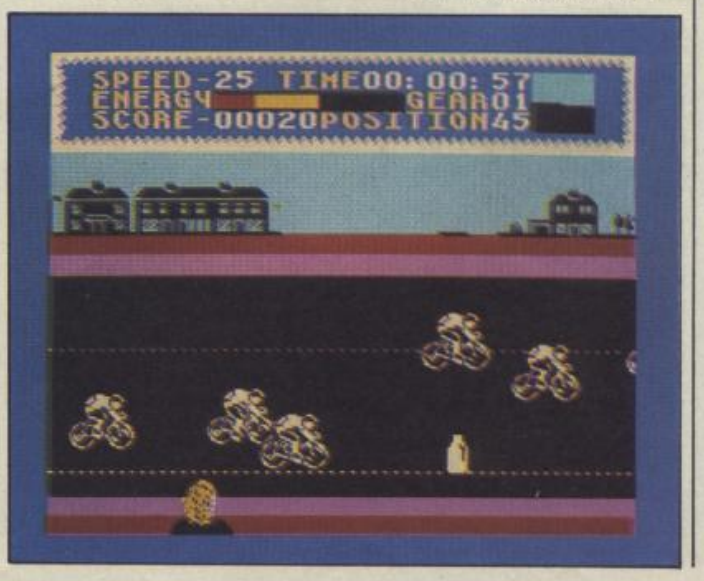
Points are awarded for the distance travelled along each stage, with a bonus received for its completion. The winner is the cyclist who takes the lowest total time to complete the course.

CRITICISM

● " I enjoyed my first race, but the game quickly became tedious. The graphics aren't revolutionary, but they're satisfactory. It's the simplicity that's the main problem; I didn't even find it necessary to change gear down hills. If you try and get all the milk bottles you can, and make sure you stay out of the way of the other riders and the marshal's car, then you're in the clear. There's not enough content to justify even a price of £1.99. "

MIKE

► At 25mph, you home in on a bottle of milk to rebuild all that expended energy.



MARK

" As this game loaded I thought it was another 'save the world from the aliens' bore. But it's really quite good. The graphics are small but clear – especially the aliens, wandering around the screen making a nuisance of themselves. Just getting past the first few waves will make you want to keep playing. Though the idea – flying a spaceship round the screen picking up pieces of equipment to aid your mission – is not new, this game has for me that quality of making you want to see just one more screen. And with those aliens about it's difficult. Still, try before you buy. "

beneath transport Mag Max to other, more perilous locations where more enemies await.

Mag Max's basic armament is a Super-Laser with a limitless supply of power, which can eliminate aliens and their constructions (and thus earn you points). And as he gathers his components into his ever-filling innards, he gains strength, defensive force and firepower.

Mag can also gather weaponry that doubles and quadruples his firepower; some invaders can only be destroyed with the special lance in the robot craft's weaponry. But each time he's hit by an alien, Mag loses the last weapon he acquired.

When a stage is completed, Mag encounters the leader of the invading hordes – and must vanquish him before going on to the next level.

MIKE

" At first play, I really disliked Mag Max **because of the awful perspective technique; everything gives a false sense of depth and position, so I found myself doing quite a bit of exploding! But ten minutes of concentration helped resolve the problem, and once you get used to the poor graphics and odd collision-detection** Mag Max **becomes a reasonable-to-good shoot-'em-up. The sound FX aren't anything astounding, but the title tune is quite nice. Overall** Mag Max **is a nice bit of blasting; but it's marred by the terrible perspective view. "**

COMMENTS

Control keys: Q/A up/down, N/M left/right, SPACE to fire
Joystick: Kempston, Interface 2, Cursor
Use of colour: generally drab in tone
Graphics: mostly small, though reasonably detailed
Sound: poor
Skill levels: one
General rating: somewhat mixed feelings, with Mark finding it more fun than the others did, but everyone agreed that it's an above average shoot-'em-up

Presentation	71%
Graphics	52%
Playability	69%
Addictive qualities	65%
Overall	67%

●*" The graphics are awful, the riders look like hunchbacks as they wobble along the road, the buildings in the background are cardboard cutouts; only the map of Britain on the intro screen is reasonable. Sound isn't too bad – quite a nice little tune plays on the map screen, but there's not much else. It's annoyingly hard to keep out of the many potholes, and out of the way of other riders.* Milk Race *didn't interest me enough to keep me playing, and though it might appeal to the younger player my advice is to steer well clear. "*

MARK

●" There aren't any other cycle-race games on the Spectrum, so I loaded *Milk Race* with anticipation. Sadly, the reality was a disappointment. The inlay says keys can be redefined, but I looked high and low for an option, to no avail. It's very simple to play; it's not long before control of the cycle has been mastered and you can race against the minimal and often jerky graphics. *Milk Race* was enjoyable to play at first but it lacked challenge and variety, and becomes boring by its repetitiveness. The idea is good, but the game needs much more excitement. "

ROBIN

COMMENTS

Control keys: Q/A up/down, O/P decrease/increase speed, M (plus Q and A) to select gears
Joystick: Kempston, Interface 2
Use of colour: black road, white sprites, simply-coloured background
Graphics: large, and adequate for the job, though jerkily animated
Sound: simple intro screen tune, few spot FX
Skill levels: one
Screens: scrolling play area
General rating: insufficient game challenge, content and graphic variety make *Milk Race* an indifferent choice for the average games player

Presentation	51%
Graphics	42%
Playability	45%
Addictive qualities	35%
Overall	41%

KICK BOXING

Producer: **Firebird (Silver)**
Retail Price: **£1.99**
Author: **Soft Designs**

When the challenger drops out, you are forced to replace him in the kick-boxing ring – and you find yourself up against that foul-breathing mean man Mick The Meat Kicker (just another abusive term for your Spectrum . . .).

You're able to move freely about the isometric 3-D playing area, but hard luck – you can't get out of it.

To protect yourself from Mick's pulverising advances you can punch and kick both high and low, or duck and block his aggressive moves. Kicks score higher than punches, but they're more difficult to get home.

Both boxers' endurance levels are reduced when punches and kicks connect. Should your computer opponent's level fall to zero he's defeated, and you pass on to the next level and a fresh combatant. But it's your turn to throw in the towel when you run out of puff.

Endurance reserves are restored by either evading or blocking an opponent's aggressive moves.

Throughout this bloodless brutality a bonus clock runs down at the bottom of the screen; the longer the contest, the lower the bonus scored when you defeat an opponent. And when there's no bonus left the contest is over.

CRITICISM

●**" Not another** Exploding Fist-**type game, I thought – and, yes, of course it is. But despite the strangely-coloured trees and yellow grass** Kick Boxing **is quite enjoyable . . . at first. The combatants move around the screen quite nicely, knocking the hell out of one another, though as with a lot of martial-arts games the controls are pretty difficult to master. But in the end** Kick Boxing **left me wondering 'why bother?'. "**

MARK

●*" This latest in a long line of beat-'em-up games shows that the idea is wearing a bit thin. I don't think kick boxing has been the theme of a game before – but this attempt to represent a fast contact sport has failed, and badly! Graphically,* Kick Boxing *is very simplistic; the badly-drawn characters jerk about the screen in terrible animation. It's also very hard to get the hang of, and boredom sets in quickly.* Kick Boxing *is poor value even for £1.99. "*

ROBIN

●" Urgh! *Kick Boxing* is very unappealing; the graphics are the best aspect, and they're pretty unimpressive. And the controls are very difficult to master. It's a pity – a successful 3-D boxing game on the Spectrum would be good. "

MIKE

COMMENTS

Control keys: Q/A up/down, N/M left/right, SYMBOL SHIFT to fire (keys used in combinations for functions)
Joystick: Kempston
Use of colour: predominantly black line on yellow ground
Graphics: jerky, masked animation frames on 3-D perspective area
Sound: poor, very limited spot FX
Skill levels: one
Screens: one boxing ring, with increasingly competent opponents
General rating: the implementation does nothing to improve a very thin beat-'em-up

Presentation	53%
Graphics	54%
Playability	40%
Addictive qualities	46%
Overall	41%

► **The guy in the fishnet tights isn't doing the *Time Warp* from the *Rocky Horror Show*, it's actually a high kick.**





THE CRASH CHALLENGE!

Get Geared Up Now!

We've resisted for years, but our resolve has faltered – the CRASHtionnaire indicates that an overwhelming percentage of CRASH readers want an arcade game Challenge. The most popular choice is reader versus reviewer (although with the exception of Mike 'Skippy' Dunn, who thinks it's a great idea, most reviewers have announced long holidays starting NOW!).

We'll get the shebang under way as soon as possible (maybe next month, though no promises yet), but in the meantime get your form filled in and sent off if you think you dare take on the awesome task of thrashing CRASH in the gameplay stakes. You're asked to name the game from the list below you would like to throw down as a challenge to a CRASH reviewer, but beware: on the day you'll also have to play a new game that you may know nothing about. A Challenge Minion will sift through the entries, looking for the highest scores, and choose a triumphant challenger. Meanwhile we'll toss up to see who gets the honour of kicking off for the CRASH team . . .

CRASH will pay travel expenses from home to Ludlow for the challenger, and there will be prizes too (just not such big ones if you lose, though).

CRASH CHALLENGE GAMES LIST

Head Over Heels	Spy Hunter
Enduro Racer	Ghosts 'n' Goblins
Gauntlet	Bomjack
Starglider	Commando
Light Force	Mikey

I've pondered greatly upon the matter of The CRASH Challenge, notice of which has stirred my imagination such that I am now filling in this form with trepidation in my heart, a song on my lips and a pain in my head. But here goes nothing anyway . . . I'd like to slap a CRASH reviewer in the face with my left-hand glove, and challenge the unlucky so-and-so to a game of:

.....

I'm known for my modesty, but I have to tell you I've already scored:

.....

Name .....

Address .....

.....

Postcode .....

Telephone number .....

Age .....

Don't hang around, get the form off this instant to **CRASH CHALLENGE, *PO Box 10, Ludlow, Shropshire SY8 1DB.***

The management of Newsfield Limited take no responsibility for any fisticuffs that may develop between their staff and challengers in the event of heated exchanges during game bouts.

Reviews

QUARTET

Producer: **Activision/Sega**
Retail Price: **£9.99**

Cosily tucked away within International Planets HQ, an innocent missions controller hears a faint message over the intergalactic intercom. Out in the deepness of space, terrorists have overrun one of the space colonies. There's no choice, no one else can help them – you must send in The Quartet.

This deadly foursome of Edgar, Lee, Mary and Joe are the only hope for the isolated inhabitants. Each of the fab four has their own special abilities. But you can only control a maximum of two on each of your conquests.

Edgar has an astounding leap, useful in jumping from platforms; Lee is the quickest on the trigger of his specially adapted wide-beam gun. Young Mary is the only one who can handle a powerful bazooka and Joe is the fastest mover of the four. To progress through each level of the planet one of the quartet must seek out the mechanical monster who holds the key to the next level.

On each level pirates jump out of portals, attempting to reduce your power. Blast them out of sight or their attack results in temporary paralysis and a lowering of the hero's unique power. Littered throughout the each part of the planet are springs, shields, jet packs and other bonus goodies – all of which help The Quartet on their quest for the ultimate one hundredth level and freedom for the planet.

●" Having played just one game of Quartet I felt I'd seen enough. The screens are of three basic designs – containing a good mixture of colour and detail but nothing inspiring. Control of the characters is very slack and tiring to use. The baddies are a boring bunch, neither originally drawn or well animated. Because of Quartet's lack of variation and its simplistic game concept, addictivity is very low. I couldn't stand going through 99 levels of this just to defeat some gormless collection of terrorists. "

PAUL

●" Quartet *is one of those types of games you either love or hate at first sight. Although the idea of hacking around trying to save hostages and/or destroying the terrorists' HQ by shooting all and sundry is not new,* Quartet *is good fun for a short while, but it tires quickly. Which is a shame, because the graphics are reasonable on the whole, and some backdrops are nicely drawn. An average blast 'n' hack game.* "

MARK

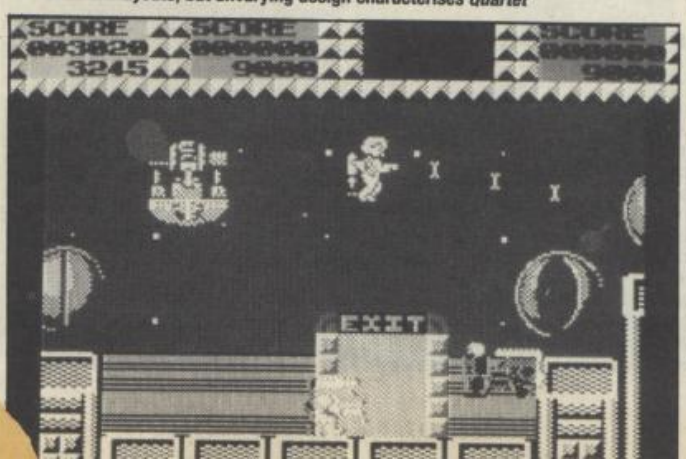
● "Oh dear, this really *is* a poor game. The graphics are very bad, and there's absolutely no challenge to any part of the game whatsoever. My first play, during which I expected only to find out how the game played, eventually lasted something in the region of twenty minutes, getting me to level 13. As I said, no challenge. In my view, whatever it costs, it's a complete waste of money. "

MIKE

Control keys: definable
Joystick: Interface 2
Use of colour: monochromatic sprites, but varied surrounds
Graphics: poor
Sound: poor
Skill levels: one, two-player option
General rating: a tired and unchallenging arcade game from Sega

Presentation	58%
Graphics	53%
Playability	37%
Addictive qualities	35%
Overall	36%

► **Different layouts, but unvarying design characterises *Quartet***



DEATHSCAPE



In the War Zones of Terra the fate of a world hangs in the balance. Your task is to navigate the multi-level grid, defending against the invading forces, whilst you attack the fortresses within the war zone on your search for the vital code necessary to breach the enemies' stronghold.

Fast . . . very fast Arcade Action to test the keenest of reflexes.

Strategy to test the finest of minds.

STARLIGHT
SOFTWARE

Music by W.E. Music
Sound FX by Tony Crowther

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FALCON
THE RENEGADE LORD

Producer: **Virgin Games**
Retail Price: **£9.95**
Author: **Sentient Software**

Falcon, agent of that future organisation TIME – Temporal Investigative Monitoring Executive – is out to clip the wings of a rebellious Time Lord intent upon meddling with precious time artefacts in this game based upon the popular *Falcon* book series.

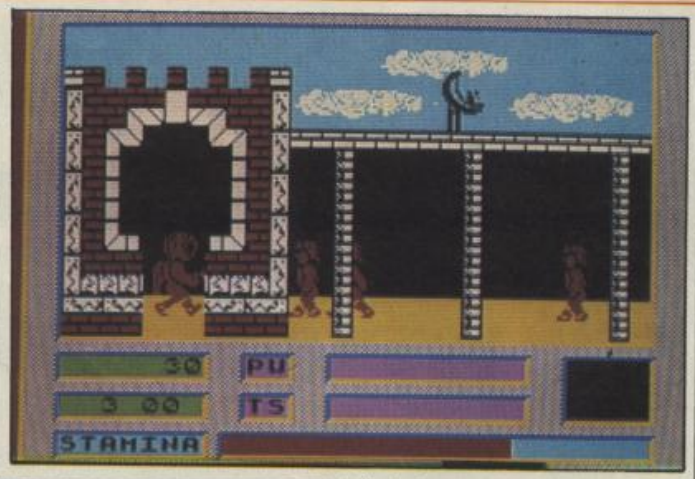
Falcon's mission begins from his headquarters, the Elger Vault, where his timecraft *Falcon's Wing* awaits. Inside the ship a control panel displays databases on the artefacts, on the inhabitants of the eight different time zones where they're kept, and on the renegade Lord.

On leaving the *Falcon's Wing*, which is immediately disguised, Falcon can rove and jetpack his way through 70 flick screens.

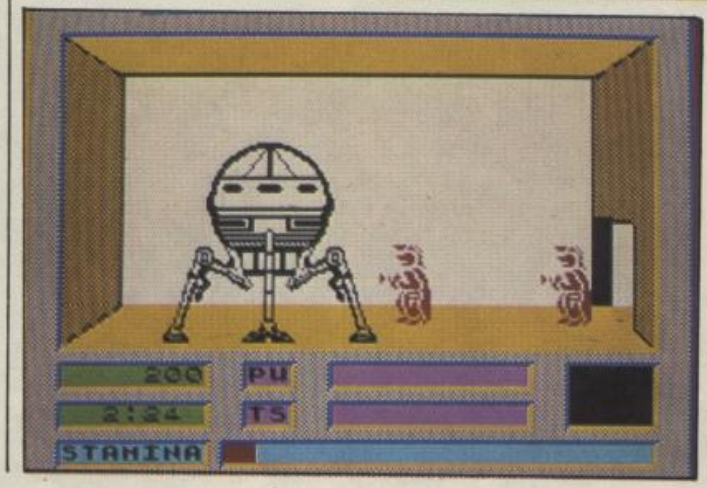
Programmed Cydroids shoot at our faithful agent, reducing his stamina – and when he's no strength left he returns to his craft. His stamina is restored by activating the ship's Auto-Doc system.

Falcon's weapon is a rapid-response laser gun; he can also find Power Of Will tokens to protect himself and Thinkstrike discs which immobilise enemies. And there are useful items to be picked up.

But Falcon's time is limited; and



► **Falcon's Wing is approached by hostiles in its quest to police Time itself.**



MIKE

" Falcon isn't much fun at first, but it grew on me little by little. Still, after a while I didn't want to play it any more. The graphics are average: some of the time-zone backgrounds are attractive and the bas-relief effect works well, but the main character is poorly animated. "

METROCROSS

Producer: **US Gold/Namco**
Retail Price: **£8.99**

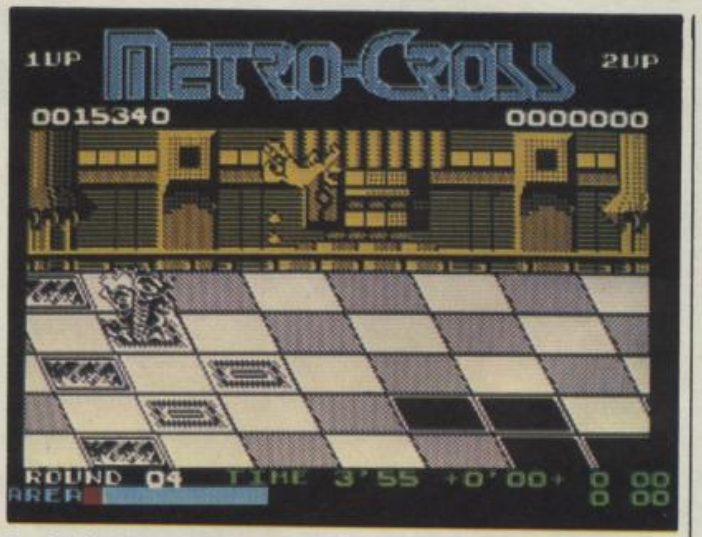
You are in a race against time across a chequer-board floor . . . and hazards like potholes, hurdles, tumbling crates, Coke cans and rats get in your way and can cause you to stagger, fall and lose time. Land on a green square, and you're all but brought to a halt.

But you can gain extra energy by jumping accurately onto springboards, landing on skateboards or kicking green cans, and hurry toward completing one of the 24 levels before time runs out.

Points are scored for every three squares moved in this conversion

► **Stage Five, and the hurdles and slow-down pads appear**





► **Roaring along on Stage Four, but whoops! That's you flying through the air just under the 'R' and 'O' of Metro.**

MARK

" Metrocross is one of those games which is easy to play and understand but gets increasingly difficult as you progress further – and, believe me, it does get difficult avoiding such obstacles as barrels, hurdles, and my favourites, the rats. Sound is nonexistent apart from the odd beep as you jump obstacles, but the graphics are pretty good. My only niggle is that on the inlay it speaks of green and blue cans – how on earth do you tell which is which on a monochromatic screen? Apart from that Metrocross is enjoyable to play, though interest may wane as you learn the patterns of obstacles – but even then you can race against the clock. "

MARK

" With features like time machines, time zones and a renegade Time Lord, this sounds like a good Dr Who **story. But though some backdrops and the facilities aboard the** Falcon's Wing **are good, and whizzing through databases and time-zone choice lists on a head-up display are brilliant, the game doesn't grab me. "**

he must complete three missions quickly to vanquish the Time Lord, though even Falcon can never *kill* this enemy . . .

ROBIN

" I wasn't impressed with the title screen – no nice graphics or tunes – and Falcon **is tedious. True, as soon as the game begins you get into the action with baddies shooting at you; but there's nothing to catch the player's attention. And once you've visited each time zone and seen all the graphics (reminiscent of poor games from a few years back) there's little of interest. I liked the** Falcon's Wings**'s databanks, but the information could well have been put in the inlay. A disappointing, very dated and poorly-presented game. "**

COMMENTS

Control keys: Q/A up/down, O/P left/right, SPACE to fire
Joystick: Kempston, Interface 2
Use of colour: varied and often attractive
Graphics: interesting backgrounds, but poor sprites and animation
Sound: below average
Skill levels: one
Screens: 70 flick screens, and display screens on the ship
General rating: above-average game with an interesting idea, but lacking the polished graphics and more involved content that would make a hit

Presentation	70%
Graphics	68%
Playability	70%
Addictive qualities	63%
Overall	64%

NICK

" As coin-op conversions go this is a real winner, with all the thrills and spills of the original arcade machine – and you don't have to keep feeding it with 10p pieces! The only difference is the sound. The graphics are pleasant to look at, monochromatic with just the walls at the top of the screen changing colour – my only grudge is that there's a colour clash when you go near the wall. Metrocross **is packed full of playability, and you'll soon be addicted, though it's a little overpriced. "**

of the famous Namco arcade original, for swapping skateboards and for passing beneath a bridge at the end of a stage. Kicking blue cans also earns you points, and jumping on them stops the timer for two seconds.

Ready, steady, go . . .

MIKE

" The first six levels of Metrocross **present no challenge whatsoever, and then the next level appears to be completely impossible. The graphics are reasonable, though I wondered why the cans, specified on the title screen as being green and blue and all that, were in fact the same colour! No,** Metrocross **costs far too much, and no-one could say they really found it addictive. It's good for a few plays, though. "**

COMMENTS

Control keys: definable, four directions and jump required
Joystick: Kempston, Interface 2, Cursor
Use of colour: yellow floor, blue walls monochrome effect
Graphics: neatly defined and effective animation over smooth scrolling floor
Sound: simple 'knocked-over' and jumping FX
Skill levels: one
Screens: 24 levels
General rating: a good coin-op conversion which maintains the original's simple addictivity

Presentation	75%
Graphics	74%
Playability	80%
Addictive qualities	75%
Overall	77%

TRIAXOS

Producer: **Ariolasoft**
Retail Price: **£8.99**
Author: **39 Steps**

Not on the side of the angels (for once), you must penetrate the orbital prison of Triaxos and free the only man alive who can activate the galaxy's most powerful weapon.

The inlay doesn't give a reason for all this, but yours is not to question why . . . oh, and you've got just 30 minutes to complete the job.

Triaxos is composed of 64 isometric 3-D flick screens, each representing one small block. A 3-D cube at the screen's top displays your position on Triaxos.

The blocks contain pulse-firing protecting droids, programmed on five levels, but luckily you didn't forget to pack a droid-destroying blaster.

ROBIN

" Yet another 3-D isometric puzzle-solving game, with the usual monochromatic graphics, Triaxos **can best be described as 'average and offering no real innovations'. Control of the central character is awkward and movement is painfully slow, lowering playability – you get bored waiting for him to cross a room. "**

Some blocks have a 'face-lift' device which alters the orientation of the room, shown on a lower screen display, turning walls into ceilings and vice versa. Using this, other rooms can be accessed –

MARK

" Triaxos **is one of a long line of logic-based arcade games. The usual mixture of puzzles and strategy is there, but it didn't keep me interested for long. The graphics are above average, though the sprites could have been clearer, but the intro tune is horrible. "**

NICK

" What a boring game this is – about as exciting as watching paint dry, and getting a headache in the process from the programmers' unappealing colours. The plot's too thin to involve – just blowing up a few aliens is not my idea of fun. "

and you can avoid falling to your death through apertures in the floors.

In one block there's a cloning booth that allows you to replicate and so guard yourself against possible death, but using it drains your personal power.

But most importantly you must collect the four components of a laser capable of destroying the mind probe which approaches to interrogate your target . . .

COMMENTS

Control keys: A left/up, Z right/down, N left/down, M right/up, SPACE to fire
Joystick: Kempston, Interface 2
Use of colour: monochromatic playing area; choice of background colours not liked
Graphics: small sprites, unimaginatively drawn
Sound: light on spot FX
Skill levels: one
Screens: 64
General rating: a game in this genre needs a lot of involved content, and *Triaxos* fails on that score, leaving it only marginally above average

Presentation	54%
Graphics	57%
Playability	53%
Addictive qualities	48%
Overall	53%

► **Looking for the only man alive who can blow the galaxy to smithereens in *Triaxos*, the orbital high-security prison**

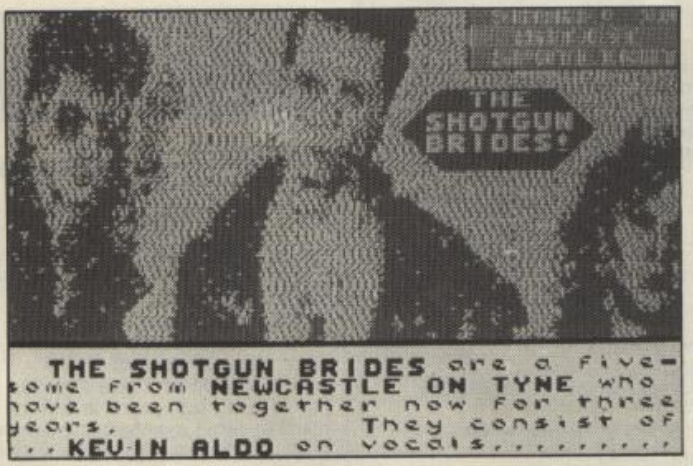


SHAKE

Producer: **Keep Publishing**
Retail Price: **£1.99**

Fed up with *Smash Hits*? Still trying to work out what *NME* stands for? Is *No. 1* a number 51 in your ratings? If the answer's 'yes' to any of the above questions, then Keep Publishing could have a little package designed just for you. No, not a game, but a fortnightly music magazine for the Spectrum.

Every two weeks you could receive a single cassette that may well solve that inky fingers problem associated with the traditional music press, *and* give you the latest lowdown on the pop world. *Shake* comes in the form of a normal cassette and inlay. There's no literature to read, just load in like a normal game. To keep you occupied you may be presented with a word square to unravel or even a few pop trivia questions to be solved before the first section has loaded.



► Some details on Newcastle band The Shotgun Brides

Section One presents the magazine's contents, which can be chosen from a menu. Just like any other magazine there's an editorial, written by the editor, Roger N Foster, containing something different each issue. Further content usually consists of elements such as record reviews, Reflections and Breaking Out.

As many as 20 recently released singles are reviewed, and information given on up to ten LPs. Reviews state the record's title, recording company, plus a few critical and informative words by a named reviewer, and every issue a record is awarded the prestigious Star LP accolade. Musical tastes vary from artists like Five Star, Swing Out Sister and Curiosity Killed The Cat to the less well known Lillo Thomas and Boston.



► Eric Clapton isn't a dead duck! *Shake*s scrolling news is fleshed out with the Clapton history.

Reflections contains a short piece on the music that inspired current hits. Issue Ten's was based on the inspiration and music of Edwin Starr. On the other hand, Breaking Out looks at current groups with a potential to be stars of the future.

For the quizzologically-minded a crossword puzzle features in every issue of *Shake*. You have two weeks to solve the pop problems contained within the squares until the next issue comes out with the result of the previous crossword and a completely new one to tax your musical mind.

After perusing Section One you can load in the next part. Section Two consists mostly of musical news and charts. Fans of musical statistics should love it because *Shake* contains a large selection of charts. As well as the usual current top UK popular singles and albums, there's also a chance to see lowdown on the soul charts, meander through the mellow sounds of the Killer Cuts, and storm your way through the top ten Heavy Rock singles of the moment.

Of course not all records run high in the British charts, *Shake* offers a run down on hits running fast in American and Canadian charts – although these vary from issue to issue. Issue Ten even provided an Election chart of ten singles most apt for playing on 11 June.

Regular news displays information on tour dates, current musically orientated books and sometimes even obituaries on recently passed away popsters. Newsflashes in the last issue we received gave information on the new Spectrum+3, the coming of the Beastie Boys and the Radio One ban on George Michael's latest single.

Section Two also contains major features, such as Decca Through The Sixties, and Eric Clapton – History Of A Man, covered in full detail with accompanying digitised pictures.

The third and final load offers a small Pop Master quiz based on a changing theme, and reports from outside correspondents on live performances around the country from bands touring the UK.

Shake side two acts as a showcase for new bands, a chance to give the public a taste of their music. Keep Publishing releases a recording of an emerging group every issue, to be given a listening while a digitised picture of the artist(s) is displayed on screen, together with band background information.

Because he's planning on becoming a musical superstar soon, we asked Robin Candy for his opinion on *Shake*.

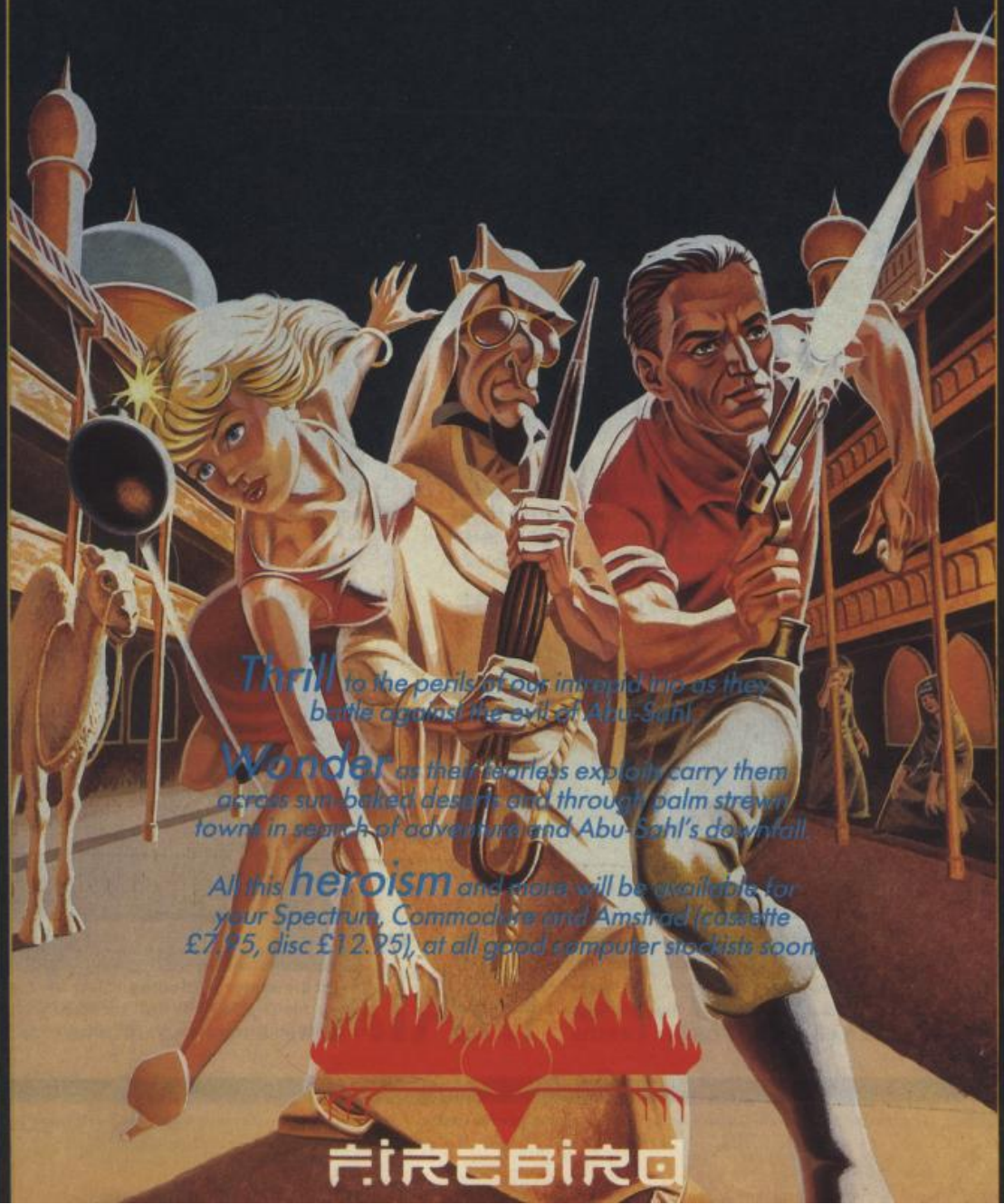


ROBIN

" The presentation is particularly impressive. Layout of the pages is neat without being too cluttered and the use of digitised pictures gives a very professional appearance. Some title screens boast that Shake is the magazine you can hear, but I found sounds produced through the Spectrum quickly became annoying and I switched off. I was happily surprised by how Shake manages to be reasonably up to date in its news items – obviously an asset for a magazine of this type, although I could have done without the news messages scrolling slowly across the bottom of the screen, it would have been preferable had the entire text appeared on screen at the same time. The tape's B-side features demos from new bands, and while not always a thrill to listen to, this is certainly a novel way of promoting new names.

Shake can be obtained from Keep Publishing Ltd, *Suite 3.2, Epic House, Charles Street, Leicester LE1 3SH.*

MYSTERY OF THE NILE



Thrill to the perils of our intrepid trio as they battle against the evil of Abu-Sahl.

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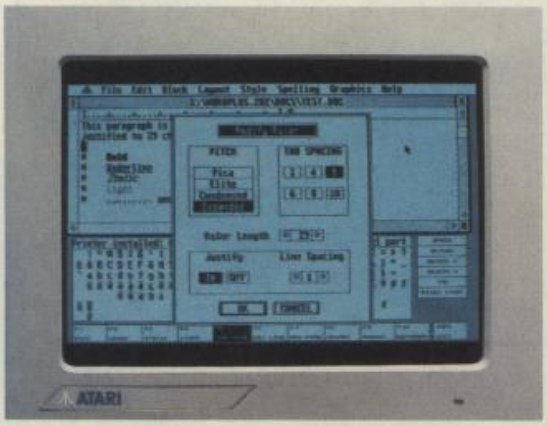
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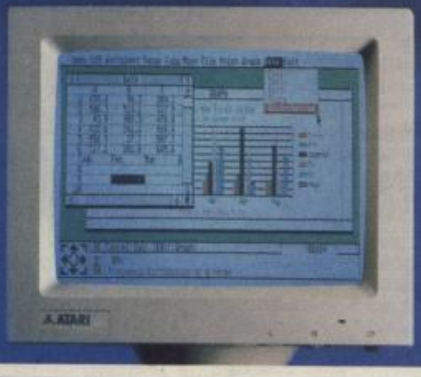
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WIZ

Producer: **Melbourne House**
Retail Price: **£7.95**
Author: **Silhouette Software Systems**

Worlds are about to collide. The wizards can prevent catastrophe, but consumed by their greed for magic they do nothing.

So you take it upon yourself to save humanity. As a novice wizard, you must elevate your power by reaching the Fifth Level and break the links that draw the worlds irrevocably closer.

Your shield against evil has been revoked by the Council Of Wizards, leaving you vulnerable to attacks from evil creatures – spiders, eyes, and stomping feet. Personal power is reduced by casting spells and by colliding with evil entities; it's restored with the passage of time, and by zapping evil beasts.

Runes selected in the correct order generate a spell. The Rune Spell destroys enemies and makes them leave behind a rune which must be picked up before it disappears. Some runes are found in the Dark Side, and to reach it the correct dark spell must be discovered. Side effects can occur if the rune sequence is incorrect or incomplete . . .

(In Read Spell mode all the spells you've learned can be read.)



► **Becoming an experienced wizard in *Wiz* is very much a matter of clever spell selection.**

CRITICISM

● " Wiz **is really dire, and that's putting it politely. The graphics look like they've time-warped from an earlier period of Spectrum games, and it took me several minutes to realise the main character sprite is a wizard. The colour clash as meanies wobble around the screen has to be seen to be believed. Steer well clear of this. "**

MARK

● " *Though Melbourne House still insist on distinctive expanded play areas,* Wiz *is much more involving than some of their recent releases. But despite the rapidly-scrolling and well-adorned play area I was very disappointed to see that the two worlds of dark and light have exactly the same structure and just differ in colour – it means lots of retracing your own tracks. So make sure you've got plenty of time to play* Wiz, *and a great long piece of paper to write all the spells on. All this fairly addictive game lacks is a title screen and some sound effects or a tune, which would add immensely to the atmosphere. "*

PAUL

● " The poor graphics of *Wiz* exacerbate the lack of playability, because of the different perspectives; having characters seen from the side and the scenery from above looks unattractive, and the chunky scenery itself isn't very nice. Firing and moving at the same time is impossible – once you've lined yourself up with an evil being, you have to stop to cast a spell at it, by which time it's run off somewhere else. You might find *Wiz* passable if you've got bundles of patience, but I doubt anyone who's paid full price for this level of unplayability will have much patience with anything. "

MIKE

PRESIDENT

Producer: Addictive Games
Retail Price: **£4.25**
Author: **Kevin Toms**

Elections are held every two years in your country, and your success as President is dependent upon opinion polls. Political events affect your standing, too – winning tank battles improves your popularity by two per cent, but allowing your people to be hungry takes it down one per cent.

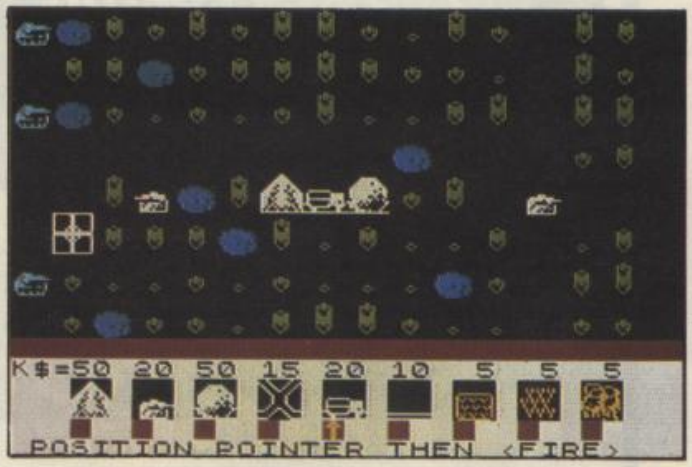
You rule the main 'oil screen'. This is the battleground for tanks, which you control in combat – and the centre of your country's economy.

You can survey for oil, build rigs, build roads for tanker trucks and sell the crude on the international market; to feed the oil workers you must plant the right amount of crops, and to protect them set up anti-aircraft guns.

The value of your country's currency is based upon gold purchases and reserves, and you must keep your currency strong to purchase oil-production equipment, military hardware and food. Gold is bought in the futures market, affected by future world growth – by anticipating growth rates, you can buy gold when prices are low.

To maintain your country's health, money must go on preventing diseases; epidemics are made worse by food shortages and the disruption caused by explosions, but food overproduction increases your people's resistance to disease.

An Income And Expenditure listing is given for each month and from this a balance-of-payments figure is obtained – another factor in your popularity.



► **Enemy tanks ranged on the left, threaten yours. Once the cursor is placed over a square you can survey it, or place an object from the lower panel in the square – in this case a vehicle.**

CRITICISM

● **" The inlay is similar to the cover of Harry Harrison's book** Stainless Steel Rat For President, **but don't be misled. Harrison's book is brilliant, and** President **is of really, really low quality. The graphics are tiny, animated awfully, and coloured badly. Is this compiled BASIC? If not, it must be someone's very first attempt at machine code.** President **is boring, badly written and unplayable. "**

MIKE



● " *This is just too tedious for words. Every decision is carried out over and over again. I know this is how a government is run – but there could be other elements like campaigning and revolts, which would have livened it up immensely. I didn't find any of the small stages very taxing, I never felt I was in control of the country, and it all seemed far too random for realism.* President *might be the best game of its type, but the whole concept is very boring. "*

PAUL



COMMENTS

Control keys: definable (no option to redefine though)
Joystick: Kempston, Interface 2
Use of colour: scenery changes within play area, backdrops differentiated between light and dark
Graphics: good scrolling, but rather inspid characters
Sound: poor
Skill levels: one
Screens: scrolling play area
General rating: convoluted RPG type with poor playability

Presentation	47%
Graphics	55%
Playability	39%
Addictive qualities	33%
Overall	38%

● " President **brings to mind *Football Manager*, and like that it's interesting for a while. The concept's good – building up and maintaining your country's economy, fighting the odd war and making import/exports – but there's no action, and I soon tired of it. It may appeal to strategists, but not to many battle-hardened blasters. "**

MARK

COMMENTS

Control keys: Q/A up/down, I/P left/right, ENTER to fire (or cursors)
Joystick: Kempston, Cursor
Use of colour: very simple
Graphics: character blocks
Sound: 'at the third stroke . . . '
Skill levels: one
Screens: one, plus menu screens
General rating: a game old-fashioned in appearance, lacking in real challenge, and short on appeal

Presentation	47%
Graphics	15%
Playability	37%
Addictive qualities	25%
Overall	29%

PULSATOR

Producer: **Martech**
Retail Price: **£7.95**
Author: **Softeam**

Five electric pulses going under the wide-boy names of Arfur, Nigel, Vince, Boris and Vince are locked behind prison doors in a five-level mazework of increasing complexity. A fellow Pulsator sets out in a rescue bid.

To find his friends our bulbous hero must navigate his way through a warren of angular pathways. Some are barred by numbered gates of six different types, which are opened and closed by passing over similarly-numbered activating sensors.

The pathways are contained within 49 flick screens; the position of the Pulsator is given at the bottom right of the screen. Transporter blocks help our hero along, moving him to different areas of the maze.

But it's not just everyday pulsating. The mazeways contain lethal electrical pads and single-direction passages, patrolled by opposing pulsators who become increasingly intelligent with each level.

A gate pulse, when touched, reverses the status of every gate on a level and then self-destructs to prevent Pulsator changing them back; killer pulses can take one of his six lives, and others drain power, though this can be replenished by collecting oil cans; others simply block passageways.

But our globular hero packs a pistol with which he can destroy his attackers. Some of them can temporarily disarm his weapon, though, and indestructible 'nutters' retaliate viciously if he fires on them. Killing enemies and collecting objects increases Pulsator's score.

Contact with a shield pulsator provides additional protection for 30 seconds – repelling attack and killing enemies if they touch it. A thief pulsator takes everything the hero carries.

To release the imprisoned pulses, the object of *Pulsator*, the eponymous electric adventurer must find keys that fit their initialled prison doors – and release one on each level before the next can be reached.

ROBIN

" Pulsator looks poor, certainly not the stuff that great games are made of. But it's a novel, very playable maze variant. The gates that give and take keys depending on whether you have one when you go through them are great. It can be very frustrating to get to a new part of the game only to find that you've got the correct key to proceed and rescue the pulses. The mazes are big enough to make mapping worthwhile; make a map as you go, because it's easy to forget where you are and where you're headed. £7.95 is a bit steep, but if you enjoy fiendish maze games then bear Pulsator in mind. "

MIKE

" Well, Pulsator is not the most awe-inspiring game I've ever played. The graphics are hardly special, and there's not much variation in the gameplay. It's not actually FLAWED, but it's nothing new. "

MARK

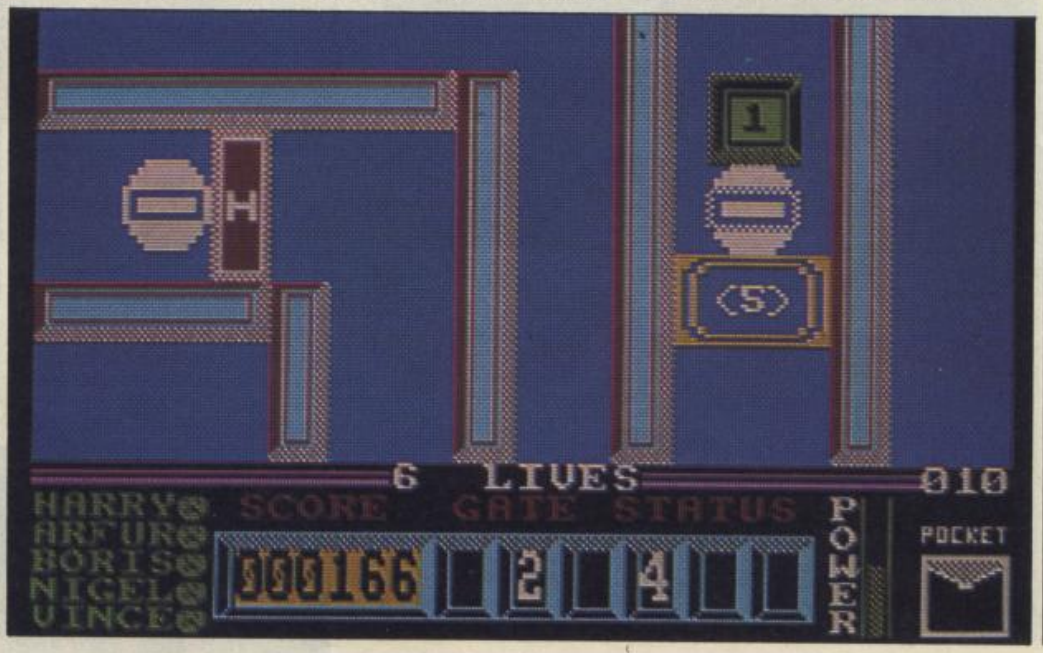
" This one didn't do much for me, I'm afraid. It's not a bad game – the graphics are quite smooth, the little ball bounces round the screen in a very convincing way – but I can't help feeling that it's an attempted imitation of Paradroid. **Still, there are some good ideas, such as door mechanisms activated by sensors and baddies which can help you. But** Pulsator **just didn't hold my interest for very long. "**

COMMENTS

Control keys: Z/X left/right, K/M up/down, SPACE to fire
Joystick: Kempston, Interface 2
Use of colour: good variety, and clear
Graphics: simply-defined shapes, good ball movement
Sound: limited spot FX
Skill levels: one
Screens: 245
General rating: a playable maze game with less lasting appeal than expected

Presentation	70%
Graphics	65%
Playability	69%
Addictive qualities	59%
Overall	66%

► **That's you, over on the right under the numeral '1', while on the left is an unfortunate pulse behind his lettered prison door.**





DEATHSCAPE

Producer: **Ariolasoft**
Retail Price: **£8.99**
Authors: **'Tag' and Pete James**

Treachery is the Varg's middle name; it's also their first and third. They're that kind of race. And they're sending hundreds of combatants into the Deathscape, a gladiatorial arena where disputes are settled.

Varg fortresses have been built in the Deathscape – they must be destroyed. You have been chosen for the task in this ten-level combat-and-navigation game.

You fly a a variable-speed fighter down a space tunnel. Indicators show your proximity to the tunnel walls, which through friction and contact weaken the craft's two shields. The fighter can reach other levels through tunnel junctions.

A grid map shows the craft's position and direction as well as fuel dumps, enemy fortresses and generators. Some regions of the grid are neutral and contain many generators and fuel dumps; they belong to the SOL FEDS. So discretion is essential if you're not to be labelled a rogue pilot and have your mission terminated.

The Vargs have five types of drones – fighters, scout craft, bombers, suicide ships and interceptors – attacking along the tunnel's length. They can be destroyed for points.

Your craft carries rapid-fire plasma cannons (capable of autofire) and up to eight target-seeking missiles (TSMs). An extra TSM is acquired when a Varg fortress has been destroyed, and a blue square registers, representing part of the 'Varg Code'.

After ten blue squares have been activated the drone-producing Varg mother ship can be reached. Plasma cannons are ineffective against the mother ship's armour; four missiles must strike the vulnerable reactor casings. Destroying these gives you extra missiles.

If your own control ship is

MARK

" Ever since the Star Wars-type coin-ops hit the arcades several years ago, I've grown steadily tired of all the 'space, the final frontier' efforts. Deathscape is yet another 'shoot the aliens and save the Earth' game. Graphically it's good; the detail on the cockpit instrumentation is neat, especially the pilot's hands as he steers the spaceship. The aliens swirl excitingly round the screen and really cause you some aggro. It'll take many games to get anywhere near the mother ship . . . damn, I'm starting to like Deathscape now . . . it's not really as bad as I feared! "

MIKE

" The packaging is good; I liked the artwork, but unfortunately (yes, you guessed it!) the game doesn't match it. There's nothing wrong with the programming apart from the minor awkwardness of the different control keys, but the game design itself is a letdown. I didn't play it for as long as I do most shoot-'em-ups, because of the repetitive action. So there's nothing gripping here; but Deathscape is a fast and pretty shoot-'em-up. "

PAUL

" Deathscape is a mystery to me. The instructions are very long and say nothing of importance; they state the obvious and cover it with loads of jargon. Prominence is given to the folk who did the sound effects and music, but for Spectrum owners hoping for some Ben Dalgleish tunes there is NO music, so don't be misled by the all-formats inlay. The graphics are well drawn, but the animation is very jerky. As shoot-'em-ups go there's very little to do in Deathscape, and it soon becomes repetitive. "

► **Your hands at the bottom of the screen guide deftly guide your fighter through the *Deathscape*.**



BALL CRAZY

Producer: **M.A.D.**
Retail Price: **£2.99**

Erik is a bouncing ball, obsessed with changing the colours of the blocks that share his screen. This he does by bouncing upon blocks at the bottom of the screen; with each bounce the block's colour changes, and when it matches another block at the top of the screen then Erik can move sideways to adjacent bouncing grounds. There's a point for each bounce.

When all the five blocks that make up a level are the same colour, another level is automatically introduced, and Erik repeats the exercise.

But things aren't that easy for this cherubic rotundity. He's chased by a collection of puncture-producing articles – rings, chain links and boxes – released after a short countdown.

Erik can defend himself with fish-shaped bullets which he fires upward from his head. And he can replenish his ammunition by collecting the falling bullet canisters. He can also stop his bouncing to avoid the chasers.

Bonus objects keep falling on his head: a cylindrical satellite (nicknamed Ring On A Thing) gives temporary protection against chasers, an air cylinder gives an extra life, a 'tick' corrects the colour of the present level blocks, and a five-pound note increases

MARK

" Judging by the inlay, I thought this was just another Q-Bert-type game; and the basic idea of jumping on blocks to change their colours is the same. But a few novel features make this highly playable. Graphically Ball Crazy is nice – the little ball springs around the screen beautifully with a big beam on his face, and the colour scheme is pleasing, with very little colour clash. Playable it is, but after a while it gets a wee bit tedious. "

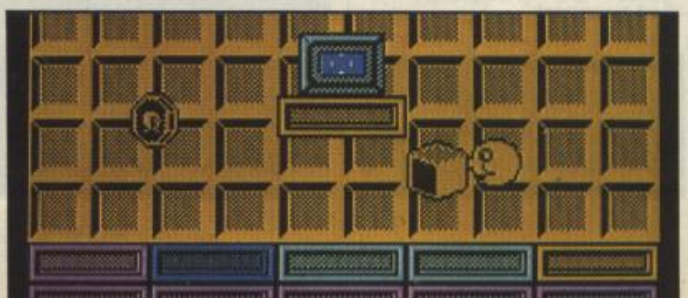
ROBIN

" Certainly an original idea, this. The cartoonesque graphics are quite passable, and the sound is reasonable. The game is simple to get into, and after a few minutes you can be jumping round the screen quite happily. I didn't find it very addictive – it lacks depth – and there's not much to do on later screens. A mildly refreshing game to cure you of interaction-game boredom. "

MIKE

" Ball Crazy grew on me. At first the cute graphics were the only things in its favour, but after a couple of hours I was enjoying it. Ball Crazy isn't very addictive but its playability is fine, and the only major fault I can find is that Ian Phillipson plays it better than I can. "

► **Cue Bert, the bouncing crazy ball.**



activated you can teleport back to defend it with its own plasma cannons. After a successful transfer, a view of the control ship's cockpit is activated and six energy bars displayed. Should three of these fall to zero them the ship is destroyed and your mission is over. But if you repel the attackers, you can return to battle with two extra missiles in your armoury.

Your fighter has two independently-emptied fuel tanks; when a sideways movement is made, the tank on the appropriate wing is emptied faster. Fuel levels can be topped up by destroying fuel dumps, and the destruction of generators re-energises shields.

Just remember – treachery is their middle name . . .

COMMENTS

Control keys: V-M speed control, 1-8 for function keys
Use of colour: largely red-and-black viewscreen, but bright and varied instrumentation
Graphics: large, well-drawn; but some sticky animation
Sound: very few spot FX
Skill levels: one
Screens: simple 3-D screens
General rating: a low-key shoot-'em-up which despite its polished look offers little action

Presentation	70%
Graphics	63%
Playability	61%
Addictive qualities	55%
Overall	**57%**

points.

When Erik has successfully completed four levels the next of the eight backgrounds is introduced and away our bouncer goes . . .

COMMENTS

Control keys: A/S left/right, L to stay down, ENTER to fire
Joystick: Kempston
Use of colour: bright, and plays an essential part in the game
Graphics: straightforward, but with good ball movement
Sound: some spot FX
Skill levels: one
General rating: novel variation on the old *Q-Bert* theme offers loads of fun and moderate addictiveness

Presentation	73%
Graphics	75%
Playability	79%
Addictive qualities	64%
Overall	73%

ALIEN EVOLUTION

Producer: **Gremlin Graphics**
Retail Price: **£4.99**

After nuclear war, the Earth becomes inhospitable to human life and is soon populated by aliens. The human survivors retreat underground and in desperation construct an android, the Cybourg 64, to exterminate the aliens. But as each generation is destroyed, a new, brighter, more deadly strain evolves.

The Cybourg starts with six lives and an arsenal of ten mines, which he can lay around the devastated landscape; bombs, TNT and lasers are added later. Some aliens are invulnerable to particular weapons, but destroying others of course earns you points.

The letters E, X, T, R, and A appear among the constructions on the earth's surface, and can be picked up to build the word EXTRA for bonus points. But aliens can destroy the letters . . .

Strings of transparent bubbles give the Cybourg protection against alien attack and can be used to pen in clusters of alien eggs (harmless till hatched).



MARK

" Sprites and backgrounds move smoothly in Alien Evolution**, and the aliens fairly whizz round the screen. And there's a nice tune playing on the intro screen. This game is obviously derived from** Ant Attack**, but that's no drawback and it's fun to play – for a while. A good buy for fans of fast-moving 3-D games. "**

MIKE

" Alien Evolution **is an appealing game with pretty graphics; but visual appeal isn't everything. It's very well presented, and the gameplay is all there, but I got bored quite soon. Despite its high-quality appearance, I see** Alien Evolution **as just a jazzed-up puzzle-cum-arcade game.**

ROBIN

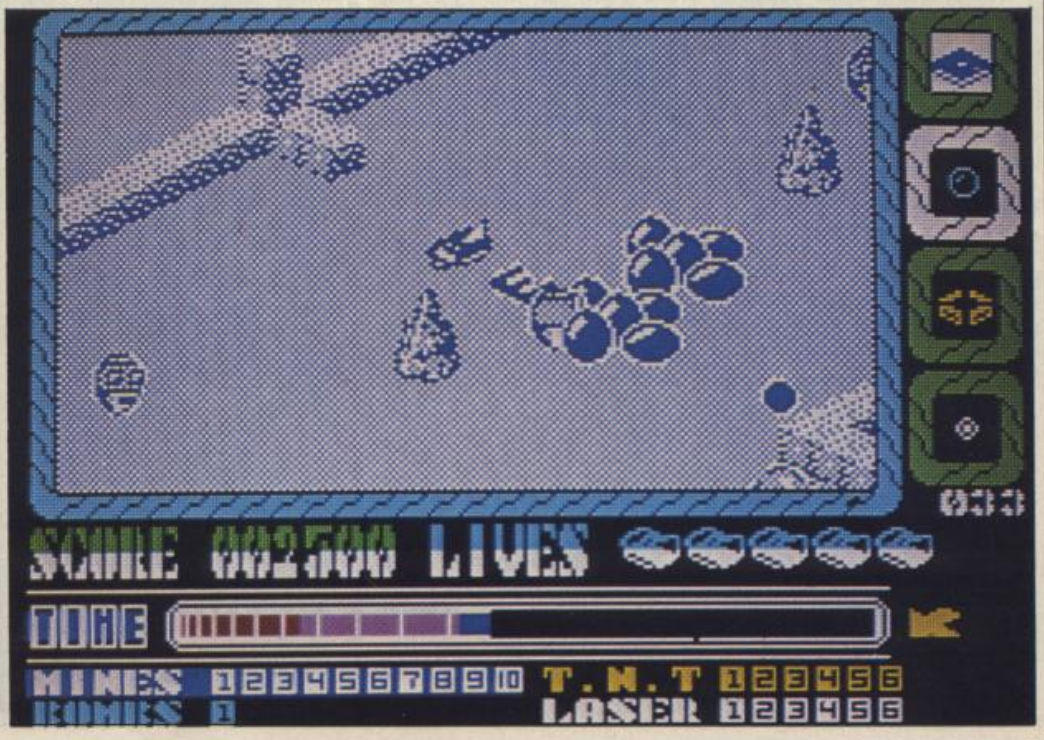
" I thought I'd loaded Ant Attack **(an ancient – pre-CRASH – game) by mistake.** Alien Evolution **is graphically very similar to the likes of** Ant Attack **and** Zombie Zombie**, featuring high-class isometric graphics still good by today's standards, though the scrolling and animation aren't up to much. But** Alien Evolution **is also enjoyable in its own right. Playable virtually from the start, it has some nice touches – like heaving bubbles around to trap nasties. And though it gets a bit repetitive, there's enough action to keep you amused. "**

COMMENTS

Control keys: definable, four directions plus FIRE and USE required
Joystick: Kempston, Interface 2, Cursor
Use of colour: blue-and-white playing area, bright surround
Graphics: fast and detailed with effective, though slightly jerky, scrolling
Sound: a few spot FX, reasonable title tune
Skill levels: one
Screens: scrolling
General rating: it's derivative of a good format, the graphics have stood the test of time, and the game is highly playable – but weaker on lasting appeal

Presentation	80%
Graphics	82%
Playability	79%
Addictive qualities	72%
Overall	**75%**

► **From Spain comes this *3D Ant Attack* lookalike at Gremlin Graphics's new midi range price.**





FORUM

I've been asked to remind people who had any trouble with their *Amaurote* 128 version, to send it back to Mastertronic. See last month's news item on the subject. Some similar problems may have been experienced with *Zub*. Also that I was over-enthusiastic last month is saying that the winner of the mapping competition had been picked, when it only closed the other day (as I write it has now closed).

Enough of that, and on with the letters, which include a couple of disenchanteds and two positively seethings. But first, Letter of the Month . . .

VALUE FOR MONEY

Dear Lloyd
This month, as usual, I find myself disagreeing with the opinions of many of the reviewers. I appreciate that, as you've stated many times, the reviewer's comments are purely subjective opinions, I feel that the judgements given are often swayed by factors such as game price, publishing house and maybe even by the author's reputation.

This is not an indictement upon the reviewers, more a reflection upon human nature. I, for one, still find it difficult to compare £1.99 games alongside their full priced (£7.95 upwards) counterparts, without feeling some degree of bias towards the full-priced item. In the software world, more than any other, the old adage 'You get what you pay for!' is proving to be less true by the day, but it's an attitude that persists, having become subconsciously lodged in the minds of a great many of us.

In an ideal system, each reviewer would be given a game tape and playing details and nothing else. Then in isolation, they would play and review the game with a mind relatively free from preconceptions about what the game OUGHT to be like, both in terms of quality and value for money. Having written the main review, they could then be given any remaining details, whereupon they would write a brief summary based on the extra information.

If nothing else, such a system would at least ensure that each game was taken on its own merits and that they all started equal, even if they don't finish that way!

Before I go I must just mention one review that I DID agree with; PAW. It's awesome. Well done Gilsoft for being one of the few software houses that can truly be called innovative!

Thanx for your time Lloyd
Mat Broomfield, Basildon, Essex

What a very timely letter, Mat! People will suspect I wrote it specially for this issue, because as you can now see, the Powers That Be at CRASH have decided to drop the Value For Money rating from our reviews. Can anyone argue that Leonardo da Vinci's Mona Lisa becomes a better or a worse painting day by day because influences like the international rates of exchange mean it's worth £50 million one day and over £90 million the next? It's still the same painting, whatever it costs.

At the more humble level of Spectrum games, it's rather hard for us to be kept in the dark about game prices – adverts, press releases and reviewers' presentation packs usually offer advance advice on price. What's important is that collectively, all involved with games reviewing at CRASH have decided to try and forget the cost element when reviewing (unless it's an essential part of a review now and then), and treat all games as equal starters regardless of their price.

You're the first person who's written suggesting such an attitude, Mat, so I'm giving you the prize for Letter of the Month. You wanted two CRASH subs, one for yourself and one for a friend, rather than any software – consider it done.
LM

ON GAMES QUALITY

Dear Lloydie-Babes
You asked for letters on the necessary qualities of games and here are my (possibly insignificant) opinions.

1. Addictivity should be a result of mystery and challenge. The player's task becomes more difficult as play progresses and the player also wishes to know what the next screen/stage looks like and what new problem it presents. Examples: *Chuckie Egg*, *Highway Encounter*. Unfortunately, in some cases, when all the screens have been seen on the game has been completed the addictivity can drop to zero, eg *Knight Lore*.
2. Playability is really down to the quality of programming, the initial difficulty and the overall game design. In a playable game when a life is lost the player should blame himself and not the computer. Gradually increasing difficulty and a good high score table help to create a long term challenge, eg *Commando*.
3. Depth is where the computer game can beat the coin-op. Depth does not mean lots of screens but lots of choices. Games which plonk you in a scenario and then let you do what you want often turn out to be classics, eg *Elite*, *LOM*, *Rebelstar*, *Quazatron*.
4. Exceptions – some games seem to be severely lacking but have that 'something' that makes them fun after the 1000th game, eg *Stop the Express*, *Halls of the Things*, *Deathchase*, *Battlecars*.

I would like to dispute the claim that games are always improving. As far as I am concerned *Stargliders* come and go while my fave games include oldies like *LOM*, *Halls of the Things*, *Turmoil* and *Krakatoa*.
William Russell, Ardrossan

A personal view from one reader (can you hear the cries of horror over those fave examples!? – mind, I agree with many of them), and here's another . . .
LM

Dear Lloyd
1. Playability and addictivity; these are probably the two hardest qualities to incorporate in a game. The programmer should try to strike a balance between a game being too hard (*Glider Rider*, which I find nigh-on impossible!) and a game that is too easy (*Throne of Fire*). This way the game is not so hard as to put you off straight away, but just hard enough to keep you coming back for more (*Ghosts 'n' Goblins*, *I Ball* for instance).
2. Content or graphics? There are lots of games that are all gloss and no content (*Nemesis the Warlock*), and then there are games with poor graphics and sound that isn't up to much, but are very, very playable (*Gauntlet*–naff sound, average graphics, but as Mike said in the review, 'WOW!!! what a game!' Programmers should aim for a balance on these points (as Jon Ritman and Bernie Drummond did in *Head Over Heels*), but if graphics have to suffer to make way for content then so be it! (but never the other way round!).
3. Price range (value for money): the price range (in my eyes) should be from about £7.95 to £12.95 (at the most), although *GAC*, PAW, budget games and a few others are exceptions to this rule . . . but most of all the games should be priced according to their worth, which is indicated by the following two guidelines; before a game is launched it should be playtested by about five individuals, and then the price set according to their opinions of its worth. This way the purchaser gets his hard-earned pennies'-worth and the company sells a lot more copies.

By the way, recent changes made to CRASH have improved an already excellent magazine.
Terry Jones, Coventry

On your last point, software houses obviously have cost considerations independent of playtesters' opinions – like how much it cost to develop the game and how much the programmers want for it (!) – but I think many might sometimes be surprised at the reaction to their products by the 'man on the street'. It's a valid point.

Let's hear from some more readers on this interesting subject
LM



RE: RATINGS

Dear Lloyd
I have some points to make about the reviews in CRASH.

Firstly, how are the final marks for graphics etc arrived at? Is it a joint decision or is one reviewer picked to do the job?

Secondly, why doesn't each reviewer give his own personal overall mark at the end of his comment? If they did this reviews would be even more accurate. For example, in the review of *Loco* from Alligata in the March Issue, the overall percentage was 44, which indicates a poor game, but the general rating indicated that the game would 'appeal to younger players', so to them the game would not be poor, would it?

Finally, I think the two most important elements in a game are playability and addictive qualities and a game should be marked according to these factors. If this were the case, games such as *Cauldron II*, *Lightforce* and *Pentagram* would not have been Smashed.

By the way, why doesn't CRASH have a separate percentage for sound, as this is now an important part of games (see *Cobra* for example).

I hope you find my points valid enough to print this, as I am interested to see what other readers think of my suggestions.

Simon Davis, Hemel Hempstead, Herts

Like all the ratings currently in use, figures for graphics are arrived at by averaging out each individual reviewer's marks. The overall percentage does take into account playability and addictive qualities much more than any other rating, and if you look, nine times out of ten the overall is an average between those two. In our continuing policy of improving the ratings system there is some discussion going on at the moment about letting each reviewer offer their overall mark, with an editorial decision then made about whether a game is a Smash or not. Sound, too, may well become a rateable factor before much longer.

LM

MY LOGO

Dear Lloyd
In response to Don Elliot's letter complaining about the CRASH logo. I must say that I quite like the logo as it is, it's become an old friend.

However, I do agree with Don in saying this it needs a face-lift, so here's my version with 3-D perspective, shading and no sparks – and I've kept the same style of writing. What do you think eh?

Andrew Shelbourn, Grantham, Lincs

Very nice too Andrew. For those of you with black and white monitors at home, Andrew has kept the blue ground, and highlighted the insides of the letters with an orange-brown landscape effect with pale blue-grey sky. The hand-stitched sequins are an optional extra . . .

But Andrew has competition . . .

LM



NEVER HAVE SO FEW . . .

Dear Lloyd
No! Don't let them do it. We will fight them in the newsagents, we will fight them in the RAM and we shall fight them in the mags, and we shall not waver. Yes its happened, the SPOCL has sprung existence (through a hole in the space-time tunnel but that's an other story along with the one about the time I went to Torquay . . . but!) – the Society for the Protection of the CRASH logo. How dare Don Elliot insult a national institution. For three years now I have looked upon the cover of CRASH and admired the artsmanship that goes into it. In those three years many changes have been made and I kept my pen quiet, but this is too much, Don Elliot must die.

I suggest nailing him to a large sign of the CRASH logo there to rot and be eaten by the FORUM BUGS, and to realise his mistake. The SPOCL needs members, as long as you pay £1,000 into a specified Swiss bank account, and so long as you are not called Don Elliot, you are welcome. Come on Lloyd stand up for your mag.

Yours protectively
David Forsyth, Templepatrick, Co Antrim

My Toytown cheque is in the post David (it has to be Toytown on the salary I'm paid). For my part, whether it's elegant, brash, out-of-date or whatever, changing the CRASH logo would be the equivalent of Delilah cutting off Samson's hair. There have been magazines that altered the design of their logo, and look what happened to them (veiled reference . . .)

LM

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AN OLI FAN WRITES

Dear Lloyd
A little message to Steve, Halesworth, Suffolk. HOW DARE YOU CRITICISE OLIVER FREY'S BRILLIANT ARTWORK!

With art as my main hobby, I know just how annoying it is when some stupid idiot comes up and moans about a picture that you've just spent hours painting. Especially when they're pretty rubbishy at drawing themselves. I'm absolutely amazed at just how much work Oli gets done in the space of a month and just how brilliant it all is.

To show how strongly I feel about the matter, I've drawn a picture to scare all those nasty little 'Oli's art moaners' out of their pitiful little boots (and anyone who says its rubbish can look forward to a short and painful future). Oh, and don't worry Oli, at least you've got one real admirer!
Nik Wriglesworth (13), Nr Canterbury, Kent

I had to put this letter in because Oliver actually does read most Forum mail as it arrives, and he demanded it be printed! Loved the drawing Nik . . .
LM

UNCONVERTED

Dear Lloyd,
'A conversion from the BBC on our Spectrums? No thanks!' – Mike, re: *Time Flight*. What an utterly naive comment! Just two pages later the same person raves about *Sentinel*, by Geoff Crammond, author of *Aviator*, *Revs* and the original BBC version of Sentinel. And just for the record, the game was by Superior, called *Space Pilot*, and I couldn't stand it either . . .
Kenton Price, Horsham, West Sussex

They do get carried away, don't they? True enough, some great games have made it from the BBC to other machines – what about Elite?
LM

PLAY IT AGAIN SAM

Dear Lloyd
I would like to congratulate Ocean, and in particular Martin Galway, for providing some excellent title tunes to some of their recent games such as *Top Gun*, *Cobra*, Terra Cresta, and in my view the best title tune ever on a spectrum so far, *Short Circuit*.

Before Ocean started to really capture my imagination with these excellent tunes, many companies attempted to produce good sound with the Spectrum but found it impossible, given the Spectrum's limitations, and only a few quiet burps and coughs resulted. Now, when I get a hold of a new Ocean game, I load it up excitedly, because even if the game falls short I know I can look forward to hearing some funky new sounds.

Now I have to complain to probably the best software company in UK, Elite. I'm certainly not complaining about the quality of their games, but I just think it's a shame that they can't be bothered to include a good title tune. I'm sure it isn't beyond their capabilities!

Here's my Top Five chart for music on the Spectrum:
1. *Short Circuit*
2. *Top Gun*
3. *Cobra*
4. *Terra Cresta*
5. *Ping Pong*

Michael Scotney, Camborne, Cornwall

There's nothing like a good tune for extra added value, but more importantly, music can add tons of atmosphere – witness the 128 music on Amaurote *– actually more like film music than a tune, but great stuff. How about some other CRASH readers' music charts?*
LM

BEER PAL

Dear Lloyd
I have a request I hope you can help with. I am looking for a penpal (about 14) from Australia or another country abroad.

He/she must collect beer towels and have a Speccy. I have a Spectrum+2.
Matthew Barnett, 27 The Crescent, Truro, Cornwall, TR1 3ES

Beer towels . . . ?!
LM

NOT ENTHRALLED

Dear Lloyd
I've just flicked through my copy of CRASH 41 and there are a couple of items I am not enthralled about.

The Video Section. Stop it while it's in it's infancy. Just because **LM** has stopped, it doesn't mean Roger Kean (blessed be his name) can add a section from the ill-fated magazine to CRASH. The section has completely nothing to do with computers in the least. (Apart from the tie-ins). Okay, so they are a part of a standard entertainment, but not the entertainment we buy CRASH for.

Philippa Irving is so annoying. The reviews she writes are fine but in every introduction there is something about Oxford. Why? Again, it's nothing to do with computers, so please stop Miss Irving. Or is it because you want to show off? I don't care which but cease the Oxford crap.

The two cartoon strips are just great. Terminal Man is excellent. I'm afraid I missed the first series but the story has filled me in on what I did miss. Jetman I absolutely love. Dead funny I think. I just hope that Terminal Man doesn't replace it. Tamara Knight is not a cartoon strip but just as good.

I know what you're going to say now – 'but they are not part of computers'. So, they are the *likeable* parts which aren't part of computers, so keep them.

Welcome back Roger Kean. Long time no see. He has brought SOME good ideas with him, like CRASH Readers Offers, all colour screen shots, names in criticism boxes and more competitions.

Lastly, don't change the CRASH logo, Oli Frey is great.
Robert Collier, Leominster, Herefordshire

Early indications are that many readers do like the video reviews, but it remains to be seen how widespread the approval is. As for Philippa – Oxford is where she is (as a student), it's a nice enough place, why shouldn't she mention it?

What you're really saying is 'get rid of the non-computer bits I don't like', which is a bit of a selfish attitude Robert. Tsk tsk.
LM

CARRY ON CRASHING

Dear Lloyd
I want to comment on how the standard of software testing and de-bugging has declined dramatically over the past few months. Once, you could walk into a shop, buy a game and not have to return it to its creator. No more, I fear. Practically every game available at the present contains an error, from a niggling glitch to, in the worst cases, glaring bugs which cause the game to lock up inexplicably.

I offer *Dandy* as a case in point. Dungeon Three really put the mockers on my several hours' work. A major error (there's a similar one in Dungeon Two) ensured that it is impossible to complete level two of this dungeon, and thus the game.

To be fair to Electric Dreams, they immediately offered me a replacement game from their range, and said that the working *Dandy* wouldn't be available for some time. The replacement game which I selected (*Enduro Racer*, which also contains a bug– - try pressing the graphics key mid-race a few times) also arrived promptly.

But there is, of course, no excuse for releasing games which don't work. I know, as a programmer myself, that bugs can be difficult to eradicate, but the knowledge that they exist should prevent the company from marketing the product. All that's required is a simple few days' testing (not by the programmers) and all would be a lot better. Many errors could be found in just a few minutes; and although righting them would take longer, the end result would be a far more attractive proposition for the customer. But too few companies do so, and isn't this highlighted by the fact that *Dandy* is already available for the Spectrum on another company's compilation tape – is it still unplayable?

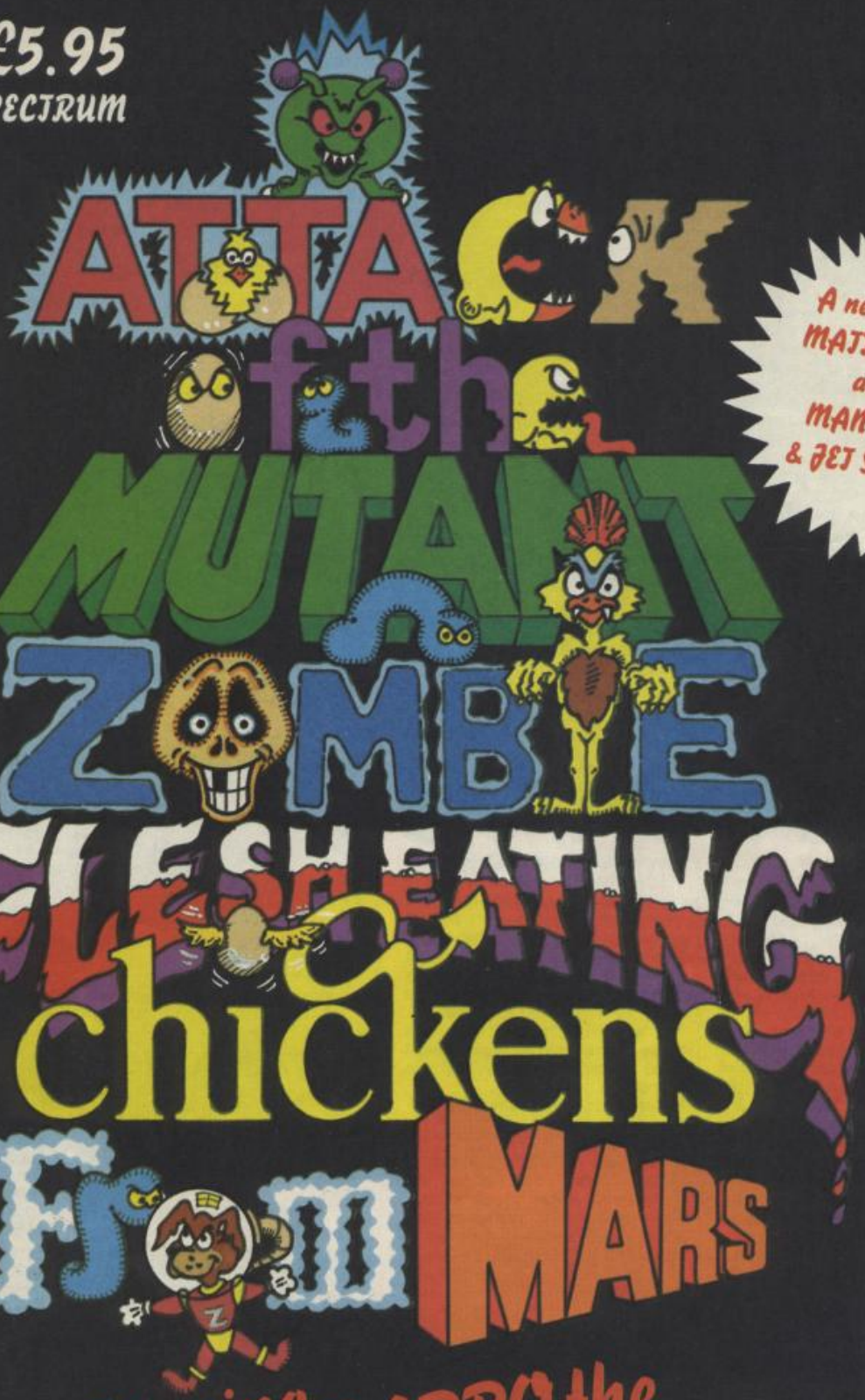
There are worse offenders: honour must surely be bestowed upon *Superbowl* (original version) which without doubt had more bugged features than working ones, even the revised version has its problems (whoever heard of a two-player game where you're not allowed to use two joysticks? – and the keyboard layout is horrendous), *DT's Supertest* still crashes on the skiing, and *World Series Basketball* still crashes any time it wants.

The best software house I've come across is Durell, and I've yet to find even one minor bug in any of their products.

Finally, I'd like to say how much Crash has improved in recent months. The new ratings system (and still the one I tend to go by) and more colour makes it the best Spectrum read on the market.
Calum Benson, Hamilton, Lanarkshire

To be honest, I'm not so sure that de-bugging is any worse (or any better either) than it used to be, but perhaps with more hype for each game these days, you notice the worst ones more. Whatever, I fully agree that enough games are definitely rushed out complete with bugs, and it shouldn't be happening.
LM

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LOST MAN

Dear Newsfield,
Being a loyal reader of **LM**, and CRASH, I felt I must write to you and express in the strongest terms my outrage and deep disappointment at discovering that, after only four issues, you have summarily disposed of your young infant **LM**. You have no idea what a plonker I felt trundling around almost EVERY newsagent in London asking for a copy of **LM**. The responses were split about 50/50 between 'What?' and 'I've no idea what's happened to it this month, loads of people have asked that.'

If you were going to scrap the publication you could at least have been civil enough to tell your stockists, this isn't Ludlow you know. And did you give us an inkling in issue 4 that it was going to be the last? Did you HELL! You gave us a questionnaire to fill in so you could improve **LM** for us – surely there was some indication that 'market forces' were about to 'prevail'. It looks almost as if your new publication didn't quite bring in the extra dosh you were hoping for and so you suddenly severed its umbilical before it had barely had time to stretch. What kind of a commitment to a new product is four months for heaven's sake?? It's close to PATHETIC.

Since when did advertisers dictate the success of a product? I doubt when CRASH started in 1984 that queues of glossy advertisers were forming. You have to build up confidence in a product for heaven's sake. If, as you say, your sales were up in the region of 60,000 I can see no way you couldn't justify a wide readership to ANYBODY interested in taking space in your pages – unless your sales force was grossly incompetent. Given all that I have said previously I am left with a deep disappointment and bitterness that the wondrous **LM** has been taken out of our hands after only four issues. My previously high opinion of your candidness and openness has been battered and I have doubts about continuing to buy CRASH – I certainly won't be renewing my subscription.

I look forward to a reasonable reply OR the reappearance of **LM**.
David Bunce, Edgware, Middlesex

Hmmmm. Well candidness and openness are relative qualities, obviously. Newsfield need not have said anything about the failure to secure advertising revenue and just kept schtumm. The newstrade were naturally informed of the non-appearance of the magazine, but you're very naive if you think that out of the tens of thousands of newsagents, even a tenth of them ever know what's actually happening.

The questionnaire was published in perfectly good faith, because although we were told advertising revenue was extremely low, there was always the hope it would soon improve. You're right, **LM** *was stopped because it didn't bring in enough money. It might interest you to know that had the magazine sold approximately 180,000 copies every month, the return on that would have JUST COVERED its monthly costs without advertising. I think you're sensible enough to see the point. It isn't advertisers who dictate, but their revenue does. CRASH had quite sufficient advertisers from Issue One onwards to support its costs.*

As to 'commitment', your remarks are close to insulting (although I can see you're obviously upset!). Thousands and thousands of man-hours went into **LM** *and some half million of money. I can assure you, the decision to cease publishing it was not taken lightly.*
LM

LOST MAG

Dear Sir/Madam Lloyd
I've just sat down with a fag in one hand and cup of tea in the other and CRASH on my lap (Issue 41), and read Roger Kean's article on **LM** closing down. As an avid reader of CRASH and **LM**, I have never written to a mag, or a paper before, but I felt I really should point out how **LM** will be missed.

Even though it was only around for a short time it has, I believed, carved a niche in the market for youth mags. It has had varied and interesting interviews, it has provided info on pop, sport, fashion, hobbies and generally things which interest the young. There are lots of mags for the young, I hear you all cry, but not like **LM**. Most of the mags for the young are usually specialised like sports, or as in CRASH, computers. And as for the mags which are not specialised – well they're 99 percent girls mags.

I think it will be missed by people like me who enjoy a good read. **LM** was beginning to get a cult following if you like. I personally think it was a great mag and if it goes, then there will once again be a gap in the market, because there really isn't anything to replace it. There was nothing like it in the first place, it was one of a kind and I hope it can somehow make a comeback.
Peter Gagg, Peckham, London

Thank you for those comments Peter. I can only echo the statements Roger made in last month's editorial. We're all sad about it, but Newsfield is springing back with a new magazine soon, though it's in the realms of computers again.
LM

NEW FANZINE

Dear Lloyd
A few friends and I have started a fanzine, which is produced every two months. As you rarely have a Fanzine File section in your magazine, I've written to you so you can mention us in the Forum. We are currently only selling the fanzine locally and are very anxious to increase the circulation.

It's called *Split Screen*, from **N Clemons, *20 Paddocks Close, Wolston, Warks, CV8 3GW***, and can be obtained by sending a postal order for 35p along with a large (A4) self-addressed stamped envelope. Please specify which issue is required – Issue 1: Jan/Feb 87; Issue 2: Mar/Apr 87; etc.
N Clemons, Wolston

Consider it done . . .
LM

FANZINE ADVICE

Dear Lloyd
I read with interest the articles in issues 39 and 40 regarding fanzines and so decided to write with a bit of advice for future editors.

1. *To begin with you must have a lot good ideas and enthusiasm, without these you won't get very far.*
2. *You need good access to photocopying facilities, copying the magazine can take an awfully long time and you may need to use it very often, so it's important that it be near to your HQ and that the owners do not mind. If you get really stuck ask the school if you could use theirs.*
3. *Make about 20 extra copies of the first issue and send them to software houses along with a polite letter explaining your position and requesting review/preview copies of games for the mag.*
4. *An Alphacom 32 printer is very useful for use with utilities such as Power Print II as you can produce some pretty decent headings.*
5. *If you have a Multiface 1 it is very good for producing screen shots for reviews. If you don't own one then it's a very good investment.*
6. *Letraset is a good idea for headings and titles. It is also important to have an attractive cover, maybe you could use coloured paper.*
7. Finally, the most important thing is good publicity. You could possibly put an advert in the free classified section of *Your Sinclair*. It's also a good idea to continually send copies to CRASH, *Your Sinclair* and *Sinclair User* as these three magazines quite often produce articles on fanzines. Follow this advice and you should do alright.

Our publication costs 65p and is called *TURBO* – it's available from **Turbo, *6 Sterndale Road, Romiley, Stockport, Cheshire, SK6 3LA.***

I hope the above advice is a help to other fanziners, and I can tell you that another Fanzine File is imminent, maybe even next month.
LM

The CRASH Forum is your debating column, and any opinions you have are welcome (though some may be snarled at, I make no guarantees!). And now it's time to pack up the ol' Hermes (1938) and peddle off into the summer sunset (for summer, read rain). But before I go, don't forget the address: LLOYD MANGRAM, CRASH FORUM, *PO BOX 10, LUDLOW, SHROPSHIRE SY8 1DB.*

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ON THE SCREEN!



There really is no rest for the wicked. As if spending his whole life writing comments wasn't enough, MIKE 'SKIPPY' DUNN now has to look after the CRASH Gallery. Wonder if he will get any sleep tonight? Probably not . . .

▼ DRAGON

This piece, called, logically enough, ***Dragon***, by **David Puddlephatt** of Bovingdon, in Herts, stood out strikingly from the rest. The bright colours he's used add to its overall effectiveness, but I can't help feeling it looked more graphical in black and white. A nice picture nonetheless, even though I have no idea what that white bit at the top is. (Suggestions on a postcard to Skippy, 1/2 King . . .)





▲ MORE MAX

Another selection of popular pictures; and I'd almost dismissed the ***Max*** picture before I'd seen it – obviously a mistake. Rather than spoil his picture by trying to over-use the Spectrum's limited colour palette, **Chris Campion**, of London W11, has stuck to the monochrome with which he has drawn this impressive screen. Presumably caught in the middle of a mega stutter, both shading and attention to detail are very good, giving it an almost digitised feel, and bring self-acclaimed superstar Max Headroom out to the full.

▼ CANDYPIX

Okay, that's the lot for this month . . . ah, almost forgot, Robin Candy's been bugging me to put some of his screens in the Gallery. So here are two of my favourites from the Candy Collection, both strictly monochromatic (Robin being such a purist). They speak for themselves: *Falco* and *Vanity*.



▼ NAZGUL RIDERS

I must confess that when I read the letter from **A Bertrand** of Hornchurch in Essex accompanying this cassette, I was a little dubious because he'd chosen subjects which are very popular among Gallery entrants. However, the quality of the art was very high, Mr Bertrand's final picture, particularly impressed me – a striking rendition of ***The Nazgul Riders*** from J R R Tolkien's superb fantasy work, *The Lord of the Rings*. As anyone who's read the trilogy (or who has listened to the recent Radio 4 play) will know, the nine riders are the servants of the Dark Lord, Sauron of Mordor, and through the predominance of black, the feeling of evil comes out atmospherically in this picture.



ON THE SCREEN IN THE CRASH GALLERY

With the page's recent non-appearance, it isn't too surprising that the amount of art I've been receiving has steadily declined; if you want the article to stay, don't forget, I need the pictures! Here's the deal: you use Rainbird's highly praised utility, the *ART STUDIO*, send the results on cassette to me, I choose two or three of the best each month and print them, and Rainbird, who make it all possible, will get your picture enlarged and ink jet printed in colour for absolutely nothing!

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EDITOR'S NOTE TO PREVIOUS ENTRANTS

I must apologise on behalf of CRASH to readers who have had their Rainbird *Art Studio* SCREEN$ printed in earlier issues of the magazine, but who never received a finished print. This was not Rainbird's fault, but was due to editorial administrative problems at the time. We have those people's names but not their full addresses. If you write to **ROGER KEAN, SCREEN PRINTS, *PO BOX 10, LUDLOW, SHROPSHIRE SY8 1DB*** with the title of your printed screen shot, your name and address, I'll do the rest.



THANATOS

In this magical game you take control of a dragon, Thanatos the destroyer, whose eternal destiny lies in conflict with the forces of the underworld. The dragon which is very large and superbly animated, flies, walks, swims, and burns its way through the landscape. The game features fantastic landscapes with a totally new panoramic scrolling action.

"Wow! This game is really amazing, stunning, astounding, brilliant! The tune on the title screen is very nice, but the graphics are absolutely superb." CRASH, December 1986 (overall rating 93%)

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DEEP STRIKE

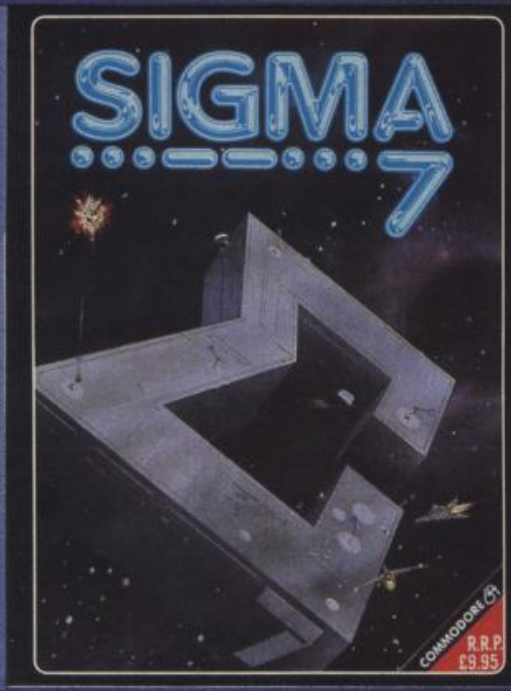
At last an opportunity to try your luck against the Red Baron and his flying circus of World War I flying aces. This game not only lets you take-off in a fully armed fighter, but also gives you control of the four bombers of your DEEP STRIKE attack force. It uses the latest techniques to bring you a smooth-scrolling and tilting 3D landscape viewed from the cockpit in full colour.

"...after a few games I really got into it. The way you can bomb the ground features (especially churches) makes the game much more enjoyable than if you just had to shoot planes!Overall a game that you should come back to quite a lot in the future." AMTIX, February 1987 (overall rating 71%)

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"I really like this – it has three neat mini-games all of which are very playable and addictiveThe graphics are really crisp and clear with a beautiful starry backdrop..." ZZAPP, February 1987 (overall rating 70%)

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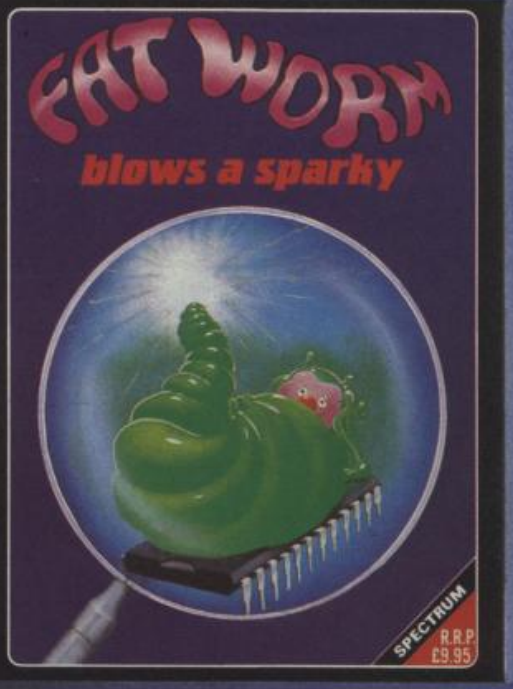
Now for something completely different. You are an insidious little wormie being chased through a Sinclair Spectrum by creepers in sputniks and crawlers on feets. Defend yourself by shooting burper sparkies at the crawlers, and blaster sparkies to take-out the sputniks. You'll see the computer board in a smooth-scrolling 3D viewed from above, as you crawl around in search of a disk drive on which to clone yourself.

"Playability and addictiveness are of the highest standard, but as for the graphics – well, what can I say? As far as animation and solid 3D goes, this is probably the best I have ever seen" CRASH, November 1986 (overall rating 95%)

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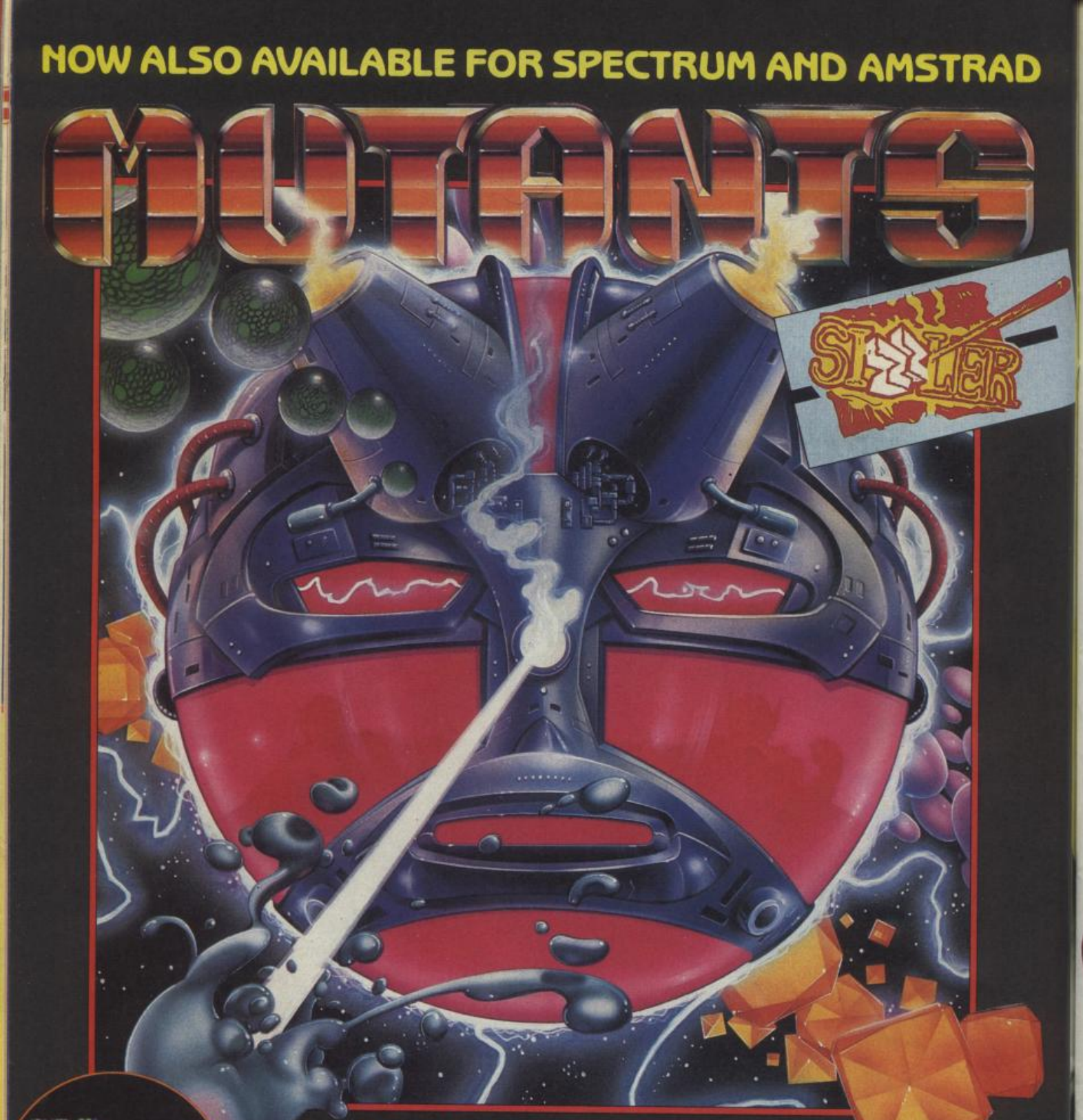


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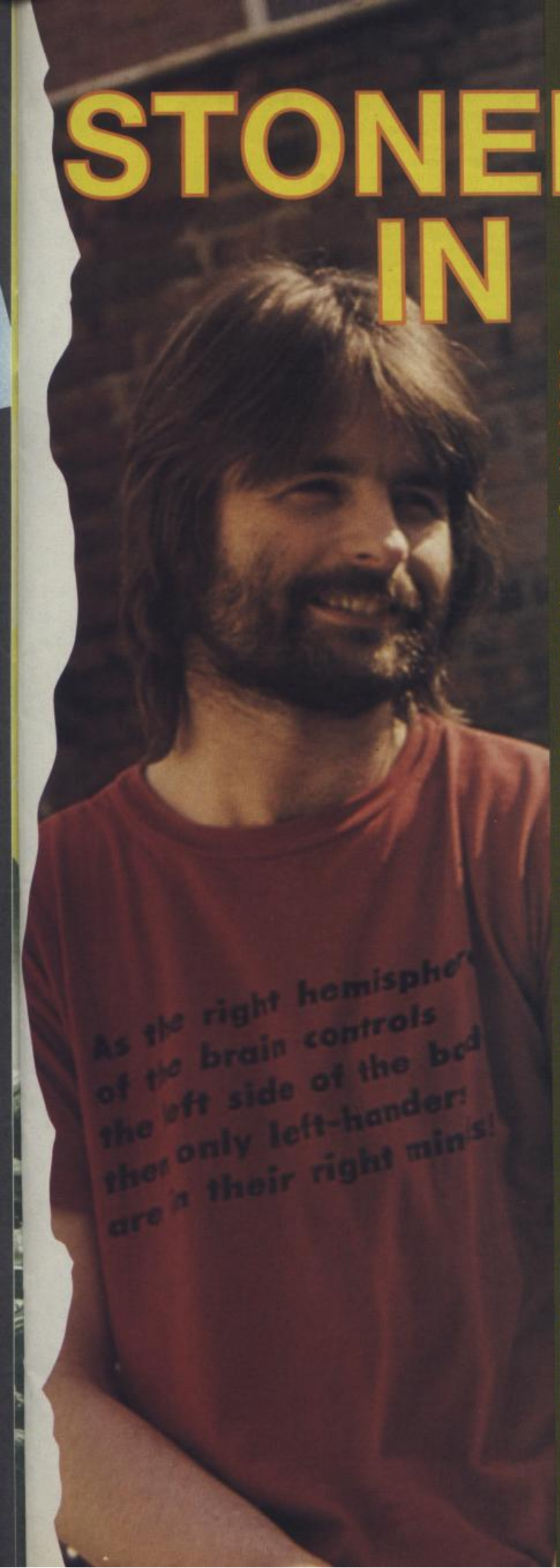
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STONEHENGE IN SPACE

With two major hits to his record, *Tau Ceti* and *Academy*, PETE COOKE remains an enigmatic figure. RICHARD EDDY went to talk to him on the eve of *Micronaut One* being released by Nexus, and discovered some facts behind the man.



WHEN *Tau Ceti* burst onto our screens in December 1985, most people had never heard of its programmer. We all tend to think stars are born with a hit on their hands; and for some strange reason CRASH credited the program to a *Steve* Cooke! (It was a Smash in the December 1985 issue.)

But in fact Pete Cooke's pedigree goes way back to 82/83. Hearing that he was about to complete a new game for Nexus called *Micronaut One*, I decided to visit the man at his home in Leicester and find out more about his work.

Pete Cooke's house is a modest two up/two down in a long terrace in the Highfields district. His programming area is an upper room, crammed with computers and synthesizers (he once played keyboards in a band). And it was here on a hot sunny day toward the end of April that we sat down to talk, together with Ian Ellery from Nexus, who'd popped over to see how *Micronaut One* was coming along.

It can be fascinating the way programmers who work on their own arrive at a game design – which comes first, the chicken or the egg? For instance, where did *Tau Ceti* come from?

'It came from a technical idea, I suppose,' Pete began hesitantly. 'I'd seen *Gyron*, and for a long while it had puzzled me how on earth they did the spheres. It obviously couldn't be a sprite because they didn't have enough memory to have that many sprites.

'I finally twigged that they must have used a table of line widths, and I thought about it a bit, then realised I could split it three quarters and a quarter, and then it would look like a shadow.

'I just went away and played with that for quite a long while and got it so that I had the sun in the sky and the shadow in the right place. And it sort of came from that, really.'

Ian, who was Creative Director at CRL in *Tau Ceti* days, remembers his first sight of the hit: '*Tau Ceti* was this funny little square that arrived one day with a horizon and some objects – that's all there was – just a little square in the middle of the screen and it had a line in the middle and some little boxes.'

It's not always a routine that sparks off Pete Cooke's imagination, though he works from a routine back to a game as often as the other way round.

'I generally start by thinking technically what I would like to see on the screen, what would look nice that hasn't all been done before. You think whether it's achievable, technically how will you do it and how could you plan it into a game? If you can't, then obviously it's a demo and you forget it – or it pops up later on when you've worked out how you can use it.'

With *Tau Ceti* the light-and-shade routine worked out, but obviously there's a lot more to the game than light and shade. What about the setting, and the little histories?

'It was all made up as I went along. I know a bit about astronomy, so I looked around for a likely location – because the way the routine works meant it couldn't be in space; you couldn't have the sun above because the line-draw routine wouldn't work, it would have to be on the surface of a planet.

'And I thought 'Right, it can't be Earth because it looks a bit barren for Earth, it's got to be another planet.' So I looked round for nearby stars that might be inhabited and Tau Ceti had a nice-sounding name.'

The display looked rather science fictional, with the controls and the flashing lights – how did *it* come about?

'An awful lot was determined by technical things, really. I thought 'How fast am I going to be able to do this?' Because filling solid areas of the screen takes an enormous amount of time.'

Pete came up with a clever cheat. The problem was sorting lots of objects into order of distance first, updating their positions each frame, *and* doing it quick enough to give an illusion of movement. Using a full screen, or

► Pete Cooke, the man behind *Tau Ceti*, *Academy* and now *Micronaut One*



"*Tau Ceti* was this funny little square that arrived one day with a horizon and some objects."



even half a screen, proved to be too slow and horrible to play. The solution was for the display to take up about a third of the screen.

But, as Pete says, 'that brings you to the question of what goes elsewhere, and the obvious thing at that point is to say that you need some other information in the game. Then you say 'Well, the game has got to use these charts' – but they've got to mean something if they're filling up half the display area, so you have a lot of things going on that you need the charts for . . . and using the charts doesn't take anything like as much time as it would to copy the top two thirds of the main display down.'

So technical restraints actually helped Pete design much of the gameplay in *Tau Ceti*. But with the follow-up, *Academy*, Pete seemed to have overcome even those restraints.

'It used a lot of similar routines, but essentially I rewrote it all, because it's amazing how much better you can do things in a year. For instance, in *Tau Ceti* you've got the list of objects and, because there's a lot of things they can do, I needed 20 bytes for each one to tell it various flags about whether it was running away, whether it was shot, whether it had a door and so on.

'At that point it started to become fixed – I had all the routines to step through it and sort it, and at the end I found I'd left a byte unused. Well, you just say 'Sod it', it's just not worth it; to times it by 20 is not too difficult (times by four and add one and then times by four again, which is all quite easy SHIFTs and ANDs), but to times it by 19 is actually slower, so it's better to be 20 long.

'I wanted it to be 16, just four SHIFTs, but given that it wouldn't fit, it was worth throwing that space away. When you start you don't know what it's going to need at the end, you're always guesstimating along the way – 'How much space is that going to take?' You think about how much memory there is and think 'Well, the code is going to be roughly this much and the data has got to fit in that much'.

'Continually, as you're working along, you're thinking 'Maybe I can compress a bit of it somewhere', or 'I'm going to have to rewrite the code to save some space'. Second time round, of course, you've got the hindsight of having done it and knowing that it fitted in this much space. It saves a lot of fiddling, so that speeds the game up.'

Was that why *Academy* turned out much more of an arcade game than an adventure?

'Yes. I mean, the code's more efficient. There's a couple of basic things I did that speeded it up an awful lot that I should have done in *Tau Ceti*. I spent a lot of time optimising *Ceti* routines, but it still scanned every object, every frame, to see whether to draw it.

'But I flagged each one based on a field of view, so if you flag each one in that area, once each pass-round, then you know it couldn't possibly get from there to there in the 15 times round, and you've eliminated most of the processing straight away. It's immediately 60 per cent faster for that.'

With the experience of *Tau Ceti* and *Academy* behind him, Pete might have drawn heavily on the same routines for his next game, *Micronaut One*. But . . .

'No, basically I ditched the lot. It works in a totally different way. It got to the point where I thought I could do another 'safe' game, but it gets less challenging after a certain point.

'And there was the move to Nexus – I thought it would be better, having moved, to do something different. It wouldn't annoy CRL as much, for certain, and it would look a lot better, and yeah, I was bored with doing another *Ceti* game.

'In fact, I'd got another one sketched out which was going to be a bit like *Psytron*, in that you were defending something. But I didn't think I could make it different enough using the same sort of display, and I'd long wanted to do something with tunnels, cos there's been a lot of things attempted but they haven't quite worked, right back from New Gen's *3D Tunnel*.

'There's *I, Of The Mask*, which again looks stunning, but actually it was just a set of frames – it must have been because you couldn't actually do anything in the tunnels but go forward and back.'

Did Realtime's *Starstrike II* help?

'It gave me a few ideas, but it suffered awfully from being a subsection in a larger game. I looked at it and thought 'The big problem is junctions', and that's what none of them had, cos you can't do them that way. Drawing a tunnel is a doddle – it's four lines converging to a vanishing point, and you just move it around. But branching tunnels is totally different, and I spent ages thinking about it.'

Needless to say, Pete cracked it. *Micronaut Cne*'s routine has a list for the tunnels; it starts in the section you're in and says 'that's the visible window at *that* tunnel'. Then, using what he describes as a 'recursive descent', it stacks that as the visible window of the screen and looks to the next two sections, gets two visible windows, and down it goes. By the time it gets to the far section it's got a tiny window and then it clips all the lines to that window.

'Effectively what happens,' says Pete, 'is that the program is doing hidden lines, but not having to actually draw solid surfaces – so it's just lines, which means it can be very fast. I thought *Starstrike II* was too slow and too simple, and stuff like *3D Tunnel* with attributes just didn't work, so it had to be fast, and the way to do that isn't to draw solid shapes all over the screen, but to find some way of working out which areas you can see and which you can't, and just clip the lines to it.

'It looks about four sections ahead and then it simply stops. After about two sections it stops drawing the floor because that looks cluttered and horrible, you just get a black mess.'

At this point we paused, partly to look at *Micronaut One* (for last month's CRASH preview), and partly to go for lunch at the local Indian. Over the poppadoms I asked Pete about his background, and how he got into computing.

Is there a dreaded ZX81 skeleton in his cupboard? Laughing, Pete admits it all.

'I used to be a maths teacher, you see. The whole thing started when I was teaching – I got hold of a ZX81 in 1981 and then a Spectrum and took it up as a hobby. I ran a little club for various of the kids sort of 14, 15, who were dead keen, and I'd bring stuff along I'd done and say 'Have a look'. Eventually some of them turned round and told me I ought to sell them. They just hassled me till I sent one off, and it got snapped up and from then on . . .'

"Having moved to Nexus, I thought it would be better to do something different, and yeah, I was bored with doing another *Ceti* game."

"I got a lot from *Urban Upstart* – it sold a lot and kept selling. But after that the market bottomed out for adventures."



Pete knew very little about programming – just what he'd picked up doing his maths degree. He played around with BASIC, and started learning machine-code routines. But what was that first game he sent off . . . ?

'*Invincible Island*.'

Invincible Island? The Richard Shepherd adventure? So long ago! And indeed CRASH Issue One's LIVING GUIDE does credit Pete Cooke with the game's authorship.

He followed it up with another adventure for Shepherd, the well-loved *Urban Upstart*.

Was he well paid for those early efforts?

'Yes, I think I was. Comparatively, it hasn't gone up a lot since then! I got a lot from *Urban Upstart* – it sold a lot and it kept selling. But after that the market bottomed out for adventures, though I did a couple more for Shepherd . . . one was called *Inferno*, based on Dante's *Inferno*.

'It was interesting, but it was a bad project to get into, it didn't work as I had wanted it to. The constraints of the book were too much in the end. For an adventure it became very linear.

'The other I wrote on the 64, *Up*

A Gum Tree. It was the best adventure I did.'

He'd packed up teaching to become a full-time programmer – but, having earned lots, he spent six months on *Up A Gum Tree* and got just £500 for it.

'I thought I'd better look round for a job. I gave up work at exactly the wrong point – when the real drop-out came.'

But he did another project with Richard Shepherd – *Ski Star 2000*.

'*Fighter Pilot* had been out long before then, but *Ski Star* was the first 3-D vector-graphics game that wasn't a *Battlezone* or a flight simulator. You could design the courses and pick things up and drag them with this cursor stuff – I think it was one of the first games to use icons as well. I scrapped icons after that – they're terrible.

'I've played too many games where it's 'What's this icon doing then?' In the end language is the best way of communicating we've got, so why don't we use it? I'd like to write a game with no words in it, something that's so transparent you don't have to use language at all.

'But I don't think that the in-between ground works – you have a weird mishmash of these wiggly, squiggly symbols. They've put me off the Atari ST a bit. I keep thinking I'd like to get rid of this and get a good on-line interpreter back where you can do things quickly rather than having to wander round endlessly.'

After *Ski Star 2000*, Richard Shepherd went under and disappeared from the software world, leaving Pete as a struggling freelance without a software house to market his games. Enter Ian Ellery and the company he then worked for – CRL. Ian takes up the story . . .

'I got this little cassette,' he recalls, 'through the post with this little letter *(adopting kiddie's reading voice)* – 'Dear CRL, I've written this game called *Jackknife*, which is a lorry-driving simulation. From Pete Cooke' – and I expected 'aged 13¾' after that. The first one didn't load. He sent me another and I still thought it was a kid sending me a program. I loaded it up and I saw what was a very original game – I wasn't sure how commercial it was, but it was still very playable.'

The game was, of course, renamed *Juggernaut* – presumably a more commercial title.

How did Pete come up with the weird idea?

'I had a mate,' he says, 'a mechanic-cum-car buff, who wanted to be a long-distance lorry driver. He saved up for this £100-a-week course, went away to Birmingham on it, and came back having failed it. The problem was reversing – it's impossible.

'I thought about it and played with little models, and it is a bit strange – when you push it one way it goes the other and it just buckles up.

'There seemed to be an idea in that, and it gradually metamorphosed into a game all because he said how difficult it was to reverse an articulated lorry. I put loads of stuff in about ferrying freight around so you didn't have to do too much reversing. But that was essentially it.'

Juggernaut wasn't a commercial hit, but it covered its costs sufficiently to encourage an Amstrad conversion which Pete did himself, and fire CRL's enthusiasm for *Tau Ceti*.

In between *Tau Ceti* and *Academy*, Pete did *Room 10*, a Ping-Pong game, on the Amstrad.

'I wanted CRL to put it out as a budget game and they wouldn't. I said it ought to be around £4 cos that's what I thought it was worth. I did it on the Amstrad because it was a chance to use the colour display – you can have a coloured floor and a coloured ball over it without attribute problems. It's the simplest game there is.'

Finally, the time had come to ask the Big Question – why did Pete move from CRL to Nexus?

'I like Clement Chambers, the boss of CRL,' says Pete carefully. 'He's a nice bloke and I get on well with him, but the reason I joined CRL was an advert that Ian Ellery put out, and the thing that worked at CRL was me working with Ian.

'Essentially it wasn't much to do with Clement. Clement would come in and ask how things were, and he'd be pleased when the product turned up. But it wasn't Clement who'd seen the demos and seen what the potential was.

'When Ian left CRL I thought 'What I've got is a fairly good relationship with Clement, but it isn't a working relationship'. Obviously Ian, who had gone to Nexus, was interested in working with me again as things had worked out alright before.'

Perhaps Ian enjoys working with Pete because he delivers ▶

SOFTOGRAPHY

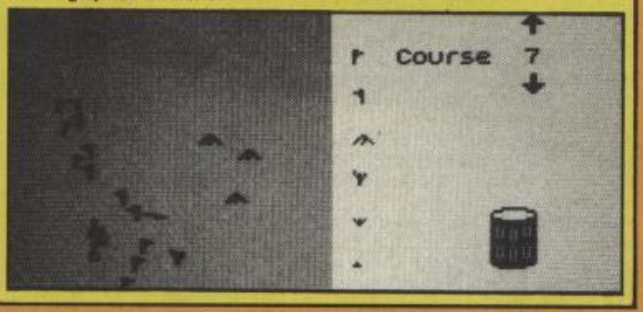
INVINCIBLE ISLAND 1983 *Richard Shepherd*
A pre-CRASH text adventure set amongst a primitive tribe which may be hiding treasure.

URBAN UPSTART 1984 *Richard Shepherd*
Reviewed CRASH Issue 3 (April 84) page 38
Street cred text adventure with graphics – get out of horrid Scarthorpe and live.

INFERNO 1984 *Richard Shepherd*
Reviewed CRASH Issue 8 (September 84) page 71
Adventure based on the book by Dante. Every location had a simple graphic.

UP A GUM TREE 1984 *Richard Shepherd*
Commodore 64 adventure

SKI STAR 2000 1985 *Richard Shepherd*
Reviewed CRASH Issue 14 (March 85) page 120
Debut appearance of icons for the piste designer in this first non-Battlezone vector graphics simulation.



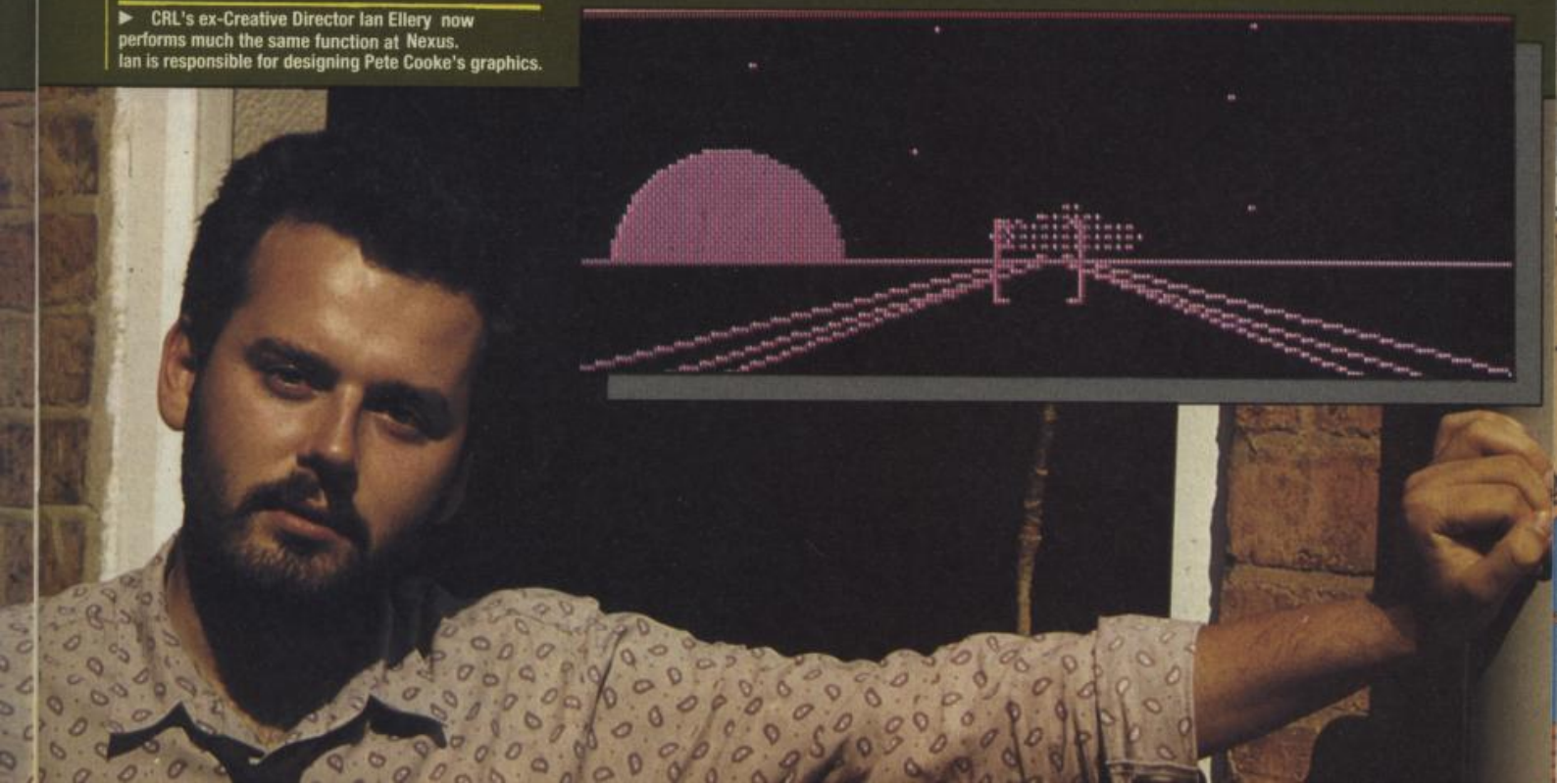
JUGGERNAUT 1985 *CRL*
Reviewed CRASH Issue 19 (August 85) page 118
Almost a simulation, as you truck heavy goods on long articulated lorries through narrow town streets.

TAU CETI 1985 *CRL*
Reviewed CRASH Issue 23 (December 85) page 86
A Smash for this complex 3D arcade-strategy game set on a hostile planet.

ROOM 10 1986 *CRL*
3D Ping Pong game, which only came out for the Amstrad.

ACADEMY 1987 *CRL*
Reviewed CRASH Issue 36 (Christmas Special 86) page 179
Another Smash with the follow-up to *Tau Ceti*

MICRONAUT ONE 1987 *Nexus*
Reviewed this issue . . .



► CRL's ex-Creative Director Ian Ellery now performs much the same function at Nexus. Ian is responsible for designing Pete Cooke's graphics.

programs on time . . .

'I'm always late, but never terribly late,' Pete replies, laughing.

'If there was ever a wait it was worth it,' adds Ian agreeably.

'No, I've never been six months late but then you can't when you're freelance because there's no wage, you know – if it's late I don't eat!'

All Pete Cooke's programs have been original, developed from ideas of his own. Has he ever considered doing an arcade licensed conversion, or working within a team?

'No, I'm not interested. Well, I can't say that about *any* arcade licence, but I can't think of any offhand. I don't like the philosophy behind them – the philosophy of the quick buck – and games I play are not like that. My favourite game to play is *Revs*, and it took me six months to crack it. Now *that* isn't going to appear on an arcade machine, is it?

'As for programming teams on such projects, I think they're actually graphic designers, and looking at the games I don't see any programming in them. When I looked at *Jack the Nipper* I thought 'This looks really nice, masked sprites, very pretty', and then I saw it moving and they all move in diagonals and I thought 'Oh no, why?' It's a trivial thing to have a look-up table and a shallow diagonal, so it looks realistic rather than bouncing off walls.'

'I wouldn't work with another programmer, but a graphics designer – I can't draw so somebody else has to do it, and that's Ian.'

And what's next after *Micronaut One*?

'There are three ideas waiting in the queue. One's about nine months long. I've got a routine that'll do solid 3-D. If you say 'Let's remove the need to do updates ten frames a second' – say something like *Lords of Midnight*, where the frame rate is very slow but is effective – then you could do an incredibly detailed 3-D display with solid surfaces, *and* you could move around it. I suppose it could be very interesting as a sort of graphic adventure. Again in first-person perspective.

'Second on my list, I suppose, is converting *Micronaut One* for the Atari ST, which Nexus really want me to do. I'm looking forward to learning the 68000.

'And the third one is quite a simple idea – I don't know whether I should give it away. It's a shoot-'em-up. There's a lot of parallax scrolling games – this is the ultimate – perspective scrolling. You can have shadows – you've seen pictures of Stonehenge at sunset – imagine shadows of rocks and boulders actually changing like that as you go by, and just a spaceship over the top with a shadow, zapping things. It's something simple like that.'

'To be written in coffee breaks!' Ian retorts.

'It baffles me that there's so much stuff around that you've seen before,' muses Pete. 'I've got millions and millions of game ideas floating around waiting for somebody to land on. I've never found it difficult thinking of ideas – it's more difficult limiting them. Picking and choosing, I suppose.'

Get ready for MICRONAUT ONE, and WIN a PHOTON WARRIOR KIT worth £150

and a copy of the game, all from Nexus!

PLUS 20 extra copies of MICRONAUT ONE



THERE ARE enough CRASH reviewing horrors around these days to make a Comps Minion's life a misery. But Ian Ellery of Nexus cheered me up the other day when he promised to send this great big parcel, addressed just to me.

Excitement mounted as the last piece of smooth brown paper fell away from the brightly-coloured box to reveal . . . a splendid Entertech Photon Double Warrior Battle kit worth £150.

Mike and Robin grabbed the most, and within minutes they were dashing round the nearby Garden Of Rest phasering each other to death, disturbing idyllic Ludlow with the electronic howls from their helmets.

Of course it's *always* left to Comps Minions to clear things up, and I've carefully packed the gear away again, good as new. Now it's first prize in this Nexus competition based on Pete Cooke's *Micronaut One*.

Wearing your Photon Warrior gear, you can almost imagine you're a science-fiction film hero – and that's the subject of the questions below: science fiction and its heroes (and baddies). The winner gets the Photon Double Warrior Battle kit (containing two Photon Warrior helmets with flashing lights, electronic sound transmitters and infrared-beam receivers; two chest modules with internal speakers, light-up 'hit' indicators and phaser power-cord hook-ups; and two Photon Phasers that fire invisible infrared beams and emit synchronised sounds).

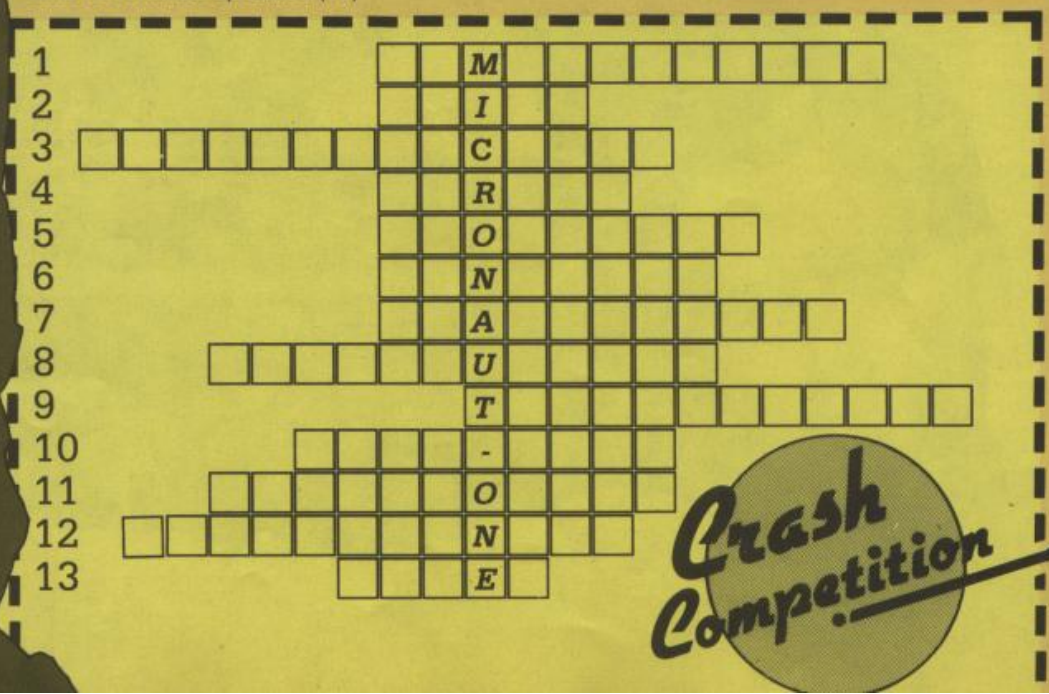
Here's what you do: from the clues below, work out what words fill the 13 lines using the vertical column of letters that spell *Micronaut One*. Where there's more than one word on a line, the blank space between the words counts as a letter (as you can see between *Micronaut* and *One*).

You can cut out the competition or, if you prefer, simply write down all the words on a postcard or the back of a sealed envelope and send it to MICRONAUT ONE COMPETITION, CRASH, *PO BOX 10, LUDLOW, SHROPSHIRE SY8 1DB*, to arrive no later than 30 July.

Don't forget your name and address! The first correct entry drawn wins the Photon Double Warrior Battle kit and a copy of *Micronaut One* (which will be reviewed in CRASH next issue); the next 20 drawn receive copies of the game.

CLUES

Line 1 H G Wells's chronocar (2 words – book, film)
Line 2 Singular of the sequel (film, game)
Line 3 Invasion of the . . . (2 words –film)
Line 4 Paranoid Android (book, TV)
Line 5 007's Lunar gardening implement (book, film)
Line 6 Space Pilot of the Future (2 words – hero, game)
Line 7 The Last . . . (film)
Line 8 Who you gonna call . . . ? (film, game)
Line 9 (5-4-3-2-1-they're GO (TV, game)
Line 10 Beam me up . . . (2 words – TV, film, game)
Line 11 In the 25th century (2 words – hero, film, game)
Line 12 Vangelis was game (film, game)
Line 13 A mixed-up Laked (TV)




ULTIMATE PLAY THE GAME
PRESENT
JETMAN
OUR HERO HAS CAUGHT STAR BLIGHT DISEASE OFF THE MONSTER! IT'S NOT HARMFUL TO MONSTERS AND PLURPS BUT IT CAN KILL HUMANS AND LOONYS SO OUR HERO IS A BIT UPSET....
OUCH!
SNIFF!
Last Will and testament of
eing of sound body & leave my
my malteesers to - no, I al
all my comics to
BWA
YUP! LOOKS LIKE YOU GOIN' DIE, BOSS!
FAMILY DOCTOR
UNLESS YOU CAN FIND THE CURE!
HOPE!
and if he dosent want
them and if he doesent
them Sally can have
P.BARRY IDEA THIS
CURE? YOU SAID CURE! YES YOU DID! I HEARD YOU! YOU DID SAY CURE! WHAT CURE? SAY WHAT? SAY CURE! NO CURE?
FAMILY DOCTOR
EASY, BOSS! YOU JUST MAKEY JERUM FRUM BLOOD OUT OF DA CARRIER!
CARRIER? WHAT CARRIER? AIRCRAFT CARRIER? PLAGGY-BAG CARRIER? WHAT CARRIER? WHAT?
WHAT?
DAT CARRIER, BOSS!... DA MONSTER BOSS WHO GIVED YO' STAR BLIGHT DISEASE AN' WHO IS NOW FEELIN' QUEESY AN' HAVIN' HISSELF A LIE-DOWN A BIT!
SNORE
WOW! I GOTTA GET SOME BLOOD FROM THE MONSTER BUT I CAN'T DO THAT WITHOUT HIM WAKING UP AN' HE GETS REALLY RATTY IF YOU WAKE HIM UP TOO SOON, AND....
SUITY SELF, BOSS, BUT YOU GOIN' DIE IN 'BOUT TWO HOURS IF YOU DON'T MAKE HIM GO WAKEY!
ZZZZZ
WAKE-UP! WAKE-UP!
I GOTTA HAVE SOME OF YOUR BLOOD OR I GONNA DIE IN THE NEX' TWO HOURS....
YOU HEAR? TWO HOURS!! BWAH!!
WHA...?
SMEKITTY SMAK SMAK
TWO HOURS? IT'S ALRIGHT FOR SOME....
OUH!
...BUT I GOTTA GET UP IN THE MORNING!!
NOW G'WAY AN' STOP BOTHERIN' ME, Y'TWERPO!!
BLEAT!
HUMP!
TIME ALMOST UP, BOSS!
PRETTY SOON NOW YOU GOIN' SHOW FIRST SYMPTOM NAMELY 'XTREME PAIN AN' HURTY BITS...
ARGH ON
HOWCH
HIEE
WAH
NOT BAD.
FAMILY DOCTOR
PANT
PANT
PANT
NEXT STAGE IS UNCONTROLLY COFF'N SNEEZO...
FAMILY DOCTOR
HATCHOO KOFF
BLATCHOO
NEAT...
LAST STAGE IS DEATH BY RAPID BRAIN ROT..
PANT-PANT
BLEAT
SOB
BLE
HMMM...
HO
...TWO OUTA THREE NOT BAD I SPOSE..!
PIFF

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TECHNICAL OVERVIEW

Hardware

Housing
Black anodised brushed aluminium extrusions.

Keyboard
Standard QWERTY layout, with 79. professional quality, full travel typewriter style keys. Twelve dual purpose keys are arranged as a separate numeric pad which also contains cursor control and editing keys. In addition, there are eight programable function keys (which give 16 functions with shift).

CPU board
Zilog Z80A CPU operating at 4MHz.
64K of user RAM plus 24K of ROM.
Video display processor with 16K of dedicated RAM.
Video board for television and sound signal encoding.
Real Time clock.

I WISH TO PAY BY VISA, PLEASE CHARGE TO MY ACCOUNT
MY CARD NUMBER IS (13 OR 16 DIGITS)

Signature
Expiry date

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.....
.....
Postcode .....

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I wish to pay by Visa/Access (delete as applicable)

Signature **Expiry Date**

Please Charge My Account No:

AUNTIE AGGIE'S DUST DEFEATERS,
PO BOX 20, LUDLOW, SHROPSHIRE SY8 1DB

Accidents will happen, but the best way to avoid them happening to your Spectrum is to wrap it in its very own, purpose-designed dust cover.

Up in CRASH Towers, the reviewing team has to be very careful to ensure the Spiky Haired Ones from ZZAP! don't get the chance to dribble Cherry Coke and splatter sarnie crumbs all over the keys of their Spectrum Reviewstations. Part of my Minion duties involves keeping the office computers clean and tidy – and it's no good trying to get biccie crumbs out of the back of a ZAPPed Spectrum with a vacuum cleaner, nor is there any point in asking Mummy Minion to pop a Spectrum in with the washing up!

Admittedly the Spiky Haired Ones may not invade *your* games-playing zone, so why do you need a high-quality, gubbins-proof, double-seamed Spectrum cover complete with a CRASH logo to dress your Spectrum up in? Simple. ZZAP! reviewers may not inhabit your home, but there might be a dog . . . a little sister maybe? A cat? A little brother? Perhaps you don't have full control of your elbows 24 hours a day, and have been known to tip over a can of pop or a cup of tea?

A CRASH Spectrum cover is just what you need to protect your faithful friend – and the covers we have on offer are super high quality. Get the power of a CRASH computer cover on your Spectrum's side (well, top then). Order one now! You know it makes sense . . .

JAMES BOND 007

IN

THE LIVING DAYLIGHTS

THE COMPUTER GAME



ALBERT R. BROCCOLI
Presents
TIMOTHY DALTON
as IAN FLEMING'S
JAMES BOND 007

Amstrad CPC/PCW
CBM 64/Amiga
Spectrum 48/128/Plus 2/3
BBC B & Master
Atari 8 Bit
MSX

DOMARK

THE LIVING DAYLIGHTS

Starring MARYAM d'ABO JOE DON BAKER ART MALIK and JEROEN KRABBÉ
Production Designer PETER LAMONT Music by JOHN BARRY Associate Producers TOM PEVSNER and BARBARA BROCCOLI
Produced by ALBERT R. BROCCOLI and MICHAEL G. WILSON Directed by JOHN GLEN Screenplay by RICHARD MAIBAUM and MICHAEL G. WILSON

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© Eon Productions Ltd. Glidrose Publications Ltd. 1987. Published by Domark Ltd., 22 Hartfield Road, London SW19 3TA. Tel: 01-947 5624 Telex: 894475G.

Lloyd Mangram

PLAYING TIPS



We may be suffering from that well known disease SSSP, Summer Software Slump Period, (or BEPECOMWOSS as it's better known – Before the Personal Computer World Show Syndrome), but there's no shortage of Playing Tips, I'm glad to say. Add to that a large map of *Auf Wieder s ehen Monty* plus a neat job on *Rasterscan*, and what you have is a feast for the eyes . . .

MEGABUCKS

If you're worn out by the struggle for wealth in Firebird's *Megabucks*, here's a solution I prepared earlier and baked in the oven until it was golden brown – or rather Michael Wardle **from Whitley Bay, Tyne and Wear did . . .**

☛ Pick up and use diamond, drop diamond, left, pick up and keep notes, left, notice alarm system on, quickly go left, left, up. Quickly pick up and use, then drop, pick up the alarm switch. R, pick up bell clanger, right, pick up torch, up, pick up skeleton key, down, left, left, down, left, pick up pass, right, up, use pass. (8%)

☛ Down, left, left, pick up gauge, down, pick up torch, up, left, left, up, pick up phonecard, up, right, pick up battery, right, pick up crow bar, right, down, down, right, drop up crow bar and skeleton key, left, left, down, pick up torch, use battery, pick up torch, up, right, right, up, up, right, pick up shears, left, down, down, right, right, right, pick up wreath, right, right, right, right, use shears. (16%)

☛ Right, pick up church key, right, right, right, pick up and use boots, right, pick up and eat apple, drop up core, right, use church key. (25%)

☛ Right, pick up beer mat, right, right, use wreath, left, up, left, right, up, up, pick up cheese, up, use clanger. (34%)

☛ Down, down, use phonecard, down, ring 59112 (tower), pick up attic key, right, right, left, down, pick up coffee, up, left, use phonecard, ring 16349 (Main Mansion), left, up, up, right, up, left, drop up coffee, up, use attic key. (40%)

☛ Right, right, pick up and use X-ray specs, left, left, down, left, left, left, pick up CD, up, down, right, right, right, use CD. (49%)

☛ Pick up CD Walkman, use CD Walkman, left, pick up and use pills. (52%)

☛ Right, down, left, down, down, right, use phone, ring 59112 (tower), right, pick up chemistry bit, left, use phone, ring 16349 (Main mansion), drop chemistry bit, use phone, ring 38312 (Pub), right, pick up biscuits, left, left, use beer mat. (56%)

☛ Up, right, pick up picture piece, left, down, right, use phone, ring 16349 (Main mansion), pick up chemistry bit, left, up, right, use picture piece, left, up, left, use chemistry bit, left, up, right, right, use biscuit, drop biscuit, pick up and use coffee. (67%)

☛ Drop coffee, right, down, left, down, down, right, pick up crow bar, right, left, left, left, down, pick up and use torch, right, pick up peg, use peg, right, down, right, right, right, right, down, pick up paint brush, right, right, right, right, (go through frazzler), right, up, right, quickly eat some cheese and use the crow bar. (77%)

☛ Drop crowbar, right, pick up dynamite, right, use dynamite, pick up control robot, right, left, left, left, down, left, left, left, left, use phone, ring 68495 (Church), down, down, down, down, use control robot (85%)

☛ Right, pick up safe cracker, left, left, right, up, up, up, up, use phone, dial 16349 (Main mansion), left, up, up, left, down, left, use safe cracker, right, up, right, down, right, use brush. (92%)

☛ Eat cheese, left, up, right, up, use secret key. (95%)

☛ Right, pick up video tape, left, down, left, down, down, right, use phone, ring 38312 (pub), use phone at pub, ring 58629 (Office), use video tape. (100%)

ARKANOID CORRECTION

Another small botch last month, I missed off a line of data from the *Arkanoid* POKE routine. Thanks to someone who forgot to sign their name from Worthing, Sussex for the correction

```
1290 DATA 166,131,33,0,0
```

DUET

Roy Goodall **came up with this infinite health hack for *Duet*, the seventh game on Elite's *Hit Pak*.**

```
 5 REM DUET
 6 REM BY ROY GOODALL
 7 REM CRASH JULY 1987
10 CLEAR 24999
20 LOAD""SCREEN$
30 LOAD""CODE
40 POKE 44114,0: POKE 46185,0
50 CLEAR 24229
60 RANDOMIZE USR 25009
```

CYROX

Paul Wells **thought he ought to invent a pseudonym for his hacking alter ego. After struggling with the likes of Brad Majors, King Felix and The DBase II Hacker, he finally decided upon . . . Paul Wells; and produced this infinite lives hack for *Cyrox* and a *Samurai* infinite buying hack.**

CYROX

```
 5 REM CYROX
 6 REM PAUL WELLS
 7 REM CRASH JULY 1987
10 CLEAR 30000
20 LOAD""CODE
30 POKE 50187,0
```

SAMURAI

```
 5 REM SAMURAI
 6 REM BY PAUL WELLS
 7 REM CRASH JULY 1987
10 CLEAR 24099
20 LOAD""SCREEN$
30 LOAD""CODE
40 POKE 41889,0
50 RANDOMISE USR 39300
```

SABOTEUR II

The codes up to level eight were printed last month, now here's the final code for level nine, with great thanks to Stuart Edmonds **from Basingstoke and** Matthew Pierce **(who would like me to say hello to his Granny, Jean Griffin, 'Hello'.) Anyway, after all that, the code is SATORI.**

SABOTEUR II

The codes and the map were printed last issue, but to round off the trilogy here's the POKEs for infinite time and energy supplied by Haxxxx . . . **You know who.**

```
10 REM SABOTEUR II
20 REM HAXBY HACKERS
25 REM CRASH JULY 1987
30 CLEAR 25099
40 LOAD""SCREEN$
50 LOAD""CODE
60 POKE 37122,0
70 POKE 61340,201
80 RANDOMIZE USR 25100
```

ANFRACTOUS

If you couldn't be bothered to type in the listing from a while back (lazy so-and-sos), here's a quicker way to become a hero thanks to Mark Gibson **from Crewe in Cheshire. Simply hold down the A, N, D, and Y keys at the same time. Easy huh?**

MARIO BROS CHEAT

Heya, Mario! Ya wanta do-a bit-a better on de Mario game den follow dese-a teeps from S Chinnock **and** M Bunney **from Mid-Glamorgan, South Wales.**

First go to A and kill the turtle which passes X – your score should rise automatically. Remember to dodge the fireball.

Stand on A and wait for the next phase, watch that fireball again.

Note: This only works in two player mode, if one player's game is over repeat the first cheat. The player previously killed reappears at X.

INTO THE EAGLES NEST

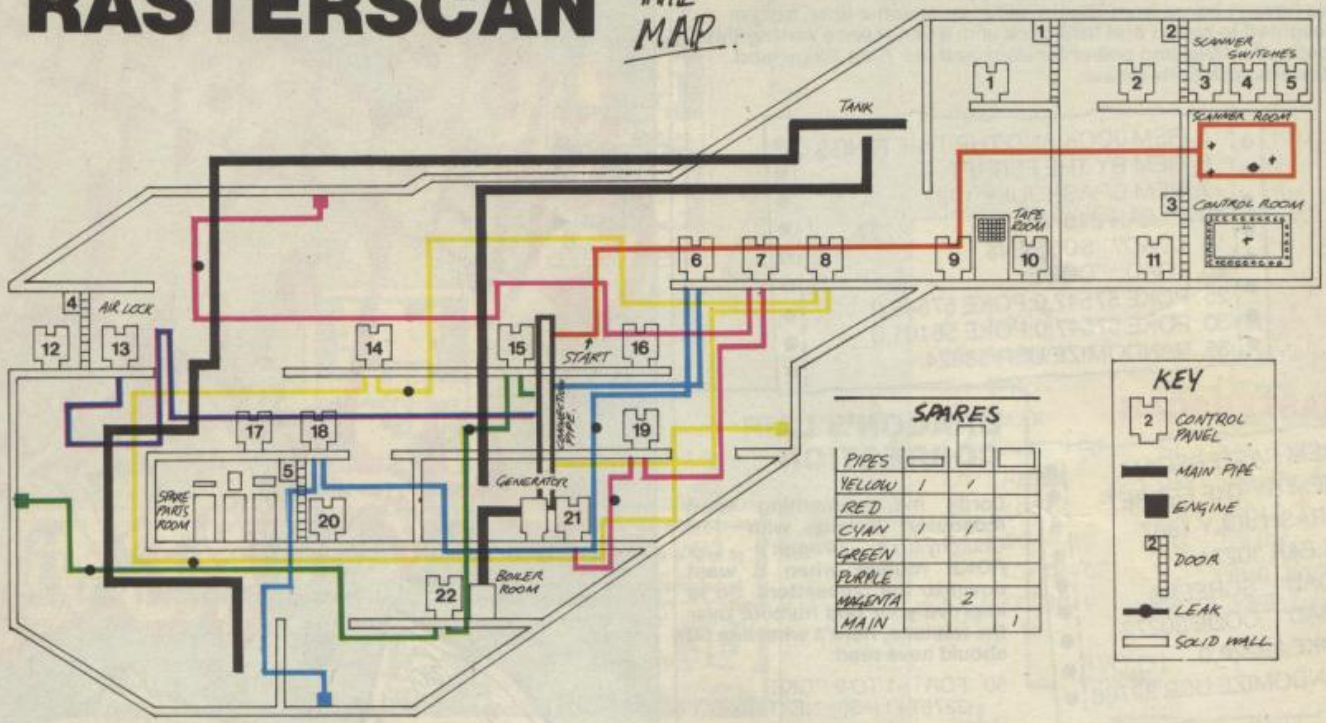
Matthew Dextes **has been fiddling around with the high score table and come up with these little gems. Type in the codes when a high-score is achieved.**

DAS CHT – infinite hits
DAS NME – no enemy
DAS MAP – for map mode
MAP OFF – switch off map mode

RASTERSCAN

THE MAP.

COMPILED BY BRIAN ENTECOTT.



ARKANOID EDITOR

Mayview Computers, publisher of *The Elite Tuner* has just unveiled its *Arkanoid Editor* program. The program, on a cassette, features infinite bats option, a fully menu-driven screen designer, a SAVE and LOAD facility and it also speeds up the long introduction.

After a quick run through it's simple to use and gets CRASH approval. If you're interested, additional details are obtainable from **Mark Alexander** of Mayview on **01 858 3603**, but if you are absolutely desperate, send a cheque or postal order for £1.25, made out to **Mayview Computers Ltd, *67 Lansdowne Lane, Charlton, London SE7 8TN.***

A WARM NORTH FRONT

This is the BBC; and now it's time for the monthly installment of the Adventures of Jon North. **In this episode Jon gets raided by some stars, knuckle busted, munched classically, gets to grips with some ducks, rasterscanned and ends up going ghost hunting. Will he survive, do you really care? Tune in next month.**

KNUCKLE BUSTERS

MERGE"" in the loader, enter this line and RUN.
35 POKE 359991,0

CLASSIC MUNCHER

MERGE"" in the loader, enter the poke and RUN. **65 POKE 30532,0**

RASTERSCAN

35 POKE 39237

STAR RAIDERS

```
10 REM STAR RAIDERS
12 REM by Jon North
13 CRASH July 1987
20 CLEAR 29999: LOAD""CODE
30 FOR F=65070 TO 1e9: READ A
40 IF A =999 THEN RUN USR 65e3
50 POKE F,A:NEXT F
60 DATA 175,50,76,172
70 DATA 175,50,169,139
80 DATA 33,0,0,34,199,166
90 DATA 195,48,117,999
```

GHOST HUNTERS

```
10 REM Ghost Hunters
11 REM by Jon North
12 REM CRASH July 1987
20 LOAD""CODE
30 FOR F=23354 TO 23360
40 READ A:POKE F,A:NEXT F
50 RANDOMIZE USR 23296
60 DATA 175, 50, 214, 216, 195
70 DATA 69,178
```

HOWARD THE DUCK

```
10 REM Howard The Duck
11 REM by Jon North
12 REM CRASH July 1987
20 CLEAR 24575
30 LOAD "" CODE
40 POKE 65076,91
50 FOR F =23544 TO 23550
60 READ A: POKE F,A:NEXT F
70 RANDOMIZE USR 65024
80 DATA 175,50,125,223,195
90 DATA 248,192
```

ALIENS

There's some places in Playing Tips you don't go alone . . . unless you've got this mini-tip from **Greg Beachim** with you.

When under attack from an alien and in a position where you are unable to shoot, press P three times and quickly select another character. Then return to your original character and you should be able to get the alien second time around. Neat huh?

PLAYING TIPS

JOCK AND THE TIME RINGS

We haven't heard from The Ferret **for quite some time, but I'm delighted to report that he's back with a vengeance waving this routine for lives and power for *Jock and the Time Rings*, and *Rasterscan* infinite power.**

```
 5 REM JOCK AND THE TIME RINGS
 6 REM BY THE FERRET
 7 REM CRASH JULY 1987
10 CLEAR 24575
15 LOAD""SCREEN$
20 LOAD""CODE
25 POKE 57547,0:POKE 57548,0
30 POKE 57547,0:POKE 56101,0
35 RANDOMIZE USR 58624
```

RASTERSCAN

```
 5 REM RASTERSCAN
 6 REM BY THE FERRET
 7 CRASH JULY 1987
10 CLEAR 30271
15 LOAD""SCREEN$
20 LOAD""CODE 30272
25 POKE 39220,0
30 RANDOMIZE USR 32768
```

DRAGON'S LAIR CORRECTION

Lordy me, something went hideously wrong with Phil Churchyard's ***Dragon's Lair*** **POKE routine when it went down to the typesetters. So to improve your bad humour over the mistake, here's what line 50 should have read:**

```
50 FOR I=1 TO 9:POKE
   32767+I,(A$(I)):NEXT I
```

SENTINEL

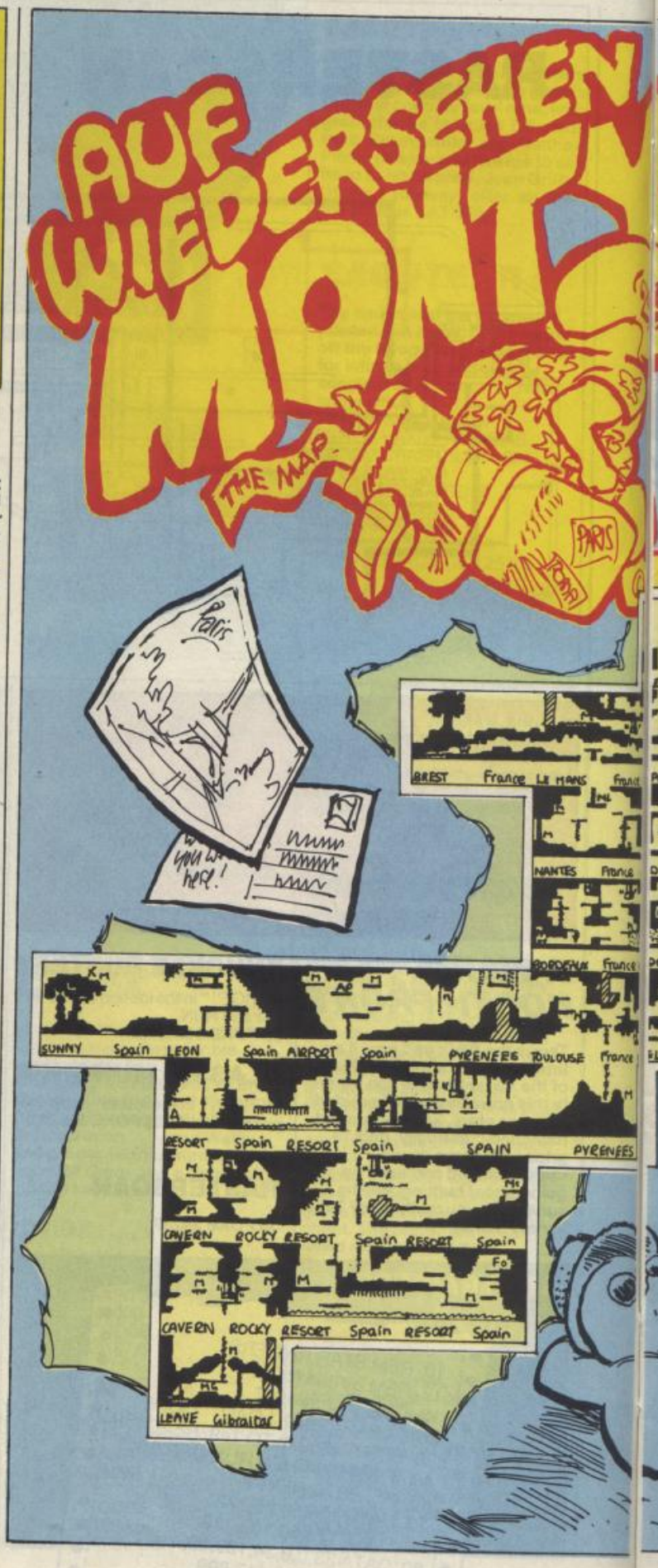
If Firebird's mind challenge has been giving you a few headaches, here are a few useful codes from Jesse Hickmott **from Bellingham, London.**

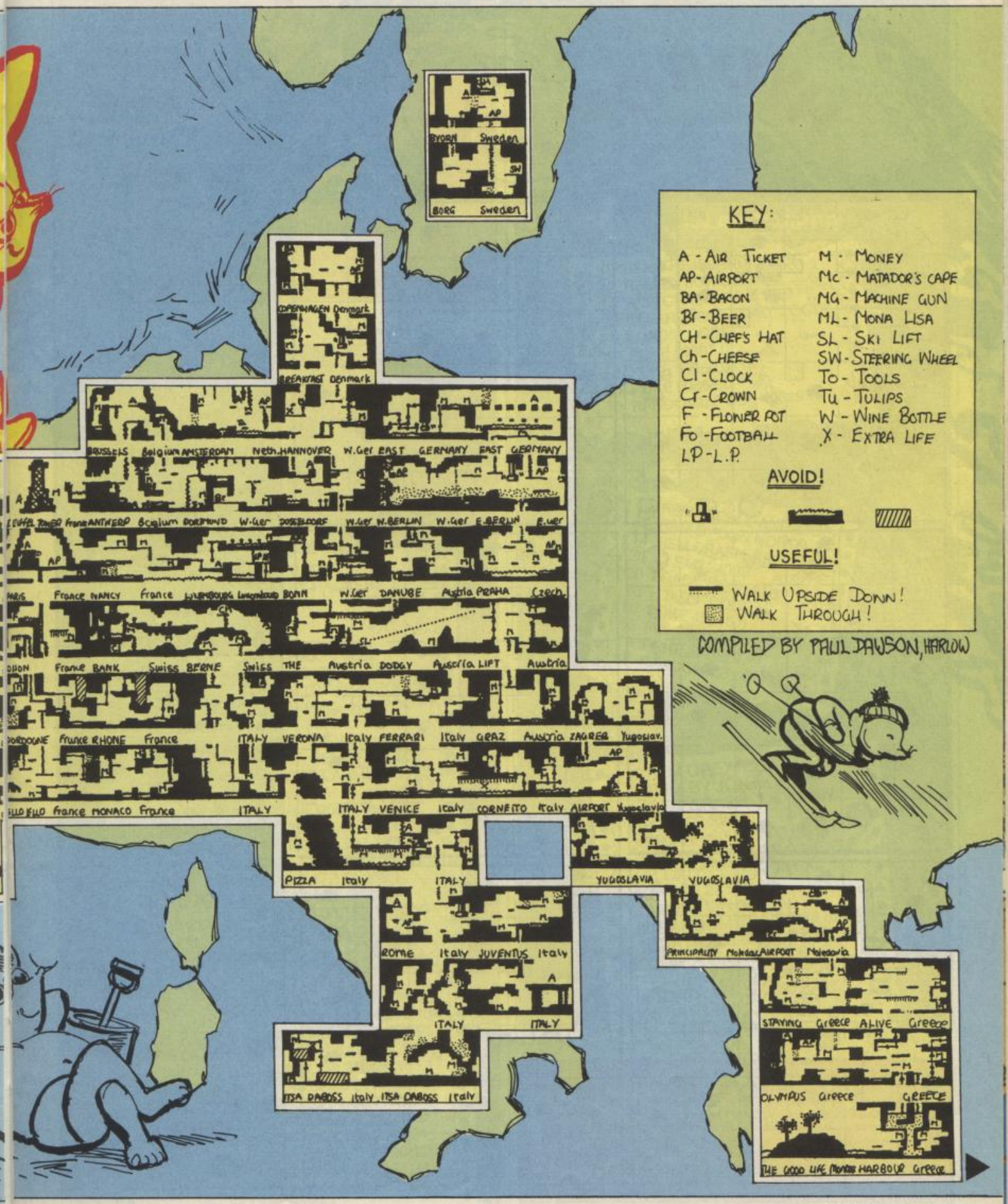
Level	Code	Enemy	Level	Code	Enemy
0006	37418839	Sentinel	0060	55361541	6 Sentries
0007	57955812	Sentinel	0070	73891540	2 Sentries
0013	74274656	1 Sentry	0089	45039464	1 Sentry
0014	51038918	1 Sentry	0098	50194977	4 Sentries
0015	85754839	1 Sentry	0126	65280897	4 Sentries
0021	53766718	2 Sentries	0164	50278879	2 Sentries
0033	47216743	Sentinel	0186	87946484	1 Sentry
			0203	18755676	2 Sentries

ACADEMY

At last! It took long enough, but those Industrious Hackers from Haxby and Pocklington **have achieved it. Yes, *Academy* has been hacked – nay, butchered. Lines 130 to 180 control the following and may be removed if desired: infinite missiles, infinite AMM's, infinite flares, infinite delay bombs, infinite fuel and infinite shields.**

```
 10 REM ACADEMY
 20 REM BY THE HACKERS FROM HAXBY
 25 REM CRASH JULY 1987
 30 CLEAR 65535
 40 FOR F=50000 TO 50034: READ A: POKE
    F,A:NEXT F
 50 DATA 205,86,5,221,33
 60 DATA 202,92,17,255,255
 70 DATA 62,255,55,205,86
 80 DATA 54,33,115,195,17
 90 DATA 0,96,1,30,0
100 DATA 237,176,62,96,50
110 DATA 104,93,195,14,93
120 DATA FOR N= F TO 1e9: READ A: IF
    A<>999 THEN POKE N,A: NEXT N
130 DATA 175,50,172,174
140 DATA 175,40,208,174
150 DATA 175,50,250,174
160 DATA 175,50,31,175
170 DATA 175,50,165,173
180 DATA 62,201,50,152,197
190 DATA 195,0,91,999
```



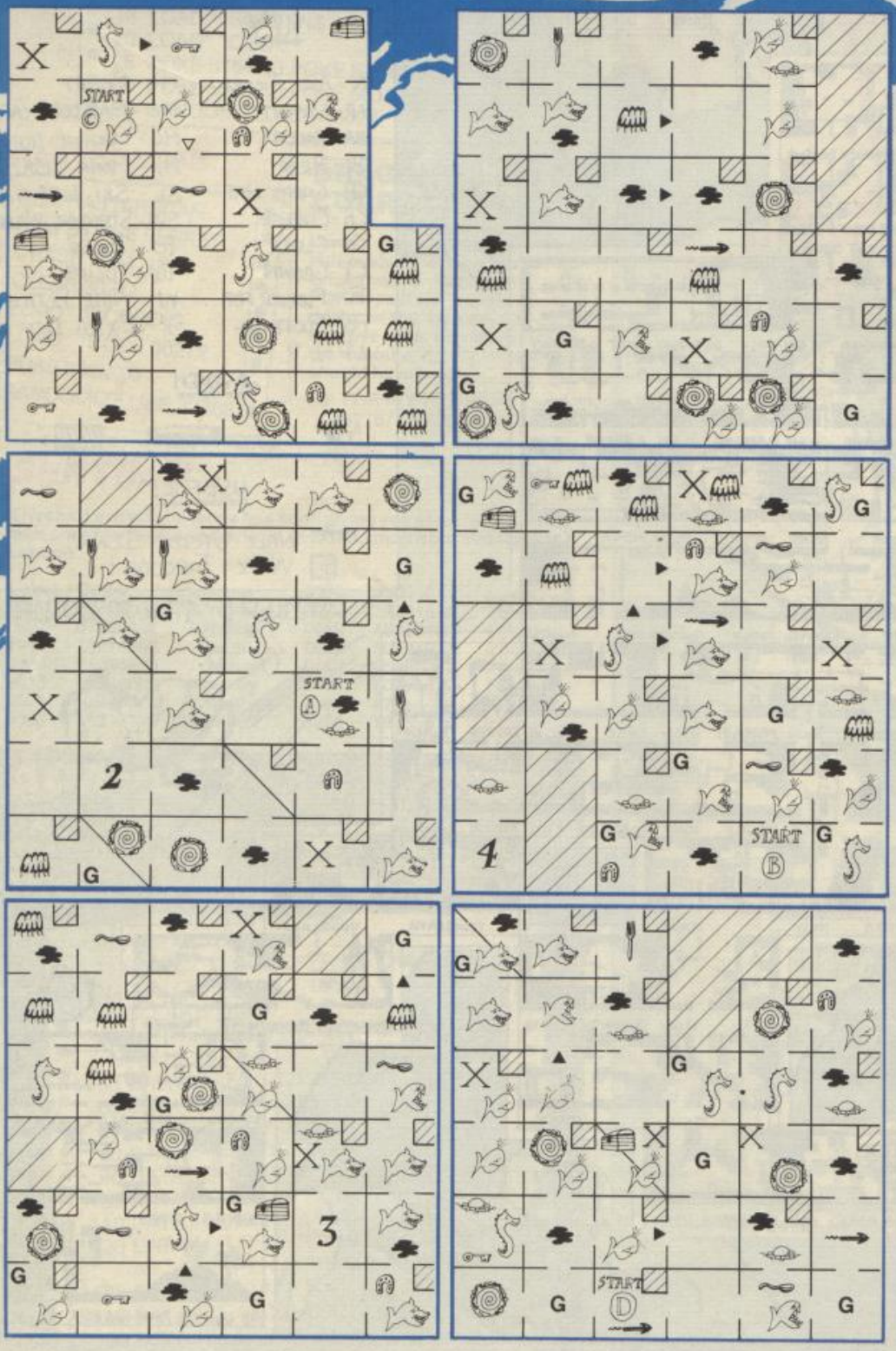

KEY:
A - AIR TICKET
AP - AIRPORT
BA - BACON
Br - BEER
CH - CHEF'S HAT
Ch - CHEESE
Cl - CLOCK
Cr - CROWN
F - FLOWER POT
Fo - FOOTBALL
LP - L.P.
M - MONEY
Mc - MATADOR'S CAPE
MG - MACHINE GUN
ML - MONA LISA
SL - SKI LIFT
SW - STEERING WHEEL
To - TOOLS
Tu - TULIPS
W - WINE BOTTLE
X - EXTRA LIFE
AVOID!
USEFUL!
WALK UPSIDE DOWN!
WALK THROUGH!
COMPILED BY PAUL DAWSON, HARLOW
BORG Sweden
COPENHAGEN Denmark
BREAKFAST Denmark
BRUSSELS Belgium
AMSTERDAM Neth.
HANNOVER W.Ger
EAST GERMANY
PARIS France
NANCY France
LUXEMBOURG Luxembourg
BONN W.Ger
DANUBE Austria
PRAHA Czech.
DIJON France
BANK Swiss
BERNE Swiss
THE Austria
DODGY Austria
LIFT Austria
DORDOGNE France
RHONE France
ITALY
VERONA Italy
FERRARI Italy
GRAZ Austria
ZAGREB Yugoslav.
MONACO France
VENICE Italy
CORNETO Italy
AIRPORT Yugoslavia
PIZZA Italy
YUGOSLAVIA
ROME Italy
JUVENTUS Italy
PRINCIPALITY Monaco
AIRPORT Monaco
STAYING Greece
ALIVE Greece
OLYMPUS Greece
GREECE
THE GOOD LIFE Monaco
HARBOUR Greece

PLAYING TIPS

HYDROFOOL

COMPILED BY:
L. BOGARDIS

THE MAP



KEY

- = BARRIER ACROSS ROOM
- X = GNOME
- = JELLY FISH
- = SEA HORSE
- = BABY WHALE
- = PIRANHA
- = WOLF FISH
- = KEY
- = SPOON
- = FORK
- = HARPOON
- = OIL
- = CHEST
- = HORSE SHOE
- = WHIRL POOL
- = BUBBLE
- ▶ = LOCKED DOOR
- ▷ = ONE WAY DOOR
- G = GOODIE
- 2 = 1 TIN, 2 BOOTS, 1 BUCKET
- 3 = 4 SHELLS
- 4 = 2 PEARLS, 2 PERFUME BOTTLES

THE CHEST CONTAINS GOODIES OR GNOMES

PIRANHAS CAN'T BE KILLED

LOCKED DOORS CAN BE OPENED BY KILLING THE FISH THAT GUARD THEM

MULTIFACE ONE POKES

Here's a jolly little mixed bag of POKEs to use with the above hardware, with thanks to Jon North, Cairnpoke **and** The Ferret.

CRYSTAL CASTLES 63733,0
HENRY'S HOARD 35614,0
BRAINACHE 28064,0
PUNCHY 45632,0
I,BALL (time) 49483,0
I,BALL (lives) 49168,0
EXPRESS RAIDER (Strength) 60503,0
EXPRESS RAIDER (lives) 60154,0
EXPRESS RAIDER (time) 61100,0
PARABOLA 38303,0
ENDURO RACER (time) 43542,0 and 43643,0
THRUST II 34200,0
IMPOSSABALL (lives) 41185,0
IMPOSSABALL (time) 37706,0
JAILBREAK 50651,0

ARMY MOVES



Does it? Yes, but only when pursued by the Haxby Hackers, **brandishing the following listing which provides infinite lives in both parts of the game. Get your marching boots on men, shoulder those packs and move out . . .**

```
10 REM ARMY MOVES
20 REM BY THE HAXBY HACKERS
25 REM CRASH JULY 1987
30 CLEAR 65535
40 RESTORE
50 LET TOT = 0:LET HAXPOC =1
60 FOR F=50000 TO 50179
70 READ A: LET TOT=TOT+HAXPOC * A
80 POKE F,A: LET HAXPOC=HAXPOC+1
90 NEXT F
100 IF TOT<>2116067 THEN PRINT
    "ERROR IN DATA": BEEP 1,1: STOP
110 PRINT AT 1,4; "START ARMY MOVES
    TAPE"
120 RANDOMIZE USR 50000
1000 DATA 62,255,55,221,33,203,92,17
1010 DATA 234,6,205,86,5,48,241,243
1020 DATA 237,94,33,124,195,229,33,172
1030 DATA 98,229,51,51,17,163,252,1
1040 DATA 21,3,33,253,94,62,202,237
1050 DATA 79,195,172,98,33,150,195,229
1060 DATA 33,199,252,229,51,51,17,209
1070 DATA 252,33,209,252,1,231,2,62
1080 DATA 186,237,79,195,199,252,33,209
1090 252,17,193,138,1,92,0,237
1100 DATA 176,33,212,138,34,217,138,34
1110 DATA 221,138,33,202,138,34,229,138
1120 DATA 33,239,138,34,249,138,62,195
1130 DATA 50,13,139,33,196,195,34,14
1140 DATA 139,195,193,138,33,221,195,17
1150 DATA 48,117,1,48,32,237,176,33
1160 DATA 195,48,34,99,254,62,117,50
1170 DATA 101,254,195,55,255,221,33,0
1180 DATA 0,121,254,4,194,103,254,221
1190 DATA 33,13,210,221,34,183,190,175
1200 DATA 50,94,209,50,181,190,221,33
1210 DATA 221,33,221,34,99,254,50,101
1220 DATA 254,195,99,254
```

COLD FRONT FROM THE NORTH

We interrupt this page to bring you a newsflash. Followers of the monthly CRASH Soap – *The adventures of Jon North* – will be shocked to know that Our Hero has suffered a few setbacks since the omnibus edition. He's been viciously attacked by two spies in an *Island Caper*, *Greyfall*en and captured by the gruesome twosome – *Jackle and Wide*. Now read on . . .

SPY v SPY: THE ISLAND CAPER

```
10 REM THE ISLAND CAPER
12 REM BY JON NORTH
14 REM CRASH JULY 1987
20 CLEAR 25087: LOAD""CODE
30 LOAD""CODE
40 POKE 59307,0
50 POKE 50980,0
60 POKE 50868,0
70 RANDOMIZE USR 42629
```

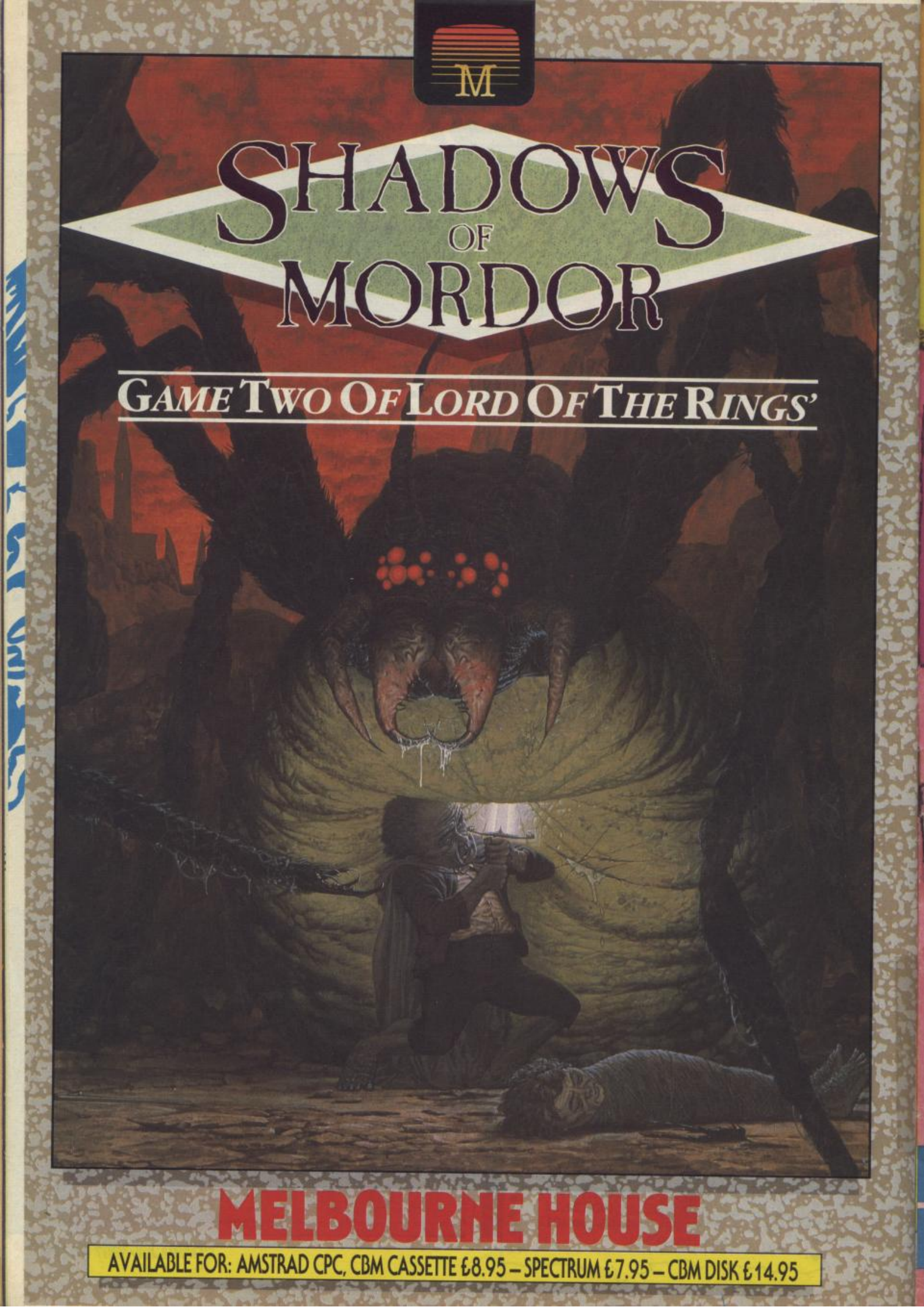
JACKLE AND WIDE

```
10 REM JACKLE AND WIDE
12 REM BY JON NORTH
14 REM CRASH JULY 1987
20 CLEAR 24999
30 LOAD""SCREEN$
40 LOAD""CODE
50 POKE 45545,0
60 POKE46029,0
70 POKE 39248,0
80 RANDOMIZE USR 25e3
```

GREYFELL

```
10 REM GREYFELL
12 REM BY JON NORTH
14 REM CRASH JULY 1987
20 CLEAR 25e3
30 FOR F=65360 TO 65381
40 READ A: POKE F,A:NEXT F
50 LOAD""CODE 24100
60 POKE 24143,64
70 POKE 24109,255
80 RANDOMIZE USR 24100
90 DATA 205,80,94,33,95
100 DATA 255,17,157,64,1
110 DATA 7,0,237,176,201
120 DATA 175,50,230,223
130 DATA 195,157,127
```

I know it's ever so tempting, once you've discovered some vitally fascinating POKE, cheat or tip, to ring up the Towers and share it, but it clogs up too many of our telephone lines! So PLEASE write in rather than ring. Also, sad as it may seem, I simply do not have time to reply personally to letters asking for tips, so PLEASE don't write in requesting information, or send stamped addressed envelopes for answers. The address for your tips is LLOYD MANGRAM'S PLAYING TIPS, CRASH, *PO BOX 10, LUDLOW, SHROPSHIRE SY8 1DB.*


M
SHADOWS OF MORDOR
GAME TWO OF LORD OF THE RINGS'
MELBOURNE HOUSE
AVAILABLE FOR: AMSTRAD CPC, CBM CASSETTE £8.95 – SPECTRUM £7.95 – CBM DISK £14.95



DEREK BREWSTER'S Adventure Trail

EARTHSHOCK

PRODUCER: Eighth Day
PRICE: £3.99
AUTHOR: Michael White

You have journeyed long across blasted plains, through the ruins of old cities, and past the salt dunes, remnants of the oceans. Now your destination is at hand.

Mutants have trailed you for many days but you have always managed to keep one step ahead of their grossly radioactive bodies. As you neared the plains of ash, the tall ventilation shafts began to appear, the dark towers jutting from the black ash like a hand, clutching the granules of dust drifting through other, unseen drowned fingers.

Exploring tentatively, you found the ventilation shafts to be derelict, or sealed. Then, on your fourth day on the plains, the metallic hammering which had accompanied your journey so far and which you had come to investigate . . . ceased. Suddenly a terrible earthshock moved the plain, throwing you to the ground, dust rising in the air all around.

You approached the nearest shaft and found the tremors had sent the shaft seals crashing down, leaving a small entrance hatch open. Piles of debris and rubble at the base of the shaft formed a small step up to this doorway, and you nimbly climbed up hoping to shed some light on the mysterious hammerings from below.

Now you stand finally at a low door into the tower that hangs above your head, blotting out the blood-red eye of the sun, the dust clouds of ash rushing in as if seeking shelter.

Stepping in and lighting your lamp reveals a small ledge above a dark, deep shaft. There is no way downward, the Stygian darkness revealing no secrets. Edging forward you notice the ledge crumbling as your weight bears down upon it, small chunks of masonry set loose and falling away into the darkness.

You swing the lamp out to hang over the pit and illuminate the darkness below, and the hammering suddenly begins again. Startled at the sheer volume of the thuds funnelled up the shaft, you step back in surprise onto part of the ledge, which crumbles under your weight.

At the same moment, a gush of air is sucked into the shaft, extinguishing your lamp – and the last sight you remember is the ledge collapsing, taking you down with it as the thin stream of daylight recedes above you.

In a straightforward text-only game such as this you're bound to dwell on plot and how well the descriptions read. The location-descriptions are indeed long, and reasonably atmospheric.

Following the skeleton's outstretched hand, which points you in the right direction, you chance upon this description: 'You are on a small ledge that borders the eastern edge of the pit. Ledges border the shaft here, and run west, north and south. An odd pile of fallen concrete and rubble is piled in one corner. As you watch, small clouds of dark dust fall from above and drift slowly through the shaft, caught momentarily in the glare of your lamp, illuminated by the light as if alive, they disappear and are gone, spiralling down into the stifling darkness.'

Here EXAMINE RUBBLE brings up nothing, but SEARCH RUBBLE reveals a thin plastic strip, without which you won't get to see the location-description I'll come to in a moment. Taking care not to fall down the shaft, you'll soon learn how to operate the cradle with the yellow-and-green buttons taking you up and down in stages.

Off to one side is another atmospheric description: 'You are in a small side room once used to store all forms of tools needed for the task of pit maintenance. Once full of all types of electronic devices, it is now empty. A twisted metal door shattered by some great impact long ago, hangs off into the darkness of the shaft to the west, where a swaying maintenance cradle can be seen. Your attention is also caught by a yellow card.'

The readable redesigned character set is light against a restful dark background, and the sparing use of colour livens up the odd passage or two. But slick presentation is left to the input line, where two towers part to accept your input.

After about ten frames *Earthshock*'s main trump card comes up. Whereas most adventures have but one solution pathway and ending, this game offers three different subquests which subtly alter the endgame. A tribesman from a group that captures you on the plains outside the shaft gives you the choice of a sword, a key, or a hoop lying atop a wooden shrine.

Each choice leads to a different miniadventure, after which you're returned to the main stream. Scoring in each subquest runs along the same lines.

Earthshock is a text-only adventure, as far as I could tell, despite the mention of a graphics man on the loading screen. The three subplots add variety to the game and allow it to be played three times. Its good, lengthy location-descriptions add a great deal.

Earthshock is available on mail order from Eighth Day at *18 Flaxhill, Moreton, Wirral L46 7UH.*

DIFFICULTY: not difficult ('moderate', says Eighth Day)
GRAPHICS: none
PRESENTATION: average
INPUT FACILITY: verb/noun
RESPONSE: fast, Quill
GENERAL RATING: good text descriptions and fine plot

Atmosphere	79%
Vocabulary	80%
Logic	79%
Addictive qualities	78%
Overall	79%

THE O ZONE

PRODUCER: Compass
PRICE: £2.50
AUTHORS: Tim Kemp, Jon Lemmon

It was a very busy issue last month, so perhaps I can be forgiven for missing the full significance of the *Golden Mask* release from Compass. I can't remember being fully aware that *Golden Mask* was in fact the final part of a trilogy, begun by the famous *Project X – The Microman*, a game which later teamed up with three others to form the *Tony Bridge Four Adventures.*

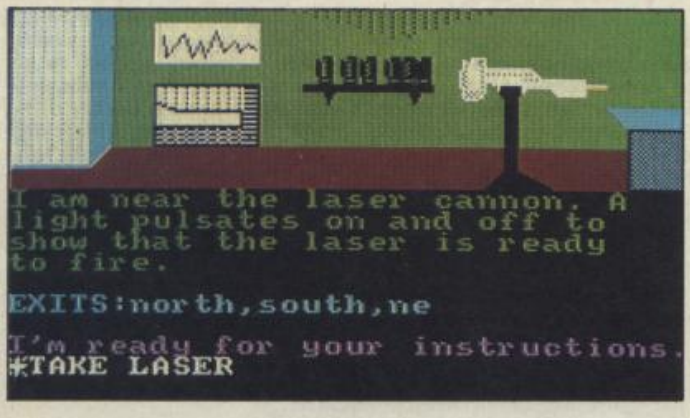
Well, *The O Zone* is the second part of that trilogy, so you might say it's being reviewed somewhat late, and bear this in mind when considering some of the criticisms which may relate to programming of bygone days.

In some ways it was worth waiting, as the cassette now has a high-standard inlay – a welcome change when even large software houses send preproduction cassettes barren of all gloss. The screen display is most colourful, as was the case with *Microman*, with colours used to good effect to split up the text in the location descriptions and in the useful list of vocabulary given at the start.

This list serves notice of the







absence of a HELP command and also points to some pretty peculiar uses of vocabulary such as SWITCH SWITCH and STICK BACK, this last referring to an operation carried out in an aircraft. More helpful and intelligible are the abbreviations G and D, which carry out a GET and a DROP respectively (though DOWN must therefore be spelled out fully).

You begin the game trapped inside a corridor. One direction is blocked by a large steel door while the other leads to what must be one of the quickest instant deaths in adventuring. The pictures in these opening scenes aren't altogether impressive and leave you with the feeling you've seen just one too many walls – blank walls!

Where a picture exists, it's shown on first visiting a location, after which it untidily scrolls up off the screen in jerks as you input below. On the aesthetic side the redesigned zero in the '50p' and '£10' aren't up to much either, looking like gnarled potatoes. But beyond looks there are some major concerns when it comes to the meat of the adventure.

One problem is the absurd story line, which is so banal it might be some sort of joke. Finding 50p by a computer console, you very shortly need it to pay the bus fare to the airport which is of course exactly 50p. Not too implausible, you might suppose, but then the wallet episode begins. Getting the wallet is somewhat unorthodox, with the conductor on the bus calling out to tell you you've left your wallet, and throwing it to you (in general, objects, often found with a token graphic by them, just materialise).

The next stage of the wallet saga reveals a rather strange aspect of the program – you must drop a container before its contents can be revealed. You see this later when you hold an envelope the wrong way round so that a key falls from it.

In the case of the wallet, 'As I open the wallet, a man runs past and tries to snatch it. It slips out of my hand and all of its contents are out. The man grabs the wallet and runs away'. The contents turn out to be a traveller's cheque and a ten-pound note which together make £110, which just happens to be the cost of your airline ticket . . .

Getting this ticket reveals yet another facet of this adventure – examining things magically transforms your chances of doing anything with them. It is seen at the vines where examining them first makes them more able to carry your weight, and when purchasing the ticket, where examining the lady (rather than talking to her) has her hinting that you might get somewhere by buying a ticket. Without examining this lady at the information desk you, for some inexplicable reason, can't purchase the ticket.

As *The O Zone* is the second part of the *Micromen* trilogy, it takes the story of Professor Neil Richards, his Project X miniaturisation experiments, and the COM 2 high-tech computer one stage further. It's a game born of many utilities – the *Quill*, *Illustrator*, *Press* and *Melbourne Draw*.

Despite the appalling plot and curious vocabulary, I couldn't help but develop a soft spot for *The O Zone*, what with its colourful presentation, and music and sound on the 48K (the 128K has a quiet sound set against a noisy background of interference on the television speaker).

It would be silly to miss out the middle game of the trilogy, and I suppose that's the beauty of marketing them! *The O Zone* is obtainable mail order from Compass Software, *36 Globe Place, Norwich NR2 2SQ.*

DIFFICULTY: not too difficult
GRAPHICS: average
PRESENTATION: good use of colour in text
INPUT FACILITY: verb/noun
RESPONSE: fast, Quill
GENERAL RATING: skirts around the Oh! zone

Atmosphere	76%
Vocabulary	63%
Logic	62%
Addictive qualities	73%
Overall	65%

TEMPLE OF TERROR

PRODUCER: US Gold
PRICE: £9.95
AUTHORS: Adventuresoft

This is a major release in the adventuring world – it's one of the 27 Fighting Fantasy Gamebook titles. (Other titles released as computer games so far are *Seas Of Blood* and *Rebel Planet*.)

After a usually-well-written fantasy piece to set the adventure, the books lead you through a magical world by setting you tasks and puzzles as in a computer adventure – but the different paths you can follow are indicated by page references.

These references lead onto other paragraphs, constructed so that a player can follow many different paths toward completing the game. That's why they're called 'gamebooks' – reading them page by page in order wouldn't make sense, as the conclusion of the game is just as likely to be at the beginning of the book as at the end!

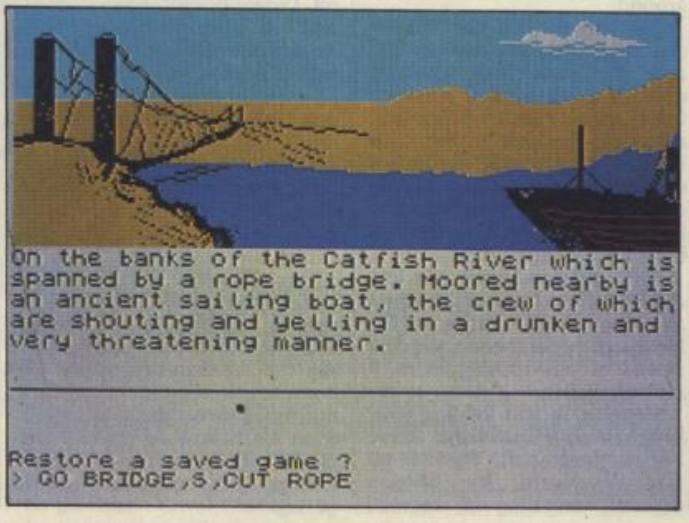
Seas Of Blood was true to the Fighting Fantasy Gamebooks – it employed a combat system – whereas *Rebel Planet* and *Temple Of Terror* are straightforward adventures.

The monster encounter boxes with their Skill, Stamina, Luck, Spell and Provisions entries add tremendous character to the books, and the omission of their counterparts from the computer games is a letdown.

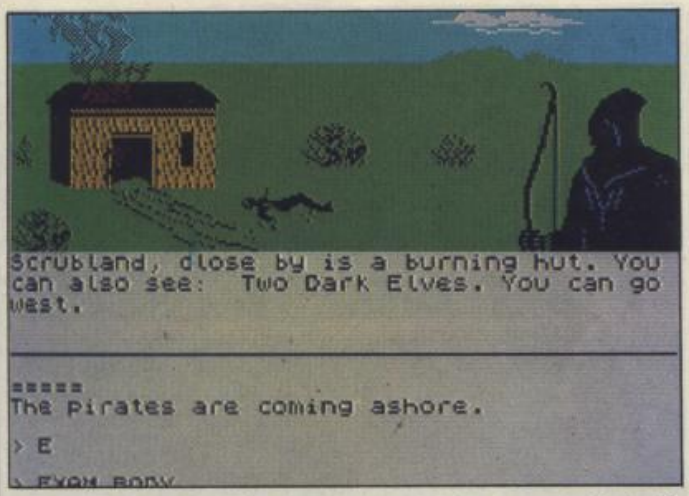
But, as with all Fighting Fantasy-inspired software, there's a superb story line.

The background given on the inlay comes directly from the book, comprising the introduction plus the first two noncommittal moves.

Born under a full moon and abandoned by his mother, Malbordus grew up in the Darkwood Forest in the care of the Darkside Elves. He was taught the Elves' wicked ways, but in order to receive instruction in the arcane and evil magic of the Elf Lords he had to pass a test. He







was ordered to journey south to the Desert Of Skulls to find the lost city of Vatos.

In the city were hidden five dragon artefacts which Malbordus had to collect. A simple incantation would bring the dragons to life, and he would then instruct them to fly him back to Darkwood Forest and the army assembling there. He would receive the ancient powers and lead the hordes in an unstoppable wave of death and destruction.

But on the edge of Darkwood lived an eccentric old wizard who became aware of these plans. The wizard travelled to Stonebridge to tell of the impending doom and to seek a volunteer for the quest: to stop Malbordus collecting the dragons of Vatos.

You, naturally, volunteer and the adventure begins when the wizard's guiding crow leaves you at the banks of the Catfish River.

The computer game has you start at this river, by a rope bridge. Crossing it would seem the only way forward – but if you go down to the nearby jetty you won't be welcomed by the drunken pirates. So GO BOAT is a rather uninspiring start!

Instead, go onto the bridge. Unfortunately here the game doesn't tell you which of the two options, NORTH and SOUTH, takes you away from the chasing pirates. You just have to guess.

Checking your possessions with INVEN (I is not enough), you discover the spell book given you by Yaztromos, a sword and a trident. Reading the book reveals the four spells to help you through your thankless task: sleep, dart, incendiary, and shrinking.

Each spell can only be used once, so blowing all on the Harpy you meet early on isn't such a good idea, especially as the very useful BOM (Back One Move) won't restore these spells if you get killed.

The first of the enemies you can take on are the Dark Elves, encountered by a burning hut. Trying to kill them with the sword seems to do the trick with the report 'Your opponent is dead'; but there were two elves so this report isn't quite convincing (still, the location description does report two dead Dark Elves).

Trying to examine or search the body that materialises now comes to naught. But there's some advance to the south, where if you examine everything you find and try things in a different order you might progress.

The vocabulary might seem as a little unfriendly, but it would be more accurate to say it's precise. When you're reading a note, for instance, only the word MESSAGE is accepted because this is the term used in the location description where newly-found items are installed.

Temple Of Terror is quite an attractive illustrated adventure. Adventuresoft still use a white background which limits text colour options (and indeed there are no text highlights), but at least with the bright pictures the surrounds don't glare as much as they might. The pictures themselves are not unattractive, though they have a sparse look.

The adventure clearly has a good background with its Fighting Fantasy story, but I can't help but get annoyed at the strangely inappropriate programming, the curious stutters and the lack of finesse in communication and presentation. Why don't Adventuresoft overhaul the whole system?

DIFFICULTY: easy to begin
GRAPHICS: average to quite good
INPUT FACILITY: verb/noun with little extras
RESPONSE: reasonable
GENERAL RATING: strong story and likable game

Atmosphere	84%
Vocabulary	73%
Logic	79%
Addictive qualities	84%
Overall	81%

THE CROWN – JOURNEY

PRODUCER: Wrightchoice
PRICE: £3.95
AUTHOR: A J Wright

Here is the first part of *The Crown*, entitled *Journey*; the second part, *Destiny*, is due for release in late June, completing the first part of the *Quest Series* trilogy. You might find all these parts and different names confusing, but if you want a crack at the £500 prize for completing the trilogy you'd better sort it all out – you have to complete every component to have a chance of winning. (Programs Two and Three of the trilogy should surface late this year.)

The adventure *Journey* is much like any other – except for its combat routine, which the author claims takes up 17K of memory. I find it hard to believe ANY combat system could eat up such a space, and this one seems straightforward, but give the routine some credit; it adds immensely to the game.

The story line on the cassette inlay is not too bad, with some imaginative names.

For many years the lands of Tharg had been ruled by King Rasselhague, under whose benevolent leadership the land prospered. But Rasselhague's half-brother Chaleb hated the King and longed to overthrow him. To forestall trouble, Rasselhague banished Chaleb to Acrux, a barren wasteland.

Meanwhile a child was born to the King and Queen. Named Yed Prior, he grew up at a time of increasing tension as Chaleb conspired with the goblins of Acrux. Together they constructed a tower of granite as a symbol of their unity under the powers of darkness.

From the tower Chaleb practised the rites of evil, eventually transposing himself into a nonliving entity, entrusting his genetic coding to several horologium stones which he mounted into a golden crown. He then hid the crown deep within the tower complex.

Rasselhague became alarmed at the dark powers seething at the kingdom's borders and so, after sending his wife and son to safety, he led an army to Acrux. Rasselhague lost the ensuing battle – whereupon Chaleb, leaving behind the goblins to defend the tower and guard his crown, travelled to Tharg to seize the empty throne.

In *Journey* you assume the role of Yed Prior, now grown up and heir to the throne, but known only as a common peasant. You set off with a broadsword and the ornate ring given you by your father, the only remaining clue to your distinguished heritage.

Undaunted by the dangers ahead you cross the desert of Vulpecula, heading for the capital, Turais. You are seeking Endanus, your father's adviser, who holds an important letter you must see. You must journey to Acrux and, once there, negotiate a route through the goblin-infested Mountains Of Doom.

The Crown has no pictures, and there's little to liven up the screen, but the character set is atmospheric and yet still readable. The print fades to nothing when you've seen your inventory, and at the end of combat – a nice touch.

But above all else is the combat system.

Combat is initiated with ATTACK or KILL, and the first enemy to require such treatment is the guard. This chap is beating some unfortunate woman and must be stopped before an avenue for your advance is lost.

Before you get stuck into the fray, remember that HELP GUARD will give you the lowdown on your opponent. (Every time I've played, it gives him a Constitution of six and has him carrying a sword.)

You can check on your own standing with STATUS, which displays those attributes randomly given to you during initialisation, a short pause at the very start of the program. Checking your status you will discover your Constitution is a number between six and ten and Dexterity between five and ten.

When I checked I found Constitution, together with its paired attribute Strength, to usually be eight; Dexterity and its paired attribute Skill varied more, but hovered around seven.

It's possible to significantly increase the chances of striking your opponent without him returning a blow – by noting which weapon he's using. This is because in combat you select LUNGE, SWING or HACK for attack and RETREAT, DODGE or DUCK for defence. Your opponent is driven to make his choices by a 65-per-cent-intelligent program and the interaction of LUNGES, DODGES etc works out along similar lines to the old scissors/paper/rock game.

But this is only useful if you can guess your opponent's move from the weapon he's carrying. The logic behind this is that the sword and spear are most effective when used to LUNGE,



while the axe causes the greatest damage when used to HACK. When it comes to your attack these factors should be taken into account, together with situations not so cut and dried, such as HACKing with a spear.

When either you or your opponent scores a hit, the victim's Constitution is reduced.

If all this sounds a bit complicated you can always run away, an option which unfailingly comes up after each exchange of a battle (though remember: your opponent's Constitution will bounce back to its original figure should you decide to flee).

But the constant need to input either YES, you want to run, or NO, you don't (without even recourse to the abbreviations Y or N) each time slows things down too much.

And you need to press a key when the computer confirms your choice to retreat or whatever onscreen – just a short delay would give you enough chance to change your mind.

Vocabulary is listed on the inlay, and can be displayed in a more complete form within the game. Type VERBS to have them listed; one or two critical verbs are omitted so as not to make the going too easy. There's also the unusual inclusion of an adverb, CAREFULLY, which you need early on in the game in a way which isn't totally convincing.

NOUN lists all the objects etc you are likely to need to describe, while the HELP command is necessarily obtuse considering the prize of 500 smackers!

The RAMSAVE, rather curiously, wanted me to start the tape.

Plotwise I found the prices inconsistent: two gold coins for a lamp, a whole gold piece for some oranges, but only two coins for a rare precision instrument like a sextant. Getting these gold pieces is difficult: the purse they're in is easily opened, but many minutes of gymnastic word games are needed to do something simple like extract the coins.

The Crown is a text-only adventure dominated by a combat routine needed to see off the guard beating the old woman, the drunken sailor, and a goblin guarding a lake. This routine is complicated enough to keep the player engaged and probably warrants taking some interest in this game and its very tempting £500 prize.

Wrightchoice can be contacted at *PO Box 100, 159 Welbeck Crescent, Troon, Ayrshire KA10 6BD.*

DIFFICULTY: combat routine might trip you up
GRAPHICS: none
PRESENTATION: very average
INPUT FACILITY: verb/noun
RESPONSE: fast Quill
GENERAL RATING: interesting

Atmosphere	71%
Vocabulary	68%
Logic	75%
Addictive qualities	73%
Overall	72%

FRIGHTENED FANTASY

PRODUCER: Dented Designs
PRICE: £1.99
AUTHORS: M Eacrett & H Church

Let's first of all take these lads to task for a bit of crude humour. Okay, so they've given themselves a clever name and they think that gives them the right to take the mickey out of Third World countries. We're told the price of *Frightened Fantasy* in Australia is two cans of Fosters, and in Zambia it's two 'gumbo beads'.

Now come on, lads, this is 1987, Channel Four, left-handed opossums' civil rights and all that.

All right, settle down – it's just that reading the info with this game, and playing it a while, has given me a fit of the giggles. You see, these guys have a certain humorous way about them and I think if enough people find them amusing, who knows, we might find these chaps vying with that famous funny, Fergus McNeil.

This effort is brought to you courtesy of the *Graphic Adventure Creator*, and that utility's drawbacks may account for its lack of tempo. However, the conspicuous lack of grammatical accuracy must be put directly at Dented's door, so come on, lads, pawn the old *Beano* annuals and get yourselves a weighty dictionary to sort the text out before packing the products off to the eager chuckletums waiting for this one.

But the other drawbacks aren't that serious – the biggest problem is the program's insistence on stopping dead instead of scrolling on. This means the first key-depression of any input following a long location description is taken as a sign to scroll, much as in *The Hobbit*.



The large picture leaves little room for the location description below, which leads to information scrolling off quickly; regular readers will recognise this as a *GAC* characteristic.

But leaving aside any shortcomings of *GAC*, *Frightened Fantasy* shows the utility used to good effect with good pictures, a pleasant redesigned, readable character set, and colour changes between location descriptions.

Playing the game is easy, allowing the player to meet the full force of fun on offer in a short time. The humour often works on a discordant juxtaposition of the fantasy and the real in a very funny way.

Hence we have a happy hour in the Nobody's Inn where the beer is free (though drinking it is a bit of a trap), a weapon found lying around turns out to be a 'Soviet SVD Dragunov Sniper Rifle. Gas operation, range 900m, Vel 830 m/s and totally useless without its trigger', and elsewhere 'Orcs, Elves and the odd Japanese Goblin tourist rush to and fro'.

In a similar vein, there's a talisman to teleport you home to Milton Keynes.

But there is some method to the madness, and beneath it all are some real tasks. Quests are given out by just about everyone you meet: Groaner of the Inn wants you to brave the swamp and bring back Basil, the Seven Dwarves want to feel happy but Happy has lost his chainsaw, and Kevin in the Inn is obviously quite happy himself when he comes out with 'Hic, I'm Ferg . . . er . . . Kevin and I need a weapon to kill the wimp Davis in *Orcbusters*', *Orcbusters* being a future release planned by Dented.

Humour oozes from this game, with random messages popping up like this: 'A boy with brown National Health glasses and a jet-pac zooms past you and disappears', and location descriptions like this one: 'You are in the messy dining room. By the look of the place some orcs have eaten here, as the furniture is reduced to bits and there are some hobbit remains.'

The credibility of the plot obviously isn't so important in a funny game, and though the talisman found just lying in the forest shortly after the off isn't stunningly imaginative, the gold scattered round the cashpoint of the bank is typically humorous.

Frightened Fantasy is supposedly a spoof of the Fighting Fantasy games, though I'm not sure which game it's based on. But this adventure IS very amusing and a much better effort than Dented Designs's *Don't Panic – Panic Now*, reviewed last month, even if here you are likely to end up with a score which reads like this: 'You scraped up 0 copies of *Orcbusters* and you have taken 43 puny attempts at this awesome quest.'

Frightened Fantasy is available on mail order from *134 Coleraine Road, Portstewart, Co Londonderry, Northern Ireland.*

DIFFICULTY: not difficult
GRAPHICS: not bad
PRESENTATION: good, with designed picture frame
INPUT FACILITY: verb/noun
RESPONSE: sluggish
GENERAL RATING: quite an advert for *Orcbusters*

Atmosphere	76%
Vocabulary	79%
Logic	77%
Addictive qualities	79%
Overall	78%





It's back to normal this month after the June special. There's been a lot of interest in *Rebel Planet* and *Never Ending Story*, so let's start with a look at what has people stumped in these two . . .

PAUL PEARCE kicks us off with quite a load of old problems. For many of the *Rebel* solutions we can thank a column regular, JOHN WILSON. Paul asks:

'1 How do I use the Bible that came from the hotel?
2 What is the blanket that came from the same place for?
3 How do I get the juice from the Tundra, and what do I need to get past the Fence without frying?
4 What is the Infrared Scanner for?
5 How do I get into the Alcove in the hotel?
6 Do I have to tell the guard at the museum a joke to help me? If so, do I get this joke from the hotelier?
7 After gaining entrance to the Main Computer on Arcadia, how do I blow it up?
8 How do I gain entrance to the University?'

Well, Paul, see if this lot get you any further:

1 SFBE CJCMF to learn a useful phone number.
2 When you meet the SPCPU throw blanket over antenna to disable it.
3 When you locate the dome-shaped rock EXAMINE ROCK to find a tin of juice. At the fence DPOOFDU pantanium QBL, then cut the fence with cutters.
4 View scanner in dark cave.
5 FYBN TUFQT, VOMPDL alcove.
6 HJWF CSFX to guard.
7 FYBNJOF Arcadian, UBML Arcadian, RVFTUJPO Arcadian, ask for help.
8 TAP DSZTUBM WITH GPSL.

PAUL JUKES writes 'I have Adventuresoft's *Rebel Planet* and it's an excellent game – but I can't get very far. How do you get around the two angry Arcadians in the Space Complex on Tropos without being dissipated, and how do you get out of the cell (where the walls whisper) on Tropos?

'Also, on Mastertronic's *Sinbad And The Golden Ship* how do you get the Old Man Of The Sea off your back?'

To avoid problems with the Arcadians, whose parking space you have pinched, GIVE UJDLFUT. To escape jail CFOE CBST with XSFODI and then activate laser.

In *Sinbad*, you must use the Old Man to navigate the sands, then go west to dump him in the sea (ANDREW TAYLOR tip).

Right, less of this wandering off the topic and straight back to *Rebel Planet* and a struggling inexperienced adventurer. KEVIN GAYNOR asks

1 how to use the dispenser (can't find card);
2 how to repair the scooter;
3 how to disembark from the *Caydia*;
4 how to decode the intercepted messages.

And my answers:

1 Insert card into dispenser regularly. If you type INVENTORY you are told you are wearing a LIMCOM. EXAMINE LIMCOM and you are told of four buttons marked PS, SS, IH and OH. These stand for Personal Status, Ship Status, Inner Hatch and Outer Hatch. To get the card go south, south from start and press IH (inner hatch). Now GO HATCH and UBML WBMFU.
2 You won't need it on this trip.
3 To leave the *Caydia*, press IH, GO HATCH, press IH, press OH, leave.
4 Enter 101, 010, 101.

On to that nongloss detective *Matt Lucas* and a seemingly small problem which I must admit had me puzzled for a while. Fortunately I stumbled on the right word combination, SPMM DBSQFU – but hold on, I think you'd better see what the question was.

It came from DAVID PAYNE, who wrote 'When you enter Harpinger's apartment you see a carpet and the computer tells you it is a Persian carpet. There is a bump in the middle and there could be something underneath it. But how do you find what is under the carpet?'

MARK WALBANK asks of the same game:

'1 Once you find the code in the vase how do you use it? It doesn't seem to work on the safe.
2 How do you deal with the thug and the pusher?
3 How do you get Phil, Joe and Lt Davis to help you?
4 Once in the boat it says 'You can drive anywhere' but I can't seem to move off the spot . . . '

Solutions:

1 It is the number to the safe. EJBL OVNCFS.
2 Shoot 'em.
3 I might be mistaken, but apart from looking into Phil's and Joe's places, they don't.
4 You need the map, container, tube, and subsequently the petrol and the ignition key.

There's been a *Never Ending Story* this month – a never-ending stream of queries on a game which often comes free with the 128K Spectrum. Reader A CHANG wonders how to find the crystal, what the stone is used for, how to remove the thorn bushes, and how to get the velvet coat.

To get the crystal GO DOWN when the thorns have burnt and then TNBTI CPY when carrying the stone. To burn the thorns light them. (JOHN WILSON tips). Collect the cape in the marsh (STEPHEN REID).

M P COOK can't get up the stairs to the top of the ivory tower. Try this lot: from the bottom of the main stairs go U,E,E,NE,U,W,W, W,SE,U,E,E,E,U to find the door to the Empress's quarters.

BEN PAYTON writes 'How do you get out of the grave? What do you use the rope and the stone for? The fragment of glass is also causing problems.'

Do not go east from the church unless you are carrying the glowglobe – you'll be pushed into an open grave. The rope is used to go down the well with UJF SPQF. To be allowed to carry the fragment of broken glass you need to be carrying the leather which you will find in the hut in the village.

NICHOLAS PIRIE wonders where to find Falkor the dragon and how to mount it. He has the Auryn but isn't sure how to use it with Falkor to make the beast help him. He's also finding it an uphill struggle entering the cave in the mountain slopes.

CMPX IPSO to attract Falkor and TAKE FALKOR when in possession of Auryn, and he will stay with you. To enter the tunnel in the mountains MJHIU CSBODI at the campfire and then MJHIU UIPSOT at the tunnel.

ENCRYPTION CORNER
It's easy to speak Brewster!

ENGLISH : ZABCDEFGHIJKL
BREWSTER: ABCDEFGHIJKLM
ENGLISH : MNOPQRSTUVWXY
BREWSTER: NOPQRSTUVWXYZ

Now to a classic release – *Lord Of The Rings*. RYAN SMITH writes 'I have completed *Lord Of The Rings* by starting on the second part. On the first part I have followed Strider out of Bree only to get stopped by the riders at a bridge just after Weathertop. I have tried everything I can think of but still those riders are at the bridge to stop me. Please could you tell me what to do?'

Well, Ryan, as with all answers I can't guarantee this will work but . . . have a go at collecting the elf gems. Used one at a time they can destroy Nazgul if you SAY 'ELBERETH'. Killing the black riders generally can be achieved with BE MERRY and SAY 'KILL RIDERS', noting that there are three lots of three riders.

Still with Tolkien-inspired works . . . PAUL TREGIOGI isn't sure how to get past the Great Gate Of Morona in *Bored Of The Rings*. Try ESPQ QFQQFS (tip from G SPENCER).

It's *Seabase Delta* time again. LIN RHODES finds adventuring difficult, which isn't that hard to understand:

'1 I know I need the heavy metal tape to open the sliding doors, but how exactly do I do it?
2 I have made a seesaw but do not know how to use it. I know I must get on it and drop the cannon ball on the other end, but how do I go about it? I have tried every way possible but I cannot get onto the seesaw in the first place.'

Answers:

1 Go to the microphone and the tape player. Insert cassette. The microphone will hear the music and open the doors. Enter tunnel and pull knob. (Help from JOHN PETRE.)
2 Make the seesaw at the launch pad, XBML QMBOL. Throw the cannon ball and you will be lobbed up to the high platform. (Tip from MATTHEW TUCK.)

LUTHER JONES has the smooth foil and pancake but can find no way of getting past the camera. Go up to Level Three. Go into the room with the TV camera. Having ironed the aluminium foil, use it to SFGMFDU the beam.

CHRISTOPHER ROUSSOU wants to know where the harpoon is found – it's north of the third-level corridor in the ▶



armoury (and in *Sinbad And The Golden Ship* you kill the roc bird, Christopher).

CLIVE ROSE is having problems with four adventures:
'1 In *Subsunk*, how do I get out of the locker?
2 In *Seabase Delta*, how do I move the rail car and how do I get in it?
3 In *Kwah!*, I have put the tape in – what do I do now?
4 In *Ship Of Doom*, how do I get the key out of the glass cover?'
Help:
1 Don't enter the locker.
2 FOUFS DBS and fasten belt. JOTFSU DBSE.
3 Set speed to 9. Change to Kevin and press record on the recorder. Say 'Kwah' twice.
4 Point TPOJD TDSFXESJWFS at cover over the key (ROBERT BURGESS tip).

Back to LUTHER JONES now and *Claymorgue Castle*: 'I cannot get to the loft or wake the moat monster.'

Swim down to moat bottom. Examine bottom. Swim up once. Cast CMJTT spell and go drawbridge, Go E, E, and E (ALEX NG).

JEFFREY BELL takes us back to that sunken sub in *Subsunk* with this letter: 'Firstly, can you please tell me what ingredients are needed to make the glue and how you mix it? Also, I have found one half of the map in the navigation area; where can the other half be found? Can the locker in the locker room be opened? Where can the acid battery be found? Finally, what is on the thin shelf in the wardroom and how can you get it down without banging your head?'

To make the glue get LOJGF and burnt UPBTU. TDBQF UPBTU. Put scraping in UFTU UVCF from above the locker. Get ZPHIVSU from cold store. Go to the reactor where the ZPHIVSU melts. Tip carton and mix with spatula. Dismantle DMFBOFS to get the other half of the map. Jump on the bed to get the key to the locker. Go down to the bottom of the sub from the washroom area to find the battery.

PHILIP HUGHES needs some assistance at the beginning of two adventures. In *The Boggit* he's got the diary but still can't open the door.

Try SFBE EJBSZ. The number is the code for the door combination lock.

In *The Very Big Cave Adventure* Philip can't get past the snake. Try killing the python with PQFO DBO.

GRAHAM COULTON is having great difficulty keeping awake in *ZZZZ* as he can't get very far. He's having trouble riding the bike, getting a bucket and dealing with the water.

QVTI or XIFFM bike and give it to the TBONBO. EJH sand and lift the bucket. Put the bucket on a IPPL by the XFMM, turn handle and do it again.

Dracula is giving SHAUN QUIGLEY some sleepless nights. At the start of Part Two look into the face of the woman opposite. MPPL JOUP FZFT. You will now enter a trance. When you awake you will have only a few inputs left so DMPTF FZFT or UVSO IFBE. The woman gives you a cross; wear and remove it as necessary. To find the staircase go west from the castle courtyard, then south, and look around. The tree in Part Three is near the wall of the mansion. DMJNC it and DVU it.

MARK ANDERSON has completed *The Sidney Affair* but wants help with *Spiderman* and *Mafia Contract II*.

In *Spiderman* you examine the crib to find the formula to drop by the lizard. This is hydrochloric acid and calcium carbonate which forms calcium chloride.

To make the web QVMM QBJOUJOH in the penthouse to reveal a torn piece of paper. Examine the paper to find a partial web-fluid formula which needs the exotic chemicals. Proceed to the lab and make web fluid.

In MC II pull pin, throw grenade, S, open door, kill janitor, search janitor (M TOWNER tip). I think this is what you're looking for, Mark.

'Please can you help me with *Gremlins* by Adventure International and *The Hobbit* by Melbourne House? In *Gremlins* I am stuck at the mailbox. I know that you have to cut the mailbox with the welding torch, but how do you stop the arm coming out and turning the valve off?'

Turn on the GMBTIMJHIU and QPTU it. Stripe should run off (D MOORE).

'And for *The Hobbit*, could you tell me how to get out of the goblin's dungeon?'

XBJU till Thorin appears and say to Thorin PQFO XJOEPX, DBSSZ NF and then go west.

IAN WALLHEAD can't get started on *The Colour Of Magic*. Put some colour into the game with GET BEER, STAND, TRANSLATE, say 'yes' to being a guide, then TALK BROADMAN and SAY ROOM. After Twoflower has left go Widdershins.

That's it till next month. Send your treasured tips and quirksome queries to SIGNSTUMPS, *PO Box 10, Ludlow, Shropshire SY8 1AQ.*



GRAPHIC DETAIL

Dear Derek
After reading Daniel Chapman's letter in the May issue of CRASH I just had to put pen to paper. I too have been experimenting with *GAC* but with a little more success than Daniel. The first two problems are easy to solve but the third, linking other graphic utilities to *GAC*, I think is very difficult.

THE MULTILOAD ADVENTURE

The SAVE option in *GAC* saves current position; all counters; all markers; and the whereabouts of objects.

It is possible to load this information from one adventure to another. If this is done the new part of the adventure must be reset. Any counters or markers which are not common to both adventures should be reset to original values – ie markers reset and counters to zero.

Any objects which are not common to both adventures should be moved to their start rooms.

I suggest that when writing adventures the following format be adopted when using objects:

All objects which can be picked up should be the first in the list of objects. Objects which cannot be picked up, such as nonplayer characters, should follow.

The noun which goes with the object should have the same number as the object. The objects which are common to different parts of the adventure, such as swords, money and quest items, should be the first in the list (strictly speaking, only objects which can be picked up should be common, ie you should only be able to transfer objects from one adventure to another if you are carrying them).

The best way to get multiload adventures to work is as follows:

Have a counter which holds the present number of the adventure – this will indicate the adventure number from which it was saved. On loading an adventure position check to see if it is a permitted load, ie that it has been saved from either that adventure or the previous adventure.

If it is permitted, reset all the markers and counters to their start values.

Move all the common objects which are not being carried into the room (you may wish them to be moved to rooms which you can access if you want to give your adventurer a chance of getting the object again). Move all objects specific to this adventure to their start positions. Move the adventurer to his start position. Let play commence.

This will take a lot of time and effort (and memory) to implement, but it's worth it to get multiload adventures.

RANDOM MESSAGES

If you have your random messages starting at message N and there are X messages, to print the random message:

```
IF (condition) MESS (RAND
(X) + N) END
```

This can be used in any condition type.

EXTENDED ROOM DESCRIPTIONS

GAC is limited to 255 characters for a room description with little scope for detailed descriptions of your surroundings. To get over this we can put the marker 0 to use. It is set whenever a description of the room is given, either on entering the room or on describing the room such as when you LOOK.

Marker 0 is not automatically reset except at the start of a new game. So if this marker is set we know the room description has been given, and we should also display our extended description in the form of messages.

But we don't want the extended messages to appear after every input, only when the room is entered or described. To prevent this from happening we RESET marker 0. The construct is:

```
IF (SET?(0) AND (room$))
MESS (message(s)) RESE(0)
END
```

This should be a high-priority condition.

GENERAL TIPS ON *GAC*

When you insert a condition at the end of other conditions you don't have to specify the exact next number – any higher number will do. If you specify 99, and there are only 22 conditions to date, the condition entered at 99 will be put in the next available space.

If you want to insert a condition between other conditions, select the condition



you want the new condition to go in front of, enter the condition at the start of the same line (not forgetting to put the END in) and the new condition will be inserted.

In large adventures it's reasonable to have rooms with the same description. To save memory leave the room description empty except for a single space. In the high-priority conditions

```
IF (SET?(0) AND AT
(ROOM$1) OR AT
(ROOM$2) OR AT
(ROOM$3). . . . ) MESS
(MESSAGE$) RESE(0) END
```

where ROOM$1 . . . are the rooms with the same description and MESSAGE$ holds the description of the rooms.

The single space must be entered in the room description because if it is completely empty 'ERROR : room not found' will occur.

A small extension to an adventure, similar to that used by Level 9, would be to impose a small penalty each time the save option is used.

This can be done best using

```
IF (VERB (14)) SAVE DECR (0)
OKAY END
```

in the low-priority conditions, changing the existing option. The routine above would deduct one point from the score but multiple DECR (0) statements could be used for larger penalties. The DECR (0) is used instead of such a function as CTR(0) - PENALTY CSET (0) because if the penalty imposed is greater than the score, size errors will occur with that function. This will not happen using DECR(0).

OTHER PROBLEMS

I am working on a system to allow a number of player characters, like those found in *Lord Of The Rings*. Next I'll tackle the problem of nonplayer characters – I hope to get them moving about the adventure and having reasonable interaction with the player.

IAN BRYER, Leicester

Ian's was one of a huge number of letters prompted by Daniel's GAC *problems, all of which were of a very high standard. Ian picks up this month's £20 worth of software; next month there'll be another big* GAC *letter from David Salter of Nottingham.*

DB

THE DEMON DRINK

Dear Derek

Three years ago the hilarious *Denis Through the Drinking Glass* was released with a very effective advert. I have played *Denis* for three years now but I still cannot answer any of the ten questions posed in the advert.

Please print an appeal for the author to send in the answers (if HE knows them), and publish them in CRASH. I would dearly like to know:

1 Are they long enough?
2 What is number 36?
3 Who spoiled the photos?
4 Is there really such a pub in Plymouth?
5 What made Way dizzy?
6 Is he a quarter-pounder?
7 A hole in one or one in a hole?
8 Where did he learn to talk like that?
9 Has he gone off to the Malvinas?
10 Who is it, dummy?

Please, please, please, use your contacts to put me out of my misery!

FRANCIS SANDS

WRITING A WRONG

Dear Derek

I have read the recent letters in SIGNPOST concerning *Vera Cruz* and am surprised that no use appears to have been made of the graphology examination. This test proves that the suicide note was written by Gilles Blanc and not by Vera, thereby disproving his statement that he was never in Vera's apartment.

CHRIS GORNALL, Lancashire

ODE TO A *RED LION*

Riches may lie in the trail of a monster
Discreetly-placed powder induces deep sleep;
Be mindful of fashion, it may be your saviour
And go not across – instead look to the deep.

Paths may be hidden, so be always watchful;
Music is useful, and charming to boot.
Search all and sundry, choose hair, just a handful;
You never know, you might escape with the loot.

To capture an animal, semidomestic,
You may count ten backwards, if dropped from a height;
Blow your own trumpet and meet with a mystic
Or two to help vanquish the Lord Of The Right.

CHRISTOPHER WARD, Mystic Software



CRASH bureaucrat NIK WILD takes a break from the savage world of advertising to hack, cut and swashbuckle his way through two new gamebooks

THE KINGS DEMON – GAMEBOOK 1

PUBLISHER: Puffin
RETAIL PRICE: £1.95
AUTHOR: Graham Staplehurst

SINGING:
Robin Hood, Robin Hood,
Riding through the Glen,
Robin Hood, Robin Hood,
With dum dum de men,
Feared dum de dum,
Dum dum . . . . . .

Enough, foul wretch!! Thy minstrelsy prowess doth play painfully upon mine lugholes! Pray continue in speech mode only!

As if our Bob hasn't got enough on his plate, what with the dastardly Sheriff, Sir Guy Of Gisbon, laddered tights and feeling all of a quiver, along comes some frog with magical powers (Sir Jean De Melusine) to ruin his day.

Your main task as Robin Of Sherwood is to defeat this new opponent before he can unleash the forces of Darkness on the land.

As with most books of this genre, you begin by defining your character. A roll of the die determines your skills in healing, riding, stealth etc, and there is a 14-page (somewhat tedious) rundown of how to use these skills and rules of combat.

A possessions table allows you to carry and use objects you find, and there's also a wound chart, and a table to monitor your powers of Light and Darkness.

Once the game proper starts, there's a good atmosphere and those despised sudden deaths can be avoided with a little thought.

I didn't get very far, but one day I'll return to Sherwood Forest to put an end to Sir Jean and his evil doings.



One of Russ Nicholson's illustrations from the pages of *The King's Demon*

STAR STRIDER

PUBLISHER: Fighting Fantasy Series
RETAIL PRICE: £1.95
AUTHORS: Steve Jackson & Ian Livingstone

Those damn Gromulans, they've only gone and bushwhacked Galactic President Xenin and are holding him captive 'somewhere on Planet Earth'.

This looks like a job for . . . er . . . you!

Break out the HB and Mars-Plastic – it's time to don the guise of Rogue Tracer and, on the turn of a die, see if a Presidential rescue is possible.

At the start of your quest you're asked to roll the dice to determine your skill, stamina, luck factor and so on. These figures are adjusted according to actions and events throughout the game.

I spent a wet Sunday afternoon ploughing through *Star Strider*, but eventually gave up. The plot is okay and some ambience is created, but I'd been there and heard it all before. The large number of sudden deaths didn't help much, either.

Two pounds isn't bad for an afternoon's 'entertainment', but there are better gamebooks to be had.

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THE SETTING

The game is set in New York City in the late 1990's. You role-play the part of a gangleader who controls a group of misguided youths. The city has severely deteriorated. The brave citizens who remain are now in a life and death struggle with the ever increasing number of drug-crazed street gangs. The New York Police Department is severely undermanned.

Your main goal is to become a very powerful gang. This is measured by building your gangs turf into one of the largest and by becoming one of the richest, toughest, and most notorious gangs in the city. This will allow you to enter the MOB, and maybe later, become the Godfather.

On a typical turn you could send your Pros, Punks and 'Cruits out to take over a couple of city blocks and ambush an enemy gang, rob or firebomb a building, buy and sell drugs, have yourselves a party, terrorize the residents, and much more.

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PO BOX 11, CLEVELEYS, BLACKPOOL, LANCS FY5 2UL.

EARTH WOOD

25 players compete to be the ultimate ruler by controlling all the developed cities, either singularly or with an alliance. A typical game will last about 18 months, with the first knockouts usually starting after six months. Each player is either a king of a fantasy race or a powerful charismatic character. You can recruit trolls, wildmen and control powerful creatures such as dragons. Your characters will capture and control cities, upon which you can spend gold to improve security, workshop production, defences, and maintain and enlarge your army. With gold, your wizards undertake magical research. Spies search out enemy strongholds and then attempt acts of sabotage, theft and assassination. These are just a few options available to a player in Earthwood. Earthwood is computer moderated but the turn sheets and replies are written in plain English. No need to look through complex charts and code books to understand this game.



CRASIMOFF'S WORLD

Europe's most popular Play By Mail game - the fantasy campaign game with over 1,000 player parties already participating. To enter, send £6.00 for rules, setup, first three turns and copy of latest newsletter. Further turns £1.75 each.

NEW

CAPITOL

To enrol in Capitol send a £6.00 cheque/PO/International Money Order payable to KJC Games. For this you will receive the rulebook, setup and first two turns. Each turn of Capitol costs £1.75 for the first 60 orders. Each additional 30 orders costs 75p. European players are welcome.

EARTH WOOD

To enrol in Earthwood send a £5.00 cheque/PO payable to KJC Games. For this you receive the rulebook, setup and first three turns. Future turns are £1.50.

KJC GAMES

Send to: **KJC Games, PO Box 11, Cleveleys, Blackpool, Lancashire FY5 2UL**

Welcome on - (0253) 866345

1987 PBM MAILBOX



Summer is here at last: tanned legs and weight training are back in vogue and here's cool, sophisticated me driving about in a Marina van following the incident with the cow I mentioned last month. But would you believe it? I'd had the van for two weeks when BLAM somebody crashed into it. Sob. Still, I was greatly relieved to return home to a pile of PBM MAILBOX mail; that bucked me up a bit. What would I do without you all?

Anyway, oh-la-di oh-la-da, life goes on (ya), so without further ado let's pull something out of that reassuring mailbag . . .

VIGOROUS PURSUIT

Dear Brendon

This morning I received information from Jade Games about *Shattered World*, and I just happened to buy CRASH as well; I was most pleased to find a piece about this new game.

I used to be a 'gamer' a few years ago, participating in STARLORD (run by Mike Singleton). I do not know if STARLORD is still running but my memories of that game are fond, which is more than I can say for the memories I have of my late 'allies' who persistently got me from behind. Rule One in war-gaming: NEVER completely trust your allies.

I began PBMing again through your MAILBOX and elected to join the footballmanagement game *Soccer Star*, which I am finding rather boring, to say the least. That said, what struck me immediately upon opening the startup package from Jade for *Shattered World* was the length of the print-out – three A4 sheets!

Presumably, as the game proceeds and more information about the planet FINDAR is discovered this printout will become larger; I feel the art of diplomacy will be well rewarded in *Shattered World* and intend to pursue it with vigour.

T Burnett, Dalkieth, Midlothian

Starlord *died a mysterious death some years ago – Mike Singleton left the project to develop the infamous* Lords Of Midnight *brainwarper, and* Starlord *suffered a number of systems crashes and staggered restarts (it was a computer-moderated game) before vanishing in a puff of smoke.*

Those who really enjoyed it can still be found playing in the American version (run by Flying Buffalo) and even the 3-D Micronet Play By Modem game.

As well as comments from the CRASH reviewers who have already started up in the game, I have heard a mixture of reports about Shattered World*: some rave over it, others hate it. What do you think?*

Many thanks for your views; please let me know how you get on in your game, Thomas.

BK

WHY CAN'T THE GM PLAY?

Dear Brendon

I am developing an amateur PBM game, which in theory will be quite different to games currently available – the GM, instead of being passive, will take an active part in the diplomacy, double-dealing and general goings-on.

While the player's aim will be galactic conquest, the GM can go any lengths to maintain order. As all interplayer communication will pass through his hands, he'll be aware of what players are planning. With this in mind, the GM can (if he wishes) warn players of impending attack or even turn alliances inside out through feeding false information to each party involved.

This will add a whole new element to the game.

Malcolm Harden, Sheppey, Kent

In my view, such a system would spoil the whole game for the players. It's up to the enemy to feed false information to his tormentors, not up to the GM – that's the whole idea of PBMing. Nobody wants to keep an invasion plan secret from all the other players, only to have the whole plan spoiled by an overzealous GM who considers his personal pleasure more than that of his players.

I was interested by your point of getting the players to communicate through the GM alone. Sadly, this is impossible (take Starglobe*, for instance) – all it takes is for two of your players to meet at a convention and exchange addresses and ba-bing, GM-controlled dippy is thrown out of the window.*

Personally, I don't find the idea appealing. I'm sorry, but you did ask! Active GMs work well in D & D *but not in PBM. What do other readers think?*

BK

RATE THE GAMES

Many people ask why I rarely offer any ratings for a game mentioned in the PBM MAILBOX. Answer? Simple. Different people have different impressions of games and companies, so my views are not always shared (remember a certain article about *Saturnalia*?).

If I rated every game, it could be unfair to the player or the company.

But my brain has had an idea: YOU can rate the games in which you play, and I'll collate the data into a monthly table. Brilliant!

That's the easy bit done. Now you have to sit down and mark the games in which you play for each of the following categories (scores out of 100, please):

GM QUALITY – how good is the game's GM?
DIPLOMACY – how important is good diplomacy in the game?
RULEBOOK – how comprehensive and clear is the rulebook?
COMPLEXITY – how complicated is the game?
EXCITING – does the game hold its appeal after a few turns?
VALUE – do you get good value for money playing this game? (Consider quality of print-out, GMing and so on.)

Send your ratings to the usual MAILBOX address, marked RATINGS, and we'll soon see what you think of the current PBM market.

ZINE OF THE CRIME

Two amateur zines have been brought to my attention this month.

The second issue of *First Post* is out; in it you'll find articles on *Vorcon Wars*, *Where Lies The Power*, *Kings Of Steel*, *AEs* and *It's A Crime!*.

Just send a £1 cheque or postal order payable to **K J Pack** to *Walnut Tree Cottage, 9 Kings Meadow Lane, Higham Ferrers, Northamptonshire NN9 8JE.*

The other zine is *PBM Scroll*, previewed in CRASH a while ago. *PBM Scroll* covers amateur games, PBM clubs and general chat. If you're looking for a cheap game, you may find it listed here.

Send 50p and a large(ish) 18p SAE to **John Woods**, *91 Wandle Road, Morden, Surrey SM4 6AD.*

Are YOU launching/editing an amateur zine offering cheap, games? Tell me about it!

CRASH PBM REVIEWERS

Just a quick note to let you know that the applications I've received so far have been dumped in a lucky dip – and as offers come in from companies who want us to review their PBM games, I simply dip my hand in the bag to see whose name comes out . . .

If you fancy playing a game for free (or at special reviewer rates) then send me a note stating your name, address, any PBM experience you have (don't worry if you don't have any!) and your age. If you're hand-picked you'll hear from me in the post sooner or later. Post your applications to the PBM FORUM address, and mark the envelope REVIEWER.

ROOM FOR READERS' GAMES

Dear Brendon

First, I'd like to thank CRASH for introducing the PBM MAILBOX; it got me interested in the hobby.

Now a suggestion: why not set aside some room to allow CRASH readers to display their amateur PBM games, magazines etc? I'm sure many people would find this feature useful – at the moment, amateur games are given far less coverage than they deserve.

Finally, what is the address for *Vorcon Wars*? And are you planning to do an article on *AEs* in the near future?

Emmett Gill, Wallsend, Tyne and Wear

Believe it or not, just such a section for readers' games is in the pipeline. Any reader who runs a ***nonprofit-making*** *amateur PBM game can drop me a line and get a mention in CRASH.*

But remember, only games run for fun will be mentioned here: if you want to charge fees for your games you'll have to EARN coverage!

John Nicholson is no longer taking on startups for Vorcon Wars*; he's concentrating instead on the game's successor* Super Vorcon Wars. *Send an SAE for details to:* SVW *(CRASH), 59 Juniper, Birch Hill, Bracknell, Berkshire RG12 4ZG.*

Mind you, John tells me he may well run the odd normal game of Vorcon Wars *(though the wait for startup may be long) – the next one will be a special edition to celebrate the hundredth Vorcon game.*

And YES!! An article on Legend's well-received fantasy game AEs *(pronounced 'ayus') is planned. The game is hand-moderated to a high standard, I gather there's a new kingdom being opened up, and I've heard favourable grunting noises; so expect a review soon.*

BK

BRIGHT FUTURE FOR MEGALOMANIA

Megalomania is a strategic/diplomatic wargame launched by John Woodall at the Second PBM Convention in February. It's set on Earth; most of the world has been divided into hexagonal countries and circular, overlapping waters (ie oceans).

15 players start the game with a home country each and as many other countries as they can afford to buy, along with a fair sprinkling of armies, navies and industrial might.

The object of the game is to expand your empire, overpowering other players and eventually dominating the whole world. This is done through careful use of your economy, very careful planning, using other players, and guarding your Tyrant (your most powerful unit, similar to a King in Chess) while capturing others – thus envassaling *(pause to look in dictionary – Ed)* them to you.

TO PLAY

I have been (sort of) playing this game for a while and, to put it bluntly, I'm not doing well. At all. At first, this is a VERY complicated game governed by a VERY fuzzy rulebook (only basic descriptions of what an action is, followed by various cross-references to other parts of the rulebook – no examples here!), and it only begins to make sense after a few turns.

So if you're landed in *Megalomania* with old-time players and you don't have a few days to familiarise yourself with the rules, then you're likely to be in BIG trouble. Like I am.

Still, if the GM puts players of the same standard for the game *in* the same game then *Megalomania* may have a bright future. Diplomacy plays a very major part in successful play, and the game develops very quickly.

I'll do a more in-depth review later; but for now, if you have a lot of spare time and fancy a challenge then have a go at *Megalomania* – there are even prizes and rewards for successful players! Startup, including the first three turns and other bumph, costs £5 from **Phoenix Games**, *Stoneleigh, Holly Lane, Upper Elwood GL16 7LZ.* Each turn after startup costs £1.50, but that figure may rise or fall, depending on how you play.

The GM quality is excellent, even if John does tend to take the Micky out of you on the phone . . . not an easy game.

Well, that's the lot for this month's PBM FORUM. If you have any points to make or news to announce, then please drop me a line. As ever, the address is:

PBM FORUM, CRASH, *PO Box 10, Ludlow, Shropshire SY8 1DB.* Remember NOT to send CRASH competition entries, subscription enquiries, whingeings to Lloyd etc in the same envelope as PBM material! We do have a bureaucracy to maintain, you know . . .

NUCLEAR DOMINATION

Nuclear Domination is a human-moderated, budget-price PBM game moderated by GAMESMASTER of Southend-On-Sea. It's simple and highly diplomatic, and should see you sending a lot of letters every week.

THE PLOT

Set on the planet of The'Atalax, *Nuclear Domination* places you in the role of a commander of the Official Marauding Hordes (of which there are seven – ie yourself and six other players complete with hordes).

The old Lord Supreme Chief Dictator has had his candle blown out, and each of the seven commanders proclaims himself the dead leader's replacement. This splits the planet up into seven empires, each trying to control the others.

The idea is to use a mixture of diplomacy and nukes to gain power of the whole planet; who cares what state it's in at the end of play?

THE RULES

The rules come on photocopied sheets, and they're not very helpful – I still can't find out how the game ends! (Perhaps *Unclear Domination* would be a better name.)

But they do give examples of what's going on and the system of play is, in essence, quite simple: you battle it out with the other commanders using armies, fleets of ships and missiles. No messing about with food supplies here – this is a pure battle/diplomacy game (or at least it appears so on reading the book).

A couple of CRASH reviewers have just signed up and a progress report will be published shortly.

Startup costs £1.50 – but if you use the coupon below you can save yourself 50p and get going for just a quid! Each turn after startup costs a staggering 75p. Send your cheques or postal orders payable to S Wyatt at **GAMESMASTER**, *60 St Andrews Road, Shoeburyness, Southend-On-Sea, Essex SS3 9JJ.* Have fun, and rule the world.

THIS COUPON FROM CRASH ISSUE 42 ENTITLES YOU TO 50p OFF STARTUP IN GAMESMASTER'S

NUCLEAR DOMINATION

Coupon valid till 1 August 1987

Only one coupon can be applied to the cost of each startup

THE BIGGEST YET!

I've received so many letters this month asking me *not* to drop the addresses from directory entries – it seems you all find the section quite useful – that I've come up with a compromise between what players want and what GMs want. If a GM *doesn't* want his game mentioned here he should let me know; otherwise it's business as usual. And with that covered, on with this month's listing of CRASH diplomats, the biggest so far!

★001 Adrian Neal
48 Marketstead Estate, Kirton, Boston, Lincolnshire PE20 1SL
GAMES: *Vorcon Wars 72 & 78; Capitol 15; Earthwood 52; Arcadia 6; Star Empires 1; Conquest*

★002 Jason French
78 Princes Road, Ellacombe, Torquay TQ1 1PA
GAME: *Vorcon Wars 75 (Commander BLITAD)*

★003 Travis Smith
27 Sharmon Crescent, Braunstone Frith, Leicester LE3 6NW
GAME: *Starglobe 4 (SS Belle Julie)*

★004 Robert Darbyshire
22 Thornton Gate, Clevleys, Lancashire FY5 1JN
GAMES: *It's A Crime! 1 (Death Warriors); It's A Crime! 4 (Megacity Blues)*

★005 Stuart Millinship
17 Graveney Gardens, Arnold, Nottingham NG5 6QW
GAME: *Vorcon Wars 75 (Commander SHUTUN)*

★006 Mr G G Manganoni
109 Kings Road, Farncombe, Surrey GU7 3UE
GAMES: *Saturnalia; Crasimoff's World; Explorers Of Orion; Lands Of The Crimson Sun; AE's; Mark Of Chaos; Untamed Land; Vesuvian*

★007 Mr C J McCarthy
39A Seaview Road, Liscard, Wallesey, Merseyside L45 4QN
GAMES: *Starglobe 1; Star Empires 1; Vorcon Wars 19; Saturnalia; Fleet Manoeuvres P107*

★008 Scott Macfarlane
2 Broomside Terrace, Costorphine, Edinburgh EH12 7LZ
GAMES: *Vorcon Wars 60; Super Vorcon Wars 77*

★009 Paul Davidson
51 Waterloo Road, Prestwick, Ayrshire, Scotland KA9 2AA
GAMES: *Vorcon Wars 60 (Commander PEPISH); Arcadia; Conquest*

★010 Kev Wasey
9 Clarkson House, Maysoule Road, Battersea, London SW11 2BP
GAME: *Earthwood 30*

★011 Ian Hudson
53 Deepmore Close, Alrewas, near Burton-Upon-Trent, Staffordshire
GAMES: *Vorcon Wars 65 (Commander PESTIB); Super Vorcon Wars 77*

LUDLOW DIPLOMATIC DIRECTORY SHROPSHIRE

(Commander FRUGAD); World Of Vengeance (Ian's Invincibles near Bury St Edmunds)

★012 Gareth Evans
4 Whitelands Road, Thatcham, Newbury, Berkshire RG13 4AR
GAME: *Arcadia 6 (Egg Groinside)*

★013 Mike Adams
774 Holmefield Road, Liverpool, Merseyside LK9 3PQ
GAMES: *Vorcon Wars; Conquest; It's A Crime! 4 (Priests)*

★014 David Lane
23 Florence Road, West Bridgford, Nottingham N92 5HR
GAMES: *Casus Belli 5; Player 16*

★015 Martin Higgins
Wallesey Road, Wallesey, Merseyside L44 2AG
GAMES: *Vorcon Wars 72; It's A Crime! 4*

★016 Cliff Frost
175 Queens Road, Leicester LE2 3FN
GAMES: *Saturnalia; Arcadia; Earthwood 44; Kings Of Steel 17; Arcadia; It's A Crime!; Swords And Shields*

★017 Robin van den Yssel
Smaragdlaan 172, 2332 BX Leideh, Zuid Holland, Netherlands
GAMES: *Vorcon Wars 72 (Commander TREBIN); Starglobe 3 (The Dutchman)*

★018 P Brunstan
Cae Mari Pwn House, Thomastown, Merthyr Tydfil, Mid Glamorgan, South Wales
GAME: *It's A Crime! 2 (Death)*

★019 Steve Vickers
26 Swinton Court, Harrogate HG2 0BB
GAMES: *Soccer Star; Saturnalia; It's A Crime! 4; World Of Chaos*

★020 Barnaby Dellar
11 Priory Grove, Stockwell, London SW8 2PD
GAME: *Starglobe 4*

★021 Stephen Holt
27 Rosemary Road, Sprowston, Norwich, Norfolk NR7 8ER
GAMES: *Vorcon Wars 61 (Commander BRIDER); It's A Crime! 4 (Fighting Uruk-Hai)*

★022 Kevin Pack
Walnut Tree Lodge, 9 Kings Meadow Lane, Higham Ferrers, Northamptonshire NN9 8JE
GAMES: *Earthwood; Saturnalia; Starglobe 4; Orion's Finger; It's A Crime! 3; Casus Belli; AE's*

★023 Matthew Hanson
10 Denby Lane Crescent, Grange Moor, Wakefield, West Yorkshire WF4 4EB
GAMES: *Starglobe 4 (SS Obsidian Fox); Arcadia*

★024 Gavin Marshall
36 Spur Road, Orpington, Kent BR6 0QL
GAMES: *Vorcon Wars 71*

★025 Owen Whitehead
213 Park Road, Barnsley S70 1QW
GAMES: *AE's ('Rillion' – E side); Saturnalia (Grendl Of The Web); Enchirodon (Brothers In Arms); It's A Crime! (Brothers In Arms); From The Mouth Of Hell (Elf); World Of Chaos (Rillion Kerr); Soccer Star (Morning Star RS League)*

★026 Damian Manning
12 Warden Road, Sutton Coldfield, West Midlands B73 5SB
GAMES: *Starglobe (SS Alvon); It's A Crime! (Merry Mob)*

★027 John Preen
12 Underdale Avenue, Shrewsbury, Shropshire SY2 5DY
GAMES: *Starglobe Four (SS Broadsword Of The Guild Alliance); Vorcon Wars 78 (Plonog)*

★028 John Kemp
9 Wold View, Caistor, Lincoln LN7 6UU
GAMES: *It's A Crime! 4 (New York Assassins); Arcadia 8 (Lord Centaurus at Jihad City, P27)*

★029 Milan Petronic
24 Dell Road, Kings Norton, Birmingham B30 2HZ
GAME: *Arcadia 13 (Draug Dur)*

★030 JC Fowler
11 Beaconsfield Place, St Agnes, Cornwall, TR5 0SZ
GAMES: *Starglobe Three; Arcadia 8*

★031 Kevin Edwards
52 Woodlands Road, Irchester, Northamptonshire NN9 7BU
GAMES: *Vorcon 60, It's A Crime! 4; City of Strife*

★032 Jason Cottrell
17 Back Lane, Barrington, Cambridgeshire CB2 5RF
GAMES: *Saturnalia (Axil Taranus); Tyranny (P5)*

★033 Michael R Stannard
44 Harrington Street, Cleethorpes, South Humberside DN35 7AZ
GAME: *Arcadia 10 (Mordran The Unknown at Seven Springs City)*

★034 Malcolm Sums
76 Mount Road, Canterbury, Kent CT1 1YF
GAMES: *Soccer Star (Kilmore Oilers); Bradley's Football (Houston Oilers)*

★035 Paul Davidson
51 Waterloo Road, Prestwick, Ayrshire, Scotland KA9 2AA
GAMES: *Vorcon Wars 60 (Pepish); Arcadia 7 (Ped at Moriquendi City); Conquest (Anar Narion, Maps 18/19)*

★036 S Davies
16 Clara Street, Ton-Pentre, Rhondda, Mid Glamorgan, South Wales CF41 7HQ
GAMES: *It's A Crime! 4 (Gang 315); Vorcon Wars 64 (Chotub)*

★037 S Wyatt
60 St Andrews Road, Shoeburyness, Essex SS3 9JJ
GAMES: *Vorcon Wars 73 (Prifun); Vorcon Wars 78 (Sathal); It's A Crime! 4 (Mercenaries); Kings Of Steel (Woodland Alliance)*

★038 Richard Goff
20 Inglis Road, Colchester, Essex CO3 3HU
GAME: *Arcadia 12 (Player 17)*

★039 Jason Huggins
35 Garratts Lane, Banstead, Surrey SM7 2ED
GAME: *Saturnalia (Vetrex)*

★040 Gary Rooksby
42 Spinney Road, Keyworth, Nottinghamshire NG12 5LN
GAME: *It's A Crime! (Scorpions, Gang 497 in Game 8)*

★041 Alan Halliday
2 Langley Drive, Handforth, Wilmslow, Cheshire SK9 3BQ
GAMES: *Vorcon Wars 76; Super Vorcon Wars 89*

★042 Andrew Middleton
3 Derwent Road, North Shields, Tyne And Wear NE30 3AH
GAMES: *It's A Crime!; Shattered World*

★043 David Patrick
18 Geoffreyson Road, Caversham, Reading, Berkshire RG4 7HS
GAMES: *Casus Belli 35 (Player 9); It's A Crime! 8 (Mutant Warriors); The Hunting*

★044 David Norman
7 King's Lane, Bebington, Wirral, Merseyside L63 8NN
GAMES: *Vorcon Wars 76 and 88; Kings of Steel 17*

★045 The Dark Young (one) *(sic)*
59 Thornton Avenue, Macclesfield, Cheshire SK11 7XL
GAME: *Super Vorcon Wars 96 (Commander CRONVO)*

★046 Gareth Williams
17 Western Avenue, Brentwood, Essex CM14 4XR
GAMES: *It's A Crime! 4 (Perrigrines); Super Soccer (AC); Crasimoff's World (Death Squad)*

★047 Andi Watson
8 Earlswood Crescent, Kippax, near Leeds, West Yorkshire LS25 7JQ
GAMES: *It's A Crime! 9; Further Into Fantasy (Thai); Saturnalia*

★048 C Houghton
12 Tedder Road, Beaconside, Stafford ST16 3RA
GAMES: *Vorcon Wars 83 (VARMER); Super Vorcon Wars 87 (GASTUG); Crasimoff's World; AE's (Western)*

★049 Patrick Walsh
36 Verney Road, Longley, Slough, Berkshire SL3 8NX
GAMES: *It's A Crime! 7 (Lynchmob); Soccer Star (Longley FC); Football League (Spurs)*

★050 David Brimley
41 Silverthorn Gardens, Chingford, London E4 8BW
GAME: *It's A Crime! 4 (The Unnameable)*

★051 Hugo Allen
38 Bathwick Hill, Bath, Avon BA2 6LD
GAMES: *Vorcon Wars 66 (THOGET); Vorcon Wars 75 (TRALIC); It's A Crime! 7 (Hill Street Scum)*

★052 Dean Stuart
26 Ullswater Avenue, West Auckland, Bishop Auckland, County Durham DL14 9LR
GAMES: *Vorcon Wars 69 (THOPAL); Vorcon Wars 85 (TRIBER); Conquest; It's A Crime! 7 (Gang 267); St Valentine's Day Massacre*

★053 Carver Tedstone
48 The Walk, Merthyr Tydfil, Mid Glamorgan CF47 8RR
GAMES: *Kings Of Steel 19 (KIR); Kingdom Of Orion 2 (Orissa); Casus Belli 38 (Player 15)*

★054 Guy Roppa
5 Lymington Crescent, Raymond Road, Wimbledon, London SW19 4AN
GAMES: *Global Supremacy 2 (Khazacstan); Tribes Of Crane (Tribes Of Rohan); AE's (Gil-galad, N side); From The Mouth Of Hell (Elf)*

★055 Neil Moulding
46 Park Avenue, Allerton Bywater, Castleford, West Yorkshire WF10 2AS
GAMES: *It's A Crime! 7 (Death Angels); Striker (Castleford Cosmos)*

★056 Carl E J Brown
174 Mersey Street, Holderness Road, Hull HU8 8SE
GAMES: *Saturnalia (Orion Blade, S, Erythia); The Hunting (Connoer MacLoud); AE's (Kalas Darkmoon); Further Into Fantasy (Marc Solo)*

★057 Stephen Griffiths
71 Arosa Drive, Malvern, Hereford And Worcester WR14 3QE
GAME: *It's A Crime! 6*

★058 David Patterson
20 Windmill Field, Denmead, Hampshire PO7 6PL
GAME: *It's A Crime! 4 (Sputniks)*

★059 Simon Barry
15 Linnet Avenue, Bayview Park, Whitestable, Kent CT5 4TN
GAMES: *Trollsbottom 2 (Boggit); Trollsbottom 3 (CROM)*

★060 A Price
17 Fernbank Place, Bramley, Leeds, LS13 1DF **GAME:** *Saturnalia (Alarorn Evilsbank)*

★061 Kevin Van-Cauter
5 Penn Road, Park Street, St Albans, Hertfordshire AL2 2QS
GAME: *Saturnalia (Bronto Balleaxe Schral)*

★062 Chris Collins
45 Eastbank Ride, Forsbrook, Stoke-On-Trent, Staffordshire ST11 9DS
GAME: *Vorcon Wars 75*

★063 Mark England
79 Carrfield Avenue, Toton, Beeston, Nottingham NG9 6FE
GAME: *Super Vorcon Wars 94 (MARCUS)*

★064 Richard Jones
133 White Dirt Lane, Catherington, Hampshire PO8 0TL
GAMES: *It's A Crime! 6 (Gang 56); Casus Belli 38 (Player 43)*

★065 Robin Appleton
9 Lime Avenue, Swinton, Manchester, M27 3FJ
GAMES: *Explorers Of Orion (Mantallas); Crasimoff's World (Mantallas Grave)*

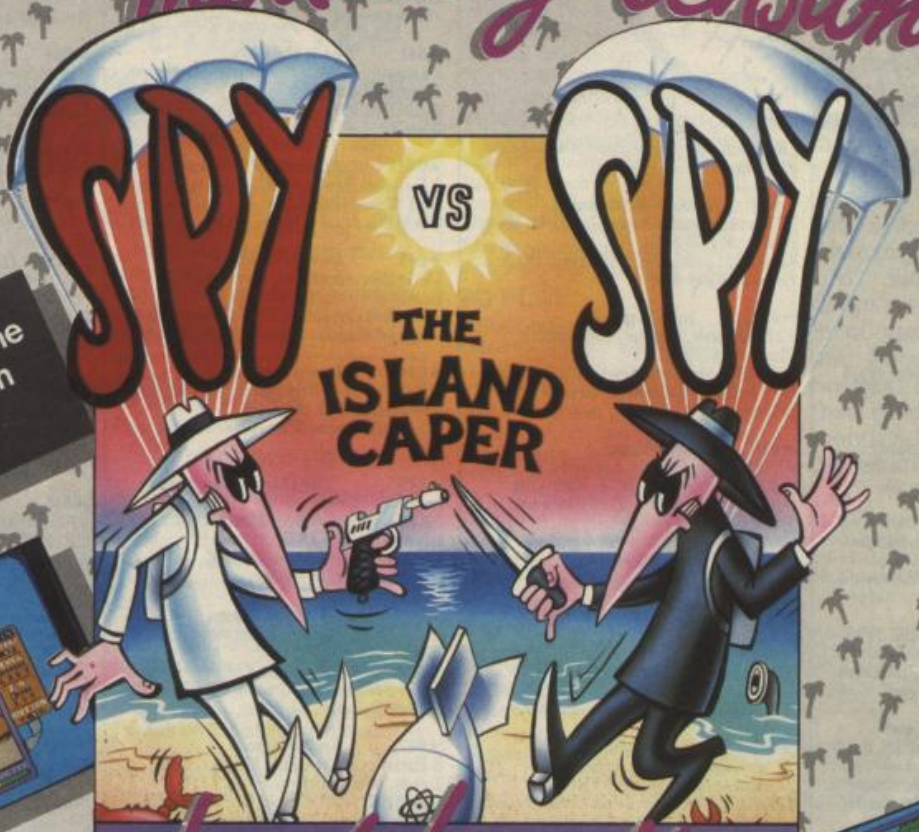
★066 Yat Kin Ho
41 Raynham Road, Hammersmith, London W6 0HY
GAMES: *It's A Crime! 5 (Gang 528); It's A Crime! 6 (Gang 379); Vorcon Wars 62 (TREGEL); Super Vorcon Wars 77 (STONOL)*

★067 Henry Shades
119 Bowfield Crescent, Glasgow G52 4HL (Prestel MBX 418829400)
GAME: *Vorcon Wars 70*

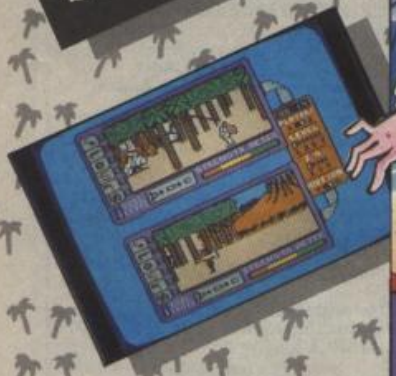
That's the complete DIPLOMATIC DIRECTORY to date. If you'd like your dippy details listed in these pages, simply send me a legible postcard with your name, address, and the games in which you play. The address is:

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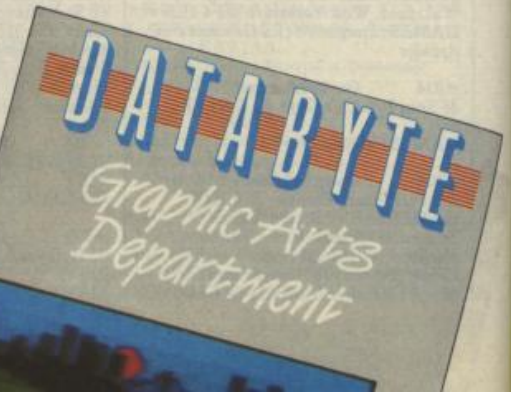
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FRONTLINE

with Philippa Irvine





FIGHTING ON TWO FRONTS

I'm hanging over the precipice of exams, but I've found time to start writing the ZZAP! wargames section too (it's called MANOEUVRES).

Even when the Commodore looked like it was going to outstrip the Spectrum, I bought a Spectrum because I preferred the software. On the whole I still do, though there's been a decline recently in the overall content standard of software.

There's a type of Spectrum software which is artistically superior to most things written and conceived for the Commodore. Or can be, or was.

The Commodore is a superior machine, yet most innovative and exciting games were developed on the Spectrum. It's partly because the Spectrum was there first, and absorbed the first enthusiasm and creativity; and because the very limitations of the hardware impose restrictions on the programmer and force him to work harder at other, 'deeper' elements of the game.

The Commodore is like a big budget for a glossy science-fiction film, and produces games like the *Star Wars* masterpieces. The programmer, free to spend millions on spectacular graphics and special effects, concentrates on making a surface impression. *Star Wars* satisfies on that level; it was fascinating to see REAL spaceships and space stations at last, just as fractal graphics are amazing to behold and thrilling to move around inside.

But the *Star Wars* series has a simple, stylised plot which doesn't matter because the films are a vehicle for the effects; and this is the case with a lot of Commodore games. *Eidolon* is beautiful, but the game evaporates to the touch.

The Spectrum is like a low budget for a TV series. Often it'll produce dry, tatty programs, but just as often the very lack of resources will inspire talented programmers to compensate and produce a game which satisfies the imagination. And a Spectrum game can have a visual restraint and artistry preferable to the Commodore look. Drab low-budget sets can build up a claustrophobic atmosphere on TV; the monochromatic wash of classic 3-D games like *Alien 8* and the elegant pencil-drawing animation of the *Dun Darach* games pleases me more than flying sprites and multicoloured explosions. Despite the inevitable tackiness when the Spectrum programmers try to pretend it's an arcade machine, there can be spectacular moments of visual imagery.

But this inventiveness, innovation and artistry have only given wargamers the *Midnight* games and R T Smith. And everything I've said refers to cassette-based games. Commodore disk-based games are in a different class, and I'd be glad to see some of the Spectrum spirit exercised on a larger database!

CONFLICTS 1

Producer: **PSS**
Price: **£12.95**

Conflicts 1 is a compilation of three games – *Falklands '82*, *Theatre Europe* and *Battle Of Britain*. There's no point in my giving full reviews of them – they've all been reviewed in CRASH (Issue 27/ April 86, Issue 30/ July 86 and Issue 37/ February 87 respectively). But let's put the collection in perspective. Is it worth paying the price of one new wargame for three old ones?

The lead track is *Theatre Europe*, one of the few wargames which have been conspicuous commercial successes; it's famous for its 'stand'.

Most wargames take a neutral view of their own ethics, despite the disclaimers that some companies publish in their rulebooks. *Theatre Europe* is a long-view representation of a war in Europe between NATO and the Warsaw Pact – you know, the sort that could happen tomorrow afternoon – which shows how quickly even limited use of nuclear weapons could lead to total devastation.

Commendable as this is, it means the game balances on a knife edge between statement and playability.

Still, *Theatre Europe* is very playable and horribly fascinating. It's a combox game, involving the movement of tiny units across a crowded map of Europe and the spending of resource points, and even has an appalling arcade sequence in the familiar PSS style.

The idea is to survive till the Americans arrive if you're NATO,







or to take over West Germany if you're the Warsaw Pact. Nuking enemy cities, or subjecting them to chemical attack, runs down the other side's supplies, but retaliation is inevitable. After provocation you'll probably find yourself on the receiving end of Fireplan Warm Puppy, which is *Theatre Europe* terminology for the complete destruction of Western civilisation.

The game has a few impressive atmospheric touches, like the ironically dispassionate Warcomp computer which checks your authorisation for launching chemical or nuclear strikes. Not many wargames can claim to be ironic.

All computer wargamers should have a go at this experience. It's hardly a long-term project, despite its three difficult levels, but in some ways it's inspired.

Battle Of Britain is almost new on the Spectrum, but it's been around longer on other machines. Stylistically it looks very similar to *Theatre Europe*, with a combox, tiny little units and an arcade sequence, but the gameplay is very different. It's a realtime simulation of the Battle Of Britain in 1941, when the Luftwaffe tried to storm the south of England and the RAF fought them off.

You can choose from a quick (and too easy) *blitzkrieg* game, an introductory training level, and a campaign game which takes place over 30 days, like the real battle. This lasts several hours, and must be a test of endurance.

A choice of speeds varies the difficulty, and the gameplay is a test of reactions and quick thinking. There's no time to do any strategic planning – it becomes a fast-moving, rather addictive puzzle. The programming is professional and the arcade sequence is marginally less awful than the one in *Theatre Europe*, though it has a time cutoff and so is no more than a trimming.

Falklands '82 is the turkey of the compilation. This was unfavourably reviewed, and caused comment on the morality, or tact, of bringing out a wargame based on such a recent conflict. But whatever your views on the ethics, *Falklands '82* is not a good wargame. Its orders system is clumsy and frustrating, its graphics are peculiarly weedy, and it's far too easy.

Conflicts 1 comes complete with its own rulebook: a cut-down, concise version of the original manuals. Sadly all historical and atmospheric material has been removed – but if you don't have any of the games, *Conflicts 1* gives fairly good value for money.

YANKEE

Publisher: **CCS**
Author: **K WRIGHT**
Price: **£9.95**

This historical simulation from the author of *Napoleon At War* is set in the American Civil War, and recreates the practical difficulties of the battlefield. Using much the same system as *Napoleon At War*, *Yankee* focuses on two battles, loaded as separate programs – Gettysburg and Chickamauga.

The American Civil War is probably best known through *Gone With The Wind* and other popular romantic portrayals; as a war, fought over issues and principle, it's probably not alive in the British imagination. This detachment means a computer wargame based on the war could easily be reduced to an exercise without atmosphere – particularly when, by presenting small-scale battle simulations, the game gives no sense of the overall shape of the war.

Yankee avoids this by taking a literal historical approach and backing itself up in the rules with detailed descriptions of the battles (I would have liked to see some general background as well).

The Battle Of Gettysburg took place over four days in July 1863 and Chickamauga over two days in September. Unfortunately there's no two-player option, and the gamer must take the Union side in Gettysburg and the Confederate side in Chickamauga. (The program's artificial-intelligence routine extends to the player's units too, so I can't see why there's no choice of sides.)

Landed with being General George Meade in Gettysburg, the player has command of six corps. The corps, of three divisions each, are under the command of generals with names like Sickle and Sedgwick. Corps command is central to *Yankee*, as it was to *Napoleon At War*. You can give separate orders to each division, but the game really works through the command unit; the other two units in the corps mimic its movement orders and throw themselves untidily into the fray.

But it's difficult to predict where all three units are going to end up if one of the divisions gets bogged down in difficult terrain or collides with another unit. And when there are two or three corps trying to attack a block of enemy units they're unlikely to arrange themselves sensibly. This can be very frustrating – but war really *was* frustrating.

The map isn't large – about three times the size of the TV display, the author claims – but it's clear and detailed, and fills the screen without the clutter of extraneous information. There are eight types of terrain, making up an interesting landscape which seems to be to the correct scale. It's easy to relate the size of the square 'counters' to the terrain features, which are helpfully illustrated in the rules.

Terrain is important to the gameplay, and most features of the landscape give an advantage to the defender (in Gettysburg the best place to defend is a wooded hill). This increases the variety and sophistication of tactics, enhances the realism and so helps generate that important and indefinable quality, atmosphere.

There are only three types of troops available: infantry, cavalry and artillery. The cavalry can move faster than the infantry units, but don't seem to have a dramatic advantage in combat. This lack of variety is doubtless historically justified.

Artillery units are not under the command of any corps leader and have to be moved independently; they're difficult to manoeuvre and fire, but the computer opponent is disturbingly adept at using them. They're also vulnerable to enemy attack and can be wiped out in a few turns.

The game operates on a simple two-stage turn structure. You give orders at leisure via a series of option menus, and there's then an action phase in which the orders are executed and combat is resolved. Combat occurs automatically between adjacent enemy units, and as in *Napoleon At War* strength is (crudely) knocked off 500 men at a time. It's possible to work out how many strength points any unit will take into combat, from their numbers, which can be checked in the





orders phase, and their morale, which gives bonuses in seven stages of cheerfulness from Excellent to Abysmal.

But you can't be certain which square or terrain your units will end up fighting from, or whether they'll be defined by the computer as attacking or defending. This element of uncertainty is nicely judged, between chaotic randomness and boring certainty. The combat is shown unit by unit, and it lacks in impact – 500 men go to their deaths in unspectacular silence.

Before the action phase starts, the player may get messages from the corps commanders in a touch of atmosphere-building (again, as in *Napoleon At War*). But soon the generals, whining for advice, become irritating and one's tempted to send them in against impossible odds just because they keep complaining about any odds at all!

Enemy units are hidden from view till they come within reconnaissance distance of the player's units. I find hidden movement disconcerting and unreal, and *Yankee* made me realise why: when the enemy side moves, the program doesn't show the 'out of sight' units but still scrolls to where they are on the map – so you watch the map shifting meaningfully about in blankness.

True, a real general wouldn't know where the enemy was, but he wouldn't have an omniscient view of the surrounding landscape either. The programming gaffe in *Yankee* underlines this.

But on the whole hidden movement is used effectively here; the reconnaissance scope of the units is wide enough to make sure you don't end up planning attacks against invisible regiments.

The rules are of a high standard, of content if not of presentation; the instructions explain them well, the two battles are described and set in context, and the designer gives an account of himself – which might make you more sympathetic to the game's idiosyncrasies!

Yankee has a deceptive complexity beneath a simple command structure and onscreen appearance. If you have sufficient self-control to restrict yourself to giving corps commands the game is very difficult – I was wiped out twice on the easiest level – but there is hope of improvement with practice.

The play is perfectly paced, and the two scenarios are very different – Gettysburg is defensive and Chickamauga is offensive, for a start. Though you can't choose sides, which is a limitation, *Yankee* should have lastability. It's certainly one of the best battle-scale simulations I've seen, and all wargamers – particularly those who like a traditional approach – should enjoy it.

PRESENTATION 90%
Free from tackiness in the rules and on the screen; the gameplay moves swiftly but considerately

RULES 91%
Excellent, apart from the physical format – detailed accounts of the battles, but no overview of the war itself

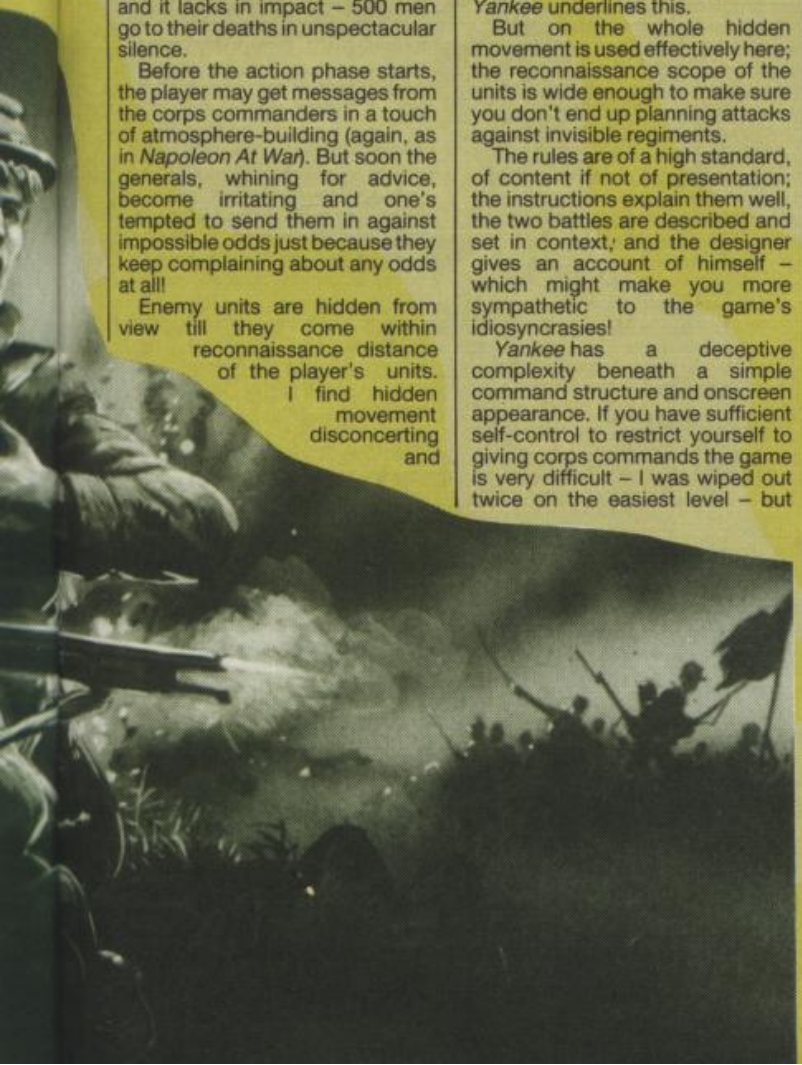
PLAYABILITY 89%
There are no interruptions or irritations; the battles are easy to follow and absorbing

AUTHENTICITY 85%
Factually it seems to be authentic, and in gameplay you too can experience the frustration of disorganised troops and whining generals

VALUE FOR MONEY 87%
Three difficulty levels and two scenarios – no choice of sides, though!

GRAPHICS 70%
Rather boring

OVERALL 87%
A complex and involving game, worth trying even if the American Civil War doesn't excite you





FORUM

TANKS FOR THE MEMORY

Dear Philippa

It is 4 April 1943. It's raining again. It's rained for the last two days now, and that's brought the push to Tunis to a standstill. We have been pushing forward since we arrived in early November 1942 and we have suffered severe losses all the way. The worst moment was when we were almost cut off because of a surprise attack from German infantry and Italian tanks during an early push at Souk Arba. We suffered many losses and it was a relief to hear the Sixth Armoured Division are attacking the Axis flank with considerable success.

We're now supplying the First Infantry division and some independents to the north of us. We are positioned north of a town called Medjez, with the French divisions to our south covering the main divisions of tanks and infantry which are just ahead of us. The next attack will start when the weather clears tomorrow morning. That will mean more casualties.

How many more do our Joint Commanders think we can take?

Losses to date: 52,170 men, 233 tanks. Our total men in the field: 178,500, and tanks in service: 1,610. It must be said that the majority of these men are chasing Rommel out of Africa, but they are coming this way!

. . .

. . . the push is still continuing. It's now 20 April and we are just outside Tunis. The end is not far off for the Axis now. the losses have been staggering for both sides, but the Axis have come off worse. They do not seem to be able to replace their losses as fast as we can. Losses are men: 67,350, tanks: 283. Estimated Axis losses: 121,710 men, 419 tanks. Estimated Axis in the field: 140,490 men, 629 tanks.

The last few days were the most crucial. We lost the First Armoured Division to a suicidal attack by the Tenth Panzers backed up by an unknown Italian division. But this was an act of desperation by the Axis and Tunis fell the next day, 3 May 1943 – earlier than was forecast, but not before time. The losses are 83,310 men, 347 tanks. I cannot recall the losses of the Axis powers, but they were horrific, with about 20,000 men left in the battle zone.

It's celebration time after a successful campaign in *Vulcan*, by CCS. Tomorrow is another day and another encounter. Next time I'll conduct the Axis powers and maybe change history.

R Stevenson, Dunfermline

This dramatic account of Vulcan *impressed me, and for an interesting way of enjoying a wargame* ***R Stevenson*** *earns this month's £20 of software.*

PI

AN EXTREMELY TINY CORNER FOR THIS GUY WHO'S RUNNING A WARGAMES/RPG SOCIETY AT LIVERPOOL UNIVERSITY AND WANTS TO HOLD A CONVENTION EARLY NEXT YEAR

The problem is convincing those generous people who decide what grant our society is going to get that enough people are going to come to make it worthwhile.

I was hoping you might be able to put a bit in the magazine, asking people if they would be interested in coming. If so, could they write to me at the address shown below, possibly telling me what they'd like to see at the convention?

A two-page spread in full colour would probably suffice, or failing that a tiny little corner at the bottom of your letters page will do.

Kev O'Donovan, Liverpool University, Department Of Electrical Engineering And Electronics, Brownlow Hill, Liverpool

WOT NO OPPONENT RATING?

Dear Philippa

I have been interested in the comments you've made as a board wargamer about current computer wargames. (You don't always seem impressed!) I would like to read more of your assessment of the quality and 'intelligence' of the computer opponent, since this matters most in a computer strategy game.

Your recent review of *Vulcan* passed over this. I gained the impression that the player didn't find out where the computer's units were till he bumped into them. 'Hidden movement' is good up to a point, but taken too far just makes sensible strategic planning by the player impossible.

A M Wright, Halifax

This month I've decided to drop the 'opponent' rating; I agree that it's a vital part of what makes a good wargame good, but in the time I have to playtest a game it's impossible for me to get a fair idea of how well the computer opponent plays. To understand an artificial-intelligence routine you have to pit yourself against a game for long leisurely sessions, and if the routine is sophisticated and devious it's difficult to notice it. If the opponent is conspicuously stupid or inactive I'll still mention it in the main body of the review.

PI

Send your letters to: FRONTLINE FORUM, CRASH, *PO Box 10, Ludlow, Shropshire SY8 1DB.*



BRIEFING

I knew I was going to get into trouble for publishing a listing . . . **Anthony Bailey**'s *Chaos* editor has caused problems for **Hew Thomas** of Hereford. Huw eagerly typed in the listing published in CRASH Issue 39. Nothing happened . . . has anyone else had problems?

To confuse everyone, and stick my neck out further, here's a refinement of the editor (which enables you to change the names and characteristics of the units). **Chris Lee** of Langdon Hills has sent in a memory map which, when used in conjunction with the previous listing, will enable you to change the graphics too. Chris suggests turning *Chaos* into a futuristic game, and adds a plea – has anyone found where the percentages are?

CHAOS GRAPHIC MEMORY MAP

32551 Spell Cursor

32944 WIZ Sword 1, 2, 3
33040 WIZ Dagger 1, 2, 3
33136 WIZ Armour 1
33168 WIZ Shield 1
33200 WIZ Wings 1, 2, 3
33296 WIZ Bow 1, 2, 3

49981 Select Cursor
50013 Flying Cursor
50045 Aiming Cursor

60273 Cobra 1, 2

60339 Cobra 3
60371 Dead Bat
60403 Bat 1, 2, 3
60499 Dead Cobra
60531 Blob 1, 2, 3

60627 ??????
60595 Dire Wolf 1, 2, 3, Dead Dire Wolf
60723 Spectre , ??????
60787 Goblin 1, 2, 3, Dead Goblin
60915 Crocodile 1, 2, 3, Dead Crocodile
61043 Gr Dragon 1, 2, 3, Dead Dragon
61171 Vampire 1, 2, 3, ??????
61299 Faun 1, 2, 3, Dead Faun
61427 Lion 1, 2, 3, Dead Lion
61555 Gryphon 1, 2, 3, Dead Gryphon
61683 Elf 1, 2, 3, Dead Elf
61811 Horse 1, 2, 3, Dead Horse
61939 Orc 1, 2, 3, Dead Orc
62067 R Dragon 1, 2, 3
62163 Fire 1, 2, 3, 4
62291 Manticore 1, 2, 3, Dead Manticore
62419 Ogre 1, 2, 3, Dead Orc
62447 Unicorn 1, 2, 3, Dead Unicorn
62575 Ghost 1, 2, 3, 4
62703 Wraith 1, 2, 3, 4
62831 Bear 1, 2

63092 Bear 3, Dead Bear
63124 Gorilla 1, 2, 3, Dead Gorilla
63252 Skeleton 1, 2, 3
63348 Ogre? 1, 2, 3, Dead Ogre?
63476 Zombie 1, 2, 3, 4
63604 Harpy 1, 2, 3, Dead Harpy
63732 Pegasus 1, 2, 3, Dead Pegasus
63860 Eagle 1, 2, 3, Dead Eagle
63988 Hydra 1, 2, 3, Dead Hydra
64116 Rat 1, 2, 3, Dead Rat
64244 Centaur 1, 2, 3, Dead Centaur
64372 Giant 1, 2, 3, Dead Giant
64500 Gd Dragon 1, 2, 3, Dead Gd Dragon
64628 Dark Citadel
64660 Magic Castle
64692 Magic Wood
64726 Shadow Wood
67758 Wall
64774 Wizards 1, 2, 3, 4, 5, 6, 7, 8

THE NEW CRASH STRATEGY CHART!

Here it is folks, the chart you've been waiting for (your chance to engage in some strategic voting). Let us know your favourite five strategy programs, and enter a draw for £20's worth of software and a fabulous CRASH T-Shirt. Five runners-up will also receive a T-Shirt, so post those coupons today.

The following are my five favourite strategy games in order of choice . . .

1. .....
2. .....
3. .....
4. .....
5. .....

Name .....

Address .....

.....

In the unlikely event that I win the £20's worth of software, I would like the following games (not necessarily strategy!)

.....

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Completed coupons should be sent to *PO Box 10, Ludlow, Shropshire SY8 1DB*, to be received no later than 15 July 1987.

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► Pig shots: left to right, Patrick Gallagher, Mark Rodgers and Tony Husband of *Oink!*

Former CRASH Editor GRAEME KIDD pulls on his muddy old Doc Martens to interrogate the men behind the pigs at *Oink!*, the anarchic best-selling comic soon to be a CRL game. It's a farmyard out there . . .

FOUR LEGS GO

OINK! OINK! OINK! OINK! OINK! OINK! OINK! OINK! OINK!

FOR DECADES, children's comics have been barrelling along the rut worn deep by *The Beano*, *Dandy* and their companions. Okay, we've had *2000 AD* for ten years now, but that's always been a rather different kettle of mayhem.

But last year a radically different publication surfaced nationally – *Oink!*, ironically backed by IPC, a leading publisher of traditional comics.

Oink! may be distributed traditionally by IPC, but it's edited by a trio of cartoonists, escapees from mainstream comics such as *Whizzer And Chips* and *Buster*. They share an anarchic view of life and treat the clichés of classic comicdom with a marked irreverence.

Published every two weeks, *Oink!* has stormed the market from its Manchester offices, and after just a year is selling almost 100,000 copies of each issue. The summer special has already appeared, an *Oink!* annual is printed and ready to enter the pre-Christmas fray in the shops, and CRL is about to launch a computer game based on *Oink!*. It's a success story that the comic's creators hardly dreamed of.

Oink! came into being almost by accident, after a chance meeting in a library. Most of the work is done by Tony Husband, Mark Rodgers and Patrick Gallagher. Tony explains how it all began:

'The comic started when Mark Rodgers met Patrick – they both worked for *Whizzer And Chips* and Patrick used to work in the public library with all the comics spread out. Mark was in the library one day and saw this, so he went up to Patrick and said 'Do you write comics?'. Patrick said 'Yeah', and Mark said 'Well, so do I'. They both worked on the same comic and they didn't even know each other!'

Tony had known Patrick as a cartoonist when he worked for *Whizzer And Chips* and *Buster* and they both found it was all a bit bland . . .

'We didn't enjoy doing it and thought that comics had got into a big rut – for the readers, anyway. We were sitting around in Mark's flat one night when we started throwing ideas around for our own comic, never thinking we'd get that far – we thought we might manage a fanzine-type thing, just as a release of our energies.



OOD

'We got this dummy together when we saw the ideas were good, and started drawing a few things up. I rang up a couple of artists to see if they would be interested in having a go – no money, just to see how it would go. We just wanted to get some fresh blood into it. We didn't even think it would come off, really, because it was quite different.'

Pigs are good fun – they're rough and ready and a bit dirty, like kids

Tony describes himself as 'a single-gag cartoonist', and his work for *Private Eye* and *Punch* put him in contact with other adult-oriented cartoonists like Banx and Haldane – associations which proved very useful for *Oink!*.

'It was just a matter of ringing them up. I don't think people like that had ever worked in comics before. I don't think they would have done it unless it had been something as fresh as *Oink!*. What we said to them was 'Just do what you want, just enjoy it', because I had worked for comics and didn't enjoy it, I knew how restricting it was. They sent us some excellent stuff, and that encouraged us to push ahead.'

A phone call to IPC encouraged the team further – the publishing giant asked for a copy of the dummy.

But when the dummy arrived at IPC, opinion was divided. 'Some people there thought it was too risky to do it,' Tony recalls, 'but the managing director, John Saunders, and John Painter at IPC were really keen and pushed the project through; they had the courage to get it onto the shelves.'

The original plan had been to produce a 24-page issue, probably on a weekly basis, but the go-ahead was finally given for a 32-page, fortnightly comic – which suited *Oink!* Publishing, as they called themselves, because it gave them a little more time to put each issue together.

Oink! features regular characters interspersed with one-off spoofs of traditional comic characters, photo-love pastiches and daft 'Madvertisements'. Pigs play a large part – the imaginary character Uncle Pigg 'edits' *Oink!*, and stories involving pigs and their endless war with the evil butchers permeate the comic; piggy posters featured in early issues, featuring characters such as Hambo. Join the *Oink!* Club and you receive a 'lucky butcher's-foot key fob' amongst the goodies.

'We thought pigs would be good fun,' Tony explains, 'they're a bit rough and ready and a bit dirty – a bit like kids, really.'

Rather than go for vulgarity, *Oink!* has been characterised by a rather black sense of humour. Take *Doctor Mooney* ('he's completely loony'), or *Pete And His Pimple* – Pete grows a huge zit on the end of his nose, larger than a beach ball, for the start of each episode. The zit is inevitably burst in the last frame of the strip, covering bystanders in pus and giving Pete temporary relief.

And Burp The Alien continually excretes dubious substances from his eyestalks and has trouble coralling his internal organs, which pop out for little adventures all of their own . . .

Tony outlines the original strategy: 'We decided to have a number of regular characters so that the readers could identify with them, a lot of one-offs to keep the comic fresh, and a lot of silly gimmicks.'

A year later, many of the original characters are still there, including Burp, Harry The Head, Horace (Ugly Face) Watkins and Hadrian Vile.

'We still like the variety of one-off stories,' says Tony, 'and love doing spoofs – we like taking the mickey out of the *Beano*. You know, 50 years old and still the same characters . . . that's great, that!

'We did a story about one strip produced by D C Thompson *(a major comics publisher)*, which I don't thing they liked very much. We did a Desperate Dan strip and one about two gangs of kids who are always fighting that's always very badly drawn. We did a spoof on that, and I don't think they were too happy about it. It's nice to stir them up.'

And experience has shown that IPC's early fears weren't totally groundless. W H Smith has moved *Oink!* out of the children's section, and the comic caused a bit of a stir shortly after its arrival.

'We got complaints from Christian Aid, Youth Groups, irate parents . . . ' Tony admits. 'Well into doing the comic, we did a story called *Janet And John*, which went to the Press Council. Somebody complained about it and the Press Council had to make judgement. They came down on our side with something like 'tasteless, but there's no reason why it shouldn't be printed'.

'One mother said her young lad loved the comic and collected them all. He'd shown her various things and she laughed. He joined the Pig Pack and got all the freebies.

'When she saw the *Janet And John* thing, she said she was so disgusted that she tore all his comics up and burned all his freebies, saying the effect on him of reading that *Janet And John* thing wasn't right for children.

'I thought the effect of a mother ripping up the thing he actually loved and burning all his freebies was a hell of a lot more frightening for him than reading a spoof comic strip.'

The criticisms were used to good effect . . . 'We knew the comic was a bit antiestablishment and a bit anarchic, so we invented Mary Lighthouse the critic to sort of put the parents' point of view, but all the time Uncle Pigg, the Editor, could always slap her down, pour swill on her or whatever.'

Apparently Mary Whitehouse, the antipornography crusader, is less than amused. A spokeswoman for her Viewers' And Listeners' Association said they are reading *Oink!* closely for possible libel.

No-one ever used to check The Bash Street Kids, Lassie, The Numbskulls and all their contemporaries for libel. Perhaps childrens' comics have finally come of age with *Oink!*.

THE GAME OF THE PIG



YOU'VE heard of the game of the film, book etc . . . now comes the game of the pig! Due from the CRL pigsty soon is *Oink!*, based on IPC's top-selling cuit children's piggy comic.

You play the part of the editor, Uncle Pigg. All your staff have gone on to pastures brown and you have three days to finish off the last nine pages of the comic before the deadline – midnight on 6 July.

Three of the pages have to be completed specifically by you, and the other six pages will come in slowly, depending on your own progress.

Now, *Oink!* is a high-tech magazine, so the articles are compiled by the writers playing computer games. And the further you get in the game, the more of your article is written *(not a bad idea – Ed)*.

Each of the three pages you have to fill features a different game. The panels of *Pete's Pimple* are filled as Uncle Pigg plays through 12 different spiced-up *Breakout*-type screens.

Rubbishman (a down-to-earth Superman) requires the porky proprietor to control Rubbishman flying round the litter-ridden streets of six different zones – the more zones you complete, the more of the article you've written.

And the *Tom Thug* page sets out another piggin' problem for the swill-sucking boss. All is not as easy as it may seem in the sty – Mary Lighthouse, the well-known moral crusader and pork butcher's friend, is trying to put a stop to all these piggy matters. Get the magazine out on time or get the sack.

It's all up to you in CRL's latest game, set for release on the Spectrum in 'a few months' time'.

frank's guide to computers

by ace reporter frank topbottom

Crash Competition

the oink oink comp.
crash,
p.o. box 10,
LUDLOW
shrops.
SY8 1DB.



written and drawn by Frank topbottom in 1987.

*e.s.p.= "everso special powers."

hello, "**crash**" readers..... i bet a lot of you out there are wondering just what are the best computers to keep! (and don't say ya're not... because i have e.s.p.* so i know you all are.... so there). anyway.... to help you decide i have put a **top five** of computers together... plus a lovely competition to make you all happy!

top 5 computers

5	the very big super cray MKIII
4	a mega amiga
3	come through the door 64
2	the one with rubber keys
1	spectrum 3

o	i	p	k	o	o	o	i	n	p
p	i	g	s	s	i	i	k	n	o
g	k	n	i	n	n	n	n	i	r
c	n	n	k	o	k	i	o	o	k
r	o	i	n	u	k	i	i	o	e
l	r	o	o	t	n	n	n	o	r
c	i	i	k	k	k	k	k	i	k
r	n	k	n	n	n	n	n	n	s
a	k	n	i	o	i	i	i	k	o
s	p	k	o	i	n	o	o	o	i

how about this comp. which is about a game which is about a trade paper for pig keepers called "**oink**" or something. seems like a funny idea, but CRL say its a right root... and to prove it, the winner gets...

1) original artwork of the oink game inlay
2) a t-shirt with 'oink' on it.
3) a 'crash' t-shirt
4) a 'oink' mug
5) a copy of the game 'oink!'

and for 5 runners up, there's 'oink' t-shirts, mugs and games.... and for another ten unlucky people theres a copy of the game.

what you have to do is see how many times you can make the word 'oink' out of the wordsquare, upwards.. downwards... and diagonal (clue: it isn't T)

Write down the number of times on a post card (or back of an envelope) and send it to my address above to get here before 30th July latest! and don't forget your name and address.

TECH NICHE



C FOR HARDWARE A FOR SOFTWARE

JON BATES investigates the FB01 tone module and an essential editing program

A fair-sized chunk of your correspondence (always welcome, but I can't guarantee a personal response . . .) puts the emphasis firmly on budget. In other words, how little do you have to spend to rival Messrs Jarre and Gabriel? Well, a nice way to extend your Spectrum is to start with a tone module.

A tone module/generator is in effect a sound synthesizer or sampler without any visible means of playing: a keyboard of sorts. It depends on a midi signal to stir it into life, sent from either a separate keyboard or a sequencer.

What are the advantages? Well, a tone module is usually cheaper than an equivalent synthesizer with a keyboard. There are fewer bits to pay for, so you get a little more for your money. And because tone modules are remote-controlled, they're more flexible.

Unless you have something like the Cheetah MK5 Keyboard you'll only be able to play and write for a tone module from the Spectrum, but if your keyboard skills are limited that's not too bad.

And there are programs that allow you to write music in either graphic or traditional notation, such as Ram/Flare *Music Machine* (which will give you sampling as well) and the Cheetah *Midi Sequencer*.

You can connect the midi-out port on the 128 to the module and write your tunes in the rather laborious code it requires. But without an interface your control of the module will mostly be through midi channels, note commands, patch changes and velocity commands.

I'm sure that with enough devotion you could write some software – but it would be limited, as some jerk at the design stage forgot to provide a midi-in option. It'll be difficult to use a tone module from the 128 without an interface.

Tone modules come in a variety of shapes, sizes and costs. Often when a synthesizer is launched, the tone module follows a few months later – the same synth, but without the keyboard and with far fewer buttons on the front. On closer inspection you'll find the buttons are multifunction, and though a bit fiddly they'll allow you access to most of the synthesizer.

Points to ponder if you're thinking of splashing out on a tone module:

1 Can you create your own sounds from scratch on it?
2 If not, has it got lots of presets that are useful to you, or are there sets of voices you can purchase and stuff into it?
3 If you already have an interface, is there programming software available for your interface and that tone module?
4 Study the midi specifications. Can you produce more than one voice at a time? How many channels will it work on simultaneously? Is the manual forthcoming about data dumps via midi? In other words, is it an open book or a major headache to control? Some manufacturers are very helpful and even provide a separate midi guidebook for their products.
5 When considering programming software, bear in mind that most digital synthesizers and samplers are far easier to program from a graphic interactive screen display then from the minuscule onboard LCD.

Prices start from around £275 for a Yamaha FB01 or Casio CZ101 and go through the £700 bracket for basic samplers; the complete TX rack system from Yamaha would start at several grand and end with you handing your chequebook back to the bank manager and wearing out sets of kneepads while craving forgiveness. Watch this space for details of samplers and synths as they appear.

The FB01 looks a fair bet, you might think. It uses the FM system of synthesis. (And if you haven't heard of this, where have you been for the last four years?) It comes with 256 presets and lots of voice configurations, which means you can talk to it on any eight midi channels, and provided you ask for only eight notes in total you can ▶

```
NAME : cameron   FILE TYPE : 0

  N  CHANGE NAME
  T  CHANGE TYPE
  V  VIEW WAVEFORM
  P  PLAY FILE
  D  DRAW ONTO WAVEFORM
  M  MATHEMATICAL
  S  SPECIAL
  R  RETURN TO MAIN MENU
```

```
FILES :
< 1.  cameron   0
> 2.  ???????   0
  3.  ???????   0
  4.  ???????   0
  5.  ???????   0

SPECIAL MENU :
  B  BACKWARDS
  C  COPY FILE
  A  ADD FILES
LENGTH OF DATA : 2K-2048 3K-3072
TAKE DATA FROM 1
```

```
NAME : cameron   FILE TYPE : 0

X 681          Y 0
```

split them up pretty well as much as you want – assigning pitch bend and number of notes per voice, and then committing the setup to a separate memory. Hence the term 'voice configuration'; there are 20 in all.

The output is in stereo with limited panning facility.

Lots to play with – but you can't make up your own voices from the FB01's controls, and it has the usual disadvantage of a tiny LCD display which allows you to peek at only a very small part of the settings and voice banks etc at a time. And you can't name any of the voice configurations you have created.

That is, it had these problems till now. Behold the *FB01 Editor*, written by Martin White (originally for himself) and used via our adaptable friend the XRI interface. For £29.95 you get a very comprehensive voice editor, voice configuration display and three banks of new sounds.

Usually when programs have been developed for the personal use of the programmer there are great gaping holes in them. Not so here – it's easy to use and well thought through, and the manual is helpful.

On loading you get the menu: Voice Bank Editor – Voice Editor – Configuration Display – Save And Load.

The Voice Bank Editor dives into the FB01's voice banks, arranged in seven groups of 48, and lists them. You can reorder these, copy, delete or rename them and then dump them back into the FB01. You can select one voice and take it away for modification, or start from scratch to create a voice in the Voice Editor.

You hear the voice by playing on the numeric keys – access to all octaves is available through an octave-shift key. But for some reason it kept jumping back to Octave Three instead of the octave I was working on when fine-tuning the sound – which could be bit aggravating when you're editing a bass sound, say.

There is a facility to alter the velocity sensitivity and hear the result – very useful, this, as many sequencers will transmit individual note velocity. You can't play the voices from another midi device/keyboard at the same time as you're editing on the Spectrum, but that's a minor problem.

Sound editing is done numerically. I find this a pain – I like to have bar graphs and waveforms in front of me, as I respond to visual images better than to rows of numbers. But it was pretty easy to use, though perhaps it should display the algorithm shape, critical to the way sounds are edited. (The manual has the shapes, at least.)

You can name your new voice and put it anywhere you like. The FB01 displays 'Dump Received!' when any information is transmitted to it. It's all very easy to use even for someone who hates numbers.

Configuration Display shows you graphically what's going on as you assemble or swap voices and assign notes and midi channels to them. The configurations are created using the front-panel controls of the FB01. You can also put a name to the configuration, which is far better than the anonymous 'user 1' that would otherwise appear on the LCD.

There's also an option which will convert voices either way between a DX100, 21 or 27 and the FB01 – a thankless activity which takes hours to do manually. The conversion feature has been lacking in other Yamaha voicing programs.

The voices that came with my review program were very well thought out and covered a wide range from ethnic instruments to percussive sounds – useful additions to anyone's sound library.

Save And Load is to tape, micro drive, or Opus One disk.

If you've been uncertain about Yamaha's low-cost tone module, I'd say this program makes the prospect of adding an FB01 much more favourable. A for effort, A for results. If I were the author I'd try flogging the FB01 and programmer as a package . . .

XRI Systems will supply you the goodies if you contact them at *10 Sunnybank Road, Wylde Green, Sutton Coldfield, West Midlands B73 5RE* tel: 021 382-6048.

PS The Casio CZ101 programmer, also from XRI, was reviewed in these hallowed pages back in Issue 38 (March 1987) – make a comparison.

Next month there'll more suggestions on keeping the costs down and the quality up, and I'll answer a few letters (honest!).



TECH TIPS

M-M-MEAN MACHINE

SIMON N GOODWIN, our man with a middle initial, samples some sampled sound

IN RECENT ISSUES I've dispensed tips for Cheetah's Sampler and SpecDrum, but I've neglected another popular peripheral – RAM Electronics's Music Machine, which Jon Bates reviewed in November (CRASH Issue 34), designed by a group of ex-Sinclair engineers. Several of you have written asking for **Music Machine** tips, so here goes!

To start with, a few POKEs for the Music Machine software. Enter these by loading the program and pressing I at the main menu to get back to BASIC. Type in the POKEs and use RANDOMIZE USR 27000 to restart the program.

The Music Machine program looks pretty, with its flashing boxes and elaborate screen wipes whenever you select an option, but it's not long before these become an irritating waste of time. Al Straker of the Music Machine User's Club has sent in two POKEs that speed things up.

POKE 33238,0 accelerates the box flashes. You can use any value between 0 and 255: the normal value is 50, and the smaller the number the faster the effect.

The screen wipe is even more slothful; use POKE 33745,201 to get rid of it.

The Music Machine includes a MIDI (Musical Instrument Digital Interface) port, though RAM's software makes only limited use of it. In theory, every note or chord sent through a MIDI system can have an associated velocity. Good electronic keyboards can measure how hard you're bashing the keys and send an appropriate velocity signal to the synthesizer, which alters the volume and tone of the sound to suit.

The Machine doesn't let you put velocity information into your recordings – it just plays everything at an 'average' velocity of 64. If you change this you can alter the tone of many synths. POKE 42204,127 selects the maximum key velocity, and POKE 42204,0 sets the minimum. You'll need an alternative MIDI program to set the velocity of notes individually.

Al's club publishes a magazine called *RAMM!* for Music Machine-owners. The Music Machine manual promises lots of new software from RAM themselves, but they've rather short-sightedly scrapped that idea, and they're encouraging other people to do the work instead. Luckily there's a lot of interest, and *RAMM!* is the place to find out what's going on.

RAMM! is published every two months; a year's subscription costs £6. For a subscription or further details write to **Al Straker** at *19 Sandringham Road, Willesden, London NW2 5EP.*

EASY CONVERSION

The Music Machine contains a sampler, so you can record your own sounds – but Cheetah publish good, professionally recorded drum sounds for the SpecDrum. And after much experimentation I've managed to convert SpecDrum files into Music Machine format.

The Cheetah samples come on cassette, at the very reasonable price of £5 for each kit of eight sounds. One side of the tape holds the sounds, collected into one big file, and the other side contains a Kit Editor which lets you extract individual samples. My conversion routine works with one sample at a time, so that you can mix and match RAM and Cheetah sounds.

Type in the program and check it. When you type RUN the program prepares to load a single sample file created with the Kit Editor. After loading the name appears on the screen, and there is a 20-to-30-second pause while the data is converted.

A message appears when the program is ready to SAVE a Music Machine file. Start the tape recorder, then press any key.

To use the sample, load the Music Machine software and delete some of the existing samples to make room for new ones. Samples from SpecDrum positions 1, 5 and 6 use 108 milliseconds of space; the others take 162 milliseconds.

Select the Load/Save menu, and press 1 to load a new sample. Just press ENTER when you're asked for a filename, and play the tape generated by the conversion routine.

ROUTINE ADVICE

As usual in TECH TIPS, the routine is the minimum required to do the job properly. It works on any version of the Spectrum, from 16K to 128K. It's up to you to add fancy graphics and filing options if you

```
100 CLEAR 26767: REM (C) June 1987 Simon N Goodwin
110 FOR X=26768 TO 26802: READ C: POKE X,C: NEXT X
120 PRINT "Play Drum tape.": RANDOMIZE USR 26768
130 LET T=PEEK 26803: LET PG=8+4*(T=130 OR T=132)
140 POKE 26771,190: POKE 26774,0: POKE 26775,PG
150 POKE 26777,255: RANDOMIZE USR 26768

160 FOR X=26804 TO 26810: PRINT CHR$ PEEK X;: NEXT X
170 FOR X=26814 TO 26814+PG*256: POKE I,(PEEK I)-128
180 NEXT X: PRINT ": tap a key to SAVE.": PAUSE 0

190 POKE 26780,194: POKE 26781,4: POKE 26771,161
200 POKE 26797,PG: POKE 26775,0: POKE 26774,17
210 POKE 26777,0: RANDOMIZE USR 26768: POKE 26803,0
220 POKE 26811,0: POKE 26812,0: POKE 26813,PG
230 POKE 26771,178: POKE 26774,12: POKE 26775,PG
240 POKE 26777,255: RANDOMIZE USR 26768: STOP

500 DATA 175,221,33,179,104,17,8,0,62,0,55
510 DATA 205,86,5,245,193,201,4,83,112,101,99
520 DATA 68,114,117,109,70,88,12,0,0,0,0,0,8
```

Converting SpecDrum samples to Music Machine format

like – my aim is to keep copy typing to a minimum.

There are quite a lot of magic numbers in the program, and you should SAVE it and check it carefully before you try it out – if you let a typing mistake slip by it's quite likely your Spectrum will crash.

The first part of the routine copies a small machine-code function and a dummy file header into reserved memory. The function is used four times, to read and write the cassette files. The returned value is not checked by this version, but the result 147 indicates a good load and anything else signals a tape fault.

Each file has two parts: a header, to say the name and type of the file, and a data block containing the sample.

Cheetah use an eight-character header. The first byte indicates the file-type, as explained in past issues of CRASH, and the next seven characters make up the name of the sample. The length of the following data-block is either 2K or 3K, depending on the file-type.

Music Machine files are more elaborate. The header is identical to that of a standard Spectrum CODE file, but the file-type is 4, rather than 3. The header consists of 17 bytes: a file-type, ten characters of filename, and three two-byte values.

The first value is the length of the subsequent data-block. The second is the address from which the data was saved. The Music Machine ignores this value when loading, so there's no need to set it. The last value is only used for BASIC program files; it can be safely left empty.

The second part of a Music Machine file contains the sample name, used on screen menus, and the sample itself. The sample name doesn't have to match the filename; my routine gives one name, 'SpecDrumFX', to all files it creates. The SpecDrum filename becomes the Music Machine sample name.

A Music Machine data-block starts with a two-byte value one greater than the length of the sample name. The characters of that name follow. Then come a zero byte, the length of the sample, and the sample itself.

This conversion is enough to make samples load, but they sound distorted. The problem is that Cheetah and RAM use different schemes to store the sampled data.

RAM samples use a list of values describing the graph of the wave. These are the numbers that are read from the analog-to-digital converter when the sample is recorded.

Cheetah samples consist of a list of measurements that indicate how far the sampled level deviates from the middle of the graph. This sounds daft, but it's very convenient when you want to replay several samples all at the same time. You can just add up the values, using signed arithmetic.

RAM has to subtract an offset every time it combines samples, to avoid going beyond the range of values allowed by the digital-to-analog converter.

The loop in line 160 converts the sample from Cheetah to RAM format. It takes advantage of the way POKE automatically converts negative numbers into their eight-bit 'two's complement' signed form. This is what takes the time between loading and saving – it's an ideal routine to convert into machine code with an integer BASIC compiler.

RAM-IFICATIONS

I find the SpecDrum software much more flexible than the drum editor on the Music Machine, so it seems worthwhile to write a program that will convert samples the other way – from the Music Machine to the SpecDrum.

I've almost finished such a routine, and plan to print it in TECH TIPS soon. The main challenge is ensuring that the combined level of several home-made samples doesn't go out of the range allowed by the SpecDrum.

The Cheetah samples have been carefully adjusted so that they can't overload the SpecDrum and cause distortion. But the Music Machine lets you play samples in any combination, unlike the SpecDrum, so there's a small risk of overload when you play three drums at a time.

If you resist the temptation to play two bass drums simultaneously with one other sound, all will be well. Bass drums are at position 1 in every Cheetah kit, and are allowed a greater level than any of the other samples.

HARDWARE SWAPS

Massimo Pilla is a keen Music Machine user, with two computers and a SpecDrum as well. He's sent in a long list of POKEs to convert the Music Machine software to work through SpecDrum hardware. (It won't record samples or use MIDI, of course, as the SpecDrum has only a single output.)

Before typing in all his POKEs I tested the SpecDrum interface with the standard Music Machine software, and found it worked fine with no changes at all. Spectrum-hardware suppliers tend to keep things very simple, and it's common for signals intended for one device to trigger another.

Sadly, this trick doesn't work the other way – the SpecDrum program won't drive the rather more sophisticated hardware of the Music Machine. Doubtless Massimo will work out the POKEs!

CHEETAH CHATTER

CHEETAH are working on a £9.99 'professional' sample-editing package, which will let you tweak sounds and transfer samples from their Sampler to the SpecDrum.

For those upset by step-time and Sinclair keyboards, Cheetah promise a £150 full-size Syndrum rack which can replay any three drum sounds at a time. Humble SpecDrummers can make do with a £4.99 Rock Kit of eight new sampled sounds, which should be in the shops in July.

The SpecDrum now has its own independent owners' club, with the best-presented Spectrum tape magazine I've ever seen. *Sinewave*, run by Paul Bellamy, includes reviews, editorial, and drum patterns ready to load into your machine. It costs only £1 a copy, and is well worth a look if you've got a SpecDrum or are thinking of buying one. Write to **Paul Bellamy**, *Sinewave, 304 Walkley Bank Road, Sheffield S6 5AR.*

But despite all this activity, Cheetah face stiff competition from RAM Electronics and their Music Machine.

MEMORY CHECKS

IT'S OFTEN useful to know how much memory is available for BASIC while a program runs, or when you're developing a new program. As you might expect, there's a ROM routine to do this. More surprisingly, it's easy to call from BASIC:

```
PRINT 65536-USR 7962
```

will print the amount of unused memory available to BASIC on any version of the Spectrum.

In 128 BASIC it's useful to be able to check the amount of free space on the RAM disk. BetaBASIC 4 contains an improved CAT! routine which tells you the free space as well as the names of files, but you can get the same effect from normal boring 128 BASIC with a few PEEKs:

```
PRINT PEEK 23429+256*
PEEK 23430+65536*PEEK
23431
```

This prints the exact number of bytes of space on the RAM disk.

There is a 'fixed overhead' of 29 bytes for each file. This space is used to store the filename, location and similar details. For example, a 6912-byte SCREEN$ file would use 6941 bytes on a RAM disk. The length of the filename makes no difference.

UPDATE

■ I must apologise for a mistake in the Datel Snapshot article headed CANDID SNAPSHOTS in the last (June) issue of CRASH. The value at address 1427 is NOT 203, and that's not the right address to POKE to change the cassette-loading speed. The correct address is 1487.

Apart from that, the code works fine as printed. It should be possible to copy the Spectrum + 3 ROM into RAM, using a similar technique.

There are dozens of other useful places to POKE, once the Spectrum ROM is copied into RAM. The best source of information about these is Ian Logan's oft-quoted *Complete Spectrum ROM Disassembly*, published by Melbourne House.

■ Keen readers may remember an engineer who has found a neat way to overlay the entire Spectrum ROM with 16K of RAM. I've used his unit, and found it very impressive, but he's stuck at the moment because his kit required that the ROM be socketed, and it's soldered directly onto the board on late Spectrum models. But it should be possible to get around this: I'll keep you posted.

■ **Adrian Judd** wants to know where he can get a copy of the *Supercode III* toolkit, which I mentioned almost a year ago (Issue 31, August 1986). CP Software seem to have vanished, but Version 3.5 is available, with a new A4 manual, for £12.95 from **J Butler**, *222 The Avenue, London E4 9SE.*

■ A couple of people have asked where they can get the Spectrum 128 version of *Laser Genius* – an excellent tool for machine-code programmers, and one of the first programs to make good use of the extra memory in the 128.

I tried to phone the authors, Oasis Software, but their number has been disconnected. And Ocean, who distributed the package as part of their IQ range, say they've dropped it.

I hope a more enthusiastic publisher will pick up on the 128 version; if the owner of the package or a potential publisher is reading this, please write in and we'll try to sort out a relaunch.

FUTURE FILE

TECH TIPS has been squeezed for space this issue, so I've had to hold over information about Spectrum display-handling which several readers have asked for. That should materialise next month, along with reviews of new gadgets and programs launched at the Microfair.

BACK NUMBERS

Don't miss out!

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Despite warnings in last month's CRASH, Guru Denise tells us that some fiendishly intractable persons still haven't taken out annual subscriptions (despite it's being virtually compulsory). Last month she was merely upset, this month the Subscription Queen is white with fury (and Hell hath no fury like a woman's love scorned etc, etc).

But we prevailed in calming her down by getting her to play some games with Spectravideo's 'Joyball' controller. So here's the deal: You take out a year's subscription to CRASH (12 issues post included) for a mere paltry £15 (£22 if you live outside the UK), and forgiving Denise will send you, ABSOLUTELY FREE, a Spectravideo 'Joyball' controller worth almost £20. Can't say fairer than that – except that existing subscribers get a chance of a cheapo deal on the controller as well . . . read on . . .

FOR EXISTING SUBSCRIBERS

If you already have a subscription to CRASH, then you can get your hands on the amazingly globular shape of a Spectravideo 'Joyball' at the special CRASH Subscribers' price of only £4.95 (not subject to any other discounts). Just fill in the form, give Denise your Subscriber Number, and she'll do the rest. If your sub is running out in a month or so, and you would like to take advantage of the FREE offer, quote your Subscriber Number and indicate in the appropriate box which issue number you would like the extended subscription to run from.

CRASH

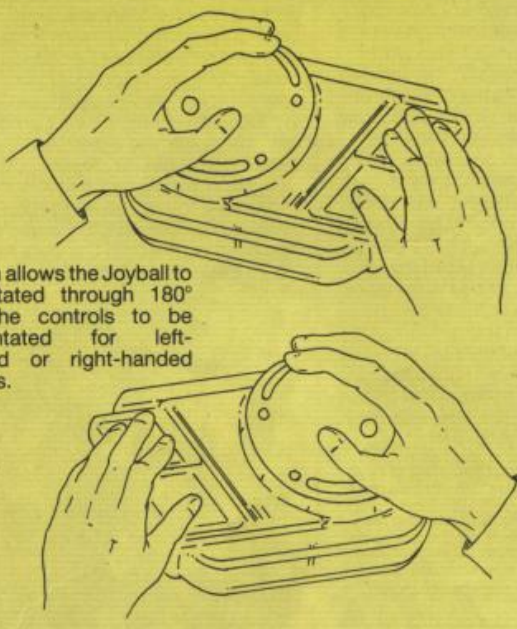
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DEAR GURU DENISE

This is simply incredible! Once again you've over-extended yourself on my pitifully crawling form. How can I ever repay you, O Guru Denise? Well, okay, in that case I'll just enclose my cheque/postal order for £15 (£22 outside Mainland UK) made out to **NEWSFIELD LTD**, for 12 issues of CRASH, and await my free Spectravideo 'Joyball' Controller, which I understand is in stock and just ready to go.

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WINNERS & PRIZES



GREMLIN GRAPHICS SUPERHERO

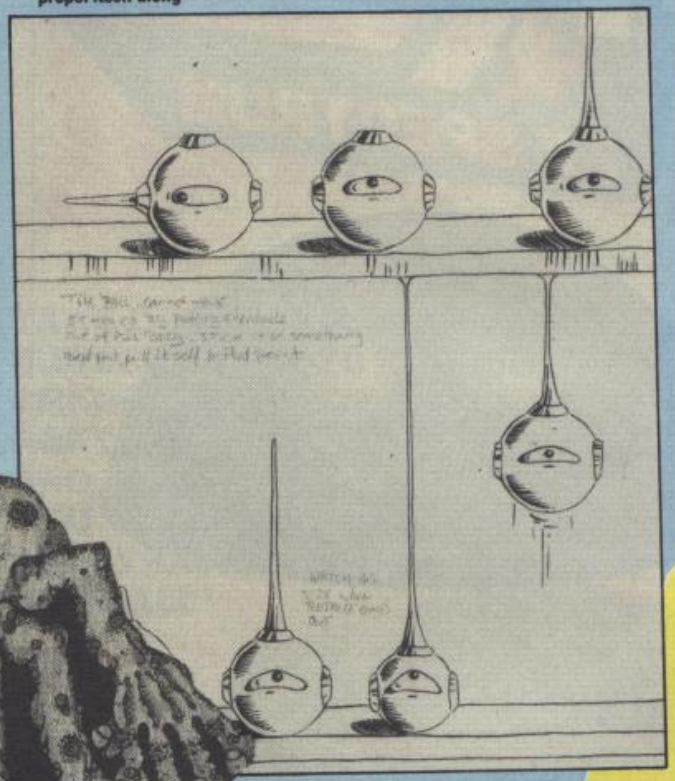
Invent a new computer hero, and a new Spectrum+3 could be yours – and what a difficult choice for an overworked Comps Minion too! I received some excellent ideas and some marvellous artwork. After much soul-searching the winning place goes to **Robert Prent** from Nijkerkerveen in Holland because (and I asked expert advice) his ideas seem very realisable, and the basic concept is really quite original (see pictures). Well done Robert. Your concept, and those of all the runners up, have been sent on to Gremlin Graphics for their appraisal, to see whether or not games can actually be developed from them.

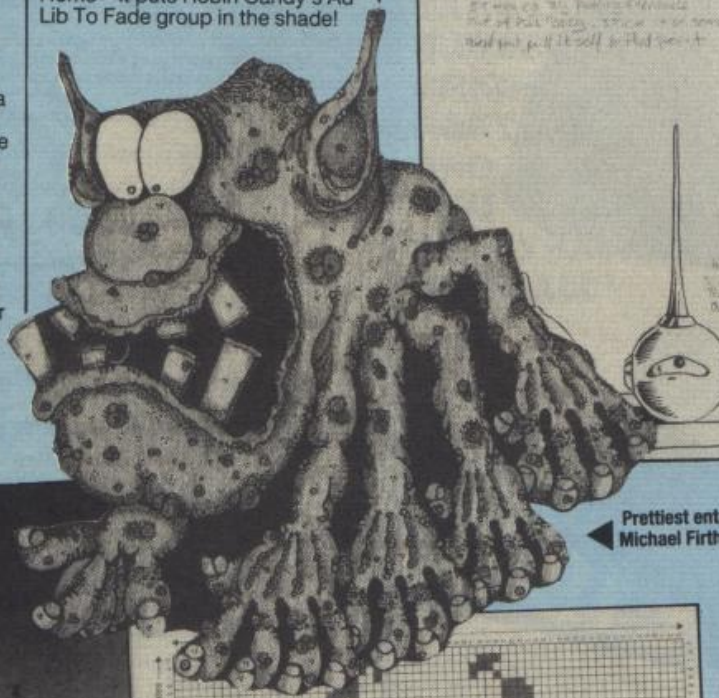
For the ten runners up there's a Gremlin Graphics T-Shirt each, and one game of their own choice from the Gremlin range; and they are:

James R Walker, West Yorks, WF12 9EW; Barry Priest, Glasgow, G46 7BU; Martin McKinney, Dorset, BH6 4DQ; Mark Watkins, Bucks, HP7 9BB; Ka Hung Man, Herts, WD2 3ST; Edgar Wright, Somerset, BA5 1UH; Michael Firth, Wolverhampton, WV6 9NP; Kevin Payne, Avon, BS18 2RZ; T McCrorie, Ayr, KA7 3XE; Kenson Low, Middlesex, HA0 3RG

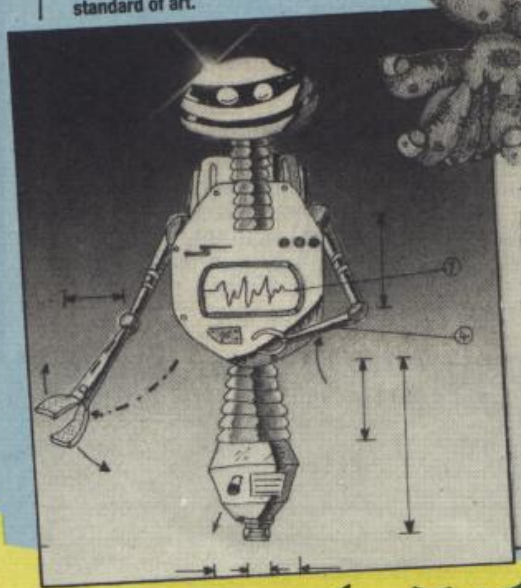
Additionally, there's a Special Mention (no prize though – sorry!) for **Chris Finch** from Bristol BS5 6EH for his gloriously impractical *Lord Scrump*, not so much for the idea and artwork, but for the wonderfully sick accompanying soundtrack (*Lord Scrump, sex symbol, all the girls just faint at his feet, never has the world before, seen a hero quite as sweet . . .*), music and vocals by Chris Finch and Lord Scrump, backing vocals by the Scrumptown Old People's Home – it puts Robin Candy's Ad Lib To Fade group in the shade!

Some sketches from Robert Prent's winning Gremlin Graphics hero entry, showing the ball-like character which exudes a psuedopod, which it attaches to surfaces so it can propel itself along





Gremlin runner up Martin McKinney offered us *Cyberoid* with a high standard of art.



Prettiest entry (ugh) was from Michael Firth, who gave us *Wretchie Grundle*, yeech!



We liked *Wobert Wabbit* from Kenson Low too.

THERE'S SOMETHING FISHY GOING ON

For the amazingly technical person able to spot which fishing rod actually had the fish (it was B of course), FTL have £100 to put towards a home aquarium, plus a copy of *Hydrofool*. And the man plunging under is none other than **Lee John Smith** from Hatfield, Herts, who is now officially a GUPPY.

25 Runners up each receive a copy of *Hydrofool*, and they are:

Lesley Reeves, Salford, M6 6DJ; A G Burton, Silsoe, Beds; Jokin Smit, 9312 PT Nietap, Holland; Paul Bowden, Woolwich, SE18 5HZ; Kevin Buddry, Twickenham, Middlesex; William Van Rest, W Midlands, B93 8DN; Harri Vayrynen, 20520 TKU, Finland; Jaron Collis, Co Down, BT20 3AQ; Scott Davies, Worcs, DY14 0NA; Darren Copson, W Midlands, DY5 2HD; Jonathan Ridehalgn, Markfield, Leics; Sergio Gingja, 2430 Ma Grande, Portugal; James Gleeson, Co Tipperary, Ireland; Leif Kornstadt, F-31770 Colomiers, France; Richard Wood, Co Clare, Ireland; F Vandbrabant, 2090 Stabroek, Belgium; Paul Dungey, Cornwall, TR10 8QJ; Carl Phillips, Gwent, NP1 4SQ; Jean-Luc Bernardi, London, W5 1AW; J C J Marshall, Argyll, PA27 8BY; Stephen Collins, Hants, GU14 8BG; Dan B Nielsen, 5210 Odense NV, Denmark; Simon J Harwood, Dorking, Surrey; Matthew Pierce, Stafford, ST18 0UB; Richard Burton, Cornwall, TR12 6RB

ONE WANTS ONE

Here was a little comp from CRASH itself – a chance for one person to win a complete set of CRASH up to date (and including the fabled Issue One) kindly donated by a mysterious reader. But there's a surprise, spurred on by such generosity, yet another reader donated his collection to the cause, so I'm able to award two sets. And they go to **Janet Nassim** from London SE12 8PA and **David Stutchbury** from Northolt, Middlesex. I'll be despatching them as soon as I can find enough wrapping paper.

CRASH TRIVIA COMPETITION

And another one from Ii'l old us and the amazingly generous Ferguson people. CRASH Trivialist and now Ferguson Colour Monitor and Spectrum+2 owner is **Andrew Sylvester**, who abides in Dudley, W Midlands. He was first out with the correct answers, which were: Joseph P Mandrell and Jin Kimas were companions of Cross, Starglider (128) got the highest rating, 1938 is the current and latest of Lloyd's typewriters, Graeme Kidd's first CRASH was Issue 19 (Aug 85), and Derek Brewster first appeared in Issue 4 (May 84). Angus Ryall did Frontline before Sean Masterson, *Sabrewulf* was the review CRASH never rated (previous month's *Nemesis* doesn't count, yah boo sucks), and CRASH's original full title was CRASH MICRO GAMES ACTION.

The runners up (CRASH clothing) are:

Michael Turner, Essex, CM9 8RQ; Kevin Earley, Surrey, CR9 2JA; Jason Mann, Herts, WD6 4TF; Neil McDowall, Wilts, SP2 7EG; Andrew Wilson, S Humberside, DN18 6AS; Robert Finlayson, Glagow, G53 7UJ; Steven Lakin, W Midlands, B63 4QZ; Bruce Hall, Edinburgh, EH14 1DL; Adam Hold, Herts, AL10 8EZ; Matthew Turner, Stockport, SK6 6PF



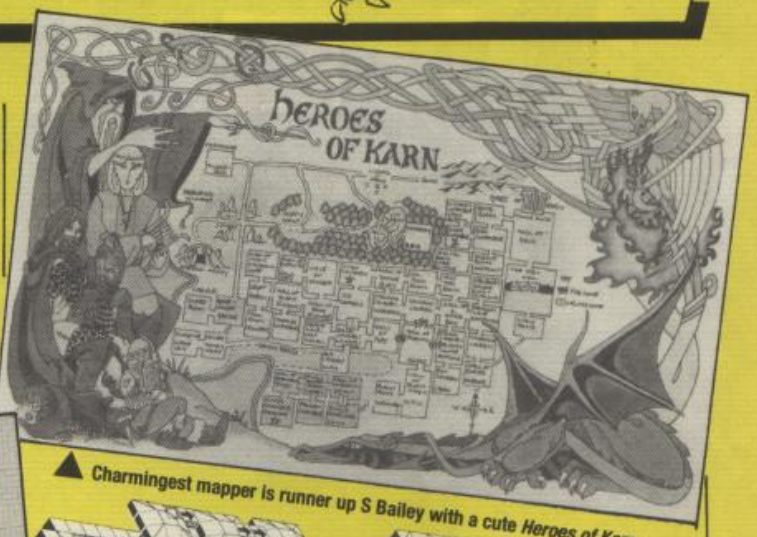


MAP COMPETITION

At last, I can announce the winner of the Ferguson TV Monitor and Spectrum+2 for drawing the best looking map. All the CRASH art department helped to select the lucky person, and he is **John Barrie** from Dundee, congratulations John. In fact John's map of *Village Underworld* was used in last month's Adventure Trail Supplement – Derek thanks you, don't you Derek.

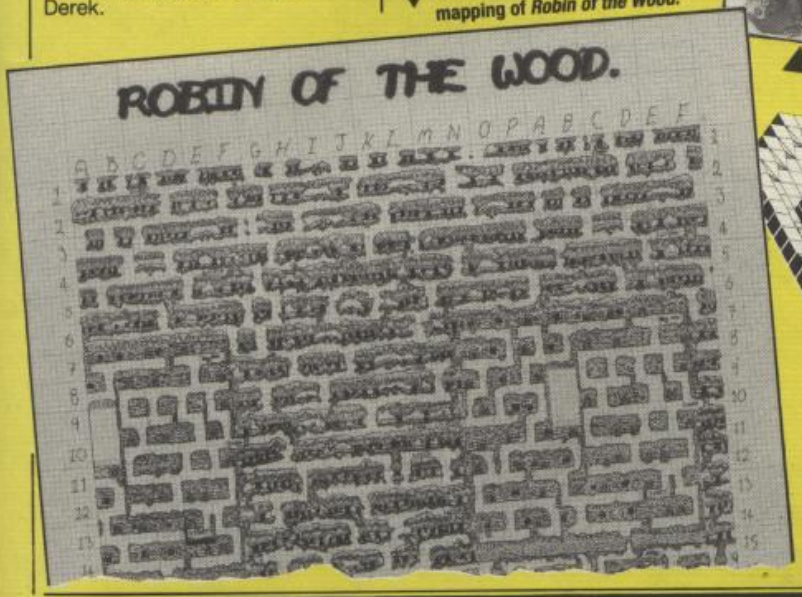
The runners up (and by the way Paul Dawson's *Monty* map can be seen in Playing Tips, pages 54/55), who each receive some CRASH clothing, are:

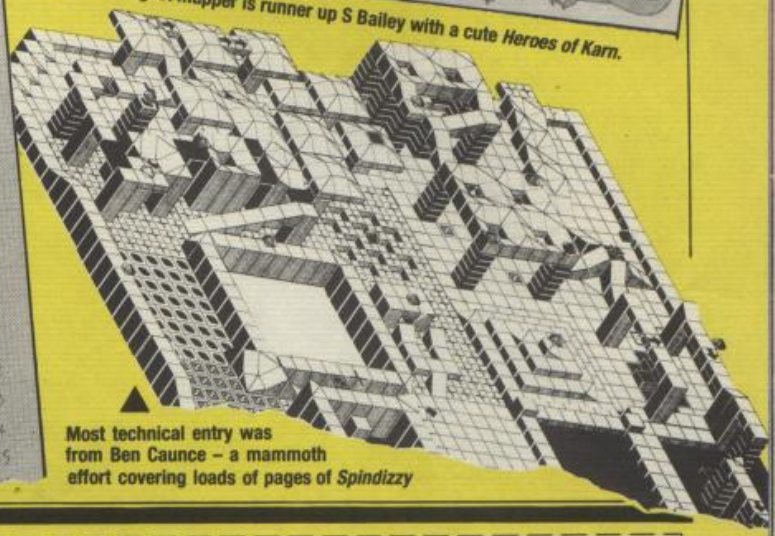
John Hay, Sutherland, Scotland; James Masters, Handcross, W Sussex; Paul Whittington, Hants, SO5 4EA; Neil Mills, W Yorks, LS22 4QX; David Bullock, Scotland, IV25 3LJ; Paul Dawson, Essex, CM18 6XB; Martin McKinney, Dorset, BH6 4DQ; Michel A Higton, Essex, SS5 4JY; S Bailey, Bristol, BS6 7NH; Ben Caunce, Staffs, ST18 0LY



▲ Charmingest mapper is runner up S Bailey with a cute *Heroes of Karn*.

▼ James Masters gave us an intricate mapping of *Robin of the Wood*.





▲ Most technical entry was from Ben Caunce – a mammoth effort covering loads of pages of *Spindizzy*

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My top five programs are:

TITLE	VOTE OUT OF TEN
1	
2	
3	
4	
5	

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My top five favourite programs in descending order are:

TITLE	PRODUCER
1	
2	
3	
4	
5	

THE LIVING

ON GOLDEN GATE

REALLY it's all done by pieces of string and mirrors,' confides Oscar-winning 007 Special Effects Supervisor John Richardson. John's cheap and cheerful philosophy may sound simplistic in this age of high-tech SFX – but, as he points out, what's the point of building a gigantic hydraulic rig if the effect you want can be achieved with two pieces of rope and some timber?

'If the simple rig goes wrong all you have to do is tie a knot in the piece of rope; if the hydraulics go wrong than it's going to take you a week to get them fixed.'

There's no arguing with his approach when you've seen the impressive results in films like *The Omen*, *Superman – The Movie*, *A Bridge Too Far*, *Ladyhawke* and, most recently, *Aliens*, for which he won an Academy Award.

John is the son of the pioneering SFX man Cliff Richardson (who worked on many classic films made at Ealing Studios in the Forties and Fifties, including *In Which We Serve*), so he grew up with a unique entrée to the world of film-making.

He spent his school holidays in a studio workshop and on location, learning his father's trade; when John was 13, one such jaunt took him to Israel to assist his dad on *Exodus*. And John's young son is following in the family tradition by working with his dad as an SFX apprentice on the creature feature *Willows*, currently being shot at Elstree Studios (and produced by George Lucas).

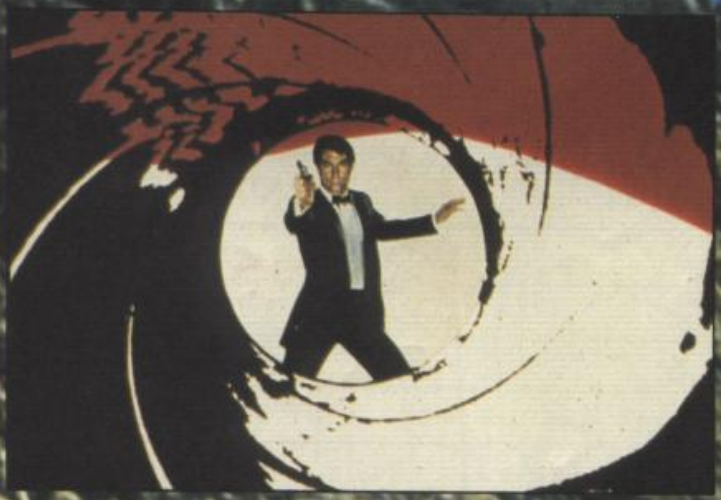
It's a hard, practical job handling SFX, working on the nitty-gritty of what is and what isn't possible. And there's nothing glamorous about British film studios. John's 'office' on the *Willows* set is a Portakabin building stuck in the corner of the SFX workshop.

You could easily mistake John and his team for construction workers – theirs is not the starry-eyed, deep-pile-carpet, Havana-cigars side of film-making. There's no room for egos or pretensions in their workshop. They leave all that to the onscreen stars.

John has been involved with the Bond series since 1979, when he worked on the South American boat-chase sequence in *Moonraker*. Since then he's worked as SFX Supervisor on *Octopussy*, *A View To A Kill* and now *The Living Daylights*.

'Basically,' he explains, 'my job entails organising all the effects you see in the film – the pyrotechnics, explosions, bullets, guns. We also make up the gadgetry and gimmicks that one is accustomed to seeing in a Bond film, plus we do all the scale models.'

This means coordinating a 27-strong team of riggers, model-makers and technicians while plane-hopping around locations with the second unit. ('You wake up in the morning and you've got to check in your diary where you are before you get up.')



Bond is back, with the Aston Martin.

On Monday 29 June, *The Living Daylights* – the sixteenth film in the Saltzman/Broccoli James Bond series – has its Royal Premiere in London. CURTIS HUTCHINSON went behind the scenes at Pinewood Studios and talked to special-effects wiz John Richardson, while back at base the CRASH team took a look at Domark's official computer game of *The Living Daylights* being programmed by Design Design.

DAYLIGHTS

There's a new 007 film made every two years, so the Bond show has become a well-oiled machine in constant motion. John works on each film for about a year, starting as soon as the first draft of the script has been written.

I organise everything – explosions, bullets, guns, pyrotechnics

'They started writing the script for *The Living Daylights* toward the end of 1985. We started preparing the effects in early 1986 and then got into heavy preproduction around May 1986. Shooting started at the end of last August and we finished shooting in February of this year in time for its Royal Premiere on 29 June.

'And hopefully, please God, toward the end of this year they'll start writing the next one. And then next year we go through the same routine again.'

John and his team are given a rough outline of what the writers and director have in mind for SFX sequences – and then they're left to work out how to do it. And there are some big production numbers in *The Living Daylights* . . .

'The film opens with a very exciting sequence, a chase on the rock of Gibraltar – with parachutes and all sorts of things like that. There's then a fairly good fight sequence which takes place in a country house, with explosions, Molotov cocktails.

'Then there's a big rooftop chase sequence in Tangiers which involved quite a lot of effects rigs. And then there's the end sequence which, as far as we were concerned, seems to start about halfway through – that involved a big fight sequence, tanks, explosions and crashing aircraft. It's fairly well studded with effects!'

007's Aston Martin, last glimpsed being shot up with George Lazenby behind the wheel in *On Her Majesty's Secret Service* almost 20 years ago, returns in *The Living Daylights* – with, of course, a few more gadgets. And among the car's adventures is a chase sequence on a frozen lake somewhere behind the Iron Curtain . . .

But John actually used three identical Aston Martins, each performing a different trick. The *Living Daylights* producers bought three second-hand models and commissioned Aston to bring them up to scratch before John and his team were let loose on them.

'We had to make the car do, or appear to do, the things that you'll see it do in the film. It deploys skis from the side to give it stability on snow and ice, it has tyres that have studs that automatically come out to give it traction, missiles that are fired from behind the fog lights, a head-up display on the windscreen, bulletproof glass all round and a rocket engine in the back to give it a little added oommff.'

All this but, alas, no ejector seat.

But despite these gimmicks, which are after all pretty standard for a Bond movie, John sees *The Living Daylights* as a return to the old style of Bond films – a return to the days before gadgetry took over.

'Like many films in the mid- and late Seventies the series went through a period when SFX seemed to be the be-all and end-all, which I think was a mistake because the public don't go to see a film just to see the SFX any more than they go just to see any other department's work, they go to see the film.

'With *The Living Daylights* we're getting back to the good story and the good acting and I think this could possibly be the closest there's been to, say, *From Russia With Love*, which is still my personal favourite.

'Timothy Dalton's a fine actor and excellent in the part. Before he started work on the film he read all of the Bond books from scratch and became something of a purist; he wanted to get back to the idea of Bond that Ian Fleming, the original author, had. And when it came to directing him for the SFX sequences he was just great, game for anything.'

John also had to brief Desmond Llewellyn's Q (Bond's secret-service equipment designer) on how to use the new gadgets, and Llewellyn is becoming something of a technobuff.

'He obviously has to know what he's doing,' says John, 'because he's invariably the one who's demonstrating it to Bond. He's great, he picks things up very quickly. We give him the gadgets and gimmicks and say 'Stand there Desmond, do this, pull that, turn that' – it all seems to work out fine.'

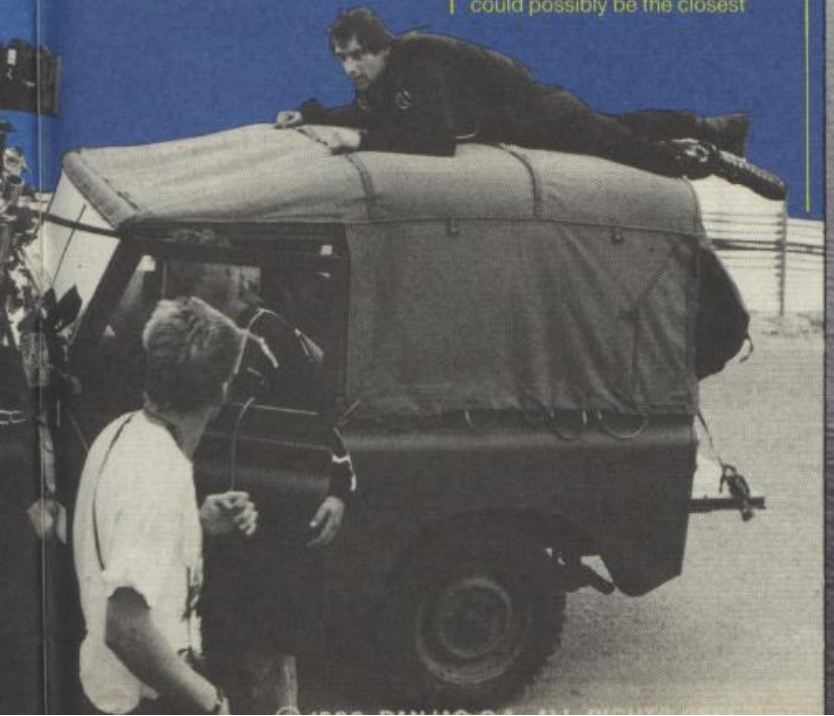
I wondered what John considered to be his most ambitious Bond SFX. He gazed skywards as he let out a slow sigh, and I'm sure I glimpsed a bead of cold sweat on his brow. The memory was clearly nightmarish . . .

'It has to be the airship sequence with the Golden Gate bridge in San Francisco in *A View To A Kill* – that was a very tough sequence to film. It was extremely difficult to get on the Golden Gate at *all* to shoot *anything*, and then to get an airship appearing to fly toward it and around the top gave us a hell of a lot of headaches.

'To make matters worse, the traffic on the bridge isn't stopped for *anything*, not even a James Bond film.

'I shot on the bridge for two days, but they would only let us up there for a weekend and then we had to be up there by five o'clock in the morning and be as unobtrusive as possible so the public weren't aware of us. At one point I had to set up a camera a hundred feet down one of the main cables from the top of the bridge, so you have to climb 746 feet and then climb out onto the main cable and then climb down the main cable and then set up the camera there.

'It was tough! But it was worth all the aggro because it's a satisfying sequence to watch.'



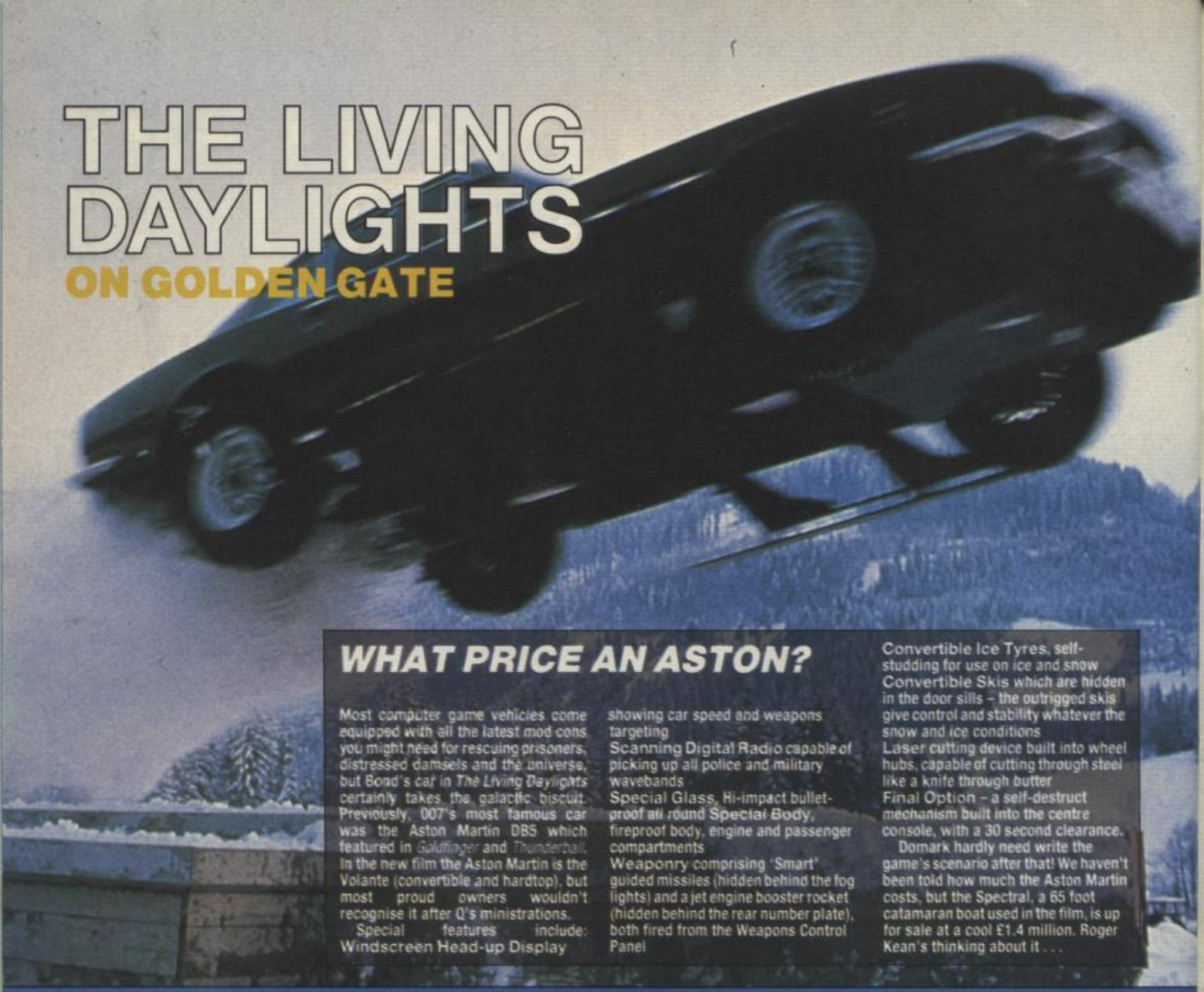
THE BOND FILMS AND THE BONDS



1962 ***Dr No*** Sean Connery
1963 ***From Russia With Love*** Sean Connery
1964 ***Goldfinger*** Sean Connery
1965 ***Thunderball*** Sean Connery
1967 ***You Only Live Twice*** Sean Connery
1969 ***On Her Majesty's Secret Service*** George Lazenby
1971 ***Diamonds Are Forever*** Sean Connery
1973 ***Live And Let Die*** Roger Moore
1974 ***The Man With The Golden Gun*** Roger Moore
1977 ***The Spy Who Loved Me*** Roger Moore
1979 ***Moonraker*** Roger Moore
1982 ***For Your Eyes Only*** Roger Moore
1983 ***Octopussy*** Roger Moore
1984 ***Never Say Never Again*** Sean Connery
1985 ***A View To A Kill*** Roger Moore
1987 ***The Living Daylights*** Timothy Dalton

THE LIVING DAYLIGHTS

ON GOLDEN GATE



WHAT PRICE AN ASTON?

Most computer game vehicles come equipped with all the latest mod cons you might need for rescuing prisoners, distressed damsels and the universe, but Bond's car in *The Living Daylights* certainly takes the galactic biscuit. Previously, 007's most famous car was the Aston Martin DB5 which featured in *Goldfinger* and *Thunderball*. In the new film the Aston Martin is the Volante (convertible and hardtop), but most proud owners wouldn't recognise it after Q's ministrations.

Special features include:

Windscreen Head-up Display showing car speed and weapons targeting

Scanning Digital Radio capable of picking up all police and military wavebands

Special Glass, Hi-impact bullet-proof all round Special Body, fireproof body, engine and passenger compartments

Weaponry comprising 'Smart' guided missiles (hidden behind the fog lights) and a jet engine booster rocket (hidden behind the rear number plate), both fired from the Weapons Control Panel

Convertible Ice Tyres, self-studding for use on ice and snow

Convertible Skis which are hidden in the door sills – the outrigged skis give control and stability whatever the snow and ice conditions

Laser cutting device built into wheel hubs, capable of cutting through steel like a knife through butter

Final Option – a self-destruct mechanism built into the centre console, with a 30 second clearance.

Domark hardly need write the game's scenario after that! We haven't been told how much the Aston Martin costs, but the Spectral, a 65 foot catamaran boat used in the film, is up for sale at a cool £1.4 million. Roger Kean's thinking about it . . .

MY NAME IS GAMES, GAMES BOND

And he's licensed to kill in DOMARK's next release . . .

We've been caught napping – or rather Design Design have. Instead of working hard on a preview screen shot of *The Living Daylights* game version specially for CRASH, what did they do? They went off *en masse* to the CES Show in Chicago (for a holiday no doubt). Anyway, that explains why there's no screen shot; fortunately we're not lacking in details as to what the game's actually about (hopefully it's the same outline Des Des are working to)!

Ten levels of varying difficulty are set to frighten *The Living Daylights* out of Spectrum games players, each with a location setting taken from the film. Level One, for instance, is set in Gibraltar where Bond is on those sort of pre-title exercises that leave you wondering, is it possible the great James Bond has been killed? No, of course not, but in this section the SAS shoot at him from behind trees and he has to react fast to avoid the 75 percent chance of being hit.

The way it works is that each level is interspersed by a Choose Weapon screen. Set in Q's busy lab, a wide range of weapons is offered for your choice, but you have only five seconds to make the decision as to which to take for the next level.

Each level's playing area consists of three horizontally scrolling sections. Bond moves along the central space, avoiding rocks and potholes, with the areas either side scrolling at different speeds to create a parallax effect. The foreground comprises details of hedges and buildings, while in the background lurk Bond's protagonists. Apart from the SAS characters, there's a sniper in various guises and men who throw anything from bottles to knives.

While Bond concentrates on staying alive in this barrage, he's forced to leap over rocks or holes which loom up in his way, and at the same time dodge bombs hurled from low-flying helicopters above. Help for the player in this ferocious firestorm is offered by means of dual joystick control. At appropriate moments the doughty 007 swagger can be halted and control turned over to a gun sight. Bond's arm follows its directions and fires at the selected target as accurately as you do. The gun, need it be said, this being based on a film, has unlimited fire power.

The Living Daylights is intended for release mid-July, about the time the film goes on general release – or at least it is if Gwaham Stafford and Design Design don't suffer too much jet-lag on their return from Chicago. Spectrum cassette price is £9.95, we should be getting a production copy on 22 June, so as long as Domark's word is their Bond, it will be reviewed next month.



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the CRASH CHARTS



TOP 30 JULY

The **HOTLINE AND ADVENTURE CHART** compiled from the votes of CRASH readers is the most realistic chart for gauging the popularity of Spectrum games – it is the games that are being played that get the votes, not the games that are in the shops this week or month.

And the votes are important. It's up to you to let us know what you feel, so fill in the voting forms which live on the RESULTS PAGES and make your voice heard.

If you don't want to carve up your issue of CRASH, we understand. Use a photocopy if you like, or copy the details from the voting forms onto a postcard, or the back of a sealed envelope, and send that to us instead.

Apart from the satisfaction of registering your vote, there's always the chance of winning a prize. Each month we draw ten winners from all the voting forms received – five for the HOTLINE and five for the ADVENTURE chart.

A top prize of £40 worth of software (your choice, not ours) and a CRASH T-shirt is awarded to the first slip drawn from the HOTLINE votes, and another £40 of goodies and a Shirt goes to the Adventure draw winner.

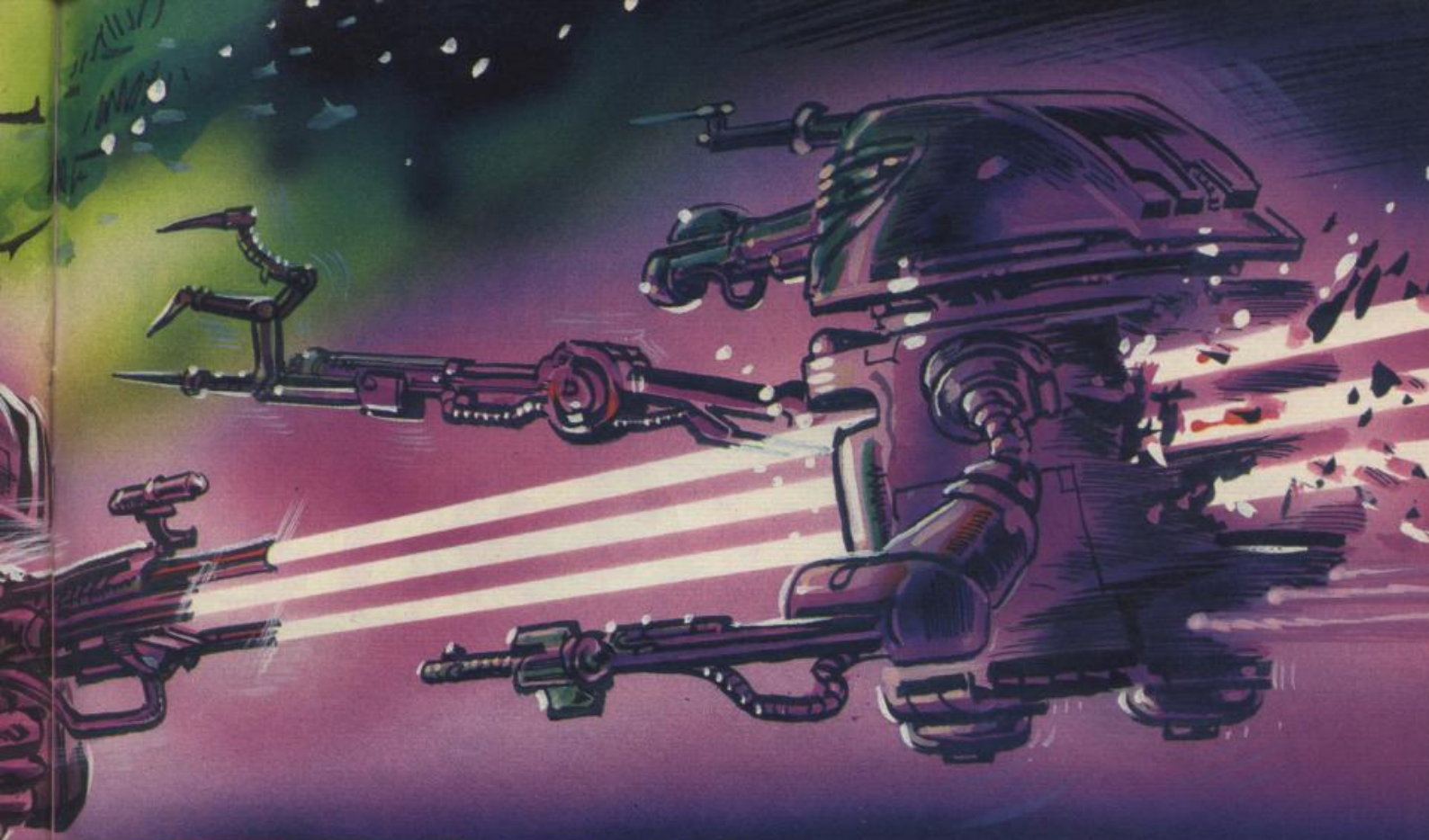
Four runners up from each ballot box collect a CRASH T-shirt and a CRASH Hat. So get those votes in to the **CRASH HOTLINE and CRASH ADVENTURE TRAIL, PO BOX 10, LUDLOW, SHROPSHIRE SY8 1DB.**

Well, BORED OF THE RINGS disappeared like Frodo with a bit of metal round his finger: it fell from fourth to fifth to 19th to somewhere in the Bottom 30. But the three frontrunners are holding last month's positions; and KNIGHT TYME has moved back up after a brief nap, while DRACULA goes below to keep the coffin warm. Melbourne House has more on the chart than anyone else, but the Adventure Top 30 still seems to have a better spread of software houses than the Hotline.

Anthony Woodcock *from Wakefield in West Yorkshire takes the Adventure Trail's £40 of software, and the runners-up are:* **Charles Wing** *from Newick in West Sussex;* **John McMunn** *from Beltra, County Sligo, in the Irish Republic;* **Matt Shaw** *from Runcorn, Cheshire; and* **Robin Cavill** *from Dewsbury in West Yorkshire.*

No new arrivals in the Top 16 this month; but the lower half of the Hotline is dominated by (-)s. PAPER BOY's recovered from last month's setback – he was in the Top Three for six months before sinking to ninth place. Ocean just beats Elite with seven games to six.

£40 worth of software goes to **R Geerling** *from The Hague in Holland. Runners-up are* **David Port** *from Liversedge in West Yorkshire,* **Karl Franzmann** *from London,* **Kirit Kotecha** *from Houghton Regis in Bedfordshire, and* **Joanne Russell** *from Bognor Regis in West Sussex.*



Hotline Top 30

1	(1)	GAUNTLET	US GOLD
2	(9)	PAPER BOY	ELITE
3	(2)	COBRA	OCEAN
4	(7)	URIDIUM	HEWSON
5	(3)	FEUD	MASTERTRONIC
6	(5)	HEAD OVER HEELS	OCEAN
7	(4)	ELITE	FIREBIRD
8	(11)	BOMBJACK	ELITE
9	(8)	STARGLIDER	RAINBIRD
10	(6)	ENDURO RACER	ACTIVISION
11	(13)	MATCHDAY	OCEAN
12	(14)	THE GREAT ESCAPE	OCEAN
13	(27)	SCOOBY DOO	ELITE
14	(10)	COMMANDO	ELITE
15	(24)	SPACE HARRIER	ELITE
16	(18)	BATMAN	OCEAN
17	(-)	WANTED MONTY MOLE	GREMLIN GRAPHICS
18	(15)	LIGHTFORCE	FTL
19	(17)	FIST 2	MELBOURNE HOUSE
20	(-)	GHOSTS 'N' GOBLINS	ELITE
21	(-)	LEADERBOARD	US GOLD
22	(12)	QUAZATRON	HEWSON
23	(-)	TOP GUN	OCEAN
24	(-)	FIRELORD	HEWSON
25	(-)	SHORT CIRCUIT	OCEAN
26	(-)	ALIENS	ELECTRIC DREAMS
27	(-)	TRAPDOOR	PIRANHA
28	(-)	SABRE WULF	ULTIMATE
29	(-)	ARKANOID	IMAGINE
30	(24)	RANARAMA	HEWSON

Adventure Top 30

1	(1)	HEAVY ON THE MAGICK	GARGOYLE GAMES
2	(2)	THE BOGGIT	CRL
3	(3)	SPELLBOUND	MAD
4	(5)	THE HOBBIT	MELBOURNE HOUSE
5	(8)	KNIGHT TYME	MAD
6	(4)	LORD OF THE RINGS	MELBOURNE HOUSE
7	(10)	FAIRLIGHT 2	THE EDGE
8	(7)	LORDS OF MIDNIGHT	BEYOND
9	(13)	DOOMDARK'S REVENGE	BEYOND
10	(-)	FAIRLIGHT	THE EDGE
11	(6)	GREMLINS	ADVENTURE INTERNATIONAL
12	(12)	RED MOON	LEVEL 9
13	(28)	JEWELS OF DARKNESS	RAINBIRD
14	(-)	SHADOWFIRE	BEYOND
15	(9)	SEA BASE DELTA	FIREBIRD
16	(14)	PRICE OF MAGICK	LEVEL 9
17	(25)	SHERLOCK	MELBOURNE HOUSE
18	(-)	IMAGINATION	MASTERTRONIC
19	(-)	WORM IN PARADISE	LEVEL 9
20	(30)	MARSPORT	GARGOYLE GAMES
21	(23)	FOURTH PROTOCOL	CENTURY HUTCHINSON
22	(19)	VERA CRUZ	INFOGRAMES
23	(11)	DRACULA	CRL
24	(27)	HAMPSTEAD	MELBOURNE HOUSE
25	(-)	NEVER ENDING STORY	OCEAN
26	(16)	DUN DARACH	GARGOYLE GAMES
27	(-)	COLOUR OF MAGICK	PIRANHA
28	(26)	SWORDS AND SORCERY	PSS
29	(-)	RED HAWK	MELBOURNE HOUSE
30	(21)	SPIDERMAN	ADVENTURE INTERNATIONAL

Crash Competition

DRILLER THRILLER!

FREESCAPE™

£300 OF COMPUTER EQUIPMENT AND THE FAME AND THE GAME could be yours in this great Incentive competition

Edible cream buns aside, there are few things in life as hard to find as a new slant on competitions. You lot (and the spiky-haired ZZAP! horrors) reckon a Comps Minion's life is all cream buns and a few words now and then, but it's not so. Thinking up competitions and prizes is a tough job.

That's why I was so pleased with that nice Ian Andrew from Incentive Software when he dreamed up this marvellously different (and practical) comp for the more ingenious of CRASH readers (though I know you're ALL clever . . .).

It revolves round *Driller* and **Freescape** (TM) – and what are they, you may well ask . . . ?

Well. there's not a lot I can say. You see, *Driller*, Incentive's latest game project, features **Freescape** – a new 3-D technique on Incentive's top-secret list which they've been working on since September.

With **Freescape**, you can walk through first-person perspective and three-dimensional graphics, and they're all completely solid! 'You have the freedom,' says Ian, 'to move to any point, to look in any direction from that point and see the actual view – it's just like Being There!'

Now, what Ian Andrew and Incentive want from you is some great special effects to complement *Driller*. They want whiz-bang machine-code sound effects, and lightning-brilliant graphic routines. Have a look at the side panel to see some examples of what you might attempt.

Meantime, what's in it for you? Well, the winning entry will earn its sender the top prize of **£300 worth of computer equipment** (your choice), the effects routine will be incorporated in *Driller* – and the winner will be fully credited.

On top of that, the winner will receive a copy of *Driller* as soon as it's finished.

Runners-up will each receive a copy of *Driller* and a full credit, as well as having their special effect used in the game. The number of runners-up will be decided by Incentive when they see the entries – but there'll be more than one, and fewer than 50!

HOW TO ENTER

Now for the serious bit. You can submit as many entries as you like with the one coupon below. Your machine-code entry should be on tape or microdrive, together with clear details of how to load and run the effect. Each routine should be less than 500 bytes long (the shorter the better), and supplied with a documented assembler listing.

Please note: do not send your entries to the usual CRASH address. Send them to **CRASH DRILLER COMPETITION, INCENTIVE SOFTWARE, *2 Minerva House, Calleva Park, Aldermaston, Berkshire RG7 4QW*** to arrive no later than 30 July.

JUDGING

In judging, two main criteria will be considered: **a)** how good your special effect is, and **b)** how short it is. Only original routines will be accepted. Some entries received may be of very similar effects – when this is the case, the shortest routine will be chosen.

SEND THIS COUPON WITH YOUR TAPE OR MICRODRIVE

I want to be a *Driller* Thriller!

NAME .....

ADDRESS .....

.....

.....**POSTCODE** .....

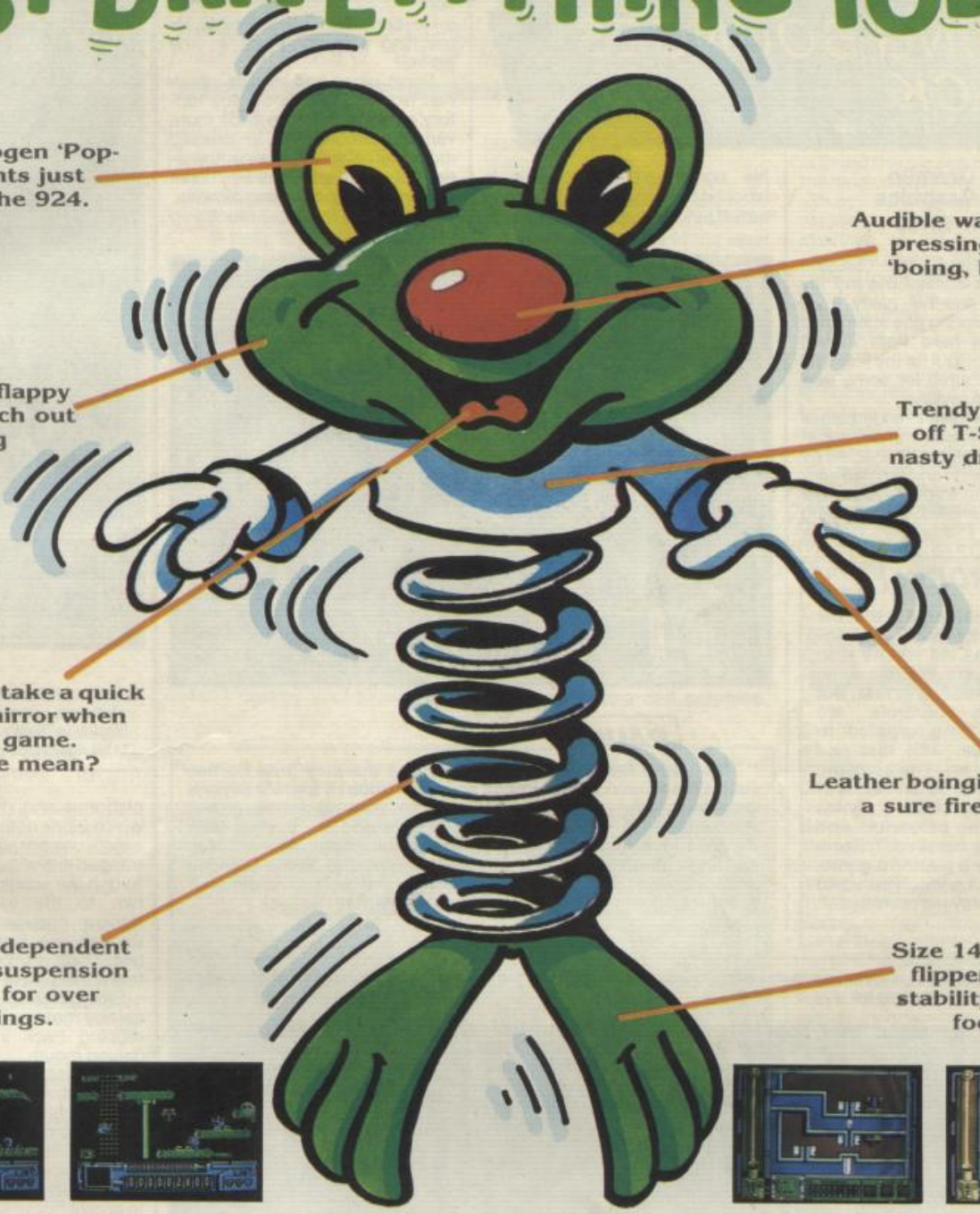
Some examples of effects you could submit:

SOUND
- Laser fire (incoming and outgoing)
- Gun/cannon shot
- Explosive noises
- Reward tunes/effects
- Falling and rising noises
- Bumping/cracking (into solid objects)
- (De)materialising noise
- Endgame noise/tune

LIGHT
- Border effects
- Window-clearing effects

'THING' BOUNCES BACK

TEST DRIVE A THING TODAY!



Quartz Halogen 'Pop-Up' headlights just like a Porsche 924.

Audible warning device pressing results in a 'boing, boing, boing' noise.

Extra large flappy cheeks, watch out for tweaking grandads.

Trendy designer cut off T-Shirt (causes nasty draught round your coils).

Stupid grin, take a quick look in the mirror when playing this game. See what we mean?

Leather boinging gloves for a sure fire grip on that joystick.

All round independent coil spring suspension guaranteed for over 100,000 boings.

Size 14 racing tread flippers for inflight stability and a sure-footed landing.





Gremlin's springiest star is set to bounce straight back into a new adventure.

Following his world saving exploits against the evil toy goblin and his monstrous toys, Thing's enjoyed his much needed recuperation, oiled his spring and is now raring to go. What next?... he must finish the job properly and halt the factory computer auto producing these hideous toys.

But as superfit as he is and fast as he can move there's danger hidden around every bend... goblins lurking to drain his oil, water rushing to bowl him over, iron chickens fielding dastardly deadly eggs.



A quick hand and dogged determination are needed if you're to get anywhere with Thing in his latest escapade.

Fast and furious action is the order of the day and a good sense of direction would be helpful to guide Thing round such a complex location.

Available on

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DRIVE YOURSELF ROUND THE BEND WITH THING

GREMLIN GRAPHICS SOFTWARE LTD

GREMLIN

Alpha House, 10 Carver Street, Tel: 0742 753423. Sheffield, S1 4FS.

THING BOUNCES BACK

Producer: **Gremlin Graphics**
Retail Price: **£7.99**

Fresh from his Sizzling exploits against the evil toy goblin and his nasty toys, Thing On A Spring (the alternative page margin hero from ZZAP!) sproings back (but for the first time on the Spectrum!) for some new adventures in toyland.

He finds himself in an industrial complex composed of 11 separate scrolling areas, connected by a system of wide and tangled ventilation shafts; through these our heroic coil tumbles. In the piping his somersaulting progress is blocked by minions, but Thing can turn at junctions and reverse direction.

He can also collect points by touching Crowns stuck in the pipes.

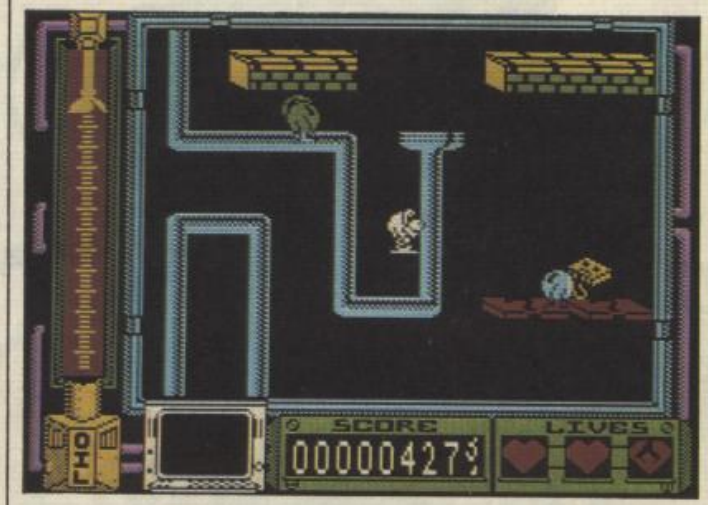
Some pipes end in exits which hurl him into one of the toy factory's zones; there he finds more varied surroundings, a chaotic multilevel layout of slides, automatic bounce pads, unidirectional conveyor belts, elevating blowers, debilitating lasers, crumbling platforms and descending doors which block or trap him.

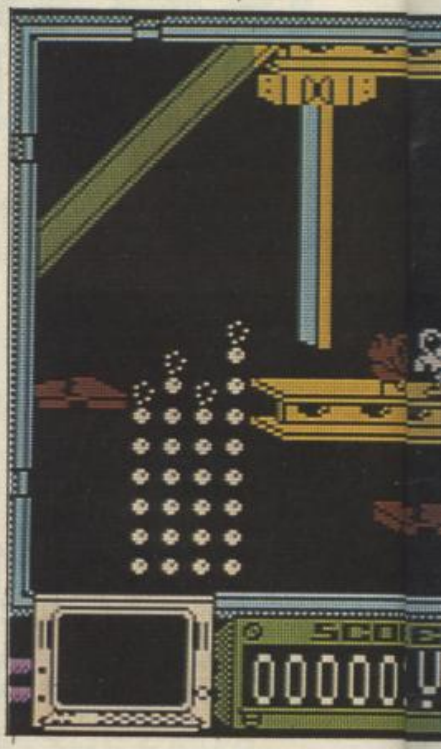
An unwary Thing is easily trapped and with no escape he has to quit the screen – which returns him to the ventilation shafts. Narrow gauge pipes snake through the factory; falling into one, Thing is taken uncontrollably to another part of that playing area.

Emerging from the pipe he must quickly move to one side to avoid slipping back into the funnel's gaping mouth.

But what of the Great Mission? To stem the flow of evil playthings, the bonce with a bounce must gather computer components: a tape, a disk, listing paper and ROM. Once they're found he can exit one playing area and progress to another.

Needless to say a horde of evil toys, still on the departed goblin's pension scheme, do their best to push Thing from platforms and





► The factory is packed with ramps, platforms, conveyors and mystery blocks. To Thing's right a geyser spouts, to his right a pipe pouts.

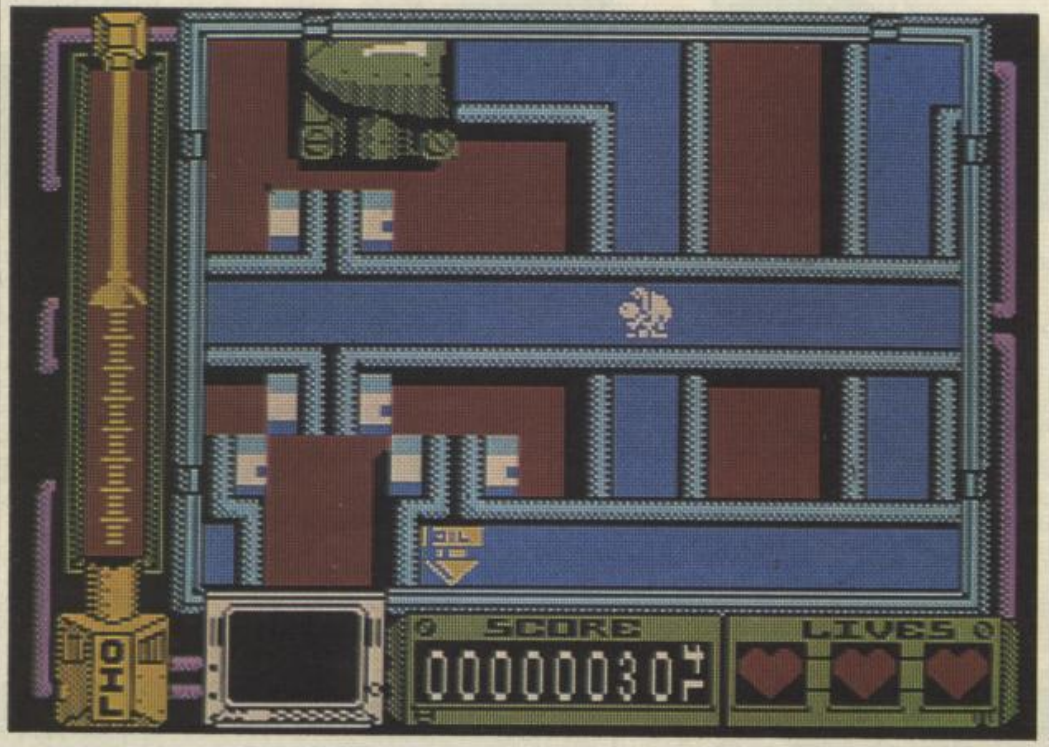
ROBIN

" My biggest gripe is that the Thing Bounces Back **instructions tell you nothing about playing the game, so it's a bit daunting at first. But once the controls are mastered** Thing **turns out to be playable, with fast and furious action. The scrolling is excellent, and isn't done at the expense of the graphics which are colourful and reasonably detailed. Though essentially a platform game,** Thing **packs enough punch to keep the player enthralled. "**

PAUL

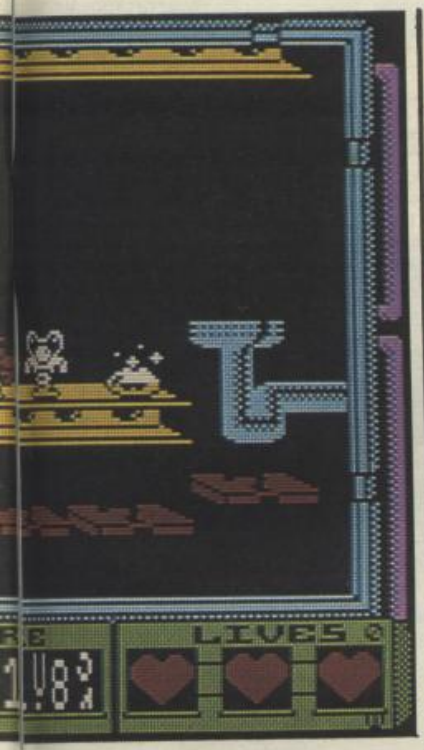
" This has a fast and furious pace, and the play area hurtles round the screen at breakneck speeds. I doubt if there's anyone out there who won't be addicted to this attractive game. Presentation is superb – a pleasant ditty and a revealing little demo. I love the subscreen of ventilation shafts which Thing sproings about with the greatest of vigour, and all the screens are appealing to the eye – loads of colour and varied and detailed graphics, giving Thing Bounces Back **a very realistic feel. "**

► Hurtling at enormous speeds through the toy factory's ventilation shafts, a wildly spinning Thing seeks an exit – and that's just what that green object top left is.



MARK

" Never having played the original Commodore Thing On A Spring, **I wasn't sure what to expect. What I found was a game of a high standard both graphically and sonically. Thing and all the toys are nicely animated, and I like the boppy little tune on the title screen. But** Thing Bounces Back **lacks a bit in gameplay because it's so difficult, and soon becomes boring. A game to keep for a rainy Sunday. "**



girders and back into the narrow pipes. Encounters with them reduce springboy's limited liquid engineering; the oil level is indicated onscreen by a descending propeller.

When lubrication is dangerously low, it's time to find an exit and return to the ventilation shafts where collectable oil cans exist. A total oil-out loses Thing one of his three lives.

Bonuses can be collected by striking red mystery platforms on their undersides. They evaporate, and some reveal extra points, but others give a headache as a heavy weight clonks down on Thing's cranium.

COMMENTS

Control keys: Z/X left/right, O/K up/down, zero to fire
Joystick: Kempston, Interface 2
Use of colour: all colours used very sensibly
Graphics: plenty of variety in the smallish sprites, fast and smooth scrolling
Sound: average spot FX, but nice title tune
Skill levels: one
Screens: 11 scrolling play areas, each 12 screens large, plus a pipe maze
General rating: excellent and refreshing arcade game with some neat touches, highly playable and addictive

Presentation	85%
Graphics	84%
Playability	87%
Addictive qualities	83%
Overall	85%

DOWN TO EARTH

Producer: **Firebird**
Retail Price: **£1.99**

As site foreman in control of an Astra-Dozer, you must clear 30 different planetary systems of hostile inhabitants.

Anyone who's played *Dig Dug* or *Boulderdash* will recognise the action and appearance of *Down to Earth*. In this chaotic geological jumble live three types of alien: dangerous Circsaws and Trigons who must be wiped out, and Conenabs, benign to you but mortal enemies of the Circsaws. Don't ignore the Conenabs, though – they multiply quickly and can block off escape routes.

At first these aliens are trapped in soil pockets, but they're released by the Astra-Dozer's activities. Circsaws or Trigons cause instant death, though touching dozers left by previous work crews gives extra lives.

You can drop bombs, or leave them behind to be activated by an alien's touch. Contact with a bomb doesn't destroy you, though the blast does. Extra bombs are found in armoury chests.

Bombs have also been left buried in the soil by previous space probes; if you chobble earth from beneath them and the large natural boulders, they'll fall upon aliens.

As supergalactic four-star is a precious commodity, additional supplies are held in oil tanks. But fuel isn't the only problem – there's a time limit on your mission.

CRITICISM

●" **Graphically** Down to Earth **is primitive; movement is jerky and the characters uninspiring. It plays just like** Boulderdash**, and just like** Boulderdash **it's almost instantly addictive and playable – but it's a touch too frustrating. And** Down To Earth **could have been improved tremendously had the programmers taken time over sound and graphics. Something for** Boulderdash**-genre fans, this doesn't improve upon the original. "**

ROBIN

●" *I'm not particularly impressed with this obvious* Dig Dug/Boulderdash *clone. The tractor's cute with his big beaming face, but the meanies look like they've been nicked from* Ballblazer. *The scrolling's awful, giving instant eyestrain as the screen flickers from area to area. It's all spoiled by unfairly tough gameplay, and I still prefer the subtleties of* Boulderdash *and the simple addictivity of* Dig Dug. "

MARK

●" I thought we'd got rid of this type of game ages ago. Colour is well used, but the graphics lack the realism and smooth animation needed for an addictive game, and the sound is terrible – no tunes and only three effects. I quickly became bored, and I can't see myself bothering with *Down To Earth* again. "

PAUL

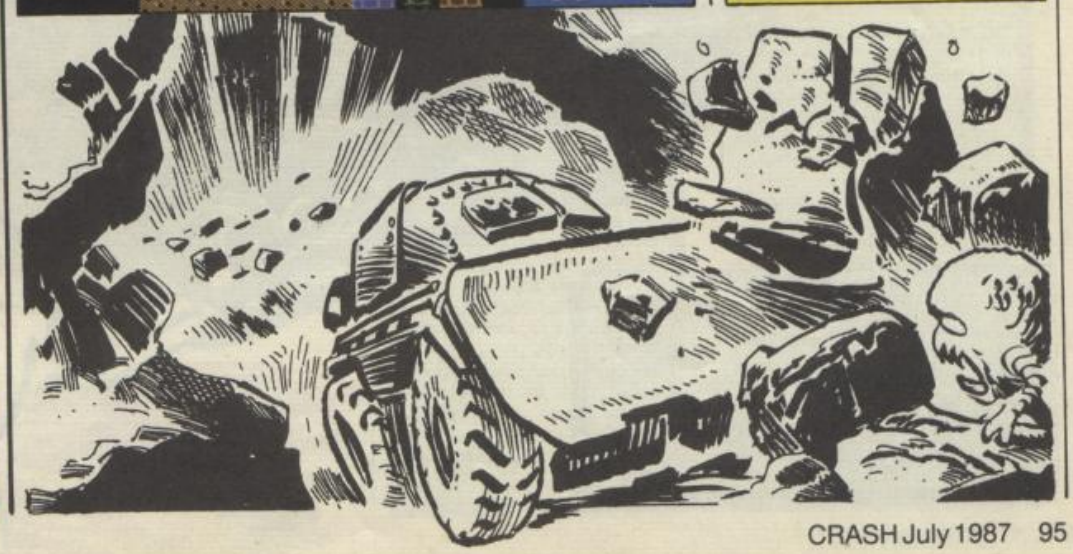
COMMENTS

Control keys: Q/A up/down, O/P left/right, SPACE to drop bomb
Joystick: Kempston, Interface 2
Use of colour: lively object-differentiation
Graphics: small characters, little animation and extremely jerky scrolling
Sound: very poor
Skill levels: one
Screens: 30 systems
General rating: latter-day clone of an old arcade game with average playability, but too frustrating to be very addictive. May have some appeal for newer gamesters practising for the delights of classic *Boulderdash*.

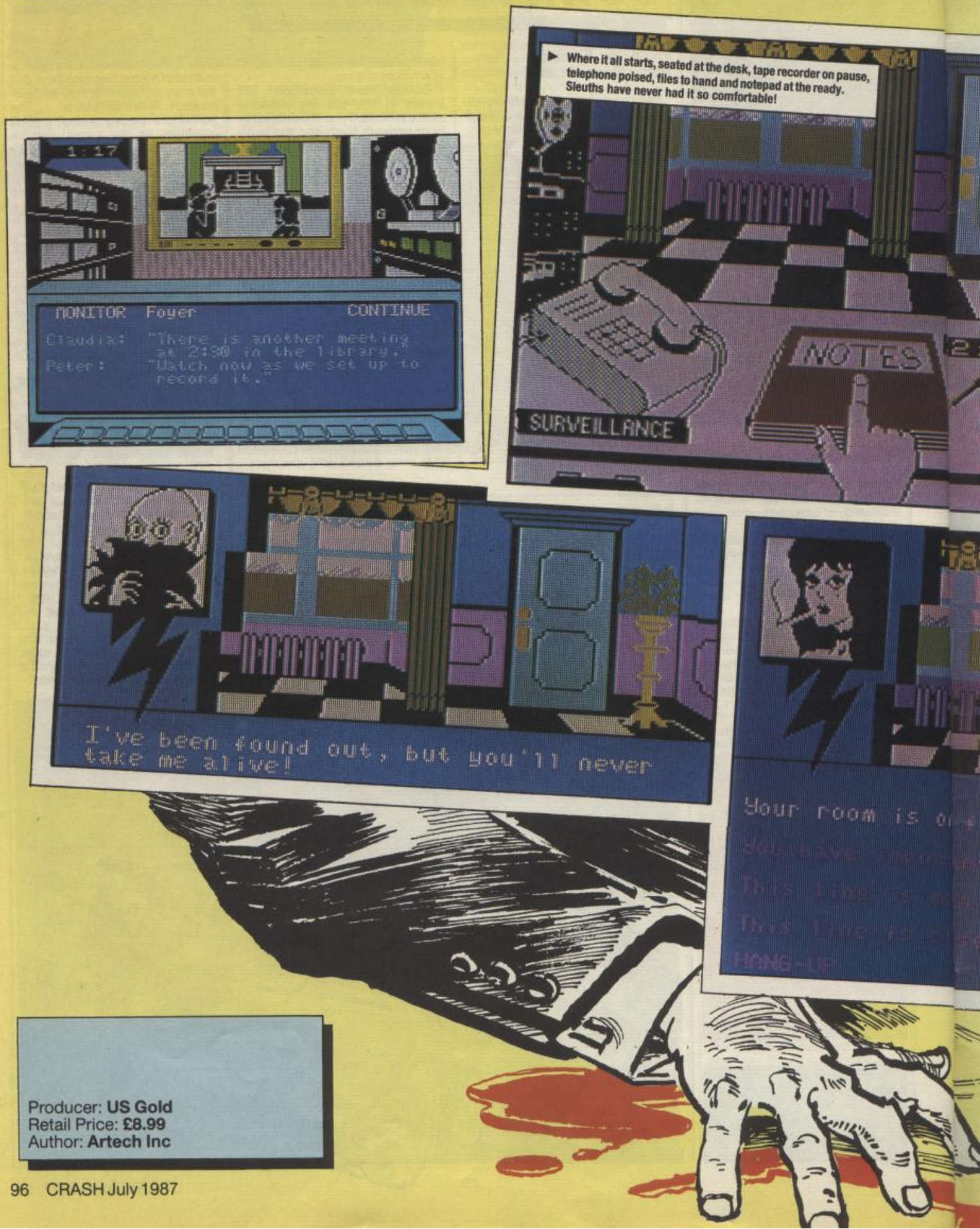
Presentation	52%
Graphics	39%
Playability	50%
Addictive qualities	45%
Overall	47%

► **Beaming and chobbling, the Astra-Dozer goes about its business of dashing boulders and mashing aliens.**





K·I·L·L·E·D U·N·T



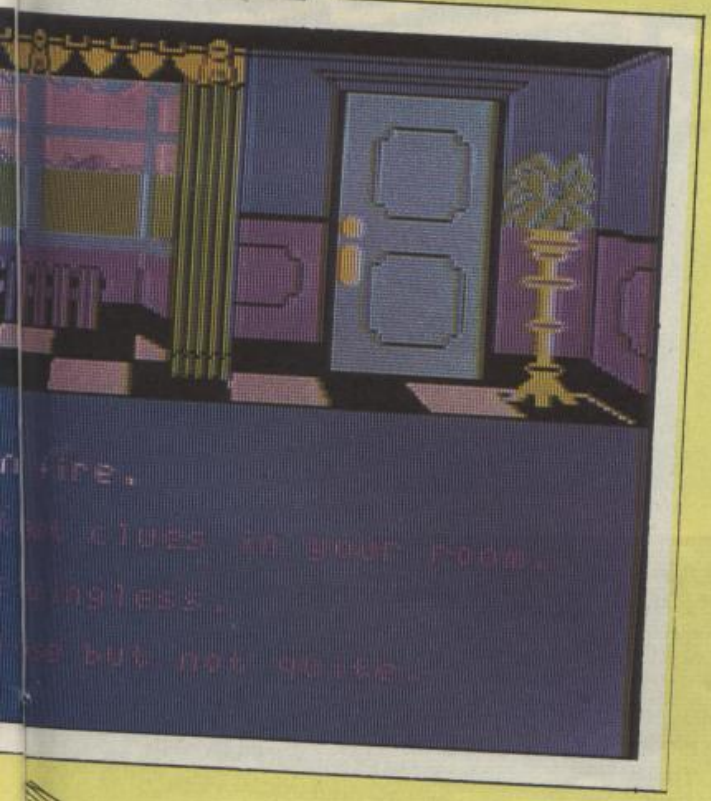
▶ Where it all starts, seated at the desk, tape recorder on pause, telephone poised, files to hand and notepad at the ready. Sleuths have never had it so comfortable!

Producer: **US Gold**
Retail Price: **£8.99**
Author: **Artech Inc**

T·I·L D·E·A·D

A CRASH Smash





At the Gargoyle Hotel, the world's greatest mystery writers – Mike Stammer, Agatha Maypole, Lord Peter Flimsey, Claudia Von Bülow, Sydney Meanstreet – are having a reunion, dancing to *Suspicious Minds*.

But one of them is a murderer and one is the victim.

Hercule Holmes is hot on the case – he must identify both before a talented 'tec is done to death. HH must also discover what the murder weapon is, find the scene of the potential crime, and unravel a motive. He has 12 hours for this herculean task, and all the time the clock sprints toward midnight . . .

Holmes has a choice of mysteries to test his skills. In each he's based at a desk where he can choose to examine files on each suspect, organise break-ins, tape conversations, monitor meetings and interrogate suspects.

Each profile contains information on the hotel's famous guests, which might indicate connections and antagonisms between them – and motives for murder.

Holmes can break into the guests' rooms when they're away and find valuable clues – if you can answer trivia questions about famous fictional detectives and thrillers. Wrong responses bring a security guard to the door.

A monitor screen allows you to view different parts of the hotel – bedrooms, library, foyer. You can set up a tape recorder to eavesdrop on meetings; three preset systems allow it to record in different places at specified times.

And Holmes can interrogate suspects, but first he has to find clues – otherwise the suspect refuses to cooperate. He can ask questions about intended victims, weaponry and murder scenes, and the suspects give weak or strong replies. Their expression onscreen changes as they grow more nervous . . .

Notes on phone conversations, break-ins, monitored meetings and anonymous phone calls can be reviewed.

Once satisfied with the investigation, you can accuse a suspect. But even if you're correct, your deerstalkered detective must still know what weapon is to be used, where the crime is to take place, and what the motive is. If you don't, Holmes's last case will be a wooden box . . .

CRITICISM

" 'Elementary, my dear Watson'? This very good game is anything but elementary. The detective idea isn't new, but Killed Until Dead **is varied and often highly amusing. I especially enjoy the expressions on the faces of suspects. Graphically the game is excellent – the sprites are large and well-defined – and sound is put to good use. When you phone suspects, a different tune plays for each! Definitely for budding Perry Masons and Philip Marlows. "**

MARK

CRITICISM

" There's a touch of The Fourth Protocol **to** Killed Until Dead **– the former provided such armchair excitement for the sleuth, and US Gold's great offering does the same with so much humour as well. The packaging has C64 screen shots, predictably more colourful than the Spectrum's – but even on the Spectrum the graphics are excellent. Along with the clever use of sound, they make** Killed Until Dead highly enjoyable. The puzzles and the different playing options add to its addictive qualities, too. Don't miss it. "

RICKY

CRITICISM

" I loved my first game of Killed Until Dead. **It has much more than pretty graphics and superb little tunes – there IS some real depth, with all the elements of the great murder mysteries and a superb atmosphere. The mysteries are a mixture of very simple logical puzzles and some real mind-benders for the professionals. If you're one of those people who devour all the Agatha Christie books and films then this is a must – and great value, with loads of different mysteries. "**

PAUL

COMMENTS

Control keys: definable, four directions and ENTER required; functions accessed by cursor and highlighted icons
Joystick: Kempston, Interface 2, Cursor
Use of colour: excellent
Graphics: superb animation is an integral part of the investigations
Sound: excellently used to highlight the characters
Skill levels: four
General rating: involved and highly entertaining sleuth game with sufficient depth to keep you playing for ages

Presentation	92%
Graphics	91%
Playability	95%
Addictive qualities	94%
Overall	93%

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Each binder holds twelve issues of CRASH held in place by small plastic straps for ease of access. The year is also marked on the spine. The binders come in a rich blue with silver logos on the face and spine and come to you solidly packaged in their own boxes.

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The PO Box number has been changed.

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PREVIEW

MERELY MANGRAM

Coming soon to a Spectrum near you!

As I write, June is busting out all over, as the old song goes, the killer tomatoes are setting, the runner beans sprouting, and the weeds take more bullying than Robin Candy, Paul Sumner and Mike Dunn put together. Still, there's time to take a snatch look at some games that are coming up almost as fast as the weeds.

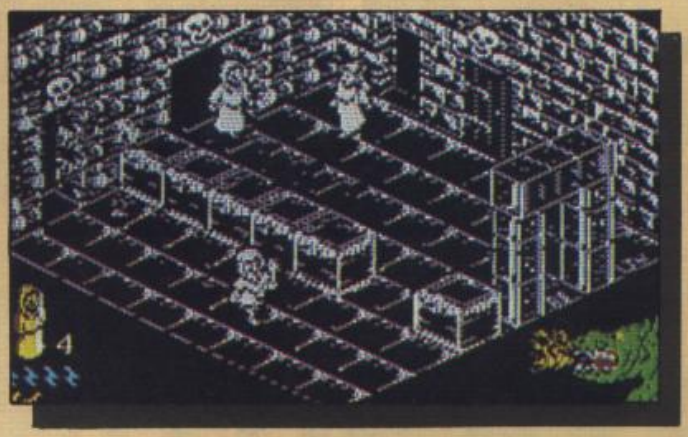
And talking of vegetation, how about a quick jaunt around Covent Garden, ex-home of the famous vegetable market, and now home of ex-CRASH person Lee Paddon who, having swapped fence sides, works for **Softek** and **The Edge**. They'll be keeping him busy during the time leading up to autumn's software reincarnation, starting off with *Warlock*.

It gets tiresome dashing around being a knight in shining armour, so players blessed by a streak of evil will be delighted to hear that actually distressing damsels, nay, even bashing them up, is all a part of *Warlock*. In this 3-D arcade adventure with *Gauntlet* overtones you play the vilest, most evil, and rudest warlock that history has known since Angus Ryall took up strategy gaming.

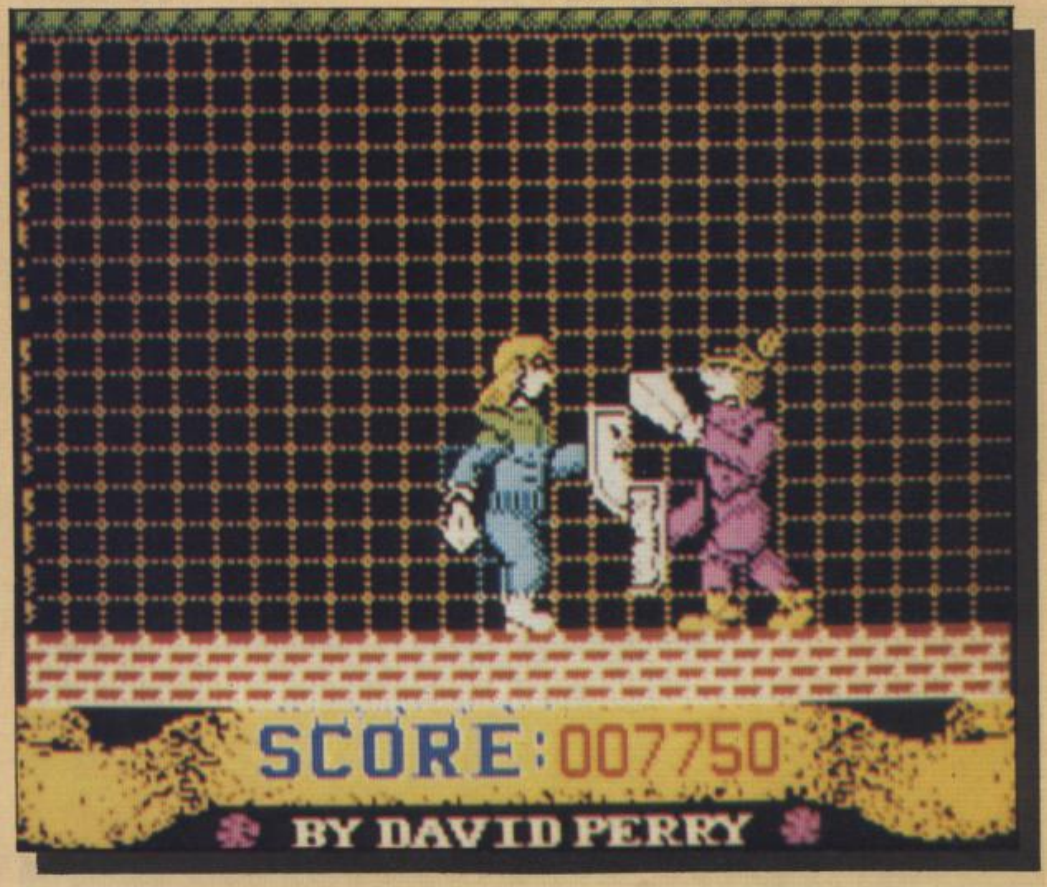
The problem facing our antiheroic mage is a bunch of moral majority do-gooders who, having infiltrated his castle, are busily engaged in convincing his minions of the benefits of being good and having a pension.

To defeat them warlock needs the Orb of Power, but being a bit thick in the head, nasty-chops has forgotten where he last put it – rather like a CRASH reviewer (well *you* try finding a cassette in this place after they've been at them). So begins the long search around the long-forgotten corridors and castle rooms which are, by now, simply infested with parent-teacher association types heaven-bent on laying traps (of kindness?) for the dreadful warlock.

From castle garderobe * to *Garfield*, also from The Edge . . .



*A mediaeval loo



► The *Great Gurianos* tackles a foe. Part of *Trio*



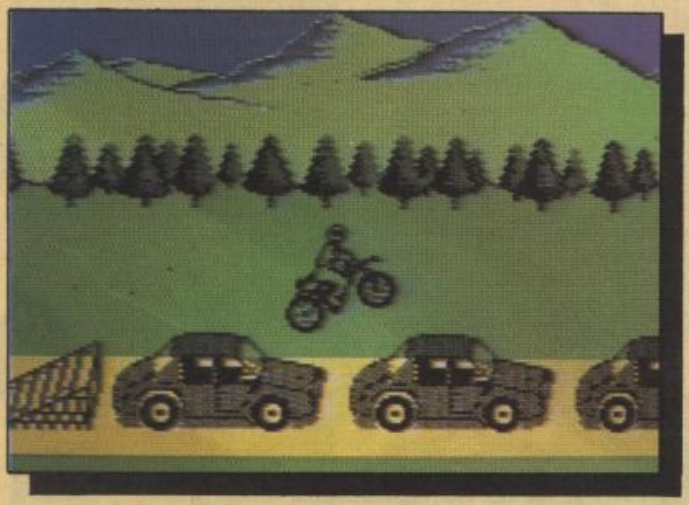
► The powerful cover of Martech's *The Armageddon Man*

it just might be a bit delayed due to programming problems. Hopefully these should be sorted out in time for display at the PCW Show. Also due for release on the Spectrum soon is *Palitron*, a conversion from the original Amstrad game. It's a kind of 3–D arcader with plenty of mind-boggling puzzles for to solve. Screen shot next month.

Dine in Kayent where one simply has to speak Queen's English, comes *International Events* courtesy of **Anco**. They proudly claim that the six sports have never been seen on a computer before and include hang-gliding (don't mention *Saboteur II* – it doesn't count), wind-surfing, motor bike scrambling, cross country, water skiing and a vellodrome cycle race – where two players play simultaneously. I haven't seen anything yet of the action, but in the meantime here's some of the action to gawp at.

It came with a colour vinyl map (2032 edition) . . . It came with vinyl re-usable flags . . . It came from Sussex. Sussex?! What is this fiendish beast? Why, it's none other than **Martech**'s *The Armageddon Man* – a name to be reckoned with methinks. Set 45 years into the future – a time when the world's nuclear arsenal has greatly expanded – the United Nuclear Nations, a group of 16 allied superpowers, have financed and built an enormous network of spy and laser defence satellites which are capable of monitoring, influencing and even directly controlling the political, economic and military events of the world. The system is all under the hands and eager gaze of its Supreme Commander – the Armageddon Man. Literally, he holds (and ►

► One of the action screens from Anco's *International Events* – ...



through him, you) the world's future in his hands.

Can the Armageddon Man reduce the chances of global immolation by maintaining an equal balance of power through his icon control? Tune in soon and hear the exciting conclusion – to be released during July at £12.95.

Over the page there's a preview of **Hewson's next release, the Raffaele Cecco shoot-'em-up *Exolon*. It's great too, and as a production copy arrived just this morning (the last but one day of the schedule), we could have reviewed it, except that promises were made to the lovely Julia at Hewson to hold back on a review until next issue (it's out at the end of August), so in the meantime you'll just have to ogle the screen shots, sorry.**

News on Ocean's *Tai-Pan* is confused – should have been here for review, but something's holding it up ... perhaps next month. I was expecting to see at least the 128 version this week. No doubt it will arrive tomorrow – that's how it usually goes.

Elite has a novelty out for 20 July, a compilation, but not of old games. *Trio*, selling at £9.95 offers, as its title suggests, three arcade games on one cassette. *Great Gurianos* is a mediaeval beat-'em-up quest using large and detailed graphics. *3-DC* is an isometric perspective arcade adventure, and the third of the set, *Airwolf II*, is a loosely-based follow up to none other than ... *Airwolf*. It's a more straightforward shoot-'em-up than its predecessor of some two years ago.

And that's about it at the moment. Richard Tisdall from **US Gold** is visiting shortly with a bunch of goodies for us to look at, hopefully including *Road Runner* and Sensible Software's very unusual *Wizball*.

Til next month, may your joystick remain on autofire mode ...

► *The Armageddon Man* – maintaining the checks and balances ...



THE SON NEVER SHRINES

THE LAST NINJA

System 3/Activision — *Summer £7.99*

We've had exploding Ninjas up to the armpits, but this 'Son of Ninja', promises System 3, is positively *The Last Ninja*, and he's on the rampage because an evil Shogun has desecrated the Ninja shrine and stolen the sacred scrolls of the White Ninja

Bound by honour, our hero must follow this undesirable power seeker through 125 screens of wastelands, magnificent gardens and dank dark dungeons. As the quest progresses, he encounters sword swinging samurai, disgruntled guards and karate killers out chopping – all minions of the grasping tyrant.

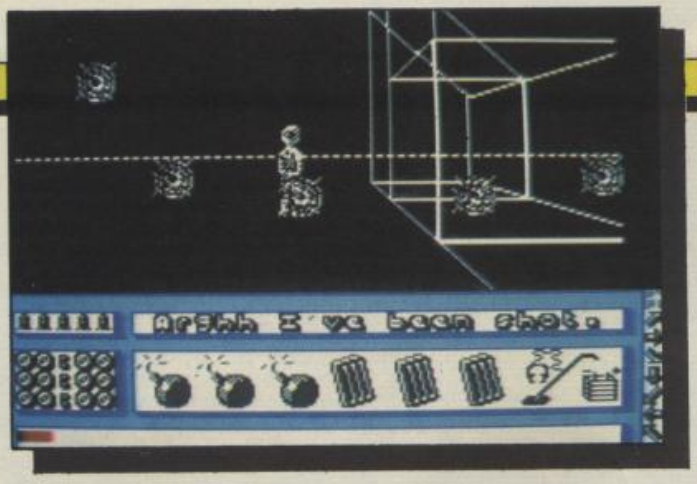
Bloody, bruising contact with these martial minions rapidly wound even a Ninja. A display shows what level of wounds he has received, and if they're too great his very life is threatened.

For protection the Ninja carries throwing stars, swords, spears, magic and some good luck charms, with an illuminated icon display showing which useful item he's present holding. Flagging energy reserves can be replenished by gathering food found on his travels.

Should he survive all of these perils and reach the dungeons, the Ninja must confront and defeat the Shogun, before the scrolls can be returned to their rightful resting place. Beat-'em-ups have been ten a penny, but as the screen shot shows, *The Last Ninja* looks like being the last word in elegant backgrounds.



► A taster of the extraordinarily detailed graphics we can expect to see in Activision's *The Last Ninja* – but the question is, will it really *be* the last Ninja?



THERE'S A CATCH

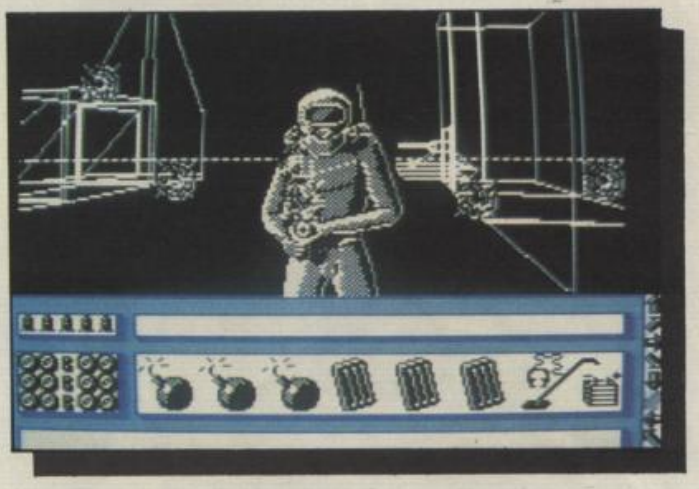
CATCH 23
Martech — *June end £7.95*

Martech's next major release, *Catch 23*, offers a massive challenge in a 3-D wire frame gamescape.

You must infiltrate the CK23 test development site, the most secret military complex on the planet.

The CK23 orbital interceptor has passed its maiden flight and you're after its plans. From your drop at 2200 hours you must trek deep into a deserted island, through mountains, over deadly minefields, high voltage electric fences and under surveillance cameras. In the deepness of the night your only companions are a Sightless Image Enhancer, through which you can see the wire-frame translation of objects in front, and of course . . . your gun.

You must expect anything and look everywhere. Inside buildings are vital pieces of information, or sometimes booby traps – the choice to search inside is yours. A shrewd mind is needed to solve information left on the island by an evacuated network of civilian spies. Once the design of the CK23 has been found you must set a time delay bomb in the nuclear reactor, and getting off the island would also be a good move!



VITORC OF AVALON

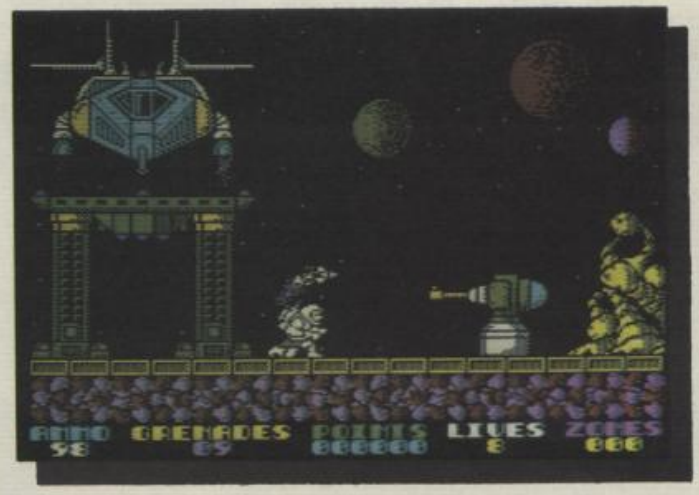
EXOLON
Hewson — *end of August £9.75*

A **SPACE SHIP** hovers overhead, the skies are bright from exploding missiles, rampaging rockets streak through the air, the deathly smell of danger is all around . . .

Thus starts *Exolon*, the latest 'planet-bound battle game' written by **Raffaele Cecco** and coming soon courtesy of Hewson. In *Exolon* you star as Vitorc, a nice enough guy, who for no other reason than he wants to has decided to rid the planet of marauding aliens. Armed with a deadly rocket launcher and laser system (cunningly disguised as a backpack) you must duck, dodge, slither and generally blast. Both weapons will be used at some point in the game, the laser to kill fast-moving aliens and the rocket launcher to destroy gun turrets and other such unpleasantries.

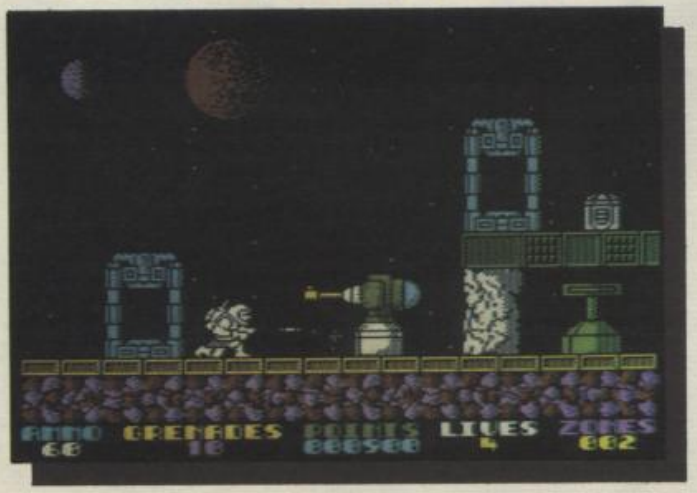
Set on five levels, each consisting of 25 screens, *Exolon* features teleporters (get you to other parts of the screen), grenades, double-barreled gun emplacements, land mines, homing missiles and pod aliens; once shot they split open to release an entire warband of mini aliens, not too dissimilar to the pods featured in age-old Defender games.

As the pictures show, *Exolon*'s graphics are colourful – what you can't see is that they're also wonderfully animated. Certainly everyone in the office enjoyed playing the preview copy, and now we can't wait for a production version.



▶ Vitorc launches a homing missile at one of the many gun emplacements in Hewson's shoot 'em up *Exolon*, due at the end of August.

▶ Large and superbly detailed graphics are all a part of *Exolon*'s fast-paced action.



AN ARCADE MACHINE I

IT'S NO LARGER than a lunch box, weighs less than a Spectrum power pack and looks about as powerful. And yet the Nintendo features 52 colours, 256 by 240 pixel resolution and 64 sprites, boasts many arcade perfect conversions and is rumoured to have sold about ten million units in Japan alone.

By the time you read this, Mattel will have launched the Nintendo games console in two guises – the basic and deluxe packages. For £130 you can buy a Nintendo console complete with a near arcade-perfect version of the immensely popular *Super Mario Brothers* – which has sold almost six million copies to date. The two controllers which are also supplied are basically enhanced versions of the Joycard, incorporating a durable, responsive rocker switch mechanism, with two fire and two select buttons – one of which is a pause. It doesn't take long to get used to this system, although the rocker switches do prove a little awkward at first.

All games come in the form of ROM cartridges – flat, grey pieces of plastic which slot into the machine in the same way as tapes were inserted in early front-loading video recorders. Loading is instantaneous, and problems are few and far between. There are presently 27 available titles, with dozens to follow over the coming year. These include sports games, arcade conversions and more 'specialised' software, such as the educational range – at prices ranging between £20 and £35.

The deluxe package costs £199 and consists of the basic console, a light gun (Zapper) and robot (ROB – Robotic Operated Buddy), plus two games to start your collection – *Gyromite* and *Duck Hunt*.

The former is played in conjunction with ROB. One of the two controllers is slotted into a suitable receptacle, and using the second controller, ROB is made to pick up and drop special gyroscopes. ROB isn't connected to the console however – data is sent via the television. The screen flashes to indicate that data has been sent, and ROB responds accordingly with either a left, right, up or down movement. The gyroscopes have to be placed on one of two pivots, which in turn press the buttons on the controller and move animated pillars up and down on screen. You then take control of a professor and attempt to collect sticks of dynamite scattered around a scrolling play area, avoiding strange creatures in the process. *Gyromite* doesn't offer much long term challenge to the ardent arcade player, but it will undoubtedly appeal to younger games-players – especially because of ROB's involvement.

Although undoubtedly a strong games machine, what lies ahead for the Nintendo games console? Well, according to Mattel the current software only uses approximately 20% of the machine's capabilities, and that its strength lies in the fact that the console is expandable – the robot and light gun are just the beginning . . .

CRITICISM

The main question to ask is why should a Spectrum owner buy a Nintendo? I would say that it's definitely a worthy investment if virtually flawless arcade conversions are what turn you on, as most Nintendo games are actually in the arcades in one form or another. Nintendo's Play Choice Ten arcade machine



N YOUR OWN HOME . . .

features ten Nintendo games, all of which are available – in almost identical form – for the home console. The difference being that the arcade machine costs around £2000, whereas the console and appropriate software costs a comparatively cheap £500.

However, at present it doesn't offer much more than the Spectrum on the games front, because where the Nintendo boasts near-perfect conversions, the Spectrum has many of its own original and immensely playable games – like *The Sentinel*, *Head Over Heels*, *Star Glider* and so on. At the end of the day it's all down to excellent software support – and not just from Nintendo, this time round, games consoles need the back up from existing Spectrum and 64 software houses.

ROGER KEAN

My first contact with 'computer games' came through an old Atari console which I encountered in about 1980, and this seems at first sight to be a progression of the same concept. The trouble is that I don't think that the idea has advanced enough over the intervening years. The machine itself is ugly and childish, and the standard of currently available software is pretty dismal (where are all the fast action shoot 'em ups for instance – most of the games appear to be nothing more than variations of the *Donkey Kong* theme). However there's no doubting that the machine has some real possibilities – the full screen graphics and expansive sound system present software manufacturers with unprecedented scope for developing new and exciting games. The only aspect of package which really impressed me was the light gun. Actually holding a pistol in your hand and aiming at an on-screen enemy beats the hell out of pressing a red button on a joystick, and the days when your computerised opponents fire back are surely not too far off.

CIARÁN BRENNAN

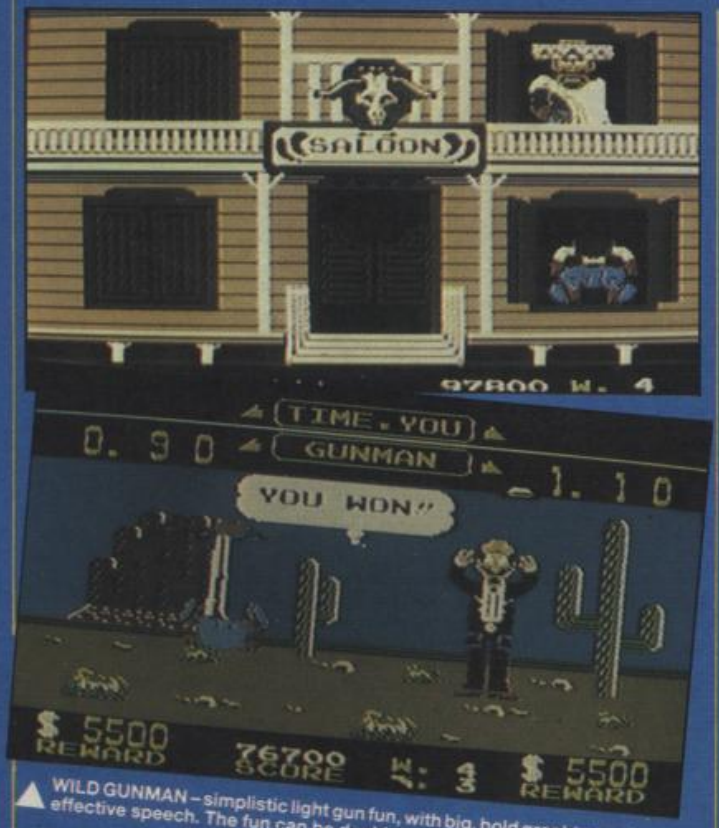
I'm very, very impressed! At first the Nintendo games don't look anything special, I suppose because one expects to see some sort of photographic mega-graphics. Instead, Nintendo have opted for colourful high quality cartoon style sprites which are beautifully animated and full of character.

Generally the games are simple, 'cute' arcade games that are easy to pick up and play, but they should keep you entertained for months. The fiendishly addictive and incredibly playable *Super Mario Brothers* is a fine example – arcade perfect (flawless actually), and I can truthfully say that it's the finest computer games I've ever played. The other thing is that they're all the type of game you always come back to – the initial novelty might wear off after a while, but weeks ▶

▼ GYROMITE – fun for all the family with ROB, as supplied with the Deluxe Package



AN ARCADE MACHINE IN YOUR OWN HOME . . .



▲ WILD GUNMAN – simplistic light gun fun, with big, bold graphics and effective speech. The fun can be doubled with a plastic holster . . .

or months later you'll load them again, just to have another quick bash . . .

I liked the robot. It might be limited at the moment, but what should one expect? There's nothing like it at this price and it's fully expandable. *Stack Up* is nothing brilliant – but what sort of extra features are going to be available in the future? The games potential for this machine is also immense – *Ten Yard Fight*, *Star Force*, *Commando* are all goodies to look out for . . . I can't wait.

JULIAN RIGNALL

I'm very impressed with this machine. The graphics are colourful and the sound is almost arcade quality. My personal favourite cartridge award has to go to *Wild Gunman*; as others in the office will testify, I play it at every available moment, and I enjoy it as much now as when I first started.

So it costs quite a bit when compared to a standard home computer – but even so, I reckon the Nintendo is one of the better things to have happened to the games world recently, and I pray that manufacturers will pick up on this opportunity, because the machine's success or failure depends entirely upon them. And, in my opinion, any success it has will be well earned.

MICHAEL DUNN

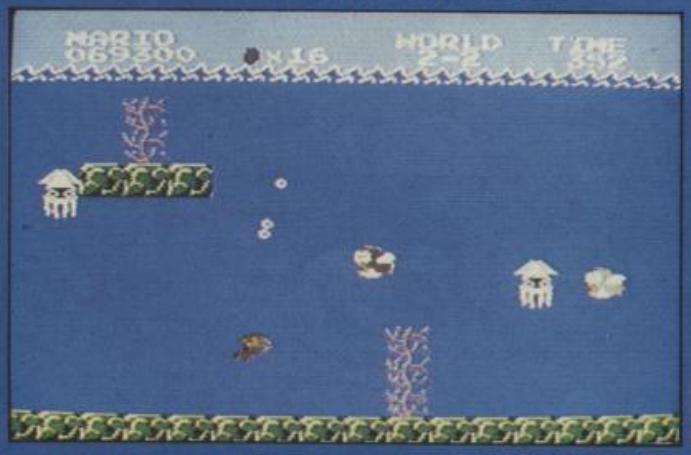
There's no doubt that the Nintendo machine will cause a great deal of interest within the games market, but the high price may discourage all but the most dedicated of games players. At the moment the games are limited in style to old arcade concepts – I can't wait until they put a totally original game on it. The graphics are of a very high resolution considering the amount of colour used, with *Duck Hunt* showing just how good the animation and realism can be. The only real disappointment is the sound; the tunes are sharp and jolly but they seem more like little ditties than proper music. As with all new products I'm sure the quality of the software will improve – and with such a high starting standard the Nintendo will be well supported. The Nintendo machine is a box of the hottest potential in years. Nintendo have designed the hardware, it's up to the software houses now!

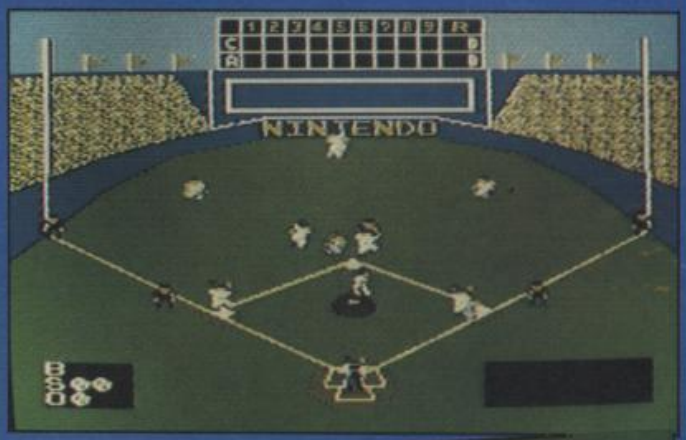
PAUL SUMNER

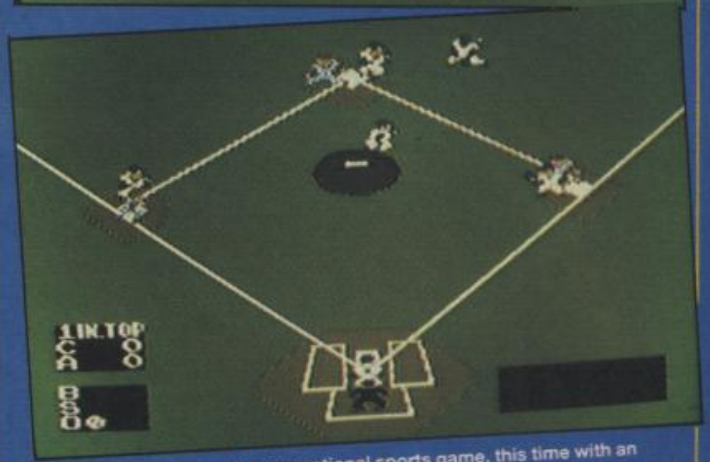
On first sight, the Nintendo games console looks really neat, boasting brilliant graphics, intricate sound, and plenty of titles to sample. However, on a closer inspection it's not quite up to expectations. The tunes are similar to those you might have expected on the Commodore in pre-Hubbard days, which is a shame as the machine seems capable of producing some nice effects. The graphics are the machine's best aspect, being colourful, well animated, and smoothly scrolling. It would be nice to see some original software, and I hope the software houses will be producing it quite soon. The hardware is of inconsistent quality, ranging from the dreadful keypad controllers to robust and easy-to-use cartridges. The gun is a mean weapon, a must for all shooting fanatics. If you're an arcade fanatic then this is the entertainment system for you – at an affordable price it should be a good seller at Christmas. Now where's the Sega?

DAVID THOMPSON

▼ SUPER MARIO BROS – start your own coin collection and rescue a beautiful princess in this immensely addictive arcade game







▲ BASEBALL – another exceptional sports game, this time with an American flavour – again for one or two players

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Video Reviews

Today two pages, tomorrow four! Last month's experiment with video reviews seemed to work – we've had as much support as censure, anyway. The system's been fine-tuned: the introductions are longer, though they still shouldn't give away too much plot, and each reviewer gives their own percentage instead of contributing to an averaged CRASH rating.

That's because we found taste in films varies even more from person to person than taste in games – perhaps because we're not professional video-watchers and we tend to go more by gut reaction than the sober, considered analysis of the software reviews.

The whole CRASH team will be writing video reviews – and this month we welcome back DOMINIC HANDY, our erstwhile word-processing reviewer, who grows more and more erstwhile every day.

THAT WAS THEN, THIS IS NOW

With **Emilio Estevez**
Label: **Embassy**
Certificate: **15**
Running time:
1 hour 37 mins

Back then in the old days it was all so straightforward. They did everything together. Like brothers they shared chicks and joy-rides in cars and went hunting trouble together, both always knowing the other would be behind them to back them up. But now one of them has grown up and the other is still a rebellious teenager fighting to survive.

In this film based on his own screenplay, Emilio Estevez (*Repo Man*, *St Elmo's Fire*; brother of Charlie Sheen, son of Martin) plays a runaway teenager having to survive in a world of drugs, murder and violence. Craig Sheffer is Brian, the old friend with whom he lives in a large Midwestern city.

But Brian meets a girl (Kim Delaney); they fall in love and Brian finds himself split between his friend and his new love. And then Charlie, the manager of the bar where the two boys hang out and drink cola, is shot dead trying to protect them after their hard night's pool-hustling.

For both of them, it's the beginning of the real world.

DOM

" Emilio Estevez could easily be the James Dean of the late Eighties. His glazed look and rebellious attitude make him more like the great man every movie. That Was Then, This Is Now **is an extremely enjoyable film with a very strong story line and some exciting side stories. The frustrated feelings of an American growing up in a changing world are well portrayed by Estevez. It's a slickly-made, flowing film with a good soundtrack, though I felt the whole lot was wrapped up too quickly. "**

70%





The next James Dean?: Emilio Estevez is the sullen and magnetic star of *That Was Then, This Is Now*

ROGER

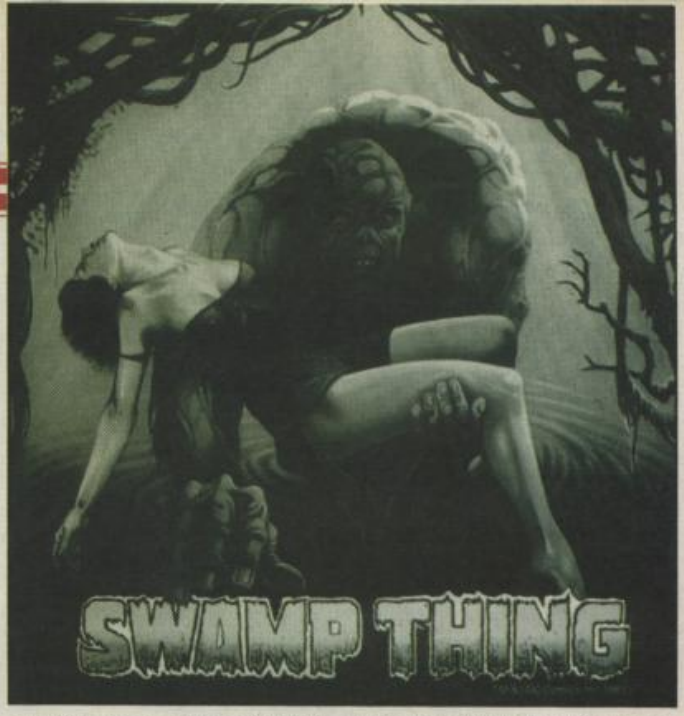
" Despite the face-lift on his name, Emilio Estevez has all the Sheen dynasty's magnetic charm – the camera just loves him. So That Was Then, This Is Now **is always watchable, even when it's rambling a bit (which it does occasionally – because this is a very un-American movie in feel). Raw emotion, brat-pack style, stands in for hard, fast action and it's quite clever that this 'now' film feels as though it's been set 'then', capitalising on popular nostalgia while still being 'relevant' to today's youth-alienation sentiments. Worth seeing. "**

73%

BARNEY

" Emilio Estevez is making a sullen career out of brooding, embittered, slightly hyper American loners – and here we have in effect the violent, no-hope other side of his cutely anarchic Repo Man **role.** That Was Then, This Is Now **hovers between teen movie and gritty, blood-and-hate drama; the all-American love interest, the sudden stopping of the action for music are there, but the story makes no concession to fun. Sometimes the dark mood is almost too overt – take the long, studied scene where Estevez talks about his mother's murder as the shadows of rain on a window course across his face like tears – but this disturbing film conveys perfectly an ambience of pointlessness and sudden brutality. "**

88%



SWAMP THING

With **Louis Jourdan** and **Adrienne Barbeau**
Label: **Warner Home Video**
Certificate: **15**
Running time: **1 hr 28 mins**

Hidden in a treacherous, unmapped swamp of the southeastern States is a small research station where scientist Alec Holland is close to solving the world's greatest problem.

By fusing the DNA of plants and animals, he's developing 'a plant with an animal's aggressive power for survival – a plant for the 21st century' which will grow in deserts and feed continents.

A young administrator with no obvious function (Adrienne Barbeau, the heroine) arrives at the base and soon falls for Holland. But a cadre of guerrillas is closing in on the scientists, determined to steal the formula to give their leader world power.

They attack the research station, but in the struggle Holland drops a flask full of the powerful chemical. After a sudden massive explosion, he is seen running screaming, blazing with flames, into the swamp . . .

As in the D C/Alan Moore comic *Swamp Thing*, Holland emerges as a scaly green creature with a smirk and a perky little nose.

He soon rescues the heroine from the pursuing baddies but she doesn't recognise him, so she says 'Shoo!', and he smiles a little smile and waves a little wave.

But together they manage to give the attackers a good run for their money ('Willie! Ty*rone*! Shoot the damn thing!') amid the misty swamps . . .

ROGER

" Well, it was a better-spent 80 minutes than I'd feared, but only by a gloopy margin. Attempts to convey a comic-strip feeling are there – the strange scene-wipes – but it's all very throwaway, and I'm sure Alan Moore is rightly indifferent to it. Some good moments (there are a few) are swamped by the general risibility and the oddly unexciting pace. "

36%

DOM

" There are some films you KNOW are going to be tacky as soon as the titles start rolling – Swamp Thing **is one such. At least the actors manage to perform convincingly against unimpressive scenery and in terrible costumes.** Swamp Thing **starts out with some promise, but as soon as the monster gets all sentimental the horror and suspense is gone.** Swamp Thing **is the sort of lagoon film that came out in the old days – all that's been added is colour. The monsters, sound and picture-quality are still the same. "**

15%

BARNEY

" 'This was so bad it was funny': I know it's an après-video cliché, but moments of Swamp Thing **really leave you groaning in the aisles. It's the sort of movie where people say 'incredible!' to explosions. It's the sort of movie where the hero says 'hello' to someone and they rip off a plastic face and turn out to have a stage-German accent, a demented glimmer in ze eye and a plan for vorld domination! But it also has the BAD habits of comic strips – people seem to speak in single lines, balloons, rather than conversations – and the score wheels out every creaking old device of 'suspenseful music'. Beneath the surface of this ridiculous swamp lies a dull, derivative (**Frankenstein, Creature From The Black Lagoon**) monster movie. "**

32%

VANISHING ACT

With **Elliott Gould** and **Margot Kidder**
Label: **CBS/Fox**
Certificate: **15**
Running time: **1 hour 32 mins**

Harry and Christine have been married a week, though they hardly know each other. Harry's from San Francisco, Christine is from Philadelphia – opposite sides of the continent; it's an odd marriage. They met in a stuck lift in Las Vegas and got hitched before you could say 'Going up'; now they're honeymooning in a Rocky Mountain ski resort. They're getting on fine. Then Christine disappears.

Harry (Mike Farrell – *MASH*) visits the police station. There's no-one there but a wife playing Bach on the flute; this is a small town, there's no crime, no problems. Eventually he tracks down the police chief, Rudameyer (Elliott Gould), a displaced New Yorker who lives for his stomach. ('You wouldn't believe what they think is a pickle out here.')

Missing person? Rudameyer shrugs over his sandwich (specially flown in from West 87th Street). He'll run a few checks, he says, but there's not much he can do.

Harry returns to the holiday condo to wait for Christine. Then the local priest rings up – she's been with him at the church, and wants a reconciliation with Harry. Harry goes to the church. The priest gives him a little talk on repairing relationships, forgiving and forgetting, and ushers in a small dark woman.

Harry watches Christine walk the length of the church toward him. She greets her husband.

But this isn't Christine, says Harry. But nobody will believe him . . .

BARNEY

" I could not fast-forward it: the video equivalent of 'I could not put it down'. Vanishing Act **is an outstanding mystery thriller in the Hitchcock style, with a brilliant twist which'll leave you grinning in amazement (and you can't predict it – this is no whodunit, though the clues are there). The style suits the abstract theme: the dialogue is strangely stilted (it's based on a stage play), the photography is simple and portrait-like. There's also a touch of spoof – no-one could write 'Sure, it all fits' or 'Look at the sequence of events' in seriousness, and Elliott Gould and Fred (*Munsters*) Gwynne are hilarious as the long-suffering Bronx cop and wonderfully lizardlike priest respectively. "**

84%

ROGER

" Vanishing Act **generates a level of frustration so extreme that you want to stand up and scream to release the tension. NOTHING goes right for this guy! And things are exacerbated by Elliott Gould's smugly dumb cop – it's enough to make your teeth gnash. Suffering some flatness in feel from its made-for-TV origins,** Vanishing Act **nevertheless provides first-rate thriller entertainment in Hitchcock style. "**

79%

DOM

" If you love thrillers, this will feed your appetite for the next six months. Margot Kidder performs superbly, changing personality at the blink of an eye. The scene, up in the snowy hills away from everyone, is perfect – though I wouldn't have minded a few breathtaking scenery shots. Throughout the film I found myself believing one person and then changing my views on the plot and siding with someone else. Vanishing Act **is constant suspense right up to the final credits – I can't give any more away without spoiling it. You must see it! "**

88%

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Screen shots taken from Atari version.

ocean

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Update:
Reawakened after two years of 'death', a confused Cross stumbles into a jungle and some of its inhabitants – some more dangerous than others . . .

THE TERMINAL MAN




ONLY THE TORRENTIAL RAIN AND THE THUNDER REMAINED AS CROSS READ THE CIRCUITRY IN THE MACHINE...
A GUARDIAN MECHANOID...
-ONE OF MANY-
-PROTECTING INSTALLATION OF VITAL IMPORTANCE...
-A COORDINATED MOVE OUTWARDS FROM ITS CENTRE ON A CYCLE OF EIGHTY YEARS...
-AND THE TECHNOLOGY IS OF THE SAME DESIGN AS THE ONE THAT CREATED THE LONG DEAD STARSHIPS I FOUND BEFORE MY SHUTDOWN!
ANCIENT PLANS OF WHICH THIS MECHANOID KNOWS NOTHING BUT GUARD DUTIES...
IK-IK PHEE!
CURIOSITY GAVE WAY TO PRESENT PREDICAMENTS-
-RELEASE THE GIRL- AND PERMANENTLY INACTIVATE THE MACHINE-
AFTER DANGER CAME WEARINESS...
WHAT NOW? I KNOW MY PAST- I KNOW I AM THREE - AND YET ONE. I HAD A TASK ONCE - IT WAS DONE. AND THE COMPUTER IN ME TELLS ME THAT IS ALL THERE IS TO IT. YET, THE HUMAN SEEKS NEW GOALS AND THE VIRUS WILL NOT DIE... I AM TORN.
NNNG-R2!
-THESE BEINGS NEEDED ME FOR A MOMENT - THAT WAS REASON ENOUGH TO BE, BUT WHAT OF THE FUTURE?
LEAVES RUSTLED AND SUDDENLY THE PRESENT WAS BACK!
DO NOT RESIST, STRANGER! YOU ARE SURROUNDED!
YOU SAVED OUR YOUNG - BUT THEY ARE NEEDED NOW - THE SEARING IS UPON US - AND THEN THE GIVING
TAKE THEM TO THE SETTLING!


LISTLESS AND PASSIVE, CROSS ALLOWED HIMSELF TO BE LED OFF WITH THE GROUP- AND AS THE RAIN STOPPED THEY REACHED THE SETTLING ...
HUGE!
CROSS GAZED AT THE STRUCTURE - THE COMPUTER SIDE OF HIM COMING TO CONCLUSIONS...
THE INSTALLATION- ANCIENT AND DESTROYED- STABILISER 3, PLANET 785- ALL THE MECHANOID KNEW!!!
AS THE CLOUD BROKE, THE FULL GLORY OF THE PLANETARY SYSTEM HUNG ABOVE HIM...
THE DYSON SYSTEM - ARTIFICIAL ASSEMBLY OF PLANETS IN A SPHERE ENCIRCLING THE SUN!!!
-ALL HELD IN POSITION BY A VAST NETWORK OF STABILIZERS LIKE THIS -LINKED TO WHAT?
-AND WHAT WENT WRONG?
COME!
STRANGER- THE ELDERS WILL SPEAK TO YOU AND THE YOUNG ONES!



BY OLIVER FREY

Next Month: Fire from Heaven

WHAT'S THAT HAUNTING, EERIE, SCRAPING NOISE??

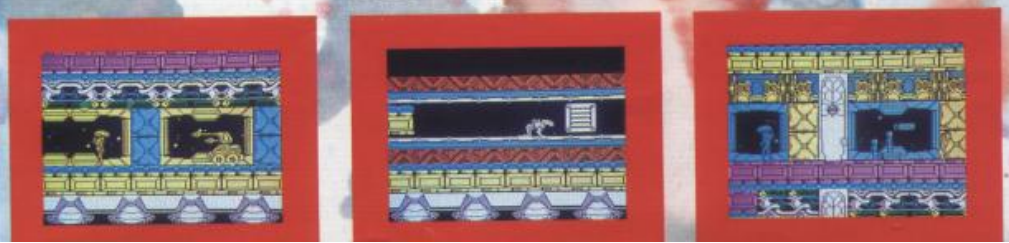
Don't worry it's you and you are the.....



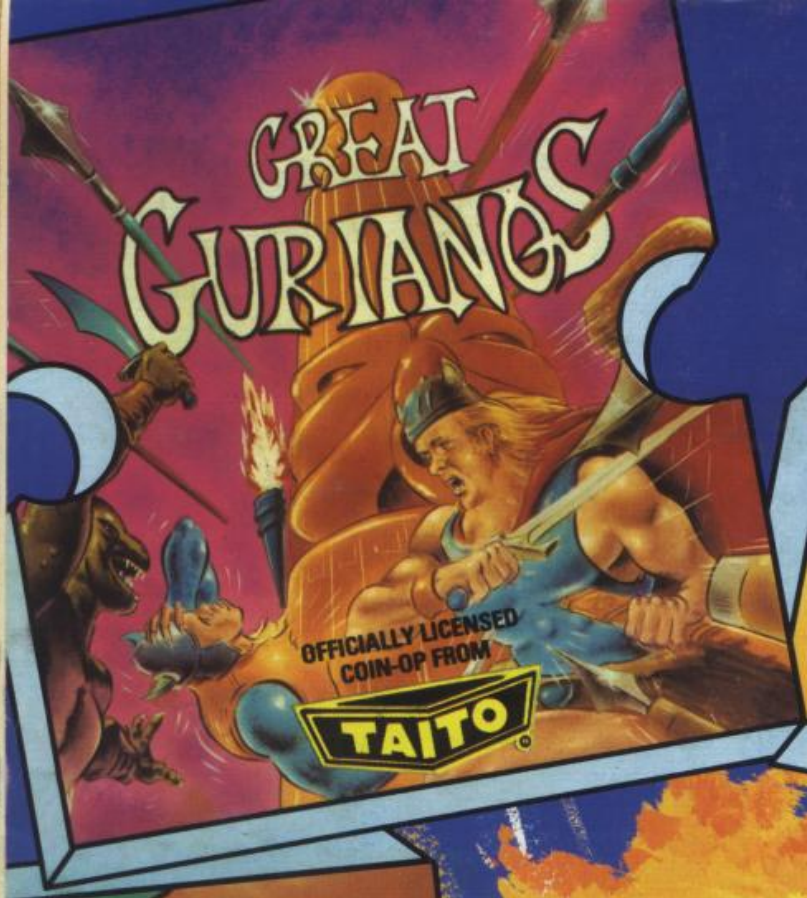
After a million long year's evolution the inevitable consequences of genetic engineering has materialised to haunt the galaxies, to terrorise the star systems and the beings that exist upon them. A race of Masters so feared that stories of their awesome powers are legend and the tales of havoc that they commit from the grotesque starship in which they collect galactic specimens, strike fear into the bodies of all inhabitants of planets upon which this vessel of doom casts its evil shadow. Fear that is in all except one single, savage neoreptilian creature, that too has felt the cataclysmic tremors of evolution and exists as the only living example of the one remaining lifeform that has the strength and cunning to resist the domination of the Masters.

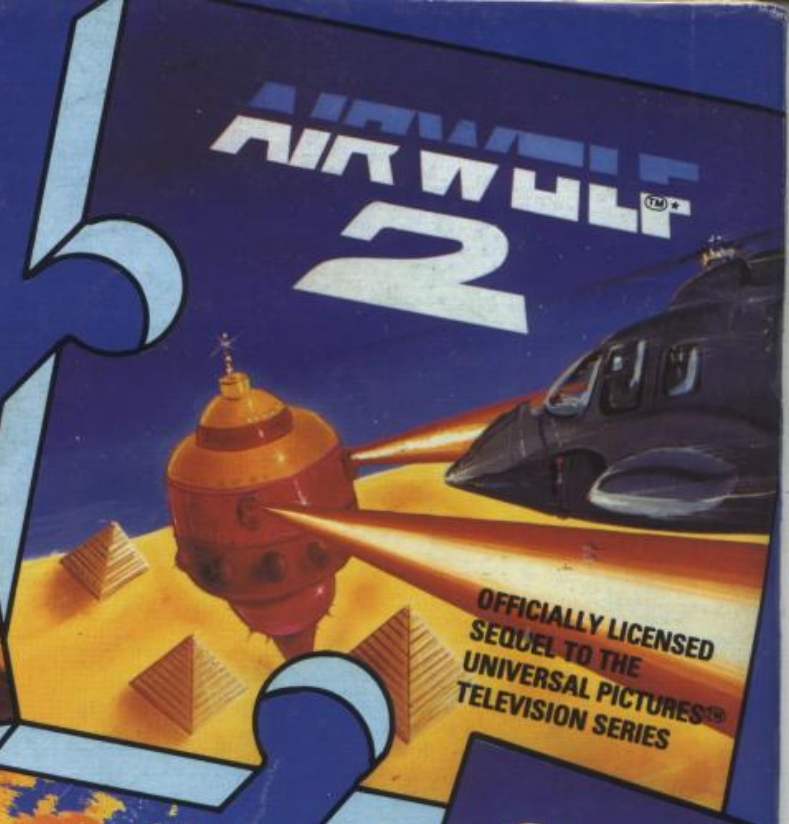
Motivated by a sub conscious determination to perpetuate its tortuous existence the creature roams the labyrinthed depths of the space station seeking the hidden hibernation chambers in which the last remaining members of its rebellious race lie in suspended animation. There can only be one objective in its miserable existence... the freeing of its companions and the ultimate destruction of the monsterous Masters. How much pain can you withstand, how long can you last out before once again you can join with spirits of your own kind?

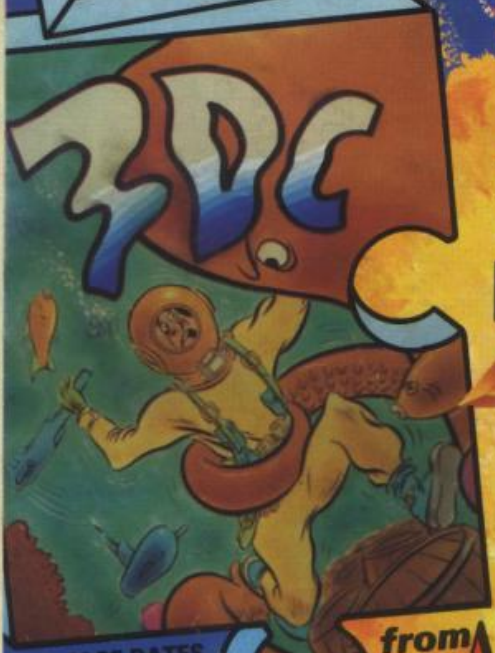
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