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A NEWSFIELD PUBLICATION
NO. 64 MAY 1989

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CRASH

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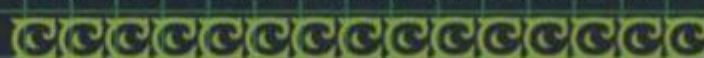
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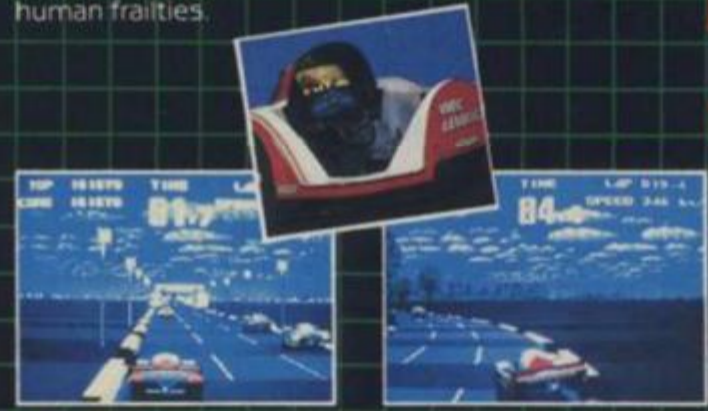
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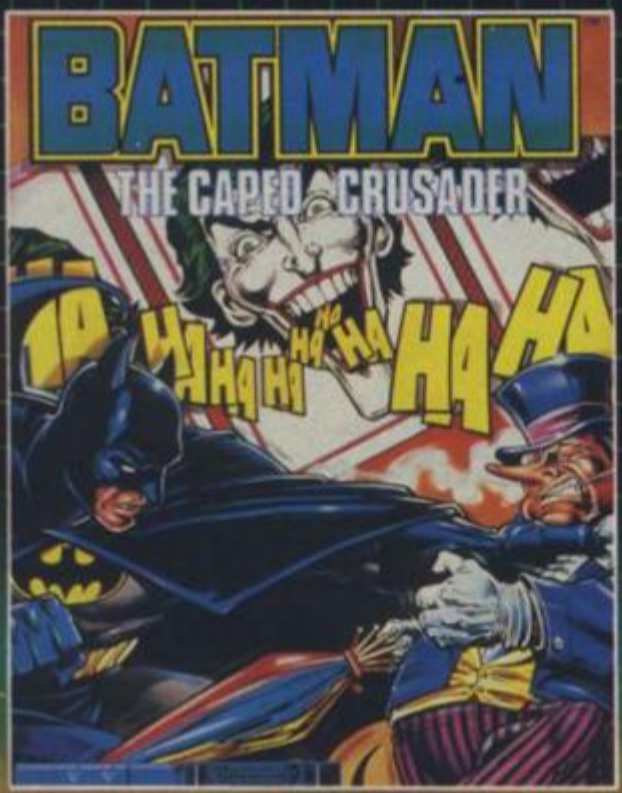
FEEL THE POWER



DARK AVENGER

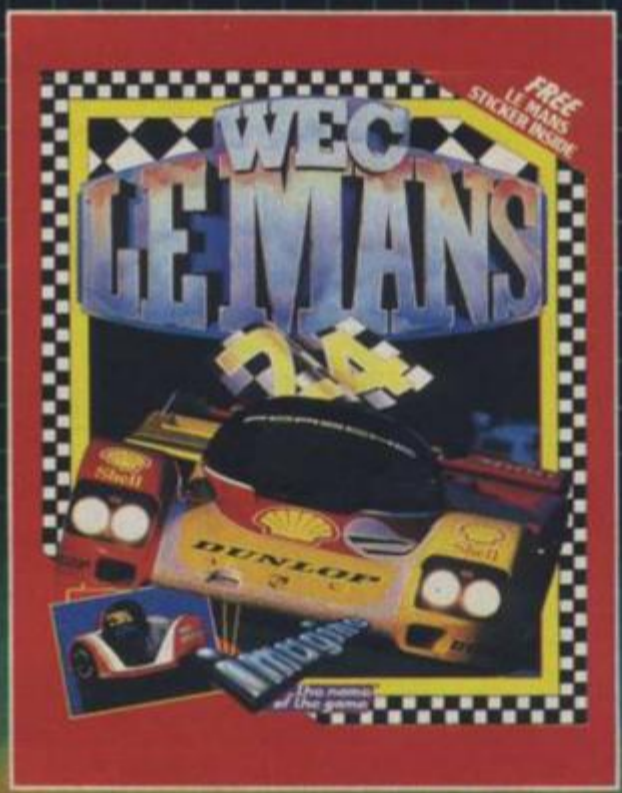


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CRASH

ZX SPECTRUM

LEARNING, TO FLY

GETTING PUBLISHED

So you want to be a binary celebrity? A master of machine code writing chart-topping hits? Mastertronic probably publish more first-time programmers than anyone else in the business, so we talked to Budget Supremo Andrew Wright about how it works. From sending the tape in, to preparing the artwork, we have the full story.

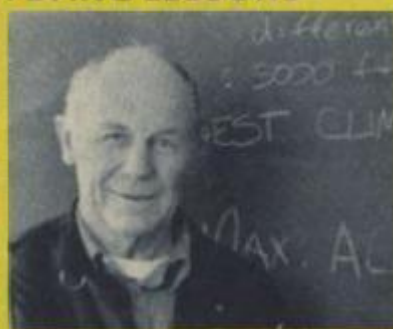
Climb to fame 41

BOMBING ALONG

The programmers of *Star Wars* and *The Empire Strikes Back* are putting the finishing touches to the 'ultimate combat flight sim'; *Bomber*. We talked to chief programmer Andy Craven about solid 3-D, MiG's and the confessions of a rock star.

Je suis a rock star 53

FLYING LESSONS



The man with the Right Stuff is Chuck Yeager; WWII ace, test pilot and Vietnam vet. His classic C64 flight sim has finally been converted to the Spectrum, allowing Speccy owners with the Folding Stuff to get flight lessons from Chuck himself, then test fly all the latest jets.

Flying high 75

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The Rebelstar Raiders meet *Aliens* in a classic SF confrontation

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Raff Cecco makes it a CRASH Smash hat-trick with a classic arcade/adventure



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Travelling through time in the latest and best Imagine beat-'em-up



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Ten levels of spectacularly horrific ghouls to get slimed by

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Multi-player football management
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First class Irem coin-op conversion

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CRASH

FRONT END

ISSUE 65
JUNE ISSUE
ON SALE
MAY 25



Piracy, ahoy!

This month's pick of the paperback's is **Tim Powers'** epic sea-faring fantasy *On Stranger Tides* out now from Grafton books. It's violent, fast-moving and spooky . . .

. . . the sand rippled and jumped . . . white bones began poking up out of it and rolling and cartwheeling together into the pile; the pile heaved and shifted and shook, then steadied, and Shandy realised it was now a human

skeleton in a crouching posture . . . Blackbeard spoke, and the skeleton lowered itself and knelt on one boney knee.

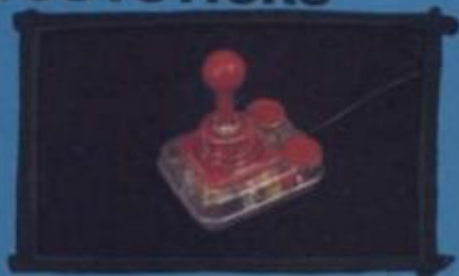
And it gets better! After writing one fantasy classic, *The Anubis Gates*, Powers has certainly done it again. Set in 1718 the story follows the high seas adventures of John Chandagnac and his confrontation with the notorious pirate Blackbeard. Complete with dramatic naval battles, zombies, a mummified two-headed dog and a beautiful damsel in distress this is essential reading.

SHORT ED

Well, not much time or space for a ramble this month. It's all been a bit hectic with Phil absent, I don't think I could've finished the issue without Erstwhile Ed Dominic Handy helping out, so thanks to him. Thanks also must go to the Art Department - Wayne Allen, Melvyn Fisher and Yvonne Priest - who came up with what I think is a great new design to go with the editorial changes. We think the new CRASH is the best ever, and the next one will be amazing!

GET YOUR FREE JOYSTICKS HERE!

Remember the amazing free offer in last month's CRASH; buy a copy of *Tower Of Light* from Caris Software (£12.95 on tape, £14.95 disk) and get a FREE Competition Pro 5000 Clear joystick worth £15.95! Pretty darn good wasn't it? And the ad was great too. Only problem was there was no address. Problem solved: Caris Software, Unit 13 (a-ha!), 25 Low Friar Street, Newcastle upon Tyne, NE1 5UE. The



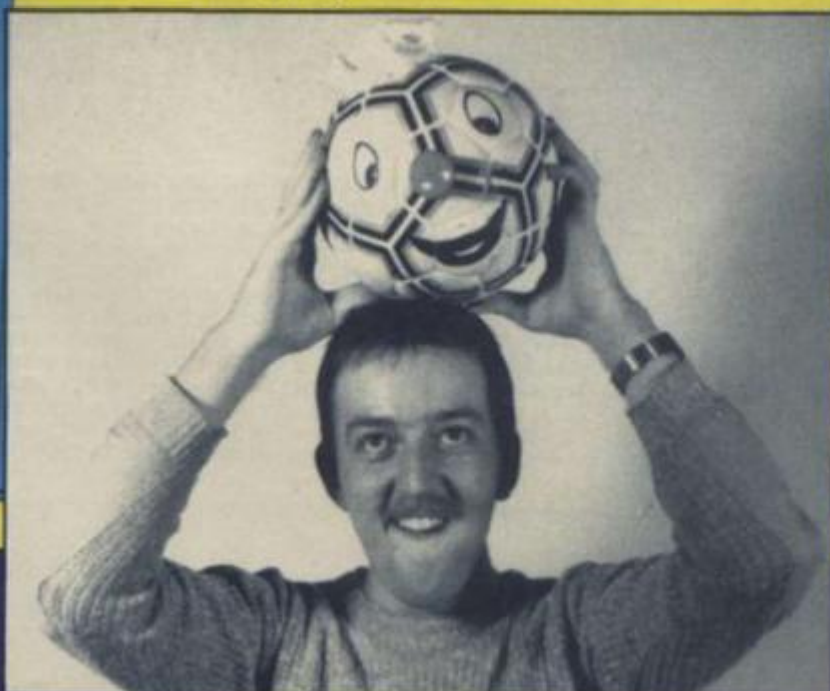
game, by the way, is a RPG fantasy adventure where up to four players can take part. Review next month hopefully, corrected ad on page 15.

SKATE AND DIE!

Observant CRASH readers will notice a drop in the number of Phil comments this month, and sad to say it's not because he's off with his flock due to it being the lambing season. No, the blame for this must squarely lie with the makers of all those skateboard games. After playing a few of these Phil seemed to think himself pretty good at it, and when asked for a real-life demo at a nephew's birthday party

promptly attempted a series of Ollies and Handplants . . .

'Get well soon' cards for Phil can be sent into the Forum to be passed on, there's no firm news when the plaster will come off but Phil asked for this story to be printed as a warning to others. And definitely didn't say; 'I hope you're not going to put this in the Front End . . .'



C·O·M·P·U·T·E·R·A·R·E·N·A·8·9

The weekend the software business spent in cloudy Majorca. 'And didn't we have a luvverly time?' pipes CRASH's Richard Eddy.

Should you have wanted to contact any of the big bods in the software industry between March 17-20 you would have found it pretty difficult - they were raving it up in Palma, Majorca, at Computer Arena 89, the software industry's annual conference.

120 'delegates' (drinking partners?) turned up from software houses, magazines, distributors and publicity companies, all in good spirits... especially after a few jars of San Miguel, the local brew.

The main conference took place on the Saturday, an early start at 9:30am. Well, tell the truth it started slightly later due to the fact that Ocean boss **David Ward**, the conference's first speaker, wasn't awake. There were eight speakers covering a wide range of topics, with some very strong views being expressed.

Paula Byrne, General Manager for Telecom Soft (currently up for sale - Telecom Soft that is, not Paula), made a strong and enthusiastic speech on 'Licensed or Original Games?', with the main argument being that no matter whether a game is licensed or original it should be well-programmed and developed.

Nick Alexander, boss of Virgin/Mastertronic/Sega et al, took the stand for the Console Challenge. Obviously, as Nick heads the UK arm of Sega, he is convinced the Sega Master System and Mega Drive are set to dominate the computer entertainment world.

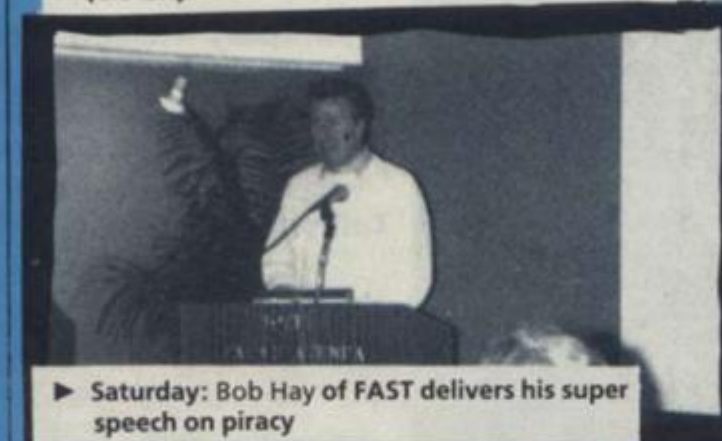
But then, seven years ago Nick was saying that the old Atari consoles were dead - long live the computer! No doubt in a few years time Nick will be back telling us that Sega are bringing out a keyboard machine - consoles are dying!

The most productive element of the conference was an excellent speech by **Bob Hay** of the Federation Against Software Theft (FAST). Bob made it very clear that commercial piracy is at an all-time high, costing the software industry incredible sums of money which would otherwise be used to produce more and better games. In fact, if the piracy problem increases any further games may well go up to £12.99 on cassette and £17.99 on disk. A worrying thought indeed.

To provide support for FAST,



► Friday: Hulloo Majorca! A few 'delegates' are ready to discuss the fate of the industry. L-R: Richard Eddy (CRASH), Steve Merrett (ST Action), Lesley Mansford (Electronic Arts) and Oli Frey (CRASH).



► Saturday: Bob Hay of FAST delivers his super speech on piracy



► 3am (!) Sunday: Paula Byrne continues her 'Licensed or Original?' speech on the floor!



► Monday: off to the beach for the holiday day. Erstwhile CRASH Ed Roger Kean practises his clothed surfing in the freezing gale!

CRASH, along with the rest of the computer magazines will be advertising the problems caused from illegal duplication. A FAST slogan will soon be appearing on advertisements and packaging - similar to the health warning on cigarettes.

Many important points were raised throughout the piracy discussion, the most relevant being: every time you pirate a game you are depriving a software house, and therefore the programmer (and one game can be around a year's work for a programmer) of £3 or £4, that's the software houses' cut of what a game costs you in the shops. Without that bit of money coming in software houses won't be able to afford to write computer games any more. But, we'll save our moral preachings for another day...

After the heated discussions which continued in the hotel bar (hic!) after the conference closed at 6:00pm everyone donned their dicky-bow and dinner jacket and prepared for the Gala Dinner. With entertainment provided by **Mel Croucher** and his Spanish-speaking dummy of Activision boss **Rod Cousens** (who never turns up for anything, cancelling at the last moment); the twits from Domark, **Dominic**

Wheatly and **Mark Strachan** (a side-splitting rendition of the two Ronnies proving to be masters of the in-joke) and the industry's first alternative comedian **Roger Bennett** - CRASH's Advertisement Director. With his cracking one-liners ('Tomorrow is Sunday!') (obviously everyone was totally inebriated at this stage - Ed) and his unprintable stories of his mate Denziel from Devon and that laugh... Well, it was superb. We're hoping for a repeat showing at this year's PC Show!

And then Sunday finally arrived and the industry took to

jeeps and small Spanish cars and headed off into the mountains and onto the coasts desperately trying to turn a working expedition into a holiday despite the force ten gales, the rain, the clouds and all that traditionally goes with a March holiday.

And, should we forget the Domark twits before leaving Majorca, they provided us with a brief entertainment slot on the concourse of Palma airport wearing plastic sombreros and chucking **Bryn Gilmore's** (of Mastertronic) passport between them. It's enough to give the industry a bad name...

But enough of this wandering gossip and down to the main business of the awards, which were given out on Saturday night, as voted by CRASH, ZZAP!, TGM, Your Sinclair and ST Action readers. They were:

- ★ **Game of the Year:** Operation Wolf (Ocean)
Runners-up: RoboCop (Ocean), Last Ninja II (System 3)
- ★ **Best Software House:** Ocean
Runners-up: Thalamus, US Gold
- ★ **Best Arcade Game:** Operation Wolf (Ocean)
Runners-up: Afterburner (Activision), RoboCop (Ocean)
- ★ **Best Adventure:** Bard's Tale (Electronic Arts)
Runners-up: Lancelot (Mandarin) Guild Of Thieves (Rainbird)
- ★ **Best Strategy Game:** RISK (Virgin)
Runners-up: Carrier Command (Rainbird), Platoon (Ocean)
- ★ **Best Music:** Cybernoid (Hewson)
Runners-up: Out Run (US Gold), RoboCop (Ocean)
- ★ **Best Graphics:** R-Type (Electric Dreams)
Runners-up: Operation Wolf (Ocean), Cybernoid (Hewson)

LICENCES TO THRILL?



AFTER LOSING Bob Monkhouse (like we wish BBC1 would!), Domark are back on the licence trail with 007's latest epic; *Licence To Kill*. Once again Timothy Dalton is Bond, and this time his opponent is the evil drug baron Sanchez. Whilst defeating Sanchez (oops! I spoilt the ending!) Bond will go on a stomach-churning helicopter chase, descend into watery depths to take on sharks and thugs, then chase after Sanchez's drug smuggling convoy of petrol tankers in a stolen crop duster plane. All these highly meaningful scenes will be duplicated by the Domark game which should be out in June.

Rather further in the future, and considerably more bloody, is Ocean's latest film tie-in deal; *Nightbreed*. This movie is scheduled for an Autumn release and is based on Clive Barker's latest bestseller, *Cabal*. The finished product should have some of the best and most terrifying monsters ever seen — so it's unlikely to a 'U' Rating. But then *RoboCop*'s '18' rating didn't do the computer games sales any harm did it?

The game Nick's most looking forward to seeing, though, should be ready for a very special kind of release right now. This is *Total Eclipse: The Sphinx Jinx*, a remixed version of the original with completely different puzzles. You've got to rebuild the mighty sphinx by collecting 12 pieces in just one hour. Incentive's incentive for you to make a really high score this time is a £2,000 holiday in Hawaii, where you can see a total eclipse for real. Unfortunately the game's only going to be available from the Home Computer Club as part of a special double pack costing £11.20. Bwah!

Requiring yet more brain work will be Level 9's latest adventure, *Scapeghost*. The idea is that you're

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this hero detective killed while investigating drugs smuggling (obviously no James Bond, huh!). Now you're dead ugly rumours have begun that you were involved with the smuggling. Determined to put a stop to this, track down the drug smugglers and free a hostage, you come back from the dead. One advantage of being a ghost is that you can walk through doors (without opening them!) but on the other hand you can't very easily move things or communicate with people. As has become common practise with Level 9 the game will come in three loads, and cost either £14.95 or £19.95 depending on whether you want tapes or a disk.

And last, but most definitely not least, we have CDS's announcement that they've got the licence to the TV Quiz Show *Sporting Triangles*. Quoth CDS: 'Yes, there have been a number of quiz show conversions . . . (but *Sporting Triangles* is deemed to go down in history as the best ever'. While cynics may note that wouldn't be too difficult, 'the best ever' should be out now for £7.99 on tape and £14.99 on disk.

OOPS 2!

Wot? Not another mistake? — 'Fraid so. In CRASH 62 we went on about ACG owning RARE and Ultimate: **Play The Game**, when in fact they don't. ACG used to own Ultimate, but then sold it to US Gold when the games writing side of ACG left to concentrate on RARE (which mainly did Nintendo games). It's RARE, not ACG, which have bought back Ultimate and are writing Speccy games again.

As part of RARE's expansion they've hired Alan Ward as Gen-

THE MAGAZINE THRILL OF THE DECADE!

CRASH GOES LIVE ACTION!

Yes guys — next month sees your fave Spectrum mag grow sideways and sprout a games cassette like you've never had before on any mag!

More free games, demos and POKEs than you've **EVER** seen before. No, not one, not even two free games. Could it be three? Could it even be four full-price games? Is it possible? Are we mad?

YES!

Gameplay heaven (or hell) will be yours on May 25th

at a cost of... well there's another point of madness — it'll be cheaper. Yes, the price with cassette is **GOING DOWN!!**

Tell your friends, tell your newsagent — but whatever you do...

DON'T MISS OUT!

A FOOLISH APRIL FOOL

LAST MONTH it was decided to keep with tradition and do an April Fool story — 'Amstrad's New Hardware'. Unfortunately the story turned out a lot more realistic than intended, and was in any case very poorly thought out. CRASH would unreservedly like to apologise to you, the

readers, as well as Acorn, Amstrad, Alan Sugar and most especially MGT's Alan Miles who was at no stage consulted over the article, and has never said anything of the kind falsely implied in the article. To further put the record straight, none of the new Amstrad hardware mentioned in the article is real and as far as we know recent rumours about a cut-price Archimedes have nothing to do with Amstrad.

eral Manager. Alan used to a senior officer with Marconi (one of the UK's biggest and most high tech companies). As his title suggests he'll be responsible for a wide range of things, including PR — fans of the Ultimate mystique need not worry though, as so far he's firmly sticking to the company policy of:

'I'm afraid we can't say anything yet'. Spectrum games are being written is all we know so far. As for Alan's interests, apart from RARE games of course, he's an avid motor racing enthusiast and is a senior official with the British Motor Racing Marshals association. Expect *Trans-Am 2* maybe?

RARE

DESIGNS ON THE FUTURE

A YEAR'S SUPPLY OF FREE GAMES

WIN MASTERTRONIC'S WHOLE RANGE FOR THE NEXT YEAR!!

MASTERTRONIC

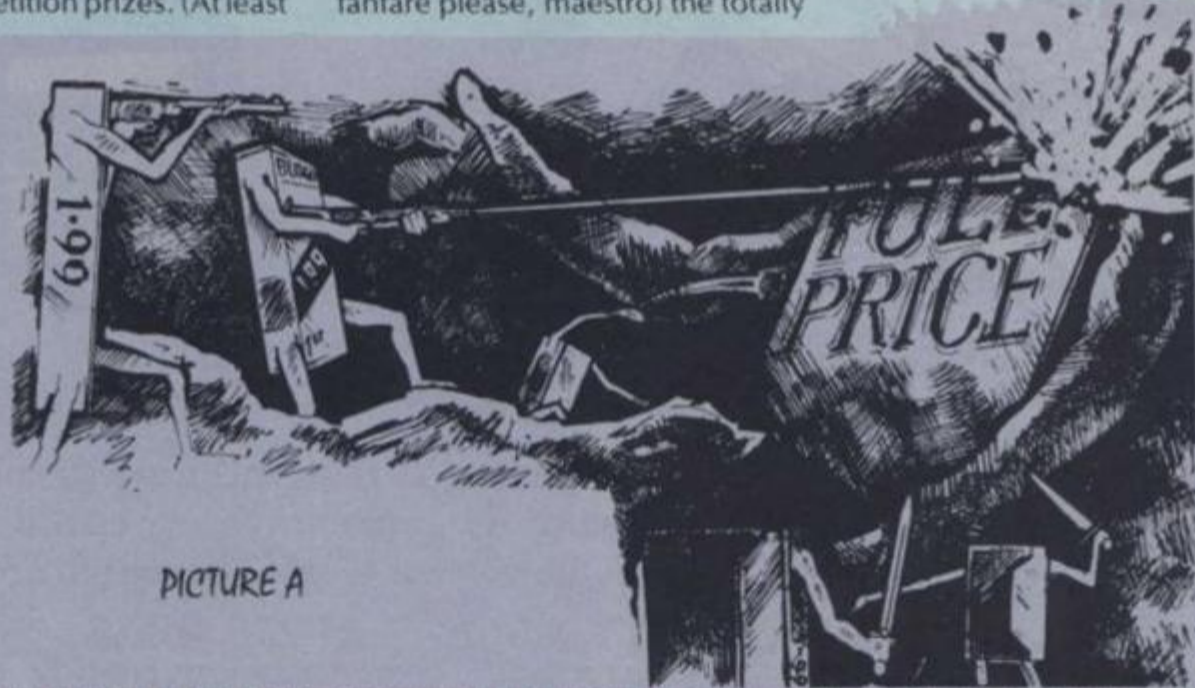
are undoubtedly one of the top budget software houses, and games such as *Spellbound*, *Agent X*, *Amaurote* and *Mind Trap* (a House Hit this very issue) go a long way to proving this point. They are also one of the most prolific, producing four to eight games per month, so it's no wonder their PR person in the shape of Lesley Walker was on the blower the other day offering some great competition prizes. (At least

I think that's what she was saying, it's sometimes a bit difficult to understand her—she has such a cute Scot's accent.) But after a quick check with the louts in the CRASH office, this was indeed confirmed, so I retired to my newly-decorated broom cupboard to sort out the details. It's needed a face-lift for quite a while, in fact ever since that mercenary chap from Ocean kicked my door in a few months back.

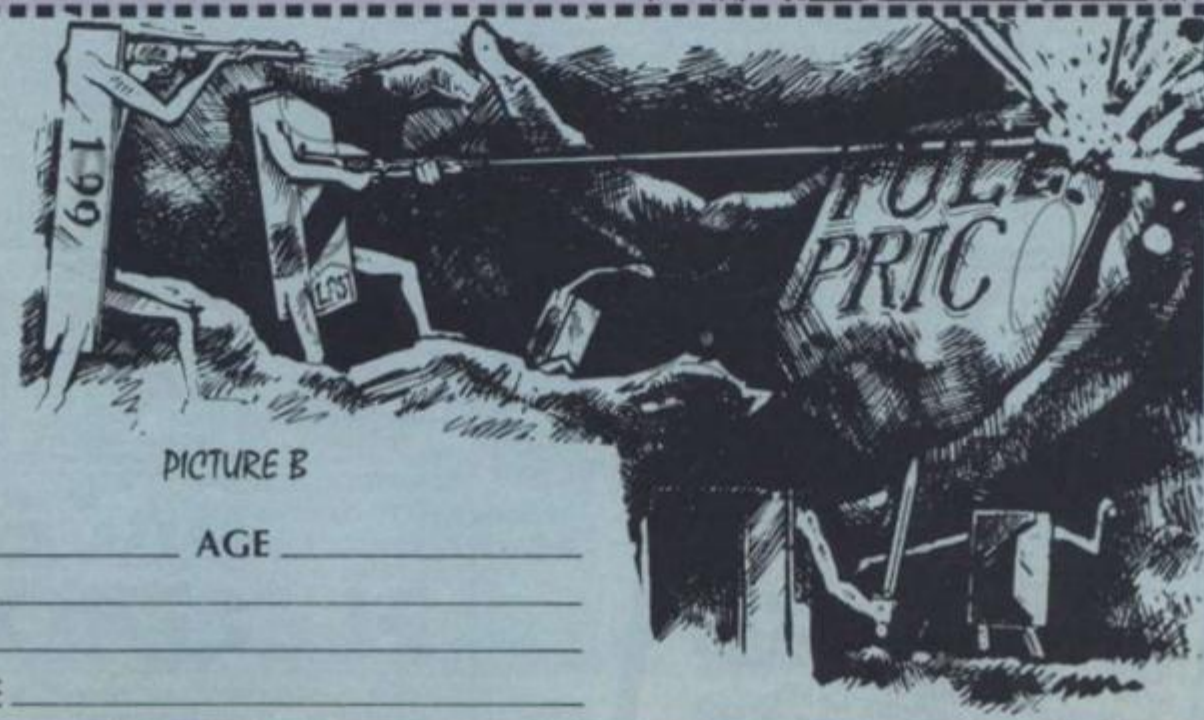
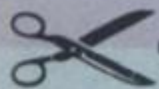
I am pleased to announce (trumpet fanfare please, maestro) the totally

stupendous Mastertronic competition. **TEN WINNERS** will each receive **A YEAR'S SUPPLY** of Mastertronic games (ie, all their releases from June 1989 to May 1990). To enter, just look at the two illustrations on this page and tell us the **TEN** differences on Picture B.

Fill in your name and address and send off the form to **MASTERS OF BUDGET COMP, CRASH, PO Box 10, LUDLOW, Shropshire SY8 1DB. Entries in by May 31, please.**



PICTURE A



PICTURE B

NAME _____ AGE _____

ADDRESS _____

POSTCODE _____

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THE GAMES

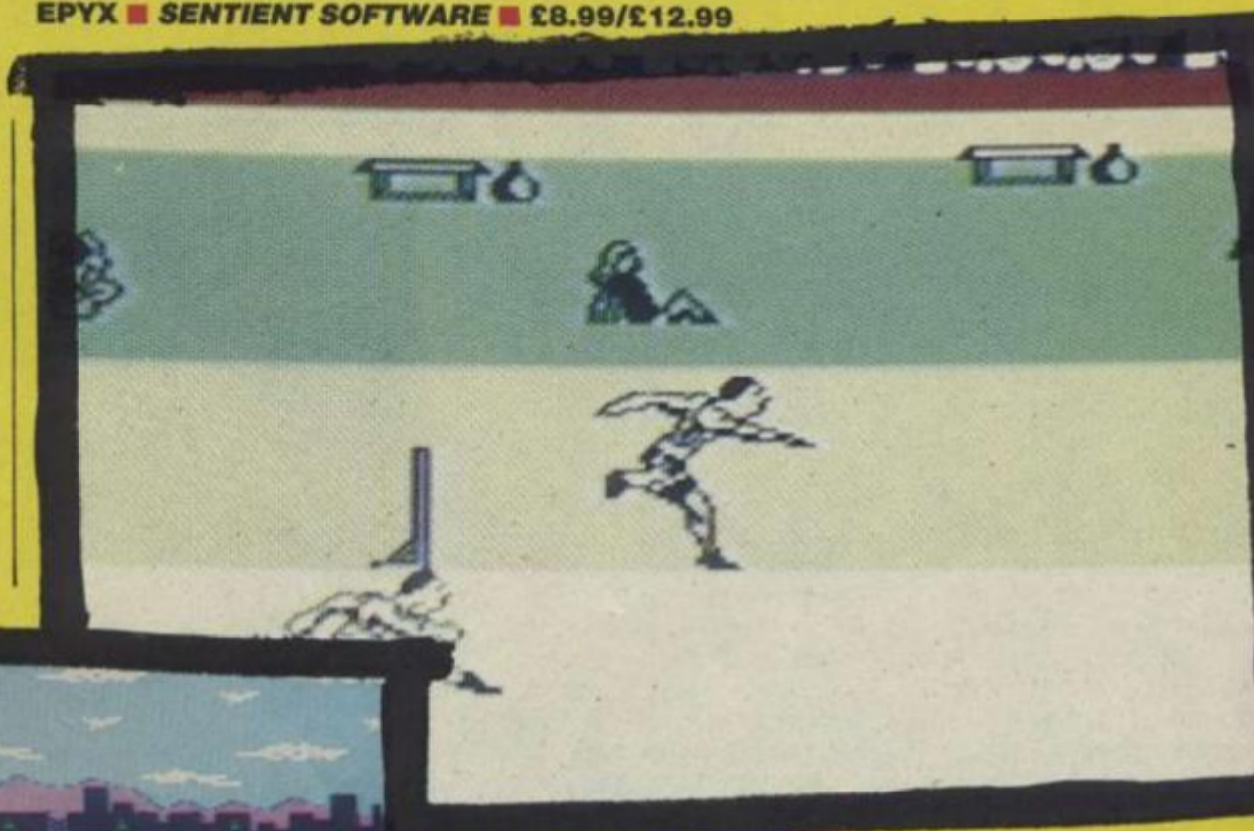
SUMMER EDITION

EPYX ■ SENTIENT SOFTWARE ■ £8.99/£12.99

Drink up your ginseng tea and prepare yourself for eight gruelling events.

Summertime is here again, so get your swimming cossie on and dive off that there bendy plank. Do a few turns and twists in the air (by jiggling the joystick) and enter the water, straight as a nail. Cor, the judges go crazy: tens all round – eat your heart out, Greg Louganis!

No sooner than you've dried off and you're on bike, ready to hurtle round a 3-D, banked track. There are four laps, but the time is only taken for the last one. You can go as slow as possible to get behind the other rider (either the



▲ Round and round it goes, hammer throwing in *The Games: Summer Edition*

NICK *The Games – Summer Edition* doesn't have any event that hasn't been seen before but the ways they're implemented are original. The graphics vary from event to event with the most detailed and colourful in the hammer throwing and archery. Sound again is not up to much – the tunes sound as if they have been well and truly BEEPed! Nevertheless this has to be the best Epyx sports sim yet and is well worth checking out.

86%

computer or another player) so you can slipstream him to save energy.

Back in the gym, the uneven bars await while you change sex! Donning a leotard, you do loadsa tricks as you swing from either bar. But the judges are strict – any 'uncharacteristic moves' (like a double bottom bounce!) lose you marks. Changing back to a man, you can then test your strength on the rings. Much joystick waggling is needed to hold torturous positions.

Back outside, more joystick waggling is required to throw the hammer. Round and round you go,

building up speed until you chuck the hammer up the field. But things can go wrong: apart from falling over, you can get wound up

MIKE *The Games – Summer Edition* is a really enjoyable sports simulation. Unlike the old days of 'wibble till that stick dies', we've now got a more strategic approach, and the balance between careful timing and all out stick shakin' is what makes it such good fun to play. The graphics are very good: the gymnastic sports have absolutely brilliant animation, and the graphical standard is generally high throughout. The possibilities for addictiveness are huge – two (plus) player games are excellent, and saving world records (on disk) gives an incentive to keep playing. Unfortunately, the various national anthems are a bit of an aural pain, but Epyx deserve considerable credit for getting them all in in a recognisable form! Overall, a really pleasurable game, well worth the asking price – though much better on disk, without the multiloop hassle. 88%

in the hammer wire! Hurdling is only slightly safer – you can easily fall flat on your face and be disqualified. And if you're not completely knackered, you can now attempt the pole vault. It's just as well there's a relaxing event to finish: archery.

I just love these multi-event sports sims – they're definitely what Epyx do best, and *The Games – Summer Edition* is no exception. All the events are well-presented with colourful backgrounds and excellent animation of the large sprites. Gameplay is equally good, especially when you gather a few friends around (up to eight people can play). And it's not all mindless joystick waggling either – the events require skill as well as stamina. Great stuff.

PHIL 90%

Nice graphics, great gameplay – another excellent Epyx sports sim, best played with friends.

PRESENTATION	85%
GRAPHICS	86%
SOUND	69%
PLAYABILITY	89%
ADDICTIVE QUALITIES	87%
OVERALL	88%

RATING



THE REAL GHOSTBUSTERS

ACTIVISION ■ MR MICRO ■ £9.99

Hi, we're the Real Ghostbusters, stars of TV, video, bendy toys (if you make any remarks here, Phil, I will hit you) etc, and now the latest computer game from Activision. In this ten level, action-packed game you too can become a Ghostbuster, joining us as we shoulder our proton beams and guns and set about saving the day (again).

As with the original game collecting ghosts is the objective. Unlike the original most of the ghosts start off as big and very aggressive monsters. Shooting them with your gun reduces the creatures to harmless ghosts, which can be collected with your proton beam (hold down fire). While bullets are unlimited, proton energy isn't and more can be collected via bonus items concealed in various obstructions - like oil drums and wheelbarrows

(!). Bonus items include shield, super bullets, increased beam energy and Slimer! Fans of the TV show will know Slimer's the ghostbuster's pet ghost with a ravenous appetite for 'foody!'. In the game the cute, green ghost circles around your character, sticking out his tongue and killing anything that touches him.

At the end of each level lurks a super baddie who makes all of the horrible denizens so far encountered look like beauty queens. These loathsome rejects from the lowest pits of hell are very tough and take many shots to dispatch. But once they're sent back to their master, a key



▲ An eye boggling end-of-level nasty stands between you and stage three

NICK The good thing about having a game based on a cartoon series in the office is you have an excuse to watch the cartoons on children's TV! But when the cartoons have finished you can carry on the story with this excellent conversion from Activision. Graphically the game couldn't be better, ghosts, backgrounds, characters - they are all beautifully drawn and animated. Do you remember the way the colour was done in *Karnov*? Well *The Real Ghostbusters* has been coloured the same way and it works a treat! There is tons of colour on the screen and hardly any clash at all - fantastic. Since the levels are all quite different there's a real incentive to see what the next one's like. Of course, all those wonderful levels mean a lot of multiloads but the code for them is all on one side of the tape, so at least there's no fiddling about trying to find level one when you die. You all must remember how well the first *Ghostbusters* sold and it wasn't really that good, so watch this game go right to the top!

90%





**A
CRASH
SMASH**



MIKE There's this interesting tendency around the CRASH office for work to stop on a Monday afternoon, a tendency which owes more than a little to a certain cartoon TV programme! On a comparison with the original *Ghostbusters* game, this is absolutely brilliant. The graphics are very good, and sound is okay, but the reason I'd play *Real Ghostbusters* would undoubtedly be the playability; there's loads and loads of it! This is a compulsory purchase for all fans of the series (like me) and recommended for anyone else who likes a spectacular blast as well. **89%**

appears which allows you on to the next multiloaded level. Unlike the original game this is something of a masterpiece of programming. Graphics are extremely colourful, highly detailed and there's hardly any colour clash at all. Scrolling is

relatively smooth in all directions and sound is effective, with a good title tune. Each level has at least two routes to the end-of-level monster and finding the best one is all part of the game. Other tactics involve use of the proton beam which not only collects ghosts, but also quickly destroys

▼ Unless you're fast with the proton beam you're gonna get slimed!

▲ *Slimer* lends a much needed hand against the living dead at the end of stage three

monsters. Making good use of the proton beam, without running out of power, is critical. And collecting ghosts isn't important only for points – some of them carry bonus items and if you collect 50 ghosts you get a life. This means when you're playing the game you're always torn between rushing to the end – to beat the timer – or staying around to collect more ghosts (which isn't easy). Once good at the game you can follow one route to the end of

level, destroy the super monster, then go down route two to get more ghosts.

The only real flaw in gameplay is the two-player option. With such relatively big characters there's not far you can move without hitting the edge of the screen unless your fellow player keeps up, allowing the screen to scroll with you. Since there's such a lot of monsters waiting to ambush you the two player game is, on the whole, more irritating than fun. In addition the control keys for the second Interface 2 joystick have been messed up so you can't use two joysticks, and the key layout is poor as well. But still, if you really do want a two-player game, it is there – but all the marks are for the excellent one-player game.

In conclusion *The Real Ghostbusters* is an addictive and highly enjoyable trip into the cartoon world of everyone's favourite paranormal investigators.

MARK 90%



Ten big levels and spectacular graphics make for a brilliantly playable game		RATING
PRESENTATION	88%	
GRAPHICS	91%	
SOUND	84%	
PLAYABILITY	91%	
ADDICTIVE QUALITIES	90%	
OVERALL	90%	

SKATE OR DIE

ELECTRONIC ARTS ■ KINETIC DESIGNS ■ £8.95/£14.95

Down at the skate park the other day I was really impressing the betties with some Kickturns, Handplants and Ollies. Yep, even if I say so myself, my skating is bio! And if you haven't any idea what I'm on about, then maybe *Skate Or Die* is for you, teaching you hip skateboarding lingo while you compete in five gruelling events.

You start off in a road junction where you pick a multiloaded event to compete by skating down a street, and it's not as easy as it sounds. In the **Freestyle** event there's a large U-shaped ramp – you have ten passes to pull such rad stunts as Rail Slides, Rock 'n' Rolls and Footplants. Stunts are chosen by moving your joystick in two grey-coloured 'pump zones' and timing is vital. The U-shaped ramp is also used for the **High Jump**, you have five passes to score a maximum height by pressing fire at the top of your jumps, building up momentum.

A completely different sort of event is the **Downhill Race**, here you have a tilted, overhead view of your skater as he zooms down a smoothly-scrolling obstacle course. There's one and a half minutes to jump over, duck under and dodge around all the objects in your path. Or if you'd prefer a bit more violence there's the much

tougher **Downhill Jam** where you race through city backstreets in competition with another skater, controlled either by the computer or another player. If the other guy looks about to overtake you can punch and kick him!

Yet more violence crops up in the **Pool Joust** where you confront

either a friend or one of three computer opponents. The rules are simple: two guys enter the empty pool, and one has five passes to try to knock over his opponent, using a boffing stick (oo-er). The first person to win three bouts is declared the winner – a tough event, but too simple to

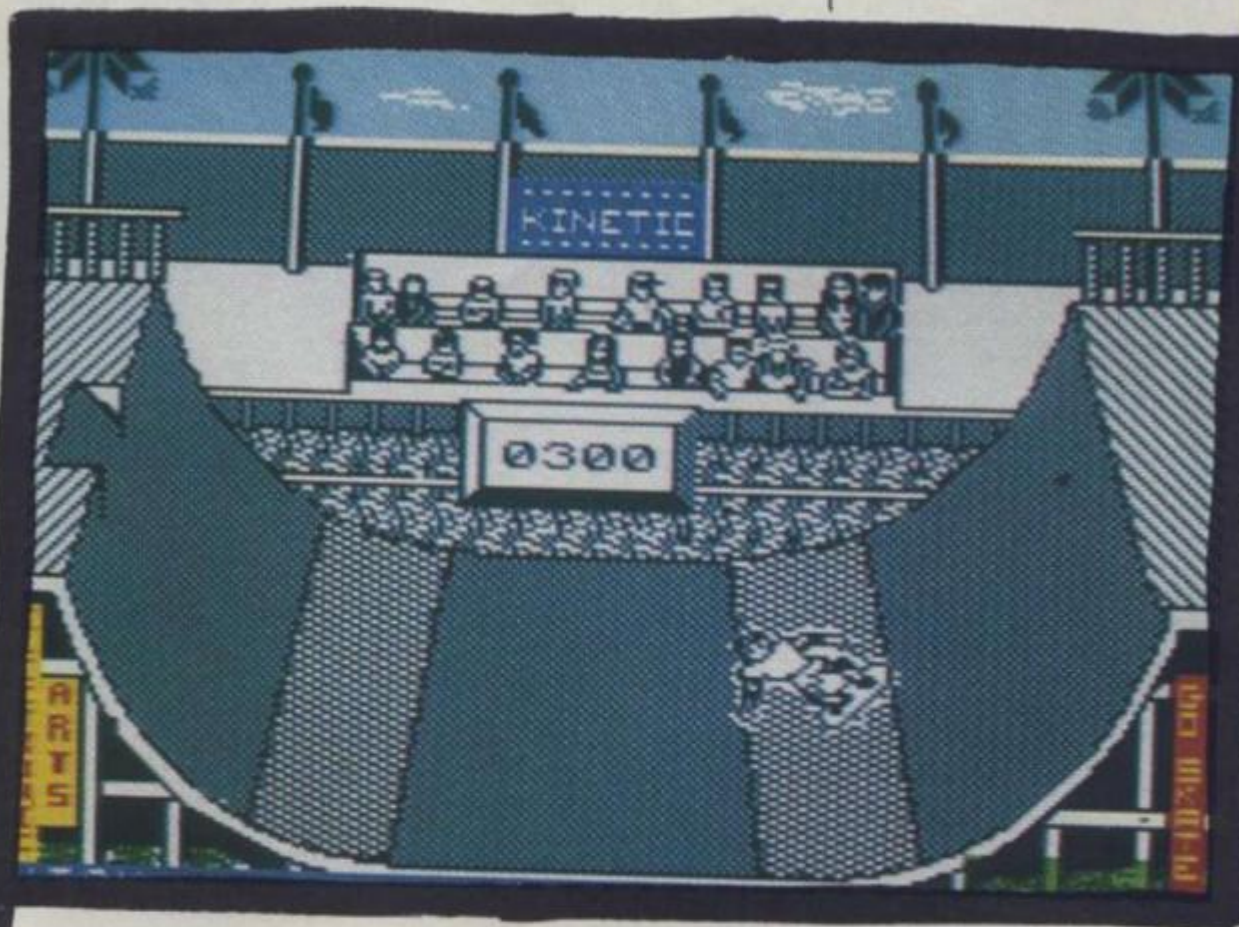


▲ Boffing sticks at the ready in the Pool Joust section

make you persevere.

Skate Or Die is an interesting collection of games, most of which are quite playable and enjoyable but none of which really stand out. If you're a skateboarding freak this is good value for money, and even if you're not there is some quite compelling gameplay, but it's not a game I'll be returning to that often.

MARK 67%



▼ The contestant comes to grips with the Downhill Section

▲ Never mind the betties, you'd better impress the judges with your bio skating

MIKE *Skate Or Die* isn't really much fun at all. The graphics are poorly drawn and badly coloured. Gameplay is limited, either whizzing about in the U-shaped ramp, zooming downhill or suffering the awful Pool Joust. Most of the events are reasonably enjoyable to get to grips with, but addictiveness is low – particularly if you haven't got a disk drive. As for the sound, well if you do actually find any, then congratulations to you – I couldn't! *Skate Or Die* is unattractive, unaddictive and uninspiring. 41%



Poor graphics, no sound and unexciting gameplay won't impress the betties.

PRESENTATION	58%
GRAPHICS	54%
SOUND	00%
PLAYABILITY	50%
ADDICTIVE QUALITIES	53%

OVERALL 54%

RATING

TOWER OF LIGHT



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5000
CLEAR

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Comet Software

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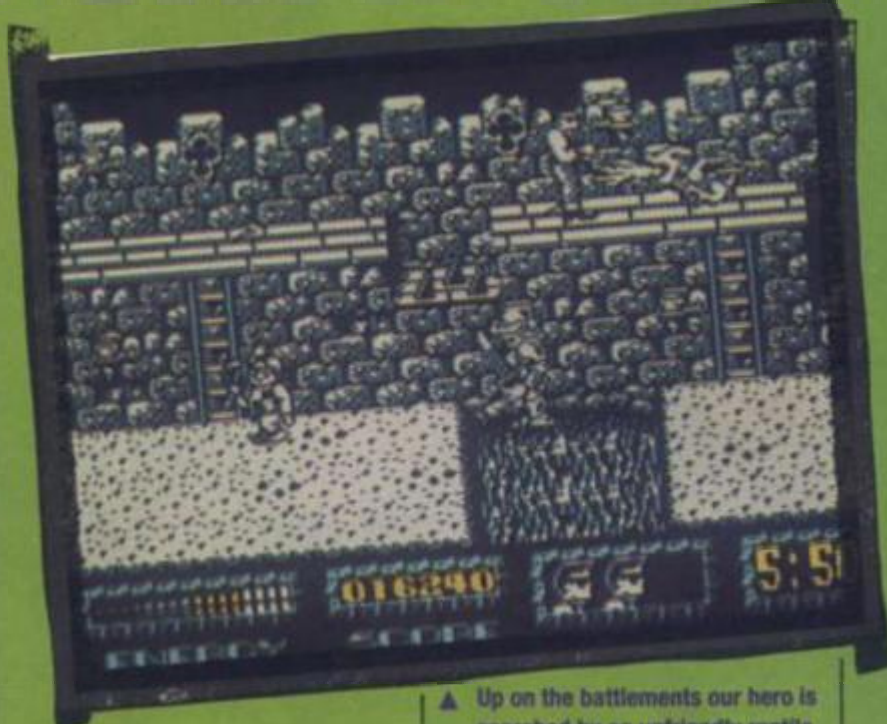
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RENEGADE III

THE FINAL CHAPTER

IMAGINE ■ A. DEAKIN/I. HORN ■ £8.99



▲ Up on the battlements our hero is scorched by an unfriendly reptile

After the disappointment of *Rambo III* Andrew Deakin and Ivan Horn have returned to form in considerable style, taking the basic *Renegade* formula and zapping it with considerable imagination and skill. The basic story is well, basic, your girlfriend's been kidnapped (again), but this time the villains are bit smarter than the usual

hoodlums. These nasties are from the future, and they've taken your girl back in time. Clearly this is one attractive young lady, so you set off in pursuit. By means unexplained you start off in Prehistoric Times and a glance at the graphics excuses all the plot nonsense 'cause they're great. Although Nick dislikes the monochrome, I think it's an



NICK Well, first came *Renegade*, then *Target*; *Renegade*, and now it's time to battle against pixelated primitives and evil Egyptians in *The Final Chapter*. Of course, the game is in a similar style to the first two, but who cares when there is so much playability to be had kicking and punching things on screen! Each level has its own detailed backdrops and excellent sprites but they're completely monochrome, which is not very appealing. Imagine have done an brilliant job on the sound though, with a title tune, tunes for each level, jingles between levels and good sound effects. Fortunately *Renegade III* has not fallen into the trap that most beat 'em ups do of making things too easy, this is just hard enough to give lasting playability. If you are looking for a good, taxing beat 'em up, *Renegade III* would be an excellent choice. **90%**

acceptable price for a wealth of often humorous detail.

May favourite characters on level one are the short, and very hairy cavemen who spring up in the air to hit you on the head with massive clubs. The dinosaurs are good too though, with baby Tyrannosaurus Rex trying to grab you and pterodactyls dropping eggs which hatch tiny lizards that run out to nip you. Scrolling is flickscreen and with a tight time

▼ Beam me up, Scotty, the Pharaohs are defeated and it's time for level three

limit the best tactic is to keep running until you're forced to fight. Apart from jumping troughs filled with spikes or lava, dodging rocks thrown from above and climbing up on to the ledges, gameplay is pretty similar to the other two games on the first level. On later levels the jumping between platforms becomes more important though.

Once you've got to the end of a level a time machine takes you to

MIKE *Renegade III* is quite a jolly kick 'em up; at least it's got a bit of variation to it! The graphics add a little spice to a hot game (ho, ho, ho) but the best bit, in my opinion is the sound, which is, simply, excellent! Content is mostly very good, though there does seem to be a limit to the efficient moves in your arsenal. Unfortunately, there is quite a similarity to the other games in the series, as far as gameplay goes; the graphics are radically different but there does seem to be an underlying likeness. Basically, *Renegade III* is worth a bash (or a kick, indeed!), and definitely worthy of consideration if you haven't got both the others! **90%**

the next, on 48K machines with the help of a multiload, on 128s

without. Level two is Ancient Egypt complete with mummies, canine-headed gods and dripping acid. Level three is Medieval Times with knights on hobby horses, jesters and flying dragons. And the final level is, of course, Future Time with lots and lots of vicious robots.

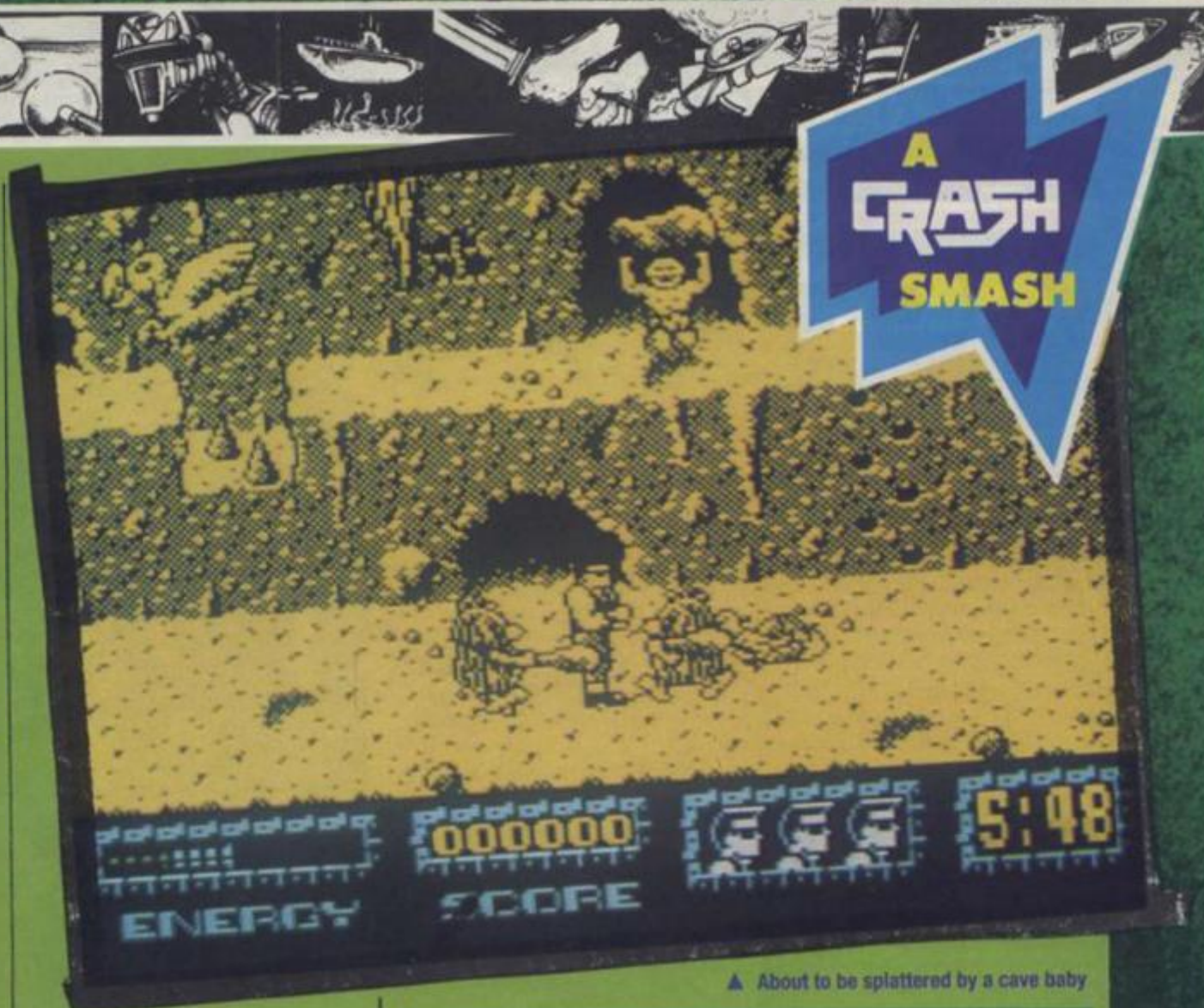
Renegade III is an excellent beat-'em-up, with a great sense of humour which should appeal even to people, like me, who don't usually like this type of game. Ocean/Imagine have done it again!

STUART 92%

The latest in the *Renegade* series is also the best, check it out even if you don't normally like beat-'em-ups

PRESENTATION	90%
GRAPHICS	90%
SOUND	95%
PLAYABILITY	90%
ADDICTIVE QUALITIES	91%
OVERALL	91%

RATING



▲ About to be splattered by a cave baby





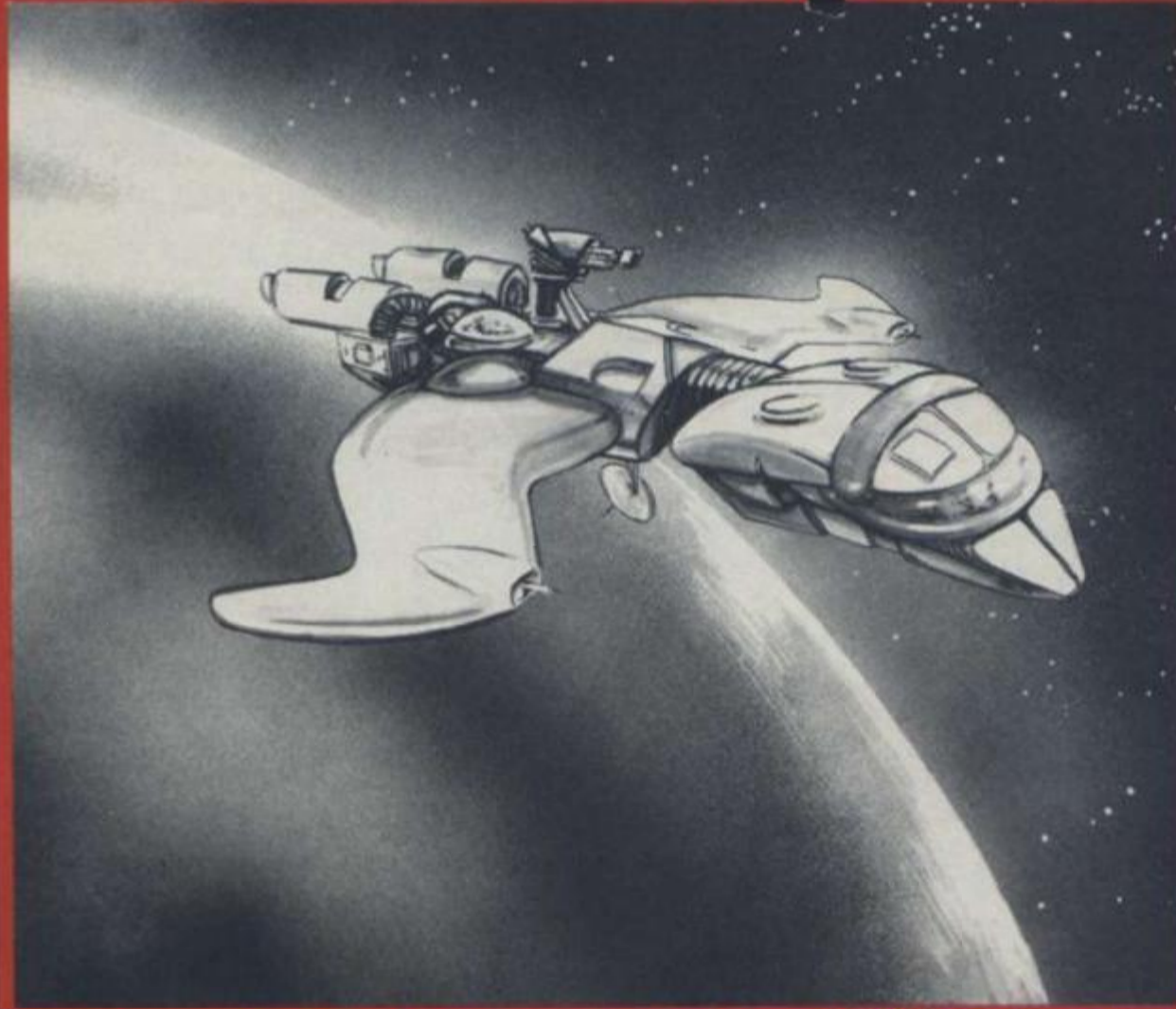
ACE 2088

CASCADE ■ ANDREW TULEY ■ £9.95

Okay, okay, I know long-winded intros aren't usually tolerated these days in the hallowed halls of CRASH, but please stay with me – this is very interesting (alright it isn't but it's necessary, so there!). Man has come a long way from his first faltering steps on Earth's moon, and he has now colonised several galaxies. One of these, M1771, has been attacked by some very

fast or manoeuvrable as enemy craft, but thankfully have far superior weapons. They are capable of carrying eight 'fire and forget' missiles, eight rear launch defence missiles, four fusion bombs, an anti-matter torpedo system and enough shielding to withstand the sort of treatment the likes of Mike Smith would give it!

Selecting and warping to one of



▲ A trio of aliens swoop in for a close encounter of the unfriendly kind

control of the craft. This is to ensure that I have a fair chance of avoiding land-based laser emplacements. It's then on with the bomb aiming sights to deliver a message from mankind that the alien scum will never forget. When all of the targets on a planet have been destroyed, the fighter automatically returns to the Deliverance. There are 118 colonies to rescue, so go to it hero!

Ace 2088 is certainly easier to play than Cascade's last offering, *DNA Warrior* (reviewed last ish). Sadly it is too damn easy: after a couple of goes to familiarise myself with the controls, my third game convinced me that it was child's play to destroy both the attacking enemy craft and bases. Indeed this game lasted for well over half an hour, selecting a star system, warping to a planet, knocking the crap out of the aliens and so on, and I quickly found myself getting bored stiff. Why can't Cascade games be like their Liz Sandey, their PR girlie (ie lively and interesting)? *Ace 2088* is for inexperienced joystick wreckers only I'm afraid.

MARK 53%

unfriendly neighbours. But Jason and Kylie aren't among them – these are horrible, yukky, slimy little swines who enjoy destroying all of Humanity's achievements. (Hmm ... then again maybe they are!)

I'm the skipper of a battered old space ship called Deliverance. It's my job to travel around star systems destroying alien invaders. For this the Deliverance was originally equipped with seven Ziegler II Assault Craft, but after numerous dogfights there's just three now. The ZACs aren't as

32 star systems, I can see at a glance which planets are friendly and which are hostile. It is down to these alien-infested ones that I must fly a fighter to bomb a variety of targets. Of course the resident meanies aren't going to welcome me with open tentacles: a decidedly unwelcome welcoming committee rises from the planet to greet me. But with a combination of lasers, torpedoes and missiles I show the swines who's boss.

Once a planet is within sight, the onboard computers take over

MIKE *Ace 2088* is a very slickly produced and attractive game to play. The graphics are all very nice to look at but there is one glaringly huge and infernally annoying problem; the game is terribly boring! Liberating systems of planets from the yoke of evil oppressors has a distinctive appeal, but unfortunately it's all so easy that the initial playability wears off after three or four hours. Once the game gets about half-way through it has very little appeal.. 58%

Pretty and well programmed, but the basic game concept is lacking.		RATING
PRESENTATION	70%	
GRAPHICS	69%	
SOUND	68%	
PLAYABILITY	58%	
ADDICTIVE QUALITIES	47%	
OVERALL	56%	

FORUM

What do you think of the new look? I'm afraid I can't comment because I haven't really seen much of it so far, as I write nothing seems quite settled. In my own hallowed pages one thing I know for certain is that Nick's been drafted in to take over a page. Partly it's my own fault, making merry at the Computer Arena and a long Easter holiday didn't leave me much time to do the Forum, but Nick's welcome to take some of the 'less serious' letters with Spring – and lots of gardening – coming up. Nothing's permanent though, and if you want more pages for LM's two-thirds of the Forum, send in more letters!

For next month's Forum I should think there'll be plenty to talk about, what with the new look, the elimination of the Essentials from the reviews and the Computer Arena awards to discuss. One topic I hope won't be too hotly debated is the subject of the Letter Of The Month below. After scolding Mr Lascelles last month about his 16-bit bashing, I have to admit I felt a bit of pleasant nostalgia reading Ian Smith's letter.

LETTER OF THE MONTH

THE SPECCY'S STILL THE BEST

Dear Lloyd

I get the feeling that I, and couple of friends, are the only people left in the country who *don't* think the C64 is the bees' knees compared to the Speccy. I'm not going to argue sound – the SID chip is very good, although the 128's AV has dramatically improved things for Speccy owners. My main annoyance is the way it is now assumed that the C64 has better graphics than the Speccy.

The argument is one of compromises. Intricate detail and shading or slick, but vague blocks of colour – needless to say I go for the latter. Sprites on the Commodore may have several colour but faces, etc, rarely have any form of detail on them. The C64's larger, slightly rectangular pixels combine with colour combination

restrictions within character blocks to produce blocky pictures with familiar combinations of colours. The Spectrum can produce subtle shading and surprising levels of detail with a choice of the same number of shades (16), and the Speccy's BIG problem of low res colour allocation can (and has for the last 18 months) be overcome with planning and thought. The overall effect is one I find much more satisfying than that on the C64 with rare exceptions such as *Last Ninja*, where the Speccy was matched for detail, and obviously could not come up with as much colour.

Incidentally the answer to those fools who sneer; '... well, why do they usually show C64 screen shots on adverts then?' is that small pictures don't show up lack

of detail, and will emphasize lack of colour. Your 'rivals' Sinclair User have shown their acceptance of superior C64 graphics.

And another point is that of memory; the C64's name is very misleading – it has under 40K of usable memory and while a disk drive can partially solve this problem, Commodore drives make my +3 seem very fast indeed. In addition 128K is now the memory of most Spectrums, and all of this is usable RAM. With the complete flop of the Commodore 128 the Spectrum seems uncontested in the memory stakes, with a superior disk drive as well!

All this make it even more annoying that software houses like American Cinemaware don't bother to make full use of these capabilities. The classic example is *Defender Of The Crown*. This game was big. Hence it required lots of memory and a disk-drive. As mentioned before, the Speccy wins out here. The only time when a C64 game is faster than on a Spectrum is when it requires good scrolling routines – the C64 has such routines hardware operated allowing for extra speed. *Defender Of The Crown* made little demand of such features – the graphics were often highly detailed statics where attribute clash is very easily avoided. This game was ideal for the Spectrum, but the only 8-bit version was on the C64.

This attitude of software houses was in my opinion started off by similar foolish views in magazines. I remember you airing similar opinions to mine of your own in an early issue of CRASH, and I hope you haven't been converted. Please Lloyd; spread the word, and keep the Speccy flag flying. I'm sure many of the good 8-bit programmers will agree with me, so help

me convince the software companies, especially from abroad, before this idea of 16-bit and C64 versions only spreads.

Ian Smith, Cheshire

To be honest Ian I don't think you need worry too much about the C64, or even the 16-bit machines. The Spectrum still sells far more games than any other machine, around twice as many as the C64 and eight times as many as the Atari ST. As for the relative technical merits of the Spectrum versus the C64, I think you've been as fair as the owner of one of those two machines can be. The Commodore obviously doesn't suffer attribute problems, but the Spectrum has evolved a different, more detailed style of graphics to compensate. Sometimes the graphics are extremely colourful as well as being detailed, as with *The Real Ghostbusters*. Myself I like both machines, each has games which are excellent and wouldn't work half as well on the other machine. As for the other point you make, about the Spectrum's 128K of RAM and good disk drive, I think it's a pity there are so few games which make use of the extra memory for anything other than tunes and sound effects. Ocean at least make multiloads that all fit in 128K quite often, but games designed for the 128 are rare. Of course the reason software houses don't write for the +2 and +3's full capabilities is that not everyone has one of these machines. Hopefully one result of your replies to the CRASHIONNAIRE will be some idea of how many 48K machines are still around. LM

MORE DEPTH

Dear Lloyd

Firstly, I would like to congratulate CRASH for producing such a high quality magazine. I'm happy to say that I have just started a subscription to CRASH. Also I'd like to thank you for CRASH's last mail order service. Are Olibugs available separately, by the way?

Secondly, I'd like to ask you if CRASH is going to do more 3-D features in the future. I know it's over a year since the last one so it's about time for another one.

Thirdly, another question. After every year, you do a CRASH Directory Update, so I thought that it would be a good idea that there should be a CRASH History Update for people who admire Oli Frey's artwork.

Finally, the reviewing team who work for CRASH (or ZZAP! or TGM

for that matter). Is it possible for people of 15 years old to write the odd review or feature for any of the magazines? I'm thinking of a career in computer journalism and I'd like to have a try now to see what it's like.

A few questions there Lloyd, I hope you have some answers. Nick Humphries, Essex

Starting at the top I'm afraid that, despite all your kind words,



Olibugs are not available separately, or in any form at all as they've sold out! Mail Order supremo Franco is currently considering another special offer, any ideas (apart from a free +3 with every game bought) are welcome.

As for another 3-D feature, maybe that's something for the summer months, what do other readers think? The CRASH History Update's another good idea, although I wonder if

enough 'history' has happened since the last one to justify it as yet.

And to answer your final question, I'm afraid all the CRASH reviews are written either by the permanent editorial staff – Stuart, Phil and Mark – or local freelancers like Nick and Mike. On the features side of things Stuart is always interested in new features, and as it says on the masthead you're welcome to send stuff into us which, if used, we'll pay the current rate for. To avoid wasted effort, however, it might be advisable to check with Stuart first whether he's likely to print the feature you want to write. Needless to say proper academic qualifications are always extremely useful, whatever career you choose to follow.

LM

FORUM

PROGRAMMERS' CHARTS

Dear Lloyd

I have been so impressed with the games produced by Ocean and Imagine since 1987 that I thought I'd do a top 15 of their programmers:-

- 1 MIKE LAMB - programmer of *RoboCop*, *Combat School*, *Renegade*, *Target Renegade*.
- 2 ANDREW DEAKIN - programmer of *Operation Wolf*, *Combat School* and *Rambo 3*.
- 3 IVAN HORN - graphic artist for *Operation Wolf*, *Rambo 3* and *Combat School*.
- 4 JONATHON DUNN - writes fantastic music/FX on nearly all Ocean games.

5 DAWN DRAKE - graphic artist for *RoboCop*, *Target Renegade*.

6 DENTON DESIGNS - programming house responsible for *The Great Escape* and *Where Time Stood Still*.

7 PAUL OWENS - programmer of *The Vindicator*, *Short Circuit* and *Gryzor*.

8 MARK R JONES - graphic artist for *The Vindicator* and *Gryzor*.

9 JONATHON SMITH - programmer of *Cobra*, *Terra Cresta*, *Batman*, *Firefly* and *Gutz*. (Personally I can't stand *Batman* - how could you give it 93% and *Afterburner* only 86%?)

10 DAVE THOMPSON - prog-

rammer of *Daley Thompson's Olympic Challenge*.

11 WILLIAM HARBISON - graphic artist for *Daley Thompson's Olympic Challenge*.

12 STEVE LAMB - programmer of *Typhoon* and *Madballs*.

13 ALISON JEFTHA - graphic artist for *Typhoon*.

14 JOHN RITMAN - programmer of *Head over Heels* and *Match Day II* (I can't stand either!).

15 SENTIENT SOFTWARE - programming house responsible for *Donkey Kong* and *Guerilla War*.

Have fun Lloyd!
Richard Dobbs, Humberside

Thank you, Richard. With Ocean pretty much sweeping the board at the Computer Arena your list is a timely reminder of the work of the programmers, graphic artists and musician(s?) who wrote the games for Ocean. However much money a software company puts into a game the ultimate responsibility for a game's presentation and playability must largely lie with the programming team involved. That said your rankings caused a bit of controversy in the office, Phil King for one couldn't understand how Jon Ritman wasn't in the top slot!

LM

THE MAY CHARTS

TOP 20 GAMES

1(1)	ROBOCOP	Ocean	Stefan Ratcliffe, Battersea	85789
2(3)	R-TYPE	Electric Dreams	Paul Walker, Manchester	76130
3(9)	LED STORM	Go!/Capcom	Graham Dunn, Middlesex	1193104
4(2)	OPERATION WOLF	Ocean	Tony Goodey, Essex	401120
5(5)	AFTERBURNER	Activision	Jamie Clark, Essex	9435000
6(4)	BATMAN	Ocean	Mike James Kenny, Sussex	100%/69%
7(6)	RETURN OF THE JEDI	Domark	Andrew Kelly, Coventry	75110
8(8)	THUNDERBLADE	US Gold	Richard Przyrodzki, Birmingham	184110
9(10)	PAC-MANIA	Grandslam	Christopher Pike, London	98750
10(15)	DALEY THOMPSON'S OLYMPIC CHALLENGE	Ocean	Andrew Wilson, Romford	10040
11(16)	SKATEBALL	Ubi Soft	Chris Lloyd, Manchester	30-5
12(7)	DOUBLE DRAGON	Melbourne House	Tim Stevens, Derby	60000
13(▶)	WEC LE MANS	Ocean	Matthew Jackson, Kent	235000
14(13)	MATCH DAY II	Ocean	Mark Stangroom, Kenilworth	9-0
15(12)	TOTAL ECLIPSE	Incentive	James Dean, Glasgow	525000
16(19)	TREASURE ISLAND DIZZY	Code Masters	Lee Jones, Powys	50275
17(20)	CYBERNOID	Hewson	Stuart Pritchard, Scotland	334423
18(14)	19 PART ONE-BOOT CAMP	Cascade	Carl Brown, Bolton	95250
19(18)	TARGET; RENEGADE	Imagine	F Smith, Norwich	725000
20(17)	CYBERNOID II	Hewson	Chris Jones, Solihull	100000

TOP 10 VIDEOS

1(1)	ROBOCOP	Virgin	His job is to enforce the law
2(2)	PREDATOR	CBS/Fox	Action packed jungle adventure
3(5)	THE UNTOUCHABLES	CIC	Toucha me and I breaka your face
4(4)	ALIENS	CBS/Fox	Gutbusting fun with Ripley & Co
5(3)	ET	CIC	Oh, look at my phone bill
6(▶)	ADVENTURES IN BABYSITTING	Touchstone	Chris Parkers' misadventures
7(7)	THE WITCHES OF EASTWICK	Warner	The witching hour is near
8(▶)	PLANES, TRAINS AND AUTOMOBILES	CIC	Thanksgiving with this pair? no thanks
9(6)	A NIGHTMARE ON ELM STREET 3	Warner	Old barbecue features is back
10(9)	SUSPECT	RCA/Columbia	Cher stars in this stylish whodunnit

TOP 10 MUSIC

1(1)	ROBOCOP	Ocean	Jonathan Dunn
2(3)	JOE BLADE II	Players	Andy Severn and Mike Brown
3(6)	BATMAN	Ocean	Fred Gray
4(2)	LED STORM	US Gold	Tim Follin
5(5)	OPERATION WOLF	Ocean	Jonathan Dunn
6(4)	BIONIC COMMANDO	Go!/Capcom	Tim Follin
7(10)	XENON	Melbourne House	David Whittaker
8(8)	TARGET; RENEGADE	Ocean	Gary Blasillo
9(7)	CYBERNOID II	Hewson	Dave Rogers
10(9)	PAC-MANIA	Grandslam	Ben Daglish

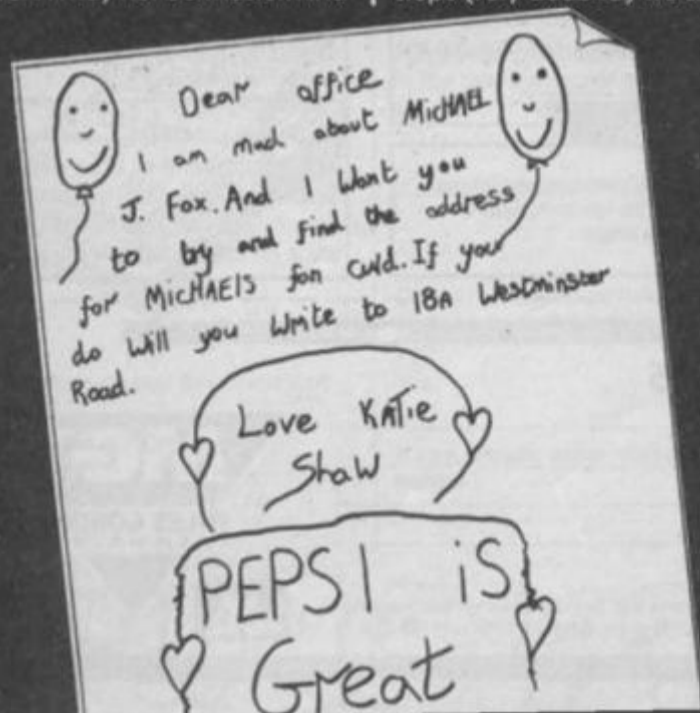
That's all for this month, as for next month - that's up to you. Hopefully there'll be enough letters to fill the entire magazine, (including one or two for Nick, I suppose). And if you need any more incentive than instant fame, then there's fortune as well in the shape of £30 worth of software. The address, as always, is LLOYD MANGRAM'S FORUM, PO BOX 10, LUDLOW, SHROPSHIRE SY8 1DB.



Polish your red nose and get out your tickling stick because this is the all-new *alternative* section to Lloyd's Borum... err, Forum. What I print is up to you: you can send in jokes, cartoons, chocolate éclairs (mmm..), absolutely anything that takes your fancy ('oo-er' as they say). You wouldn't believe the amount of letters we get in the office that are total rubbish – they make pretty hilarious reading, though. In fact when Mark first set his eyes on them he split his sides laughing – he had to have twenty stitches and the mess on Mike's desk and the surrounding walls was terrible. Now, the last thing we want to do is offend someone, so I'd just like to say it's all in fun, no hard feelings. So don't fret, get set, are you ready? Oh shut up, Bruce...

Dear Nick
I have zilch amount of pirate software simply because... I'M NOT THICK. I may not be Mastermind

89 but I can work out that unless Bluebeard, Blackbeard and whoever else pirates software stops (very doubtful) we shall be



living off games from Alternative and Mastertronic for the rest of our lives because no-one with any sense copies these games in the first place. I don't blame the pirates totally though, they normally copy games for the cost, right! So why don't software houses reduce the cost if it really is a dud game. The public are going to find out when they read a review in a mag. Surely it didn't cost US Gold £9.95 a copy to produce *Echelon*. My sister could have done better blindfolded and with her hands tied behind her back. Hope this letter is printed and read by hundreds of pirates to get on their nerves.
Nick Birch, Halford, Warwickshire

Well, fellow Nickster, it looks like you'll be living off Alternative games for the rest of your life! And it serves you right if all you do is tie your sister up and make her write *Echelon* clones!

Dear CRASH
We have sent this letter to you because we would like to know if you are interested in having a hints and tips page in your CRASH. We would send you hints, tips and codes. For instance, Freddy Harvest's code for Part 2 is 897653.

If you are interested please write back giving your answer.
Stephen Southam and John Hamm, Hornchurch, Essex

Yes, that's it! The one thing that's been missing from CRASH for years. We've all been racking our brains for something to put in the mag along just those lines. Err, um, actually have you seen page 33 lately, Stephen and John? There's a handsome guy on it with just what you might be looking for.

Dear Sis (I like this one already!)
I am just writing to advise you of a new force in the software and home entertainment industry. That is, myself and my partner have just set up a new company called Technik Programming. As you can see by this letter, we are still very young in production (ie, no headed paper!) but we aim to revolutionise the software industry, as well as other forms of home entertainment. We want to bring back the old style software house, aiming to produce quality products but retaining the friendliness between us and our cus-

tomers. We've got plans for the industry and I can guarantee you that within 12 months we will be one of Britain's top entertainment companies and within three years one of the world's top five.
Kevin Kennard, on behalf of Technik Programming

Hmm, Technik Programming, eh? Sounds a bit like something you do to Mark Caswell first thing in the morning... Right, thanks for the advice, now how about some samples of all your fantastic products, ta.

Dear Nick
I've just written to say this (a chain saw starts up): broom, broom (a smell of petrol) broom, broom, vroom, Zzzzzz. Blood flies all over the room. People next door hear a faint scream, zzzz. Well that goes to show that they don't make Bros fans like they used to... Also likes Bros? A machine gun goes off. Ratterrr, ratterrr, well that's solved that problem.
Neil Sutton, South Cave, Humberside

PS Wherever there's a Bros fan there will be a chain saw after him/her in fourth gear.
PPS I would like to tell you that I don't like Bros.
PPPS I hope you don't, or I'll be paying a visit with my friend – THE CHAIN SAW!

Cor, what a twonker! I just hope the Art Department aint reading this letter because their wall is covered in Bros posters. It's a pity people like that can't be helped! No, Nell, I'm more of a Pet Shop Boys, Erasure, Depeche Mode man myself. I just hope you haven't got anything against any of them.

Dear Nick
I am scribbling to congratulate CRASH on being the best space ship ever. It's even hotter than Sam Fox's underwear.
Chris Gallery, Weymouth

Sammy? She's a bit old hat. How about Maria Whittaker – now that's what a call a wheelbarrowful of evening's entertainment. However, I can't argue with you (what a shame), although I haven't really had first 'hand' experience of Miss Fox's unmentionables.

TIME TO TALK

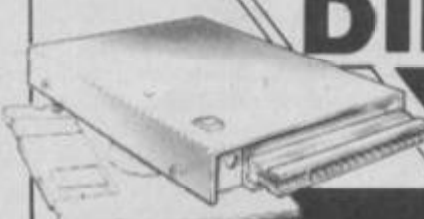
The PLUS D

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MGT's premier product. The disc interface that snapshots all your cassette software to disc in seconds. The printer interface that prints out ANY screen. Simple enough for a beginner, yet state of the art for the expert user. For the 48k, 128k or +2 Spectrum - now suitable for the +3 and +2a, with The Fixer.

'+3 KILLER' - Crash magazine



MGT DIRECT

It's time to talk about quality of service. Lots of companies are advertising lots of products at excellent prices. But we believe that our customers deserve more than that. We believe that you have the right to demand an honest, in-depth appraisal of a product's strengths and weaknesses before you buy. We believe you should get a description in terms that you can understand and perhaps an expert comparison with rival products. And if you decide to buy, you need to be assured of first-class service afterwards. Not just if a product is faulty, but also if you need help in installation or if you simply come up against a problem that stumps you.

At MGT we've got the time to talk to you. We only sell products that we like and use ourselves. We understand what we sell, and every one of our sales team is trained to help you, whether before you buy or after. And even if we don't know the answer to your question, or if we don't stock the product you're looking for, we'll find out about it for you.

And the time to talk can be almost any time. Our phone lines are open till 6p.m. Monday to Friday in case you want to call us after work - even after that, there's an answer-phone. Just leave a message and we'll call you back.

It's time to talk to MGT first!

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Star LC-10	£229.95
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Convert your Spectrum +3, or +2A edge connector to the standard Spectrum edge connector - so now the PLUS D Drive will work with latest Spectrums - call for details.

THE TWO FACE

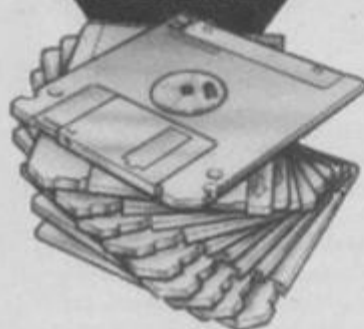
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TELL US WHAT YOU THINK!

There's mega-prizes to be won!

Okay, you've got the very latest issue of CRASH complete with amazing new look, what do you think about it? Tell us a bit about yourself, (okay, lots), and you can play teacher and give CRASH its annual school report. You, the customer, are what keep us going so fill in as much you can below, send it off to us and hopefully we'll know a bit more about you, and what you want.

But if all this 'getting to know you' lark offends any cynics (shame) out there, then be assured there's £50 of software - of your choice - to be won, plus a CRASH T-shirt and cap. And for five runners-up there's £20 of software, a CRASH T-shirt and cap. Surely that's worth 10 out of 10 for the CRASHTIONNAIRE on your report card huh? Go on, be generous - I think you're our very best reader, honest!

Send completed forms to **CRASHTIONNAIRE, CRASH Towers, PO Box 10, Ludlow, Shropshire SY8 1AQ** to arrive here before May 31st 1989.

FOR STARTERS

Are you . . .

MALE
FEMALE

How old are you?
.....

OCCUPATION

Are you . . .

At school
At College/University
Working Full Time
Working Part Time
Unemployed

DOSH

On average, how much do you spend on computer games every week?

£2-£5
£6-£10
£11-20
More Than £20



How often do you buy full-price software?

Once a week or more
Once a week
Once a fortnight
Once a month
Less than once a month

How often do you buy budget software?

Once a week or more
Once a week
Once a fortnight
Once a month
Less than once a month

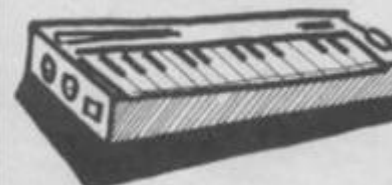
Have you purchased a utility in the last six months?

YES
NO
If yes, please state type
.....

Do you intend to purchase a utility in the next six months?

YES
NO
If yes, please state type
.....

.....



Have you purchased a peripheral in the last six months?

YES
NO
If yes, please state type
.....

Do you intend to purchase a peripheral in the next six months?

YES
NO
If yes, please state make and model
.....

.....

Do you own a . . .

48K Spectrum
128K Spectrum
+2 Spectrum
+3 Spectrum

Do you own any other computers or consoles?

YES
NO

If yes, please state make(s) and model(s)
.....



Do you intend to buy a new computer or games console in the next six months?

YES
NO

If yes, please state make and model
.....

What is the major influence on your decision to buy a computer game (please indicate in order of priority 1-6)?

Friend's Recommendation
Magazine Review
Advertising
Author
Producer
Price

ARE YOU WELL READ?

When did you first buy CRASH?

How many issues have you bought since then?

ALL
SOME

If some, how many?
.....

On average, how many other people read your copy of CRASH?
.....



How do you get CRASH?

Subscription
Reserved or delivered by newsagent
Off the shelf
Off the shelf of a non-newsagent shop

Which other magazines do you buy?

ACE
Computer & Video Games
New Computer Express
Popular Computing Weekly
Sinclair User
The Games Machine
The One
Your Sinclair
Other (Please Specify)

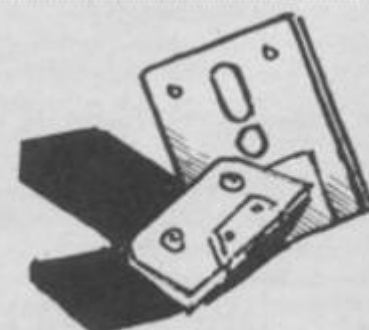
Which other magazines do you read regularly but not buy?

ACE
Computer & Video Games
New Computer Express
Popular Computing Weekly
Sinclair User
The Games Machine
The One
Your Sinclair
Other (Please Specify)

Do you read any non-computer mags; if so, which ones?
.....

What type of game do you enjoy playing (in order of preference 1-6)?

Adventures
Arcade Adventures
Shoot 'em ups
Simulations
RPG
Strategy
Other (Please Specify)



IN GENERAL . . .

Please award marks out of ten for each of the following features in CRASH

- Advertisements
- Budget Bureau
- Challenge
- Charts
- Classifieds
- Comms
- Competitions
- Competition Results
- CRASHIONNAIRE (marks out of 100)
- Diary of a Game
- Editorial
- Front End
- Frontline
- Hypermarket
- Jetman
- LM's Forum
- Nick's Forum
- Nick's Tips
- On The Screen
- PBM
- Phil King's Adventure Trail
- Poster Previews
- Previews
- Reviews
- Tech Niche

Any comments about any or all of the above?

.....

.....



What do you think has been the best recent CRASH feature, the worst, and why?

.....

.....

Do you enjoy reading film/game tie-in features?

- YES
- NO

SOFTWARE COVERAGE

Please rate CRASH's coverage of software out of ten

- News
- Previews
- Reviews

REVIEWS

Do you like the new look?

- YES
- NO

Why do you like/dislike the new look?

.....

.....

Do you like the review style?

- YES
- NO

Are the reviews detailed enough?

- YES
- NO

Are the reviews long enough?

- YES
- NO

Are there enough screen shots?

- YES
- NO

Are the comments detailed enough?

- YES
- NO

How often do you agree with ratings?

- Always
- More Often Than Not
- Rarely
- Never

Do you use CRASH as a source of reference when buying software?

- Always
- Sometimes
- Never

Which of the following do you object to seeing in CRASH?

- Book reviews
- Console coverage
- Film reviews
- Video Reviews

What do you think of the standard of CRASH's covers?

- Great
- OK
- Rubbish

Is there anything you'd like to see in CRASH?

.....

.....

Is there something which you find particularly aggravating?

.....

.....

CRUCIAL CRASH GOODIES . . .

What would you like to see on cover cassettes (in order of preference?)

- Playable demos
- Free games (oldies)
- Free games (new, budget-type)
- Free games (new, home-grown)

Would you object to paying 50p extra for a cover cassette?

- Yes
- No
- Don't mind

Do you want more posters?

- Yes
- No

OTHER NOSEY STUFF

What is your weekly income?

- Up to £5
- £5 to £10
- £10 to £30
- £30 to £100
- £100 to £200
- £200 plus

Where do you buy most of your clothes?

- Large Retail Chains (BHS, Woolworth etc)
- High Street Fashion Shops (Next, Top Man etc)
- Specialist Fashion Shops
- Other (Please specify)

Do you have access to a record, cassette or CD player?

- YES
- NO

On average per month, how many . . .

- SINGLES do you buy?
- LPs do you buy?
- CASSETTES do you buy?
- CDs do you buy?

How often do you buy canned drinks?

- More than once a day
- Once a day
- Every other day
- More than once a week
- Once a week
- Less than once a fortnight
- Never

How often do you buy crisps, sweets and peanuts?

- More than once a day
- Once a day
- Every other day
- More than once a week
- Once a week
- Less than once a fortnight
- Never



How often do you go to the cinema?

- Once a week
- Every other week
- Once a month
- Every other month
- Less than twice a year
- Never

How often do you buy books?

- Once a week or more
- Once a fortnight
- Once a month
- Less than once a month



What types of books do you buy?

- Horror/Fantasy
- General Fiction
- Film and TV tie-ins
- Computer
- Thrillers/detective
- Historical
- War
- Romantic
- Sci-fi
- Humorous
- Non-fiction

NAME

ADDRESS

.....

.....

POSTCODE

Have you any other hobbies or interests apart from playing computer games (such as RPG, macho military stuff, PBM)?

- YES
- NO

If yes, what are they?

.....

.....

Do you participate in sport?

- YES
- NO

If yes, list your three favourite sports

.....

.....



Do you have access to a video recorder?

- YES
- NO

If yes, how often do you hire pre-recorded tapes?

- Once a week or more
- Once a week
- Once a fortnight
- Once a month
- Less than once a month

How often do you buy pre-recorded tapes?

- Once a week or more
- Once a fortnight
- Once a month
- Less than once a month

Do you have a bank or building society account?

- YES
- NO

If yes, with who (and state type of account)?

.....

Which of the following takeaway fast-food chains do you prefer (mark 1-6)?

- Macdonalds
- Wimpy
- Kentucky Fried Chicken
- Pizzaland
- Pizza Hut
- Local Fish and Chip Shop
- Other (please specify)



PBM

PLAY BY MAIL

KEEPING YOU POSTED

Games to run yourself, a new hotline service and futuristic violence are just some of the latest PBM developments to catch IAN LACEY's eye.

FOR THOSE wondering, the second company profile will appear next issue as it is not yet ready (the one I had ready was on a company which looks to have gone bust!). Instead, this issue I have a potpourri of news and reviews.

LISTEN VERY CAREFULLY

Jade Games are spreading themselves across the whole hobby at the moment, snapping up the rights to games both old and new. Now they have added the weight of their name to a PBM hotline. The line provides a 24 hour service, giving up-to-date information on all that's happening in the Play By Mail world. The aim is to give more cohesion to the very fragmented world of PBM. In the past, information has taken a long time to reach players, the classic example being the shut-down of Mitre Games (magazine deadlines don't help much!). Jade are processing the information sent in to go on the line, so if you've got some news, either ring Tony on 0705 828 271, or write to Jade Games, Phonenumber, FREEPOST, Portsmouth PO5 1BR. For players who just want to use the line, the number is 0898 555 075.

BE A GM

Flopping onto my mat the other day was 'a new concept' in PBM. What is this new and enlightening format to rock the foundations of PBM? Well the idea is to sell a game system to people (in the same way PBM companies sell start-ups) and then to let them get on and run it themselves. The game is called *Overlord* and is produced by Exodus Incorporated. It is a pretty normal semi-fantasy wargame, not brilliantly presented and rather overpriced. However, the game is quite fun to play, and if you have small peers group within PBM it would be fun to all try your hand at GMing. Of course, I don't recommend you drop out of all your PBM games on the pretension that this is the way forward. There isn't the same depth as a full time PBM, and I reckon GMing would take more time than the average gamer could handle. Still, if you like the idea, £6 will buy you the basic package (extra sets for each player can be obtained from Exodus for an extra charge). Make cheques payable to Charles Perkins at 169 London Road, Cheltenham, Gloucestershire GL52 6HN.

BRIGHT FUTURE?
Future Games have hit the

PBM scene with *Centaurea*, a science fiction game of group role playing. The scenario has your group as a band of wandering adventurers on the post-apocalyptic planet of the title. There are three types of characters, any combination of which is acceptable in your group: Humans (slightly stronger than their terrestrial counterparts), Mutants (radiation-affected humans) and Metalons (War robots). This lot left earth just before it hit the self-destruct button, and ended up on *Centaurea*. After a couple of thousand years, *Centaurea* suffered a similar fate to Earth when a world war broke out. Now the radiation clouds are lifting and you are among the first to venture out of your underground homes. Searching the old cities for treasure, killing other people and generally having a good time seem to be the main objectives.

£4 buys you a start-up package, comprising a well written rule book (with an awful cover), 4 character sheets (2 to return), a newsletter, some hex paper to map on and example turnsheets. Each turn you can write a number of group actions, individual actions and combat strategies. Turns cost £2 for a lengthy word-processed reply and a localised map, while combat results come at no extra cost. Get in touch with Future

I'll see you next month with a profile of one of the country's foremost PBM companies. Until then keep playing it by mail . . .

Games at 125 Hownslow Road, Feltham, Middlesex TW14 0BL.

READ ALL ABOUT IT

For those who would rather read about PBM than play, there is *PBM Scroll*, Issue 8. It's not particularly well written or presented but still proves interesting. One brass beer token (that's £1 to the more cultured) will secure you a copy, and £3.50 will get you a year's supply. John Woods (cheques to) is the perpetrator, and his cell is located within 91 Wandle Road, Morden, Surrey SM4 6AD.

THE 1989 PBM CONVENTION

Contrary to widespread rumours reported in last month's *CRASH* the British PBM Association's fourth annual convention has not been cancelled. After some initial problems finding a venue, the BPBMA has now announced its most impressive venue yet; The University of London's Jeffrey Hall in Bedford Way, London WC1. The event will take place on Saturday June 3rd and tickets will cost £3 on the day, or £2 in advance. For more information write to the BPMA at 55 Eden Road, London E17 9JX or phone them on 01-521 5814.

As you'd expect all the major PBM companies will be attending, many launching new games and offering discounts on old ones. Events planned include GM and star player panels, The Great PBM Quiz, computer game competitions, live role-playing demonstrations and, at the end of the day, the presentation of all the PBM awards. Sounds great doesn't it? And with it being within walking distance of Euston, Kings Cross and St Pancras mainline railway stations should be very heavily attended.

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£2.99 EACH

"ONLY FOR SERIOUS STRATEGY GAMESTERS"

OTHER

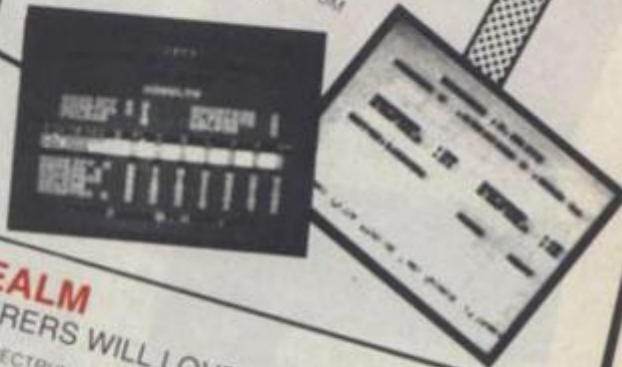


BUDGET GAMES

SOCCER Q

2000 FOOTBALL QUESTIONS TO ANSWER. TAKE YOUR TEAM TO THE TOP OF THE FOUR DIVISIONS AND LIFT THE CUP.

AVAILABLE ON SPECTRUM 48 128K & C64



THE DAMNED FOREST

AN ICON DRIVEN GRAPHICAL ADVENTURE

AVAILABLE ON SPECTRUM 48 128K

KEMSHU

A BRAINTEASER

CRASH REVIEW 81%

AVAILABLE ON SPECTRUM 48 128K

THE REALM

ADVENTURERS WILL LOVE THIS

AVAILABLE ON SPECTRUM 48 128K

ARENA

A WARGAME "COULD PROVE TO BE A BUDGET CLASSIC" POPULAR COMPUTING WEEKLY

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GET BUBBLES

BMX SIMULATOR

£2.99 ■ CODE MASTERS

The aim in Code Masters' latest sim is to get on yer bike and pedal like crazy to get around the course as quickly as possible – up to four people can participate. Apart from avoiding collisions with each other the bikers must also avoid tumbles resulting from collisions with the variety of obstacles placed in their way. All of which would be great if the controls weren't so over-responsive, breathe on the joystick and you crash.

Graphically *BMX Simulator 2* is very colourful, but pretty graphics do not a game make I'm afraid, for BMX fans with lots of patience only.

Overall 42%



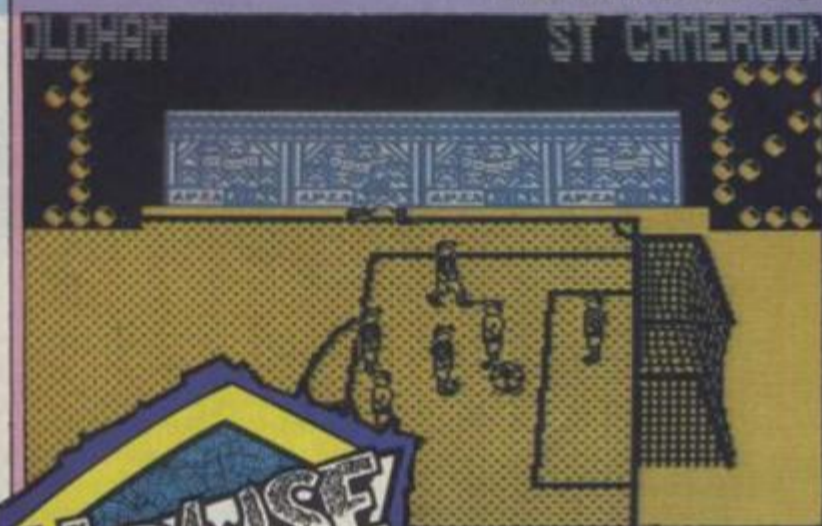
ADVANCED SOCCER SIMULATOR

£2.99 ■ MAD

It's soccer management time again with a real gem of a game coming out on Mastertronic's posher budget label. Taking on the role of team manager you're in charge of your favourite team's progress from rock bottom in Division Four to the dizzy heights of Division One, a small matter of beating several other teams along the way sorts out the men from the boys. League cups, FA cups and European cups provide the footie challenge for 1 to 8 would-be Brian Cloughs.

All the usual features associated with football management crop up in *Advanced Soccer Simulator* – player deals, fixtures, player injuries and away matches – but the financial side of things is a little weak by comparison with *Football Manager*. On the other hand the match tactics are as good as I've seen in any game, presentation is superb and the obligatory goalmouth highlights are great – even if they are in monochrome. All-in-all a well-above average management sim, with the added bonus of a multi-player option. Don't miss it.

Overall 82%



SOCCER Q

£2.99 ■ CULT

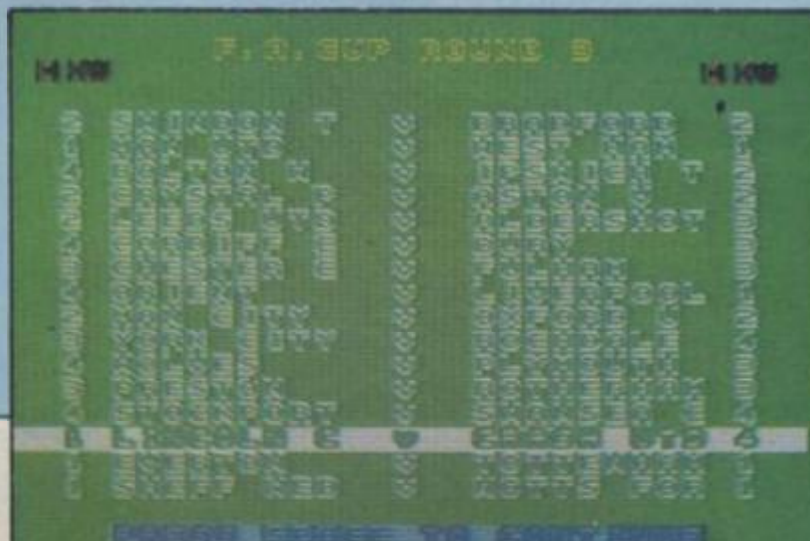
Soccer Q is a rather strange mixture of football management game and trivia quiz. The first task is to choose one of the thirty two teams on offer. The aim as in all other footy games is to reach the top of division one and ultimately win the FA Cup. But goals aren't scored by playing matches, they are in fact awarded when you answer a soccer related question correctly. At the end of each match the league tables are calculated and displayed, but watch out if your performance is consistently low you will be relegated rather than promoted. Training your team is very important the success of

this is again determined by a correct answer to a question, get it wrong and the team will be too tired to train.

Garish colours, long winded print-outs of the days results and footy related questions that I could neither read (because of the garish backgrounds) or answer anyway (because I'm not as footy mad

as our Phil) did nothing to endear me to *Soccer Q*. Not that most football manager games are wildly exciting anyway, but the idea of asking trivia questions instead of viewing porkey sprites wobbling around a pitch isn't a bad one I suppose.

Overall 35%



SUPERNUDGE 2000

£1.99 ■ MASTERTRONIC

Surprisingly enough the objective of this fruit machine game is simply to make money. You start off with 10, 20 or 30 credits – your choice – then press a key to start the reels revolving. You can press hold to stop any of the five reels, with the hope of getting a winning combination. The fifth reel has numbers instead of symbols. According to the number sometimes a couple of the 'Supernudge' letters at the top of the 'machine' light up. Get them all and you go into the bonus feature section. Needless to say all the complexities of fruit machine gambling is here; losing gambles, holds on reels and holds on the SUPERNUDGE feature just when you only need one more letter lit to complete the set are all too common. At £1.99 this is a good way to spend a rainy Sunday afternoon, but after a while I think that this will be relegated to the software cupboard.

Overall 65%

PLASMA BALL

£1.99 ■ ATLANTIS

In *Plasma Ball* you play the part of a small sphere of energy trapped on the planet Odessia Millennia, which is made up of 50 levels of isometric mazes. Needless to say there's lots of baddies, touch 'em and you lose energy, but lightning bolts restore it. There's also energy draining tiles, bottomless pits and bonus stars.

The first thing you notice about this game is the difficulty one experiences in controlling the wildly bouncing plasma ball, it took me several goes to tame the thing. Not that I'm saying the game is bad, once even partial control is gained the zippy little plasma ball is busy doing his stuff destroying the meanies

MINDTRAP

£1.99 ■ MASTERTRONIC

There seems to be something about people from the other side of the Iron Curtain that makes them devise fiendishly difficult puzzles for us Westerners to blow our minds trying to solve! I mean, look at *Tetris*, and good ol' Ernst Rubik, and now this! Yep. *Mindtrap* (as you've probably gathered from the title) is one of those disgustingly addictive, simple puzzle games that seem to hold your attention for weeks for no logical reason whatsoever!

Each screen has a set of blocks, of different colours. All you have to do is swap them around into columns of one colour each; the colour for each column is shown at the bottom. You control a frame which can contain four of these blocks at time; this can be moved about the screen, and fire and left or right rotates the colours in either direction. Don't worry about the appalling explanation; the idea is incredibly easy to pick up.

As I said before, *Mindtrap* is fiendishly addictive; the only moan I have is the ridiculous password system; OK, so it's fairly secure, but who wants to type in a 32 character line of what looks like random characters just to get onto the next level? The graphics aren't exactly stunning, but then they're not usually on this sort of game! A lot of mental effort is required on *Mindtrap*, particularly on the higher levels; you need to move quickly and think at the same time. It's very addictive, though, and well worth buying.

Overall 84%



and getting ever nearer to his goal. *Plasma Ball* will keep you occupied for a fair while, if you don't first throw the computer out of the window in frustration.

Overall 69%

SHANGHAI WARRIORS

£1.99 ■ PLAYERS

Yet another Martial Arts game makes its way onto the Spectrum in the guise of *Shanghai Warriors*. The archetypal vigilante figure rushes about and kicks the crap out of everyone in his search for a missing submarine (!?), I've seen it all before guys. But if the gamep-

lay's a little overfamiliar, the graphics and sonics are still quite good with colourful backgrounds at the air force, army and navy bases you visit. A good game, but a bit too easy with no end-of-level monsters for just three levels.

Overall 76%

HEARTBROKEN

£1.99 ■ ATLANTIS

Will you be heartbroken if you shell out for this game? Well it depends on whether you like arcade/adventure games or not. Graphically *Heartbroken* is a bit of a mixed bag, the colourful backgrounds are quite nice, but the character sprites hobble around like miniature Quasimodos and ruin the whole scene. If you like this type of game take a look at *Heartbroken*, it's cute and colourful but far from the best of its type.

Overall 55%

STREET GANG FOOTBALL

£2.99 ■ CODE MASTERS

Two tough New York gangs have decided to settle their differences in *Street Gang Football* with a game of footy on the city back streets. But there aren't any FA rules here matey, nope these guys play strictly to their own rules. The game is split into two one minute halves with each team doing everything to get the ball, short of murder. And apart from the human obstacles cars, buildings, pavements, potholes etc also thwart your attempts to reach the oppositions goal line.

Most arguments can be settled fairly peacefully, but the occasional punch up occurs when a goal is disputed and the winners are awarded the points. *Street Gang Football* is my favourite section from *4 Soccer Simulators*, so I greatly enjoyed causing a bit of computerised aggro against either the computer player or a second person. Graphically the game is good with the back streets looking really dark and dingy, and the players out to cause some damage on their way to the oppositions goal. If you haven't already got *4 Soccer Simulators* take a look.

Overall 78%

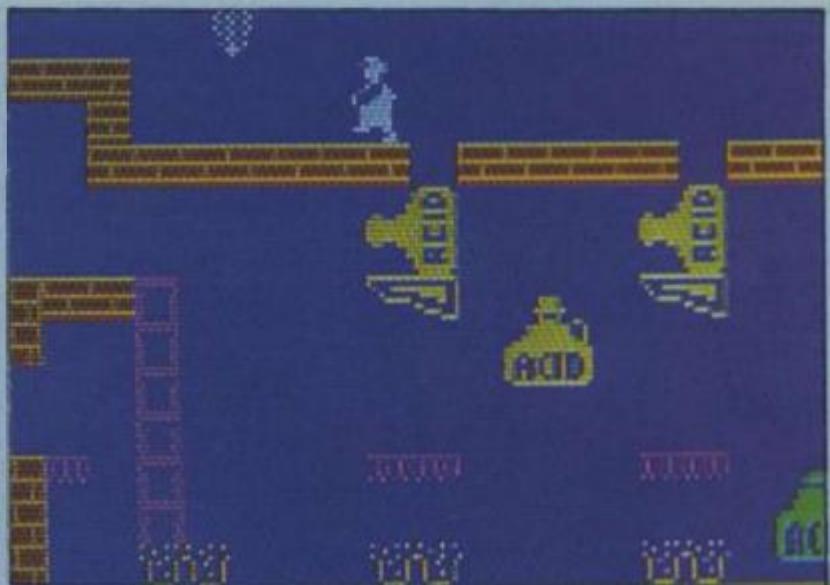
SOFTWARE

TECHNICIAN TED

£2.99 ■ RACK-IT

Technician Ted is a hard working young computer hacker who earns his daily crust at the local, platforms-and-ladders Microprocessor factory. He clocks on at 8:30 and has until 5:00 pm to complete his 21 daily tasks. His first task is to go to his desk, then the Silicon Slice Store where he has to hit two flashing boxes in the correct sequence. When a task is completed another two boxes start flashing somewhere in the 50 screen factory.

Even with a map of the factory and the order of the tasks from Playing Tips (Issues 15 & 18), *Ted* is a difficult game. Your thirty or so lives are always in danger and some of the tasks - with strict time limits - are 'mega-tough'. Yet



four years after its release the graphics remain crisp, colourful and amusing, the tune is good and playability high. Moreover Hewson have thoughtfully added some coding so that the +2/+3 joystick ports will work with the game.

An attractive and compelling game this is an essential purchase for platform-and-ladders fans, and well worth a look even from people who normally hate the game-style.
Then: 96% Now: 87%

TETRIS

£2.99 ■ MASTERTRONIC

Originally programmed by a bunch of university students from Moscow and released by Mirrorsoft, *Tetris* was first reviewed in issue 50 and received a fairly good reception. The aim is simple; differently shaped and coloured blocks drift down the screen, you've got to guide them down to make a solid line across the bottom. As each line is completed it drops down one space, if it isn't completed the blocks keep building up until they reach the top of the screen.

When I visited the recent ATEI show I was surprised to see a *Tetris* arcade game - it's one of only a handful of home computer games converted to an arcade machine rather than vice versa. With ten skill levels *Tetris* certainly poses quite a challenge especially on higher settings, and I must say that I disagree slightly with the comments made by the original reviewers. *Tetris* is worthy of consideration and I feel will keep the old grey matter ticking over for a few months.

Then: 77% Now: 82%



MANIC MINER

£2.99 ■ MAD

Manic Miner must be one of the only rerelease games that has never been reviewed in CRASH. This occurred not because the lads couldn't be bothered, but because this classic platforms-and-ladders game appeared before your fave mag hit the streets. Miner Willy is the star and it is his job to travel the underground caverns of Surbiton(!) and collect the treasure which lies therein. There are around

twenty screens to go through, and all the treasure has to be collected on a screen before you progress to the next. Opposing your progress are such bizarre opponents as penguins, performing seals, dancing rabbits and kangaroos. And there's a time limit too.

Although *Manic Miner* is one of the oldest games to be rereleased, it's also one of the best. The graphics are sharp and attractive, the ingame tune attractive and playability as addictive as it's frustrating. This is an essential purchase.
Then: N/A Now: 92%

BARRY MCGUIGAN'S WORLD CHAMPIONSHIP BOXING

£2.99 ■ MASTERTRONIC+

Sadly a bit out of date this, since the objective is to battle your way through professionals and semi-professionals until you can take on Bazza for the world title he's now lost. To do better you are able to mix and match your own boxer from a range of options, once you are happy

with your creation you go to the training camp - the amount of time allowed varies so make the most of it. In the ring the boxers slug it out over ten three minute rounds, it's a long way to the top of the ladder so get climbing.

Sad to say that I didn't greatly enjoy playing this. In

the ring the boxers are limited to a few fairly ineffectual moves, whilst each time I attempted to create a new fighter the outcome of a bout was always the same - the other guy wiped the floor with me. For bored boxing fanatics only.

Then: 88% Now: 54%

THE SACRED ARMOUR OF ANTIRIAD

£1.99 ■ SILVERBIRD

Centuries after a terrible nuclear war, the last inhabitants of Earth are in danger of being wiped out by aliens. But hope is at hand: The Council Of Elders have discovered a scroll describing the almost magical powers of an anti-rad suit developed to withstand nuclear weapons. A hero, you, must find the armour and take on the alien fiends.

The main character's animation is a little crude, and the reappearance of enemies as soon as you go off screen is irritating, but the background graphics are good and the quest to first activate your snazzy suit is compelling. Despite having a slightly dated feel the new low price means it's an attractive buy.

Then: 89% Now: 74%

HEAVY ON THE MAGIC

£1.99 ■ REBOUND

Gargoyle came up trumps in Issue 29 with this graphic adventure about a novice wizard's fight for survival in a dingy dungeon.

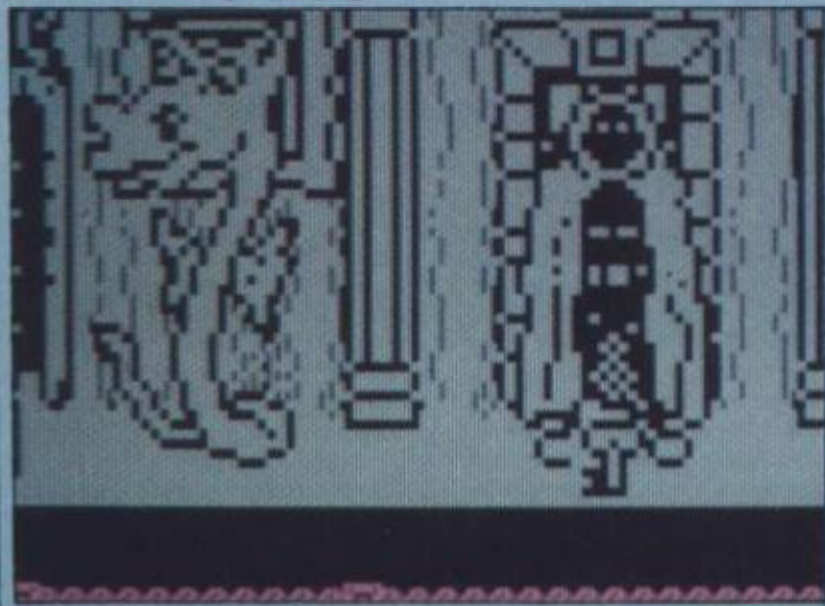
Axil The Able was fairly useless as a wizard, but his forte was Wizard-Baiting, ie telling very rude stories about his magical colleagues! Unfortunately, one of them overheard him and threw him in a castle dungeon. Axil's task is simple: escape before the various ghouls who inhabit the dungeons have him for brekky. Axil does have a book of spells, enabling him to do all sorts of magical things, but alas there are only a few pages

in the book to start with; others have to be picked up during his wanderings.

I'm personally not that keen on adventure games, but *Heavy On the Magick* is rather playable. Command of the language used in the game takes a while to master, but Axil is soon on the right track to regaining his freedom. The denizens of the dungeon attack without mercy, and for the first few games I doubt that you will get very far. But if you enjoy a good adventure, try *Heavy On The Magick*.

Then: 9/10

Now: 85%



GUNRUNNER

£2.99 ■ RACK-IT

Long ago in a galaxy far away, there was a Planet called Zero. The population were a peace loving race who used plutonium to heat their frozen world. But the evil Destroyians were attracted to Zero by its rich plutonium deposits, and began plundering the planet. Time to send for... The Gunrunner.

Produced by Christian Urquhart and Mike Smith you'd expect something pretty darn good, but apart from

some nifty background graphics this is a dull and disappointing game. Your character, who looks and acts as if in a deep-sea diver's suit, must simply run to the right and shoot all in his path. *Gunrunner* is a mediocre shoot-'em-up which may provide a couple of hours entertainment, but will soon end up gathering dust on the software shelf.

Then: 55% Now: 50%

SPYHUNTER

£2.99 ■ KIXX

Ahhh, it's nice to see this classic game back again on a budget label. Reviewed back in the mists of time (issue 16 to be precise) this CRASH Smashed game was raved over by the resident looneys of the time. Set in a James Bond-style cloak and dagger scenario, you take control of a sophisticated mean machine in which you have to burn rubber along a road filled with terrorists, or transform to a boat (at a suitable point) and cause even more mayhem on the open waters. To destroy the enemy vehicles you can either bump them off of the road, or destroy them with a range of devastating weapons. You start with a machine gun, but at regular intervals supply lorries appear and after a swift bump up the ramp an extra weapon is added.

Although *Spy Hunter* is looking a little dated in the graphical department, the pulse-racing playability has remained. Many happy hours will be spent blowing up or ramming the myriad of enemy cars and speed boats, but watch out for the civilians out for a Sunday drive. Decimate any of these and you will lose points as quickly as you make them, now excuse me while I practise my Timothy Dalton voice... My name is Bond, James Bond.

Then: 89% Now: 84%

SUPER CYCLE

£2.99 ■ KIXX

Climb into your riding leathers and jam that crash helmet onto your head 'cos we are going open road racing with *Super Cycle*. The rules are simple, just stay on the large and very powerful bike long enough to complete a course. Each race is held in different locations some in the desert, others in the city and there is even one course where you can see Cape Canaveral in the distance. As with most race games time is the enemy, a set limit is allowed to complete the course - fail to beat it and it's the end of the race. At the beginning there's only the other riders to worry about, but as the game goes on ice, roadworks and oil slicks etc all add to the challenge of reaching the finishing line in one piece. A fairly nice looking game, spoilt by being too easy with lousy collision detection.

Then: 63% Now: 53%

TRANTOR

£2.99 ■ KIXX

The troop ship left and you are now up the proverbial creek without a paddle. The only way to escape is by finding the NIK security terminal and tapping in a computer related word. How do you discover the word you ask, simply tap into the eight sub terminals scattered around the underground complex you now find yourself in. A ninety second timer, a flame thrower and lots of aliens are all that you have for company. Obviously if the time runs out it's end of game, but when each terminal is reached the timer is reset, so it's a race to get from point to point rather than complete the game in one go.

Trantor - The Last Stormtrooper is certainly graphically very pretty, a large, well defined character sprite strolls around the variety of caverns, roasting any and all scaly denizen who dares to show its face. Gameplay is tough but not quite as impressive, the denizens attack you a bit too mercilessly for my liking and this left me with a vague 'why bother?' sort of feeling. Take a look though, you might like it.

Then: 68% Now: 56%

BATTLE-TANK SIMULATOR

£1.99 ■ ZEPPELIN

Previously titled *3D Tank Duel*, this was originally reviewed way back in Issue 7. In fact it was the debut game by Realtime Software (the guys behind *Starstrike*, *Starglider* and the imminent *Carrier Command*), and is a *Battlezone*-type game.

You take control of a modern tank, equipped with radar. Four types of enemy tank try to sneak up on you and must be destroyed before they destroy you. A sharp eye must also be kept out for homing missiles which whizz towards your tank, destroying it on contact.

Battle-Tank Simulator is a good way to reminisce, but I wouldn't advise you to part with your dosh unless you really love this type of game, as sadly this genre is now a little out of date. However, the wire-frame enemy tanks do move quite smoothly across the horizon, and the game is enjoyable for a couple of hours.

Then: 83% Now: 55%

RYGAR

£2.99 ■ KIXX

Let's fight' says the macho man hero of *Rygar*, a Tecmo coin-op converted by US Gold in Issue 48. In a future land the enthusiastic hero must battle across countless screens infested by a variety of bloodthirsty aliens. Initially his only defence is the ability to hurl spiked balls (oo-er, missus!) at his assailants, but by shooting boulders and collecting their remnants, he is transformed into an invincible (well not quite!) fighting

machine.

It certainly doesn't sound original and plays poorly as well. For a start the game is far too easy to play, and hence becomes tedious very quickly. Graphics look rather simplistic: the hero looks more like a seven stone weakling than a Schwarzenegger-type action man. The meanies are little better and look about as menacing as one of Phil's sheep! *Rygar* is a mediocre shoot-'em-up game which probably won't keep you entertained for very long.

Then: 58% Now: 45%



INFILTRATOR

£2.99 ■ KIXX

The game that rocked America' fell onto the desks of the resident CRASH mob in issue 35. In this three level game you play the part of Captain Johnny 'Jimbo Baby' McGibbits, known to friend and foe alike as the Infiltrator (an improvement on Jimbo Baby!).

Climbing into the cockpit of a high-tech helicopter, you are faced with an eye-boggling array of controls. Once these are sussed out, you must locate the enemy base and land. Fight your way through

the variety of security devices and you will find yourself on the final level, trying to escape in one piece. You can do it Jimbo; at stake are freedom, the American way, and more importantly, Mom's scrummy apple pie!

Unfortunately, *Infiltrator* is spoiled by awkward helicopter controls. At the start of the game I repeatedly crashed due to these. And once I actually managed to stay airborne, an enemy airplane came along and shoved a couple of missiles up my tail. Frustration caused me to give up playing long before I got anywhere near the second level.

Then: 72% Now: 48%

TEMPEST

£1.99 ■ RICOCHET

Based on an ancient arcade coin-op, *Tempest* first appeared on the Spectrum in Issue 37, thanks to Electric Dreams.

In a future time, a series of galactic highways have been infested by hostile aliens. As 'The Zapper', your job is to tidy up the highways and make them safe for decent citizens to once more set foot into. A variety of aliens (such as Flippers, Fuseballs, Tankers, Spikes, and Pulsars) kill on contact. Of course you aren't

exactly defenceless; a rapid-fire gun provides protection from the meanies as they move towards you along the wireway. And for those tight situations, you have a limited supply of smart bombs.

Despite its simplistic wire-frame graphics, *Tempest* is an immensely playable game. The coin-op version is one of my all-time favourite games, and still worth a few ten pees if you can find it. Its simple playability has certainly been preserved on the Spectrum. So if you have a couple of quid burning a hole in your pocket, buy *Tempest* now.

Then: 62% Now: 89%

INTO THE EAGLE'S NEST

£1.99 ■ PLAYERS

ATTEN... wait for it, wait for it... SHUN! Right, do you know why you have been called to this briefing? Well, you are the brave idio... er, volunteer who has been assigned to this mission. The Eagle's Nest is a huge fortress manned by lots of German soldiers (well this is World War II, you know). A three man team was sent in to blow the place to smithereens, but they never returned. However, they did manage to plant explosives throughout the fortress, and your mission is to find the four hidden detonators and destroy the Eagle's Nest.

Drat, I haven't been able to put the joystick down since I started playing this game. The overhead-view graphics have some really nice touches: the mess tables, toilets, and bunk rooms are all depicted in great detail. One slight moan I do have is about the amount of explosives lying around - when concentrating on shooting the enemy, it's too easy to accidentally hit a crate of dynamite, ending the game. Even so, *Into The Eagle's Nest* is great fun to play and fantastic value at just two quid.

Then: 82% Now: 91%



HOW TO BE A COMPLETE BASTARD

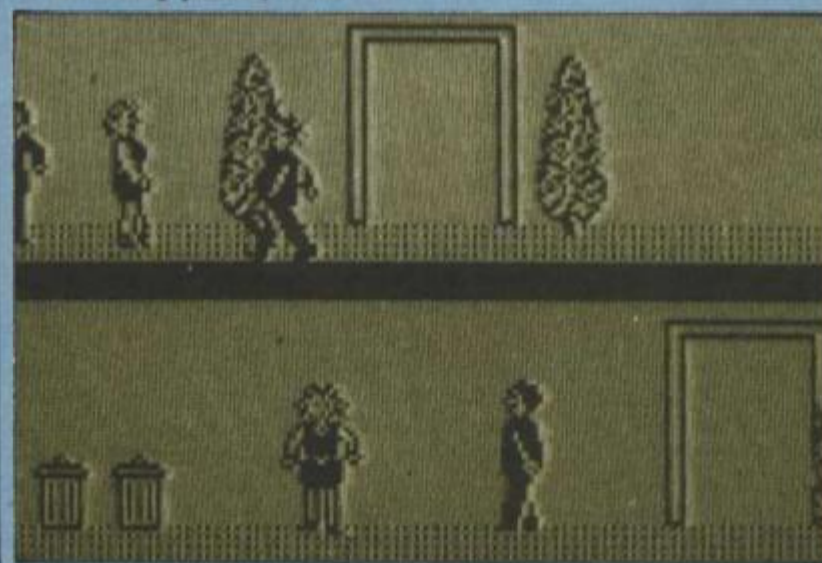
£1.99 ■ RICOCHET

Adrian Edmondson has Agate-crashed a yuppie party. His admirable aim is to be as obnoxious as possible! By searching the house, useful items can be found. Lager makes our hero as sober as a newt, while curry builds up methane levels in his body! Four gauges must also be topped up during the game: the weeeometer, drunkometer, fartometer, and smellometer. Items such as itching powder, laxatives, and sneezing powder can be collected and used against the guests! But some of these activities require Ade to be totally juiced, while for

others he must be stone cold sober (a rare event!).

Whether or not you enjoy this game entirely depends on whether you like Adrian Edmondson's type of humour. Personally I enjoy some of his wit, but the game struck me as a bit childish. And graphically the game is no great shakes; a bunch of stick-men wander aimlessly around simplistic backgrounds. *How To Be A Complete Bastard* may appeal to some fans, but I'd rather watch an episode of *The Young Ones*.

Then: 73% Now: 57%



PLAYING TIPS

Yeh! I always look forward to May: it's the only time there is anything to do in boring old Ludlow. This month the fair comes to town, with its arcades, noisy rides and roundabouts. My favourite's the Dumbo flying elephant ride. Trouble is, you look a bit silly when you're the only person on it over six! (It doesn't impress the women, either.) Pity it's only here for a few days, Ed Stuart only lets us out for an hour a day.

You may have noticed that something has changed on this page – yes, Playing Tips has finally been redesigned! Well, at least they got rid of that ever-darkening picture of yours truly. You can't get a sun tan that good in this town, matey!

WEC LE MANS

I quite enjoyed playing *WEC Le Mans* when it first came into the office, but couldn't get too far. That is until Andrew Cooke sent in these tips to improve my distance and help you at the same time.

★ When changing gears, wait until the speedo reaches about 120-130 mph before flicking up. This will ensure a smooth change of gear.

★ At the beginning, accelerate immediately and change gear as indicated above. Don't move from the centre of the road. You should then pass the four cars that were on the starting grid, with around 58 seconds left.

★ After the third corner there will be a hill in front of you. When you reach the top of it, go as far right as possible and change to low gear. You can go around the following sharp corner without crashing.

★ If you come off the road without hitting anything and find yourself off the grass break until you stop and change to low gear. Then turn the car back towards the track whilst accelerating and change to high gear.

★ If you think you can't get past a car or two (especially on a corner), slow down and take it carefully. If you stay to the one side they will eventually go to the other leaving you to accelerate away.

AIRBORNE RANGER

I'm sure that many of you bought the action-simulation game from MicroProse, *Airborne Ranger*, and thrilled to the danger and suspense behind enemy lines. But from my own experience I know that it was a bit hard, so here are some tips to keep you going from Nicholas Pirie of Flamstead.

● Remember that your law rocket has a range that goes past the boundaries of the screen, so line yourself up on the map and fire.

● Try and drop your supplies in trenches.

● Run across dangerous situations.

● Crawl in the trenches as much as possible.

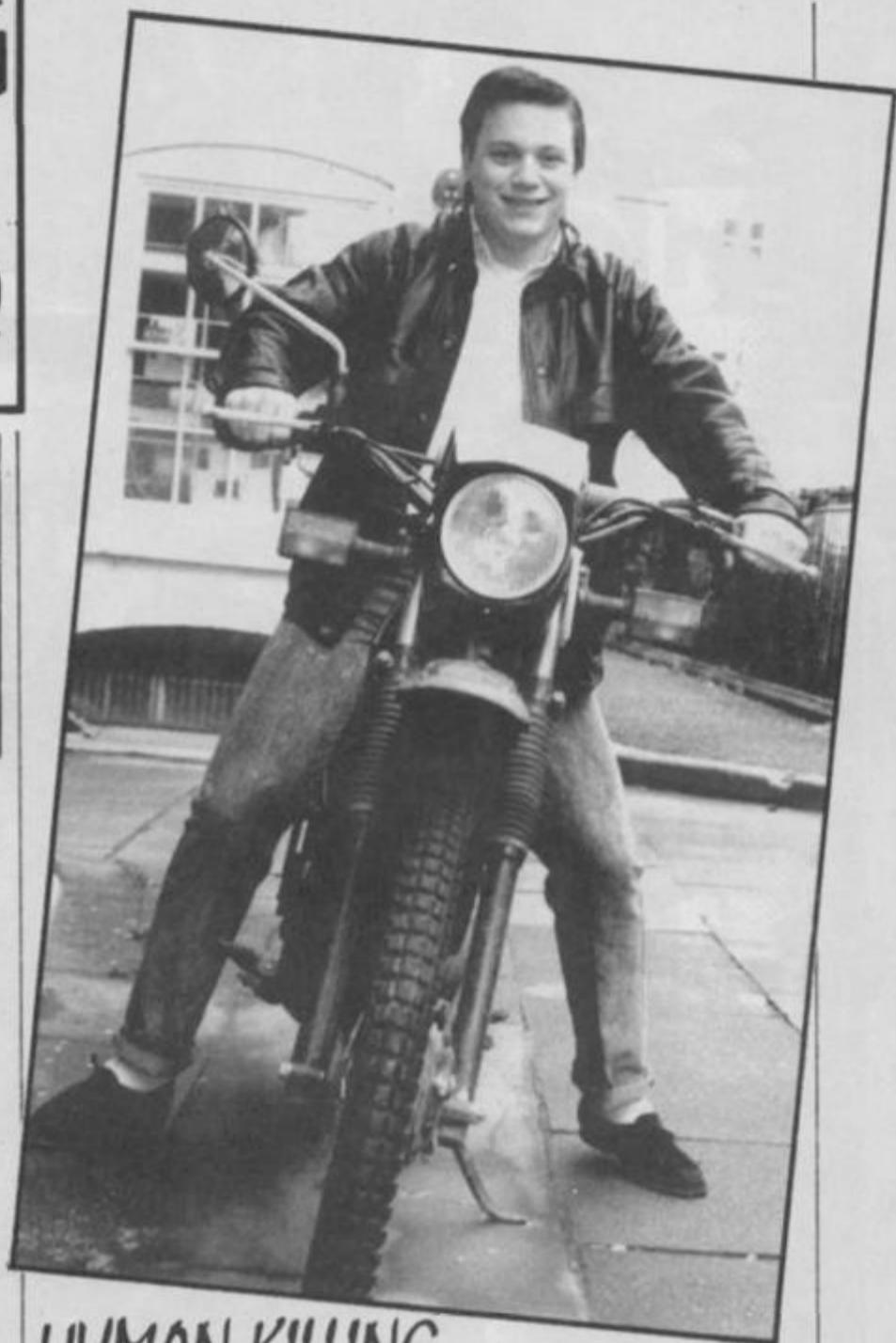
● Set traps for the enemy by throwing grenades onto patches of safe ice, thus cracking (but not breaking) them. Anyone walking across here will fall through.

● Plant 15-second time bombs so that you have a chance to get well clear (get the danger area off screen).

● Use your knife if the enemy is on top of you.

● Noise attracts the enemy.

● If you are walking through a lake, and you see an enemy enter the lake, then disappear (crawl) or you will start taking hits from him.



HUMAN KILLING MACHINE

Going a bit red in Moscow's Red Square? Getting a bit cheesed off with Edam in Amsterdam? Well Gordon Sheffield certainly isn't. He's so good at fighting in any place are the world that he thought he should send in some tips for other less-fortunate players.

Moscow

IGOR Use crouch kicks but watch out for his rifle.

SHEPSKI Same as Igor but watch his deadly bite.

Amsterdam

MARIA Her fighting style includes vicious kicks. Force her into a corner and use spinning crouch kicks to finish her off.

HELGA Use crouch kicks but keep at a safe distance as her punch is very powerful.

Barcelona

MIGUEL Force him into a corner and use a spinning crouch kick. Be careful though as he may hit you with his stick.

BRUTUS This bloke is a doddle, use crouch kicks and he won't last long.

Germany

HANS Same as Helga in Amsterdam but watch out for the kicks.

FRANZ He throws bottles and punches you. The only way to win is to jump towards him as soon as possible, duck and use spinning crouch kicks.

Beirut

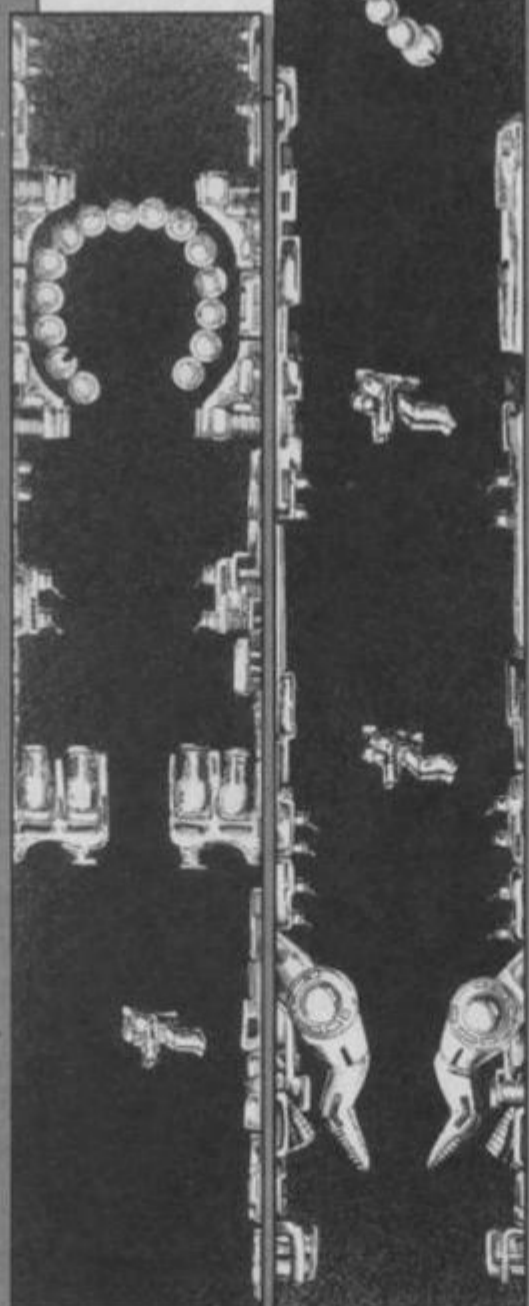
SAGAN Crouch kicks for this clown.

MERKEVA He kicks you with his rather large boots. Use crouch kicks to beat him to a quivering pulp.

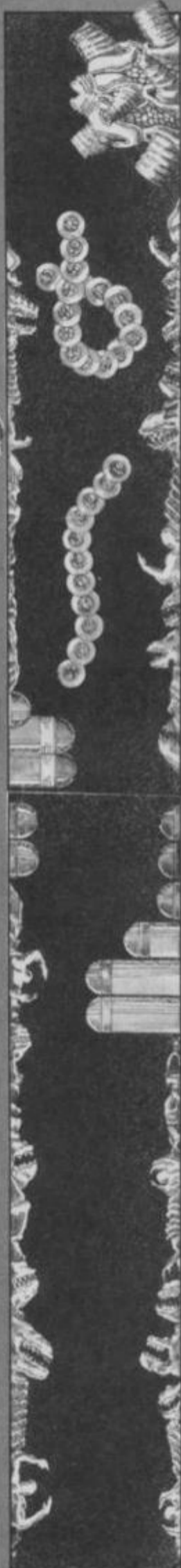


CRASH

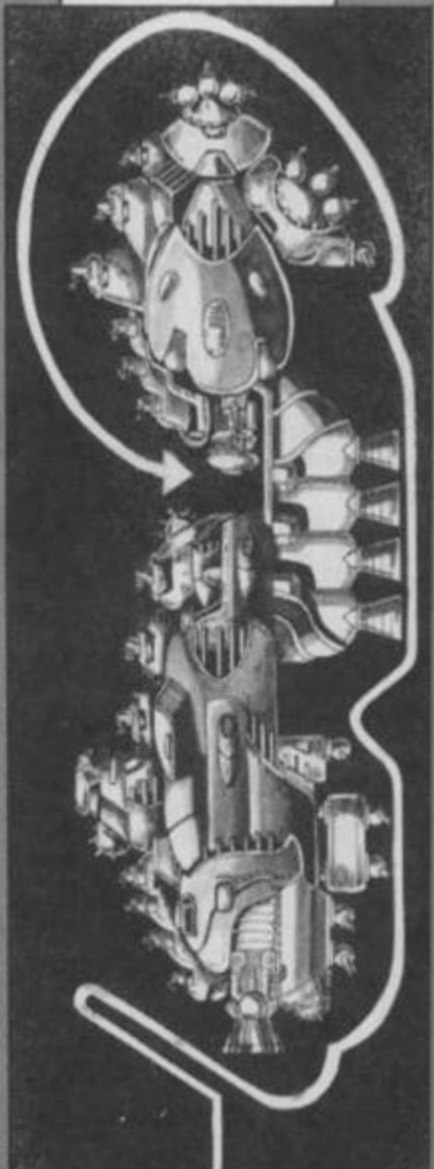
LEVEL 1

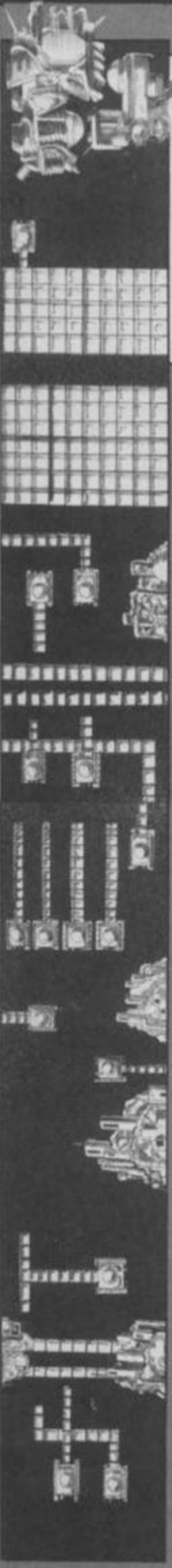


LEVEL 2



LEVEL 3

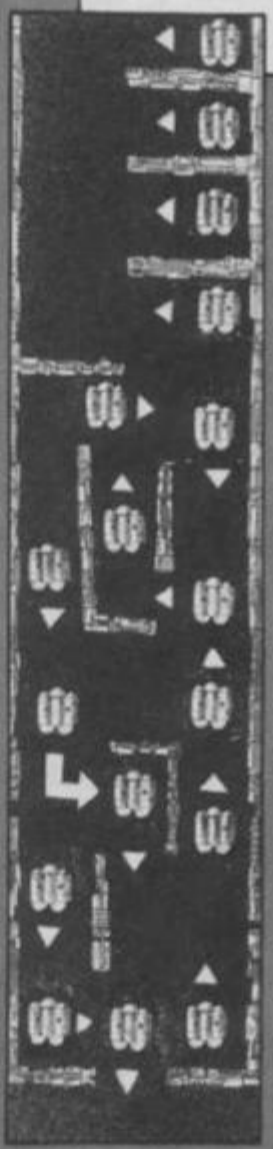




LEVEL 4

LEVEL 5

LEVEL 6



LEVEL 7

LEVEL 8



WIZARD POKES

Here are a load of POKES from someone new. Wizard Software which consists of Mark James George Ascroft and Nicholas Mark Tether has a hacking department which has sent in a whole tape full of normal listings and multiface POKES. Here are just a few...

SAS COMBAT SIMULATOR

```

1  REM WIZARD
  PRESENT ...
2  REM SAS COMBAT
  SIMULATOR (INFINITE
  LIVES AND GRENADES)
10  LET T=0
15  FOR F=29000 TO 29035
20  READ A: POKE F,A
25  LET T=T+A: NEXT F
30  IF T<>3904 THEN
  PRINT AT
  10,10;"ERROR IN
  DATA": STOP
35  PRINT AT 10,3;"START
  'SAS COMBAT SIM'
  TAPE"
40  LOAD ""CODE 16384
50  RANDOMIZE USR
  29000
100 DATA 221, 33, 80, 114,
  17, 34
110 DATA 132, 62, 255, 55,
  205, 86
120 DATA 5, 221, 33, 38, 248,
  17
130 DATA 214, 5, 62, 255, 55,
  205
140 DATA 86, 5, 175, 50, 15,
  129
150 DATA 50, 221, 132, 195,
  80, 114
  
```

BMX FREESTYLE

```

1  REM WIZARD
  PRESENT ...
2  REM BMX FREESTYLE
  POKES
3  REM (ALWAYS
  QUALIFY)
10  CLEAR 25000
20  PRINT AT 10,3;"START
  'BMX FREESTYLE'
  TAPE"
30  LOAD ""CODE
40  FOR F=26793 TO 26800
50  READ A: POKE F,A
60  NEXT F
70  RANDOMIZE USR
  26700
100 DATA 195,164,106
  
```

BMX SIMULATOR 2

```

1  REM WIZARD
  PRESENT ...
2  REM BMX SIMULATOR
  2 (QUALIFY EVERY
  TIME)
10  CLEAR 65535: LET T=0
20  FOR F=32768 TO 32816
30  READ A: POKE F,A
40  LET T=T+A: NEXT F
50  IF T<>3817 THEN
  PRINT AT
  10,10;"ERROR IN
  DATA": STOP
60  PRINT AT 10,2;"START

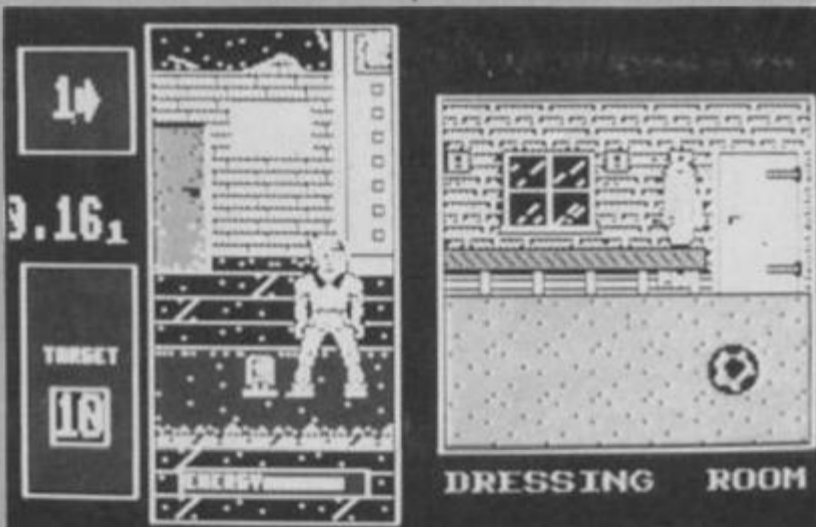
  'BMX SIMULATOR 2'
  TAPE"
70  RANDOMIZE USR
  32768
100 DATA 221, 33, 0, 95, 17
110 DATA 0, 1, 62, 255, 55
120 DATA 205, 86, 5, 48, 241
130 DATA 33, 29, 128, 17, 118
140 DATA 95, 1, 20, 0, 237
150 DATA 176, 195, 0, 95, 58
160 DATA 28, 126, 254, 32, 62
170 DATA 24, 32, 5, 50, 28
180 DATA 126, 24, 3, 50, 30
190 DATA 126, 195, 0, 96
  
```

4 SOCCER SIMULATORS

```

1  REM WIZARD PRE-
  SENT ...
2  REM 4 SOCCER
  SIMULATORS - SOC-
  CER SKILLS (INFINITE
  ENERGY ON BOTH
  PLAYERS)
10  CLEAR 26699
20  PRINT AT 10,3;"START
  'SOCCER SKILLS'
  TAPE": AT 12,5;"(4

  SOCCER
  SIMULATORS)"
30  LOAD ""CODE 26700
40  FOR F=26793 TO 26804
50  READ A: POKE F,A
60  NEXT F
70  RANDOMIZE USR
  26700
100 DATA 33, 0, 0, 34, 248,
  188, 34
110 DATA 6, 189, 195, 70, 105
  
```



STREET GANG

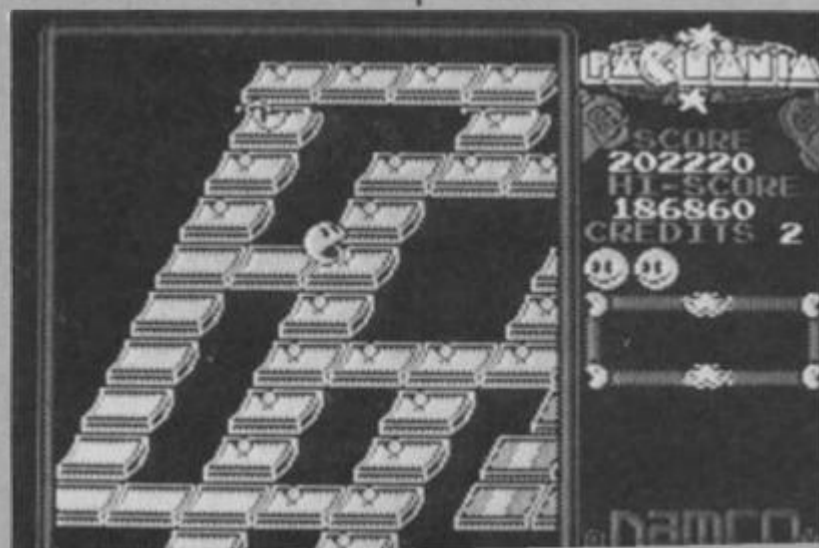
```

1  REM WIZARD PRE-
  SENT ...
2  REM STREET GANG (IN-
  FINITE LIVES)
10  CLEAR 32767
20  PRINT AT 10,4;"START
  'STREET GANG' TAPE"
30  LOAD ""CODE 65024
40  POKE 65041,201
50  RANDOMIZE USR
  65025
60  POKE 65341,95
70  FOR F=24320 TO 24335
80  READ A: POKE F,A:
  NEXT F
90  RANDOMIZE USR
  65301
100 DATA 62, 36, 50, 86, 153
110 DATA 62, 58, 50, 11, 145
120 DATA 50, 240, 144, 195,
  0, 130
  
```

PACMANIA

```

1  REM WIZARD
  PRESENT ...
2  REM PACMANIA
  (INFINITE CREDITS
  AND LIVES)
10  PRINT AT 10,5;"START
  'PACMANIA' TAPE"
20  LOAD ""CODE
30  POKE 24355,205
40  POKE 24356,180
50  POKE 24357,95
60  FOR F=24500 TO 24512
70  READ A: POKE F,A
80  NEXT F
90  RANDOMIZE USR
  24300
100 DATA 50, 48, 117
110 DATA 175, 50, 143, 120
120 DATA 62, 55, 50, 69, 137,
  201
  
```



BARBARIAN II (48K)

```

1  REM WIZARD
  PRESENT ...
2  REM BARBARIAN II
  POKES (48K)
10  CLEAR 30267: LET T=0
15  FOR F=60928 TO 60955
20  READ A: POKE F,A
25  LET T=T+A: NEXT F
30  IF T<>3197 THEN
  PRINT AT 10,2;"ERROR
  IN DATA (BEFORE
  POKES)": STOP
35  FOR F=60956 TO 1E9:
  READ A
40  IF A<256 THEN POKE
  F,A: NEXT F
50  PRINT AT 10,0;"START
  'BARBARIAN II (48K)'
  TAPE"
55  LOAD ""CODE
60  RANDOMIZE USR
  60928
100 DATA 62, 195, 50, 90,
  244, 33
110 DATA 14, 238, 34, 91,
  244, 195
120 DATA 0, 244, 221, 33, 0,
  91, 17
130 DATA 0, 82, 175, 55, 62,
  255
140 DATA 205, 18, 249
150 DATA 62, 58, 50, 216,
  144, 175, 50, 223, 156:
  REM INFINITE ENERGY
160 DATA 175, 50, 108, 150:
  REM INFINITE LIVES
170 DATA 62, 151, 50, 25,
  144, 62, 183, 50, 26, 144:
  REM HIT ENEMY ONCE
180 DATA 62, 205, 50, 192,
  151: REM NO ENEMY
190 DATA 195, 104, 244, 999:
  REM END MARKER (DO
  NOT REMOVE)
  
```

TOTAL ECLIPSE

Total Eclipse, the third game in the Freescape series from Incentive, has proved to be the most difficult to map. The 3-D pyramid layout of the game has been reproduced by mappers in a variety of different ways. Stuart Ferris of Kilmarnock in Ayrshire, who was also behind the *Dark Side* map, used the same 2-D method again and, with his solution, wins him £40 of software. Thanks to everyone who sent me a map; having completed it myself I know how much work you must have put in.

- 1 Go round the back of the pyramid and enter it through the secret entrance.
- 2 Shoot the door in **Rameses B** and go through it.
- 3 Take the treasure in **Rameses D** and then leave the pyramid. Go back round to the front, enter the front door.
- 4 Fill up with water and take the ankh in **Horakhty A**, then go through the door into **Horakhty B**.
- 5 Take the treasure, shoot the

- switch and go to **Horakhty G**.
- 6 Shoot the head of the mummy and the top of the treasure chest, then take the treasure. Duck under the blocked door and go to **Horakhty D**.
 - 7 Shoot the tree symbol and the wall. Go through the gap in the barrier, shift the door panel and go into **Illusion D**.
 - 8 Take the exit in front of you to **Illusion E**.
 - 9 Take the exit behind you to **Illusion A**.
 - 10 Take the exit on your right to **Illusion B**.
 - 11 Take the exit on your right to **Illusion C**.
 - 12 Take the exit in front of you to **Illusion I**.
 - 13 Take the exit behind you to **Illusion F**.
 - 14 Take the exit in front of you to **Sahara A**.
 - 15 Shoot the bone and go to **Illusion F**.
 - 16 Take the exit in front of you to **Illusion D**.
 - 17 Take the exit in front of you to **Horakhty D**.
 - 18 Go to **Horakhty J**.
 - 19 Take the ankh and go to **Horakhty I**.
 - 20 Shoot the top of the pillar where the treasure is, then shoot

- the treasure lid to take it. Go to **Horakhty F**.
- 21 Shoot the eye symbol and go to **Horakhty B**.
 - 22 Shoot the block on the stair and go to **Horakhty E**.
 - 23 Take the ankh and shoot the lid of the treasure chest. Take the treasure and go to **Pharaohs F**.
 - 24 Shoot the rope holding the ankh and then take it. Go to **Nephthys E** via D, B, A and C.
 - 25 Shoot the beam to make it rotate and go to its middle. Then shoot it again to get to **Nephthys F**.
 - 26 Shoot the switch and go to **Rameses C** via D, B and A.
 - 27 Shoot the door and go to **Rameses A**.
 - 28 Drop to the lowest level and move the large block to make a staircase.
 - 29 Go to **Rameses E** and shoot the door.
 - 30 Go back to **Rameses C**, leaving the pyramid by the back entrance and going back through the front door: follow the map.
 - 31 Go to **Rameses A** via the fourth door from the left.
 - 32 Take the door next to the one you come out at and you will end up at the middle door. Take

- the stairs and then shoot the head symbol. Go to **Rameses C**.
- 33 Leave the pyramid at the back and go to **Khepresh E**.
 - 34 Shoot the left-hand wall and take the ankh.
 - 35 Go to **Nephthys B** and **Pharaohs D**.
 - 36 Shoot the bar on the south upper door and climb the stairs that appear. Go through it to **Pharaohs D**.
 - 37 Go to **Pharaohs H** and take the treasure. Drop down the hole and go to **Khepresh C**.
 - 38 Take the ankh and go back to **Pharaohs H**.
 - 39 Go to **Pharaohs E** and then to **Shabaka B**.
 - 40 Crouch and climb the stairs then stand up straight to open the door (five anks are required). Stand up straight to go to **Shabaka A**.
 - 41 Go as close to the statue as possible and start to shoot the body.
 - 42 You will then get a £2 million bonus.
 - 43 The statue will then disappear and you will get the message 'Curse Overcome'.
 - 44 The moon will then pass safely over the sun.

CHEAT MODE MOTEL

Wow, yeah, whoopee, def, crucial, it's another Cheat Mode Motel. With cheats on some of the faberoony games to come out recently. Why don't all the programmers of high quality software put cheats in? It would make us play for so much longer. Something to think about there all you programmers!

LED STORM

When the count down has finished collect a few points then press BREAK twice, the border should go green then the game will abort. Press fire to start your game again and you will have 300,000 points! This may vary according to your score when you press BREAK, but it gives a good score boost to show to Phil King.
(Twin room: Daniel Blunden, Peter Clark and Lee Philpoff)

TASK FORCE

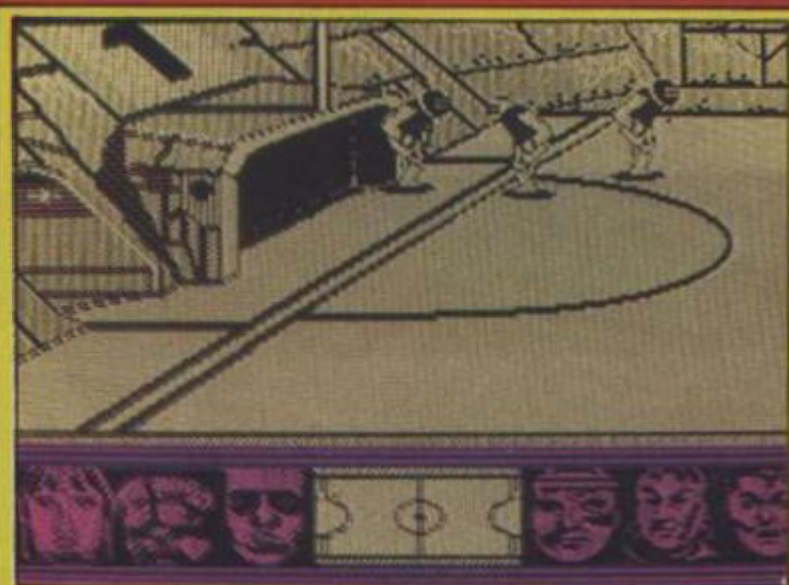
On the 'define keys' option type CHEAT and then redefine them how you want. When you start the game you will have infinite lives.
(Single room: Rajan Mehra)

SHANGHAI WARRIORS

When you get to the high score table type in your name as OUTLAND. When you start up a new game you will have a smart bomb every time you press fire. A useful thing to have when there are so many nasty people in the game!
(Kitchen cupboard: The Geek)

SKATEBALL

For infinite lives all you have to do is type TIXY on the title screen. You will then be able to see all of the 26 levels and improve your skating into the bargain.
(Single room: Lee Caveney)

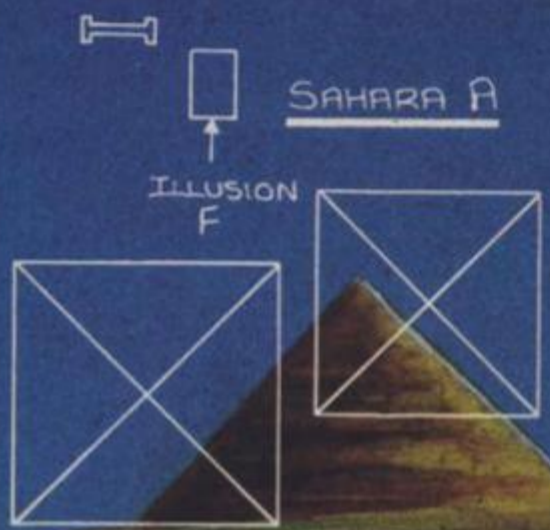


Mark, Phil and Stuart would like to apologise to Ubi Soft for saying that *Skateball* has only nine levels in the review when there are really TWENTY SIX! They all hope that this has not caused anyone any distress while buying this excellent game and will pay for all hospital bills occurred.
Thank you.

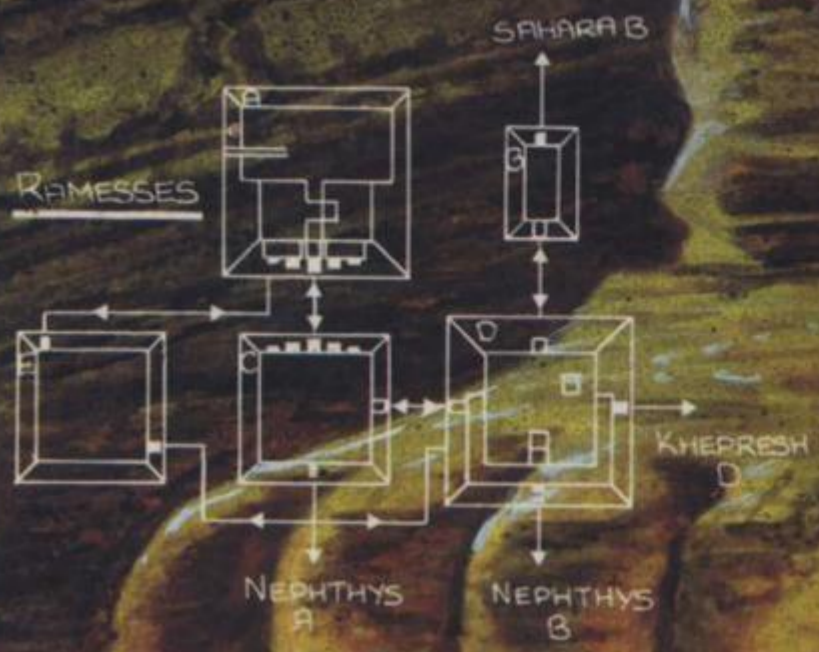
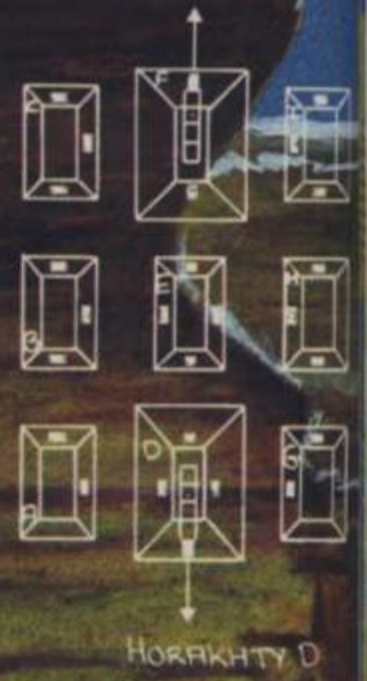
A CRASH 'whoops what a cock-up!' Announcement.

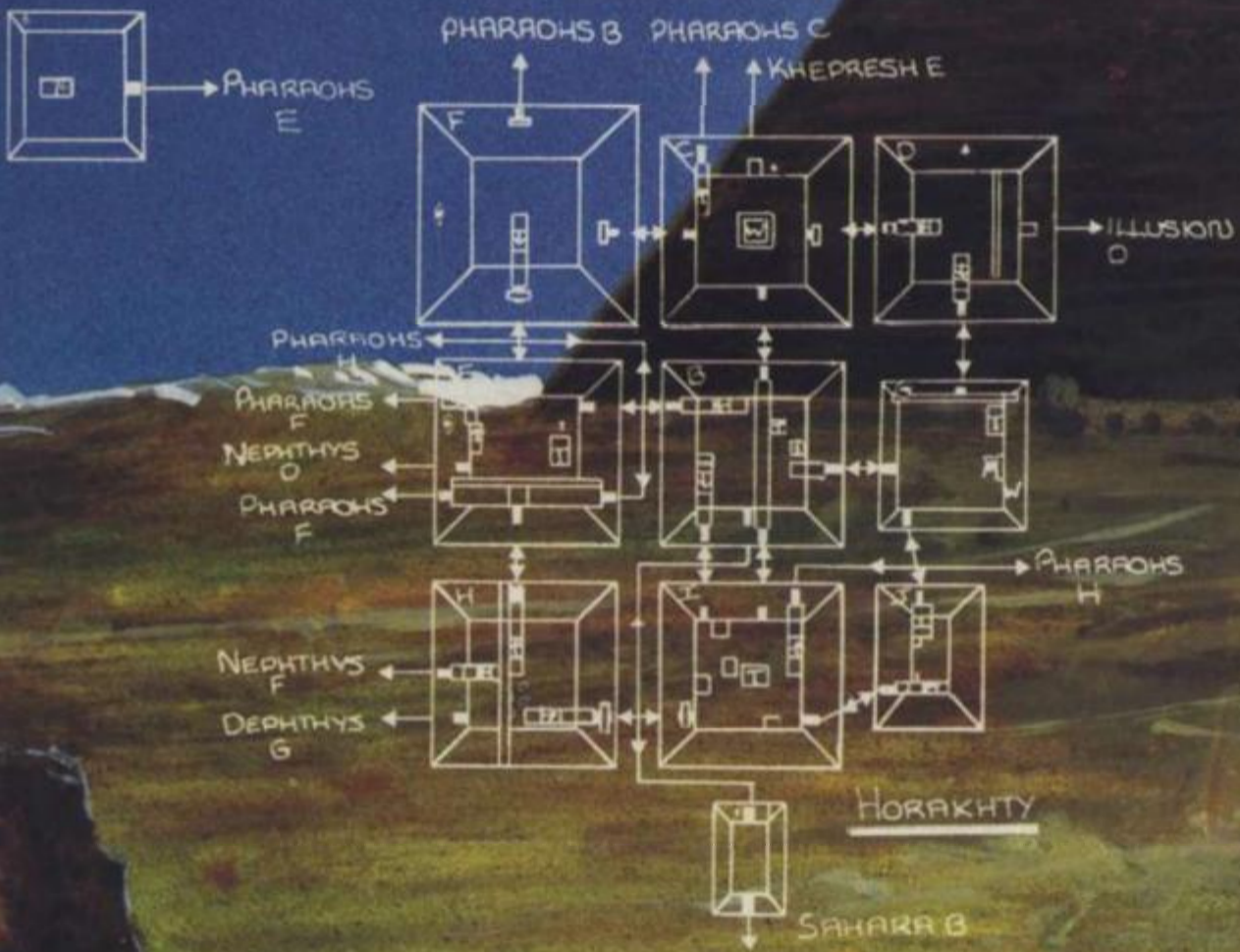
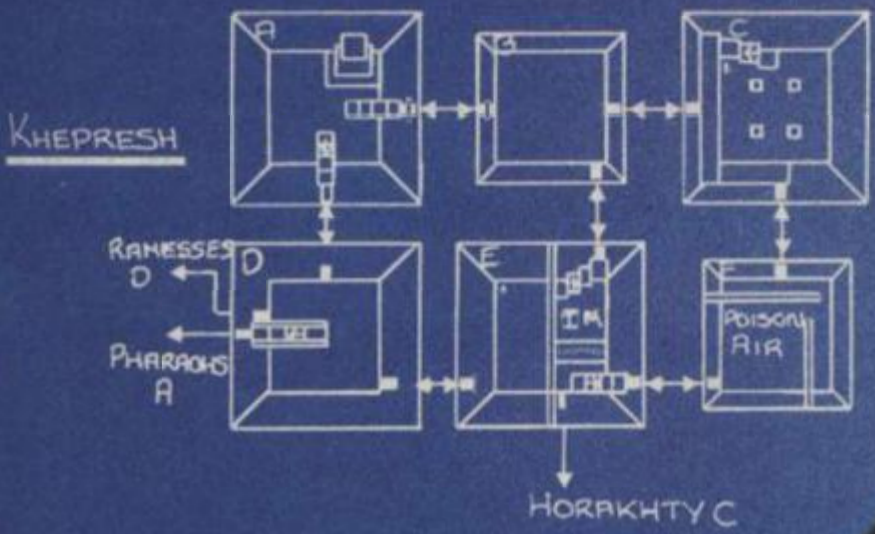


TOTAL ECLIPSE

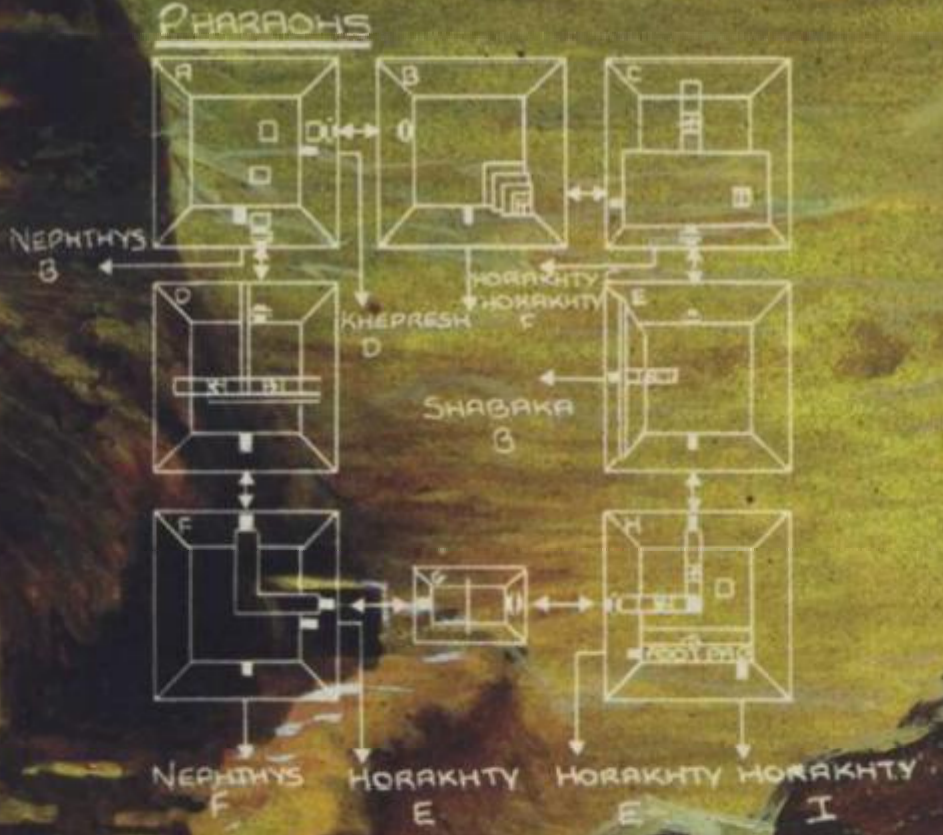


ILLUSION SAHARA A





Well I'm off to enjoy myself down the fair now, so I'll leave you to browse through the rest of the magazine. Have fun until next month and don't forget to send all your POKEs, tips and maps to... tralaa...
 Nick 'Jaw Cracker' Roberts, Playing Tips, CRASH, PO Box 10, LUDLOW, Shropshire, SY8 1DB.



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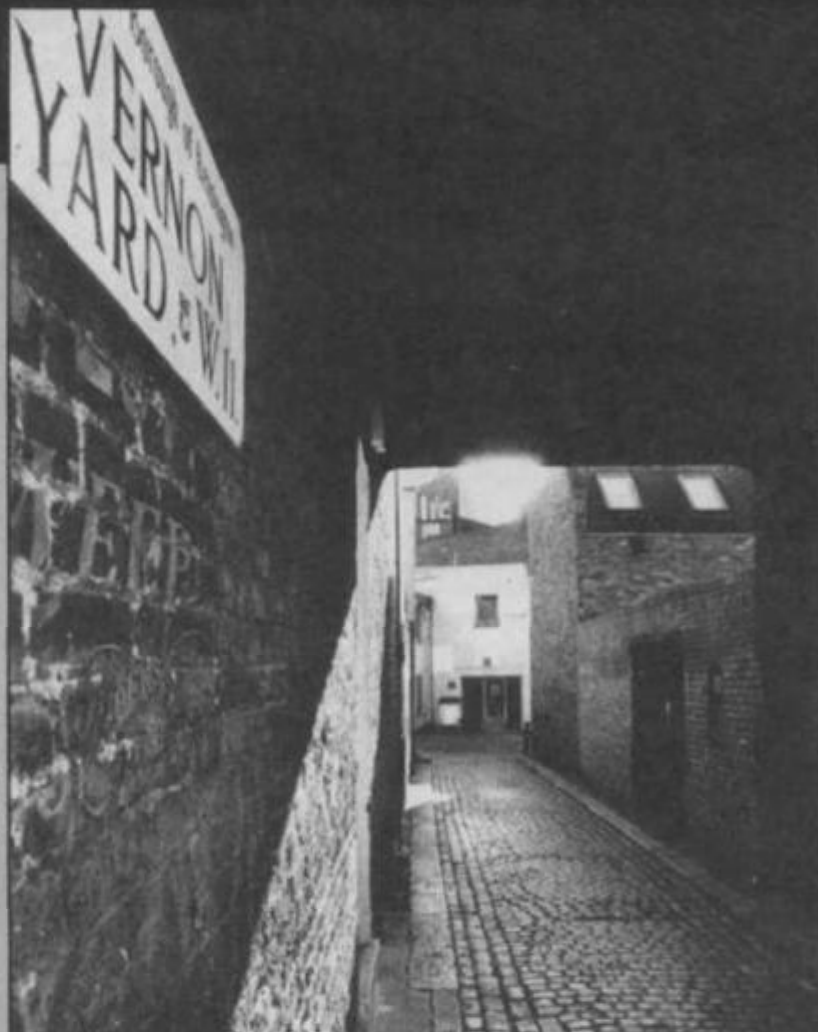
BEGINNER'S LUCK

Lloyd's mailbag is constantly brimming with letters wanting to know how you go about getting homegrown software published. The producer of most debut-programmer games is almost certainly Mastertronic. CRASH talked to Mastertronic's Andrew Wright and asked him exactly what happens when your entrusted package lands on the doormat of their London offices . . .

When Mastertronic started off in 1984 they weren't the first to promote budget software, CCS had already tried that, but they were certainly the first with the marketing muscle and sheer quantity to make a success of it. At that time, a lot of the smaller software houses were going bust, providing a rich source of cheap games to launch Mastertronic's budget

range. But at the same time Mastertronic were interested in getting games from first-time programmers. There was little delay in these arriving, and the cardboard box where the games were filed on arrival was soon dubbed the 'Magic Postbox'.

Five years on, the budget market has become massive, with budget titles usually dominating the Gallup top twenty. A sizeable proportion of these games are written by new programmers, and indeed this is virtually their only hope of getting published. With the near extinction of small-



► At the end of a dark alleyway, off London's famous Portobello Road antique market, lies the Virgin Mastertronic offices

► Andrew Wright



er, independent software houses most full-price software is now published by larger companies like US Gold and Ocean, which rely on established programming teams. Moreover, these software houses tend to base games on big licences, and expect any full-price release to be available on all formats – maximising the effect of advertising.

But if getting a game published full-price is vastly more difficult now than in 1984, the opportunities of getting a budget game released are much better – although the standards are rising all the time. To attract more games Mastertronic made the 'Magic Postbox' nickname official six months ago, with ads in all Mastertronic's budget releases. As a result, the number of games arriving has increased to around thirty per week on all formats.

Spoiled for choice

When a game arrives in the Mastertronic offices it's usually loaded that same day by David George, Mastertronic's 17-year-old playtester. The selection process begins: the biggest cause of rejection is simply that

the game won't load! Games will also be rejected if they use a utility like Incentive's *Graphic Adventure Creator*, or the *Shoot 'Em Up Construction Set* on the C64. Similarly an indifferent *Manic Miner* clone will soon be sent back to its creator. All games received by Mastertronic are returned, even if they lack enclosed postage, together with a form letter of rejection – or a note explaining that it wouldn't load.

Some games, however, are so obviously excellent that it's obvious they're right for the label. In that case Budget Labels Product Manager, **Andrew Wright**, will phone the programmer the next day and try to arrange a contract.

More often, promising games are put in a box to be put through a slightly more formal review procedure. These are held whenever there's enough games to justify a meeting. Besides Andrew and David, also present are the software producers; **Tony Smith**, **Andy Green**, **Alex Martin** and **Nicole Baikloff**. These four are responsible for overseeing the development of 'outside' programs, a job they are particularly well suited for as they used to be the



► Joanne and the Magic Post Box – approximately 30-40 games a week arrive here



► Submissions are reviewed in the games room – (L-R, 'Little' Dave George, Jonathon and Andrew Wright)

Gang of Four – who wrote *Dan Dare* (92%, Issue 32) and *Dan Dare II* (74%, Issue 49). The marketing department may also be consulted.

Quite often a game may be brilliantly-playable, but still be rejected because it isn't likely to sell. According to Andrew, kids 'want guns 'n' violence. What's hot now are ninjas, skateboards, death and tie-ins'. One *Gauntlet*-type game was rejected by Andrew as being old hat, but Code Masters picked it up and made it more attractive by slapping a 'ninja' title on the game. Substantial changes to gameplay are rarely considered. The quantity of games submitted is such that Mastertronic has no time for promising games which need more than minimal changes. Some games require nothing more than the signing of the contract before being published, other games require gameplay to be tweaked.

A gentleman's word . . .

The essential point of a contract is the signing over of the programmer's copyright to the publisher – in this case Mastertronic. As Lloyd pointed out last month, whether you write a computer program, a book or a song you automatically have copyright on it – the sole right to make copies. The only problem is how do you prove in a court of law that you actually *are* the programmer, if someone does make copies. The cheapest way is simply to enclose your program in a package, seal the package securely, and send it by registered delivery to yourself. As long as the package isn't opened it should

prove you had a copy of the program on the post marked date – weeks before Mr X claimed to have written it.

With a new programmer Mastertronic will usually ask that the copyright be sold to them forever, more established programmers may set a limit of a couple of years after which they get the copyright back. In return for getting the copyright Mastertronic will promise to pay a royalty on every copy of the game they sell. On an average your royalties will amount to several thousand pounds!

Typically a publisher will offer an advance on this money to keep the programmer happy until the game is published. Advances vary substantially from programmer to programmer, and all have to be paid out of the eventual royalties, but they are not returnable – if the game doesn't sell, you don't have to give the advance back.

As part of the contract, Mastertronic usually ask for worldwide copyright, so they can sell the game abroad as well. If you want you could exclude a certain country, but this could reduce your advance and obvi-

ously decrease the amount of money you stand to make from Mastertronic sales. Mastertronic offer good opportunities to authors over US publication since they directly publish in the US, so the author gets his royalty cut direct. If the game were published by another publisher, he'd only get X% of the UK publisher's X% cut of the US publisher's revenue.

Sadly, however, the US market for Spectrum games is virtually nonexistent – which brings up the subject of conversions. If a title is suitable for other machines, Mastertronic could suggest conversions – these are particularly useful for boosting a game's chart position. If you can't write the conversions yourself you could allow Mastertronic to have them written. When these are published you'll get royalties on them too – after the cost of conversions has been taken out.

Mastertronic argue they offer a very good deal, and if a programmer won't accept Andrew often gives phone numbers and contact names at other software houses.

Getting it taped . . . legally

If a game is perfect as it is, and no conversions are required, it can be rushed onto the streets in three week's time. Artwork can be done in a day or so, although some take longer, and sometimes an inlay will be dropped on the verge of being printed – as happened with *Advanced Soccer Simulator*.

Most games require tweaking though, and sometimes title music will be required. If the original programmer cannot provide this it may be written by a free-



► The Software Co-ordinators supervise conversions.



lance musician. In fact potential binary maestros are welcome to submit material to Mastertronic for this very purpose. Graphic artists, however, are unlikely to be used as this is expected of the original programmer.

Once a game is published the programmer can continue writing budget games, or even full-price ones, sometimes going on

Time for dinars

One company which deals with many of Mastertronic's conversions is **Activemagic**, which serves as an intermediary between four Yugoslavian programming teams and British software companies.



The head of the company is a former chief engineer in Yugoslavia's merchant navy – **Milan Stajcic**. After emigrating to the UK, Milan got a job with Mastertronic as merchandising manager. He left Mastertronic just eighteen months ago with the aim of setting up Activemagic.

According to the Yugoslavian government there are around a million personal computers in the country, over half of which are in the home. Of these between fifty and sixty percent are Spectrums, most of which have been bought by people visiting neighbouring European countries. Buying a Spectrum in Yugoslavia would cost about three times as much as in Britain.

At the moment the biggest software publisher in the country

is Suzy Soft, a subsidiary of the State record publisher. Its games cost around £1.50, but by far the most popular tapes are illegal compilations of pirated Western games. Obviously this doesn't do much to support the publishing of more and better games, and Milan is trying to stop it by putting pressure on the country's three computer magazines. Already one of the magazines has stopped carrying ads for pirated material, and the rest should soon follow suit.

The first Western games to be legally published in Yugoslavia are Mastertronic's, who have recently signed a deal with Activemagic for the latter to handle distribution of all their products throughout Eastern Europe. Games for Yugoslavia will be produced by Ljubljana, one of Yugoslavia's ten TV companies, and will have identical packaging to the UK versions apart from Yugoslavian text. Once a proper budget market has been established, Milan hopes to bring out full-price games, for which there's potentially a very large market.

Football crazy

The author of Mastertronic's latest football game is **Steven Hannah**, a 19-year-old native of Kilbride Scotland. Steven started programming five years ago when he first bought his Spectrum, and has started writing numerous games but the only one he's completed is **Advanced Soccer Simulator** (reviewed pg 28). This was origi-



nally a BASIC game, which was rewritten in machine code to make better use of memory, up the graphic standard and generally speed things up. This version was completed by late '87.

Getting the game published, however, ended up taking longer than the programming. Firebird rejected the game, and when Mastertronic didn't respond after a few weeks Steven thought they had too. Then Andrew Wright phoned to offer a contract. Apart from a few tweaks to gameplay, and a change of title, the game was ready to be published. At one stage review copies of the game were sent out, but then with-

drawn when the release date was moved back to allow the cover art to be redone.

Now that the game is coming out Steven seems happy enough with how things have gone. While he's looking forward to receiving some royalties, his main motivation in writing the game was the satisfaction of completion. The hardest part, he says, was all the time wasted while waiting for his program to be SAVE/LOADed from his Spectrum's cassette deck. On the actual programming side of things the graphics were the biggest challenge.

At the moment, Steven is working on a new Editor/Assembler to develop more games, but since going to university he has little spare time and doubts he'll be writing a new game in the near future. He's still very interested in the Spectrum though, and is considering upgrading to MGT's SAM Coupé. The programmers he admires most on the Spectrum are Jon Ritman and the Ultimate team, but he's never seriously intended to follow a similar career. Instead he hopes his Information Engineering course will earn him a career in business computing!



Computer mad

One of the latest, and best budget puzzle games is **Mindtrap** (reviewed pg 28) and was written by a 17-year-old Yugoslavian named **Predrag Beciric**. The title comes from when Predrag first had a Spectrum 'the whole of my family, in which I include a dog, kept telling me the computer is a trap which will eventually trap my mind'. This seems to be true since, apart from the Sex Pistols and Art Of Noise, Predrag claims to be only interested in computers. The computer he most wants, apart from a Cray, is Steve Job's NeXT machine complete with optical disk. Unlike Steven Hannah, he remains enthusiastic about games, and hopes to eventually set up his own software house. His favourite game is **Atic Atac**, and at the moment he's working on a conversion for Activemagic.



to be a part of established programming houses like Binary Design. More common, however, is the teenager who writes one game then goes on to college or university where there's no spare time to write another game. **Star Force** (58%, Issue 61) was apparently programmed two years before its release as a version of the arcade game **Star Force**. When its programmer was down on his grant at university he simply improved the graphics then sent it in. He has no plans to write anything else.

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In the past System 3 have mainly been a C64 company, with a reputation for releasing only a handful of games a year, but usually of high quality. On the Spectrum they've had a pretty low profile until the *Ninja* games. The original *Last Ninja* game, of course, was heavily advertised and its graphics demo'd on a CRASH cover cassette, but never released. *Last Ninja 2* took its time arriving as well, but when it did come was awarded a well-deserved Smash. Prior to *Ninja 2* their biggest Spectrum hits were *Deathstar Interceptor* and three years later *International Karate +*. Probably their best known game however, is *Twister* (aka *Mother Of Harlots*) which was promoted at the 1985 PCW by scantily clad dancing girls – causing something of a controversy. Sadly 1989 sees System 3 in a more respectable guise, spaced out over the year there'll be another *Ninja*-style game (*Vendetta*), an arcade/adventure set in the 1920s (*Tuskor*) and a hack 'n' slay game (*Myth*). But their first, all format release is the spectacular, and somewhat gruesome shoot-'em-up *Dominator*.



IN THE BELLY OF THE

BEAST

The setting for *Dominator* is the interior of a vast alien which is devouring the planet Earth.

Once purely a mechanical being it has now begun absorbing biological organisms to make it even more powerful. As one of the last humans not yet eaten by the creature you've got to pilot a space cruiser into the creature, and destroy it from within.

As you explore ever further into the monster you'll discover it has already substantially remade itself, with cogs and pistons overgrown by flesh and bones. Besides gun emplacements, and ulcers dripping poison, there's plenty of defence ships – biological and mechanical. The first level is a vertically scrolling one with a beating heart as the end of level baddy. Levels two, three and four are horizontally scrolling and a lot more difficult.

If you destroy a wave of enemies a bonus icon can appear, this can give you either a mystery bonus or an add-on weapon. The four mystery bonuses are extra points, a brief period of invincibility, a smart bomb and an extra life. Add-on weapons include a rear-mounted cannon, autofire, a laser and a blaster cannon. These only last for a set amount of time, but once you collect them are shown protruding from your impressively animated ship.

The programming of

Dominator is being done by Laurie Synnott, a twenty-six year old who's previously worked for Sentient, Odin (where he helped program *Nodes Of Yesod* and *Robin Of The Woods*), *Canvas* (*Mag-Max* and *Desolator*) and *Source*. Laurie got involved with computers while studying the obscure subject of Communication, Arts and Media studies at university. While rather bored with the course he bought a Memotech (a powerful, but sadly unsupported British computer) and wrote an art utility on it. In an effort to get it published he went to the shop where he bought his computer to ask about software houses. As it happened the shop owners were in the process of setting up Sentient, and Laurie hasn't looked back since. He joined System 3 in January and immediately started work on

Dominator.

Originally the game was to be in monochrome, but after a look at *R-Type* Laurie decided to be a bit more ambitious. As a result not only does *Dominator* have full colour, perfectly smooth, pixel-scrolling but also animated landscapes with teeth gnashing, pistons pumping and cogs turning. Visually it's extremely impressive and could well challenge *R-Type* as the Spectrum's best shoot-'em-up.

As you read this programming should be finished and duplication begun. The finished package will cost £9.99 on tape, £14.99 on disk, with the all the levels loaded in one go on 128K machines. 48K owners, by way of compensation, will probably be only be sent back to the start of the level they've loaded, so dying on level four won't send them back to level one.



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DOMINATOR

SYSTEM 3

CLIVER
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COMPETITION

MARK CALE HAS 21 SKELETONS IN HIS CUPBOARD AND WE'VE GOT TWENTY TO GIVEAWAY!!

DOMINATOR

is coming soon from System 3. After such excellent products as *International Karate*, *IK+* and *Last Ninja 2*, System 3 are now set to unleash the terrifying power of an evil alien. Entitled *Dominator*, this latest shoot-'em-up takes the gentle reader on a journey into the guts of a creature that was once purely mechanical, but now has the desire to become the most sophisticated lifeform the universe has ever seen. Thus

it noshes every planet in sight, and Earth is next. So you are sent out to try and destroy him before he sticks his knife and fork into your beloved homeland.

Mark Cale, the geezer who owns System 3 and a white Ferrari (which, incidentally, bumped into the latest erstwhile Ed's Dad's van when last up in Ludlow creating the 21st skeleton in Cale's cupboard), has asked us at CRASH to run a comp on this wonderful new product. Well, at the risk of him

coming up to Ludlow again, and annoying more of the local inhabitants, we agreed. There are some rather, shall I say . . . unusual . . . prizes on offer: twenty people will receive a lifesize skeleton (an inflatable one, of course, there are no grave robbers here).

Yes, you too could be the proud owner of one of these spooky chaps. Just think of all the things it could be used for . . . (Ummm, still thinking - Ed.) As well as the skele-

ton, the lucky winners will receive a copy of *Last Ninja 2*.

To be one of the fortunate twenty, just draw us a nasty planet-eating monster on A4-SIZED PAPER. It can be as evil looking as you like (no, Nick Roberts pictures like last time, please) but it must reach us by the May 31. Please send all entries to **EEK! A NASTY MONSTER COMP, CRASH, PO Box 10, LUDLOW, Shropshire SY8 1DB.**



PHIL KING'S ADVENTURE

TRAIL

Wow! I bet you're really amazed – Adventure Trail has got a new, incredibly mathematical ratings system. And I've even persuaded Ed to give me a brand new font! So now the Trail's got a neat new look, where are the flippin' games to review?! All the major adventurer producers seem to have taken an early holiday. It's a good job those dedicated amateur writers are still turning out plenty of new adventures. The three games reviewed this month aren't the best I've ever seen, but they've kept me busy while my sheep have been making a nuisance of themselves at the local fair. They just love shooting people with air-guns and going mad on the Dodgems – I must remember to never let them near my tractor. So until next munt (cor, my spelling's getting as bad as Nick's), I promise not to make any more silly jokes about sheep – they're in terribly baaad taste!

SPACE DETECTIVE 2: HOME RUN

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only!)

Life's not easy being a Space Detective. So after solving the mystery in the original *Space Detective* game (43%, Issue 30) I decided to relax on a leisurely space cruise. Of course most of my relaxing happened in the bar, and since drinking on duty is strictly forbidden I had a lot of drinking to catch up on. Anyway, there I was, peacefully pouring a litre of lager down my neck when in walked a particularly smug ship's officer. 'Hello, you stupid ★◀❖!' I cheerfully announced. The officer considered this for a moment then, obviously not having my talent for witticisms, threw a punch. I watched his fist coming rapidly closer for a while, decided to dodge it, but then found myself flat out on the deck. Not feeling well enough to get up and thrash the ugly Rigellian slime-mould I drew my laser pistol and shot him between the eyes . . . not a wise move, really.

I was sentenced to death for my crime, but my execution could only take place back on

Earth – one week away. So I was locked in a cryogenic chamber and put into suspended animation for the home journey. But at last, a stroke of luck – when I awoke from my deep sleep the ship seemed to be deserted. Fed up of feeling like Wacko Jacko I got out of my casket to investigate.

I thought escape would be easy but soon discovered the ship's security systems were still active. So too, though, were more useful devices like a clothes dispenser and I soon swapped my untrendy cryosuit for a flashy blue uniform. Feeling very authoritative I began swaggering around the ship – and almost stumbled over some pirates! Quickly hiding I found out that the pirates were planning a massive nuclear attack on the Earth – maybe I should help them! Nah, then I wouldn't get my monthly helping of CRASH! There was only one thing to do; infiltrate the pirates and spoil their plans.

Hi-tech 'tec

Space Detective is yet another PAWed, home-grown adventure with neat presentation.



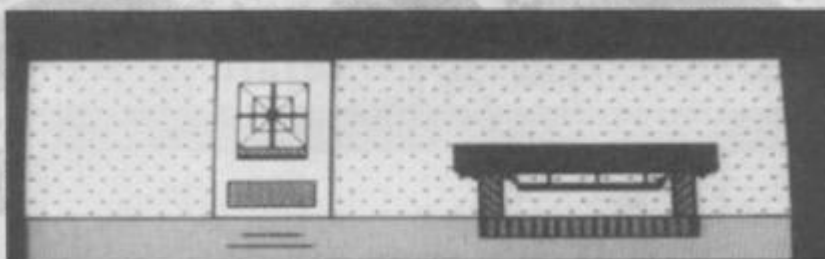
Most locations have a colourful picture which take up a thin strip at the top of the screen and don't get in the way of the text. Any of four different character sets may be used, ranging from bold to a more suitable futuristic font. Unfortunately, location description are too brief to provide much of an atmosphere – although most objects can be examined, eliciting useful responses. Locations include a tacky TV lounge with pink wallpaper (psychedelic, man), and a games room where pool and darts are played – very futuristic!

What really disappoints is the linear nature of progress. Problems must be solved in the correct order, so you're not free to

simply wander around the ship. And meeting a pirate guard spells instant death, so it's just as well there's a useful RAMSAVE command.

Despite the flaws, for only £3 (50p of which goes to Comic Relief) there are plenty of puzzles to solve, and completion is a challenge. Sadly there's no 48K version, but 128K owners can buy *Space Detective* by sending the dosh to 37 Millriggs, Corby Hill, Carlisle, CA4 8QP.

Presentation	74%
Atmosphere	56%
Playability	60%
Overall	62%



GAMES ROOM

This is the place where most of the more sporty of the passengers come for a bit of physical activity such as darts or pool, these being the only form of exercise on the ship except jogging the corridors and perhaps some for of yoga. There's a pool table and dartboard here. you can go

LIGHTMARE

Scott Johnston, £3.75 cass

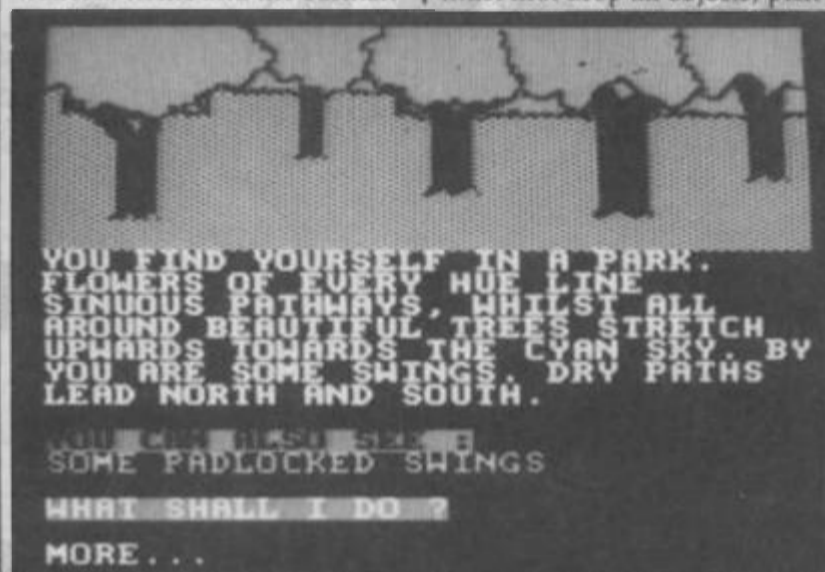
On a planet very similar to our own there's a village called Delvhorn. To strangers it appears to be just another rural paradise, but it hides a terrible secret. In a nearby castle there is an evil entity patiently waiting for the time when it will engulf the land in flames. As the brave hero Dervorin I must reclaim the magical locket which the evil force stole from my sister. This allows the wearer to master all evil powers (although it didn't help my sister much!) and will enable me to save the local countryside.

Arriving in the village, I follow my instincts to quickly find the local pub. Damn, I left my wallet at home and the barman

I encounter an unfriendly blacksmith, a cave, and unfortunately, a pack of starving wolves.

Light entertainment

Lightmare is impressive in just one area: presentation. Many of the locations are illustrated by a tiny, but detailed, picture. This adds to the medieval atmosphere created by the text. Sadly, the adventure itself fails to live up to its professional appearance. Response to input is painfully slow and the verb/noun parser is none too friendly. Objects may only be examined when carried. This is made more irritating by the fact that you can only carry up to a certain weight. For instance, to search a heavy dead body you must first drop all objects, pick



doesn't have a slate. But what's this on the bar? A tatty old book - it may be of some use so I stuff it down my trousers while no-one's looking. The chances of anyone buying me a drink seem remote so I go upstairs to explore the rest of the inn. Peering round a bedroom door I spy the innkeeper's beautiful daughter lying on the bed. Coyly, she enquires, 'Is that a book down your trousers or are you just pleased to see me?'. After showing her what's really down there, she gives me a magical jewel and tells me to meet her in the woods to activate its power! On the way there

up the corpse, examine it to find a coin, then drop it, get the coin and all the other objects again. Luckily there's a GET ALL command!

I wasn't too impressed with *Lightmare*, but if you fancy battling against evil, it's available from Scott Johnston at 4 Bayview Place, Monifieth, Dundee, DD5 4TN.

Presentation	79%
Atmosphere	65%
Playability	47%
Overall	54%



IMMORTALITY RULES OK!

Wildfire Publishing, £3.99 cass

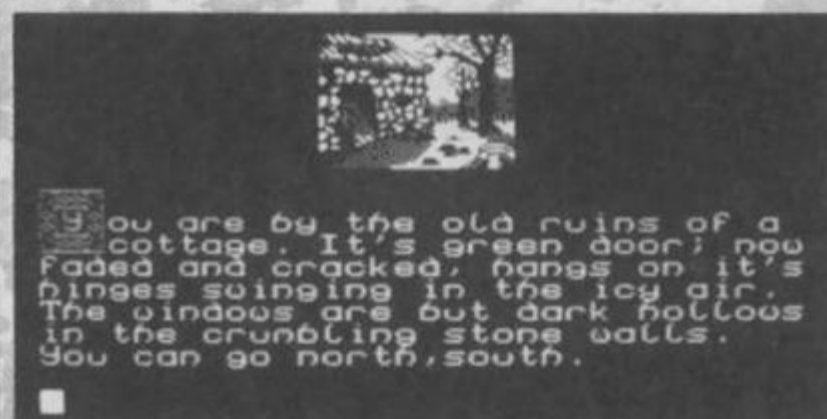
Flicking through the *Daily Crucible* one morning, I learn all about 'Vicar's steamy nights of passion with Busty Betty, a crucifix and a sacrificial goat' (are you sure this is in the scenario? - Ed). But my favourite section is the competition page - solve the clues to discover the secret location of the prize: a priceless amulet. This is hidden inside a bank vault in a mystery town.

As I'm cleverer than your average *Crucible* reader (I've got an IQ of six!), I quickly realise that I must travel to a checkpoint in the Yorkshire

the digits are found, the correct permutation must be discovered to get the amulet. Even then, a boat must be built to return to the checkpoint!

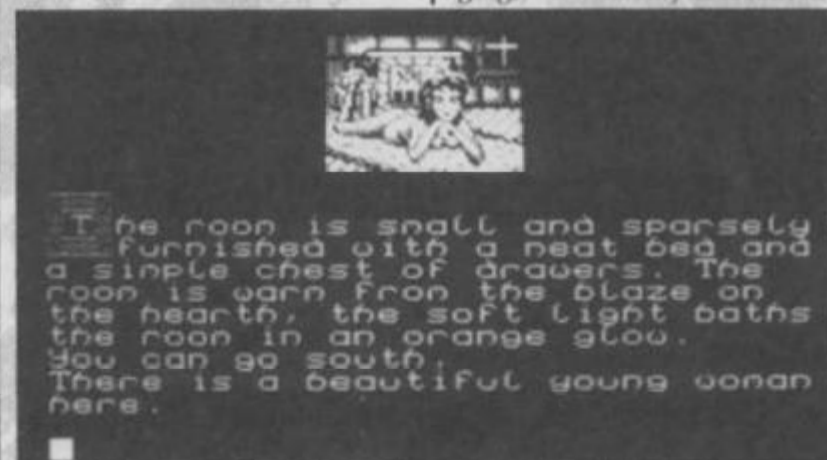
Who wants to live forever?

I can't say I'm surprised to discover that *Immortality Rules OK!* is around three years old, having been recently 'unearthed' by the author. Despite a large vocabulary of over 500 words, the *Quill* parser limits input to mainly verb/noun and prevents any real character interaction. While the problems encoun-



hamlet of Shoreham. Arriving here, I am greeted by a newspaper reporter - I can tell he's a journalist by his immense beer belly. He takes me across a fast-flowing river and into town. According to him I must somehow discover the four digit code to open the safe deposit box in which the amulet is hidden.

tered can be solved in almost any order, the solutions are painfully obscure and hardly logical - it's just as well that the author runs a free Helpline service. On the good side, the numerous pictures are fine and the text often witty. A blank map is also included in the packaging, but with only 40 locations



Exploring the town, I discover locations ranging from a football ground to a building site where the 'workers' sit around, smoking all day. There's also a TV rental shop, containing a teletext TV which I can use to call up articles, puzzles and quizzes! Although the town isn't that large, finding the four digits represents a major challenge - the cryptic clues are very obscure. And even when

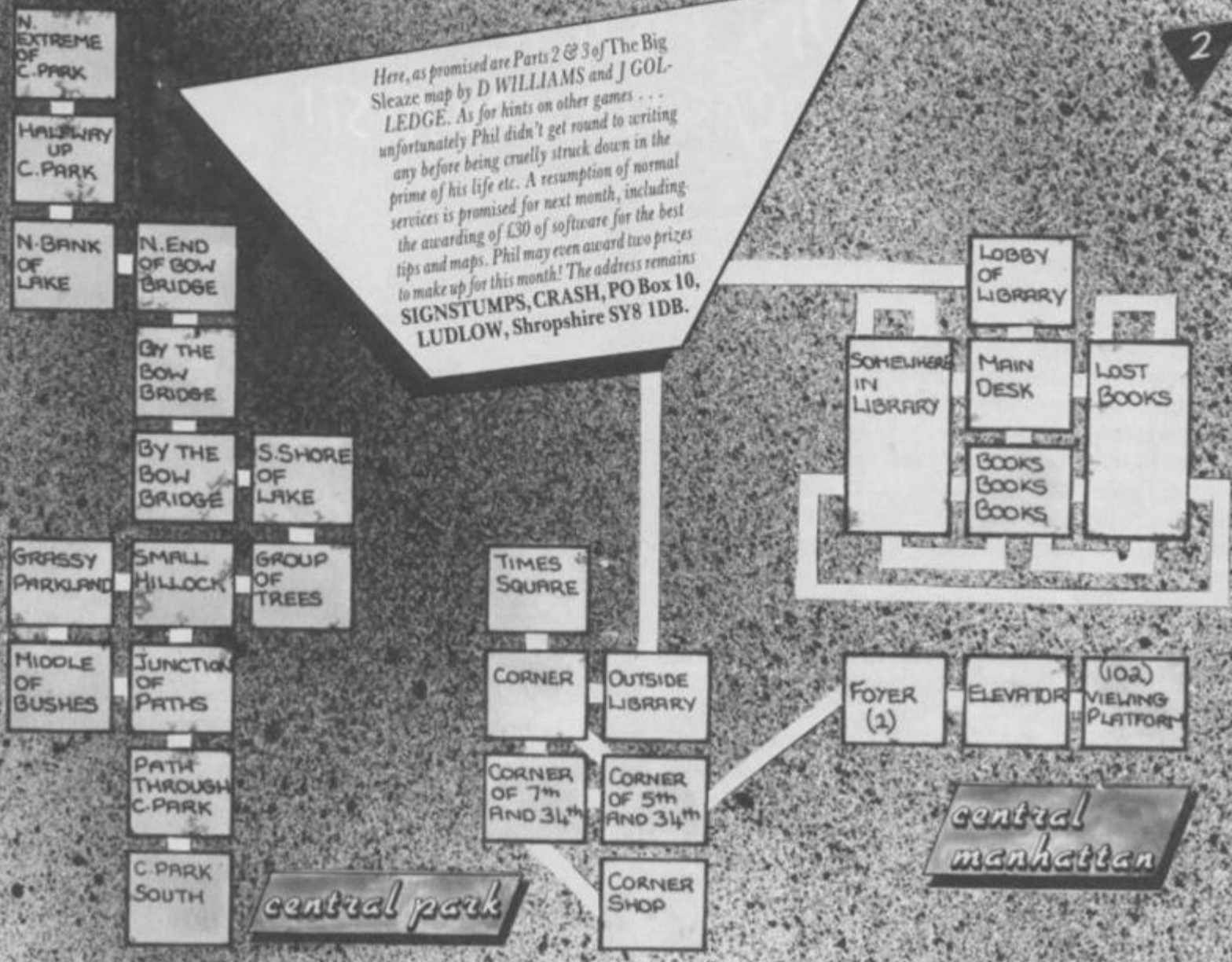
to explore, it is soon filled in. *Immortality Rules OK!* is available from Robert Burgess at 1 Middlefield Rd, Rotherham, South Yorkshire, S60 3JH.

Presentation	70%
Atmosphere	53%
Playability	50%
Overall	52%

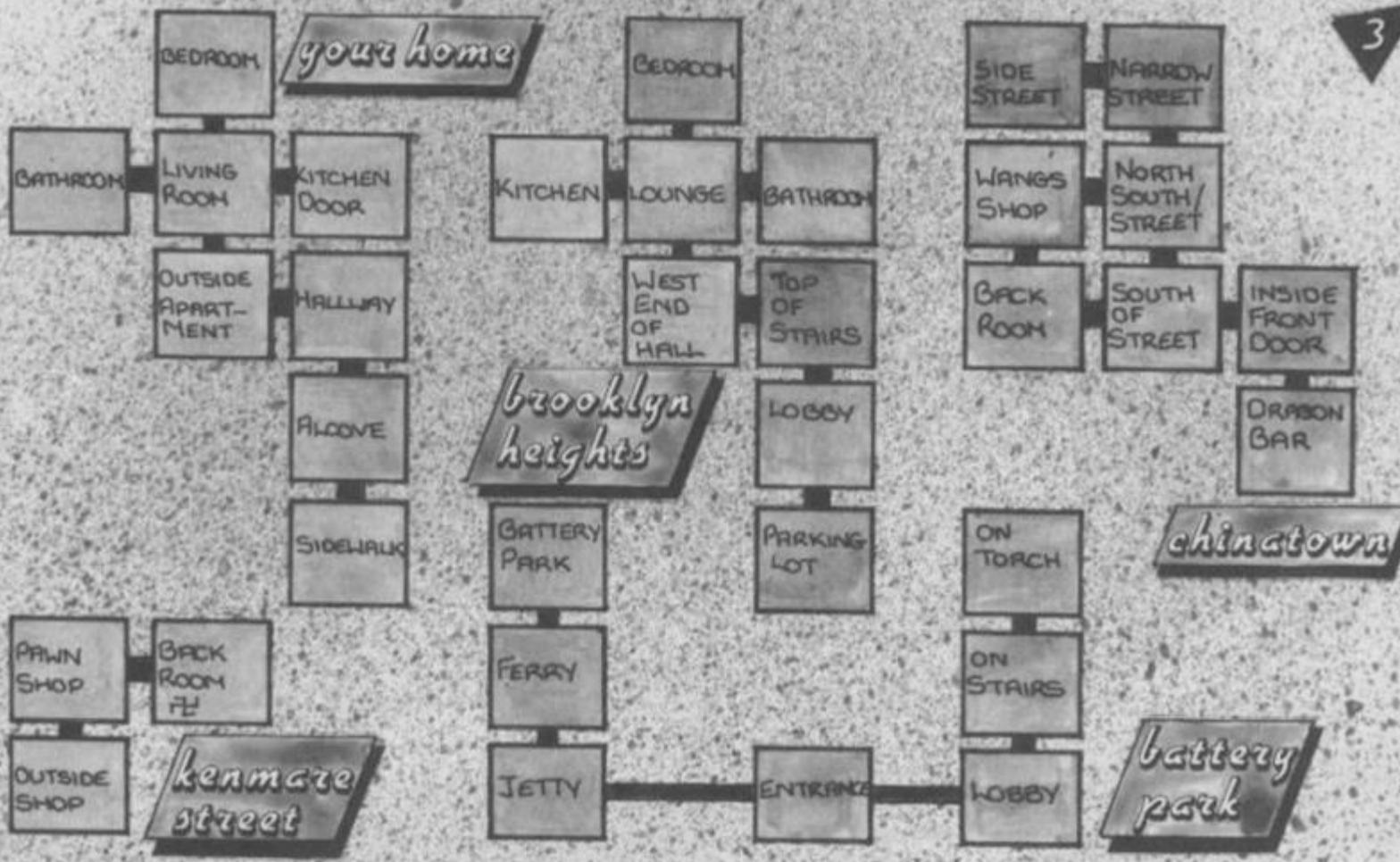
SIGNSTUMPS

Here, as promised are Parts 2 & 3 of The Big Sleaze map by D WILLIAMS and J GOL-LEDGE. As for hints on other games . . . unfortunately Phil didn't get round to writing any before being cruelly struck down in the prime of his life etc. A resumption of normal services is promised for next month, including the awarding of £30 of software for the best tips and maps. Phil may even award two prizes to make up for this month! The address remains SIGNSTUMPS, CRASH, PO Box 10, LUDLOW, Shropshire SY8 1DB.

2



3



COMPETITION

PHONE FROM HOME . . . FOR SOME GREAT CRASH GIVEAWAYS!!

So then, what have we got to giveaway this month? Well, if you telephone the number printed on this very page you'll get a little man telling you all about *Sanxion: The Spectrum Remix* and *The Real Ghostbusters* in fact, the little man could well be the one and only JAMES WHALE, he of the famed radio/TV show!!

So what do you get for the trouble of ringing up the CRASH Competition Hotline – excepting the earbashing from mum or dad for using the phone? You'll have the chance of winning one of the following prizes which include TEN mega-biastin' *SANXION: THE SPECTRUM REMIX* shoot-'em-ups; TEN incredibly hip, designer THALAMUS T-shirts (XXL size), SIX CRASH T-Shirts and EIGHT *REAL GHOSTBUSTERS* T-Shirts. Prizes will be allocated at random to winners – unless you put down a preference.

So you fancy a chance of winning something? Well, just ring up the Hotline, answer the two questions, complete the tie breaker and write it all down on the form printed here. Then just send it all off to the address printed. Right . . . ? Easy, wasn't it?!

DON'T FORGET the other CRASH Hotlines, packed full of information written by us for YOUR delectation. CRASH news, reviews and updates on 0898 555082, and Nick 'Party Line' Roberts's *Playing Tips* on 0898 555083. CRASH – always at the end of the phone.



HOTLINE COMPETITION ENTRY FORM

Cor, wow . . . All I have to do is answer a couple of questions and complete the tie breaker (in no more than twenty words, of course) and I could win a mug or T-shirt – AMAZING!

ANSWERS

1

2

TIE BREAKER

.....

I REALLY WANT

NAME AGE

ADDRESS

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PO Box 10, LUDLOW, Shropshire SY8 1DB.
Entries by May 31.

☎ 0898 555084

Keeping up-to-the- minute with CRASH

Printed below are the three CRASH Hotline numbers. They're open 24 hours a day and each has 160 lines to prevent the number being engaged. Phone calls will only cost you 25p per minute during off-peak time (Mon-Fri 6pm-8am, Saturdays, Sundays and Bank Holidays) or 38p per minute during standard and peak time (8am-6pm Mon-Fri). If you are using your parents' phone or even someone else's, please ask them first!

Line One: ☎0898 555082 *CRASH NEWS AND REVIEWS.*
All the latest software news as soon as we hear it, with thoughts on games that just missed our deadline.

Line Two: ☎0898 555083 *NICK ROBERTS'S PLAYING TIPS.*
Hints 'n' tips on the latest releases from Mr Crucial himself.

Line Three: ☎0898 555084 *COMPETITION HOTLINE.*
Listen carefully for we shall say this only once (every two minutes!) and loads of prizes are up for grabs every month!

The CRASH Hotline is brought to you by CRASH Ltd in conjunction with Chatterbox Ltd. So there!

A ROCK STAR ATE MY COMPUTER

Giant American software house Activision has turned Electric Dreams into a label for all their original products, and one of the top development houses writing for it is Vektor Grafix. CRASH spoke to company founder Andy Craven about his company, and his progress from real-life rock star to top programmer.

Vektor Grafix was formed by two programmers, Andy Craven and Danny Gallagher, who'd never written a computer game before. Andy had in fact started out as a rock musician touring Europe with bands such as Smart Ass and The Clients. Usually Andy was lead singer, guitarist and frontman (the person who dealt with hecklers). Some of the best venues for the groups were American and British military bases in Europe, with the music being tailored to fit the audience. For Americans Lynard Skynard was really popular, whereas British audiences preferred Led Zeppelin. At times Andy even stooped to playing covers of Country and Western records! (Remember *The Blues Brothers's* 'Stand By Your Man'?) The main purpose of the bands, though, was to have a good time, travelling round in an old Merc van with a bed in the back (to accommodate female fans, we're told - such generous people).

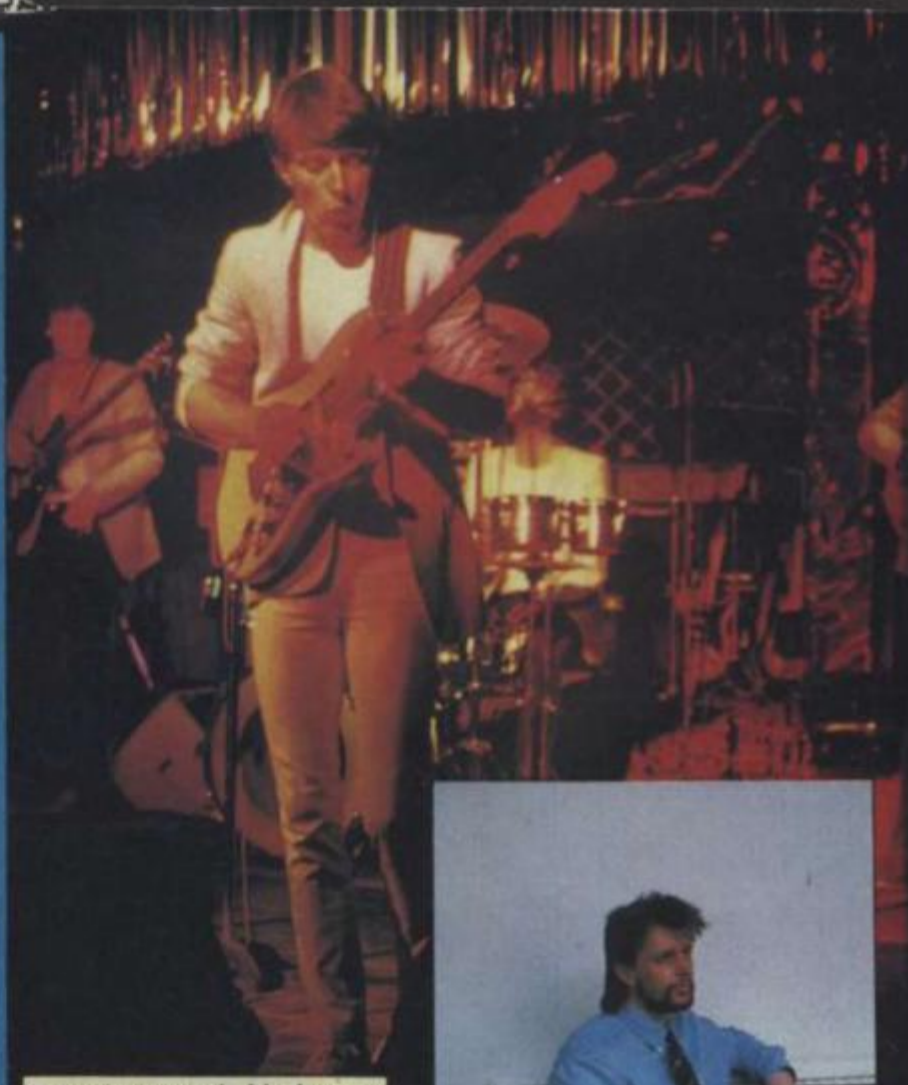
Eventually, the hard life of a rock star forever being chased by groupies got to be too much - Andy stopped touring and got married. Being a musician gave Andy lots of spare time at home, between gigs, and that's how he got interested in computers, first buying a ZX81, then a Spectrum and finally a BBC Micro. Like most programmers he taught himself machine code, and one book he particularly recommends is *Programming The Z80* by Rod-

ney Zac. The worth of his all-night sessions was proved when a friend commented that he'd never get anywhere without proper qualifications. Andy responded with a boast about getting a job teaching people-qualifications. It took a few years, but starting off with YTS trainees Andy worked his way up to doing lectures at colleges in Leeds!

It was while doing this that he met up with Danny Gallagher, and Vektor Grafix was born in June 1987. The first employee was Claron Gutniaks, a 16-year-old programmer. It was this three-man team which landed the *Star Wars* contract only a month or so after the company was formed. To start off with such a major project was obviously a stroke of luck, but the deadlines were tight - just eight weeks to write the Spectrum, Commodore and BBC Micro conversions. Nevertheless the quality of their Spectrum work earned them 84% with CRASH, and they got *The Empire Strikes Back* contract as well.

Vektor launched a recruiting drive to expand the company, but ironically it was then that Danny Gallagher left (he's now writing a 3-D game for Ocean). On the positive side a local ad drew in Derrick Austin and Bill Pullan, again complete newcomers to the software industry - Derrick is now a graphic artist, specialising on the Spectrum, and Bill is writing *ST/Amiga Bomber*. Another recruit was Ian Martin, the programmer of the C64 *Ace* and *Ace 2*. When some of the company went to visit Broderbund, the American programming house, Ian spent his three weeks rewriting C64 *Star Wars* to run faster for the Americans.

As work progressed on *Empire* John Lewis arrived, taking his place as a company director.



▶ Andy Craven in his days as a guitar hero

Prior to his involvement with the software industry John used work at an advertising agency. He then moved over to being the marketing manager at a software house before finally arriving at Vektor Grafix. When he joined he took over Danny's 50% share of the company, and has become the business-minded balance to Andy's more programmer-orientated outlook.

Once completed *The Empire Strikes Back* won a CRASH Smash for fast wireframe graphics, more involved gameplay and excellent 128K tunes. Unfortunately the final game in the trilogy had even tighter deadlines, and didn't use vector graphics. Consult Computer Systems eventually got the contract for *Return Of The Jedi*, but by that time Andy was already determined to develop a more advanced graphics system. A look around the software market convinced him that solid, rather than wireframe, 3-D was the way to go and the now complete system is claimed to be at least as good as anything else available.

The core of the 3-D system is a series of algorithms, mathematical formulae or flow-charts that can be applied to a host of home computers. One function of the system is that if Andy puts in data for, say, an F-4 Phantom code comes out for whichever machine it's required. Once *Bomber* is completed there's plans to use the system for several other games - including an



▶ Andy Craven today, a (relatively) sober-suited member of the computer industry

all-out arcade game.

But the company is determined not to be limited to only one type of game, and has set up a sub-company called Sprytes Ltd which is developing a similar sort of core system to be used with a wide variety of machines and games. Already Sprytes has the contract for a coin-op conversion from Activision. There's also Muzik Ltd, which does the same for music and sound FX. And finally there's a natural language parser under development by Alan Brown, an ex-MoD boffin. Currently his system is said to equal the parser used by adventure masters Infocom, and it's not finished yet. Vektor hope to hook it up to their 3-D system for something very special in the future.

For the moment Vektor Grafix remain an ambitious new development house, but for the future they harbour plans to set themselves up as an independent publisher. How soon that happens depends in part on the success of *Bomber*, but from the demos and screenshots we've seen they should have no worries.

STRIKING HOME

Fast, incredibly detailed solid 3-D, four different aircraft to fly and fast, realistic but fun combat are the prime components of Electric Dream's *Bomber*. The latest flight combat sim to hit the Spectrum is looking very hot...

The most accurate title for Electric Dream's latest release would be something like *Indicator/Strike or Multi-Role Combat Aircraft*, but they don't quite have the same ring as *Bomber*. Rather than featuring rather slow strategic bombers like the B-52 and 'Bear', Electric Dream have concentrated on multi-role aircraft such as the Tornado, MiG-27, Viggen and F-4.

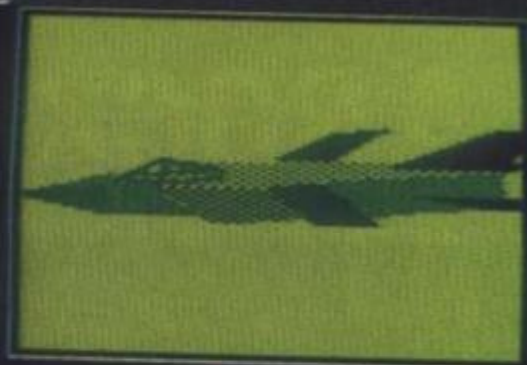
The idea for the game came to Andy Craven from the Curtis E. Le May bombing competition held each year in the States by the USAF's Strategic Air Command. Allied air forces from around the world are invited to take part in the competition with points awarded for accuracy, tactics and so on. Craven thought it sounded like a 'very expensive grown-up's game' and turned it into a 'Test Drive of the skies' in *Bomber*, with the Russians allowed in too.

The finished game will be a multiload, with the first load

allowing players to select which aircraft they'd like to fly. Each aircraft will have slightly different handling characteristics, plus accurate top speeds, turning circles and such-like. Once an aircraft has been selected it's into the game proper. To start off with players will have to demonstrate that they're fit to take part in the competition by making take-offs and landings. Accomplish this and you can go onto missions such as intercepting enemy aircraft and bombing terrorist camps. On all missions you must return to base and land, although if necessary you could prolong a mission by air-to-air refuelling! When you do land you can save your performance as a combat readiness record.

Bomber should be out soon for \$9.99 and £14.99. 128 owners will be pleased to know they'll have less loads, and some extra game sequences as well. But whatever machine you have *Bomber* looks like a very hot program.

TORNADO



PANAVIA TORNADO IDS

First flight: August 1974

Engines: 2 Turbo Union RB.199 turbofans, 7256kg thrust each

Span: 13.9m/8.6m Length: 18.1m Empty Weight: 14000kg

Max Speed: Mach 2.2

Produced by West Germany, Britain and Italy Tornado is probably the world's fastest low-level military aircraft. Using terrain following radar it can fly sixty metres above the ground at Mach 1.2. Like the MiG-27 it has 'swing-wings', which sweep backwards for high speed flight and forwards for long patrols.



MCDONNELL DOUGLAS KC-10

First flight: August 1970

Engines: 3 General Electric CF6 turbofans, 23134kg thrust each

Span: 50.4m Length: 55.3m Empty Weight: 109350kg

Cruise speed: Subsonic, 956 km/h

The KC-10 is the tanker/transport version of the DC-10 airliner. An airliner one thought likely to be a worldbeater until a series of crashes, and a scandal about a design flaw, made it notorious. Since then the aircraft has obviously been vastly improved. The KC-10 is equipped with a drogue system (a long hose with a socket for an aircraft's refuelling probe) and a flying boom (a sort of arm, used by the USAF). Since the US military considers the aircraft to be non-aggressive, KC-10s in America can often have female crew members.

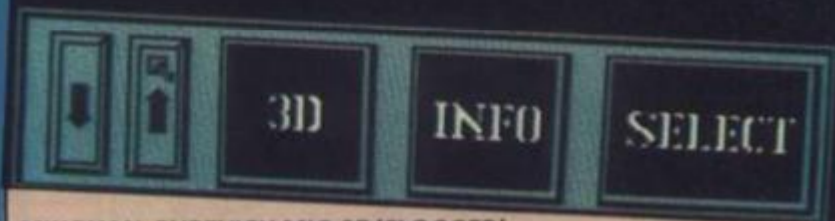
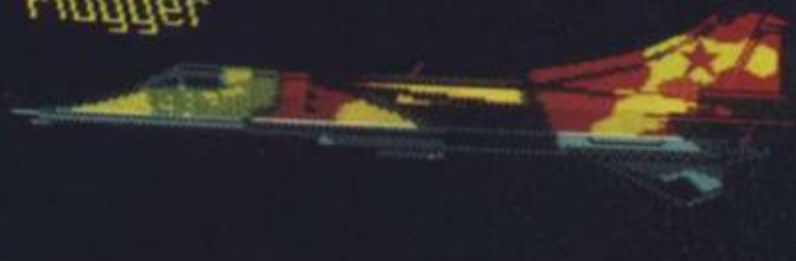
NB: You can't select this as your bomber!





SAAB AJ37 VIGGEN
First flight: February 1967
Engine: 1 Volvo Flygmotor RM8A turbofan, 11800kg thrust
Span: 10.6m *Length:* 16.4m *Empty Weight:* 11800
Max Speed: Mach 2+
 The Viggen was developed as part of System 37, which included not only the aircraft and its maintenance equipment, but also test and training bases. Built by a country with a population less than that of London the Swedish 'Thunderbolt' has been a great success. The unusual 'tail-first' design allows it to operate off roads.

Mig-27 'Flogger'



MIKOYAN-GUREVICH MIG-27 'FLOGGER'
First flight: Late 1966
Engine: 1 Tumansky R-29B turbojet, 11500kg thrust
Span: 14.3m/9.9m *Length:* 18m *Empty Weight:* 11000kg
Max Speed: 1.7 Mach
 The MiG-27 is the attack version of the MiG-23, and together the two aircraft form the mainstay of the Soviet air force with about 31000 estimated to be service in 1984. As with most Soviet aircraft it has large, low-pressure tyres allowing it to operate off rough fields. The characteristic nose shape has lead to it being nicknamed 'Ducknose' by its pilots.



MCDONNELL DOUGLAS F-4E PHANTOM II
First flight: May 1958
Engines: 2 General Electric J79 turbojets, 7711kg thrust each
Span: 11.77m *Length:* 19.20m *Empty Weight:* 13757kg
Max Speed: Mach 2.27
 Despite being regarded as the ugliest aircraft in history the F-4 has set the greatest collection of world records ever held by a single aircraft type. It can climb to 3048m just 30 seconds after starting its take-off run, and went on to serve with the US Air Force, Navy and Marines, not to mention the RAF and Royal Navy. During the Vietnam War it provided the backbone of US air power.
 As a result of combat there a strike version was produced, the F-4E, which has an M-61 gun under the nose, an extra fuel cell plus dramatically improved electronics and engines.



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SWIFT DISK LOADING

Sixword's latest Spectrum add-on

FED UP waiting for tape-based programs to load? You might consider upgrading to a +3, but another option is to purchase an interface and 3.5 inch disk drive – a lot faster than the +3's 3 inch drive.

Swiftdisc II is a new disk-drive interface from **Sixword Ltd** which allows you to use a wide variety of 3.5 inch disk drives with the Spectrum, and is an improved version of the original Swiftdisc interface.

Unlike its predecessor, which fitted underneath the Spectrum, the Swiftdisc II fits right behind the edge connector and has a through port allowing other peripherals to be used simultaneously. I had problems connecting the interface as it is quite large – there is just room on my 48K machine to connect to the tape and power sockets, but my fitted ON/OFF switch blocked access to the interface's joystick port.

The Swiftdisc II is compatible with both the 48K and 128K Spectrums, and has a built-in magic button which, unlike the Plus D, calls up a complete disk control program when pressed. The Swiftdisc II can, as well as controlling the disk drives, control a printer through standard RS232 or Centronics ports, and

'The interface is compatible with 48K and 128K machines'

offers a Kempston joystick interface (however, all these ports are optional – see details of prices). The system I tested had a Centronics printer port, Kempston joystick and 'Microdrive Hardware Mapping' (more on this later).

The interface can be used in three completely different ways: from the magic button, from Spectrum Basic or from a microdrive emulation mode. Button control is the simplest and will be the preferred method for many users, especially those primarily using the drive just as a way of loading games more quickly than tape. When the magic button is pressed, part of the screen is cleared and a prompt appears. It is then possible to LOAD and SAVE machine code files, screens or 'images' (which are like Multiface snapshots). It is also possible to catalogue or format disks, erase, copy or rename files, or protect indi-

vidual disks from erasure. A complete disk can also be backed up to a second disk – but this is an operation that will rarely be used, since it apparently takes up to 30 disk swaps (I didn't try it!). There are also magic button commands to enter pokes, reset the Spectrum and return to the interrupted program (the screen is restored first).

The Spectrum Basic commands (for example LOAD%0;"file") largely dupli-

'It can be used in three completely different ways'

cate the magic button functions – allowing running Basic programs full access to the disk. An additional feature is that Spectrum streams can be used – so the Disk Catalogue can be redirected to a printer (using CAT%%£3,0): either a ZX or Alphacom printer, or one connected to the Swiftdisc's printer port (once it has been FORMATED). The Basic SAVE command can save machine code and screens, like the magic button function, but can also save Basic and data arrays, handling all the normal SAVE/LOAD options. There are also OPEN and CLOSE commands for setting up streams to files (allowing a file on disk to be PRINTed to or INPUT from), though the OPEN%%£5;"file" syntax is a little hard to get used to.

One of the most powerful features, however, is the Swiftdisc's option of 'fixed



length' (or RANDOM ACCESS) files, as well as the normal 'sequential' files. Most Spectrum disk systems (including the +3 and Plus D) can only create 'sequential' files – a program can



Continuing his ongoing mission to find the perfect Spectrum system IAN CULL investigates another potential + basher – the new Swiftdisc II interface. Our resident techie also shows Clare Rayner a thing or two in answering readers' embarrassing hardware problems.

PRINT to a file (which puts data in it) or INPUT from one (which reads the data back). The Swiftdisc II has this facility – enhanced with functions to

'A complete disk can be backed up to a second disk'

append to the disk file (for adding more data to an existing file) and to test for an end-of-file condition (which would normally result in an error).

vidual record in the file almost instantly by referencing each entry by number according to its position in the file. The only disadvantage of this system is that all items in the file must be the same size. This facility is available to Spectrum Basic using IN% and OUT% commands and makes it possible to write database programs handling a full disk of data (more than 600K). The example program uses the commands to almost instantly recall from the disk file any pre-calculated prime number (after another program has created the file on disk). The only other Spectrum disk system I know of which can do this is Mallard Basic running under CP/M+3.

SWIFTDISC II EXAMPLE

```
5 CLOSE%%£4
10 OPEN%%£4;0;"primelis
  t","R","R",5
15 REM opens primes file –
  each number takes 5
  bytes
20 DIM P(1)
25 REM all IN/OUT is via
  arrays of numbers of
  characters
30 INPUT "Which
  prime?";X
40 IN%%£4;P(1),X
45 REM get entry X into P(1)
  array
50 PRINT P(1)
60 GO TO 30
```

ANOTHER feature offered by Swiftdisc II is the 'Fixed Length Record' mode. This allows a program access to any indi-

Other Basic functions include error handling (%ERR and %LINE give the error code and the line on which it occurred) and a file date stamping facility (use LET %DATE="dd/mm/yy" on power up).

The final way to use the Swiftdisc II interface is via ZX Interface One emulation. This is initiated by loading an emulator program (LOAD%0;"EMUL") purchased separately at £12. Once loaded, the Magic Button is disabled and the emulation gives up to 4 pseudo-microdrives on one disk (numbered as you choose from 1 to 8) – each is 127K in size and can hold up to 50 microdrive files. The emulation (of a version one ZX Interface One) is very compatible with existing Spectrum software – especially if the optional Hardware Mapping facility is purchased (this is £11 on top of the microdrive software, or free with either printer port). The hardware simulates the circuits of the Interface One so that even software which directly accesses the interface (to check whether a cartridge is inserted for example) will run correctly – the hardware also fixes the CLOSE£ bug (a bug in the Spectrum ROM itself).

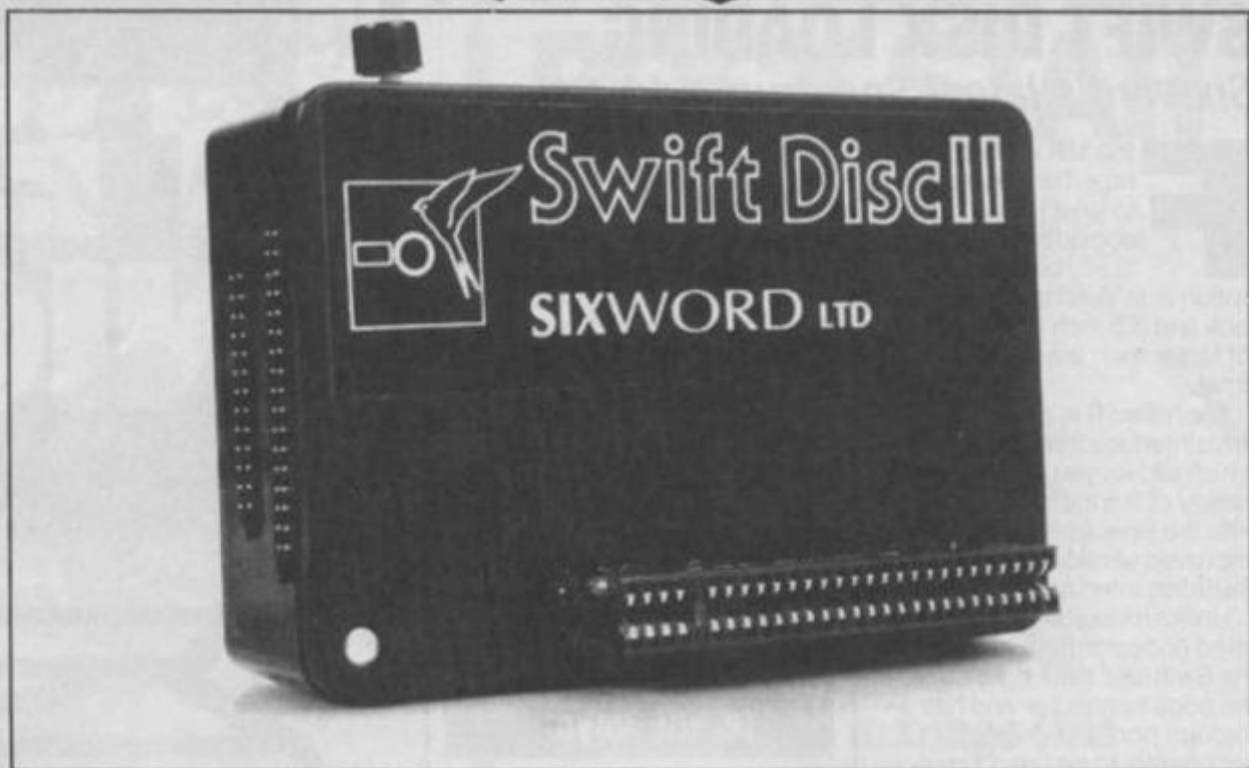
For tests, I ran Hisoft's *Devpac* (versions 3M21 and 4), Oasis Software's *Laser Genius* (a superb package – bring it back on the market, someone!), *Beta Basic* (version 3.0), *Supercode 3.5* (another useful package) and *Imbos 2.0*. I also ran, without problems, an extended catalogue program (modified from listings in the Hisoft manuals) and the *MOVE copier program that came free with the Microdrive Expansion Kit. In fact, the only program that I could not get to work was *Microdrive Doctor* from PIPEQ.

The Swiftdisc II is also fully compatible with ZX Interface One, allowing microdrives to be used even while it is connected. A program supplied with the microdrive emulator disk automatically transfers whole cartridges to pseudo-microdrives on the disk (though it

'Fully compatible with ZX Interface One'

omits 'hidden' files starting with CHR\$0, and gets confused if files are multiply-saved using the POKE 27391,x trick). Loading the same 48K image program took about 7.5 seconds, compared with 3.7 seconds on the Plus D and 30 seconds on the +3 with Multiface 3 – this shows that the Swiftdisc doesn't quite live up to its name!

The Swiftdisc II is compatible



with normal Multiface Ones, except in microdrive emulation mode – but my Disciple-compatible Multiface worked fine all the time, and saved images onto the pseudo-microdrive correctly. It is difficult to decide how fast the microdrive emulation is compared with the ZX microdrives – since microdrive loading time varies enormously, depending on how the files are laid out on the cartridge. At a guess I would say that SAVEing

'The Swiftdisc doesn't quite live up to its name'

is quicker than cartridges, and LOADing is slightly slower – however, the disks are much more reliable! FORMATING (after the first, which sets up the disk) is almost instant, and the RAMTOP bug (which crashed the Spectrum if a LOAD was attempted when there was too little free memory) has been cured.

Prices for the Swiftdisc II vary from £50 for the basic interface to £172 for the interface, drive (which has a built-in power supply and formats 3.5inch disks to more than 600K), RS232 port, microdrive emulator software and hardware, and Kempston joystick port. If you want one of

'The RAMTOP bug has been cured'

the interface write off to Sixword Ltd at 24 Chatsworth Close, Catisfield, Fareham, Hampshire PO15 5LS. I recommend the Swiftdisc II system to any

serious Spectrum user wishing to upgrade from microdrives – games players and non-microdrive users may wish to compare prices with the MGT Plus D system.

Z80 LEARNERS

FOLLOWING THE recent proliferation of tape-based magazines and newsletters, comes one on 'old-fashioned' paper, from Nicholas Lewis of 52 Kyle Crescent, Whitchurch, Cardiff CF4 1SU. He has sent me issues 1 and 2 of the *Advanced Z80 machine code* newsletter. Issue 1 begins somewhat patronisingly ('... our friend the ROM chip ...') but settles into a quite useful two page discussion on calling ROM routines to plot/unplot a single point on screen, and to draw arcs. Issue 2 expands on these routines, combining them into a complete program to draw shapes using a general point/line/curve table. Colour and sound is promised for future issues.

The newsletters are short (just two A4 sides each) but not too expensive (50p per issue, including postage). Most of the assembly code written is quite well documented, line by line, though this will become less detailed as the programs increase in size. If you are planning on getting serious about machine code, give these newsletters a try. However, please note that you will need an assembler program to make use of the examples.

For those in need of more basic machine code programming details, Nicholas also produces a *Beginner's Guild* (sic).

Part 1 is well presented and consists of eight A4 pages. In it, Nick first gives a background on machine code programming and the Z80, then leaps straight in with code sections and descriptions of how the chip inside your Spectrum really calculates things. It seems to me to be rather heavy going for a beginner, but it may get you learning fast. I was not informed of the price (naughty, Nick) so write to him for details, and get to the heart of your Spectrum.

ASK IAN . . .

THIS MONTH Tech Niche catches up on readers letters – revealing the painful and often heartbreaking side of living with a Spectrum that has personal problems. If you too are suffering with your Sinclair masterpiece please write in and I'll try to print a solution. Personal replies are not always possible, but if you're really desperate enclose an SAE and I'll see what I can do.

Our first problem comes from MJ Hopper of Scunthorpe who is having difficulties getting his 8056 printer copy routine to work on his Spectrum +2 – it simply feeds blank lines! Well, MJ, the program you are using is not designed to work on the +2, but make sure that the printer port is set up to send all characters – ie in Binary/Unformatted mode, not Text mode. In text mode the printer control sequences are filtered out by the Spectrum.

Paul Squires of East Ham wants to know how good the 8056 printer is for use with his +3 – the simple answer is 'almost usable' if it is free! Screen dumps are difficult and

it uses expensive, difficult to obtain, paper. Much better to buy a 'real' printer, if you can afford it.

John Jones has a faulty Alphacom 32 printer which he wishes to repair himself! I would recommend having it done properly, but if you want to try, send me an SAE and details of what is wrong.

Tim Lewis of Swansea has a 128K Spectrum which goes out of tune with the television after only a few minutes. This sort of problem is normally caused by something overheating. Try swapping your television lead and power supply with that of a friend with another Spectrum. If that doesn't cure it then - if you feel brave enough - dismantle the machine and check that the regulator is attached securely to the large heatsink inside the Spectrum.

Craig Dobson of Hull wants to do word processing on his Spectrum +2, as does D Lasselles of Tyne and Wear. The most expensive item is always the printer (which will cost £150-£200 for a reasonable one) - second hand ones will still cost around £100. A disk system will cost around £150, but for a really cheap solution buy a Rotronics Wafadrive. This costs under £20, for two drives, and also has a printer port built in - it's nowhere near as fast as a 'real' disk drive, but does work! Also, *Spectral Writer* is a word processor program written specially for the wafadrives and may still be available - try Logic Sales Ltd (☎ 01 882 4942) or Microsnips (☎ 051 630 3013). Other word processing programs include Tasman Software's *Tasword* series (a popular program) which can do almost everything except mix text and graphics - for that look at PCG's *WordMaster/Typeliner/Headliner* suite which is complex but very powerful (a full review soon).

Scott Stemp asks whether the SAM Coupé will be able to use Spectrum +3 disks and 128K games. Unfortunately not, Scott. The SAM Coupé will use much faster, higher capacity 3.5 inch disks, and has a very special arrangement for using its extra memory which is different to the method used by 128K Spectrums.

Brian Gawthorpe wants to know if the SAM Coupé will be compatible with the Swiftdisc interface - possibly, but not for certain. If you want to keep up to date with details of the SAM project, consider joining MGT's user group, INDUG. Contact Bob Brenclay on 0452

412572.

'Buzby' from Mountain Ash wrote asking about getting more than one life with CRL's *3D Game Maker*, then sent in a solution to the same problem! The program, which allows 1 to 255 lives on a game, is too long to print here - anyone interested should send an SAE.

Finally, Bernhard Lutz from Germany has written to see if *Powerprint II*, from Buttercraft Software (CRASH Issue 30) is still available. Does anyone have an address for them? Alternatively, Bernhard, you could try Bradway Software's *Letta Head Plus* (which is similar I believe). Write to 'Hilsett', Upper Padley, Grindleford, Derbyshire S30 1JA.

PROBLEM SOLVED!

TESTS HAVE proven that no matter which other magazines people read, they always know where to turn for help: CRASH, of course! One such person is Darren Blackett of County Durham. He has sent in a listing from a rival magazine for a screen dump program (for his Tandy DMP 106 printer) which he cannot assemble (doesn't say why). Sorry, Darren, but I can't print the other magazine's program here (copyright and all that). Send details of your assembler problem and an SAE and I'll sort it out.

HEAR DRUMS

Gary McCloskey has sent in a short machine code program which gives a drum-like sound to any Spectrum. Type in and run the listing and get down to that beat!

```

5 CLEAR 59999
10 DATA 1,160,0,17,1,0,10,38,0,111,197,205
20 DATA 181,3,193,11,120,177,200,24,241
30 FOR X=60000 TO 60020: READ a: POKE x,a: NEXT x
40 RANDOMIZE USR 60000
50 PAUSE 20
60 GO TO 40
  
```

+3 CORNER

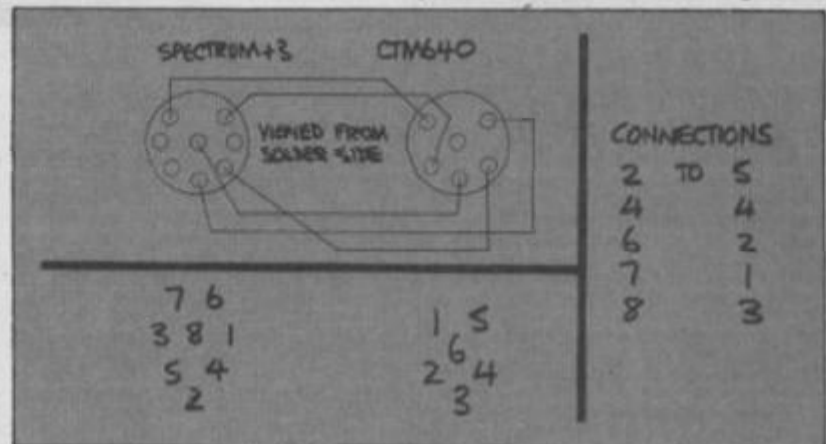
MARK THOMPSON of Merseyside has sent in a program which allows the Spectrum +3 editor screen colours to be altered to give black characters on a green screen, which may be easier to work with than the normal colours.

```

5 CLEAR 29999
10 RESTORE 10: FOR f=32768 TO 32792: READ s: POKE f,s: NEXT f
20 DATA 243,62,23,1,253,127,237,1,21,62
25 DATA 32: REM Editor Attributes
30 DATA 50,17,236,50,15,236,62,16,1,253,127,237,121,251,20,1
40 RANDOMIZE USR 32768
50 BORDER 4
  
```

+3 Basic, if you type in RANDOMIZE USR 23354 you will be back in +3 Basic. This should work on the +2A too, but probably not on earlier Spectrums. Don't use LPRINT/LLIST/COPY while in 48K Basic, though...

For some fun with your Spectrum +3, Ian suggests the following: type in COPY RANDOMIZE and press ENTER. After a short delay, the error cursor will appear (obviously). Now press ENTER again, but hold down P, L, Z and C during the



Dorian Rodney wrote, some time ago, about connecting an Amstrad CTM640 colour monitor (the one that comes with the Amstrad CPC6128) to his Spectrum +3. I have now got this system working on my machine, using a cable that I made specially (see wiring picture for details). You will need an 8-pin male 180 degree DIN plug and a 6-pin female 240 degree inline socket. The five connections between the two should be made (use four core screened cable, the screen being used for pin 2 to pin 5). You should be able to get the monitor working perfectly without any internal adjustments - though the display may be rather bright (if this is the case, there is an internal 'sub-bright' adjustment - have a qualified electrician set this up for you). DO NOT, under any circumstances, open the monitor - even if it is switched off! There are extremely high voltages present within, which remain for many hours even when the monitor is unplugged! The only problem with this monitor is that there is no sound; I built up a Maplin Electronics kit (LM76H, under £5) which gives ample sound when run off the (now redundant) 5 volt supply from the CTM640.

Ian Collier of Bolton has written to point out that my ZX Print program (Crash issue 60) can't work on the ZX Printer since there is no 9 volt power signal for it to run from - true (the Alphacom works fine, which is what I tested it on) unless you try using MGT's Fixer. He also gives details of un-SPECTRUMing. After typing SPECTRUM from

delay - you'll need to be quick (keep trying if nothing happens the first time)! After the fun, RESET is the only exit, so make sure there's nothing loaded! Also, from the test screen (hold down BREAK while pressing RESET) press E, U and A then play a tape. Finally, try typing FLASH 1 then pressing ENTER from the +3 Basic editor, the press EDIT - yuk!

IMPROVED PLUS D HACKER

A NEW VERSION of Plus D Hacker has arrived at CRASH, and is now available from Bettabytes, 10 Spittal Terrace, Gosforth, Newcastle Upon Tyne NE3 1UT for £12.95 on 3.5 inch disk. Changes from the version reviewed in CRASH Issue 62 include a disk test/repair program (which takes 35 minutes to run - I didn't try it!), a file restore command (an UNERASE), and an automatic tape to disk transfer routine. There are also routines to compress Snapshots - they take quite a time (up to 5 mins per file) and are awkward to use (reloading is no longer a simple LOAD) but they certainly work, eg a *Nebulus* Snapshot was reduced to 32K. The actual 'hacking' routines now use the full screen display (rather than just one third) but seem otherwise unchanged. One final point - Plus D Hacker is no longer compatible with version 1 Plus D interfaces.

WINNERS AND PRIZES

GREEN AND SLIMEY COMP

Issue 58

Oh dear, we do seem to be slacking a bit don't we, **Zeppelin Games** asked CRASH to run a *Draconus* comp way back in issue 58. But due to this and that (and our beloved Production Manager cutting pages) the results have only just seen the light of day. Five multi-choice questions were asked and you fulfilled your part by sending in the answers, the prize is (another) JVC VHS Video recorder. The lucky winner is **Karl Flood**, Lincoln LN5 8AJ. Now Karl can watch his favourite programme on TV whilst recording his other favourite on another channel because the idiots at the TV companies have shown them at the same time (bloody typical).

Fifty runners up will soon be able to play the CRASH Smash game *Draconus* signed by the head honcho of Zeppelin Games himself **Derek Brewster**, 'cos this is what they have won.

Nathan Spong, Loughborough LE11 3PQ; **S J Fokkett**, Luton LU3 3RB; **David Richards**, Kidderminster DY10 2UZ; **S Wilkinson**, Cumbria CA25 5NN; **Andrew Kaye**, Doncaster DN5 8NF; **Simon Clark**, Suffolk IP14 4DG; **David Navin**, Morecambe LA4 4ED; **G Brook**, Huddersfield HD7 4BY; **E M Thorpe**, Co.Durham SR7 7JD; **Andrew Miller**, High Wycombe HP15 6BL; **James Armstrong**, Kent TN12 7ES; **Simon Penfold**, Gwent NP2 1GD; **Abdul Haque**, W.Midlands B66 2BS; **K Monaghan**, Rutherglen G73

4RP; **Gregory Frensham**, London E15 2BQ; **J Milne**, Northumberland NE66 3RS; **Gordon Sutton**, Basingstoke RG22 5PG; **Danny Fox**, Warwick CU35 8SE; **Brian Doyle**, London SW18 3PG; **Geoffrey Kilroy**, Dublin 16; **Michael Smylie**, Shifnal TF11 9AQ; **Graeme Anderson**, Berwickshire TD11 3EZ; **Chris Lawson**, Carnforth LA6 3DE; **Daniel Brice**, Bristol BS15 2EN; **Ian Dowdall**, Herts EN10 7JZ; **Julian McKenzie**, London NW11 7QG; **Neil Blain**, Cheshire CW4 3ET; **L Wojnarowicz**, Coventry CV6 5LX; **A Fleet**, Staffs ST13 7EF; **Simon Webster**, Grimsby DN31 1RW; **Graham Gillam**, Ware SG12 0QG; **Teresa Moss**, Suffolk IP14 4DG; **Robert Burnfield**, Essex SS2 5HD; **John Ellwood**, Cumbria LA9 6HJ; **J Sanchez**, Liverpool L24 2TT; **Richard Dowson**, Cleveland TS22 5LY; **Peter Rhodes**, Kidderminster DY11 5NQ; **Rob Gaffney**, Scunthorpe DN16 1JH; **Ian Ailsopp**, Preston PR2 4AD; **Andrew Rossiter**, Peterborough PE3 8JW; **Gavin May**, Herts WD2 3SP; **Greg Tudhope**, Ayrshire KA12 0YF; **David Bradley**, Hounslow TW3 1XS; **Kamran Chadry**, Stockport SK3 9NY; **Roy Harwood**, W.Sussex RH13 8BX; **Karen Benson**, Cambridge CB4 4UN; **C Lillicrap**, Jersey; **Simon Pope**, E.Sussex TN19 7BS; **K Brown**, Lanark ML11 7HN; **Paul Gale**, Southampton SO1 6DL.

I'M BLINDED BY THE LIGHT

Issue 61

July 22nd 1990 is a date that is no doubt eagerly awaited by astronomers the world over, but Joe public is probably unaware of what will happen. No, not the end of the world (although years ago people believed that this phenomenon did herald the end). A total solar eclipse is the event and Finland is the venue. **Incentive** ran this competition in CRASH, ZZAPI and TGM, our Comps Minion asked you to answer three simple questions based on the incentive game *Total Eclipse*. The CRASH winners name was put in a hat with the winners from the other two mags and one overall winner was chosen. He is **John Macleod**, Ross-Shire IV40 8HE, a ZZAPI reader (although we won't hold that against him), and he and a companion will be flown out to Helsinki with £100 spending money each to witness one of nature's most spectacular phenomena.

ALBA HOTLINE COMP

Issue 61

Issue 61 saw the introduction of the CRASH Competition Hotline, all we wanted you to do was pick up the telephone (after first asking, we don't want any annoyed parents coming round here with their 'phone bills) and answer the three easy peasy questions and tiebreaker on the coupon provided. The prize on offer was an Alba MS 4300 Midi system thanks to those ever communicative people at **Telecomsoft**. The winner is **William Callaghan**, W. Midlands.

I AIN'T GOT NO BODY

Issue 61

Ever fancied being miniaturised and injected into the blood stream of someone else? Nope, neither have I, but the silly so-and-so who stars in the new **Cascade** game *DNA Warrior* is game for a laugh (but then he doesn't have much choice). We asked you to write us a short story and say in no more than 200 words what the brave volunteer's journey would have been like. Some of the stories defied description and/or good taste, but a winner was eventually chosen and he will receive a hip, trendy, rad, def (can you think of anymore crucial words, Nick?) ghetto blaster for his efforts. Well done **Paul Jameson**, Kemston MK42 7LS.

Two second prize winners will get a personal cassette player to play their favourite (Pet Shop Boys - Nick) music on, they are **Chris Gallery**, Weymouth DT4 8TW; **Adam Sharp**, Chichester PO19 2JH.

Runners-up will find a copy of *DNA Warrior* arriving on their doorstep any day now, they are...

Stephen Barclay, Glasgow G61 3PR; **Luke Gietzen**, London SE23 3QN; **William Couper**, Inverclyde PA16 7AU; **Cai Ross**, Gwynedd LL31 9EJ; **Ron Brunton**, Washington NE38 7HD; **Tony Murphy**, Killarney Ireland; **Neil Harper**, Falkirk FK1 3BW; **Leigh Loveday**, Port Talbot SA12 6AL; **Stuart Hall**, Hull HU7 4BH; **Thomas O'Dwyer**, London SE15 2HU; **Andrew Reay**, Cramlington NE23 6EQ; **Mark King**, Birmingham B26 2SE; **Asad Habib**, Sheffield S4 8FG; **Jonathan Webb**, Sunderland SR4 8LP; **Steven Harman**, Ulverston LA12 0PE; **James Gleeson**, Nenagh Ireland; **G White**, Doncaster DN3 2LB; **Andrew Wilson**, Romford RM2 6QD; **Malc Sims**, Canterbury CT1 1YF; **Steve Hutchinson**, Doncaster DN10 6QB; **Darren Culvert**, Huddersfield HD2 1SE.

GET YOUR SKATES ON

Issue 61

Good morning, listen very carefully I will say this only once, **Ubi Soft**, the software house who brought you *Skateball* (85% issue 61) and promise a great game in the guise of *Iron Lord*, offered old Compy a competition prize he couldn't resist. The winner will receive a weekend for two in Paris (take a friend along, or me if they can't make it), where they will be able to sample the delights of this wonderful city for absolutely nothing. The winner is... nah I'll tell you next month, hold on Stu is holding a large cricket bat over my head. The winner is **P Render**, Dewsbury WF13 3RZ, have a good time you lucky sod.

Nine runners-up will soon be able to sport a genuine UbiSoft T-shirt, they are:
Jon Sendel, Sheffield S8 8DU; **Dave Chapple**, Saltash PL12 4HR; **Caroline Middleton**, Sheffield S8 7DM; **Malc Sims**, Canterbury CT1 1YF; **Colin Price**,

Halesowen B63 3JE; **R Chowdhury**, Dunstable LU5 5RG; **Chris Shimadry**, Weybridge KT15 2JB; **T Metters**, Swanley BR8 8BS; **Harry Mortensen**, Seaham Co.Durham.

Runners-up will receive a UbiSoft goodie bag stuffed with lots of useless items that nobody wants anymore. The winners are...

S Standen, Dagenham RM10 8PX; **J Bragg**, Iford IG1 1HQ; **David Haffner**, Redditch B97 6LY; **Brendan O'Brien**, Birmingham B9 5QD; **Peter Young**, Saddleworth OL3 5EG; **Anthony Johnson**, London NW2 5TA; **Alistair May**, Moray IV30 1QT; **Colin Andrew**, Broadbottom Cheshire; **E M Thorpe**, Seaham SR7 7JD; **David Fokkett**, Luton LU3 3RB; **C Moore**, Sheffield S12 2QN; **Andrew Cook**, Redruth TR16 6RT; **Brian Hughes**, West Lothian EH52 5HX.

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ARCADE ACTION

Last month, arcade maniac MARK CASWELL played some of the hottest new games at the ATEI show. This month he concludes his two-part report on Britain's premier arcade convention. While searching for the ultimate coin-op, he is deafened by a rogue CD jukebox and meets the star of *Friday The 13th* . . .

NARC Williams

Williams have been out of the limelight for a while, after previously creating such masterpieces as *Defender*, *Joust* and *Star Gate*. *Narc*, however, represents their triumphant return to the arcade scene.

You, alone or with the aid of a friend, play narcotics agents who have to clean up the streets of your beloved city. This entails either arresting or blowing away the many villainous denizens of the neighbourhood. With machine guns and variety of more powerful weapons to hand, our intrepid heroes must face the pushers, punks and junkies in order to reach the drugs baron known only as Mr Big.

The dynamic duo massacre their way through various scenes (including a warehouse, subway platform and bridge), while the baddies make their presence felt – they're armed with guns of various sizes, and one guy even throws hypodermic needles! As the felons are riddled full of lead, money and packets of white powder fall to the pavement. Collection of these earns bonus points on the 'evidence' screen. Extra ammo and rockets are earned in the same manner. However, pushers aren't the only enemy – crimelords occasionally make an appearance. Instead of running around the streets, they thunder about in helicopters. And the only way to shake these mothers off your tail is with a well-aimed rocket launcher.

Both graphically and sonically *Narc* is great. Movement is enhanced by digitized rotascope motion – graphics being drawn from film of real people – but it adds a large chunk of realism to the action. Sound is also good with some dramatic effects, although not a lot could be heard because on the stand right next door were some very loud CD jukeboxes!

OPERATION THUNDERBOLT

Taito

A combination of fast reflexes and an itchy trigger finger were required to succeed in *Operation Wolf*, one of the most popular coin-ops since its launch in 1987. Now, almost two years later, Taito have produced the sequel: *Operation Thunderbolt*.

The mission remains the same – rescue the hostages whilst doing as much damage as possible to enemy soldiers, tanks and aircraft. But this time a friend can join in the carnage because a second Uzi gun has been bolted onto the cabinet. However, it's a case of double the firepower, double the trouble as the enemy presence is increased to provide a bigger challenge.

As in *Operation Wolf* the enemies yomp towards you firing their little guns, lobbing hand grenades and knives – these

can be exploded or deflected. As the dangerous projectiles hit your frail body a damage meter rockets up. But help is at hand: by shooting the power drinks which occasionally appear, a small amount of energy is restored.

Also making an occasional appearance are some very useful items. Magazines are essential 'cause if you run out of ammo it's goodnight Vienna. Rockets are good for taking out enemy vehicles (but not to dinner!), while laser sights come in very handy when trying to see what you are trying to shoot.

Taito have certainly done it again. I loved *Operation Wolf* – and the sequel, with its double gun set-up and frenetic action, is sure to be a winner. I can't wait for the Speccy version.



SPLATTERHOUSE

Namco

As the name suggests, *Splatterhouse* ain't exactly your 'boy saves girl from ravening baddie and lives happily ever after'-type game. Nope, this guy would probably put the willies up the likes of Freddy Krueger. He is Jason, the cleaver-wielding, ice hockey mask-wearing baddie from the *Friday The 13th* movies. Here he is brought back to life (again?!) and proceeds to do what he does best, and a hell of a mess this makes too!

At the start of the game, Jason has nowt for protection but his fists and feet, and a punch of the buttons soon puts our hero (?) into action. But things really start

hotting up when a weapon is found and he can start dishing out some serious decapitation and disembowelling (accompanied by some stomach-churning sound effects). Energy is represented by a row of disembodied hearts (very apt), and contact with the various ghouls, skeletons and other members of the undead moves Jason nearer to his original state; death. The gruesome graphics in *Splatterhouse* certainly add a lot to the atmosphere, but I warn you - this isn't a game for the squeamish among you. However, lovers of yucky horror movies will love it!



STRIDER

Capcom

Capcom have had a bad time of it recently, and games like *1943* did little to help. So it's good to see they're back to their old, brilliant form with *Ghouls 'N' Ghosts* (reviewed last month) and now another impressive game, *Strider*.

Like *Ghouls 'N' Ghosts*, *Strider* utilises Capcom's brand new coin-op system, and it shows. The detailed graphics are simply incredible - the athletic hero looks like he came straight from a Japanese TV cartoon as he performs amazing feats. He can even do a triple backflip while slicing a robot in half with his laser sword! The screen scrolls smoothly in all possible directions as the hero jumps and slides his way around while fighting off hordes of deadly robots of all shapes and sizes. This must be some of the most demanding gameplay ever invented - it's exhausting just to watch!

Strider is one of the best platform and ladders games ever created (apart from maybe *Ghouls 'N' Ghosts*). With games like this, Capcom are clearly on their way back to the top.



TETRIS

Atari Games

Da, is good comrade - dig this groovy Glasnost game! Those of you with a good memory will recall that Mirrorsoft released *Tetris* on all major computer formats last year (it was reviewed in Issue 50, getting a worthy 77%). But now Atari have picked up on the game and released it in the arcades (hang about I always thought it was meant to happen the other way round!). Originally programmed by a bunch of students from Moscow University, the game sounds simple, but in practice it's very tough and

takes quite a while to master.

Differently shaped and coloured blocks float down the screen. Your task is to guide these blocks to the bottom of the screen and create a solid line. When this occurs the entire block drops down a line. Lightning reflexes are needed to rotate the blocks so that they fit snugly into a space. Leave any gaps and the line won't drop and the blocks will build up (if they reach the top it's game over). Five lines have to be cleared before a bonus is awarded, and as the game progresses the blocks move faster and faster. A one or two player option is offered with two friends either battling head to head or playing separate games.

Tetris is a novel arcade strategy coin-op which will certainly weed out the men from the boys - just like a Russian winter!

Also on show and worthy of mention was the sequel to Taito's *Double Dragon*, entitled *Double Dragon 2 - The Revenge*. Once more you take the part of a martial artist, but surprisingly, you're not on a rescue mission. Instead you are avenging the murder of your loved one by an evil gang. The bodies pile up as you punch and kick your way through this violent but unoriginal game.

Another sequel on show was the latest *Ikari Warriors* adventure, *Ikari III*. Rambo-style action is provided in a two-player romp through enemy territory. Play simply entails fighting the 'gooks' and destroying everything in your path.

Well that's about it, the ATEI is over for another year but I hope that over the last couple of months I've given you just a taste of what's likely to be appearing on these shores in 1989. Next time I'll be back in more familiar surroundings (ie the local arcade). So until we meet again, keep practising.

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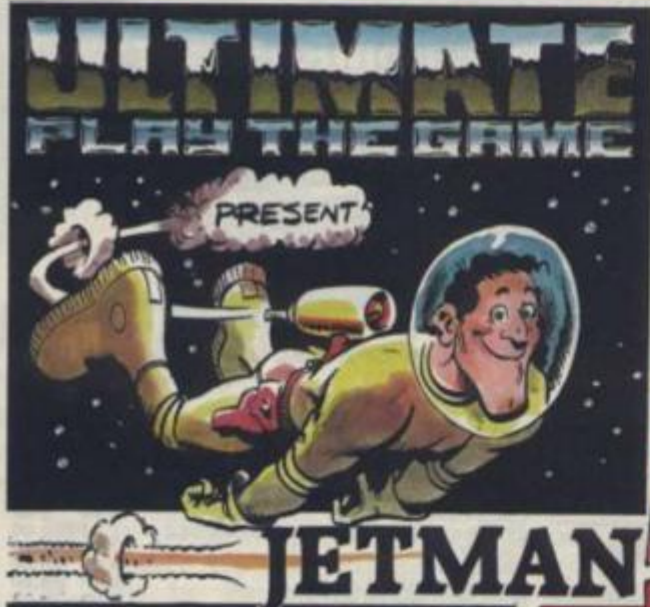
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FRONTLINE

REBEL STAR 2

Producer: Silverbird

Author: Target Games (Programming by Julian Gollop with graphics assistance by Ian Terry)

Price: £1.99

Julian Gollop may have pinched a few ideas from *Aliens* for the plot and gameplay of *Rebel Star 2* (not to mention Silverbird with their cover), but those of you eagerly awaiting the game can forgive Mr Gollop for any lapse of originality.

The planet Thray 6 has been taken over by warring aliens who are getting ready for an attack on Rebelstar itself. The Rebelstar Raiders are dropped down on the planet with orders to destroy as many alien lifeforms as possible.

As represented in the game Thray-6 is a rather small planet, but is still a moderately-sized battlefield comprising an alien fortress and swamplands. A small section of the battlefield is always on display, and by moving the cursor around you can scroll across the battlefield at will.

The game begins with the Raiders on the western side of the swamp with, not surprisingly, the alien fortress on the other side. The Raiders have 15 turns before their drop ship lands near the fortress, and another 11 to get on board before it takes off again. If any alien eggs can be brought back for research purposes so much the better.

To get to the fortress the Raiders

have to first cross rivers, swampland and marshes while avoiding the unwelcome attention of marsh rats, indestructible water monsters and aliens on aggressive search-and-destroy patrols. The only good thing about the swamp is that it can provide cover from enemy fire.

In true *Rebel Star*-style the Raiders have a set number of action points to use up each turn through movement, combat and other actions – like picking things up and loading weapons. Needless to say being wounded often results in a massive, and permanent loss of action points per turn. Unfortunately the aliens are quite merciless and very good shots, so keeping under cover is of paramount importance.

Although it is possible to engage in hand-to-hand combat, it's not advisable and most of the time combat involves sidearms. Aimed, snap and opportunity shots are possible and it can all get very exhilarating to see laser bolts flying back and forth, occasionally missing by pixels. So hopefully even arcade fans should enjoy the game.

The Raiders are mostly armed with laser rifles, although a few are equipped with highly effective Photon guns. The latter equipped soldiers are



the key to success in *Rebel Star 2*. Without their firepower you'll be lucky to survive until the drop ships lands, let alone get onboard. Actually winning the game rests on getting those alien eggs though, and they're in the alien fortress with an acid-spitting Alien Queen, its vicious babies running amok and

plenty of guards. Surviving the waves of alien troops is tense enough, running around the alien fortress will have you sweating blood!

Although the concept behind *Rebel Star 2* differs little from the original, the methods of play are different and the game itself offers a respectable level of strategic challenge. With excellent graphics as well it's all highly engrossing. This is a game to appeal not only to strategists, but also fans of the *Alien* movies and in fact anyone who enjoys a really good – and very tense – game.

Presentation 75%

Packaging is typically budget with very brief instructions. In-game layout is neat with a clean appearance and very user-friendly command system. The resetting of the machine once the game is over is a minor setback, however

Graphics 83%

Menacing looking Giger-style aliens, weird and wonderful swamp flora and fauna, all colourful and highly detailed

Rules 64%

Adequately explained if short, but it's left to the player to unravel the actual mechanics of play through good old trial-and-error

Playability 91%

Far easier to get into than most other strategy games, 1 or 2 player options and 8 skill levels to provide the long term challenge

OVERALL 90%

A great sequel and a compelling, highly rewarding strategy game in its own right. Not to be missed



TANK ATTACK

Producer: CDS Software

Author: Stuart Middleton, game design by Ake and Henrik Andersson and CDS Software

Price: £12.99 cassette, £14.99 +3 disk

Mechanised tank combat is the subject on today's agenda with the follow-on to *Brian Clough's Football Fortunes* and it's questionable as to which is the more violent. As with *Football Fortunes* the computer program serves merely as referee and judge to what is basically a board game.

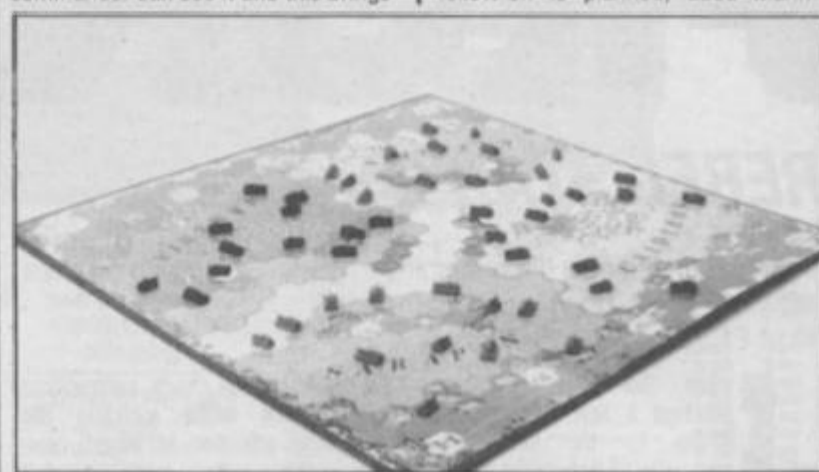
The game pack contains a 40cm x 40cm board (21 x 23 hexagons large if you count the edge hexagons), small but detailed plastic playing pieces (48 in all), a comprehensive manual and, of course, the computer tape.

The game is based around four warring countries - Armanis, Kazaldis,

The specific amount of damage you take is decided by the computer program which calculates the results of combat based on the strengths of the tanks involved. The computer also takes the role of a War News paper, providing vital information on the ongoing battle and how it is affecting the movement and performance of each country's forces. Despite some neat animated sequences the command system is particularly slick in execution and speed once the basics are mastered. However, while the program does indeed play an integral part in the game, seasoned computer wargamers may find the computer's presence as a referee, coupled with the

particularly liked was the presence of notches on the rear of the pieces indicating a piece's strength. Only the commander can see it and this brings

one other person around to play it! Thankfully such a fresh idea as this hasn't been abandoned by CDS - a follow-on is planned, titled *Marine*



into play the ever subtle 'Fog of War' factor - you may have a thoroughly useless spearhead force but your enemy doesn't know it and he'll have to worry about it until combat reveals all. Another good touch is the teamwork factor when four players are taking part, this is often lacking from computer wargames and is very welcome here.

To its credit *Tank Attack* brings together the two often very different worlds of board wargames and computer wargames in one successful halfway house. It must be remembered though, that *Tank Attack* is primarily a

Attack, and revolves around, yes you guessed it, all things marine. I can't wait to see the plastic aircraft carrier!

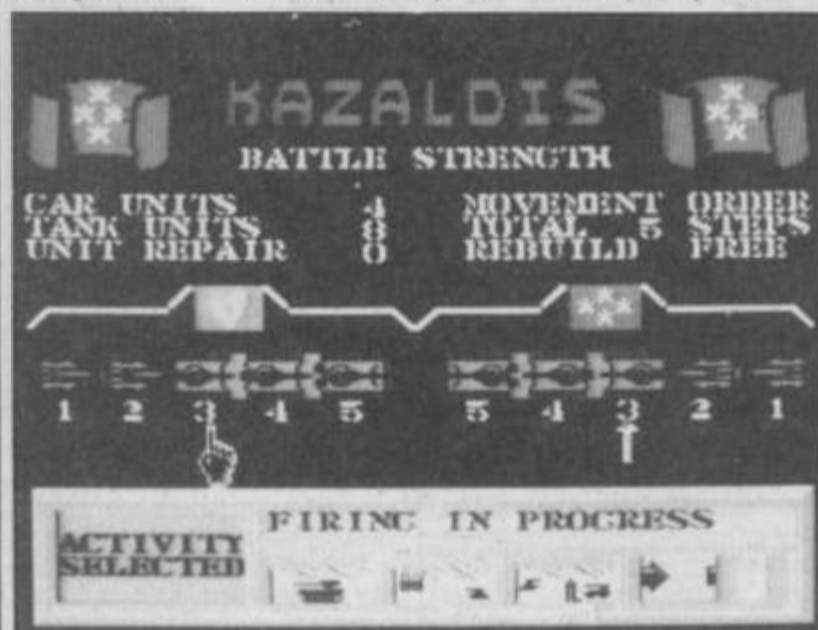
Presentation 83%
Smart playing pieces, a functional board and a simple but effective manual

Graphics 82%
The program itself is well presented with some highly detailed graphics, good animation in places and well thought out command screens

Rules 70%
The rules serve their purpose in so much as they inform the player of how to play the game but provide little other information

Playability 79%
As playable as a beginner's board game with the addition of a competent moderator computer program. The 2-4 player option keeps the game playable at all levels, and offers considerable variety of play to boot

OVERALL 80%
An interesting, clever approach to the wargame concept with some well thought out game ideas, a lot of fun to play. The somewhat limited game scope may prove a drawback with experienced wargamers, though.



Sarapan and Calderon. Two to four players can take part, controlling either one or two countries each. If four players are involved alliances can be set up. The objective of the game is to reach and occupy the enemy's HQ.

All this is clearly set out in the manual, which is quite comprehensive in explaining the game. But what it also helps make clear is that *Tank Attack* is for sure no *Desert Rats*, and the game's relative simplicity may not be to everyone's liking.

The basic gameplay revolves around the movement and combat of tanks and armoured cars across satisfyingly mixed terrain. Most of the terrain doesn't help progress and bad weather can slow down a country's attack completely. Combat is line-of-sight based, with tanks firing upon one another once within four hexes range. When engaged in combat main battle tanks pack the most punch but are relatively slow moving and can suffer at the hands of fast moving light tanks and armoured cars. Damaged vehicles can be repaired at depots, and even totally destroyed can be brought back from the dead - at a severe cost in time. Meanwhile the enemy draws ever nearer to your increasingly vulnerable HQ!

somewhat limited scope of the game, perhaps too restrictive.

One aspect of *Tank Attack* I



board game and should be played like one (ie with 4 like-minded people!). A relatively simple a game it may be, but *Tank Attack* is still worth consideration - provided of course you've got at least



Target Games' *Laser Squad* is an advanced version of the *Rebelstar*-type game, and thus one of my favourite games, so the arrival of the first expansion tape was most welcome. The first scenario (*The Cyber Hordes*) involves defending a planet station from droid attack. The second scenario

(*Paradise Valley*) continues on the same theme with the survivors fleeing through alien infested canyons, valleys and tunnels. The price is £3.95 for the both on a single tape, and well worth it in my view as the scenarios substantially improve the 'latability' of the original game.

EXPANSION TAPE TIPS

No sooner is word given of the expansion tapes then we have tips in! These along with a map (the latter sadly can't be printed) were sent in by David Smith of Uttoxeter in Staffordshire. DO NOT READ THEM UNLESS YOU'RE STUCK!

The Cyber Hordes

On the far right of the station there is an open casket. In this are two keys and ammunition. The green key opens locked caskets around the base, the purple key locks doors around the base. Destroy battle droids from behind or blow them up with an AP75 grenade.

Paradise Valley

The entrance to the underground tunnel network can be found in the top left corner of the first large rock structure encountered (the rock in the rough shape of a boot). Look out for water dwellers in the river. Use the light sabre to cut your way past the bushes. Protect the man with the blue prints.

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Playing Tips supplement! Mel Croucher! Imagine profile! PBM convention!

No 28 May 1986

Fanzines! Martech profile! Composite Video Interface! SpecDrum!

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First PBM Mailbox! Homegrown software! Realtime profile! Maps: Cylu, Sir Fred, Saboteur, Tantalus!

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Birth Of A Game! Laser Genius! Maps: Tantalus, Movie!

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Software Projects! Word Processing! Maps: Pentagram, Heavy On The Magick!

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Programmer: Dave Perry! GAC! Maps: Core, Ghosts 'n' Goblins, Bobby Bearing! Echo Synthesizer!

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Programmers: Jon Ritman, Costa Panay! Maps: Dan Dare, Cauldron III! SpecDrumming!

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Programmer: Don Priestley! Genesis Update! Maps: Dynamite Dan II, Equinox, Universal Hero! Music Machine!

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Designer: Dan Malone! Computer Advertising! Maps: Glider Rider, Thrust, Lightforce! MIDI!

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Lloyd's Lookback! Spectrum Music! Maps: Scooby Doo, Heartland, Druid!

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John Richardson: Jetman! CRASH Reviewers revealed! Match Day Challenge! Maps: Fairlight II, Firelord, Avenger, Dandy!

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Fanzines! Designer: Bernie Drummond! Maps: Cobra, Impossaball, Uridium! MIDI!

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Arcades Update! The Z88! Programmer: Steve Taylor! Maps: Nosferatu, Double Take, Future Knight, Feud!

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Playing Tips supplement! Maps: Short Circuit, Antirad, Conquest, Into The Eagle's Nest, Sceptre Of Bagdad, Dragon's Lair II, Thrust II, Fat Worm Blows A Sparky, Tarzan, Aliens!

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Programmer: Mike Singleton! Industry Today! Adventure Trail supplement! Maps: Saboteur II, Head Over Heels! Multitrackers! 128 Bugs!

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The +3 arrives! Run It Again runs the

Gauntlet clones! CRL's 3D Gamemaker! Maps: Enduro Racer, Flash Gordon!

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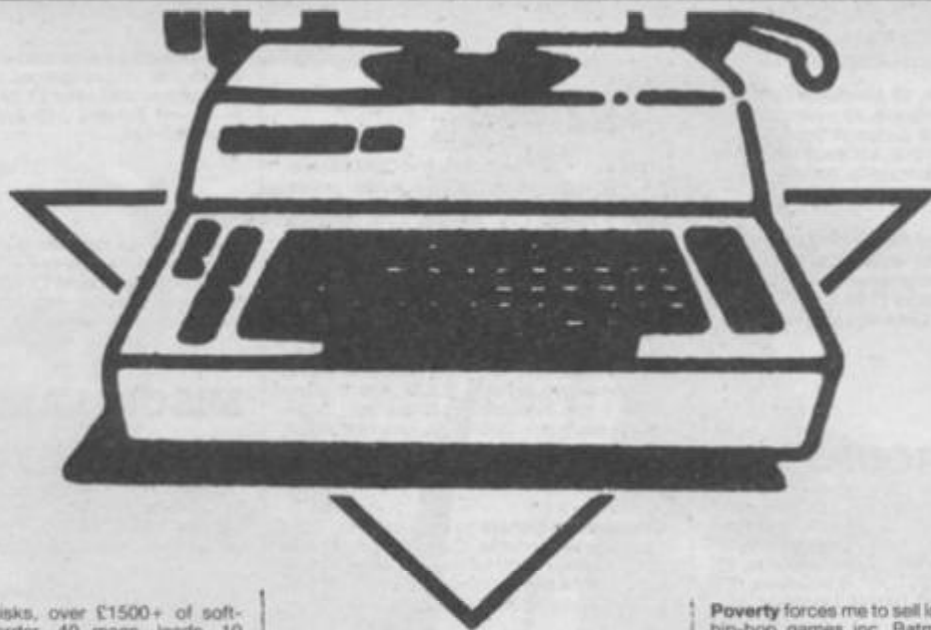
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128+2, joystick, one year old, £350 of games including Taito Coin Ops, Ikaru Warriors and others, poke and demo tapes and mags. The lot only £230 on. Bargain hurry! Ring Jon 0908 72574 after 6pm.

CLASSIFIEDS



Spectrum +3, disks, over £1500+ of software, tape recorder, 40 mags, leads, 10 books, a radio communications receiver (RTTY, AMTOR CW). Phone Gavin on (0705) 817466 before 9am and after 4pm and make me an offer.

Spectrum +3 for sale. Hardware (£425+) incl. Videoface digitiser, Multiface 3, tape deck, mags, books (£145+), disks and tapes (£45+), games (£950+) incl. R-Type, Robocop, etc. All leads. V.G.C. worth £1,550+, sell for £550 on. Phone (07456) 2977.

Spectrum 48K+, joystick, tape recorder, many full price and budget games including Star Wars, Tracksuit Manager, 720, Aliens, Outrun plus loads more! Worth over £500, will sell for £140 on. Phone Graeme on 0724 869778.

Unused Sony Discman C.D. for sale £125, or swap for top Walkman and cash. Also software for sale e.g. Driller £3.50. Consider swaps for strategy games especially Rebelstar Raiders. Phone Mike on (0924) 464509 (evenings).

Spectrum 48K+ in excellent condition, 21 assorted games, Quickshot joystick and interface. Boxed as new. Will accept £80. Tel: (0621) 741426, 13 Hillcrest, Mayland, Essex.

Atari 520STM, joystick, printer (IBM) + paper, 28 games, all boxed. Worth £1200, sell for £700 on. Call 0603 408040 and ask for David anytime.

Games for sale, all for Spectrum new and old, including Back to Skool, The Eidolon, Cauldron and lots more. Send an SAE to Steven at 52 Harwater Drive, Loughton, Essex IG10 1LW.

Spectrum +3 with second disk drive, mono monitor, CP/M, Masterfile, Tasword, Tasspell, Tascalc, also numerous games and plenty of other utilities. All in mint condition and boxed £350.00. Tel: (0709) 867066.

The Sale is on! 100's of titles for Spectrum 48K, includes Operation Wolf, Savage, Bards Tale, Target Renegade only £2-3 each! All originals, send SAE to: J.J. Meacher, (CRASH), 59 Lee Road, Dovercourt, Essex CO12 3SB.

Spectrum 128+2 for sale. Good condition, all boxed as new, including joystick, manual, interface, games include: Elite, Outrun, Enduro Racer, Champions and many many more. Absolute Bargain £80 the lot. Tel: 01 651 1284 (Croydon, Surrey).

AFTERBURNER, Robocop, Echelon and many more for sale, all for £5 each. All 25 games can be bought for £50. Phone (0823) 475198 after 6pm and ask for Marcus.

CRASH back issues numbers 1-50 all in good condition £45 on. Phone 01 444 3503 after 7.00pm.

Sinclair printer plus 7 rolls £20. Interface One and Microdrive plus 26 cartridges £50. Multiface 128 £20, computer table and stool £20. Spectrum 48K with DK'Tronics keyboard, tape recorder, joystick, games £40. Ring Alan 0279 34252.

Spectrum 48K, Kempston joystick, tape recorder, three binders of INPUT and £200+ worth of games. Original price over £350. SELL for £150. Jonathan Murphy, Lorne House Lodge, Douglas Street, Castletown, Isle of Man.

CRASH collection for sale! Issues 1 to 30, all in very good condition, includes Xmas issues, posters. Offers to: Pete Agnew, 16 Turnberry Grove, Cudworth, Barnsley, South Yorkshire S72 6ER.

Spec +2, joystick, £150's worth software, £125. Opus Discovery disk drive, 5 disks £70. Multiface 128 £25. Or the lot £170. Write to Nick Hurrell, 30 All Saints Walk, Mattishall, East Dereham, Norfolk NR20 3RF.

Bargains, twin Wafadrive +64K Wafa all in box only £50 on. Also original Elite (with Lenslok) £12 + Surfchamp (Sinclair User Classic) £6. Also over 200 Multiface pokes only £1. Ring Scott on (0233) 625581.

For Sale: ZX Spectrum 48K with Sega Emperor keyboard, fitted Multiface One and Wafadrive, over 100 software and utilities, tape recorder, Kempston interface and Quickshot Turbo joystick, £170 on. Phone 0947 841077 after 6pm.

Spectrum games for sale. Full price games e.g. Zynaps, Starstrike II, Enduro Racer, Empire Strikes Back, for £3.00. Budget games 50p. Send SAE for full list. Clive Billington, 12 Mere Close, Newport, Shropshire. Telephone 0952 813401.

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Spectrum games, American comics, British comics, TV and Film merchandise and army stuff. Ask for the list or lists you're interested in. Please send SAE to: Lee Shard, 15 Randall St., Maidstone, Kent ME14 2TB.

Premier: NEW fanzine, 30 reviews, 10 pages adventure tips, competitions etc. £1.00. For Sale: Elite, Thanatos, Lord of the Rings and others. Spectrum 48K, slight repairs needed. Contact: R. Salman, The Rising Sun, Syden, Llanelli, Dyfed SA14 8JA.

Spectrum 128+2, excellent nick, two joysticks, £250+ worth games, serial 8055 printer, roll included, magazines, programming books, pokes + hints, contact Scott on Staines 55669 from 3.30pm onwards. £200 all BARGAIN!

Sinclair 128K+2 for sale, hardly used, Cheetah joystick plus 20+ games worth altogether £280, will sell £200 on. Contact: Paul at 20 Gynor Place, Ynysyhir, Rhondda, Mid Glamorgan, South Wales. Very quick sale. Please buy!

Atari 520STFM, built-in 1 meg disk drive, mouse, joystick, disk box, 20 blank disks, £500 original software, P.O. software, excellent condition with all manuals and six months guarantee. Only £350. Tel: (0608) 2605.

Commodore 64K computer & 1541 disk drive. Disk drive fine, but computer needs repair. £100. Tel: Mark 0626 55244.

Spectrum games, all original, for sale, including Kamon, Cyberoid, Flying Shark, Nebulus and many more new and old titles. Save pounds by sending SAE to Mark, 14 Tewington Place, St. Austell, Cornwall for list. Write now!

Hangman and 'Os' and 'Xs' completely original games, computer option on both games included. Send P.O. for £2.00 and SAE to: Alan Evans, 4 Conover Drive, Shrewsbury SY2 6JD. Tape by return, 48K Spectrum only.

Spectrum 128+2, Kempston interface, Cheetah joystick, software worth well over £650. All worth over £800, sell for £300. Phone (0787) 247847 after 5pm, loads mags if wanted, FREE!



CHUCK YEAGER: THE RIGHT STUFF

With the long-awaited conversion of *Chuck Yeager's Advanced Flight Trainer* just about to be released from Electronic Arts, CRASH investigates General Yeager's career and talks to the programmer.

At the end of WWII, and the start of the Cold War, jet propulsion was replacing propellers and the race was on to produce the best military jets in the world. The great aviation companies of the US churned out ever wilder aircraft by the month – jets like the tiny Goblin (intended to be carried by bombers until needed for defence) and jets with skis (to land on water). There were no sophisticated computers to predict how the aircraft would fly, and little time for long, slow evaluations. The air base where all these tests happened was Edwards, named after a dead test pilot, and its roads soon

became named after yet more test pilots who'd 'bought the farm'. Simply learning to fly those early, primitive jets was difficult – in 1952, 62 USAF pilots died during just 36 weeks of training – testing them was

even more hazardous.

Yet flying at Edwards was not a duty dreaded by its pilots. Quite the reverse, in fact, as writer Tom Wolfe described it in *The Right Stuff* there was a hierarchy of military pilots – a pyramid. At the bottom were the third or so of trainees who washed out during training, many of whom went on to become back-seat radar operators. Then there were transport plane pilots, and so the hierarchy went until it reached the elite who became

fighter pilots. Above them were the pilots who had the skills to be test pilots. And the best of them was Chuck Yeager, whose Southern accent became unconsciously imitated by pilots the world over – like the upwardly-mobile imitating a high class, BBC accent.

SEND IN CHUCK

Yeager was born into a poor West Virginia family and would, like his father, probably have become a gas driller had it not been for WWII. He enlisted in 1941 at the age of 18, and by 1943 was a flight officer flying P-51 Mustangs over Germany from British bases – despite the fact that on his first few flights he was air sick! In his first eight missions Yeager shot down two German fighters, but on his ninth he was brought down by enemy flak and had to bail out. Fortunately he was picked up by the French resistance and eventually smuggled out to Spain. After that he should've gone home – in case he was shot down again and tortured to reveal the names of Resistance members. But Yeager fought this policy all the way up to General Eisenhower, and was eventually allowed into combat again.



► Pyramids are just one of the landscape features to admire – if you stay aloft long enough

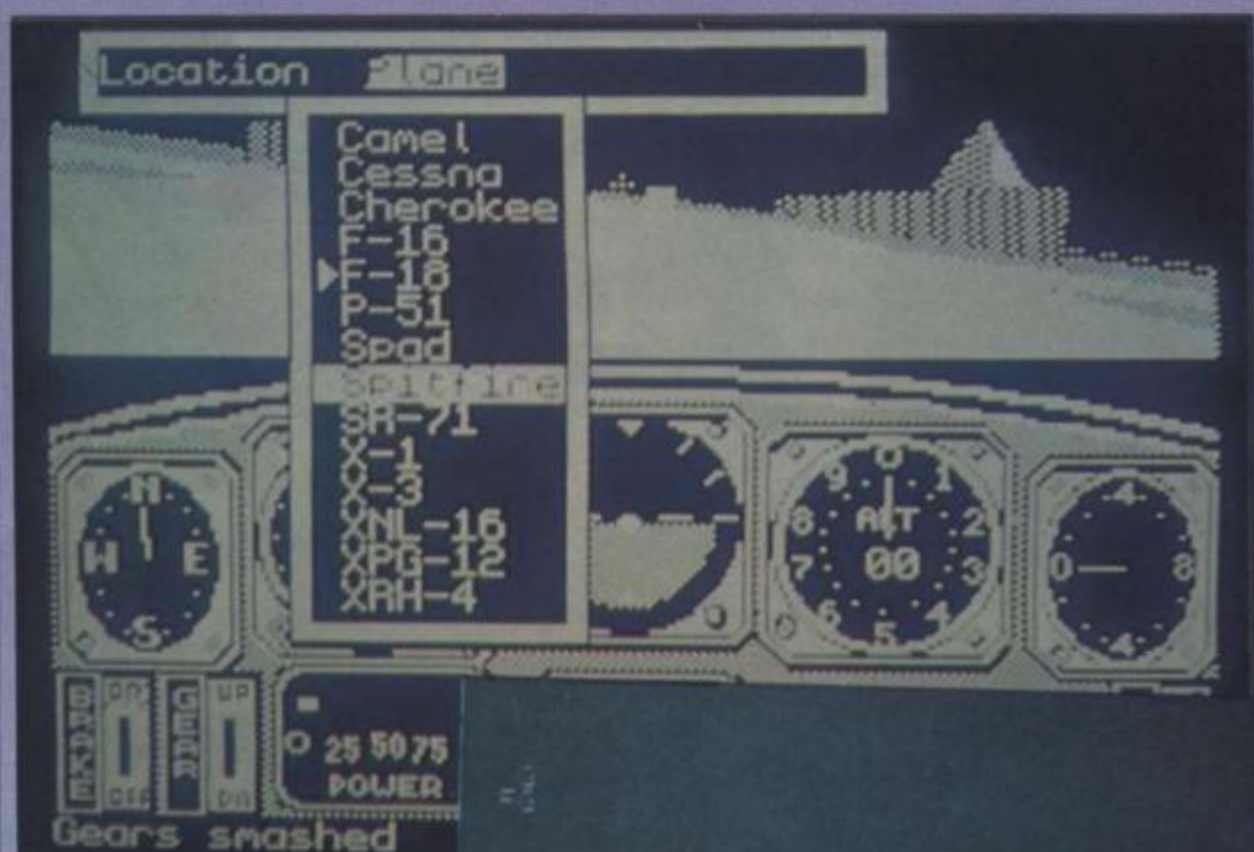




Despite promising to marry 'Glamorous Glennis', a beautiful brunette he'd met back in the States, Yeager was determined to have a good time while 'there were still a few girls to chase, a few bottles left undrunk, and more than likely a few Krauts to shoot at.'* If a pilot friend died, they just drank a little more. Thirteen pilots had died simply during basic training. But the excitement of battle proved addictive, it was 'the ultimate flying experience'. 'It's almost impossible to describe the feeling: it's as if you were one with that Mustang, an extension of the throttle . . . You were so wired into that airplane that you flew it to the limit of its specs, where firing your guns could cause a stall . . . Maximum power, lift, and manoeuvrability were achieved mostly by instinctive flying . . . Concentration was total . . . (Once) you set him . . . there was no way out . . . You picked your spot: slightly below, so you could pull up, lead him a little, and avoid being hit by metal when he disintegrated . . . There was no joy in killing someone, but real satisfaction when you outflew a guy and destroyed his machine.'*

CHUCK GOES HOME

By the end of the war, Yeager had thirteen and a half kills, including a Messerschmitt-262 jet. You'd expect after that he might want a quieter life, and indeed he asked to be assigned to an air base as close to home as possible. That base was Wright Field, Ohio, and it was crammed with aircraft waiting to be test flown. Yeager didn't apply to be a test pilot, he lacked the academic background, but instead became an assistant maintenance officer - in charge of checking out repaired aircraft. Yet ironically, because the early jets were so unreliable, Yeager spent more time flying them than the test pilots. Later he would fly one of the jets at air displays, and because of his mechanical knowledge could fix the planes and bring them back. Most pilots left their inevitably malfunctioning aircraft at the air show. This came to the attention of the head of the flight test division. When he was offered the opportunity of becoming a test pilot Yeager didn't hesitate. Just a few months after he graduated from the test pilots'



► Some of the planes you can fly (or crash, in most cases)

school he was selected to be the prime pilot for the X-1 project. At that time there were plenty of scientists and engineers who believed no aircraft would be able to fly faster than the speed of sound - the shockwaves would destroy any aircraft. In 1947 a famous British test pilot, Geoffrey De Havilland Jr, had died when his aircraft had disintegrated in a dive trying to break the barrier. As a result the British had closed down their supersonic experiments.

The American project to beat the sound barrier was the X-1. This was a small aircraft designed to be carried aloft by a B-29 bomber, then dropped at altitude and the rocket engines ignited. It was shaped like .50 calibre machine-gun bullet since this was a shape known to be stable at supersonic speeds. The aircraft had been built by the Bell Corporation and it was they who were paying a civilian test pilot to fly it. At that time it wasn't thought right to ask a military pilot to take the risks for his normal wages. But the civilian pilot involved, Slick Goodlin, had only contracted to take the X-1 to .8 Mach (80% of the speed of sound). To go further he wanted \$150,000,



▲ Coming in to land with Chuck giving advice in Flight Instruction mode

which Bell refused to pay. Annoyed by the delays the air force stepped in with Yeager and Co.

Apart from a bit of high spirits on the first flight - dropping down to 100 metres above the runway and igniting the main engines - the programme proceeded smoothly enough. And an inevitable part of the routine was Pancho's, a local bar frequented mainly by test pilots. According to Wolfe 'Flying & Drinking, Drinking & Driving' were part of the military tradition. But since Muroc was so primitive, horses took the place of cars.

On the night before the big supersonic flight Yeager went for a race with his wife, Glennis. Of course Yeager fell, but rather than report to an air force doctor

he went to a nearby town where a local doctor strapped up two broken ribs and told him to avoid moving his right arm for two months.

Nevertheless Yeager had his wife drive him to the air base. He got a friend to give him a stick to close the cockpit door, and the mission began . . .

. . . The B-29 takes off and at seven thousand feet Yeager climbs down through the bomb bay into the X-1. At 26,000 feet the B-29 goes into a dive, then pulls up and releases the X-1 so that it sails upwards like a tossed bomb. The rockets ignite and the X-1 zooms upwards at a 45° angle. At Mach .87 severe buffeting begins, but Yeager keeps on and soon after the machometer needle goes off the scale and a sonic boom echoes





over the desert . . .

It was five months or so however, before the news was made public and Yeager received practically every aviation award going. By that time he'd gone on to testing other vehicles. He flew the USAF's first swept-

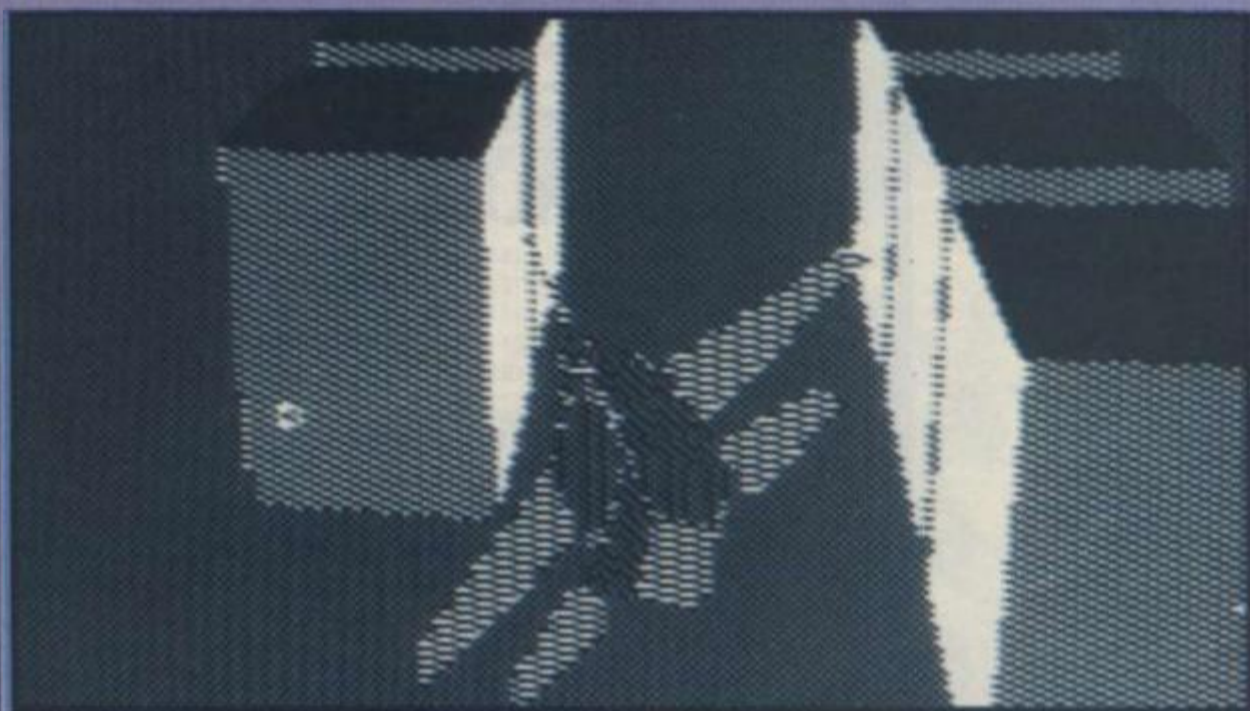
school where military pilots were trained to be astronauts. During the Vietnam war he flew 127 combat missions, and went on to reach the rank of brigadier general before retiring. But he still flies supersonic aircraft, for the sheer fun.

the second introduces more advanced manoeuvres like power off stalls. The third level teaches acrobatic stunts and obstacles courses, and like all the other levels features instructions from Yeager. On 128K machines there will also be the

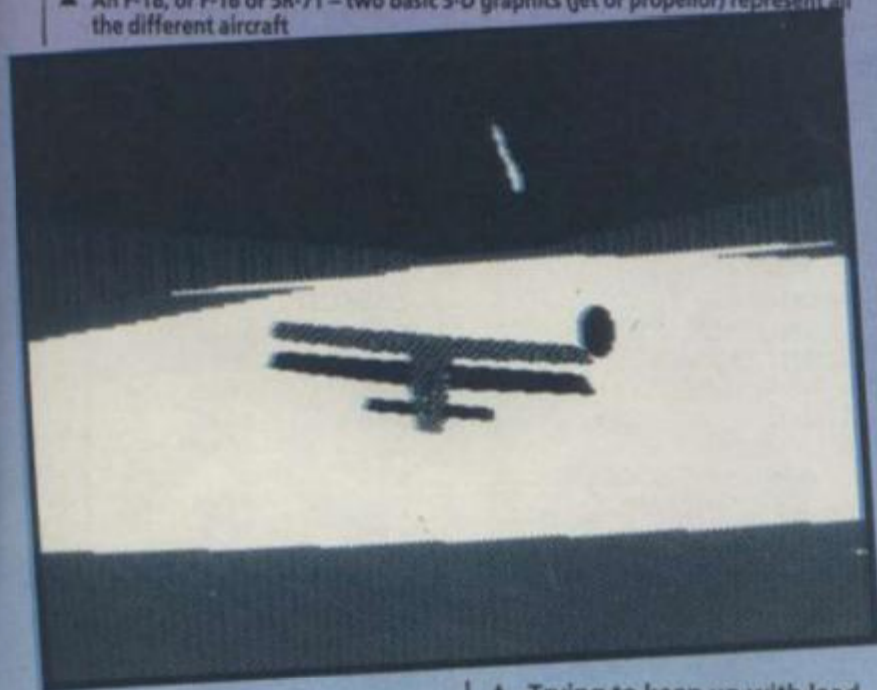
by Stefan Walker, a twenty-year-old whose first job was with MicroProse in the USA. After writing Z80 versions of *Pirates* there, and doing some work on *Project: Stealth Fighter*, Stefan returned to Britain to work for Electronic Arts. *AFT* is his first game for them and is a conversion of the Apple game (previously the most recent version of the program).

The bulk of the Z80 program was written on the Amstrad, with most of the code, except the graphics, being ported across to the Spectrum game. The Amstrad version runs about two frames faster than the relatively-quick C64 game, and the Spectrum a touch faster still. This means a lot more realism, requiring even quicker responses.

Chuck Yeager's *Advanced Flight Trainer* should be out soon for £8.95 on cassette, and £14.95 on disk . . .



▲ An F-18, or F-16 or SR-71 - two basic 3-D graphics (jet or propellor) represent all the different aircraft



▲ Trying to keep up with lead plane's smoke trail in Formation Flying

wing bomber, the B-47, and helped teach the Strategic Air Command how to do air-to-air refuelling. In 1954 he test flew a defector's MiG-15 - the Russians' prime weapon in the Korean War - in tropical storms to provide some extremely valuable information. During the mid-Fifties he was in Germany, training F-86 fighter squadrons how to do quick alerts. In 1962 he was Commandant of the

CHUCK AND COMPUTERS

Chuck Yeager's Advanced Flight Trainer is a unique game in that it's designed to allow players to test a wide range of aircraft against specifications included in the manual, simulating the work of a test pilot. The first level of the solid 3-D game teaches basic flying skills such as take-offs and landing, while

capability to do formation flying and race a computer-controlled aircraft.

The 14 aircraft waiting in the hangers cover a wide range; there's light civilian aircraft (the Cessna 172 and Cherokee), WWI biplanes (the Sopwith Camel and Spad XIII), WWII fighters (the Spitfire and P-51 Mustang), modern combat jets (the F-16 and F-18), experimental jets (the X-1, X-3 and unbuilt XPG-12, XRH-4 and XNL-16) and even the world's fastest reconnaissance jet; the SR-71 Blackbird. These are all simulated with great attention to detail, with the SR-71 taking forever to make a turn and the X-1 being rather difficult to make take-offs in.

All the flying takes place over a wraparound, solid 3-D landscape including features such as pyramids, tower blocks swamps and, of course, two runways. Making a rather large hole in said landscape is made easier by red-outs and black-outs; when G-forces make you lose consciousness blanking out the screen. There's also the possibility of you getting locked into some fatal spins!

The programming of the Z80 versions of *Chuck Yeager's Advanced Flight Trainer* was begun about eight months ago

YEAGER



SOURCE MATERIAL

The above feature was written with reference to two great books. Firstly there's *The Right Stuff*, Tom Wolfe's brilliant account of the early days of the US manned space programme with two chapters on General Yeager. Then there's Yeager's own action-packed autobiography simply called *Yeager*, written with Leo Janus. All quotes, signified by *, are excerpts from Yeager.

The Right Stuff is a Black Swan Book available for £4.99 and *Yeager* is an Arrow Book available for £3.95.

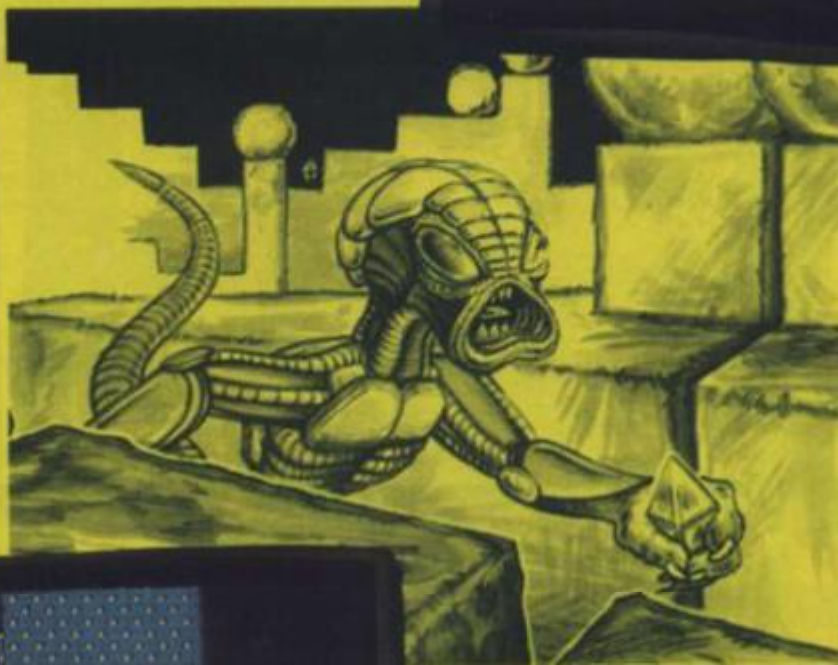


REPTON MANIA

SUPERIOR ■ Gil Johnson-Smith ■ £7.95/£12.95

According to Superior, on the BBC Micro *Repton Mania* is even more popular than *Elite!* In fact, the original *Repton* has been followed by six sequels together with *Repton* mugs, pens and cuddly toys! Even allowing for the weird nature of BBC owners it's obvious that the brightly dressed lizard is a bit special.

The introduction of *Repton* onto the Spectrum is via the bundling of *Repton 1* and *Repton 2* on a single tape or disk. *Repton 1* is by far the easiest to start with, it's made up of 12 caverns and when you complete one you get the password for the next. To



fast monsters makes for a really compelling game.

Repton 2 suffers from the same presentational problems as the original, but additional features such as transporters, meteors and skulls add variety, livening things up. The main difference though, is in gameplay – instead of there being 12 caverns there's just one immense puzzle, consisting of 16 levels linked by transporters. To complete it you have to collect 4744 earth sections, 42 jigsaw pieces, 1634 diamonds, kill all 18 monsters (by dropping boulders on them) and lots more besides, all without making a single mistake!

At first *Repton Mania* looks drastically over-priced, but once you begin to play the game it becomes apparent you get more than enough gameplay for your money. Unlike most blast-'em-ups this could easily keep you playing for months on end, so if you really do prize playability over graphics look out for the lizard.

STUART, 1.8.79%

without that boulder sealing off my exit? On the first cavern, puzzles can be solved instinctively, but later on a little thinking is necessary when safes (which need keys to be opened) and eggs (if they fall monsters appear) are added. On eight of the caverns a map will appear when fire is pressed, on the final four it won't.

Repton 1 duplicates much of the addictive gameplay of *Boulderdash*, but lacks some of that game's inventiveness and graphic charm. Whereas in *Boulderdash* the diamonds have a greed-inspiring sheen, here they're unattractive and blocky. Even cruder is the large lizard itself, which has only about three frames of animation moving sideways. Sound is limited to a blip when you collect something and a simple tune on the front end. By way of compensation scrolling is fast and perfectly smooth. But if the generally disappointing presentation makes getting started difficult, once you've begun playing, stopping is extremely hard. The combination of time limits, tough puzzles and

complete a cavern you have to run about collecting all the diamonds before the time limit runs out. To start off with there's just the diamonds, the earth stuff you move through, monsters and

boulders (which crush Repton if they fall on him).

While swift responses are vital to avoid the monsters, the heart of the game is solving the puzzles, eg how do I get the diamond

NICK I must admit that I was truly shocked when the first two *Repton* games sauntered into the CRASH office. I played them on the BBC ages ago but couldn't get very far on either (probably because the teachers at school kept kicking me off the computer!). But having now played them for longer I must admit that *Repton* is quite good fun. The graphics are basically abysmal and sound isn't much better with an ancient tune stuck on the front end and minimal effects throughout the game. But the gameplay is addictive and the frustration of dying at a critical moment or dislodging a vital piece of rock will keep you playing for ages. Both games could definitely have been better presented and the graphics and sound leave much to be desired. But as they stand, they should provide enjoyment for quite some time.

71%

Fascinating, addictive gameplay more than makes up for the lacklustre presentation.

PRESENTATION	59%
GRAPHICS	58%
SOUND	35%
PLAYABILITY	79%
ADDICTIVE QUALITIES	78%

OVERALL 75%

RATING



VINDICATORS

DOMARK ■ CONSULT COMPUTER SYSTEMS
 ■ £9.99/£14.99

Flippin' typical isn't it, you beat the aliens to a charred lump in one game and they or their relatives are back causing aggro in another. Take *Vindicators* for example, set in the year 2525 you're a brave space cadet on routine patrol when you encounter an alien fleet. Fourteen battle stations are just about to invade Earth – your job is to go through them one by one

MIKE This is the most boring game I've played for ages. The graphics are mundane and uninteresting, sound is minimal, and there is hardly any variation in the gameplay. As a full price game it is extremely poor value for money. It's very easy to play; one game can last for ages; so the addictivity is a tiny insignificant speck of nothingness. A definite no-no. **39%**

destroying the control centre of each.

One or two players can participate simultaneously in this battle to become the Earth's saviour. And the first task is to decide whether to begin on level one, two or three (easy, difficult or

simply impossible). Once this is settled it's on with the show, what's that? . . . what do you get for protection? Well, we ain't likely to send you out there with nothing. Cue vast SR88 Strategic Battle Tanks rumbling onto the scene. These mothers are heavily armed and armoured, and will stand up to most of the flak the aliens throw at you.

Yes, I'm afraid the aliens are heavily armed too. Battle tanks similar to ours patrol each level, and there's fixed gun emplacements, mines and force

field generators. Another problem is that your tank guzzles a large amount of fuel (about five gallons to the mile) so look out for supplies or it's game over. Also littering the ground are stars – these can be traded at the end of the current level for a variety of custom weapons and add-ons.

Sad to say I'm not overly impressed by this, mainly because of the rather juddery scrolling and some graphical glitches, like seeing the floor tiles through your tank and blank spaces sometimes appearing on the tiles when objects are picked up. On the plus side the game is quite playable – the enemy tanks, turrets, mines etc present a stiff challenge, but there's nothing special here.

MARK **59%**



▲ Avoid contact with those forcefield generators at all costs

PRESENTATION	54%
GRAPHICS	60%
SOUND	52%
PLAYABILITY	59%
ADDICTIVE QUALITIES	53%
OVERALL	49%

RATING

BUTCHER HILL

GREMLIN ■ IMAGITEC DESIGN ■ £7.99/£12.99

Don't push me! I might just go and see a Sylvester Stallone movie – arrrgggghh! You see, I was down in 'Nam a few years ago and my mind is still taunted by horrific memories. So when I discovered that some American soldiers were still being held hostage, I volunteered to join the rescue mission.

The hostages are being held in a prison camp at the base of Butcher Hill, slap bang in the middle of a dense jungle. Before my mates jump in and rescue them I've got to knock out the camp's radio. But first I've got to get there in my flimsy inflatable boat. Reeds cause the boat to go out of control, rocks bounce it out of the the water and colliding with the river banks reduces stamina. And that's not mentioning the military hazards, like mines and enemy aircraft. Fortunately stamina can be boosted by

▶ War is hell, and you're about to become the latest victim

MIKE I'm afraid Gremlin have come up with a bit of turkey here, guys. *Butcher Hill* is an extremely badly presented game – the first section is a mass of messy colour; the second is simply monotonous greenness! Probably the worst thing about the game is the awful boredom that sets in during the first level. It just goes on and on and on, with very little demanding action – most of it is simply spent waiting for the little yellow jetty! Still, if you don't mind bad presentation, and you've got an infinite supply of Pro-Plus (to keep you awake), you might find yourself actually getting something out of *Butcher Hill*. But I'm afraid I didn't. **48%**

collecting red barrels, while other barrels provide extra ammo to shoot mines or save for later

stages. Being a Vietnam vet this is a ridiculously easy section, which goes on far too long with very

unattractive graphics.

If I manage to keep awake long enough to reach a jetty, I can land and continue my mission on foot. A previously collected compass helps me to navigate through dense jungle (viewed in first-person perspective 3-D). On the way to the enemy camp, I must keep an eye out for enemy soldiers and the odd land mine. I can also attack enemy tanks and hide-outs to collect grenades and ammo – vital for the final stage where I must blow up the enemy huts.

The jungle sections are in fact pretty tough, if you don't get shot you can easily run out of ammo. Mapping is vital but considering the military scenario, there isn't really enough shooting. And if you aren't looking for arcade action, there's little else worth finding in *Butcher Hill*.

PHIL **53%**



Gameplay is simple and monotonous; as is presentation. A mediocre military sim.

PRESENTATION	48%
GRAPHICS	50%
SOUND	68%
PLAYABILITY	60%
ADDICTIVE QUALITIES	48%
OVERALL	50%

RATING

SANXION

THALAMUS ■ DAVE THOMPSON ■ £8.99/£12.99



A new Cold War has begun, the Americans and Russians are at each other's throats, and when the USA's 'Star Wars' satellites malfunction the world teeters on the brink of nuclear war. Then there's a crash in the Arctic Circle - is it the Soviet spaceship responsible for the malfunction? Top NASA scientists are rushed to the crash site. A blizzard is blowing but it doesn't take too long to decide the weird metals, and green, scaly crew aren't Russian. Alien datafiles are swiftly translated.

It turns out the aliens are part of a vast galactic empire which

has been watching Earth for centuries. As Mankind has become ever more technologically advanced, the aliens have become increasingly worried. To prevent any challenge to their empire the alien despatched a Culture Technician to manipulate Mankind into a nuclear apocalypse. The 'Star Wars' malfunction was the aliens' latest dirty trick.

Somewhat concerned by this the Americans have urgent talks with the Russians, and together the two superpower set up Project Damocles. Ripping off the alien ship's hi-tech a fleet of Sanxion

spaceships were built to protect Earth against the Galactic hordes. Needless to say if the game were genuinely realistic the Sanxion force wouldn't have a chance...

... and they don't. Aliens zoom in at great speed, pump out tons of very fast bullets and often take a lot of hits to destroy. No-one's

NICK Well, this is Thalamus's first release on the Spectrum and it's pretty darn good. All the graphics are well animated and look good despite being monochromatic. That is until you encounter the first wave of aliens! Your first handful of goes won't get you anywhere because the aliens are just thrown at you and come whizzing past without hardly any warning. The only way you can get anywhere is by memorising the alien formations and the directions they come. 128K and 48K versions both have reasonable tunes and for some unknown reason the 48K game has more sound effects than its 128K counterpart. *Sanxion* may be excruciatingly difficult at first but things soon get better and the addictive qualities vastly improve. **84%**

THE SPECTRUM REMIX

MIKE The C64 version of *Sanxion* was an ancient (and excellent) beast, and I've waited long enough for the conversion! Now it's here, and every bit as good as I hoped. The only major problem is the difficulty level, which is a bit high, to say the least! Still, this is only good for the lastability... It's also a pity the background colours don't change but the graphic characters are very well defined, and playability is high. My favourite feature though, is the absolutely superb 128K title tunes. This is a good value shoot-'em-up - buy it! **89%**

going to save Earth this time without lots and lots of practice learning the alien attack patterns.

Graphical presentation isn't too impressive to start with, all the action's in monochrome, but the backgrounds are nicely detailed, the ship reacts as speedily as you could want (I wish the same could be said for my hand) and all twelve levels are crammed into a single 48K load. Sound effects are a bit sparse, but the title music is good, with 128K owners having a different version of the program complete with two long, and excellent tunes.

Sanxion's only really novel feature is the overhead scanner, which shows a bigger part of the play area, acting as a warning of attack. Unfortunately it doesn't show whether the aliens are grouped high or low, which is often crucial. All you have to fight back is a single laser cannon, which fires slightly faster if you collect a 'P' icon. At the end of each level there's the obligatory super-alien. Kill him with plenty of seconds left on the timer and you get lots of bonus points.

This is a very fast and hard shoot-'em-up, which should keep you tearing out your hair for ages.

MARK 83%

Fast, ferociously difficult and very playable

PRESENTATION	85%
GRAPHICS	84%
SOUND	85%
PLAYABILITY	83%
ADDICTIVE QUALITIES	84%
OVERALL	85%

RATING



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DTP



Who said fairies don't exist? Don't believe a word of it! Well, actually, they won't exist for much longer, not if the evil, wicked and generally not particularly cuddly Queen has her way. In a fit of quite understandable outrage at the unbearably loveable fairies, she's decided that the only sensible course of action is to kidnap the lot of them. Quite right too.

But having performed this act of utterly justifiable nastiness, the entire land falls into a horrid darkness, the crops fail, the frogs get plague, Skippy fails his 'A' levels, etc. etc. Anyway, the upshot of all this is that you're

▲ Shoot the eggs before they land otherwise they hatch some very vicious flies

supposed to free all these disgustingly naff little fairy-warys so as they can go round making

the land a happy place to live again. If you fail, darkness will reign for ever, and evil will penetrate the very heart of the

▲ Stormlord receives the fairies' gratitude on the bonus screen

land blah blah blah.

On each level, there are a five fairies and by jumping on top of them, Stormlord frees them from the spell of the Queen (sounds a



◀ A fairy patiently waits to be jumped on at the top left of the screen

NICK Raf Cecco has gone and done it again folks! Not content with writing two fabberooony CRASH Smashes, namely *Exolon* and *Cyberoid*, he now makes it a hat trick with *Stormlord*. The game has all the polished graphics and sound that we have come to expect from Mr Cecco. And a simple but enjoyable concept makes it addictive and immensely playable. All the animation is smooth and there's a lot of it to make each level incredibly varied. The sound complements the game well with excellent tunes and sound effects, some of which are quite funny. This is a totally brilliant game, there is so much in it and it is set at just the right difficulty level to give you hours and hours of enjoyment. Get down to that software shop and get it NOW!

91%



▲ Another puzzle for the Stormlord, how to reach the key without being fatally stung

bit dubious, but if that's how Mr Cecco's mind works, then that's fine by me). Dotted around the landscape are lots and lots of interesting things which help you progress; things like springboards which fling you

millions of miles (sort of) across the sky, and pots of honey which attract bees (and Pooh Bears, but I haven't found any of them in *Stormlord*).

Getting in the way, though, are Venus fly traps (usually stuck underneath a disappearing platform to catch you unawares), little plants which spit death at you, acid rain which kills, and Marks, who spoil the fun by telling

MARK The game of the Log finally arrives and it's totally brilliant. The attention to detail is quite exceptional, from the winking fairy on the title screen (no boob jokes please, Phil) to the superb in-game sound effects. The scrolling of the marvellous graphics really is great, and this has to be the prettiest game we've seen in ages. My only complaint is that the game is so hard. The dragons in particular seem unbeatable, although with practice you can get past them without losing a life. This is the sort of game we used to expect from Ultimate, and makes as good use of the Spectrum as can be imagined. Don't miss it!
93%

you everything you have to do next (however, you might not have this problem at home; we suspect it might be limited to the CRASH office)

game alone. The graphics are of the highest quality, well animated and beautifully coloured. And what's more they scroll perfectly smoothly making you wonder why anyone ever wrote a flickscreen arcade/adventure. Sound is excellent, with a good title tune and some wonderful in-game effects. *Stormlord* is immensely playable, highly addictive and a great CRASH Smash.

MIKE 90%



Raf Cecco does it again, the best looking game for ages and extremely playable too

PRESENTATION	89%
GRAPHICS	93%
SOUND	92%
PLAYABILITY	91%
ADDICTIVE QUALITIES	91%
OVERALL	91%

RATING



VIGILANTE

US GOLD ■ EMERALD SOFTWARE ■ £8.99/£12.99

Madonna's been kidnapped and the villains responsible are more violent than Sean Penn and crazier than Iran's mad mullahs. While the pop world panics, music lovers applaud and the police wonder where to bring our hero takes the law into his own hands.

The first level of this Irem coin-op conversion has the vigilante strolling down a very quiet and peaceful-looking street. The bover boys soon arrive though, fully equipped with lead piping lead piping, knives, shuriken stars etc. To avoid getting duffed up, the hero must punch and kick the heck out of the thugs. Although initially unarmed, he can pick up a nunchukka (two pieces of wood joined by a bicycle chain) to really bash the baddies. But watch that energy bar as even the vigilante takes a trip to rigor mortis land if hit too many times. A timer is also in operation – ninety nine seconds are allowed to reach the end of level where a big fatso waits to give him a good pounding.

Beat him and the multiloop gives four more levels, including junkyards, bridges, another street

scene and finally a construction site. And at the end of it all there's a tearful reunion with Madonna. I'm a great fan of thump-'em-

▼ Ninety-five seconds to go and in deep trouble

NICK There may be the odd spoilsport (Mike!) who will say that *Vigilante* looks and plays like *Renegade* and endless other titles. This may be true, but most of them never proved to be much of a challenge – unlike *Vigilante*! The enemies in each level don't vary too much with the occasional biker trying to run you down and nasty men with sticks beating you up, but there is a different hit man at the end of each level to give you a hard time just when you think you've finished. Colourful backdrops and detailed sprites boost up the graphics rating, and although sound leaves much to be desired, the game holds together well. *Vigilante* is definitely one of the best beat-'em-ups around. **85%**



▼ Who needs a dentist when Mr Vigilante is about?

up games and *Vigilante* is no exception. After playing the brilliant PC Engine version I couldn't wait to see what the

MIKE *Vigilante* has more than a slight similarity to a certain game called *Renegade*! That said, it's fun and addictive. Gameplay is excellent, though the content of a scrolling kick-'em-up game is obviously limited. It's quite difficult to play well; not too hard, but enough of a challenge to make it very addictive. The only real disappointment is the sound – FX aren't exactly overindulgent, and there's no music to speak of. But the graphics are very good – the colour/mono graphics option is useful (it also means I can't moan about the garishness or boringness of the colour!). *Vigilante* is a jolly good biff; value for your dosh if you didn't buy *Renegade*. If you did, then it might not be such a wise investment, but still well worth thinking about. **84%**

Specy could do. I'm pleased to report that this game has retained most of the original's pleasantly frustrating gameplay. At the start, the time limit is easy to beat, but as you get deeper into the action the sheer number of enemies slows you down. I wasn't too pleased with Ocean's attempt at *Dragon Ninja* (one of my other fave beat-'em-ups), so it's a case of well done US Gold!

MARK **88%**



Excellent graphics and challenging gameplay make this an addictive beat-'em up.

PRESENTATION	82%
GRAPHICS	82%
SOUND	57%
PLAYABILITY	86%
ADDICTIVE QUALITIES	84%
OVERALL	86%

RATING

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*Kenny
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Cognito

PREVIEW



Gilbert the Alien is the green and rather-snotty star of *Get Fresh* and *Gilbert's Fridge*. You knew that, but did you know he's a Drillian? Any fans of The Green and Snotty One will also know he can't keep his slimey mouth shut! His fellow Drillians are sick to the back teeth of his continual boasting and bragging about his Earth-bound experiences – and now he's got *another* contract. So to prevent him returning to Earth, the Drillians have hidden his vital parts (of his spacecraft). He can get them back, however, if he can beat them at their own (arcade) games. He's only 24 hours to do it before the contract is given to another superstar (yeeeeeah, Rat fans!). Help him in *Gilbert - Escape From Drill*, out now from Again Again at £9.99/£14.99.



Another of Capcom's hugely-successful coin-op games will soon be getting the **US Gold** treatment (say no more . . .) when *Forgotten Worlds* blasts onto your computer screens in May. There ain't much of a storyline but what there is goes like this . . . Emperor Bios, the God of Destruction and Creator of Evil (blimey, I've met this guy before, haven't I?), has put together eight evil minions to kick the crap out of all-and-sundry who oppose the evil etc, etc. . . . One such place was a planet called Dust World. Two super warriors were created on Dust World by the tormented souls of the planet's inhabitants (or something like that, these Japanese translations are a bit iffy). So that's you and a friend blasting the hell out of Bios's minions – easy! Damage to the folding stuff . . . £8.99 cassette and £12.99 disk.





TIME 4.2

RPM

RPM

SCORE 12345678

L.T 13.72

Again, US Gold screech out of the Holford Way car park to bring you another racey automobile game, the follow-up to *Out Run*. Entitled *Out Run Europa* you, as the intrepid racer with the red Ferrari (lucky sod), and the beautiful blonde in the passenger seat (very lucky sod) race through the major capitals of the world, intent on winning the race. Since this isn't an arcade conversion, US Gold have been free to make the gameplay a bit more involved with varying weather conditions and lots of other special feature. Fortunately, *Out Run Europa* (programmed by Probe Software) won't cost as much as a brand new motor (John). Released in June it will set you back £8.99 cassette and £12.99 disk. And as US Gold are so proud of the game's sprites, they threatened to hold Tiddles the office cat hostage if we don't show them. So here's a classic animation sequence, and why not?



'Ere they come, there they go, where've they gone? . . . Hang about this new footy game is from the masters of the flight simulation. Yep, **MicroProse** are set to release *MicroProse Soccer* (title gives it away, doesn't it . . .) any day now. It follows the usual trend of such games with eleven players on each team booting a leather ball around a nicely-mown pitch (enter Phil King explanation here . . .). Will the F-14s be able to resist an appearance? Has 'Wild Bill' Stealey finally hung up his flying helmet and donned a pair of football boots? All will be revealed.

MICROPROSE SOCCER (SES)



PLAYER 1 00:147

ARGENTINA	+	0	0	USSR	+	0	0
POLAND	+	0	0	URUGUAY	+	0	0
IRELAND	+	0	0	HUNGARY	+	0	0
ALGERIA	+	0	0	USA	+	0	0
GROUP C				GROUP D			
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GROUP E				GROUP F			
HOLLAND	+	0	0	N. GERMANY	+	0	0
ENGLAND	+	0	0	DENMARK	+	0	0
CHILE	+	0	0	N. IRELAND	+	0	0
CANADA	+	0	0	N. ZEALAND	+	0	0

DAY 1 - ROUND ONE MATCH



Thankfully, we're assured that *Thunderbirds* from *Grandslam*, isn't even half as irritating as Fuzzbox's Top Ten record, based on the Sixties characters. There are disasters to avert and these are just the guys to do it. Jeff Tracey and his team of International Rescuers are back for their second outing on the Spectrum (remember Firebird's puzzle game?) in April. The puppets-on-strings are available in pixelated form for £8.95/£12.95. We guarantee you won't be able to see the wires.

FULL WARNING STATUS: CONDITION RED

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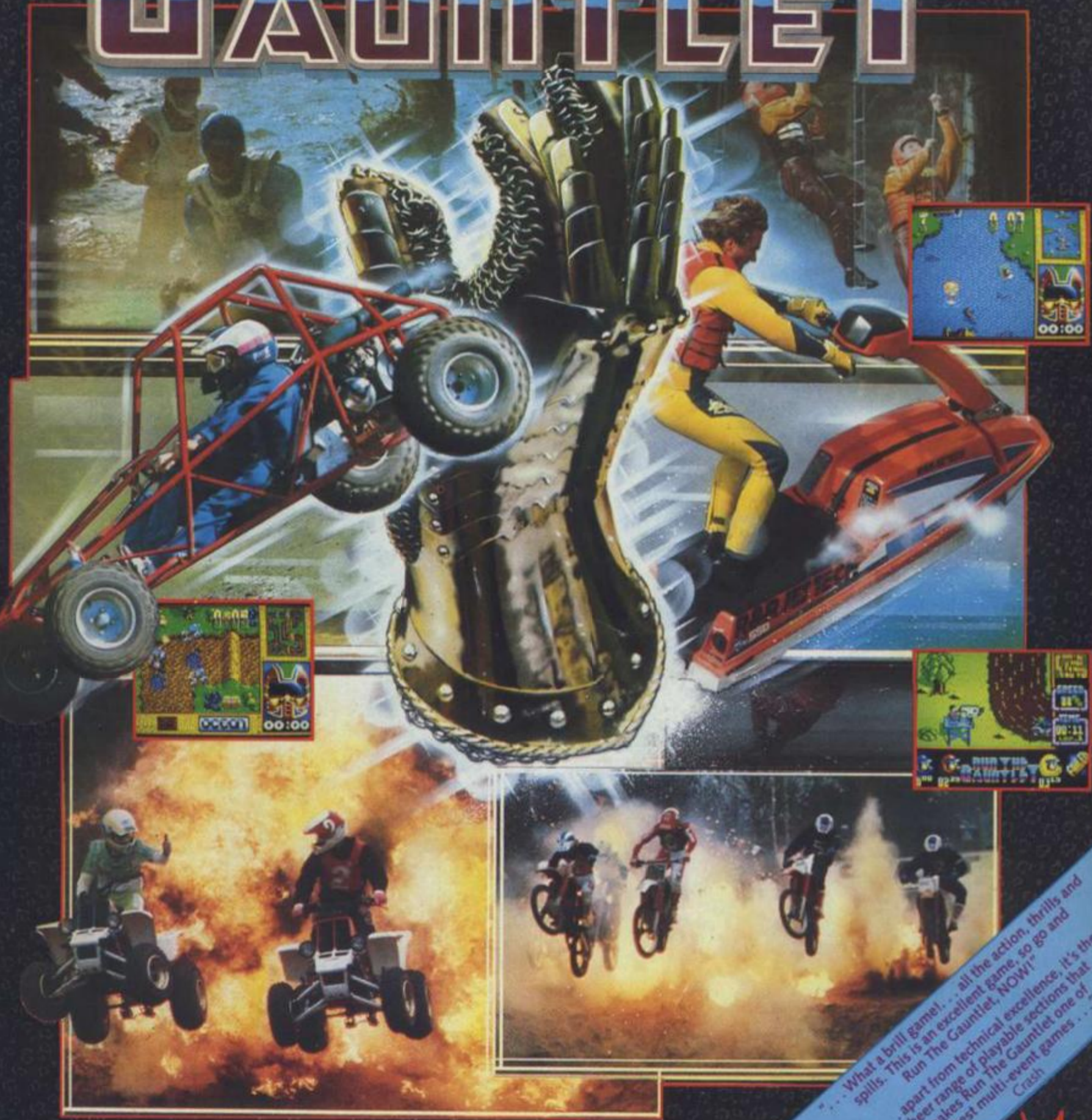
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