

The Games machine

COMPUTER LEISURE ENTERTAINMENT

TX:021 AUGUST 1989

The Most Exciting
Game in Town...

DIGITISING!

**TGM
LAB
REPORT**

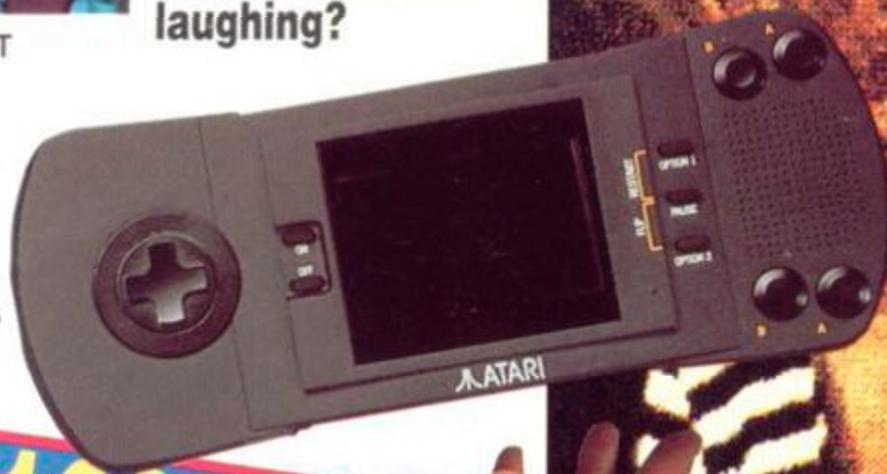
How to digitise from video, camcorders, slides, you name it — an exciting first from the newly created TGM Labs — we try 'em, you benefit!



The
BATMAN
in-depth...

Ocean's game, Burton's film all explained, but why's The Joker laughing?

THE TOP ALL-FORMAT
REVIEWS, PLUS
ESSENTIAL
WORDPROCESSING,
PRINTERS, PBM,
ADVENTURE GAMES
AND VDU HEALTH —
ALL IN THIS MONTH'S
PACKED ISSUE



WIN £1000 CASH!
in the 2nd great TGM Hotline Competition

The
Atari Hand-held is here!
See page 14



08

PLAYFUL



ROBOCOP™ & © ORION PICTURES CORP. ALL RIGHTS RESERVED.

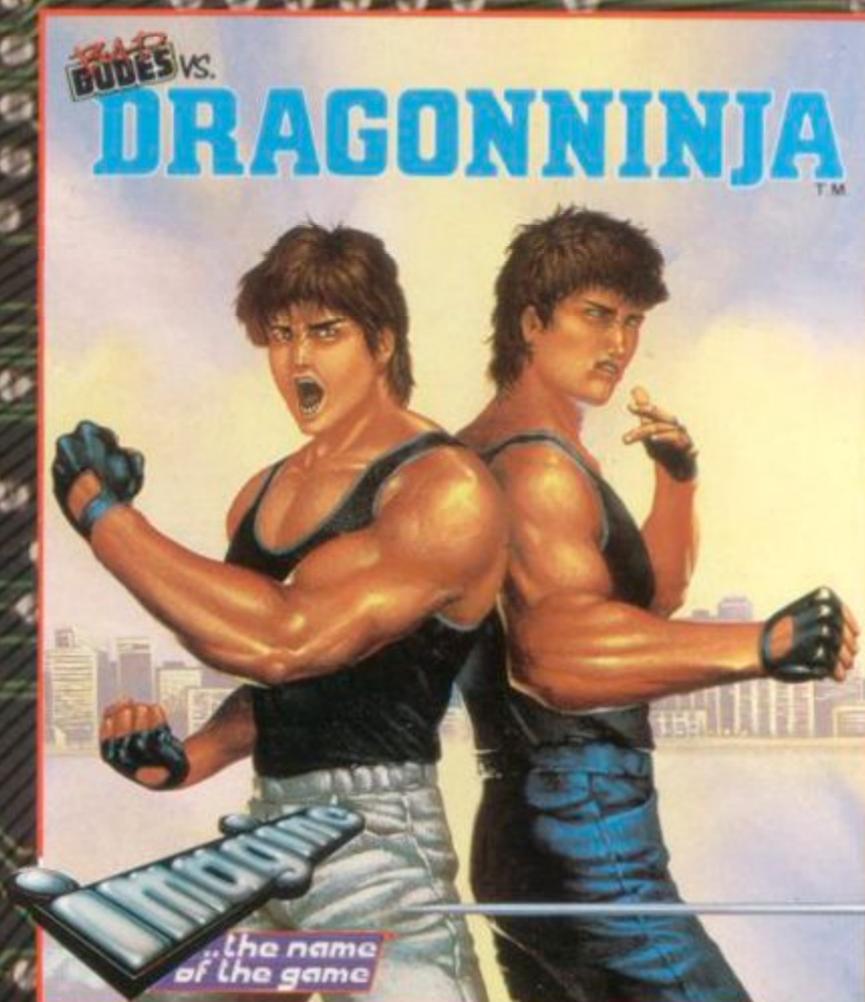


"the most playable and enjoyable licensed games to date"
New Computer Express 5 star

"The graphics are slick, the action is tough ... designed to keep you glued to your stick".
ZZAP Sizzler



"a popular movie license backed up by great game-play, an unbeatable formula - needless to say, I'd buy it ... miss this and you're missing the hottest game of the year".
ST Action



"A sure winner with the official conversion to the home computer".
The Games Machine

"There is more than enough action in this one to keep you coming back for more".
Ace

"a superb game with such addictive gameplay".
Computer Games Week FAB

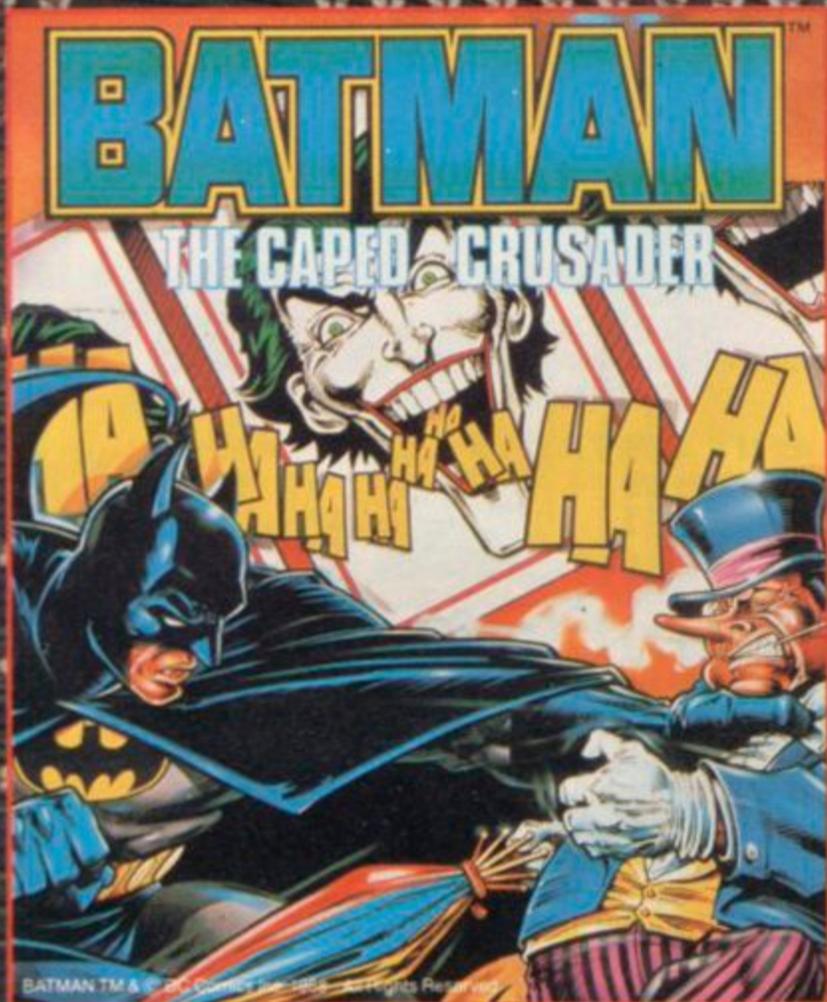


BATMAN

ATARI ST CBM AMIGA
£19.95 £24.95



INTELLIGENCE



"Special FX programmed the game and have done a great job, recreating the character of the originals with a hint of humour".

Amiga User Int.

"The characters and backgrounds are striking — each are superlative — the Amiga features a soundtrack in glorious remixed stereo".

The One

"polished in every aspect — from the humorous storyline to the end of the blasting".

The Games Machine Top Score

"... you're in for the time of your life ... fabulous 3D, hours of absorbing play — you name it, Voyager's got it. And that's not all: Ocean throw in a cassette soundtrack which has to be one of the most mind-blowing pieces of music I've ever heard".

BZAP Sizzler

"... scrolling 3D graphics, the most impressive I've seen on the ST ... a great arcade formula and clever graphics ... an excellent game that will keep you playing for quite some time".

ST Action



STAI



ATARI ST

CBM AMIGA

£19.99 **£24.99**

Ocean[®]

The Games machine

IN THIS ISSUE...

REGULARS

- 7 TGM NEWS AND PREVIEWS**
Stuff that happened — stuff that will, plus the definitive Batman preview: Ocean's game, Burton's film
- 26 ROBIN CANDY'S PLAYING TIPS**
Everything AND the last part of *Zak McKracken*
- 31 CENTRE BYTES**
It moves! And gets bigger! State-of-the-art with Amiga digitising. In-depth report on 16-bit wordprocessors plus printers at a budget. Famous horror novelist Ramsey Campbell on coping with wordprocessing. The New York Expo, plus all the usual Bytes Bits.
- 66 PLAY BY MAIL RETURNS**
John Woods (the 2nd) explains the rules
- 80 THE ADVENTURE COLUMN**
An expanded Paul Rigby checks out the exciting range of 'exportware' and the latest big adventures, strategy games and computer RPGs
- 87 REVIEW CATALOGUE**
All-format games hit the definitive Machine hotspot

FEATURES

- 14 HAND HELD AND LCD**
An exclusive report from Chicago on the new revolution in hand-held games consoles, plus Sam Tramiel's future vision for Atari and the role of LCD games
- 20 CES REPORT**
Marshal M Rosenthal catches up with the Batman and other assorted super-heroes at Chicago's big computer showcase
- 24 THE DANGERS OF VDUs**
Use a computer? Listen to Mel Croucher, it's a fright when it comes to the diseases you can catch
- 69 FANTASY GAMES**
John Woods (the 1st) gets into Games Workshop's RuneQuest and slays perps in the Judge Dredd RPG
- 70 AN IDIOT'S GUIDE TO...**
Programmers have planet-sized egos, says Ruth Pracy in this first of an irregular series which takes the lid off the computer world in a light-hearted way
- 76 POCKET VISION**
Mel Croucher's run down on the range of mini TVs and pocket video players you can find in Tottenham Crt Rd
- 79 OUR MAN IN JAPAN**
Up-to-date specs on consoles and software from the land that gave us cutesy characters, Shogun and Shusi

CENTERING THE BYTES

The traditional summer software slump is well and truly with us this month. Even the 16-bit sector, more than lively of late, has slowed to a trickle, but nonetheless, in this expanded TGM, you'll find more features than ever before.

For a start, we've moved Back Bytes to the middle of the magazine, so main features can take advantage of some colour — in this case a TGM Lab report on Amiga digitising and video applications. Games are important, but with the access of greater (and cheaper) memories on 16-bit machines and highly improved software at reasonable prices, users are seeing wider horizons for their computers and leisure time than zapping errant alien hordes. We also take a look at wordprocessing and printers, the first stage toward using DTP applications (a future TGM Lab exercise to watch out for).

Obviously enough, with it in the centre we can't call it 'Back Bytes' — Centre Bytes it is then, and if that smacks of Cenobites, you'd better be prepared for some real technical hell-raising in this and future issues...

But on the games front, all the hardware action recently has been in the States, centred on the Computer Electronics Show in Chicago. We have two reports: one general; one on the developing hand-held machine war, and the relevance it has for us here in Britain in what is still really a pre-Nintendo era — will they ever make the move?

WIN!

AN INDIANA JONES OUTFIT

US Gold have a fedora hat, bullwhip, Indy-style leather jacket and sweatshirt (no gun!), the game and poster, plus copies of the game and the Last Crusade book — just for you!

See page 68



AND...0898

Check out **page 72** because we've got another **£1,000 prize** for you this month on the TGM Hotline! just incredible! Yours for a phonecall... Are you going to be the lucky one this month? You could be...

£1,000

IN CASH!

THE ADVENTURE BEGINS WHEN RICK DANGEROUS, SUPER HERO AND PART TIME STAMP COLLECTOR IS IN DIRE PERIL. ARMED ONLY WITH HIS TRUSTY SIX SHOOTER, A STICK AND SOME DYNAMITE, RICK CRASH LANDS SOMEWHERE IN SOUTH AMERICA. HOW LONG HE CAN SURVIVE IS UP TO YOU.

RICK DANGEROUS IS AVAILABLE FOR SPECTRUM AND AMSTRAD, CASSETTE AND DISK PRICE £9.95, £14.95; COMMODORE 64, CASSETTE AND DISK PRICE £9.95, £12.95; ATARI ST, COMMODORE AMIGA AND IBM PRICE £24.95.



RICK DANGEROUS

© 1989 CORE DESIGN LTD.

FIREBIRD, UNIT 1, HAMPTON ROAD INDUSTRIAL ESTATE, TETBURY,
GLOS. TEL: 0666 504326.

NEWS 'N' PREVIEWS

STUFF THAT HAPPENED — STUFF THAT WILL

A PARADOX

ARCANA would like all TGM readers to understand that *Mars Cops* will not be available this month. But, it's not their fault!

Unfortunately, the programmer has done a bunk and walked out on the Bristol-based company, just two weeks before the game's release. Don't worry, though. *Mars Cops* is now planned for an early September release. And if you're really desperate you can travel abroad and buy it at the end of August. Now

the Future II: Paradox. Electric Dreams produced the original film, but still don't know whether they'll do the sequels (both *Back to the Future II* and *III* are being filmed at the same time). All the other major film releases have already been picked up. Indeed, the Activision/Electric Dreams partnership have great potential with *Ghostbusters II* and *Alien III*, for which they produced the original games. *Die Hard*, licensed by Activision last



Foxed: Michael J's back again, but on computer...? With two sequels no-one's yet vying for the licence, not even Electric Dreams who produced the first game



A touch late: you may just remember this preview picture from Issue Two of TGM — Arcana's *Mars Cops* was reckoned to be 'nearly ready'

there's a paradox.

Talking of paradoxes, it is still uncertain who will pick up the licence to the new Michael J Fox film, *Back to*

Christmas is still not out. It seems as if the Mediagenic household are waiting for the video release — aren't we all.

Talking of films, The Games

Machine recently attended a special preview showing of *Indiana Jones and the Last Crusade* (the computer games are coming from US Gold and Lucasfilm) and a private showing of the new Bond film, *Licence to Kill* (out now from Domark), at studio 007 in Pinewood Studios. Thanks go to both companies. However, Ocean, who have probably the most eagerly awaited licence of the year, probably won't have a *Batman* preview at all. It seems as if Warner Bros don't want any pre-viewing of the film. So it looks as if you'll see a lot of tired out journalists in the queues when it opens on August 11.

Arcade action for UK

Everybody wants to do it but nobody ever does it. What are we talking about, software houses and arcade games, of course. Somewhere amongst every software company's future plans is a section entitled arcade development. Very nice if you can get it.

And it finally seems that after Ultimate turned into Rare to produce the Razz board for arcade machines, everybody else is following suit.

American giants MicroProse, recently announced their intentions to form a subsidiary company, called MicroProse Games (MPG), dedicated to producing arcade products.

MPG plan to design and produce their own hardware as the equipment presently available is just not up to the power of the games they are trying to develop. MPG hope to release their first game in autumn of this year. It will most likely be a combat flight simulator, creating 60,000 polygons per second. An arcade flight simulator, developed from the research used in F-19 Stealth Fighter, is also planned.

More blood money

On our side of the Atlantic, Psygnosis are also planning to get into the arcade act — and the consoles and hand-held markets.

After their recent agreement with First Star, Psygnosis are now able to develop for all the formats you can find First Star games on — including coin-ops. That means Psygnosis may soon also be seen on the Sega, Nintendo and even the new Game Boy.

With more than 30 specialists, the Liverpool-based company hope to storm the console market in 1990, which they believe 'will really come into its own'.

ParSec packs pixel punch

And after *Mars Cops*, another of those stories that almost got away...

As promised in TGM007, all those years ago, Elmtech Computing have designed a revolutionary graphics board for the Atari ST (to released in the end of August), to make it into the super computer Atari promised it would be.

But Elmtech aren't limiting themselves to the ST. The ParSec Graphic Interface will also be available for the IBM

PC (September/October), Amiga (November) and possibly for the Apple Macintosh. We'll be having a full review next month. Sorry, but like over a year ago, there are no pictures yet. Until then here's a bit of the specification to whet your appetite.

The ParSec Graphic Interface comes in two forms: the 4768 (£460) and the 8768 (£920).

Resolution of 1024x768; colour palette 4096 (model

4768) or 16,777,216 (model 8768 — honest!); maximum colours onscreen 4096/196,608; and memory (video RAM) of 768K on both models.

It's supported by lots of utility software including an art, CAD/CAM, DTP, ray tracing and animation packages. There will also be some 'recreation software'. Elmtech also have plans for a Genlock device and a digitising module.

Can't wait...

Fun School 2 not left wing enough

Top-selling *Fun School 2* from Database has run into a bit of political pressure. The record-breaking school package — the first piece of educational software to enter the Gallup chart — has apparently been given the cold shoulder by left-wing educationalists who refuse to use the program as part of their teaching courses.

So infuriated was Tameside teacher Shelly Gibson that she decided to put pen to paper and ask Minister of Education, Kenneth Baker, to 'hit back against the bias of left-wing educationalists'.

Shelly, from Poplar Street Primary School, Audenshaw, wrote in mid-June to ask Mr Baker to include *Fun School 2*, released in January of this year, in the national teaching curriculum. As yet no reply has been received from the DoE.

But what are the objections to *Fun School 2*?

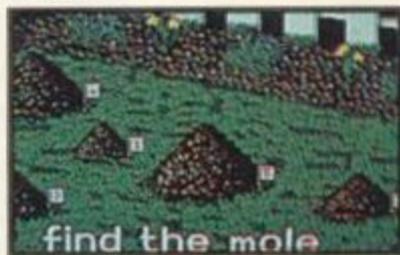
'What they don't like about it — apart from it being based on the 3Rs — is that it involves an element of competition,' says co-author Peter

Shelly Gibson sends Kenneth Baker a copy of *Fun School 2*, but moles in the government haven't reacted yet...

Davidson. 'One official in Greater Manchester considered it old-fashioned. But what can you expect from an authority where children at one school are required to play bongo drums during maths?'

But why's it so popular? What do the users think of it? 'The children love it,' says the primary school teacher. 'They are not only learning but having fun at the same time... The national curriculum states that more use should be made of Information Technology and that's exactly what *Fun School 2* does remarkably well.' And of Kenneth Baker? Well, the ball's in his court now, says Shelly.

Fun School 2 is available on BBC/Amstrad, Amstrad, Spectrum and C64 at £9.95 cass, £12.95 disk, and on the Atari ST, Amiga and IBM PC priced £19.95.



Cheap thrills

The recent Atari ST Show held at Alexandra House (June 23-25th) was a virtual treasure trove of bargains. Recently-released games were going for budget prices, while you could pick up a 520STFM for as little as £200. The soon-to-be-withdrawn Multiface ST was also heavily discounted (new copyright laws come into force next month). New products launched included a new range of utilities from Hi-Soft, K-Spread 3 a spreadsheet from Kuma and The Creator, a cartoon generator, from Signa Publishing. Atari were conspicuous in their absence perhaps biding their time until the launch of the rumoured STE. Undoubtedly star of the show was Elmtech's soon-to-be-released ParSec graphics system (see ParSec packs pixel punch). For more details on new ST products see Toolbox (page 50).

Barbar's back

With Palace's *Barbarian II* just about to hit the streets Psygnosis have finally got around to producing their own *Barbarian II*. Their original *Barbarian* was that extremely pretty, icon-controlled hack-'n'-slay arcade adventure which wowed 16-bit over a year ago now. The sequel features an armoured Hegor taking on skeletons, bulls, magicians and extremely over-weight dragons. Full-screen scrolling and lots of puzzles make this a mouth-watering prospect for ST and Amiga owners in September. (Amiga screen.)

The Chariot Game

It's going to be called something else when it appears in



Barbarian II The Second (C64), and below, someone more civilized — a Psygnosis charioteer

September, but it'll undoubtedly still have lots of chariots racing around in glorious 3-D with sampled horses' hooves sounds. Intended to show Cinemaware how to really do interactive movies it features a climatic stadium race. Another Psygnosis ST and Amiga (pictured) release.



Central computer show

The first ever computer show to be held in Shrewsbury, Shropshire, takes place on September 1-2, with more than 30 exhibitors from all over the Midlands and Wales. 'There are only a handful of stands left,' says David Pletts, boss of The Computer Room, sponsors of this new event. 'In the past people in this area have had to travel to Birmingham, Manchester and London. This is very inconvenient, particularly for those who live in Wales. Now, for the first time, they're getting a computer show on their own doorstep.'

The Shrewsbury Computer Show will feature games, serious software, and home and business computers. The SCS will also be showing computer hardware and software for the handicapped, with demonstrations.

SCS admission in the Music Hall, Shrewsbury, is free. Contact David Pletts on (0743) 231172 for more information.

HAMing it up

From Imageworks comes *DDT*, a zany game set on the planet Shogglewaggle. Here the most profitable profession is that of Dynamic Debugger (ie disposing of the variety of nasty bugs that infest Shogglewaggle). So armed with a cork-firing champagne bottle, a vacuum cleaner, a DDT gun and battery you must tackle ten worlds infested with a variety of pests. The Amiga version is one of the first, if not THE first game to exploit (ie, animate and scroll) the Hold And Modify mode, with over 4000 colours on screen! Watch out for *DDT* later in the year when it will be available on Amiga, Atari ST, C64 and PC. (Amiga Screen)

Compilation corner

Summer's here. The sun's beating down, and who wants to play a computer game? No many people it seems, for summer is notoriously the worst time of the year for software sales. However, Hewson have turned the concept on its head with the release of their



latest compilation *Heatwave*. Their latest package is designed in postcard form, complete with stamp (of approval?). The compilation also features the new Hewson logo.

Heatwave, available for C64, Spectrum and Amstrad at the end of July priced £12.99 cass, £17.99 disk, contains: *Nebulus*, *Firelord*, *Ranarama*, *Netherworld*, *Zynaps*, *Impossaball* (Sp, Ams) and *Alleykat* (C64).

Also coming out with com-

pilations lately are Elite. They recently announced their intentions to stop producing 8-bit games, to concentrate on compilations, 16-bit products and — like everyone else — consoles.

Their latest anthologies are entitled *The Story So Far*.

Volume 1 (16-bit): *Beyond the Ice Palace*, *Buggy Boy*, *Ikari Warriors* and *Battleships*.

Volume 2 (8-bit): *Space Harrier*, *Live and Let Die*, *Overlander*, *Beyond the Ice Palace* and *Hoppin Mad*.

Volume 3 (16-bit): *Space Harrier*, *Live and Let Die*, *Bombjack* and

Thundercats. **Volume 4** (8-bit): *Ghostbusters*, *Aliens*, *Wonder Boy*, *Eidolon*, *Back to the Future* and *Quartet*. Volumes 1 and 2 are now available for £19.95 and £14.99 respectively. Volumes 3 and 4 are expected in early September.

More news from Elite is that *Commando* and *Paperboy* are almost ready for their 16-bit debut. Okay, Elite, enough of the old stuff, how about some great NEW games, like in the good ol' days.

French quest

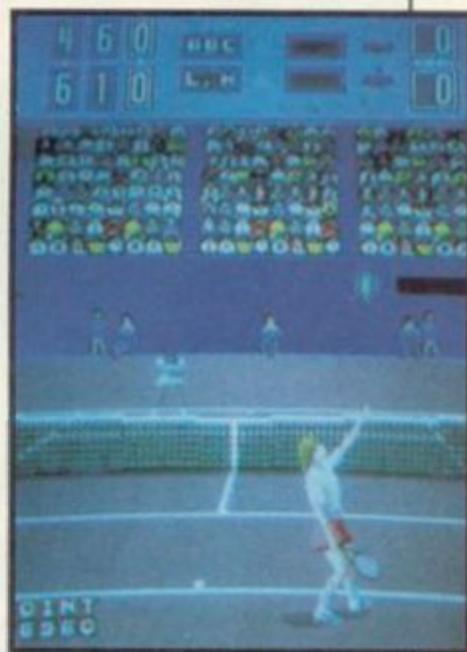


Infogrames jump on the comic conversion bandwagon with this stylish game by the programmers of *Passengers In The Wind*. *The Quest For The Time-Bird* comic has won numerous awards, and takes place on the planet Akbar where magicians, dragons and witches still exist. The computer game features a knight, a witch-princess and a 'stranger' attempting to recover the Conche Of Time from the evil monster Ramor. Available on the Atari ST, PC and Amiga now!

Paradroid on the Amiga

Star programmer Andrew Braybrook is returning to well-trodden territory to produce the smash hit classic, *Paradroid*, on the Amiga. Apparently Braybrook is taking six months to program it, so it's not going to be just a straight port across. Despite Graftgold leaving Hewson for Telecom Soft, it seems that the Abingdon-based company have picked up the rights to publish the sequel to their Christmas of 1985 hit. More news when we get it...

More tennis!!



WIMBLEDON will be long finished before *Passing Shot* is released, but this tennis game licensed from a Sega coin-op promises to be a winner for Imageworks (just take a look at the arcade screen). *Passing Shot* will offer an impressive array of playing options along with the obligatory line judges, ball boys etc.

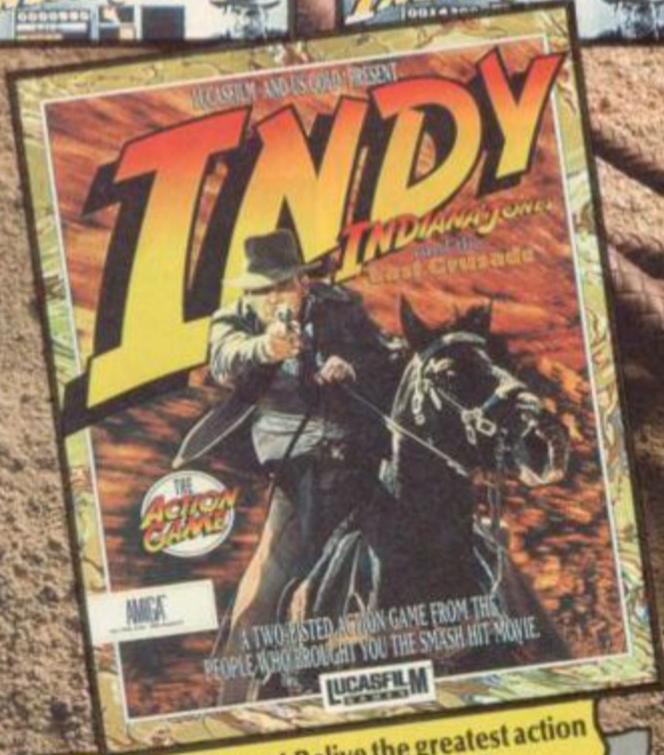
PRESS ANY KEY

The Man with the Hat is back!

TINDY

INDIANA JONES
and the
Last Crusade

SCREEN SHOTS FROM VARIOUS FORMATS



Whip those bad guys ... as only Indy can! Relive the greatest action scenes from the greatest Indy movie of them all. It's red hot, slam bam action in true Indiana Jones style!

- Capture the Cross of Coronado.
- Overcome a savage rat attack.
- Fight your way out of a giant Zeppelin.
- Survive the deadly tests of the Grail Temple.

.... and much, much more!

CBM 64/128 & AMSTRAD £9.99C/£14.99D • ATARIST & CBM AMIGA £19.99
SPECTRUM 48/128K £8.99C • IBM PC & COMPATIBLES £24.99

U.S. GOLD LIMITED, UNITS 2/3
HOLFORD WAY, HOLFORD,
BIRMINGHAM B6 7AX. TEL: 021 625 3388



Available in the Autumn for all major formats, we promise not to let John McEnroe anywhere near it.

In a German prison...

Kayden Garth is a prison planet controlled by an orbiting space station. But one day contact with the station is lost and chaos threatens to envelope the world. You control four characters in a this intriguing fantasy roleplaying game from Germany-based EAS. Out now on the Amiga (pictured above, right), with an ST version to follow soon.



(small glass containers for plants). Your job is to rescue her and return to the real world. *Terrarium*, programmed by Splinter vision, is available on the Amiga, Atari ST and PC on the Imageworks label in Autumn. (Amiga screen.)

Get the Vette

Created using the simulation technology that brought you Falcon, Spectrum Holobyte are set to release *Vette* onto the Amiga, Atari ST and PC later in the year. So jam a racing helmet on your head and choose one of the three Corvettes on offer as you prepare to race through the completely accurate streets of San Francisco. (PC screen.)

Flight fantastic

The flight sim fanatics among you will be pleased to know that *F-16 Combat Pilot* will finally be available for the Amiga (pictured) from Digital Integration now-ish. A TGM Top Score on the ST, the Amiga game should have improved sonics but otherwise be very similar. So those of you who fancy pulling some fancy aerobatics or blasting seven bells out of a variety of enemy targets with the awesome weaponry at your command can start queuing now.

Bowled over

Shock horror, Dr Slimms (a brilliant female scientist) has been kidnapped! Call in Captain Frontier, a retired secret service officer. Apparently Dr Slimms was miniaturised and hidden in a mysterious world within one of the laboratory's terrariums

The story so far...

You play the part of Eldred the Brave, son of King Eldred the Good. Disaster strikes when the King is poisoned by a spiteful wizard called

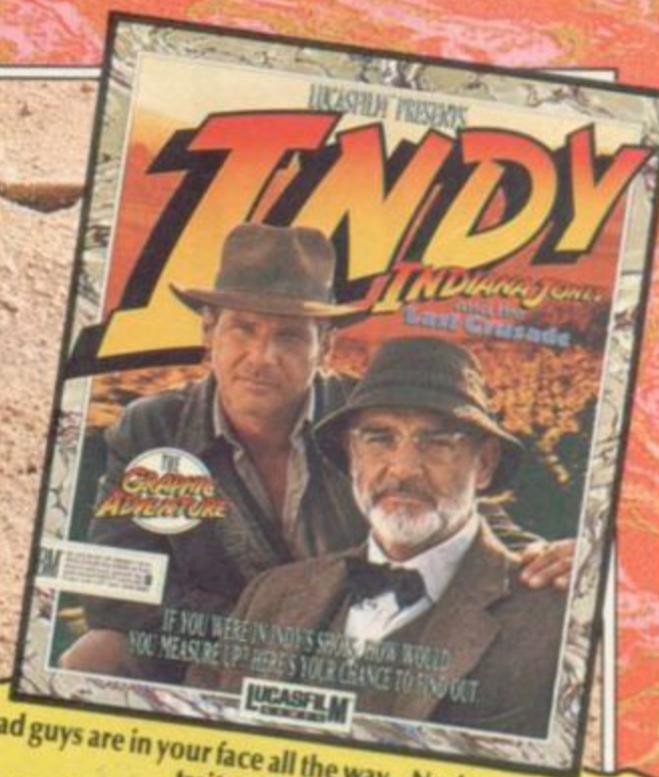
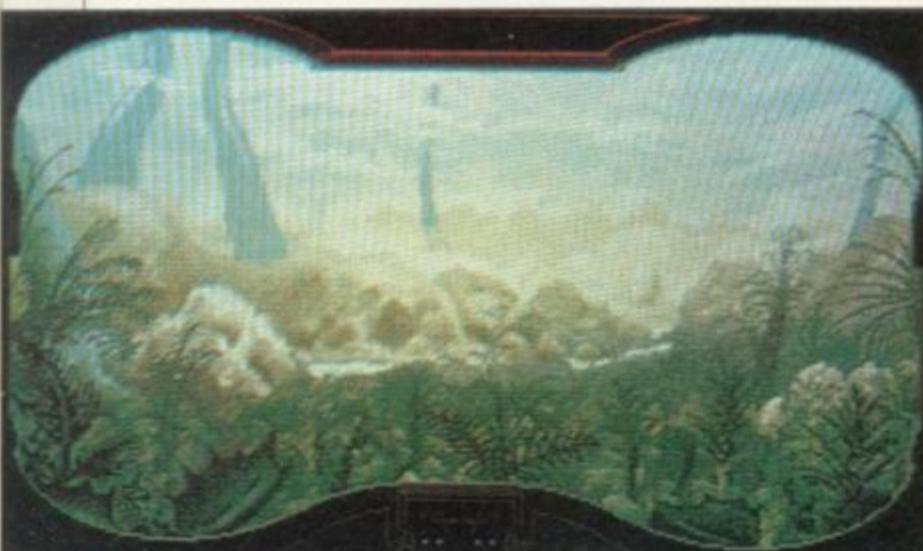


THE LAW

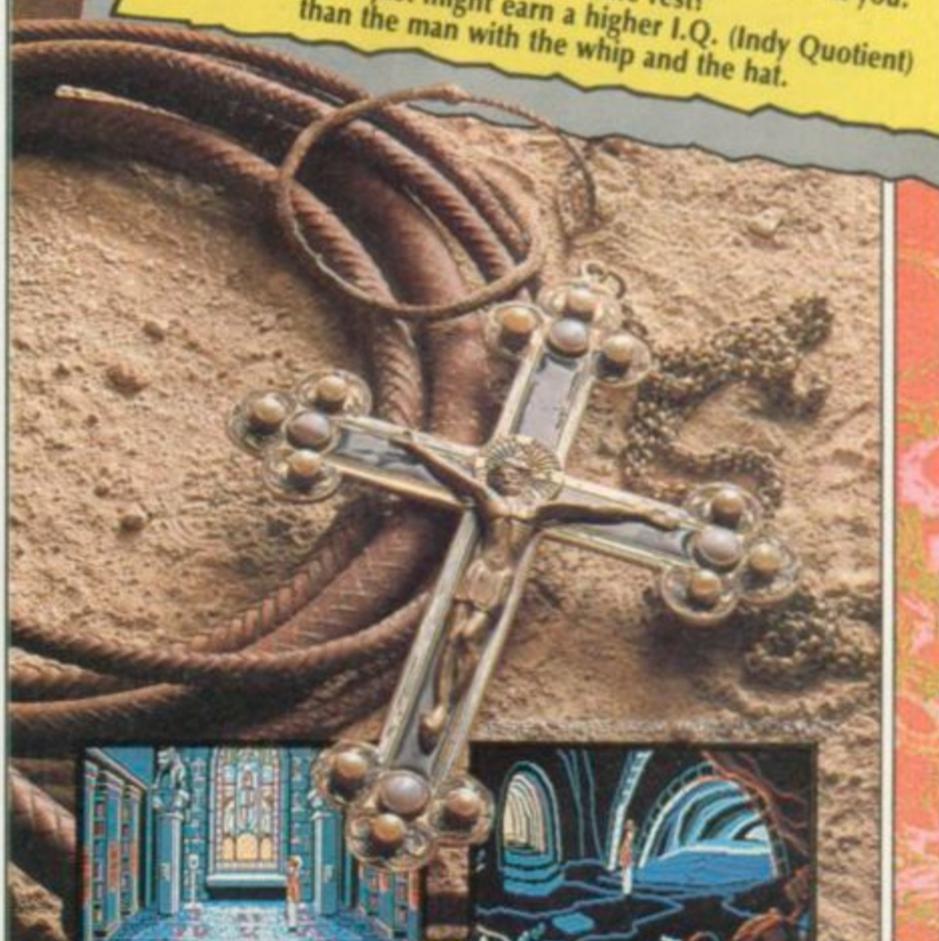
Officer Bob is the long suffering star of APB, a hilarious cops and robbers game which will be the latest conversion to appear on the impressive Domark/Tengen label in a matter of weeks, if not days. This friendly policeman's task is catch a daily quota of criminals, ranging from traffic offenders to murderers. (Atari ST screen.)

Zandor. Now you must battle your way through Zandor's evil minions to gain the antidote and so save your father. Released by Delphine Software, distributed by Palace, *Castle Warrior* will be available in July for Amiga and Atari ST. (Amiga screen.)

Officer Bob roars off in his car in APB (top), while in a more fantasy world, Terrrium's attractively shaped screen can be seen immediately below. Below that is a screen from Digital Integration's F-16 Combat Pilot, and at the bottom of the page, Eldred the Brave fights for his father in *Castle Warrior*. Left page, bottom: great graphics from Spectrum Holobyte's *Vette*.



The bad guys are in your face all the way - Nazis, mercenaries, traitors and spies. Not to mention everything the Luftwaffe can throw at you. Can you handle the rest? If you can, you just might earn a higher I.Q. (Indy Quotient) than the man with the whip and the hat.



- Visit dozens of locations not seen in the movie.
- Over 100 sound effects ... plus movie theme music.
- Comes with Henry Jones clue packed Grail Diary.

And this time he's bringing his Dad!

ATARI ST & CBM AMIGA £24.99 • IBM PC & COMPATIBLES £29.99



INDIANA JONES AND THE TEMPLE OF DOOM AND THE GRAIL DIARY ARE TRADEMARKS OF LUCASFILM LTD. ALL RIGHTS RESERVED.

THE BATMAN

IS BACK!

Ideas for a Batman movie have been circulating for nine years or more, with directors such as Steven Spielberg showing interest in a project which has been both a Thirties period piece and a big budget comedy starring Bill Murray. When the film actually started production many felt the latter concept was still on, with Michael Keaton replacing Bill Murray. But thankfully, on the 50th anniversary of the comic hero's creation, Warner Bros have gone back to the Batman's ominous roots.

The Batman originated with sketches by Bob Kane depicting a hero more demonic than angelic. The man in the bat-suit, Bruce Wayne, had no superpowers — merely inherited wealth and a burning obsession to fight crime born of witnessing his parents gunned down by a mugger at the age of seven.

Serious commentators see the Dark Knight as a product of the times: America was only just recovering from the Depression, a period of terrible poverty when violent criminals like Baby Face Nelson, Bonnie and Clyde, and Al Capone were regarded as heroes by many. The Batman was as ruthless, shadowy and virtually as violent as such criminals in his pursuit of vigilante-style justice. While supporting authority when many questioned it, his character bordered on the fascist.

Hence the early stories emphasised the relentless detective side of his character, the high-tech gadgets and brutal violence. Comics of the time were often extraordinarily violent, eventually leading to a backlash which forced a sweeping code of self-censorship on the industry in 1954. Dubious characters such as Batman were gutted to become banal goodies. In the late Sixties this character was gloriously sent up in the famous TV series. Devotees of the original style could only groan as the once intriguing, morally dubious vigilante was made an international comedy hit by Adam West.

Since then comic books have outgrown the self-censorship of the Fifties and in 1986 one of the most innovative writer/artists,

The summer of 1989 sees Hollywood dream factory cranking out big-budget movies almost by the dozen — Indiana Jones III, Ghostbusters II, Star Trek V, The Abyss and Lethal Weapon II. The first two smashed records for first week box office takings, records which have, in turn, just been broken by 1989's hottest film: **BATMAN**. Stuart Wynne looks at the phenomenon of The Batman.



Frank Miller, produced *The Dark Knight Returns* (£7.95, Titan). This graphic novel has sold over a million copies and finally made people outside the comics world aware of how grown-up it can be.

Appropriately enough the story begins with The Batman in retirement, but an outbreak in crime caused by a vicious street gang, and the release of 'rehabilitated' foes like the Joker and Two Face, brings the Caped Crusader back into action. Promptly thereafter the new police commissioner issues a warrant for his arrest as a vigilante.

The scriptwriter for the 1989 Batman film, Sam Hamm, is a comics buff and some of the dialogue in the movie is inspired directly by *Dark Knight*. The core story, however, seems to owe most to *The Killing Joke* (£1.95, Titan) by Alan 'Watchmen' Moore. Here the Joker is a mirror-image of the Batman; one is dedicated to justice, the other to crime, but both are mentally unbalanced and schizophrenic. Indeed as the Joker's brand of crime created, in some sense, the Batman, so the Batman's vigilantism in part creates the Joker.

In the final film, the dubious and most interesting parts of The Batman's character have mostly stripped away to Hamm's displeasure. \$25 million inspire caution, especially when director Tim 'Beetlejuice' Burton casts Michael Keaton as Batman. The overall tone of the picture remains disturbing however, with Jack Nicholson making the Joker a mesmerising portrait of evil. And the Batman is certainly no grinning, Superman-like upholder of The American Way. In one of his first meetings with a Gotham City criminal he gruffly announces; 'I'm not going to kill you... I want you to do me a favour... I want you tell all your friends about me... I'm Batman.'

Just as in the comics the Batman sets out to terrorize his prey. The film deals with Bruce Wayne's return to Gotham City, and his decision to become the Batman who will, inevitably, be locked in a spectacular confrontation with the Joker. One of the many Gothamites threatened by this confrontation is Bruce's girlfriend — reporter Vicki Vale (played in fine form by Kim Basinger).

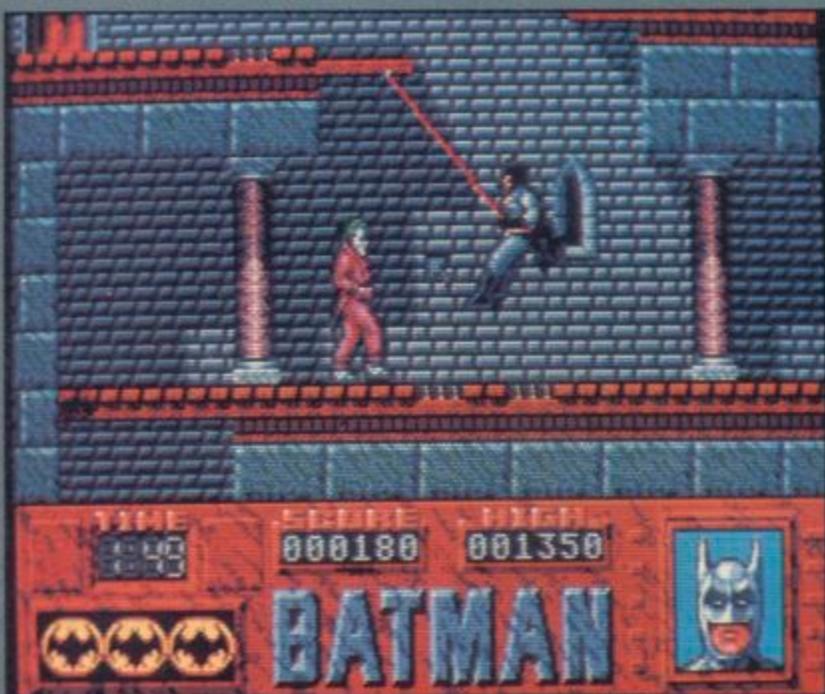
Another star of the picture is Gotham City itself. The largest outdoor set since Cleopatra, this is a breathtaking vision of an urban hell. Production Designer Anton Furst has described the city as Thirties vision of a city of the Eighties. It is likely to rival the Los Angeles of *Blade Runner* as cinema's most astonishing vision of an alternative world. Then there's all the Bat devices, including the ominous Batwing and 22-foot Batmobile with flickering afterburner and pop-up Browning machine guns.

Tim Burton has been oft-quoted about the four most recognised symbols in the world, these being Coca-Cola bottle, Mickey Mouse, the swastika and the Batman logo. That logo is now being used to sell a whole host of merchandising, already more licences have been sold for Batman: The Movie products than any other single film. And Ocean, of course, have the computer game licence.

Batman: The Movie will be Ocean's third Batman game. The first was way back in May 1986



BatTeam: Ocean programmers Mike Lamb and Dawn Drake



Michael Keaton (opposite page) storms in as the new iron-muscled Dark Knight locked in battle with his arch-enemy The Joker (Jack Nicholson, bottom right, in superbly evil form), who is after Batman's girlfriend Viki Vale (played by Kim Basinger top, with Keaton). Also pictured two screen shots from Ocean's forthcoming game: the Atari ST version above and the C64 below.

when the Batman theme was used by Jon Ritman and Bernie Drummond to produce a novel twist on the Knight Lore-style isometric arcade adventure. Despite the fact the main character was perhaps more Fatman than Batman the game was a massive commercial and critical success. Head Over Heels, the programmers' next game, dramatically improved the game-style but lacking the Batman

name didn't sell nearly so well.

When rumours started that a Batman movie was about to be made Ocean thus knew better than most the value of the licence. A meeting was arranged with the head of Warner, which conveniently enough owns DC Comics. With one successful Batman game already released, Ocean won the licence for not only a game based on the film but also another game based purely on the comic. Ocean entrusted the latter project to top programming team Special FX, who used a novel overlapping, flickscreen technique to suggest the panels of a comic book. Batman: The Caped Crusader was another big hit.

Given the hype surrounding the film Batman: The Movie could well emulate RoboCop's recordbreaking stay at the top of the charts. Accordingly, the design of the game has been entrusted with Mike Lamb and Dawn Drake, the team responsible for the Spectrum/Amstrad RoboCop game. Following Ocean practice since the groundbreaking Platoon, the programming/graphic artist team has sought to follow the plot and feel of the film as much as possible, rather than simply changing the graphics of an established

game-style. Film fans should be warned that reading about the game's structure reveals a lot about the film too!

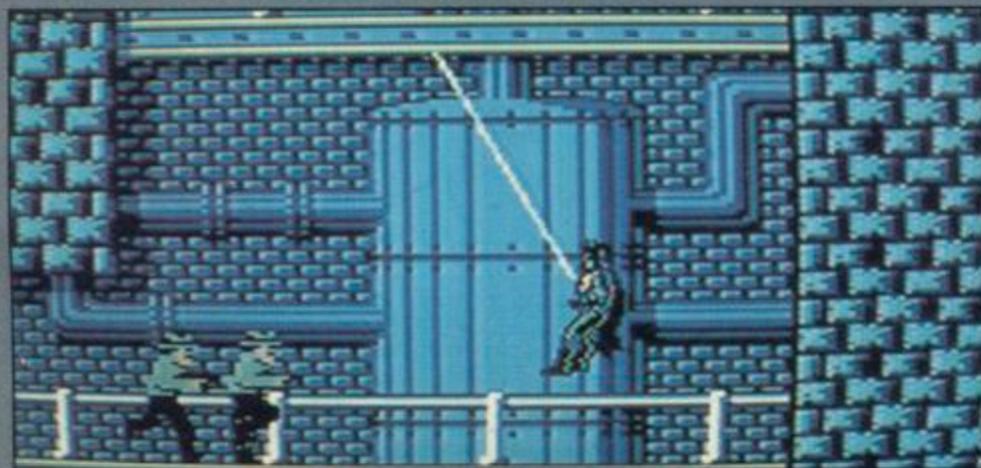
Batman: The Movie comes in five separate parts. Level one takes place in the Axis Chemical factory where Batman must battle both cops and robbers in his pursuit of Jack Napier (the Joker-to-be). The batarang can be fired to swing Batman above his foes Bionic Commando-style. The next level has Batman patrolling Gotham in his Batmobile, then giving chase to the Joker's van. Then it's back to the Batcave where the world's greatest detective does some chemical analysis.

Level four sees the Batman flying down a street in the Batwing, in a Zaxxon-style scene he must cut the ropes tying balloons to parked trailers without bursting them.

The final section is the Batman/Joker confrontation in a cathedral. The C64 version is currently being coded by Zach Townsend and Andrew Sleight, the programming/graphic artist team previously responsible for Platoon and Renegade III. 16-bit conversions should be underway as you read this, programmed to best exploit the host machines.

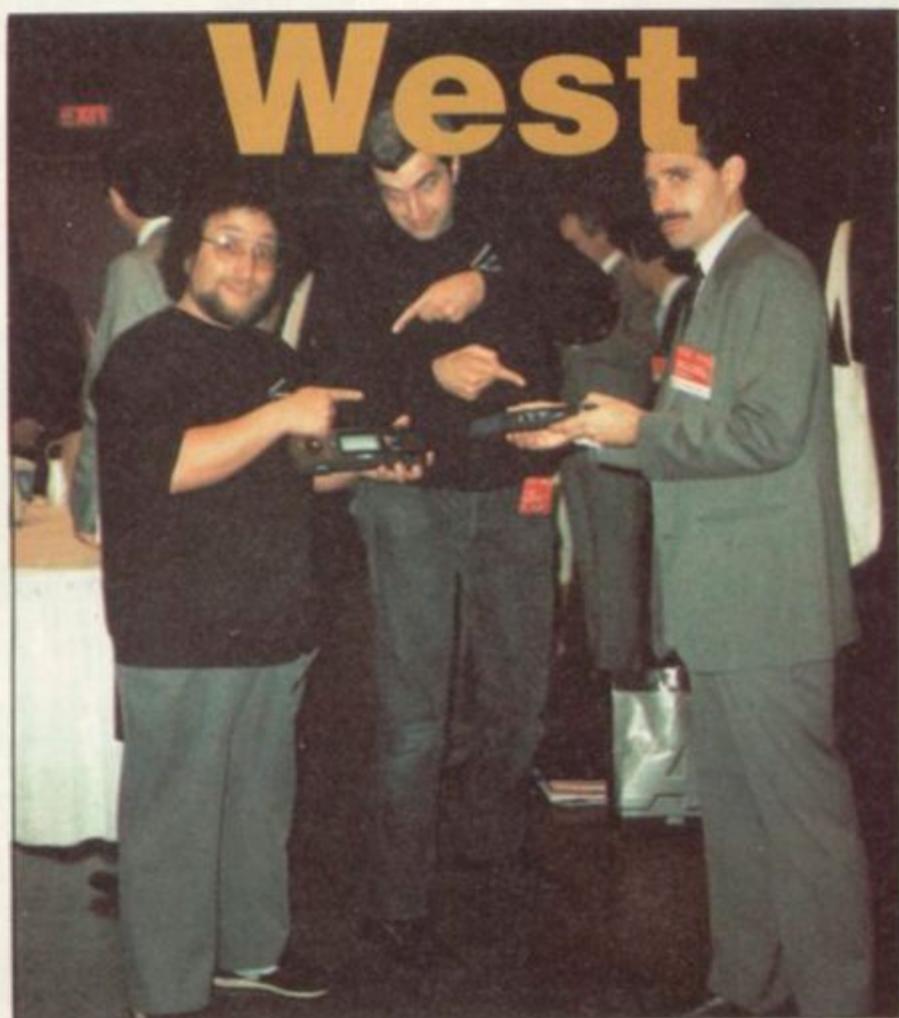
All versions should be released by September at the normal Ocean prices, and reserving advance copies might be a good idea following the example of tickets to the superb movie.

Batman: The Movie opens in the UK on August 11.



The Fastest Gun in the

With Nintendo's Game Boy storming chainstores all over the US and Japan, Atari rushed their announcement of their handheld toy for the CES in Chicago (see report on page 21). With a full colour LCD screen it shook the pillars of the Game Boy stand. Marshal M Rosenthal, our man in the West, found the nearest saloon and wondered if Nintendo had met their match...



The Stranger enters the town, dusty as the dirt-filled street beneath his feet. His poncho slaps back and forth against his chest as a cold wind blows the smoke from his cheroot up and away. The townspeople stare — he has a lean and angry look. The fat sheriff goes inside, bolts the door and hides.

The Stranger enters the saloon. He walks to the bar and orders a drink. A greasy, ugly man in a garish shirt comes over and spins the Stranger around.

'Who do you think you are, to come in here like you own the town? You must pay respect to our leader!'

The Leader sits in a corner — oblivious to what is going on. His ears are plugged up with headphones, his eyes glued to the tiny black and white screen of his Game Boy system.

'Yeah — show some respect or we'll cut you up,' bellows another.

The Stranger shrugs off the hand upon him, and walks slowly over to the Leader. The Leader takes off his headphones, and looks up.

'So who are you, the Man With No Name?' Laughter and guffaws abound throughout the bar — until the Stranger slaps one hand down to his waist.

Quiet.

The Leader stands and faces the Stranger. Silence hangs in the air like fog. You can hear the clock on the wall... tick, tock, tick, tock.

Two hands rise up as one. The Leader is flushed with easy victory, until he sees the Atari Portable Entertainment System in the Stranger's hand.

The Leader falls back, defeated — his Game Boy dropped to the floor.

An aura of respect envelopes the bar as the Stranger turns and goes back out into the street. A voice is heard to call after him — 'Hey Mister, where can I get me one?'

It wasn't quite a bar-room scene, and the competition wasn't invited, but Atari's still-unnamed Color LCD Portable Entertainment System made the impact of a ten-ton weight striking an egg. A hurried press event called at the CES in Chicago brought in 20-30 people to listen to Atari's President, Sam Tramiel, expound on bringing the gaming business back to America.

'We haven't been sitting back, watching profits go offshore to manufacturers who are totally unrealistic about offering consumers value,' Tramiel begins. 'It wouldn't have done the consumer any good if we had simply brought out another grey screen that only offers simple, slow, flat graphics. People want and deserve more.' Tramiel's

H

E

L

D

remarks seem in defiance to the fear of God that big N has held over the gaming community these last few years.

But defiance comes easy when you're holding Aces, and the System is impressive (it should be noted that it was designed by a team of experts at Epyx software). Weighing about a pound and no larger than a VHS video cassette, a 3.5-inch diagonal color LCD screen stands out. Easy to view and with a resolution of 160x102 pixels. A built-in speaker outputs four-channel sound, and there's also a headphone jack. A rocker pad on one side performs directional functions, while A-B buttons on the other take care of the activation/firing modes. 8-bit technology (6502 microprocessor) is given a big push through a 16 MHz clock — running at least three times faster than other units. 16 colours onscreen are selectable from a palette of 4096, with game cartridges ranging from one up to 16 megabytes. Multiple player games are possible since the system can be interlinked with up to eight other units using a connecting cable (and just one game card). A nice touch is that the entire screen can be rotated 180 degrees for left-handed players (which is what the second set of A-B buttons are for), and there's a Pause button as well. Six penlight batteries power the unit, which can also run off a car's cigarette lighter or an AC adaptor.

The units are turned over to our greedy little hands, and we start playing. The system fits nicely in our hands, the size and weight working to give it a solid and secure feeling. The game cart has a Californian motif (more on that later), and is fun to play — although my little guy keeps falling off his skateboard. Hey, these are REAL — no wires leading to VCR players under a table, and we walk around with them without noticing any horrified looks from Atari. It's hard to make a decision based on just a few minutes of use, but action onscreen was quick, entertaining and very colorful. Not much more to ask than that.

We turn our attention to two offbeat-looking guys wearing Epyx sweatshirts and hanging out in the corner. These two are prodding and poking the units like they were hand puppets in a Punch and Judy show. It's

okay, we're told — they're the system's designers. The tall, thin one, with the stare like that of Jason from Friday the 13th, is RJ Mical — software engineer extraordinaire. His partner (not as tall and decidedly more 'normal' looking) is Dave Needle, wizard at hardware design. These are the two guys who created the Amiga (we knew that the 4096 colour palette sounded familiar!). Getting them to hold still for a few questions isn't easy, but an electric cattle prod works wonders...

Mical seems the more vocal of the two. He pulls out a 'For Our Eyes Only' notepad and states 'All engineers are jerks'. Needle takes umbrage with that, and corrects his partner, 'All engineers without exception are jerks'. Asked to explain what that means gets the answer that hardware designers constantly UNDERRATE what can be done with their products. 'But we feel that this project will allow great things,' notes Mical, and they both agree that their device has great potential, since it takes many of the problems away from the software — freeing the creative process. For instance, perspective and size changes are handled automatically, with each player



being provided with a first-person view of the action (when two units are hooked up in tandem). An example would be a race game.

Each driver views his perspective only, so when a second car approaches the lead car, the lead car becomes larger on the second player's screen. If the second player should then pass, the first player then sees the other car ahead of him.

Noting that the first series of games will come from Epyx, we try to ask a few more questions, but Mical and Needle can't sit still. Besides, Atari personnel is tearing after them trying to recover two of the game units that they've stuck in their pockets!

Speaking of Epyx, they have the inside track to the first series of game carts to be released (makes sense). First up will be *Monster Demolition* — which enables you and another to go on the rampage (bad pun) throughout the country. *Impossible Mission* has you trying to save the President's daughter from a band of terrorists, who are protected in a fortress complete with killer droids, explosive traps and electrified floors. *Blue Lightning* places you in the cockpit of a supersonic fighter jet — taking on all-comers



The Marshal gets his men

'All engineers are jerks...' claim the men who created the Amiga (top left): Marshal M Rosenthal with systems designers Dave Needle (left) and RJ Mical (centre). Below: 'People want and deserve more...', says Atari's President Sam Tramiel at a CES press conference. What's he talking about? The Atari Portable Entertainment System (immediately above), with its brilliant colour graphics on games such as *Blue Lightning*, *California Games* and *Monster Demolition*, pictured in order on the left.

PRESS ANY KEY

while trying to reach the target (there's even a warbling tone 'lock on' for the fire control). *Time Quests and Treasure Chests* is an adventure in dark dungeons, filled with mean and ugly characters. Survive this and then try to handle being thrust into *Outer Space* — all in pursuit of the Star Gem, a stone that brings the owner eternal life. *The Gates of Zendocon* challenges you to fly a stolen spacecraft as you attempt to wipe out the cruel aliens (some 50 types of them). It helps that you're armed with a destructor shield, photon bombs and neutrino laser. Finally, *California Games* is a multiplayer

treat that takes you on a whirlwind tour of the Golden State. Try your hand at such sunny sports as surfing, skateboarding, foot bagging and BMX bike race (this cart is included with the system).

Other companies are keeping a low profile for the moment, but the talk under the tables is that those now gearing up to develop for the Game Boy will also be dipping into Atari's Well. But for right now, it does seem that discretion is the only part of valour being considered.

The mini-party is winding down. Marketing people dart to and fro — recovering game units from jour-

nalists who are trying to walk them out of the meeting room. Referring to a quote from a competitor that Atari's product is like using the Ferrari to get to the corner grocery store, Tramiel retorts: 'I'd rather drive a Ferrari to the corner grocery store. Who wouldn't rather have a Ferrari than a Toyota? But our price is not that comparable to a Ferrari.' Tramiel sums it up by noting that 'It (the Portable Colour Entertainment System) really is US technology at its best.'

The Atari Portable Colour Entertainment System will retail in the United States for \$149.95 (around £90).

Below: the two-foot-tall *After Burner* hand-held machine, with (to the right) a typical game screen and another from *Outrun* which can be played on a similarly-sized hand-held

Handle with care

It all started with the Game and Watch systems of the Seventies. Then, the hand-held games market went quiet, till now. Last month we introduced you to Nintendo's Game Boy — with interchangeable cartridges. This month Marshal M Rosenthal looks at the phenomenon that's sweeping America, and is now taking off in the UK: dedicated hand-held games...

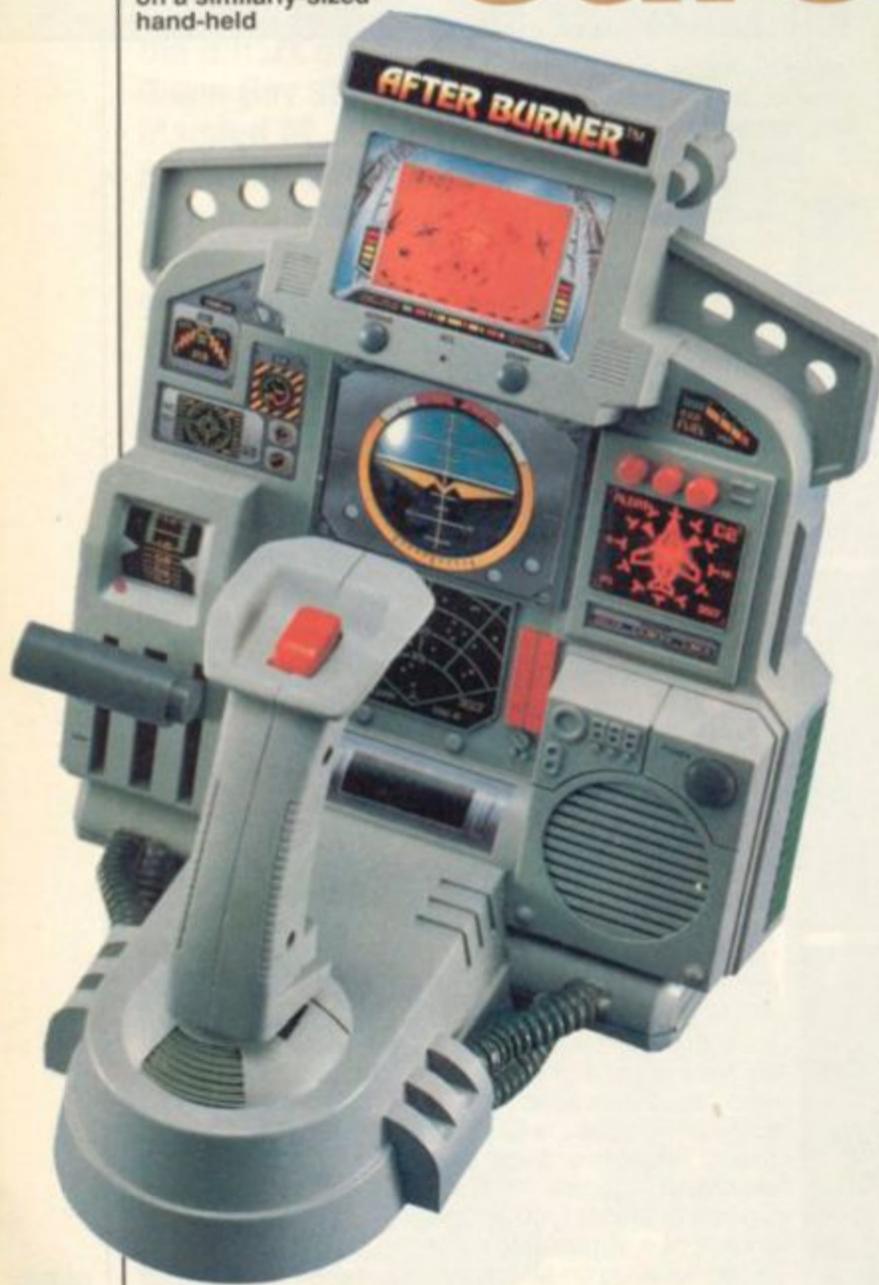
Everything seems to be electronic this year, and hand-held LCD games are very hot, both in screen size and popularity. We know that there's a whole new adventure with interchangeable cartridges for the Nintendo Game Boy and Atari Portable Color Entertainment System — but small, inexpensive 'pocketable' LCD games still command attention.

Wrestling is one US sport that can't be explained. Suffice to say that you either love it or hate it. Those who love it will also love Acclaim's hand-held version of that great American sport (?) *WWF Wrestlemania* featuring Hulk Hogan. The LCD screen enables you to 'rattle' your opponent, while avoiding being hit by his chair-wielding teammate. Other favourites include *Airwolf*, where

you go after missile launchers and enemy aircraft, and *Rambo*. New ones in the works for the holiday season include *Rocky* and *Wizards And Warriors* (based on Nintendo's own cart from last year).

Tiger Electronics won't disappoint you either. Their line of LCD games include *Double Dragon*, *Simon's Quest* (which displays four different stages), *Gauntlet* and *Heavy Barrel* — and even video adaptations of computer games like *World Games*. Plus screens based on new television shows; *Police Academy — The Series* being one. Great sight and sound is enhanced by auto shut-off and a special memory feature that keeps the high score intact when the power is switched off (as supplied by two penlight batteries).

For serious fun, try *Afterburner*.



H E L D



Over two feet tall, it features a full-size joystick and 18 levels. Great sound and warning alerts make this the one to fly. Then cool down on the open road with *Out Run*. Shaped like a sports car, this baby has a realistic steering wheel, shift lever, and five races to master. Both have larger-than-average LCD screens, and keep your highest score in memory (bit heavy on the batteries, though).

Probably the neatest from Tiger is *Sugar Ray Leonard's Talking Boxing*, it even looks like a boxing ring! 12 exciting LCD rounds — there minutes to pummel your foe into submission — with a talking

handed joystick controls combine with buttons to let you do it all — just remember to watch out for that uppercut!

Maybe it's not technically a hand-held, but Video Tek's *Electronic Talking Battleship Command* is really something. Based on the popular board game, each of the two consoles react with a talking 'narrator' who keeps score of the game. As on the board, you position your navy, but by using a keypad to punch in their location. Then it's time to try and defeat your foe by guessing where they've placed their ships. Sound and light effects highlight the action — so sink your opponents fleet before he gets yours!

One of the first sound chips to really show its smarts came a long time ago in the Mattel Intellivision game. We've come a long way since then, so say hello to the Hitstruments from Nasta. Hit Stix 2 follows the success of last year's model. Two bright yellow drumsticks trail wires that attach to a small speaker box clipped onto your belt. Beat the sticks in the air (or against a wall/friend) and out comes the sound of a snare drum. Change a setting on the left stick and now it's a Tom-Tom (or a Bongo). The tone control on the right stick varies the timbre for dozens of sounds.

Rather a piano? Don the two mitten-like pads and finger the keys

the speaker.

Let's end with some unusual high-tech: *Hide 'N' Seek* from Worlds of Wonder. Now what was a simple game becomes high adventure, as the 'seeker' uses his device to home in and locate the 'hider' units. Light panels on the speaker device sync with beeping sounds when within 50 feet of a hider. You can't turn off the hider unit either — that can only be done by touching it to the seeker unit. One seeker and two hider units come in a kit, and all are powered by a 9v battery.

Most of these types of games are now available in high street stores like Dixons, and small independent chains (ranging from £10-£20). Check 'em out to see what should be in YOUR hands this summer.

Game Boy gaming

In all the excitement we musn't forget Nintendo's Game Boy (as featured in TGM last month). The Game Boy is available in Japan for about £55 (so expect grey market imports at about £100). Games should appear over here soon, probably at around £12.

The Game Boy already has a large amount of third party software support from the likes of Kemco, Bandai and Coconut Japan, plus Nintendo, of course. Games currently available include *Tennis* (two-player option, with two machines), which brings back memories of Psion's *Match Point*; *Baseball* (also with two-player option); *Tetris*, the arcade puzzle game (which is on every single format imaginable); and the inimitable *Super Marioland* (a real classic).

Over the next few months expect *Mickey Mouse* and *Hyper Lode Runner* (both arcade/puzzle games); *Pinball* and *Pachinco Time* (conversions of table-top games); and *Golf* and *F-1 Race*.

If you've seen our feature on Atari's hand-held this month (previous pages), don't be put off buying one of these (remember, you'll have to wait till 1990 for that!). The Game Boy is a real 'hand-held', with super sound and smooth graphics, and all the games are VERY addictive (although I dread to think what Mel Croucher would have to say about that screen!). If you see one, GET IT!

Games equality
With *Sugar Ray Leonard Boxing* (left) even lady players stand a chance of succeeding in the pugilistic art, while thumping is not always restricted to smashing opponents in the face as the Hitstruments (below left) prove with funky force.
Not to be outdone in the hand-held stakes, Nintendo are releasing a host of LCD games for their Game Boy, including *Baseball* pictured below.



referee to announce every move that occurs. Score points with jabs, body punches, and left and right hooks, while weaving, ducking and dancing away from being hit. Play against a human, or let the computer do its thing — start off against the third-ranking contender and work up to the champ. Two-

on Hit Keys. Ten musical tones will result, and the speaker box can switch from piano to organ in a flash.

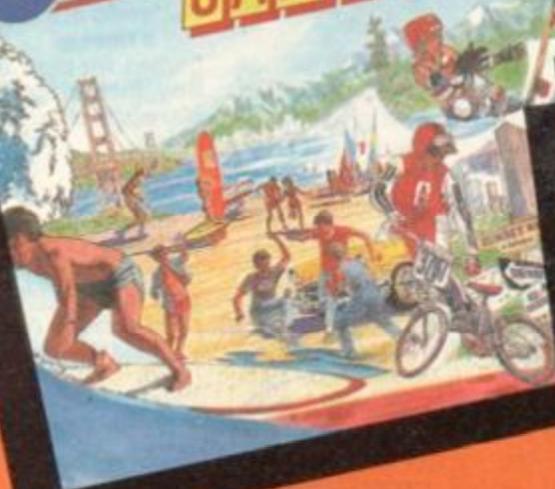
Or how about Hit Guitar, the free-style guitar. One hand wears the 'neck', while the other has a pad. A funky coiled wire keeps you talking to



THESE 16 BIT SENSATION

CALIFORNIA GAMES™ - The smell of the surf, the sun on your back, the sand between your toes... six of the best West Coast sports will set your pulse racing. Skate the boardwalk, flip the frisbee and wheelie the BMX. And then the ultimate test-shooting the curl as you battle the giant Pacific rollers. So get air, go crazy! Welcome to a new state of intensity!
AMIGA £19.99d IBM PC £19.99d

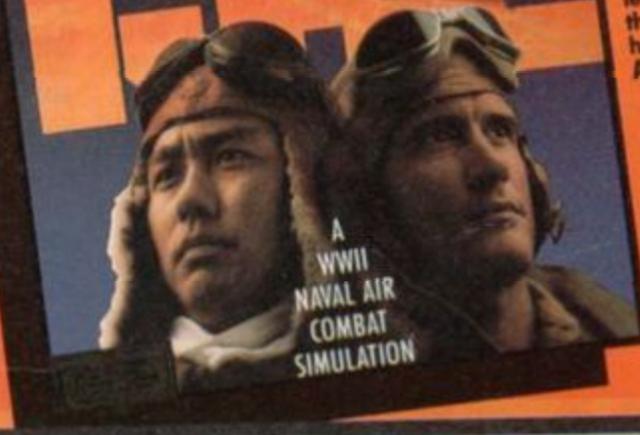
California GAMES™



ZAK McKRACKEN™ - A totally zany, over the top adventure awaits you in the crazy world of Zak McKracken - a world full of jokes and surprises with a rich, multi-layered mystery to solve. A full size copy of the 'National Inquisitor' packed with hints, clues and laughs comes free inside the game to help you.
IBM PC £24.99d
ATARI ST £24.99d
AMIGA £24.99d



BATTLEHAWKS 1942



BATTLEHAWKS 1942™ - 'The Coral Sea', 'Midway', 'Santa Cruz', 'The Solomon Isles'. With you as an American or Japanese pilot **BATTLEHAWKS 1942™** lets you relive the intense excitement of these battles which have changed the history of the world.
ATARI ST, AMIGA & IBM PC £24.99d

SEE **ESL** APPOINTED DEALERS BELOW

AT YOUR LOCAL

AVON

Ace Computers 42 Cannon Street, Bedminster, Bristol. Tel: 0272 637961
Ace Computers 3 North Street, Bristol. Tel: 0272 066341
Virgin Games 18 Marchant Street, Bristol, Avon. Tel: 0272 294779

BEDFORDSHIRE

Dawling Computers 3 Harper Centre, Lower Floor, Harper St, Bedford. Tel: 0234 273099
Software Plus Unit 11, The Boulevard, Harper Centre, Bedford. Tel: 0234 66598

BUCKINGHAMSHIRE

Aylesbury Computer Centre 28 Kingsbury Square, Aylesbury. Tel: 0296 89400

CAMBRIDGESHIRE

Software Plus 43 Barkhale Street, Cambridge. Tel: 0223 353643

CHESHIRE

Northwich Computers 79a Wilton Street, Northwich, Cheshire. Tel: 0606 47883
Oracle Computers 230 High Street, Winsford, Cheshire. Tel: 0606 861353
Tim's Megastore 29/31 Sunderland Street, Macclesfield, Cheshire. Tel: 0625 34118

CLEVELAND

C.H.I.P.S. Computer Shop 151 Linthorpe Road, Middlesbrough. Tel: 0642 219139
C.H.I.P.S. Computer Shop Silver Court Shopping Centre, Silver Street, Stockton on Tees. Tel: 0642 618256
Computer Shop 14 West Row, Stockton on Tees. Tel: 0642 606166
Topsafr 3 Humberston Yard, Stockton on Tees. Tel: 0642 670503

CORNWALL

Truro Micro Ltd, Bridge House, New Bridge Street, Truro, Cornwall TR1 2AA. Tel: 0672 40043

COUNTY DURHAM

C.H.I.P.S. Computer Shop Clarks Yard, Darlington. Tel: 0325 381048
Topsafr 6 Wellington Court Mews, Grange Road, Darlington. Tel: 0325 486689

DERBYSHIRE

DK Sound & Vision 7 Lightwood Road, Buxton, Derbyshire. Tel: 0298 72066
Gordon Harwood 68 - 71 High Street, Alfreton, Derbyshire. Tel: 0773 836781

DEVON

Computerbase 21 Market Avenue, City Centre, Plymouth. Tel: 0752 672128
Judy's Computers 79 Easter Road, Exmouth, Devon. Tel: 0395 264593
The Games Cupboard 5 New Bridge Street, Exeter. Tel: 0392 214128
The Model Shop 11 Old Town Street, Plymouth. Tel: 0752 221851

DORSET

Computerbase 21 Market Avenue, City Centre, Plymouth. Tel: 0752 672128

EAST SUSSEX

Computerware 22 St Leonards Road, Beach-on-Sea, East Sussex TN40 1HT. Tel: 0434 223340
Software Centre 31/32 Church Square, Brighton, East Sussex. Tel: 0273 776576

ESSEX

Computer Leisure Centre, 6 Lower Mallow Street, Limerick, Ireland. Tel: 010 35361316488
Cork Microcomputer Centre Ladith Quay, Cork, Ireland. Tel: 021 273330
Virgin Games 14 - 18 Aston Quay, Dublin 2. Tel: 0001 777180

ESSEX

Computers 88/90 London Road, Southend on Sea. Tel: 0702 335443
Estuary Computers Victoria Practice, Southend on Sea, Essex. Tel: 0702 614131
Softellers 36a Osborne Road, Colchester. Tel: 0206 586638
Software Plus 336 Chaffell Square, Southend. Tel: 0702 610784
Software Plus Liberty Shopping Mall, Basildon. Tel: 0268 27922
Software Plus 15 Kingway, Colchester. Tel: 0206 760977
Software Plus Unit 1, 28/31 Moulton Street, Chelmsford. Tel: 0245 491746
Software Plus Unit 1, Queensgate Centre, Orsett Road, Grays. Tel: 0375 391164

GLoucestershire

G. D. Computer Software 9 Market Parade, Gloucester. 0452 307108
The Model Shop 79 Northgate Street, Gloucester. Tel: 0452 410693
The Model Shop 22 High Street, Stroud. Tel: 0433 65920

GREATER MANCHESTER

Microbyte Unit 176, Halls Mill, The Arndale Centre, Manchester. Tel: 061 832 1438
The Computer Shop Unit 7, Knightbridge Mall, The Arndale Centre, Manchester. Tel: 061 832 0878
Yudata 203 Stamford Street, Ashton-under-Lyne, Lancashire. Tel: 061 339 0326

HAMPSHIRE

Columbia Computers 17 Columbia Road, Ersbury Park, Bournemouth. Tel: 0202 535542
Micro Centre 13 London Road, North End, Portsmouth. Tel: 0705 697802
G.S. Microland 7 Queen's Parade, London Road, Waterlooville. Tel: 0705 239911
Software Plus Unit 8, The Boulevard, Wellington Centre, Alton. Tel: 0252 29862
Ultima 118 East Street, Southampton. Tel: 0703 639419

HEREFORD & WORCESTER

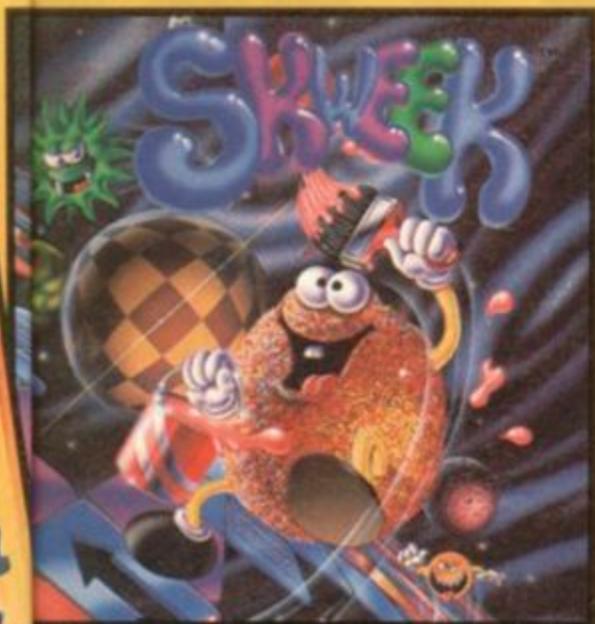
Antics 16 St. Swin Street, Worcester. Tel: 0905 22335
G. D. Computer Software 37 Upper Tything, Worcester WR1 1JZ. Tel: 0905 726259

HERTFORDSHIRE

Faxminster 23 Market Square, Hemel Hempstead, Herts. Tel: 0442 55044

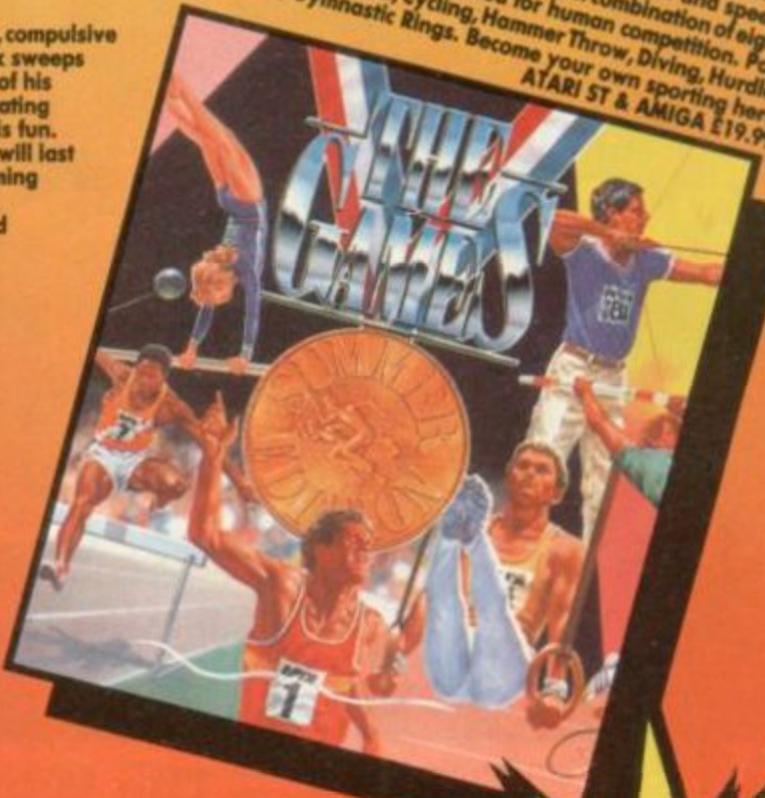
- Software Plus 13 Town Square, Stevenage. Tel: 0438 742274
- Video City 45 - 47 Fisher Green, Stevenage, Herts. Tel: 0438 353808 (ST & AMIGA)
- Video City 10 Station Road, Letchworth, Herts. Tel: 0462 672647 (ST & AMIGA)
- KENT**
- Computer Leisure Centre 117 High Street, Orpington. Tel: 0689 21101
- Silica Shop 1 - 4 The News, Hatherley Road, Selva. Tel: 01 302 8811
- Software Plus 25 High Street, Gravesham. Tel: 0474 233162
- Software Plus Unit 2, 4 - 8 Orange Street, Canterbury. Tel: 0227 428112
- Video Machine 194/196 Canterbury Street, Gillingham, Kent. Tel: 0634 56460
- LANCASHIRE**
- Alan Heywood 174 Church Street, Blackpool. Tel: 0252 21657
- Bits & Bytes 18a Bon Street, The Rock, Bury. Tel: 061 764 1989
- PV Computers 104 Abbey Street, Accrington. Tel: 0254 35345
- PV Computers 87 St. Albans Road, St. Anne's. Tel: 0253 722949
- LEICESTERSHIRE**
- May's Computer Centre 57 Churchgate, Leicester. Tel: 0533 22212
- LONDON**
- Doublevision 22 High Street, Ealing, London. Tel: 01 566 1804
- Erol Computers 125 High Street, Whitehorse, London. Tel: 01 520 7763
- Logic Sales 19 The Broadway, The Bourne, Southgate. Tel: 01 882 4942
- Microtek Grove Green Road, Leytonstone. Tel: 01 566 2275
- Shikhana 221 Tottenham Court Road, London. Tel: 01 631 4627
- Shekama Computers 7 Gladstone House, Gladstone Avenue, High Road, Wood Green. Tel: 01 631 4267
- Silica Shop 52 Tottenham Court Road, London. Tel: 01 580 4000
- Software Plus Indrops, 27 - 43 South Mol, Edmonstone Green Shopping Centre. Tel: 01 800 0000
- Virgin Games 100 Oxford Street, London. Tel: 01 637 7911
- Virgin Games 527 Oxford Street, London. Tel: 01 491 8582
- Virgin Games Store 14-22 Oxford Street, London. Tel: 01 631 1234
- MERSEYSIDE**
- Bits & Bytes 18 Central Station, Ranleigh Street, Liverpool. Tel: 051 709 4036
- Micro Snips (Mail Order), 37 Seaview Road, Walksey, Merseyside. Tel: 051 630
- MIDDLESEX**
- J.K.L. Computers 7 Windsor Street, Uxbridge, Middlesex. Tel: 0895 51815
- NORFOLK**
- Computer Plus 40 New Conduit Street, Kings Lynn, Norwich. Tel: 0553 774500
- One Stop Revamp 11 Castle Meadows, Norwich, Norfolk. Tel: 0603 663794

ONS ARE AVAILABLE NOW



SKWEEK™ - Manic action, compulsive fun as hyperactive Skweek sweeps through the 99 continents of his mother planet decontaminating them on his way. Skweek is fun. Skweek is action. Skweek will last forever. Skweek is a charming action sensation.
ATARI ST & AMIGA £19.99d
IBM PC £24.99d

THE GAMES SUMMER EDITION™ - The complete test of body co-ordination, muscle power and speed as you exhaust your limbs on the widest combination of eight exciting events ever compiled for human competition. Pole Vault, Parallel Bars, Cycling, Hammer Throw, Diving, Hurdles, Archery, Gymnastic Rings. Become your own sporting hero.
ATARI ST & AMIGA £19.99d



FORGOTTEN WORLDS™ - Two cool dudes, one hot situation, eight megalithic adversaries ... it all adds up to a whole lotta trouble.
IBM PC, ATARI ST & AMIGA £19.99d

16 BIT SENSATIONS COMING SOON RED LIGHTNING. STORM ACROSS EUROPE.

STAR DEALER

- Software Emporium 77/87 Magdalen Street, Norwich, Norfolk. Tel: 0603 633362.
- Virgin Computers Andrew Roe, Colton Green Road, Norwich. Tel: 0603 425209
- NORTHAMPTONSHIRE**
- 1 - Z Country Supplies 23a Lower Hill, Weston Favell Centre, Northampton, NN3 4JZ. Tel: 0604 414528
- CompuNet Computing 1 Central Buildings, Railway Terrace, Rugby. Tel: 0788 73209
- Software 47 High Street, Coventry, Northants. Tel: 0227 79020
- NORTH YORKSHIRE**
- The Computer Store 14 St. Sampson's Square, York. Tel: 0904 646934
- York Computer Centre 9 Daygates Centre, Daygates, York. Tel: 0904 651863
- NOTTINGHAMSHIRE**
- The Computer Shop Unit 230, Victoria Centre, Nottingham. Tel: 0602 410633
- Micro Byte 27 Gowgates, Huckley, Nottingham. Tel: 584654
- Microbyte Unit 100 Upper Broadwalk, Broadmarsh Shopping Centre, Nottingham. Tel: 0602 384654
- North North Computers 23 Outran Street, Sutton in Ashfield, Notts. Tel: 0623 556486
- Virgin Games 6 - 8 Wheeler Gate, Nottingham. Tel: 0602 476126
- OXFORDSHIRE**
- Sub Computers 6 Evans Yard,icester, Oxon. OX6 7ST
- South Computers 2 Rogers Arcade, Wantage, Oxon. Tel: 02357 4831
- Software 5-6 Broad Street, Banbury, Oxon. OX16 8BN. Tel: 0295 68921
- Pitney Computer Centre 105 High Street, Witney, Oxfordshire. Tel: (0993) 778294
- PETERBOROUGH**
- Apple Sales 6 Malpas, Peterborough. Tel: 0733 49990
- SCOTLAND**
- Capital Computers 17 Horse Street, Tallcross, Edinburgh. Tel: 031 228 4410
- Computer Centre 32 Princes Street, Ailsa. Tel: 0259 722932
- Computer Centre 50 Banton Street, Salford. Tel: 0786 64175
- Database Computers 42 East Port, Dumfries. Tel: 0383 724597
- Database Computers 73 Graham Street, Airdrie. Tel: 0236 47997
- Software Computers 742 Graham Road, Falkirk. Tel: 0234 612989
- Software 304 High Street, Graysby, Tel: 0592 265569
- Software 9 Albert Street, Lath Walk, Edinburgh. Tel: 031 553 6155
- Software Computers 15 Market Arcade, Inverness. Tel: 0463 226205
- The Computer Shop 75 Rannoch Viaduct, Aberdeen AB1 1NS. Tel: 0224 647875
- The Micro Shop 271/275 Dundee Road, Glasgow. Tel: 041 329 0832
- It's Computer Supplies 21 - 33 South Street, Perth, Scotland. Tel: 0738 36704

- Virgin Games 131 Prince Street, Edinburgh. Tel: 031 225 4583
- Virgin Games 28 - 30 Union Street, Glasgow. Tel: 041 204 0866
- Virgin Games Centre Argyle Street, Glasgow. Tel: 041-221 2606
- SOUTH HUMBERSIDE**
- The Computer Store 43 High Street, Scunthorpe. Tel: 0724 857985
- SOUTH YORKSHIRE**
- Crazy Joes 145 Ellingham Street, Rotherham, South Yorkshire. Tel: 0709 829286
- Just Micro 22 Canon Street, Sheffield. Tel: 0743 752732
- Microgamer 20 Cleveland Street, Doncaster. Tel: 0302 329999
- Micro Fun Unit 12, Guardian Centre, Rotherham. Tel: 0709 360000
- Micro Fun 10 Paul Street, Sarnley. Tel: 0226 387063
- Micro Fun 83 Holme Lane, Hillsborough, Sheffield. Tel: 0743 345002
- The Computer Store 44 Market Street, Donley, S. Yorkshire. Tel: 0302 21134
- The Computer Store 21a Priory Office Street, Doncaster. Tel: 0302 25260
- STAFFORDSHIRE**
- Burton Software 31/2 High Street, Burton-on-Trent, Staffs. Tel: 0283 34308
- Miles Better Software 219/221 Caspock Road, Chadderton, Cannock. Tel: 0543 466377
- Software City 59 Foregate, Stafford. Tel: 0785 41899
- SUFFOLK**
- Bits & Bytes 47 Upper Orwell Street, Ipswich. Tel: 0473 219961
- Bits & Bytes 45 Orwell Road, Felixstowe, Suffolk. Tel: 0394 279264
- Softellers 5a Dogs Head Street, Ipswich. Tel: 0473 57158
- Software Plus 22 St. Matthews Street, Ipswich. Tel: 0473 54774
- SURREY**
- The Model Shop 89a Woodbridge Road, Guildford. Tel: 0483 39115
- Ultima White Lion Walk, Guildford. Tel: 0483 506929
- TYNE & WEAR**
- Microbyte 56 Garden Walk, The Metro Centre, Gateshead. Tel: 091 460 6054
- Microbyte The Green Market, Newcastle-upon-Tyne, Tyne & Wear. Tel: 091 261 9050
- Sunderland Computer Centre 29 Crowther Road, Sunderland. Tel: 091 565 3711
- The Computer Shop 7 High Fries, Eldon Square, Newcastle. Tel: 091 261 6260
- The Computer Shop 9 Maritime Terrace, Sunderland. Tel: 091 310 8142
- WALES**
- Allsorts 39 Cross Street, Aberystwyth, Gwent. Tel: (0873) 6903
- Bud Morgan 22/24 Castle Arcade, Cardiff. Tel: 0222 329065
- E.C. Computers Glamorgan House, David Street, Cardiff. Tel: 0222 390286
- Tandy Pier Street, Aberystwyth, Dyfed. Tel: 0970 625491

- WARWICKSHIRE**
- Spa Computer Centre 68 Cavendish Street, Leamington Spa. Tel: 0926 337648
- WEST MIDLANDS**
- Bull Ring Computers 7 Waterloo Terrace, Bridgwater. Tel: 0746 766829
- Compass 204 High Street, Dudley, West Midlands. Tel: 0384 229239
- Compass Shopping Mall, Marnhill Shopping Centre, Swales Hill. Tel: 0384 261898
- Micro City 1a Queens Road, Hove, East Sussex. Tel: 0283 382049
- Mr. Disk 11 - 12 Three Shores, Oak Road, Beaconsfield, West. Tel: 021 429 4996
- Software City 1 Goodall Street, Walsall. Tel: 0923 24821
- Software City 3 Lichfield Passage, Wolverhampton. Tel: 0527 25304
- Venture TV Broad Street, Silkenor, Bromsgrove. Tel: 0527 73650
- Virgin Games 98 Corporation Street, Birmingham. Tel: 021 236 1577
- Microbyte 424 Grand Parade, The Bull Ring Centre, Birmingham. Tel: 021 616 1036
- Watchdog Comp 40 Queen Street, Wolverhampton. Tel: 0902 313600
- WEST SUSSEX**
- Crawley Computers 62 The Boulevard, Crawley. Tel: 0293 37842
- Worthing Computers 7 Warwick Street, Worthing. Tel: 0903 210861
- WEST YORKSHIRE**
- Atom Software 495 Great Horton Road, Great Horton, Bradford. Tel: 0274 573788
- Microbyte 1 Kirkcaldy Mill, The Kirkcaldy Centre, Bradford. Tel: 0274 308829
- Microbyte 29 Queen Victoria Street, Leeds. Tel: 0532 850529
- Microbyte 32 Kirkgate, Wakefield. Tel: 0974 276654
- The Computer Store 24/26 Ivegate, Bradford. Tel: 0274 732094
- The Computer Store 10 Square, The Woodlands, Halifax. Tel: 0422 89077
- The Computer Store 4 Market Place, Huddersfield. Tel: 0484 514805
- The Computer Store 40 Trinity Arcade, Bond Street Centre, Leeds. Tel: 0532 429284
- The Computer Store 13 Westwoodland Street, Wakefield. Tel: 0974 290139
- Virgin Games 14 Briggate, Leeds. Tel: 0532 432606
- WILTSHIRE**
- Antica 8 Regent Circus, Swindon. Tel: 0793 611253



IN-STORE MARKETING
 2/3 Holford Way, Holford,
 Birmingham B6 7AX.
 Tel: 021 625 3388



CES

RE

CES — The Hardware

The Consumer Electronics Show in Chicago is so huge that it's easy to miss many of the more unusual and interesting products, many of which might be making an impact on your life as we head into the Nineties. So we sent out TGM's super-snooper American correspondent, Marshal M Rosenthal, to bring them home.

The Marshal gets his men
Apprehended by all-American heroes (above) for being a smartly dressed New York journo, Marshal M Rosenthal can reflect from the leisure of his Gotham City cell on the sprawl of the Chicago Consumer Electronics Show (right). Its relevance to the British market is one of futures: from this international showcase, expect to see most of the products featured in this article appear in our highstreets soon.



The Consumer Electronics Show is unique among the trade shows, because there is hardly ever any vaporware; that's products that are shown and discussed but never make it to the store down the block. CES is an opportunity to see amazing devices, some costing just a bit, while others are prototypes running into thousands of dollars.

The hand-held gaming end is heating up like mad. We're all familiar with Game Boy now — the LCD black and white screen combined with stereo sound and interchangeable cartridges. Atari's Portable Colour Entertainment System (no name for this yet) is a strong contender for this market; with its four-channel sound, 16-colour 3.5-inch LCD screen and 16

MHz clock speed (see Atari feature on page 14). Many of the gaming companies will be putting out cartridges for both these systems — it'll be interesting to see what happens next. There's even talk of Sega getting into the act.

Staying in the game area brings up some interesting devices. Strike Force Navigator (Advantage Ace) is a navigational device that allows the user to move himself around with absolute accuracy. Designed for vehicle simulations, it's made of clear plastic with a handle and a 360-degree navigation compass printed on the face. As the handle bends, it can be used with a video screen — making it a valuable tool for all computer and video entertainment systems, since most of the simulations come with maps of the theatre of action (with your starting location noted).

Camera continue their theme of remote control for the Nintendo with The Freedom Stick — a cigarette pack-sized unit that connects to any joystick already owned. You plug the two together, and Stick goes into cordless action (you can hang it around your neck or use the attached belt clip). Stick runs on penlight batteries, and has automatic and manual fire switches for turbo-fire capabilities. Just stay in line (up to 35 feet) of sight with the receiving unit that has been attached to your game machine.

Designed specifically for the Nintendo market, Acclaim's two-person controller is very similar to their individual one of early this year. The two pads work together with the receiver so as to let two-player games go on simultaneously. It's the end of passing that controller back and forth.

Interactive Vision (View Master Ideal Group) challenges the user through an interface of video and computer graphics. It consists of a hand-held remote unit with colour-coded selection buttons and a multi-directional joystick. The video processor looks a bit like a enlarged Lego block, and is attached to a standard television and VHS video recorder (which you supply).

What happens is that graphics appear at strategic points of the tape, and require actions to be performed. This 'overlay' is handled quite well, and the results are very pleasing. No cartridge or program is needed, the video tape contains all the data necessary to access the system.

The first set of tapes consist of children's titles, such as *Sesame*

REPORT

Street and Disney cartoons. Future applications could become quite exciting — we'll have to wait and see. (Rumour has it that the graphic system was designed by Cinemaware.)

Right next door can be found the ultimate home robot, Newton. SynPet's mechanised creation is not a toy — not with features that



include a 20Mb hard disk drive and two microcomputers. Applications are accessed on an IBM XT-compatible while all the internal functions are driven by a realtime one. Standing 32 inches tall, Newton can both speak and understand voices — and be programmed to respond on command. He can learn about his location, and then patrol it — keeping a lookout for trouble. An internal telephone links up with the one in the house, and enables him to take messages and respond to call-in commands from his owners. You can even have him control lights and other electronics using a BSR X-10 interface (this line of units work through the house's wiring). Newton runs on rechargeable batteries and knows when it's time to dock with the charging unit for a quick 'fix' of the old AC. The lovable robot has a bright and colourful appearance (sorry, no laser gun accessory), and could certainly make an impression the next time you're trying to get rid of those pesky house guests.

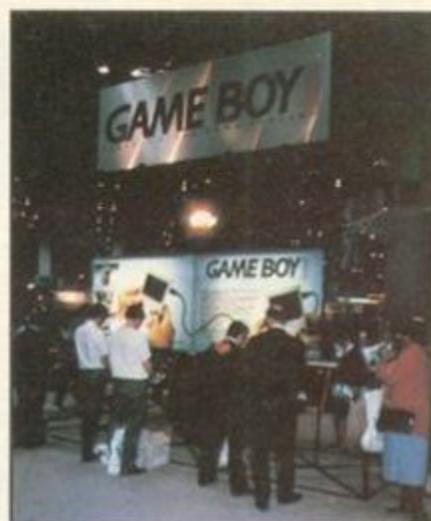
One of the hot items right now is Still/Video — point and shoot cameras that take a picture which is recorded onto a computer disk. The image can then be viewed on a conventional television or monitor. Sony's Mavica has a fixed lens,

auto exposure — in fact auto everything. It's the Brownie of today. The disk holds 50 images, which can then be played back on an accessory device (the camera itself is small and compact). Canon's Zapshot goes one better with an LCD read-out and a built-in playback device. Both systems can record up to 300 lines of resolution, with a playback of 400 (Super VHS limit). Uses for these kind of cameras include digitising and computer graphics work, plus the safety of non-film (a print can always be made with one of the thermal or colour printers from Kodak, Canon, etc).

Going one better is Toshiba's prototype IC Card Camera. Similar in size to the Zapshot (and needing a viewer like Sony's model), IC Card Camera actually records its images on a pop-in card — no disk. Being looked at as a device for security and high-tech applications, IC Card can store some 13 images per card, and has a resolution of 400 lines. An optional electronic 'album' can be used to store some 1600 images for viewing (basically a record/playback unit using DAT (Digital Audio Tape) technology).

Let's have a bit of fun with Voice Over — The Personal Sound Studio. It's a walkman-sized device that inserts between your portable radio/cassette player and special headphones with a mike attached. Voice Over adds echo and depth to your voice as you sing along with the music or speak. The results make you sound pretty good — certainly better than in the shower, and now other people can hear you as well.

MicroProse are out to grab some of the lucrative coin-op market. They plan to design and produce machines with all-new hardware featuring 3-D graphics which will



Nintendo's stand for The Game Boy (left) was a popular venue, and so was Interactive Video's (far left, this page), where visitors could play with a video and computer graphics interface unit

draw on polygons for the multi-dimensional effect. This is not new, but the average coin-op today draws some 12,000 polygons per second. MicroProse plan for their system to generate up to 60,000 of these little fellows. This will be coupled with a screen-refresher rate of 30 frames a second. The trick will be to get all this going without sacrificing speed. And let's not forget that the coin-op needs to be a fun and challenging game too.

Speaking of coin-ops, check out the Battletech Center. Parts look familiar; gaming boxes to climb into, with controls, video screens and joystick handles. But the differences are pronounced. The idea behind the Center is to create an interactive, sophisticated simulation for the player — one enveloping him in a total environment. Recreating a Star Base, each Battletech machine is interconnected; you're fighting against a real person. In other words — no artificial intelligence, just the nastiest, deadliest carnivore in existence: You!

And it requires both concentration and quick reflexes. The screen above you is the window to this world, filled with hostility and danger, while the lower secondary screen displays radar and vehicle status. And we're not talking about one or two buttons here. Try dual joysticks with trigger buttons, weapon selection displays, throttle control, directional pedals, ceiling message centre, and radio controls to communicate with teammates. Enough?



Robots abounded, like the lovable and brightly coloured Synpet (above), but some visitors prefer their pets to be as muscular as Michael Keaton — seen above in a cardboard form more suited to the characteristics of the TV series than the new film.

More information:

BATTLETECH CENTER: ESP Corporation/FASA, 1026 W. Van Buren Street, Chicago, Illinois 60607.

FREEDOM STICK: Camerica Ltd, 230 Fifth Avenue, New York, New York 10001. Price \$39.95.

INTERACTIVE VISION: View Master Ideal Group, 200 Fifth Avenue, New York, New York 10010.

MAVICA (MVC-C1): Sony Corporation, \$650.00.

MAP-T1 Playback Adaptor, \$249.95.

NEWTON: SynPet, 7225 Franklin Road, Dept P, Boise, Idaho 83709.

STRIKE FORCE NAVIGATOR: Advantage Ace, Ann Arbor, Michigan. Tel: 0101 313-677-0732. Price \$8.95.

VOICE OVER: Voice Over Marketing, 6055 North Lincoln Avenue, Chicago, Illinois 60659.

ZAPSHOT RC-250: Canon, \$800.00

CES REPORT

Software City

As with our own PC Show, the CES often promises what it will deliver in time for Christmas, promises like the 3-D solid graphics, text and action adventure of *Star Trek V* (right), which Mindscape say will have all the characters from the TV show and new movie. Somewhat more complete is Epyx's *California Games II* (below), with some exciting new skateboard action.

Each Battletech machine uses three proprietary computers totalling over 32 megabytes of RAM, and capable of displaying 200 3-D objects in realtime (using a maximum of 64,000 colours onscreen at once). The units are linked up via a local area network — with groupings of eight machines possible in teams of four.

Unlike a 'pay and pray' machine, these simulations are designed for set periods of time (30 minutes). Scenarios can be changed, so an air battle today, could turn into fighting giant robots tomorrow. Of course that also means that the vehicle being controlled can be altered — skycraft becoming submarines. The two environments already created are *Battletech*, a game set in the year 3050 with huge manlike Battletechs slugging it out, and *Renegade Legion* — a game of starfighter combat in the year 6000.

Battletech Centers are scheduled to pop up along the US and Canada in 1990, with the first one (in Chicago) designed to open in the next few months. They will feature a total environment that sets the mood — with a lobby area resembling the deck of a giant starship, Combat Information Centres and embarkation halls leading to the launch area, where you get into your machine. It becomes something to do with your mates, and more enjoyable than just watching someone else having all the fun.

CES — The Software

Did you ever wish on a star? Carry moonbeams home... enough of that! Who needs to make wishes, when there's the Consumer Electronics Show to go to? EVERYTHING that eats electricity can be found there. With that in mind, we turn the page over to TGM's American correspondent, the one and only (once again...) Marshal M Rosenthal.



Ready to go? Better take big steps, because there's a lot of stuff at the CES. Epyx presents *California Games II*. Participate in four events: bodyboarding, jet skiing, skateboarding and snowboarding (think you'll get board?). Less events mean more to do in the four presented. Ready to toss your cookies over a monster wave?

At the Electronic Arts booth, *Deluxe Video 2* is displayed — promising greater control and added features. SSI previews *Curse Of The Azure Bonds*, the sequel to *Pool Of Radiance*. Your party of adventurers awake to discover strange azure-blue markings

on their skin, which take over control of their bodies when they glow (checkout adventures on page 78). Then there's Interstel's *Dragon Force* which places you in charge of a seven-man elite strike force that takes on baddies all over the



world.

Moving along to Mastertronic finds their Megagames — Amiga games featuring the same graphics, animation and sound as found in the arcades (and requiring 1 Megabyte). First out will be *Rick Davis's World Trophy Soccer*, followed by *Magic Johnson's Basketball*. But what I'm waiting for is *New York Warriors*.

Then there's Mediagenic, hosting a suite for their line of affiliated companies. Infocom's text/graphic *Arthur — The Quest For Excalibur* features such added goodies as onscreen mapping, and Merlin's crystal ball (which reveals hints as needed).

Moving forward a few thousand years takes us to the world of Infocom's *BattleTech. Mechwarrior* drops you into the cockpit of a 30-foot tall, lethal combat robot. Strategy, action, war — all this and more as you earn blood money, while trying to build a lance (family of four) of Mechs. At least this is one picnic where you're too big to be bothered by ants.

Microlusions is going Hanna-Barbara crazy. *Scooby Do* lets you range among the characters — move Scooby around or follow after Velma — the gang's all here in four mysteries to solve, each based on a cartoon episode. Raised 3-D perspective, arcade sequences (hey — let's all run from the abominable snowman), even a Scooby Snack feature.

In the world of *The Jetsons*, you must keep George from being fired by that creep of a boss, Spacely. Completely mouse-driven, windows pop up with information, and you can look inside of objects and collect items for use. Text interaction of course.

Yabba Dabba Do. That could only be Fred. *The Flintstones* stresses the essence of Fred — so there's no telling what will happen next (the screen even has a Stone

Age TV to turn on). Multiple adventures mix with large characters that give off a true cartoon feeling. Just point and click on what you want to do — but never, ever, ever make Fred have to give up bowling just because Wilma's mother is around!

Johnny Quest combines the feeling of adventure with action and mystery. Join Johnny and Hadji (and Bandit, too, of course) as they search for the stolen Splinter of Heaven. Text display is combined with combat sequences, icon controls, and the full cast from the cartoon.

The Activision pot is bubbling nicely.

Tongue Of The Fatman is a futuristic hand to hand combat game with a sense of humour — and character animation bordering occasionally on the obscene. Human and alien life forms of all kinds take on each other for the ultimate reward — cold cash! Then there's *Ghostbusters II*. Drive the famous Ectomobile through the streets of New York, destroy ghosts, and generally have a great time blasting all those suckers. The game is arcade-orientated, with lots of action and almost no strategy whatsoever!

Die Hard also continues this theme of action, but the foes are all too human. Take one off-duty New York cop, combine liberally with terrorists holding his wife and others hostage in a modern skyscraper, and the result is pretty messy. Digitised scenes from the film link the arcade sequences together, and you've only so long before the terrorists break the seven access codes to the computer holding their plunder-to-be. You should get overtime for this.

Returning to the show, we duck into Mindscape's booth to see a few minutes of *Star Trek V* — still under development. The program promises 3D solid graphics, text and action adventure, plus all the characters from the TV show and new movie.

There ahead is the HUGE MicroProse booth/auditorium. *F-15 Strike Eagle 2* is almost ready to be released. More action-orientated than the first, *Strike Eagle 2* will feature intelligent help to make it easier to fly and fight. Enemies react intelligently as well (aargh), and combat takes place in four regions of the world: Lybia, the Persian Gulf, Vietnam and the Middle East.

It's time to leave — the show is closing down for the day. Anyone know a good chiroprapist?

ENTHUSIASTIC FRENCH PRESS REVIEWS !!!

COBRA SOFT has thought of everything ! Thanks to the Organizer and other little treasures, the inquiry becomes a pleasure. MURDERS IN VENICE has the talent to be very easy to practice and fascinating at the same time. The whole game system includes an undeniable ludic aspect.

Graphics : ****
Sound : *****
TILT

As usual, a whole lot of objects serving as clues go with the software and will guide the player in his inquiry. A game so technically well conceived it will seduce the fans of Miss Marple.

MICROWORLD

After MEURTRES EN SERIES (Murders in series), MURDER ON THE ATLANTIC and MEURTRES A GRANDE VITESSE (High Speed Murder) here comes MURDERS IN VENICE. If it was necessary to strike a great hit to leave the precedent successes unmarked, one could say without the slightest hesitation that Bertrand BROCARD and his staff have created a real masterpiece. (...)

A remarkable challenge for a very exceptional software.
SVM (Sciences et Vie Micro)



THE PACKAGING CONTAINS MORE THAN 30 REAL CLUES !

Impressive and ingenious!
Well, we'll be honest; MURDERS IN VENICE left us literally breathless ! Infernal intrigue, magnificent screens, genius and manifold conception (...) plus the mysterious Venetian atmosphere are the elements that makes you drop everything and dive immediately into the investigation !
Playability: exceptional
Interest: fabulous
FIRST Magazine

MURDERS IN VENICE is the very kind of production that shows that detective intrigues may always compete or even outrun the ludic interest of all the other software. (...)
It's really genius.
GENERATION4

If I had to stop right here, I would say that MURDERS IN VENICE is a superb detective inquiry "open enough" to interest the freaks of Scotland Yard and the inveterate adventurer alike.
The only thing is that it is even better than that !
MICRO-NEWS

ADVENTURE AND ACTION FOR THE NEW SUPER-PRODUCTION FROM COBRASOFT

Venice is threatened. The terrorists' ultimatum expires in 5 hours. It's time for you to step in to defuse the infernal bomb...

In the magnificent "City of Doges" (digitalized graphics) you'll meet dozens of people. Make them speak ! Unmask the guilty... Analyze the clues ! You will even have to make yourself a new face !

"Commedia dell'arte", high technology, masks, weapons, poison and worst of all tourists,... these are only a few of the ingredients composing the new super-production realized by Bertrand Brocard.

At your disposal is not only an exciting, graphic game, but also an instrument that allows you to progress in your research: a real "Organizer" that includes word processing, file cards, graphic tools, photo album... And to train you for the final part, the defusing of the bomb, you have at your disposal an electronic wiring simulator!

INFOGRAMES LTD, Mitre House, Abbey Road, Enfield, Middsx. EN1 2RQ



the dangers of VDUs

Mel's Law

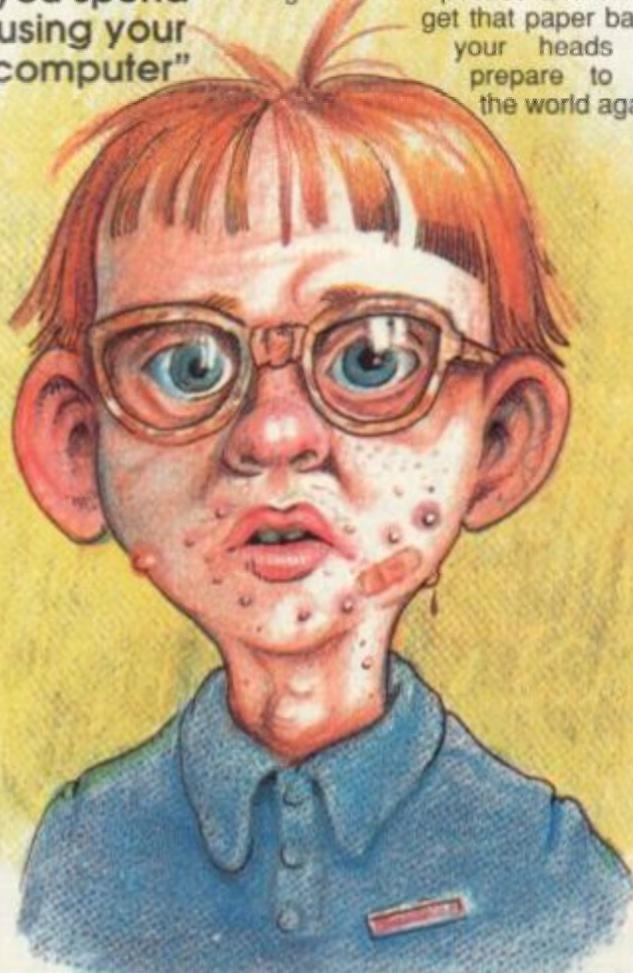
A didactic look at Visual Display Units and what they can do to you, from Mel Croucher

■

"The number of spots on your face plus your need to wear glasses is in direct relationship with the time you spend using your computer"

I always resented the fact that my schoolboy skin looked like a pizza and my eyes resembled what happens to snow when a dog pees on it. More recently, I was still amazed that I could grow facial blemishes and zits of the Elephant man and go bald at the same time. I tried changing my diet, getting married, living by the sea, washing more often, growing a beard, but nothing seemed to work. Then, after all these years of looking like the dark side of the Moon, I discovered an explanation for my afflictions, and having met thousands of spotty four-eyed computer maniacs in my time, I reckon it's time I shared my research. So take heart, my legions of the pocked and blinded,

get that paper bag off your heads and prepare to face the world again.



Here's my theory, let's call it Mel's Law, and it goes like this: $S+G = VDU \times (T-D)$. Or to put it into words, the number of spots on your face plus your need to wear glasses is in direct relationship with the time you spend using your computer and the distance you plonk your face from the screen. And if you think I'm kidding, take the trouble to read the following facts.

Back in 1982 a doctor named Nilsen wrote a three-page report called *Facial Rashes in Visual Display Unit Operators*. As this was published in an obscure journal called *Contact Dermatitis*, hardware manufacturers never got to read it.

Then in 1985, two Scandinavians called Wahlberg and Linden noticed that in spite of good diet, plenty of healthy exercise and enlightened sexual attitudes (which had all been previously offered as remedies for rotten skin) young people who played with computers and used VDUs suffered from an abnormal rate of zits and bad eyesight. But they didn't know why. Was it because spotty bespectacled folk were naturally less sociable, and went in for solitary habits such as computer games? Was it because computer users were less interested in their real personal appearance and more interested in living out their fantasies via their screens? Or was it just coincidence?

'There are none so blind as they who will not see.' (Old English proverb)

'If a man destroy the eye of another man, they shall destroy his eye in return.' (Hamurabi, 2030BC)

'Men seldom make passes at girls who wear glasses.' (Dorothy Parker, 1942)

After great woggles of research the coincidence theory was blown sky high. Some of you may have read my last bit of scare-mongering (in CRASH) about computer screens causing cancer, abortion and deformity (I know several journalists did, because they've been repeating the facts in their own magazines!), well, it has now been proved that your screens are zapping skin and eyeballs too.

Last year, the University of California Eye Clinic came up with the worrying fact that the favourite affliction suffered by all computer users is eye damage, and I mean real damage. There was plenty of back strain, finger deformity, headaches and epileptic fits too, but a loss of eye focusing came out top of the problem league by a mile. People who play with computer screens can lose the ability to focus properly up to 30 years before normal.

The next lump of data listed the skin diseases caused by computer monitors and close contact with TV screens, it's a very nasty list indeed and the winners are:

Rosacea (which ranges from a slight blushing of the cheeks, all the way to turning your face into something that looks like a boiled strawberry)

Acne (puss-filled zits which have a habit of leaving craters and scars)

Seborrheic Dermatitis (inflamed skin caused by glands producing greasy gunk in huge quantities.)

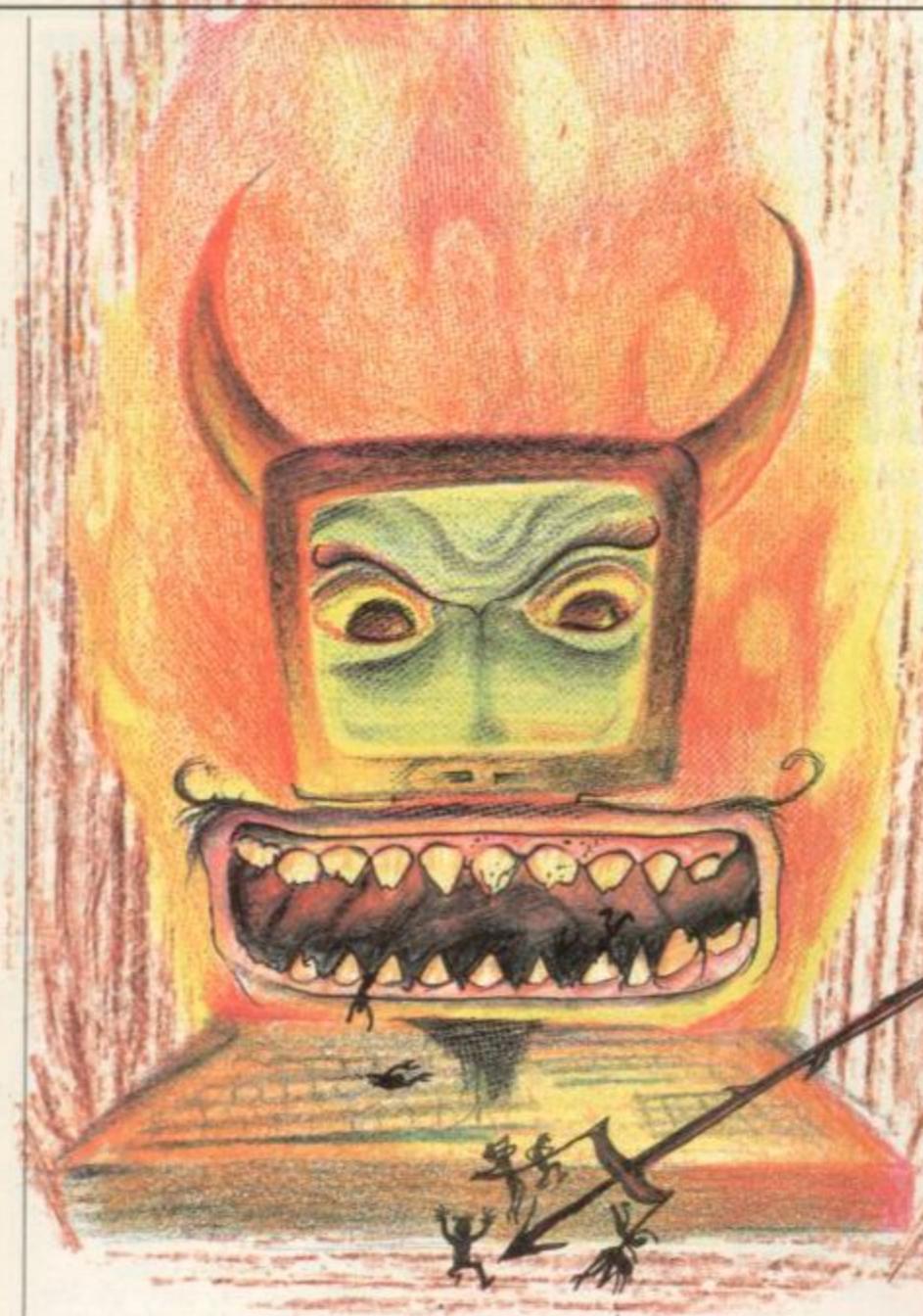
Poikiloderma (flakey zits caused by abnormal temperature changes in the skin)

Paraesthesia (itchy, burning inflamed skin which often starts two or three hours after using a VDU.)

Now that you've buried your monitor under the nearest mattress and rushed to the bathroom mirror to examine your boat-race, I'll tell you exactly how all these ghastly diseases can be caused by your machines. Unlike the lethal radiations that can deform unborn babies and knacker body tissues, skin problems are caused by electrostatic fields.

These energy fields are present around most TVs, VDUs and monitors when the atmosphere is dry and they tend to vanish at higher humidity when there is more moisture in the air.

According to the British medical journal *The Lancet*, skin problems suffered by computer users happen most often in Northern Europe during the winter months, and that's not because we play computer games more in the winter, but because the water in the air (relative humidity) is less than 40%. So the drier the air, the more your screen pumps out charged air borne particles, and they're the ones that want to zap your skin.



union and environmental groups call 'safe' levels, and they ain't much good for playing games on.

And as for the popular games machines, I won't make any comments but I will pass on the information that the Friends of the Earth London office had stuck a 'Bio-Hazard' sign on their Amstrad! But don't despair, you need not spend a fortune on fancy screens or cover your face with gunk, because Mel's Law can be fought off if you follow my advice:

- Don't use your screen for longer than two hours at a time. Take a break for at least 20 minutes between bouts.

- Sit as far away from your screen as you can, and never closer than four feet.

- Clean off the surface of the screen every time you use it. And I mean every time.

- Don't touch the screen with your fingers (or any other part of your anatomy come to think of it!).

- Try not to finger your face or rub your eyes while you are computer gaming or fiddling your computerised accounts.

- If you suffer from bad skin eruptions, ask your friendly non-privatised doctor for some 'Duoderm' or a similar blocking cream. You might even tell her about this article.

- Every chance you get, demand that hardware manufacturers stop ignoring the FACT that their machines are hazardous to our health, because only by doing that will we force them to clean up their act!

- Don't pick 'em and they'll get a lot better (dangerous machines AND zits!).

"If you suffer from bad skin eruptions, ask your friendly non-privatised doctor for some blocking cream"



Blushing is the colour of virtue.' (Diogenes the Cynic, 400BC)
'Out! Out! Damn spot!' (Lady Macbeth)

'In an ugly world, the richest man can buy nothing but ugliness.'
(George Bernard Shaw 1903)

Many female operators have noticed that tiny particles of their make-up get deposited on their screens during the working day, and I bet that if you run your finger over your screen now (go on, do it) you'll get a film of electrostatic deposit. This is a similar effect to the trick of rubbing a balloon against a woolly jumper and charging it up with enough static to stick it up on the wall all by itself. Okay, try and work out how many times you wipe your nose, rub your eyes, rest your chin on your hand, mop your brow or simply touch your face every hour that you use your computer. Again, I bet you finger your face every minute, and if you don't you are very unusual.

If you work or play any closer than four feet from your screen, you are depositing these charged particles all over your face simply by sitting there, but if you touch

your face you are concentrating the dose. For those of you who have the habit of touching your screen as well, you are upping the problem by a factor of up to 100!

In the United States, computer users have started to use a skin-coloured 'sun block'-type cream containing 2% titanium dioxide with iron oxides. This has two effects: firstly it stops a lot of skin contact with the deposited particles, and secondly it soon cures you touching your screen because of the sticky fingermarks you plonk all over it!

Some spotty Norwegians have begun using antistatic floor covering to cut down on the charged particles, and most of Northern Europe (except Britain) is already widely using electrostatic shields attached to the front of the screen. These eliminate the static field for a while, but they lose their effect after a month or so, and it's an expensive business replacing them.

For anyone thinking about changing their machines, I don't have much good news to report. Only Olivetti and Compaq come anywhere near what the trade



Mel Croucher is a regular contributor to The Games Machine. And we have just heard that as a result of two Mel Croucher features in sister magazine, CRASH, a major TV company (and we don't mean Sky!) has asked the old fool to make a pilot TV programme on the Seamy Side of Computing. Full details as soon as we have them!

Illustrations by Robin Evans

Robin Candy's PLAYING TIPS



ZAK McKRAKEN

(All Formats — the final solution)

This is my third month as Playing Tips editor and I'm pleased to say that the tips are rolling in more than ever. Competition is hot for the £50 software prize, so I'm looking for those extra special tips — just like this month's winner's who's been working hard on Populus. And remember it's not just tips that win prizes. I've yet to receive many maps, and POKES for 16-bit machines are thin on the ground.

Use the crayon on the wallpaper map. Read the strange markings on the wall and note them down (call this diagram 3). Now using the Sphynx map printed in TGM020, make your way out of the Sphynx and go to the airport. Use the reservations terminal and buy a ticket to Kinshasa. Walk to the plane. Walk through the jungle till you get to the village. Go inside the Shamen's hut. Give the yellow crystal to the Shamen. He shows you how to use it. You are now outside the Shamen's hut.

Use the yellow crystal. The wallpaper map appears. Click on Egypt. You are teleported to a secret room at the top of the pyramid. Walk to the left and

pull the lever on the side of the wall.

Switch to Annie. Make your way out of the Sphynx. Walk left to the pyramid and go through the door. It's very dark in there so use the WHAT IS command to find the door. Go through the door and go as far left as possible and use the WHAT IS command again to find the stairs. Go up them. You're now in the same room as Zak. Pull the lever on the wall. Switch to Zak.

Walk to the centre of the room and use the glowing object on the base. Walk away from the machine and use the yellow crystal. Click on Lima. Pick up the candelabra. Use the yellow crystal and click on Egypt. Walk

to the machine and use the candelabra on the glowing object. Put on the wetsuit and the oxygen tank. Use the duct tape on the fish bowl. Put on the taped fish bowl. You are now wearing a space suit. Walk away from the machine and use the yellow crystal. Click on the Mars Face chamber.

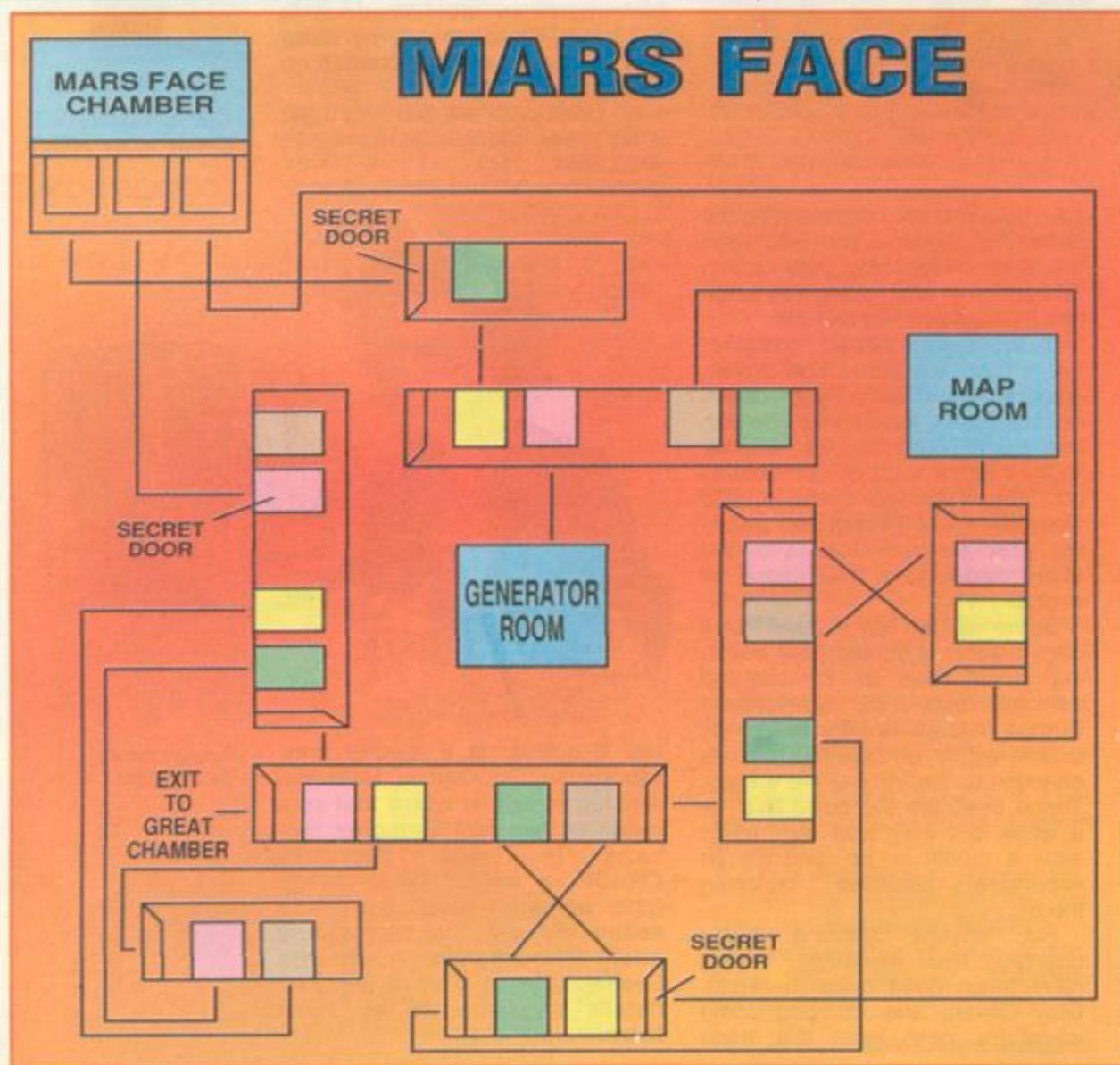
Use the crayon on the strange markings and reproduce the markings from diagram 3. The three doors at the back of the room open. Use the Mars Face map and make your way to the exit. You have to use the lighter to find your way because the doors are coloured. Walk left to the landing site and switch to Melissa.

Put on the helmet, pick up the boombox, open the door and go outside. Switch to Zak and enter the spaceship. Close the door. Now take off the taped fish bowl and the oxygen tank. Use the oxygen valve then switch to Melissa. Walk right to the huge face. Enter the great chamber and walk to the first large door (it should be open). Walk to the pedestal. Switch to Leslie.

Make your way out of the Map room using the Mars Face map. Then find the exit from the maze. Give the DAT and vinyl tape to Melissa. Use the ladder on the pedestal then switch to Melissa. Use the vinyl tape on the DAT then use the DAT on the boombox. Turn on the boombox. Click on record and switch to Leslie. Pick up the crystal sphere then switch to Melissa.

Walk to the second large door. Turn on the boombox. Click on play and the door opens. Go through the door and use the WHAT IS command to find another exit. Go through this door. Use the Ankh on the panel. The forcefield disappears. Push the button on the machine and you receive a message. Pick the golden key and walk back to the great chamber. Go back to the landing site. Keep walking left till you get to the monolith. Use the cash-card on the slot and you get a token. Switch to Leslie.

Go to the monolith. Use the token on the tram and wait for her to get into it, then switch to Melissa. Use the token on the tram and wait. You are outside the pyramid. Take both Melissa and Leslie to the pyramid



XENON

(Spectrum)

A quick cheat from Mark Dow of Wolverhampton makes battling those aliens a bit easier.

Start the game as usual and then press the break key to pause the game. hold down keys T,I,N and Y and your ship becomes indestructible.

entrance. Switch to Leslie and use the broom alien on the pile of sand. Switch to Zak.

Put on the oxygen tank and the taped fish bowl, open the door and go outside. Walk left to the monolith. Use the cashcard on the slot, use the token in the tram. When you arrive at the pyramid, walk to the entrance. Use the bobbypin sign in the keyhole, enter the door. Use WHAT IS to find the exit. Go through this door. Walk as far left as you can, then switch to Melissa. Enter the

door and use WHAT IS command to find the other exit, go through it. Go as far left as you can. Switch to Leslie. Enter the door. Use the flashlight to reveal the other exit. Go through this. Walk to the Sarcophagus feet and push them. Switch to Zak.

Walk to the stairs which should be directly in front of him. Switch to Melissa and walk to the stairs. Switch to Leslie and walk away from the feet. Switch to Zak and stand him in front of the white crystal. Switch to Melissa and

walk to the box on the wall. Use the golden key on the box. Push the button. Switch to Zak. Quickly get the white crystal and use the yellow crystal. Click on Egypt.

Take off the taped fish bowl and the oxygen tank. Walk to the machine. Use the yellow crystal on the candelabra. Use the white crystal on the candelabra. Walk to the switch on the right of the machine. Turn on the switch. Switch to Annie. Turn on the switch — that's it!

POPULOUS

(ST/Amiga)

D Bryan from Tollesby is this month's Star Tips winner for his complete list of level codes from Electronic Arts's excellent Populous. Level 999 is a bit weird — complete it and see what happens.

- | | | | | | | |
|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|------------------|
| 2: JOSAMAR | 67: TIMOMAR | 132: CALYMAR | 197: SCOINGCON | 273: IMMEED | 350: SUZDIEHOLE | 426: MOROGOJOB |
| 3: TIMUSLUG | 68: CALMELUG | 133: SCOUXLUG | 198: SWAILUG | 274: HOBGBHAM | 351: DOUQUELAS | 427: NIMODOR |
| 4: CALDIEHILL | 69: SCOMPHILL | 134: SWAEAHILL | 199: KILLMEHILL | 275: BUGINOND | 352: SHIUME | 428: BILMEPAL |
| 5: SCOQUEMET | 70: SWAHIPMET | 135: KILLDIEMET | 200: EOAMPMET | 276: SHADSODLOW | 353: HURTPOLD | 429: RINGDIPERT |
| 6: SWAUER | 71: KILLQAZED | 136: EOAQUEED | 201: BURHIPED | 277: CORYILL | 354: JOSOZBOY | 430: WEAVKOPOUT |
| 7: KILLPEING | 72: EOAEING | 137: BURUING | 202: MOROURHAM | 278: BINOXTORY | 355: TIMWILDOR | 431: ALPOAZT |
| 8: EOAZORD | 73: BURGBORD | 138: MORDEORD | 203: NIMAORD | 279: SADEAEND | 356: CALINGPAL | 432: BADEPIL |
| 9: BURWILCON | 74: MORINCON | 139: NIMDICON | 204: BILUSCON | 280: LOWIKEME | 357: SCOIHOLE | 433: IMMGBJOB |
| 10: MORINGILL | 75: NIMLOPILL | 140: BILKOPILL | 205: RINGINILL | 281: QAZOGOLD | 358: SWACELAS | 434: HOBINLIN |
| 11: NIMIHILL | 76: BILTHILL | 141: RINGINTORY | 206: WEAVLOPTORY | 282: VERYUOND | 359: KILLMPAL | 435: BUGLOPDON |
| 12: BILCEMET | 77: RINGOXMET | 142: WEAVIMET | 207: ALPTMET | 283: MINDELOW | 360: EOAHIPPIL | 436: SHADYPERT |
| 13: RINGMPED | 78: WEAVEAED | 143: ALPCEED | 208: BADPEED | 284: HAMDIICK | 361: BUROUTJOB | 437: COROXOUT |
| 14: WEAVHIPHAM | 79: ALPIKEHAM | 144: BADASHAM | 209: IMMOZHAM | 285: FUTKOPHOLE | 362: MORADOR | 438: BINEAT |
| 15: ALPOUTOND | 80: BADOGOOND | 145: IMMSODOND | 210: HOBWILOND | 286: SUZQAZLAS | 363: NIMUSPAL | 439: SADIKEBAR |
| 16: BADAON | 81: IMMOCON | 146: HOBXON | 211: BUGINGLOW | 287: DOUEME | 364: BILDIRPERT | 440: LOWOGOER |
| 17: IMMUSILL | 82: HOBMEILL | 147: BUGOXKILL | 212: SHADOILL | 288: SHIGBOLD | 365: RINGLOPOUT | 441: QAZOLIN |
| 18: HOBDIETORY | 83: BUGMPTORY | 148: SHADUSTORY | 213: CORMETORY | 289: HURTASBOY | 366: WEAVTAL | 442: VERYDEDON |
| 19: BUGQUEEND | 84: SHADKOPEND | 149: CORDIEEND | 214: BINMPEND | 290: JOSSODDOR | 367: ALPPEPIL | 443: MINDIMAR |
| 20: SHADTED | 85: CORQAZME | 150: BINQUEME | 215: SADHIPME | 291: TIMYICK | 368: BADOZJOB | 444: HAMKOPLUG |
| 21: CORPEHAM | 86: BINEHAM | 151: SADUHAM | 216: LOWOUTOLD | 292: CALOXHOLE | 369: IMMWILLIN | 445: FUTOAZHILL |
| 22: BINOZOND | 87: SADGBOND | 152: LOWDEOND | 217: QAZAOND | 293: SCOEALAS | 370: HOBINGDON | 446: SUZEBAR |
| 23: SADWILLOW | 88: LOWINLOW | 153: QAZDILOW | 218: VERYGBLOW | 294: SWAIKEAL | 371: BUGIPERT | 447: DOUGBER |
| 24: LOWINGICK | 89: QAZLOPICK | 154: VERYWILICK | 219: MININICK | 295: KILLQUEPIL | 372: SHADMEOUT | 448: SHIING |
| 25: QAZITORY | 90: VERYYTORY | 155: MININGHOLE | 220: HAMLOPHOLE | 296: EOAUOIB | 373: CORMPT | 449: HURTSDORD |
| 26: VERYMEEND | 91: MINOXEND | 156: HAMIEND | 221: FUTTEND | 297: BURDEDOR | 374: BINHIPBAR | 450: JOSYMAR |
| 27: MINMPME | 92: HAMEAME | 157: FUTCEME | 222: SUZPEME | 298: MORDIPAL | 375: SADOUTER | 451: TIMOXLUG |
| 28: HAMHIPOLD | 93: FUTIKEOLD | 158: SUZASOLD | 223: DOUOZOLD | 299: NIMKOPPERT | 376: LOWALIN | 452: CALEAHILL |
| 29: FUTOUTBOY | 94: SUZOGOBOY | 159: DUSODBOY | 224: SHIWILBOY | 300: BILQAZOUT | 377: QAZUSDON | 453: SCOIKEMET |
| 30: SUZALOW | 95: DOUOLOW | 160: SHIYLOW | 225: HURTOGODOR | 301: RINGIAL | 378: VERYINMAR | 454: SWAOGOED |
| 31: DOUUSICK | 96: SHIMEICK | 161: HURTAICK | 226: JOSOICK | 302: WEAVCEPIL | 379: MINLOPLUG | 455: KILLUING |
| 32: SHIDIEHOLE | 97: HURTDIHOLE | 162: JOSUSHOLE | 227: TIMMEHOLE | 303: ALPASJOB | 380: HAMTT | 456: EOADEORD |
| 33: HURTLPLAS | 98: JOSKOPLAS | 163: TIMDIELAS | 228: CALMPLAS | 304: BADSODLIN | 381: FUTPEBAR | 457: BURDICON |
| 34: JOSTME | 99: TIMQAZAL | 164: CALQUEAL | 229: SCOHIPAL | 305: IMMYPAL | 382: SUZOZER | 458: MORKOPILL |
| 35: TIMPEOLD | 100: CALEOLD | 165: SCOUCLD | 230: SWAOUTPIL | 306: HOBXPPERT | 383: DOUWILING | 459: NIMQAZTORY |
| 36: CALOZBOY | 101: SCOGBBOY | 166: SWADEBOY | 231: KILLEBOY | 307: BUGEAOUT | 384: SHIINGORD | 460: BILEMET |
| 37: SCOWILDOR | 102: SWAINDOR | 167: KILLOZDOR | 232: EOAGBDOR | 308: SHADDIET | 385: HURTMOMAR | 461: RINGCEED |
| 38: SWAINGPAL | 103: KILLSODPAL | 168: EOAWILPAL | 233: BURINPAL | 309: CORQUEBAR | 386: JOSMELUG | 462: WEAVASHAM |
| 39: KILLOHOLE | 104: EOAYHOLE | 169: BURINGPERT | 234: MORLOPPERT | 310: BINUJOB | 387: TIMMPHILL | 463: ALPSODOND |
| 40: EOAMELAS | 105: BURXCLAS | 170: MORILAS | 235: NIMTLAS | 311: SADDDELIN | 388: CALHIPMET | 464: BADCYON |
| 41: BURMPAL | 106: MOREAAL | 171: NIMCEAL | 236: BILPEAL | 312: LOWDIDON | 389: SCOOTED | 465: IMMOXILL |
| 42: MORHIPIL | 107: NIMIKEPIL | 172: BILASPIL | 237: RINGEAPIL | 313: QAZKOPMAR | 390: SWAAING | 466: HOBEOATORY |
| 43: NIMOUTJOB | 108: BILOGOJOB | 173: RINGHIPJOB | 238: WEAVIKEJOB | 314: VERYINGLUG | 391: KILLGBORD | 467: BUGIKEEND |
| 44: BILADOR | 109: RINGUDOR | 174: WEAVOUTLIN | 239: ALPOGOLIN | 315: MINIT | 392: EOAINCON | 468: SHADQUEME |
| 45: RINGGBPAL | 110: WEADPAL | 175: ALPAPAL | 240: BADOPAL | 316: HAMCEBAR | 393: BURLOPILL | 469: CORUHAM |
| 46: WEAVINPERT | 111: ALPDIPERT | 176: BADUSPERT | 241: IMMPEPERT | 317: FUTASER | 394: MORTHILL | 470: BINDEOND |
| 47: ALPLOPOUT | 112: BADKOPOUT | 177: IMMIDIEOUT | 242: HOBMPOUT | 318: SUZSODING | 395: NIMPEMET | 471: SADDILOW |
| 48: BADTAL | 113: IMMQAZT | 178: HOBQUET | 243: BUGHIPT | 319: DOUYDON | 396: BILOZED | 472: LOWKOPICK |
| 49: IMMPEPIL50: | 114: HOBEPIL | 179: BUGUPIL | 244: SHADQAZBAR | 320: SHIOXMAR | 397: RINGIKEHAM | 473: QAZOAZHOLE |
| HOBZJOB | 115: BUGGBJOB | 180: SHADPEJOB | 245: COREJOB | 321: HURTUSLUG | 398: WEAVO- | 474: VERYIEND |
| 51: BUGWILLIN | 116: SHADASLIN | 181: COROZLIN | 246: BINGBLIN | 322: JOSDIEHILL | GOOND | 475: MINCEME |
| 52: SHADOGODON | 117: CORSODDON | 182: BINWILDON | 247: SADINDON | 323: TIMQUEMET | 399: ALPOCON | 476: HAMASOLD |
| 53: COROPERT | 118: BINYPERT | 183: SADINGMAR | 248: LOWLOPPMAR | 324: CALUER | 400: BADMEILL | 477: FUTSODBOY |
| 54: BINMEOUT | 119: SADOXOUT | 184: LOWIOUT | 249: QAZTOUT | 325: SCODEING | 401: IMMMPATORY | 478: SUZYLOW |
| 55: SADMPPT | 120: LOWEAT | 185: QAZCET | 250: VERYOXT | 326: SWADIORD | 402: HOBHIPEND | 479: DOUOXICK |
| 56: LOWHIPBAR | 121: QAZIKEBAR | 186: VERYMPBAR | 251: MINEABAR | 327: KILLWILCON | 403: BUGOUTME | 480: SHIEAHOLE |
| 57: QAZOUTER | 122: VERYQUEER | 187: MINHIPER | 252: HAMIKEER | 328: EOANGILL | 404: SHADMEHAM | 481: HURTDIELAS |
| 58: VERYELIN | 123: MINULIN | 188: HAMOUTING | 253: FUTOGOING | 329: BURIHILL | 405: CORGBOND | 482: JOSQUEAL |
| 59: MINGBDON | 124: HAMDEDON | 189: FUTADON | 254: SUZODON | 330: MORCEMET | 406: BININLOW | 483: TIMUOLD |
| 60: HAMINMAR | 125: FUTDIMAR | 190: SUZUSMAR | 255: DOUMEMAR | 331: NIMASED | 407: SADLOPICK | 484: CALDEBOY |
| 61: FUTLOPLUG | 126: SUZKOPLUG | 191: DOUDIELUG | 256: SHIMPLUG | 332: BILSODHAM | 408: LOWTTORY | 485: SCODIDOR |
| 62: SUZTT | 127: DOUQAZHILL | 192: SHIQUEHILL | 257: HURTKOPHILL | 333: RINGOUTOND | 409: QAZPEEND | 486: SWAKOPPAL |
| 63: DOUPEBAR | 128: SHIEBAR | 193: HURTTBAR | 258: JOSQAZMET | 334: WEAVACON | 410: VERYEAME | 487: KILLINGPERT |
| 64: SHIOZER | 129: HURTCEER | 194: JOSPEER | 259: TIMEER | 335: ALPUSILL | 411: MINIKEOLD | 488: EOAILAS |
| 65: HURTIKEING | 130: JOSASING | 195: TIMOZING | 260: CALGBING | 336: BADDIETORY | 412: HAMOGOBOY | 489: BURCEAL |
| 66: JOSOGOORD | 131: TIMSDORD | 196: CALWILORD | 261: SCOINORD | 337: IMMQUEEND | 413: FUTLOW | 490: MORASPIL |
| | | | 262: SWALOPCON | 338: HOBUED | 414: SUZMEICK | 491: NIMSODJOB |
| | | | 263: KILLYLUG | 339: BUGDEHAM | 415: DOUMPHOLE | 492: BILYDOR |
| | | | 264: EOAOXHILL | 340: SHADOZOND | 416: SHIHIPLAS | 493: RINGAPAL |
| | | | 265: BUREAMET | 341: CORWILLOW | 417: HURTOAZAL | 494: WEAVUSPERT |
| | | | 266: MORIKEED | 342: BINNINGICK | 418: JOSEOLD | 999: KILLUSPAL |
| | | | 267: NIMOGOHAM | 343: SADITORY | 419: TIMGBBOY | |
| | | | 268: EILOOORD | 344: LOWCEEND | 420: CALINDOR | |
| | | | 269: RINGDECON | 345: SCOASME | 421: SCOLOPPAL | |
| | | | 270: WEAVDIILL | 346: VERYHIPOLD | 422: SWATHOLE | |
| | | | 271: ALPKOPTORY | 347: MINOUTBOY | 423: KILLOXLAS | |
| | | | 272: BADQAZEND | 348: HAMALOW | 424: EOAEAAL | |
| | | | | 349: FUTUSICK | 425: BURIKEPIL | |



PRESS ANY KEY

MILLENNIUM 2.2

(AtariST/Amiga)

Having problems defeating the Martians? Fret no longer. Matthew Pegg from Milton Keynes knows a trick or two.

1. Don't establish too many bases or you spend all your time defending them from the Martians. It's possible to finish the game with only three. There's no point in establishing a base somewhere that doesn't have vital resources. The most useful bases are Callisto, Titan and Triton.
2. Triton is the only place that has Chromium — and you need that later on in the game. Since it's far away it's a good idea to send a probe and establish a base there early on in the game.
3. If a base loses all its colonists, dismantle one of the Carracks or Waveriders and the crew can repopulate the base.
4. New bases need at least one fighter, an orbital laser and a solar battery. Send these in a Carrack because Waveriders aren't able to transport the necessary equipment for some planets.
5. Successful Martian attacks tend to destroy your most powerful solar battery. Store them in the hold of a Carrack or in the bunker for safety.
6. You will have to turn off your refinery to get enough power to build a fleet carrier.
7. As soon as you start converting your fleet carrier your moon base will be totally destroyed. Unfortunately, there's not much you can do about it. Just repopulate the base and store a battery as above.
8. After this your colonies start declaring independence. Again there's not much you can do about it. Any ships you land on independent colonies are lost. Just make sure you get as many resources to the moon before this happens.
9. If you're stuck for materials for the earth base dismantle all your ships and use their raw materials.



EMYLYN HUGES INTERNATIONAL SOCCER

If you're a poor loser, try Danny Anderson's little cheat to guarantee victory.

You're in the lead during a game and don't want to lose, so kick the ball off for a throw in or goal_kick then press P, @, * and : together. The game quits, but your score remains.

Danny adds that if you wish to attempt this in the first half, you may have to press the keys more than once to achieve the desired effect.



DRUNKEN MASTER

(PC Engine)

Micromedia's very own

you can remember all that, an option screen is revealed where you can choose the number of lives and make yourself invincible.



THUNDER BLADE

(Sega)

One of the trickiest stages of the game is undoubtedly the cavern section. However, Andrew Hopkins from Stapenhill recommends this strategy...

STAGE 2 LEVEL 2

When the caverns first appear on screen press both fire buttons rapidly and the game slows

down making this tricky section a lot easier. When you emerge from the first cavern, go down to the bottom right-hand corner of the screen straight away and stay there and none of the plane's missiles will hit you. If you lose all your lives push the pad down then right and press button 2 to start the game from where you left off.

SLIMEY'S MINE

(Firebird)

Not exactly a cheat or a tip, this item from Robert Sharp of Batley may interest fans of the game's sound samples.

When the game loads, press the space bar and hold it down. Let it go after a while and a rat_a_tat sound should be heard. You can now replace that sound with any of the samples from the game by pressing the corresponding key:

- Commodore Key — Bom!
- Left Shift — Get Ready!
- Right Shift — Aargh!
- CRSR Left/Right — You are here!
- Z — Drum Sample
- X — Got Him!
- C — Ow!
- V — Uurgh!
- B — Screen Cleared!
- N — Gopher!
- M — Bertie!
- < — Snore
- > — Scream
- / — Game Over!

Say, for example, you wanted some drums; press Z and it plays the drum sample, but press Z five times in rapid succession and it repeats the sample in blocks of five. This is useful for arranging a tune with the samples (you can also add them to the existing title track!)

£50

WORTH OF SOFTWARE MUST BE WON!

Each month the best set of tips, hints, POKEs or maps will earn its sender £50 worth of software (your choice), plus a TGM T-shirt. Send 'em to Robin Candy's Playing Tips, TGM, PO Box 10, Ludlow, Shropshire SY8 1DB

WIN
 Second Drive
 and a year's supply
 New Titles published by
 Gainstar NOW!!!
 LOOK BELOW FOR MORE
 INFORMATION

TARGHAN



DEALER
 ENQUIRIES
 WELCOME -
 SPECIAL
 DISCOUNTS
 Distributor
 enquiries
 welcome



Targhan

Far from Edengarhn is the castle of the evil one.

Far from your village, a lord keeps the secret, such a powerful lord that he cannot be human, a creature floating a world that dies and grows again . . .

Targhan is probably the most stunning game you'll ever play.

Targhan is an adventure-action game with more than 120 landscapes and 40 different characters. The game is playable on either keyboard or joystick.

The game offers digitised sound and outstanding graphics.

It will be released on Amiga, Atari and PC (EGA, VGA and CGA) by the end of May. The game will run on both colour and mono screens.

Look for reviews in
 Commodore User,
 Popular, The One,
 C&VG, Ace,
 ZAP, The
 Games Machine
 and Amiga User
 International soon!



Silmarils

To enter our competition please send your warranty cards of TARGHAN and complete the following:

I like the game Targhan because

Send your entries to: UNIT 1 (Rear of 7), WELLINGTON ROAD, SANDHURST, SURREY GU17 8AW ☎ (0252) 877431-879718 • Fax: (0252) 877431

Closing date September 1, 1989.



When The Empire
Invaded . . .



THALAMUS



SANXION

the SPECTRUM remix

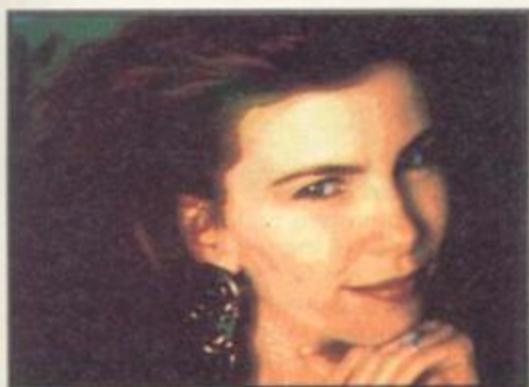
Pit your wits against the perils from the sky, fight against an alien empire intent on mankind's destruction. Get ready to experience 12 levels of the fastest, meanest shoot 'em up scrolling onto your screens with graphics to astound and sound to amaze! Operation Sanxion is active!

By SoftStorm Developments
Thalamus, 1 Saturn House, Calleva Park, Aldermaston, Berkshire RG7 4QW ☎(07356) 77261

SPECTRUM Cassette: £8.99
Diskette: £12.99



SHINE & GRAB



A moody Tawny Kitaen in hi-res above and HAM mode below. Who said she's a ham? But can she remember the film in which she appeared...? Title pic: Jack Nicholson on the tippie. Is he going to Coke?



In our very first TGM Lab Report, Franco Frey achieves some startling results with a video camera, Digiview and a colour Rank Xerox printer. You could too.

What's this then? A journey into movieland? Recognise where these pictures come from? Yes folks, the first three readers to put the right picture to the right pictures, sorry, movies, will get an inkjet printout of Michelle Pfeiffer, wowie!

But is this only another fabulous competition? No, this is the rambling of one who has made the big step of entering the world of digitising, drop his favourite computer, the Speccie, buy an all-singing, all-dancing, sometimes all crashing Amiga 2000, spend another coupla hundred quid on the all important DIGIVIEW digitiser and graphics editing software (see product listing box), then make the decision to spend £1250 on the wonderful RANK XEROX 4020 inkjet printer and to then declare himself completely and utterly loco and broke.

Worth it? You bet, every penny, or should that be pounds!?

Alright, we've all seen the standard reviews in computer mags praising the

excellent DIGIVIEW digitiser and the RANK XEROX 4020 printer, we've all seen the usual demo pictures (remember old Tut or the Newtek lady in wool?), but these poor reviewers never have the time to seriously get to grips with their review machines, before they have to be returned to the asylum (and the machines to the manufacturer or distributor). So, what's it like to use this



ALSO IN THIS MONTH'S CENTRE BYTES...

WORDPROCESSING

Everything you always wanted to know about wordprocessors but were afraid it was too expensive to ask. TGM Lab tested, we put all the popular packages through their paces. There's a ton of information on what to look out for, how to get the best out of it, and where to get it from. PLUS Horror novelist Ramsey Campbell as a WP guinea pig, and printers to see the results on.

● Page 36

SOCIETY OF SOFTWARE AUTHORS	page 44
NEW YORK EXPO	page 45
REPAIRS	page 46
COMMUNICATIONS	page 48
TOOLBOX	page 50
INFODESK	page 52
CLASSIFIED ADS	page 54
CONTROVERSY	page 58
READERPAGE	page 60
MEL'S TRIVIA QUIZ/RESULTS	page 64



equipment and software, and are the results as good as the demos would indicate?

Well judge for yourself on these pages. The originals have come from various sources. DIGIVIEW is not a full colour digitiser, but in combination with

a colour filter wheel in front of a normal black & white video camera it will scan three base colour planes (red, green, blue — or RGB) and combine these to a full colour picture in any of the Amiga's formats, ideally in HAM mode or in high resolution inter-

lace.

When to use one mode or the other? Quite simple. If you're looking for best colour rendition, select HAM to give you 4096 different shadings, but with only 320 x 256 resolution. If you're looking for best resolution, choose hires interlace to give you a useful 640 x 512 pixels across the screen, but with only 16 colours. If your picture has a multitude of prime colours (red, green and blue), choose HAM, otherwise you will find DIGIVIEW selecting an ideal palette of 16 colours, but unable to cover some important shades in the picture. The result is a removal of bright red lipstick from leading ladies and other weird discolourations.

But don't forget, the digitised image is not only necessarily good when it approaches the original in tone and hue, you may find improvements on the original by making use of these inefficiencies and create, rather than just digitise, images.

Newtek suggest the use of fluorescent lighting for their new filter wheel and without going too technical, you need balanced lighting with the correct colour temperature. In practice, this means selecting either mini-fluorescent strip lighting from your hardware store or miniature halogen lighting. As long as the you're not imposing too much of a colour tint from your light source, you can correct the hue within DIGIVIEW. If you're worried about experimenting, buy the special copy stand and lighting with your DIGIVIEW and video camera.

A good investment is also DIGIDROID — the motorised filter wheel, which selects the correct colour filter under full program control and lets you make a perfect, undisturbed cup of tea during full colour scans.

What video sources can be used with DIGIVIEW? The answer is any. You can experiment with colour camcorders, mono cameras, video recorders or direct from TV. But there's a snag. DIGIVIEW is only equipped to handle a mono video signal. So you need extra equipment. Even if you're not

worried about the colour element in the picture, you will need to filter out the colour modulation in the composite video signal. If you don't, you get a diagonal pattern across the digitised image. So if your colour camcorder or video recorder doesn't have a colour kill button, you will have to improvise. More of this in a future issue.

If you're more audacious, you will want to digitise colour images from your colour camcorder or home video recorder. This means replacing the old mechanical filter wheel with an electronic setup, which splits the colour composite signal from the video source into separate RGB signals and combines them with the composite sync signal and feeds them on demand to DIGIVIEW.

Complicated...? You bet. So don't worry, a number of products will appear soon to let you do this — at a price. In fact, one such product is already available, an AMIGA COMBINER RGB which only works in conjunction with the professional RENDALE genlock, so be prepared to spend in excess of £800, or wait for less expensive product to appear. The pictures on these pages were taken mostly from slides and from a digital video recorder fed through a very early prototype of a colour splitter/video manager from FREL Ltd. More of this product in the near future.

Video recorder and camcorder images pose another major problem to DIGIVIEW. The scanning of an image can take several minutes and must therefore be frozen for the duration of the scan. That is obviously not a problem with a still image such as a colour slide or artwork, but if you have 'live action' — say from a TV or film or home video movie — this must be halted and retained with a good quality and steady image. Very few video recorders have a perfect still frame capability due to the dynamics of storing images on magnetic media.

The only useful solution lies with the new digital video recorders. This does not imply



Left: a dithering Susan Sarandon, is she getting the right vibes? Inset left: you shouldn't have said that about his mum — Sylvester Stallone over(re)acting?

Above, right: on the fly... freeze frame video image digitised using a new prototype colour splitter/video manager. And below it, a taste of things to come — Xerox print version, but what's the film?

Inset right: Steve Guttenberg meets his match with Darryl Hannah in one of her better moments in...?

Far right: a sweet looking Julianne Phillips in...?

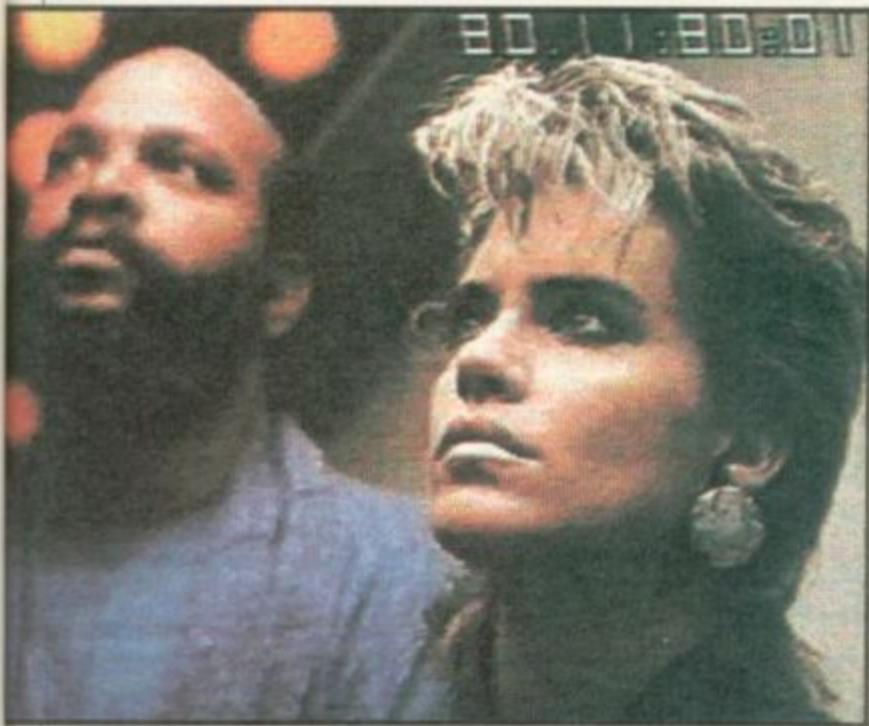
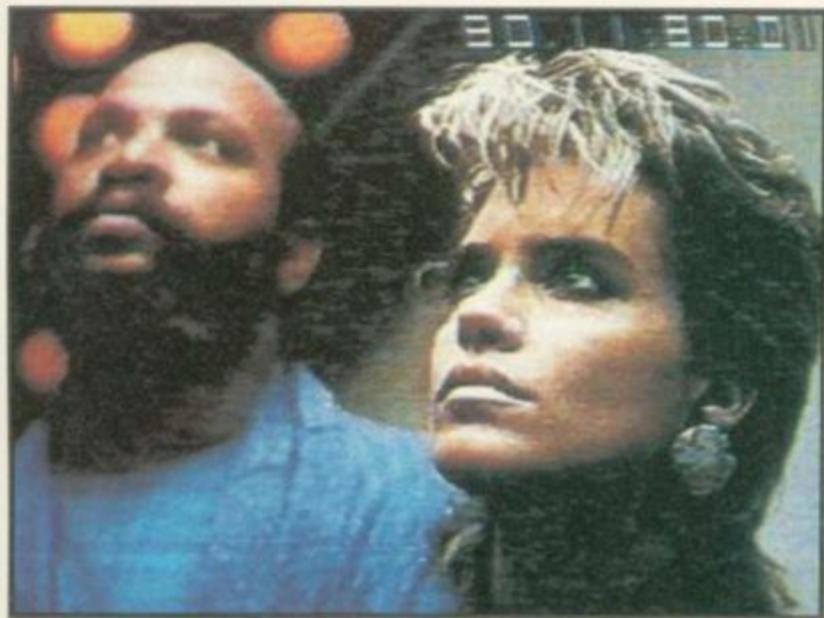
ele-
will
mod-
ideo
et a
digi-
lour
rder
ton,
More

you
lour
am-
der.
old
an
the
the
RGB
with
and
to

So
rod-
you
one
vail-
IER
con-
onal
pre-
of
sive
res
ken
n a
fed
e of
ger
this

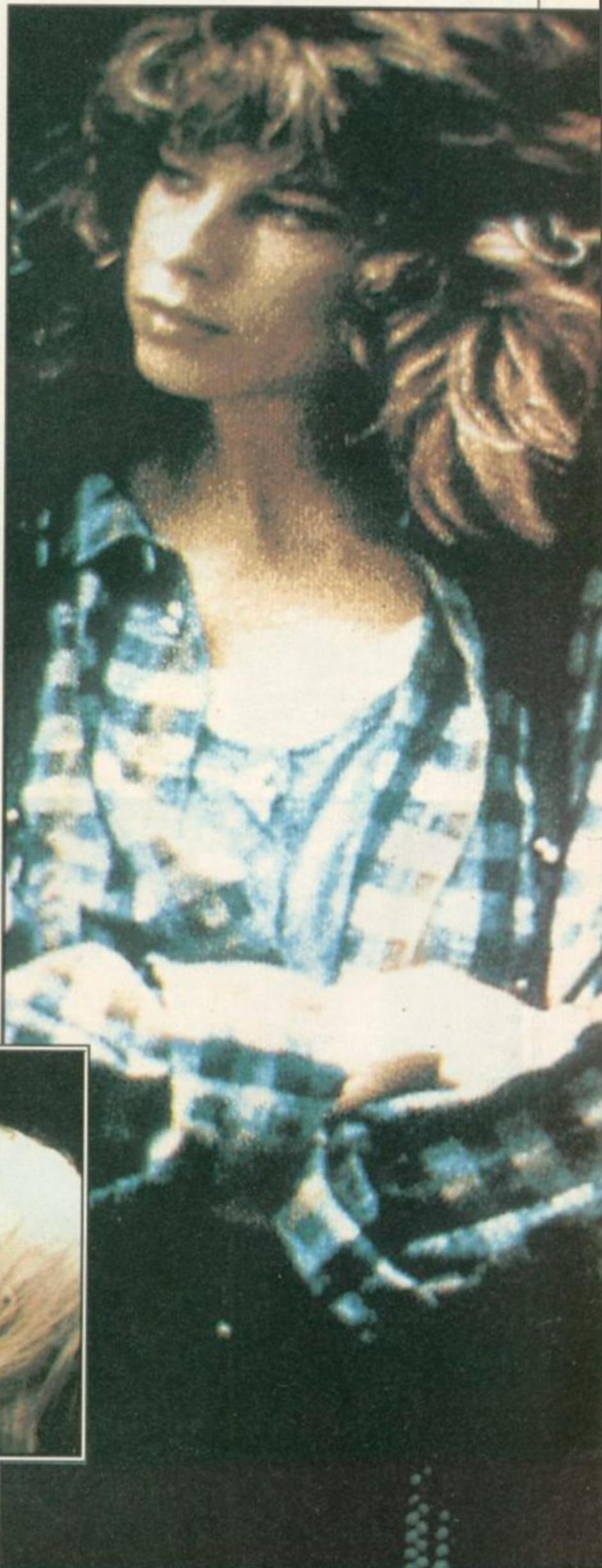
am-
ther
EW.
can
must
ura-
us-
still
e or
live
film
this
ned
ady
ers
pa-
of
etic

lies
deo
ply



digital recording onto media as with CD disks, but digital refers to the freeze-frame principle — the tape is not physically halted on these machines. The picture is grabbed and digitised into RAM memory in the video recorder and output instead of

the 'moving' picture. In other words, a complete frame grabber within the video recorder. DIGIVIEW is to record an already digitised image! Expensive? Yes, but don't forget if you're already renting a video recorder, you're only looking at





GRAB IT COMPETITION

Send in your list of film titles and the first three out of the bag who get at least three films right will receive a XEROX print of the lovely Michelle Pfeiffer (pictured left).

Please also state what digitising equipment you already have or would like to purchase. Send the entry to GRAB IT, The Games Machine, PO Box 10, Ludlow Shropshire SY8 1DB

The Products

(All prices are RRP inclusive of VAT)

- DIGIVIEW GOLD V3.0 (Newtek) £129.95
- WV1410 CAMERA WITH 8.5MM LENS (Panasonic) £263.82
- DIGIDROID (Newtek) £59.95
- COPY STAND FOR DIGIVIEW (Newtek) £59.95
- AMIGA COMBINER RGB (Pure Graphics) £172.50
- AMIGA GENLOCK 8806 (A2000) (Rendale) £750.00
- XEROX 4020 INK JET PRINTER (Rank Xerox) £1437.50
- STARTER PACK (includes all necessary consumables): £146.68

A full list of products and suppliers will be published in the next issue of TGM and Centre Bytes. Watch this space!

Michelle Pfeiffer (above) isn't wicked, but she also isn't advertising a hair shampoo in...?
 War isn't always a picnic (below) in...?

the rental upgrade difference.

There are a number of digital VHS recorders on the market, so try them out before you buy or rent. Selection of a camcorder can also be tricky. The problem here is resolution, or lack of it! Your average VHS, VHS-C or VIDEO 8 camcorder provides a resolution of 200-240 lines, which is about half the image resolution of the PAL TV system you have at home. To obtain good results when digitising in HAM (320 x 256) or in hires interlace mode (640 x 512) this is insufficient and Newtek advise the use of a mono video camera, as this provides resolutions in excess of 400 lines. The only other option is the new SUPER VHS format which provides a similar resolution in colour, and reaches the limit of the PAL video format signal. Again, be prepared to pay something in the region of £1400 for this type of camera.

SUPER VHS format records and outputs the luminance and chrominance element of the video signal separately, so you need an adaptor or colour splitter/RGB-combine which takes care of this. Perhaps you're best off following Newtek's advice after all. At under £300 a mono video camera is good value for money. But beware of its limitations. Unlike modern camcorders there's no user-friendly macro facility, in fact you need a screwdriver to

adjust the focal length range, a must for slide digitising! I just hope the screw is built to last...

Another niggly point is the choice of the 8.5mm lens. Check the edge of the scanned image and you find massive distortion. The centre area of the image is lengthened and the perimeter areas shortened. Fortunately, anyone you show the results to won't usually be able to compare original and digitised image side by side, but the distortion can cause problems on some geometric images.

Previewing is another problem on DIGIVIEW. Unfortunately Newtek have not provided a monitor output for previewing and focusing/centering of the image. You must purchase a video amplifier with multiple outputs or wait for the new colour splitter/video managers which incorporate switchover between computer activity display and video input monitoring. Who said digitising was simple?

In the next issue I'll be discussing the various components in more detail and provide some useful tips on how to digitise slides — a chapter in itself. Further there will be experiences to report on RANK XEROX 4020 printing and analysis of printing costs. In the meantime take a look at wicked witch Susan Sarandon in full inkjet glory.



The Games machine GUIDE TO WORD PROCESSORS & PRINTERS

Anyone who has to do a lot of writing will soon realise the limitations of a typewriter — if you make any major mistakes or just want to make a few changes the entire page has to be re-typed. Obviously a word processor is a must for any writer whether you're writing magazine articles, business reports, novels or just letters.

Early word processors were very basic text editors. Spelling mistakes and typing errors could be rectified, paragraphs could be changed, text could be moved or inserted to another part of the article and words could be replaced automatically with others. However, word processors have come along way. While many still retain these basic features they've been expanded upon. For instance many allow text to be cut and pasted between two files; multiple documents to be worked on at the same time; mail merge and macros. Some even allow graphics designed on an art utility to be included in a text file.

So what then is the difference between a word processor and a desktop publishing (DTP) package. If truth be told very little. Generally a word processor features better text editing facilities such as spell checkers and find and replace options, while DTP packages are best suited for layout and graphic work. However, the dividing lines are becoming increasingly blurred quite often word processors duplicate many of the options of a DTP package while text editing facilities on DTP packages are becoming more sophisticated.

When purchasing a word processor it's important to consider what you want it for and what facilities you need. This may sound obvious but it is pointless spending money on an expensive package when all you want to do is write letters. Another consideration is your printer. Colour graphics import facilities are fine if you've got a colour printer but a bit pointless otherwise; also don't forget to check to see if your printer is compatible. With this in mind read through the TGM guide to 16-bit word processors to find the package that suits your own price range and needs.

GLOSSARY

ASCII American Standard Code for Information Interchange. A file format where just the basic codes for printing the characters are saved — ie, all printer codes are stripped out. Word processors which support ASCII can exchange files with other ASCII compatible programs (and sometimes other computers, via serial ports or similar disk formats).

DOCUMENT Any file created in a word processor, can contain graphics and text.

DOCUMENTATION A brief description of the manual. Is it easy to understand? Or does it fail to highlight potential problems?

FONTS Types of character sets. If your printer doesn't support a particular font it won't be able print it regardless of whether the software can.

EASE OF USE What it's like to work with.

GRAPHICS Some word processors offer the facility to include graphics in a text file.

However, few allow for multi-coloured images to be included and will often recolour the graphic.

INTERLACE A screen resolution mode on the Amiga with a vertical resolution of 400 lines.

MACRO A user-defined operation. A word can be assigned strings of frequently used instructions which will be performed when ever this word is entered.

MAIL MERGE Useful for producing a series of documents which differ only slightly from each other. The most common use is to produce multiple letters with different names and addresses on each but the same body of text.

MISMATCHED WORD Any word not found in a spell checker's dictionary. A mismatched word may not be misspelled it just isn't in the dictionary. If this is the case most spell checkers allow you to include it in the dictionary for future use.

MULTITASKING The capability to run more than one program at a time. The Amiga

WORD PROCESSOR PACKAGES

has this facility built-in. Many word processors allow the user to edit several documents at once and cut and paste between them.

NON-INTERLACE A screen mode with a vertical resolution of 200 lines.

POINT SIZE A unit of measurement used by typesetters and printers to measure font size. There are 72 points per inch. Common sizes include 8, 10 and 12 point.

PRINTER What printers the package will output to. Check to see if your printer is compatible with any of those listed.

PRODUCER Who to contact if you're interested in any particular program.

REQUESTOR A box that appears in a window as response to a choice made on a menu requesting additional information to complete the command.

SCREEN The screen resolution. This is particularly important on packages that can import graphics. Higher resolutions allow for more detailed graphics.

SIZES Font sizes measured in point size.

SPECIAL FEATURES Any additional functions not normally featured on a word processor.

SPELL CHECKER/DICTIONARY/THESAURUS Details on spell correction facilities including the size of the inbuilt dictionary and any thesaurus functions.

STYLES Alternative ways of representing the same font. Useful for highlighting sections of text.

SYSTEM REQUIREMENTS Minimum hardware and software requirements to get the package up and running. The more powerful programs operate more efficiently with two disk drives and memory expansions for dictionaries.

LAB GUIDE Our TGM Lab Report at-a-glance overall appraisal of the program taking in to consideration ease of use, functions and price.

WIMP Windows, icons, mouse and pull-down menus (or Windows, icons, mouse and pointer, which some argue was the original interpretation of the acronym). Options are selected by pointing to the desired function on a pull-down menu. The standard working environment for most word processors.

WYSIWYG What You See Is What You Get. Documents appear on screen exactly as they will be printed (very useful — saves reams of paper!). However, it relies on screen resolution and can be quite misleading at times.

PACKAGE: Prowrite
SYSTEM REQUIREMENTS: Amiga, 512K RAM, Kickstart 1.2 or later.

SCREEN: In order to display pictures and text in the same proportions that they will be printed, Prowrite operates in high resolution mode. If you don't own a high resolution monitor the screen will flicker. However, an additional medium resolution version is supplied on disk. Regardless of which version is used both will print in high res.

WYSIWYG: Yes, in high resolution only.

FONTs: Diamond, Emerald, Garnet, Opal, Ruby, Sapphire, Topaz.

STYLES: Plain, Bold, Italic, Underline, Superscript, Subscript.

SIZES: 12, 20.

GRAPHICS: Imports normal IFF pictures such as those created on the Deluxe Paint series of art utilities as well as Hold And Modify (HAM) pictures. Although the Amiga is capable of producing 4096 colours, most colour printers can only produce seven colours. When a multi-colour picture is printed the printer produces an approximation of the on screen colours using a dithering technique. This works by printing two colours close together to create the illusion of a third colour. For instance to produce dark blues the printer alternates between printing blue and black dots. However, this method doesn't always produce satisfactory results. Prowrite attempts to rectify this by showing the dithered picture on screen along with options to control the degree of dithering. Alternatively a graphic can be converted into a monochrome image. Pictures can also be resized both vertically and horizontally. Very close to a DTP package.

MAIL MERGE: Yes.

PRINTER: Epson, CBM MPS1000, IBM, Xerox and compatibles.

ASCII OUTPUT: Yes.

SPELL CHECKER/DICTIONARY/THESAURUS: Mismatched words are highlighted in a special requestor where they can be ignored, changed or added to the 95,000 word dictionary. A suggest option will display a list of similarly spelled words in a list box. Corrected words will automatically replace mismatched words in the document.

DOCUMENTATION: Very detailed. The manual assumes the user is familiar with WIMP environments and Workbench but never fails to explain any option in sufficient detail for inexperienced computer users. By the end of the first chapter the user is familiar with spell checking, cut and paste, and basic document editing functions. While subsequent chapters show how to get more out of these and other options.

SPECIAL FEATURES: Supports Amiga multi-tasking. You can open several documents simultaneously in several windows and cut and paste between them.

EASE OF USE: While the manual gives detailed explanations of all the program's functions, anyone familiar with word processors will experience very few problems using Prowrite without it. Most of the options are self-explanatory and a little experimentation soon reveals the purpose of those that aren't.

TGM GUIDE: Priced at £85 Prowrite can't be grouped with the budget word processors nor is it as expensive as some of the top-end Amiga packages. As such it falls in a shadowy middle ground which is frequently overlooked by many potential buyers. Which is a real shame because it is a marvellous package — pow-

erful yet easy to use.

PRICE: £85.

PRODUCER: New Horizons Software. Available in the UK from HBMarketing, Brooklyn House, 22 The Green, West Drayton, Middlesex UB7 7PQ. Tel: (0895) 444433.

PACKAGE: Transcript
SYSTEM REQUIREMENTS: Amiga, 512K RAM.

SCREEN: Low resolution, interlace and non-interlace modes.

WYSIWYG: There's a video preview option which allows you to view a representation of the actual printer output. However, you can only view the document in this mode you can't edit it.

FONTs: Topaz.

STYLES: Plain, Bold, Italics, Underline.

SIZES: 8, 9, 11.

GRAPHICS: No graphics support.

MAIL MERGE: Yes.

PRINTER: Any of those featured in the Preferences directory on Workbench.

ASCII OUTPUT: Yes.

SPELL CHECKER/DICTIONARY/THESAURUS: Spell checking is done by a separate program called Transpell. Individual words or entire documents can be spelled checked. Mismatched words can be corrected in a special requestor and will be automatically replaced in the document, ignored or added temporarily to the dictionary. Alternatively, guess spelling will open a requestor listing words that are close in spelling. The default dictionary consists of 90,000 words. Words can be added to it temporarily but they will be lost once the Amiga has been switched off, unless a new dictionary is saved to disk.

DOCUMENTATION: There are always those users who wish to

WP HORRORS!

It's all very well TGM lecturing you on what's the best way to process your words and what equipment to buy, but how do the professionals go about their word processing days. Andrew Ritson spoke to top horror writer, Ramsey Campbell, on the pros and cons of word processing...

Ramsey Campbell (author of *The Hungry Moon*, *Ancient Images* and *Demons By Daylight*) is the responsible owner of an Apricot 286. It's the diary of his night and daymares.

The master of horror sits hunched in his chair, a green light bathing his face in a ghostly garish shade. His computer lies dormant, resting its weary CPU (head), before being coughed into action by its hideous owner.

'It's not a bad computer,' he says, proudly patting his Wordstar 5 package, which he regards with high esteem. 'Pretty much unlike the infamous Amstrad manual,' he laughs with a contagious smirk. 'Did you know there's even a best-

selling book called *How To Understand Your Amstrad?*'

Campbell began computing as an ignorant. This leap from the 'pneumatic-drilling' typewriter to the word processor began five years ago. Computer Specialist Jean Hill introduced him to the metal-kind, with an inviting hand. 'He y'are,' she said one day, 'come play on this!' He naturally dabbled with the ominous keyboard and took an immediate dislike to it. His response? 'Ghastly. The phrase 'fatal error' cropped up and something disappeared off screen. Most odd indeed.'

However, since that shock of a beep and grunt from the computer's metal gut, he's been happy with his newest companion; the Apricot in comparison has been ever so user-friendly. Campbell's Apricot is his closest companion. Carefully, he caresses its silvery face with a lover's touch; speaking to it at a far greater pace than the printer prints.

The most useful thing about this bute is that it checks repetition. A dictionary is there for use, which is extremely powerful. One comical occurrence of the new system happened when he added the words 'gruesome' and 'grotesque' to its literary banks. The computer's response?:

WORD PROCESSOR PACKAGES

dive straight into a program without reading the relevant details first. A tutorial early on in the manual is designed with them in mind providing a simple example of how to create, edit and save a document. Generally the documentation is fine with all references to word processor jargon clearly explained.

SPECIAL FEATURES: Designed to work with the DTP package Professional Page.

EASE OF USE: Virtually all functions can be carried out with only a few key presses.

LAB GUIDE: Excellent text edit and layout facilities. Clearly aimed at the serious user and at a bargain price. Lack of graphics support may be disappointing but at such a cheap price it is easily integrated in a low cost DTP set up.

PRICES: £25.

PRODUCER: Gold Disk.

Distributed in the UK by HB Marketing, Brooklyn House, 22 The Green, West Drayton, Middlesex UB7 7PQ. Tel: (0895) 444433.

PACKAGE: WordPerfect

SYSTEM REQUIREMENTS: Amiga, 512K RAM.

SCREEN: The text window can be set to any size using the usual window resize procedures. Operates in medium resolution.

WYSIWYG: Yes.

FONTS: Many.

STYLES: Plain, Bold, Underline, Italics, Superscript, Subscript, Overstrike.

SIZES: User-defined.

GRAPHICS: No graphics import facilities.

MAIL MERGE: Yes.

PRINTER: A separate disk controls all printer configuration options. Most dot-matrix and many other types of printer are catered for.

ASCII OUTPUT: Yes.

SPELL**CHECKER/Dictionary/Thesaurus:**

A separate disk takes care of the spell check, dictionary and thesaurus functions.

Mismatched words are highlighted along with a list of similarly spelled alternatives. Other correction options include the Phonetic option which produces a list of words which sound similar to the mismatched word. Any corrections will automatically appear in the document. Dictionaries can be set up for specific purposes such as business or computing. Not only can words be added to the dictionary but they can also be deleted when you feel they are redundant.

WordPerfect features a fully developed thesaurus option.

Once activated, words are easily selected using the cursor. The program then produces a list of possible alternatives. Should you decide to select any of these the old word will be substituted in the document for the new one.

DOCUMENTATION: A huge 600 or so page manual. Incredibly daunting and incredibly detailed. The size of the manual makes it difficult to locate exact information quickly and quite often several pieces, located in different sections of the manual, must be cross referenced to fully understand a function. However, a comprehensive tutorial section helps teach many of WordPerfect's features.

SPECIAL FEATURES: Sequences of instructions can be assigned to MACROS.

EASE OF USE: Definitely not for beginners. Basically it's difficult to use because there are so many facilities to master. Some options are not immediately accessible and a fair amount of documentation reading is necessary before you can start using the program

adequately. Fortunately, a tutorial disk is supplied and a help option provides a quick keystroke reference guide. If you're still prone to getting lost (which is likely for a good while) a template with a full list of key functions fits over the Amiga keyboard.

LAB GUIDE: WordPerfect is generally regarded as one of the best word processors available for the Amiga and quite rightly so. The editing and layout features are everything you could want in a word processor and more.

However, the price is rather prohibitive and only worth the outlay if you're really serious about word processing or DTP.

PRICE: £228.

PRODUCER: WPCorp Products.

Supplied in the UK by Electric Distribution, Meadow Lane, St Ives, Huntingdon, Cambs PE17 4LG. Tel (0490) 496789.

PACKAGE: That's Write

SYSTEM REQUIREMENTS: Atari ST, 512K RAM.

SCREEN: Medium resolution.

WYSIWYG: Yes.

FONTS: Pica, Elite, Times, York, Rock, Helbo, Greek.

STYLES: Plain, Bold, Underlined, Double Underlined, Strike Through, Italic, Superscript, Subscript, Symbol.

SIZES: Varies according to font and style.

GRAPHICS: No graphics support.

MAIL MERGE: Yes, compatible with some database packages such as dMan.

PRINTER: Most 9-pin and 24-pin dot-matrix printers also the Atari laser SLM 804.

ASCII OUTPUT: Yes.

SPELL**CHECKER/Dictionary/Thesaurus:**

Fast spell checker. The dictionary is kept in RAM whenever possible. Also one of the few programs to support foreign lan-

guages (currently German and Dutch, others available on request).

DOCUMENTATION: Concise manual written with beginners in mind.

SPECIAL FEATURES: Font editor for user-defined character sets including logos and other symbols.

EASE OF USE: Very simple. As any key on the keyboard can be assigned its own macro you can effectively customise the program to suit your own writing and layout habits. Selections need never be more than a key-press away.

LAB GUIDE: A reasonable word processor with a wide selection of fonts (more are available) which should appeal to those who wish to vary the appearance of their text. The font editor proves to be very useful for adding a personal touch to a document in the form of a custom logo.

PRICE: £129.

PRODUCER: Cavendish

Distributors Ltd, 209 Tottenham Court Road, London W1 9AF. Tel (01) 323 4761.

PACKAGE: K-Word 2

SYSTEM REQUIREMENTS: Atari ST, 512K RAM

SCREEN: Medium resolution.

WYSIWYG: Yes.

FONTS: Just the one.

STYLES: Plain, Italic, Bold, Underline.

SIZES: Non-changeable.

GRAPHICS: No graphics support.

MAIL MERGE: Yes.

PRINTER: Includes a printer configuration program which can be adapted to most popular makes of printer. The configuration routines also work with other software application packages.

ASCII OUTPUT: Yes.

SPELL**CHECKER/Dictionary/Thesaurus:**

K-Word does not feature any spell checker, thesaurus or dictionary options of its own. However, it is fully compatible with K-Spell and K-Roget (also from Kuma) which provide extensive document correction facilities.

DOCUMENTATION: Since this isn't a particularly complex word processor the manual isn't overly long. Shouldn't pose any problems for anybody.

SPECIAL FEATURES: Frequently used key combinations or words can be assigned to any one of the function keys.

EASE OF USE: Operates in a WIMP environment without hordes of windows to clutter up the screen, very easy to use. All the editing functions are easily accessed with just a few clicks of the mouse. There's even a help option which provides brief explanations of some of the program's functions just in case you get lost. The document editing



Horror author Ramsey Campbell

Do you really want to add these words?

Campbell laughs gingerly, his heart ticking like an old grandfather clock.

Campbell was a latecomer to word processing. However, he agrees its usages are plentiful. 'A completely different mind-set comes into play once I switch from longhand to screen. Creative energy is usually usurped on paper, and revision on screen. I can now see complete redundancies of text on seeing a printed page. I guess the thing which convinced me of WPs' advantages was their ability to cut here and there, without screwing up pieces of paper and having to start again.'

Campbell begins his daily writing shift at 7:30am. The morning is swallowed up by thinking imaginatively. Creativity is an early morning priority. Writing non-fiction, which he regards as being more lateral, can be done straight onto screen without the use of the mighty sword — the pen.

Has he any regrets or bitterness to vent against the computer industry at large?

'Yes,' he argues defiantly. 'Paying £3,000 for a system and being told to simply go away and use it is not my idea of salesmanship.' He adds: 'We once had a problem — the computer refused to

continued on page 38

WORD PROCESSOR PACKAGES



facilities, including cut and paste and find and replace, aren't developed to a particularly high degree but are certainly sufficient for everyday use.

LAB GUIDE: Aimed very much at the first time user. The program is presented in a no-nonsense manner without hefty manuals or over complex menus. While most other ST word processors are more sophisticated (and expensive) it's worth asking yourself do you need reams of functions? K-Word 2 is fully compatible with the K range of application packages from Kuma. Presently these include a spell checker, a thesaurus, a document indexing system and a spreadsheet. By making the program modular you can adapt it to suit your own needs without paying for functions that you won't use. Lack of graphics support is disappointing but if you only want a word processor to write well presented letters K-Word 2 is more than adequate.

PRICE: £39.95.

PRODUCER: Kuma Computers Ltd, 12 Horseshoe Park, Pangbourne, Berkshire RG8 7JW. Tel (07357) 4335.

PACKAGE: Protex (version 4.2)
SYSTEM REQUIREMENTS: Atari ST or Amiga with minimum of 512K RAM.

SCREEN: Medium resolution.

WYSIWYG: Yes.

FONTS: Just one.

STYLES: Plain, Bold, Underline, Italics, Condensed, Double Strike,

Subscript, Superscript, Elite, Pica.
SIZES: Standard text size for the ST or Amiga.

GRAPHICS: No graphics import facility. However, simple line boxes can be drawn.

MAIL MERGE: Yes.

PRINTER: Epson, Diablo, HP Laserjet and compatibles. Other makes of printer are easily configured for use with Protex.

ASCII OUTPUT: Yes.

SPELL

CHECKER/DICTIONARY/THE-SAURUS: Built-in 70,000 word dictionary. Mismatched words can be ignored or added to the dictionary. There's also a spell check while typing facility.

DOCUMENTATION: The manual on earlier versions was rather muddled; it was often difficult to locate exactly what you were looking for. Thankfully in the latest version this has been improved.

SPECIAL FEATURES: Compatible with some other word processors including First Word on the ST.

EASE OF USE: Generally straight forward. Initially very easy to use but some of the more complex functions can be a bit tricky to master. However, the new improved manual is a considerable help.

LAB GUIDE: A popular word processor for both the ST and Amiga and continual revisions ensure good after sales support. Perhaps a little overpriced in view of the lack of graphics commands. Nevertheless an excellent word

processor.

PRICE: £99.95. Owners of earlier versions can purchase an upgrade at a discount.

PRODUCER: Arnor, 611 Lincoln Road, Peterborough PE1 3HA. Tel (0733) 68909.

PACKAGE: First Word Plus (Version 3.14)

SYSTEM REQUIREMENTS: Atari ST, 512K RAM.

SCREEN: High and medium resolution modes are supported. For high res you'll need a special mono monitor. Medium res works well with TVs, although distinguishing a comma and a full stop is difficult on smaller sets.

WYSIWYG: Yes.

FONTS: Pica, Elite, expanded and condensed.

STYLES: Italic, underlined, superscript, subscript can be combined, and presented in bold, medium or light.

SIZES: Just one.

GRAPHICS: FWP comes with a Snapshot accessory which can snatch any pictures created by a GEM-based package and paste them into a document. There's also a DegaSnap for use with Degas and Degas Elite.

MAIL MERGE: FWP comes with First Mail — a mail merge package sold separately for £14.95. Besides FWP datafiles you can use files from H&D Base, LaserBase, DB Master One and dBMAN to create form letters.

PRINTER: Brother HR daisywheel series (except HR-1), Diablo

daisywheel, Epson FX, RX, JX 8 colour printer, LX and LQ, IBM Personal Graphics printer and Proprinter, Juki 6100 daisywheel, Star, Oume Sprint daisywheel series (except 10), Atari SMM804 and compatibles. There's also a Standard, ASCII printer driver and a customise printer driver option.

ASCII OUTPUT: Yes.

SPELL

CHECKER/DICTIONARY/THE-SAURUS: 40,000 word dictionary with option to create supplementary dictionaries which can be maintained separately, or merged with the main dictionary which currently takes less than a minute to load. Documents may be spell checked all in one go, or continuously with a beep announcing each misspelling as it's input.

DOCUMENTATION: A sturdy ring binder takes both FWP and First Mail instructions. Both are well laid out and comprehensive (FWP usefully explains why many printers have problems with NLO italics), the indexes could be better though.

SPECIAL FEATURES: Disk-based Scrap file and a spill feature which exploits a hard disk to allow bigger documents.

EASE OF USE: FWP takes the basic First Word WP most people will be familiar with and not only adds additional features but improves existing ones (ie putting header bars on file selectors so you can see whether the menu is for deleting or editing files). Also welcome are statistics (words, remaining disk/RAM space), Save and Resume and background printing while editing. In short, an extremely user-friendly program.

LAB GUIDE: FWP is one of the most powerful GEM-based word processors around and the natural choice for upgrading First Word users.

PRICE: £79.95.

PRODUCER: GST Software. Distributed in the UK by Electric Distribution, Meadow Lane, St Ives, Huntingdon, Cambs RE17 4LG. Tel (0480) 496789.

PACKAGE: Word Writer ST
SYSTEM REQUIREMENTS: Atari ST, 512K RAM. A RAM expansion is recommended to make effective use of the spell checker.

SCREEN: Will work in high or medium res modes, but not low res.

WYSIWYG: Yes.

FONTS: Just one.

Ramsey Campbell, from previous page

print out. It sat there glumly convinced it was about to do something, but it didn't. We rang Apricot — they said it was a software fault. We rang the software producers; their response — wait in a queue and be patient. Thankfully, Jean Hill performed open-heart surgery and solved the problem. The only penalty — sleepless nights.

Would Campbell be interested in following Clive Barker, and seeing his name on the computer game shelves? Would the idea of novel conversion to screen attract the younger generation? 'Oh undoubtedly YES. I think it would be great fun. Let's hope some software house approaches me!'

Campbell's household doesn't contain any addictive computer games. He does bravely admit to often whiling away the hours sitting in a spacepod simulator down at the local arcade. 'Sitting tightly in a craft and weaving yourself in between an asteroid shower is fun,' he gleams, 'but addiction admittedly is frightening. Fortunately, my children haven't got their maulers into the games market, although I wouldn't discourage them.'

Campbell's most recent venture into the apocalyptic future was *The Hungry Moon* (available on

Arrow Books) — a portrayal of the shadowy era of post-nuclear war. Is he afraid of nuclear technology?

'Of course, yes. But it is usages which are dangerous. Primarily its uses are economic — cheaper goods at a faster rate. But the drawback is the old Freudian idea — once you learn to do something, you can't undo it. Can you? Dependence is also dangerous.'

From darkness to light, Campbell addresses the comical side of computing. 'I don't know whether this is true in Britain, but in America, there's a computer game whereby if you feed in the wrong digit, your whole system will be fused.' A bit like Russian Roulette? 'Yes,' he hauls unapologetically.

His pastimes include watching re-runs of *Tron* — the computer-generated film. Will he be employing the services of a robot cleaner should one land on his doorstep? 'Eeerrmm,' he crows, 'I'd have to examine it pretty carefully. But it sounds fun doesn't it? Of course, a malfunction would be something else.'

The conversation ended abruptly with the invasion of a hum. His computer blinked and yawned. 'Are you talking about me?' it bleeped.

WORD PROCESSOR PACKAGES

WordPerfect

SIZES: Just one.**STYLES:** Italics, bold, light, subscript and superscript may be mixed and matched as usual.**GRAPHICS:** No.**MAIL MERGE:** Yes. Can draw data from Timeworks Swiftcalc ST and Data Manager ST.**PRINTER:** A wide range including Atari 804, Brother HR series, Citizen P35, Comstar, Epson, Juki, NEC 3550, Panasonic, Diablo, Toshiba, Seiko, Star, Qume, Transtar, Okimate and compatibles.**ASCII OUTPUT:** Yes (via printer driver).**SPELL****CHECKER/DICTIONARY/THESAURUS:** 90,000 English dictionary and 60,000 key word thesaurus. Unfortunately on a standard 520 STFM the size of the dictionary means you're unable to spell check documents of more than a couple of pages without running out of memory.**DOCUMENTATION:** Generally good,

except for the all-important printer section which is rather small and not very informative.

SPECIAL FEATURES: A useful 'Integrated Outline Processor' which uses a labelled series of tabs to help with planning out essays etc.**EASE OF USE:** Spell checking documents is one of the most tedious WP functions, and if you've got a megabyte of memory or more the 90,000 word dictionary is extremely attractive. In addition once you choose to ignore a word on a spell check sweep all further occurrences of the word are ignored as well. The thesaurus is reasonable as well, though a disk access is required for each word you want to find synonyms for. Word Writer ST is compatible with both First Word and FWP.**LAB GUIDE:** A superior spell check, bold menu headings and Quick Key system make this a serious rival to FWP in many respects.**PRICE:** £79.95.**PRODUCER:** Timeworks. Available in the UK from Electric Distribution, Meadow Lane, St Ives, Huntingdon, Cambs RE17 4LG. Tel (0480) 496789.**PACKAGE:** Wordup**SYSTEM REQUIREMENTS:** Atari ST, 512K RAM, 1Mb needed for graphics import options and some

printers. It's also advisable to have either a double sided disk drive or an additional drive.

SCREEN: Medium or high resolution. Smaller fonts would pose difficulties on most TVs.**WYSIWYG:** Yes.**FONTS:** Swiss (like Helvetica), Dutch (like Times), Typewriter.**STYLES:** Plain, Bold, Light, Skewed, Outline, Underline, Broken Underline, Double Underline, Strikethrough, Superscript, Subscript.**SIZES:** 8, 9, 10, 12, 24.**GRAPHICS:** Imports graphics from Degas Elite, Neochrome and in GEM image format. However, colour graphics are automatically converted to monochrome images and some adjustments may have to be made to the graphic to ensure that the colours remain their original intensities. Graphics can be resized either manually or with aspect-ratio scaling options to maintain the original width and height ratios.**MAIL MERGE:** Yes.**PRINTER:** Epson FX/EX/JX/LQ, Atari SMM804, Star Gemini 10X and SG series, Citizen Tribute 224 and compatible printers.**ASCII OUTPUT:** Yes.**SPELL****CHECKER/DICTIONARY/THESAURUS:** None.**DOCUMENTATION:** Good, with a nice Quick-Start mini-manual. But

the printer section could've been more substantial.

SPECIAL FEATURES: Individual words can be replaced with blocks of text using the Glossary option. For instance there may be a particular piece of text that you use frequently. Instead of typing this time and time again it can be assigned a keyword of your choice. When ever this word is typed into a document it will be replaced with the relevant block of text.**EASE OF USE:** To begin with the disks must be backed up in a lengthy process, and then old First Word files must be converted to ASCII (all codes stripped out) to be read by Wordup. Once past all this Wordup is reasonably user-friendly.**LAB GUIDE:** Wordup is a powerful tool as regards the final print-out, offering a wide-range of options from fonts to text size, but lacks both a spell check and First Word compatibility. Potential buyers must decide for themselves whether the pros outweigh the significant cons.**PRICE:** £59.95.**PRODUCER:** Neotron. Available from HB Marketing, Brooklyn House, 22 The Green, West Drayton, Middlesex UB7 7PQ. Tel: (0895) 444433.

CaC Computers and Communications

ATTENTION**NEC PC ENGINE ANNOUNCEMENT.**

NEC Corporation, NEC Home Electronics Ltd, and NEC (UK) Ltd (collectively 'NEC' hereinafter) have recently become aware that the PC ENGINE is being offered for sale in the United Kingdom. NEC believe that it is important that UK consumers should be aware of the following information.

1. The PC ENGINE is a product manufactured by NEC Home Electronics Ltd for use with the NTSC transmission system. It is not compatible with the UK PAL transmission system nor any other non NTSC transmission system. For this reason, NEC Corporation does not market the PC ENGINE in the UK or in any other EEC countries.
2. There are no authorised distributors of the PC ENGINE in the United Kingdom at present. Therefore, if you are offered a PC ENGINE which is said to be compatible with the PAL system or any transmission system other than NTSC, you should be aware that it will have been modified by a third party. This modification is made without NEC's permission or approval.
3. In the event that a defect should arise in any modified PC ENGINE you must contact the dealer from whom you purchased the product. NEC cannot be held responsible for any defects in any modified PC ENGINE nor be involved in any disputes between purchasers and sellers of such products. In particular, NEC (UK) Ltd cannot respond to service calls in respect of any modified PC ENGINE. Please note that the guarantee provided with each PC ENGINE sold in Japan by NEC Home Electronics Ltd extends only to the use of the unmodified PC ENGINE in Japan and therefore NEC cannot assist you if you purchase a modified PC ENGINE in the UK. Any other guarantee provided with a PC ENGINE in the UK is not an NEC guarantee. Finally, any modified PC ENGINE's sent to NEC (UK) Ltd for servicing will be returned to the sender.

NEC Corporation, NEC Home Electronics Ltd, NEC (UK) Ltd.

NEC

PRINTERS

TGM LAB GUIDE TO PRINTERS

For anyone interested in word processing, desktop publishing or other applications (from music to spreadsheets) a printer may be the single most expensive item you buy for your computer. Obviously if you're about to part with a tidy sum of money you want to know exactly what to look for; check out the glossary for a full explanation of printer jargon. The first thing to decide is precisely what you want your printer for — different types of printer are suited to different functions. Then decide how much you've got to spend and take a look through the TGM guide to printers.

Daisywheel printers are great for word processing or any package where you require quality output. However, there are several drawbacks. They are often expensive (we could only find one below £500), printing is slow, they only come with one font and they can't print graphics — so they're not a lot of use with DTP software.

Chances are you'll want use your printer with several packages and print graphics as well as text. If you're on a tight budget it's best to go for a dot-matrix printer. These are the most popular type of sub-£1000 printer and can cope with any type of output. There are two main types of dot-matrix printers: 9-pin and

24-pin. Provided you're not after high quality output a 9-pin printer is fine, they're often cheaper too!

Ink-jet and laser printers will probably be outside the budget range of most TGM readers and are only necessary where extremely high-quality output is necessary — desktop publishing for example. However, TGM did find one ink-jet printer below £1000.

The prices quoted are the manufacturers own recommended retail prices. Generally these prices are artificially increased due to EEC levies on Japanese printer imports which make up 80% of the dot-matrix printer market. However, if you're prepared to shop around you should find some reasonable discounts. The only hidden cost to watch out for is the printer lead, the cable needed to connect the printer to the computer. A suitable lead can cost anything from £5-£10. Printer manufacturers usually make their own range of accessories including replacement ribbons, buffer expansions and sheet feeders. Contact the manufacturer for relevant price lists. Finally if your printer should break down after the warranty has expired TGM Centre Bytes features a full list of independent repair services which repair various makes of printers.

GLOSSARY

BUFFER The printer's own memory. Computers send text to the printer much faster than it can print, so the printer needs somewhere to temporarily store the incoming information. A limited amount of information can be stored in the buffer. Information that can't be immediately placed in the buffer will remain in the computer until it can be sent; effectively locking up the computer until there is sufficient space in the buffer. Therefore, large buffers allow you to return to using the computer quicker because the printer can temporarily store the information in its own memory. Just like computer memory buffer size is measured in kilobytes (K).

CARRIAGE This physical part of the printer handles the paper. OBVIOUSLY larger carriages can handle larger pieces of paper.

CHARACTER Any letter, number or printed symbol.

COLUMN WIDTH The number of characters that can be printed on one line; determined either by carriage width or software.

CORRESPONDENCE A print mode between draft and NLO.

DOT-MATRIX A kind of printer that produces characters as a series of dots in vertical lines. The most popular type of home computer printer. Suitable for printing graphics.

DRAFT The quickest and lowest quality print mode. Suitable for printing rough drafts.

CPS Print speed measured in characters per second.

DPI The print resolution measured in dots per inch. Higher resolutions produce better quality print.

FONTS The number of typefaces.

EPSON COMPATIBLE Epson largely pioneered the field of low-cost dot-matrix printers with the Epson FX-80.

Printers that are said to be Epson compatible will work with software which works with the Epson series of printers — which includes most packages.

LQ Letter-quality; a high-quality print mode involving two printer head passes — usually a quarter of the speed.

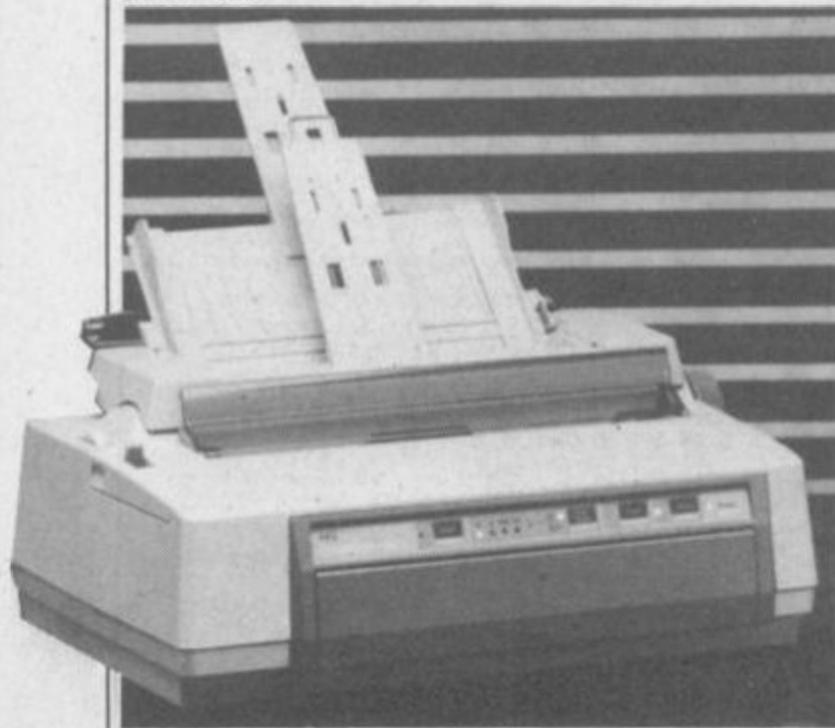
MODE Different print modes produce different standards of output. Modes are usually selected by switches on the printer, or via software codes. The highest quality modes (SLQ and LQ) print at the slowest rate.

NLQ Near-letter quality. On the lower cost printers this is usually the highest quality print mode.

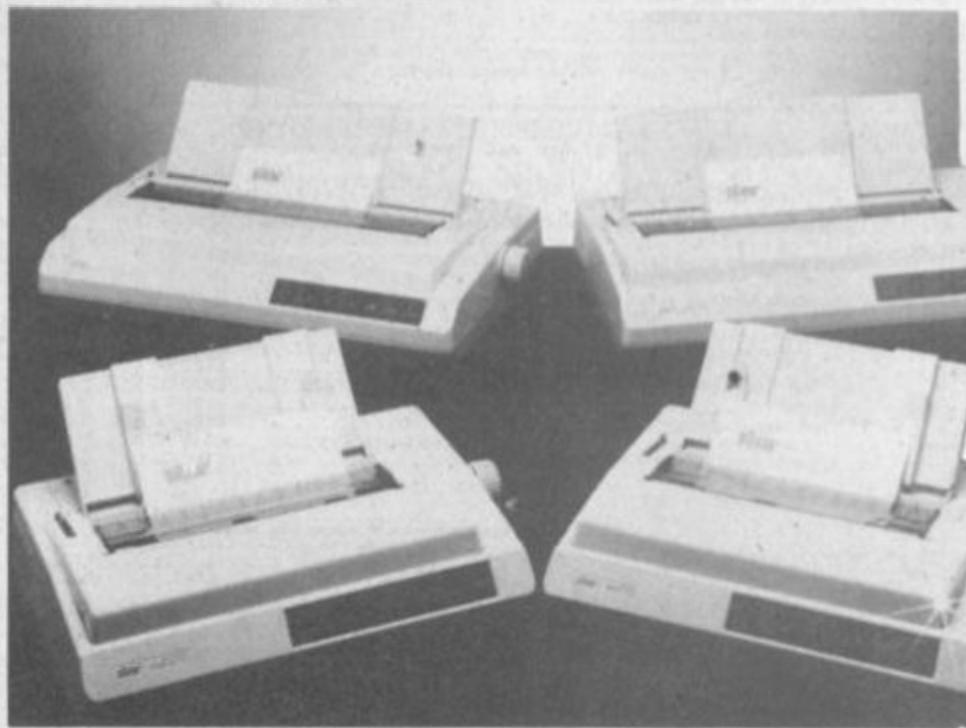
PINS Dot-matrix printers produce each character by drawing a series of vertical lines. Pins refer to the number of dots in each vertical line. So 24-pin printers produce better quality print than 9-pin printers. 9-pin printers have largely been superseded by 24-pin printers and can often be bought at reduced prices.

SLQ Super-letter quality. Found on some makes of Star printers this print mode reputedly produces 48-pin quality output using 24-pin technology.

NEC P2300



Some of the widely popular Star printers



Top Quality 2nd Drives for the Amiga and Atari ST at low, low prices

Evesham MICROS



- ✓ Full compatibility with all Atari ST models, Amiga 500 & Amiga 1000
- ✓ Top quality Citizen drive mechanism
- ✓ One megabyte unformatted capacity
- ✓ External plug in PSU (Atari ST)
- ✓ Throughport (Amiga)
- ✓ Very quiet
- ✓ Slimline design
- ✓ Colour matched to computer
- ✓ Long cable for location either side of computer
- ✓ Full 12 months guarantee

Don't forget - all prices shown include VAT and delivery

ATARI ST VERSION ONLY

£79.95

AMIGA VERSION ONLY

£74.95

including VAT and delivery

ATARI

All our ST prices include: mouse etc. plus 5 disks of software including First Word wordprocessor, utilities, Neochrome graphics utility, game and demos.

520 STFm POWER PACK

Amazing value, all-new special ST package from Atari! Includes 520STFm with 1MEG drive, joystick, mouse, user guide, 5 disks of public domain software, plus an incredible selection of chart-topping software worth over £500! Software included is:

R-Type	Pacmania	Out Run	Nebula
Airbomber	Starblaster	Bombuzal	Starjumper
Double Dragon	Super Huey	Xenon	First Music
Super Hangon	Eliminator	Garrett II	First Basic
Space Harrier	Predator	Black Lamp	Organiser
Overlander	Bombjack	Staray	

All for only £359.00
Inc VAT & delivery

520 STFm SUPER PACK

Includes 520 STFm with 1MEG drive, over £620 worth of software, joystick, mouse, User Guide and 5 disks of Public Domain Software. Software supplied includes:

Starblaster I	Starblaster II	Tracker
Carrier Command	Sentinel	Virus
Marble Madness	Test Drive	Chopper X
Beyond the Palace	Buggy Boy	Ranarama
Thundercats	Quadrant	Starquake
Summer Olympiad	Xenon	Genesis
Arkand II	Wizball	Black Lamp
Eddie Edwards Ski	Seconds Out	Thrust
Kan Warriors	Zynaps	Flying Shark

Same price! £319.00
Inc VAT & delivery

520 STFm with 1MEG internal drive fitted	£269.00
1040 STFm with built-in TV modulator	£399.00
1040 STFm including joystick, 21 games with business software as supplied with above described '520STFm Super Pack'	£419.00
1040 STFm Hyper Pack, including 'Hyper Paint', 'Hyper Draw', 'First BASIC' and 'Organiser' software, plus £50 software voucher	£429.00
Buy a monochrome monitor with any 1040 from above for £110.00 extra	
Mega ST1 with monochrome monitor	£599.00
Mega ST2 with monochrome monitor	£849.00
'Super Pack software' as supplied with above 520STFm offer	£60.00
520 STFm 1MEG internal 3.5" drive upgrade kit inc. full instructions	£74.95
Atari SM124 monochrome monitor	£119.00
Atari SC1224 colour monitor	£279.00
ITT CP3228 16.5" TV/Monitor with remote control, inc. ST or Amiga lead	£229.00
Philips CM8833 14" colour monitor c/w ST or Amiga lead	£229.00
Philips CM8852 as above, higher resolution	£259.00

PRINTERS

All prices include VAT, delivery and cable

Star LC10 best-selling 144/36cps 9 pin, 4 NLQ fonts, inc.2 extra ribbons free	£189.00
Star LC10 7-colour version of above printer, inc.2 extra black ribbons	£239.00
Star NX-15 budget wide carriage 9 pin printer	£319.00
Star LC24-10 feature-packed 10" multifont 24 pin printer	£319.00
Star NB24-10 great value 10" 24pin inc. cut sheet feeder + 2 extra ribbons	£499.00
Star NB24-15 wide carr.version of NB24-10 inc. cut sheet feeder	£649.00
NEC P2200 budget 24pin, 10" carriage 168/56 cps	£319.00
Amstrad DMP3160/3250DI 9 pin, 10" carriage	£189.00
Amstrad LQ3500 10" 24pin with both serial and parallel interfaces	£279.00
Panasonic KXP1081 reliable budget 10" printer 120/24 cps	£169.00
Panasonic KXP1180 new, exciting high spec. multifont 9 pin 10"	£199.00
Panasonic KXP1124 superb value 10" multifont 24 pin with 6 typestyles	£319.00
Epson LX800 popular 10" 180/25 cps	£199.00
Epson LQ500 good 24pin printer 150/50 cps	£319.00
Citizen 120D good value 10" 120 cps	£139.00
Citizen HQP-45 bargain 24 pin wide carriage printer	£399.00

3.5" Disks

10 Bulk packed DS/DD 3.5" disks with labels, fully guaranteed	£11.95
25 bulk disks as above	£27.95
10 disks as above with plastic case	£13.95
25 disks as above, with 40 capacity lockable storage unit	£34.95
Kodak DS/DD 3.5" disks, top quality storage media, fully guaranteed. Box of 10	£17.95

How to order from Evesham Micros

Phone us with your ACCESS or VISA card details on: **0386-765500**

All prices include VAT and delivery. Express Courier delivery £5.00 extra.

Send cheque, Postal Order or ACCESS/VISA card details

Govt., educ. & PLC orders welcome
Same day despatch whenever possible
All goods subject to availability, E.&O.E.
Open to callers 6 days, 9.30-5.30

Evesham Micros Ltd
63 BRIDGE STREET
EVESHAM
WORCS WR11 4SF
0386-765500
fax 0386-765354
telex 333294

Also at: 1762 Pershore Rd., Cotteridge, Birmingham B30 3BH Tel: 021 458 4564

DOUBLE TAKE! PYE 15" FST TV/MONITOR (MODEL 1185)

Superb quality, stylish medium resolution FST colour TV/monitor to suit the ST or Amiga. Features teletext, full infra-red remote control, Euroconnector, Video/Audio input and head-phone output connectors, 40 tuner presets, external aerial connector and loop aerial. Supplied with cable (please state computer type when ordering).

GREAT VALUE!
£269.00
Includes VAT and computer connection lead

AMIGA ACCESSORIES

A501 RAM/Clock expansion unit for the Amiga 500	£129.00
External 5.25" 40/80 track switchable floppy drive	£114.95
Project 'D' disk backup utility	£34.95
X-Copy new disk backup utility	£27.95
Vortex 'System 2000' 40Mb hard disk, with interface & software	£529.00
ITT CP3228 16.5" TV/Monitor with full rem/ctrl & SCART cable	£229.00
Philips CM8833 colour monitor, c/w Amiga cable	£229.00
Philips CM8852 colour monitor as above, higher resolution	£259.00
Amiga 500 dust cover	£4.95

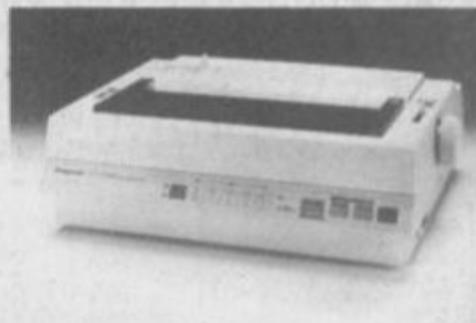
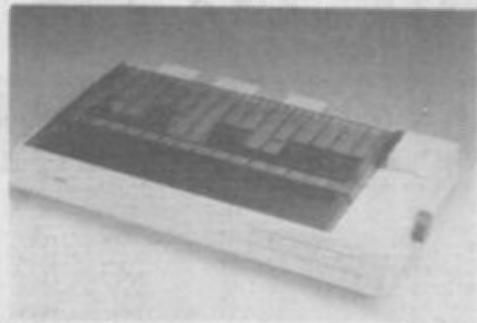
DISECTORST ULTIMATE ATARI ST DISK UTILITIES

VERSION 5
NOW AVAILABLE!

- ◆ **SOFTWARE BACKUP** incorporating turbo nibbler
Version 5 backup incorporates a very fast and powerful menu-driven backup utility. Makes use of all available drives and memory.
- ◆ **80 SOFTWARE BACKUP PARAMETERS**
Now with 80 individual parameters to backup and de-protect even the toughest of protection schemes!
- ◆ **FAST BACKUP VERSION 2**
Will backup a non-protected disk very speedily, using 'File Allocation Copy' techniques.
- ◆ **EXTERNAL DRIVE BOOT**
Allows many programs to startup from drive B.
- ◆ **ORGANISER ACCESSORY**
Providing extremely useful disk management commands under one desktop-based accessory, including FORMAT, RENAME, DELETE etc.
- ◆ **SPECIAL FORMATTERS**
Increase your 3.5" disk user storage capacity by up to 25% and improve access speed by up to 30% with these two new disk formatters provided!
- ◆ **RAMDISK and SET DATE/TIME** accessories.
- ◆ **plus UNDELETE, DISK ANALYSIS, UNFORMAT DISK SPEED CHECK** and much more!

Only £28.95 Existing users - upgrade your Disector ST disk for only £7.95

PRINTERS



MODEL	TYPE	SPEED	BUFF	FONTS	DPI	COLS	NOTE	PRICE
Amstrad DMP 3160	9-pin dot-matrix	draft 160 cps, NLQ 40 cps	8K	2 NLQ	-	80	Epson compatible	£199
Amstrad LQ3500	24-pin dot-matrix	draft 160 cps, NLQ 54	7K	1 NLQ	80			£401
Citizen 120D	9-pin dot-matrix	draft 175 cps, NLQ 30 cps	4K	1 NLQ	240	80	Epson compatible	£182
Citizen 180E	9-pin dot-matrix	draft 175 cps, NLQ 30 cps	4K	2 NLQ	240	80	Epson compatible	£205
Citizen MSP 15E	9-pin dot-matrix	draft 200 cps, NLQ 50 cps	8K	1 NLQ	240	136	Epson compatible	£343
Citizen MSP-40	9-pin dot-matrix	draft 240 cps, NLQ 50 cps	8K	1 NLQ	240	80	Epson compatible	£493
Citizen MSP-50	9-pin dot-matrix	draft 300 cps, NLQ 50 cps	8K	1 NLQ	240	80	Epson compatible. Colour kit available for £57	£642
Citizen HQP 40	24-pin dot-matrix	draft 200 cps, correspondence 132 cps, NLQ 66 cps	24K	1 NLQ	-	80	Epson compatible. 7-colour printing kit available for £50	£642
Citizen HQP-45	136 column version of the HQP 40							£769
Epson LX-800	9-pin dot-matrix	draft 180 cps, NLQ 30 cps	3K	2 NLQ	-	80		£320
Epson LQ-500	24-pin dot-matrix	draft 180 cps, LQ 60 cps	8K	2 LQ	-	80		£458
Epson FX-850	9-pin dot-matrix	draft 290 cps, NLQ 54 cps	8K	2 NLQ	-	80		£527
Epson FX-1050	136 column version of the Epson FX-850							£688
NEC Pinwriter P2200	24-pin dot-matrix	draft 168 cps, LQ 56 cps	8K	2 LQ	-	80	Epson compatible	£395
NEC Pinwriter P6plus	24-pin dot-matrix	draft 265 cps, LQ 90 cps	80K	2 LQ	-	80	Epson compatible	£649
Panasonic KX-P1081	9-pin dot-matrix	draft 120 cps, NLQ 24cps	1K	1 NLQ	-	80	Epson comp. (4K buffer exp available)	£251
Panasonic KX-P1180	9-pin dot-matrix	draft 198 cps, NLQ 38 cps	2K	4 NLQ	-	80	Epson compatible (32K buffer exp. available)	£309
Panasonic KX-P1592	9-pin dot-matrix	draft 216 cps, NLQ 45 cps	7K	1 NLQ	-	136	Epson compatible (32K buffer exp. available)	£454
Panasonic KX-P1124	24-pin dot-matrix	draft 192 cps, LQ 63 cps	6K	5 LQ	-	80	Epson compatible (32K buffer exp. available)	£458
Panasonic KX-P1595	9-pin dot-matrix	draft 288 cps, NLQ 61 cps	15K	2 NLQ	-	136	Epson compatible (32K buffer exp. available)	£626
Panasonic KX-P1540	24-pin dot-matrix	draft 240 cps, LQ 80 cps	13.5K	1 LQ	-	136	Epson compatible (32K buffer exp. available)	£764
Star LC-10	9-pin dot-matrix	draft 144 cps, NLQ 36 cps	4K	8 NLQ	240	80	One of the most popular low cost printers, widespread support	£263
Star LC-10 colour	7-colour version of the LC-10							£343
Star NX-15	9-pin dot-matrix	draft 120 cps, NLQ 30 cps	4K	1 NLQ	240	136	(buffer expandable to 20K)	£458
Star LC 24-10	24-pin dot-matrix	draft 170 cps, LQ 57 cps	7K	8 LQ	360	80	(expandable to 39K)	£458
Star FR-10	9-pin dot-matrix	draft 300 cps, NLQ 76cps	31K	16 NLQ	240	80	(buffer exp to 159K) 7-colour printing kit available for £39	£527
Star FR-15	136 column version of the Epson FR-10							£688
Star XB 24-15	24-pin dot-matrix	draft 240 cps, LQ 80 cps	27K	4 SLQ, 25 NLQ/LQ	360	136	(buffer exp to 187K) 7-colour printing kit available for £39	£688
Tandy DWP-230	Daisywheel	20 cps	3K	1	-	80		£286

PRINTER EXTRAS

ACOUSTIC BOX Cut down on printer noise with this padded foam acoustic box which also doubles as a printer stand. Prices start from £38.95 depending on printer. Phone to check there's a model that will fit your printer.
Kador: Unit 4, Pontcynon Industrial Estate, Abercynon, Mid Glamorgan CF45 4EP. Tel: (0443) 740281.
PRINTER STANDS Specially designed stands which house the printer paper beneath the

printer. Prices start from £14 upwards. **Manor Court Supplies: Glen Celyn House, Penybout, Llandrindod Wells, Powys LD1 5SY.**
REINKING At least two firms will reink old word fabric cartridge ribbons cutting down on replacement costs.
Alladix charge £1.45 per ribbon: **Freepost, Eyemouth TD14 5BR. Tel: (08907) 50965.**
SU Brothers charge 99p per ribbon: **Hillview Post Office, Alexandria, Dunbartonshire G83 0GD. Tel: (0389) 52680.**
MAXAFIT A sheet-feeder that

handles single sheets of paper and saves you the problem of putting them in one at a time. Phone to check that there's one to fit your printer. £17.50 from **Margin Maker: 121 Gresgam Road, Staines, Middlesex TW18 2AJ. Tel: (0784) 452677.**

PRINTER PRODUCERS

Amstrad: Brentwood House, 169 Kings Road, Brentwood, Essex, CM14 4EF. Tel: (0277) 230222.
Citizen: Wellington House, 4/10 Cowley Road, Uxbridge,

Middlesex UB8 2XW. Tel: (0895) 72621.
Epson: Freepost TK984, Brentford, Middlesex TW8 8BR (no stamp required). Tel: (0800) 289622 (24-hour answering service, phone call costs nothing).
NEC Technologies: Castle Farm Campus, Priorslee, Telford, Shropshire TS2 5SA. Tel: (0952) 620440.
Panasonic: 300-318 Bath Road, Slough, Berkshire SL1 6JB. Tel: (0753) 34522.
Tandy: Tandy Centre, Leamore Lane, Walsall WS2 7PS. Tel (0922) 710000.

THE SOFT OPTION

Around one year ago, Mev Dinc and Jonathan Dean discussed the idea of forming an organisation to represent the programmers' interests. It was not until now that they were ready to discuss the formation of the Society of Software Publishers. Dominic Handy spoke to Mev Dinc about the Society...

The Society of Software Authors is ready to receive applications. For the first time ever, programmers have their own organisation to look after their own very specific interests (and I'm not just talking money). Chairman of the said body is Jon Dean, a programmer and developer at Konix. Assistant Chairman and innovator is Mev Dinc.

Mev is a long-time Z80 programmer and is currently in the process of publishing his first game through his own company Vivid Image. Also helping out are Dr David Pringle, head of Oxford Digital Enterprises, who have just signed an exclusive deal with Entertainment International to produce games on their own label, Empire.

Also volunteering their experience is Jacqui Lyons. Jacqui's a programmers' agent at Marjacq Micro, representing the likes of Argonaut (*Starglider II*), Steven Dunn (Spectrum *Starglider II*, *Virus* and Vivid Image's first game), Archer MacLean (*Dropzone*, *IK Plus*), and David Braben (*Elite*, *Virus*). Rod Cousens, Activision supremo, is helping out with the fundraising. He's previously helped with cash on Soft Aid and War On Want.

Have you had a lot of cooperation from the software publishers?

Obviously it's very difficult, because primarily we're trying to represent the development community, and at the same time we wanted to work

closely with the publishers. It's very difficult to achieve something as important as standard contract. There are still a couple of points in the contract that we haven't resolved. But we do have a draft contract for people to look at and get an idea of what we're trying to do, and see the problems we're trying to tackle.

What are you trying to achieve with a SSA contract?

In every other industry they have proper contracts. I still feel our industry's young, but we have been around long enough to get our act together and become more professional. It's true for both the publishing and development community. Our idea is something similar to the ELPSA (a new body set up for the software publishers) idea, and that's good. But you don't have to use the contract, it's just there if you want it — as a guide.

So it's not like a union?

No, not at all. We'll be giving free advice to people, and generally being at the end of the phone for consultation.

What sort of response have you had?

We've had a very good response. Usually with new organisations people just say, 'oh we'll wait and see, and join later'. But we've got a constitution and aims, so we've had a real response, and it's growing all the time.

Where's the funding coming



Long-time Spectrum programmer Mev Dinc turns association founder

from?

It's mainly self-funding, with the profits being put back into the Society. But, obviously we'll try to get funding from organisations and groups when we can. We're non-profit-making. We have a constitution and bank account to support that.

How much do people have to pay to join, then?

Full membership is £150 a year. Obviously we're offering a lot of services, and we require somebody to look after the Society full-time. So far we've all been doing it in our spare time and it's been very difficult to get everyone together at the same time. Hopefully, once the membership is there, at the first AGM they'll be able to vote in who they want. At the moment it's completely voluntary, but we're eventually looking to employ someone to look after the Society's interests with a helpline etc.

So how will the Society help people? Is it just there to help programmers get money out of difficult software houses? That's one way in which we can help people. Maybe, we can work towards being some sort of arbitrator. We could get members from the publishing community as well, to sit down and sort out problems, get advice and, hopefully, some sort of result. If these are common problems, we can highlight them. But we're not a union, so it would be difficult to approach a publisher and say 'stop this or else'. But the publisher in question would know that there is an organisation out there they'll be more careful.

Similarly, the same is true of programmers, if they mess around with publishers. We can do quite a lot for publishers in that respect.

Do the software houses think it's a good idea?

The ones we've spoken to so far do. Obviously there's always going to be a conflict of interests, unfortunately. But they feel it is going to be good for the whole industry, and we need the publishers. We want to make the industry more professional.

Apart from advice and a standard contract, what do developers get for their subscription fee?

We'll be providing a quarterly newsletter, packed with programming hints and advice. The SSA will also be producing some fact sheets, about things like VAT and other business aspects that most programmers know little about. We're trying to get accountants and lawyers to get material that we can pass onto our members. And we already have a helpline, which David Pringle will host — he's got experience in publishing as well as development.

£150 still seems quite a large amount.

Well, we think we have some valuable experience in all fields. We're also trying to obtain some hardware/software discounts for our members. But that doesn't mean we're a union, we think of ourselves as a club, whose members get together, exchange ideas and support each other. That's not happening with programmers at the moment. There are so many talented people out there, it would be nice to help them. Obviously, programmers don't tell each other what they earn, so they don't know if they're being exploited. We'll be able to give people a guide of what they

Please send me more information on the Society of Software Authors.

NAME.....

ADDRESS.....

POSTCODE.....

I am a professional (please tick):

Programmer Graphic Artist

Musician Game Designer

Send to:
Dept TGM021, Society of Software Authors, 6 Callow
Croft, Burbage, Wiltshire SN8 3TB.

Continued on page 62

NEW YORK PRESENTATION EXPO

TGM's always-on-the-spot American correspondent, Marshal M Rosenthal, walked the aisles at the recent Presentation Expo in New York. This is THE place to be for imaginative innovations on the PC and Amiga. Although, don't forget, most of these items can also be accessed via emulation devices. (Which just happen to feature prominently in next issue's Centre Bytes.)



There are many ways to get people's attention. You can become a rock star. Wear a funny face. Or show them something interesting and unique. Part of the fun in having and using computers is that they let your imagination soar. You can create graphics, cartoon animations — do things that just can't be in reality. The drawback is usually in trying to show what you've done to someone — it's having to drag them in front of the 12-inch monitor or TV screen and make them watch. The New York Presentation Expo deals with this problem, and in a big way. Talk about high-tech to the Max! It's the only place where walls are stacked with synchronized colour monitors, and any screen smaller than 37 inches is 'cute'. The Expo bridges the gap between creating amazing video and graphics, and getting them out where they can be seen by audiences.

'Create A Lasting Impression' is this year's theme, and how can you miss with the assortment of electronic goodies being displayed? Take the humble overhead projector: boring. It's been turned into a turbo-charged unit through the addition of PCViewer, a high-res 640x480 LCD unit that sits on the glass top of the projector. PC Viewer transfers images directly from the computer (all types of IBM compatibles and

Macintosh) with the added power of an infra-red remote featuring highlighting, drop-down menus, and special effects like fades and wipes. Black and white display can be changed to blue and yellow, and there's a memory module that 'soaks up' 100 images so that the PC can be left behind.

Pushing LCD technology to the wall brings us to Sharp's imminent 100-foot, colour, LCD projection system. Similar in concept to conventional front projection units, the still-unnamed unit uses three LCD panels to separate the source beam into highly accurate red, green and blue components which are then recombined and projected onto the screen. A zoom lens selects the image size (from 40 to 100 feet), and the picture, which is quite clear and sharp, has a resolution of 300 lines (input is designed for a video source). Price has yet to be finalised, but expect this baby to hit somewhere in the \$5000 (£3000) zone. And it looks kind of like a cannon from an old sci-fi film of the Fifties.

The Amiga booth was bustling with activity — including desktop publishing and video applications. Seen for the first time was ImageLink — a software package that converts images between many of the formats used by Amiga software (IFF, Sculpt 4D, Digiview, Caligari) and the world of IBM (GIF and TIFF, among others). Expandable



modules turn Commodore's whiz into an image conversion workstation that even lets you talk to Macintosh PICT and PICT2 (24 bit) files. No modems or hook ups between computers — all is done on the Amiga using an Intuition-based user interface (the ARexx language can also be implemented).

Eric Lavitsky of Video Arts was showing The Cable Advision System on the Amiga. This is an extremely professional package designed for controlling a television station — complete with digital transitions, and full scheduling control of program output (it will even yank out expired ads once their air time is complete). This is one heavy duty professional software package. Expect TGM TV when the Government deregularises television in 1992.

Digitising pads aren't new, but how about cordless operation? Wacom's SD-Series creates a link between the pad and you by installing a transmitter in the pen that is used on the drawing surface. Electromagnetic resonance eliminates many of the kinks found in other pads, and the pen itself is so pressure sensitive that functions can be programmed onscreen to relate to it (in the draw application being shown, different colours snapped on depending on the pressure being applied, and pressing harder on the pen made the line thicker). The RS232-C port is used to receive the information from the pad (which comes in varying sizes), and there's an optional 12-button, 24-function cursor unit — also cordless.

This one's fun. Silent Partner (Presentation Electronics Inc) is a handheld remote that allows you to control your PC/XT/AT from across the room. It can learn a key or sequence of keystrokes and then access them with a single press. Non-volatile memory remembers your programs — it even comes with stick-on overlays for your tired brain. The receiver unit connects to the keyboard or serial port, and has a ready light that blinks when a command is executed.

Of course it wasn't all walking, there were also seminars to participate in.



These ranged from how to slow slides effectively to speaking with confidence (you can't avoid them!). One, for the Amiga, took all day; delving into applications for video and print. But it WAS mostly walking...

Until you bump up against Ultrawall. This consists of multiple monitors separated by only a hairline eighth of an inch, and towering some 16x16 feet with sharp, clean visibility from any direction. Computer control ensures synchronization between multiple video projectors, while a dedicated microprocessor constantly checks performance and does fine-tuning as necessary. Internal controls for multiple special effects are easily accessed as well.

Advertising types say 'Sell the sizzle, not the steak'. The Presentation Expo shows that even sizzle is computerised today.

MORE INFORMATION (all addresses are US)

ImageLink: Active
Circuits, 106 U.S.
Highway 71, Suite 101
Mansquan, New Jersey
08736.

PC Viewer: In Focus
Systems, 7649 Southwest
Mohawk Street, Tualatin,
Oregon 97062.

SD-Series Cordless
Digitisers: Wacom,
Country Club Plaza/West
115 Century Road, Box 6,
Paramus, New Jersey
07652.

Silent Partner: MediaNet,
305 Madison Avenue,
Suite 564, New York, New
York 10017.

GUIDE TO REPAIR SERVICES

No matter how much you care for a computer, eventually something goes wrong.

And you can bet your life it'll happen after the guarantee has expired, so you can forget about sending it back to the manufacturers. In most cases, they won't want to know.

Before packing your computer off to a repair firm, check to see if your local computer dealer can recommend a local repair outfit.

Phone the company you choose and try to get a rough guide of the cost of the repair, how long it will take — and whether they'll give a warranty to do it again for free if the repair doesn't work.

Make sure that the quoted price includes parts, labour, VAT, and return postage.

When sending your computer by post, pack it carefully — preferably in the original box.

Always include a letter with your name, address, and telephone number and the effects of the fault.

Send the whole package by recorded delivery — just 24p on top of the stamp cost — and pay the extra cash for an advice-of-delivery slip (25p if you ask for it when you post the package, 65p if you leave it till later).

That way you know it's got there.

— that includes all the well-known 8-bit and 16-bit machines.

PERIPHERALS REPAIRED

Electronic & Computer Services will repair some peripherals, but write or phone for details in case yours isn't included.

PRICES According to the problem. Phone for a quote.

WARRANTY Write or phone for details. The warranty only covers the problem repaired, not the whole computer.

INFORMATION Turnaround varies, depending on the problem, from two days to a week.

Electronic & Computer Services also sell spare parts. Again, write or phone for details.

Hindley Electronics.

97 Market Street, Hindley, Wigan, Lancashire WN2 3AA (0942) 522743.

COMPUTERS REPAIRED

Spectrum, C16/64, Vic20, CPC.

PERIPHERALS REPAIRED

Some. **PRICES** Set price for each machine, ranging from £17 (48K Spectrum) to £25. 1541 disk drives £32.50.

WARRANTY Three months.

INFORMATION Average two-day turnaround — well quicker than the average.

HS Computer Services.

Unit 2, The Orchard, Warton, Preston, Lancashire PR4 1BE (0772) 632686.

COMPUTERS REPAIRED All Spectrums.

PERIPHERALS REPAIRED

Phone.

PRICES From £14.95.

WARRANTY Three months.

Hytek Computer (Rentals)

Unit 4C, Yeovale Industrial Estate, Lapford, Crediton, Devon. (03635) 604.

COMPUTER REPAIRED Major makes, including Acorn.

PERIPHERALS

Most major makes.

PRICES Fixed price list available on request.

WARRANTY Three months.

Ladbroke Computing International.

33 Ormskirk Road, Preston, Lancashire PR1 2QP (0772) 21474 or 27236.

COMPUTERS REPAIRED Mainly Atari.

PERIPHERALS REPAIRED

Printers and disk drives.

PRICES According to machine

— for example ST £34.50, XL/130 XE £23 (these prices

include VAT).

WARRANTY Phone for information.

Microtech Computer Services.

216-219 Cotton Exchange Building, Old Hall Street, Liverpool L3 9LA (051) 236-2208.

COMPUTERS REPAIRED ST, Amiga, BBC, Amstrads.

PERIPHERALS REPAIRED

Printers, monitors; also electric typewriters and other office equipment.

PRICES Start from £30 — call Mike Lopez at Microtech for a quote.

WARRANTY Three months.

MP Electronics.

Wendling, Dereham, Norfolk NR19 2LZ (0362) 87327.

COMPUTERS REPAIRED

Spectrum, C64, BBC B, PCs — in fact all major makes except ST and Amiga.

PERIPHERALS REPAIRED

Printers, plotters, monitors, disk drives etc.

PRICES All-inclusive prices for most machines — 48K

Spectrum £15, 128K Spectrum, BBC B and C64 £27.50, PCs

from £20-£100+. These rates cover all faults except those

caused by other people's botched repairs!

WARRANTY Phone for information.

INFORMATION Free estimates. £20 repair and overhaul service for 48K Spectrums — MP

Electronics replace sockets, keyboard membrane etc and will repair any faults that

develop within six months of overhaul.

Ortec Micro Computers.

ORC GEC ITEC, GEC Switch Gear, Distribution Division, Higher Openshaw, Manchester M11 1FL (061) 301-2210.

COMPUTERS REPAIRED All home micros and PCs.

PERIPHERALS REPAIRED

Printers, monitors and disk drives.

PRICES Depends on fault — phone for details.

WARRANTY Three months.

PM Engineering.

Unit 8, New Road, St Ives, Cambridgeshire PE17 4BG (0480) 61394.

COMPUTERS REPAIRED All home computers.

PERIPHERALS REPAIRED

Printers, monitors and disk drives.

PRICES Fixed price list available on request.

WARRANTY Three months.

A1 Computer Services.

Unit 9, Paddock Mount Offices, Dawley, Telford, Shropshire TF4 3PR (0952) 502737.

COMPUTERS REPAIRED

'Virtually any computer' — including Spectrum, C64/128, BBC, 16-bits, C16, Vic20 and Plus 4.

PERIPHERALS REPAIRED

Printers; also full disk-drive service for £25.

PRICES Mostly £25-£30, but C128 is £42.50.

WARRANTY Three months.

ACE Repairs.

Outways Farm, Pelynt, Looe, Cornwall, PL13 2NW (0503) 20282.

COMPUTERS REPAIRED

Major makes except Atari ST.

PERIPHERALS REPAIRED

Sinclair Interface 1 and Microdrive, Amstrad disk drives and printers and Commodore disk drives, printers and datacorders.

PRICES From £15 upwards depending on fault.

WARRANTY Six months.

INFORMATION

Sinclair, Amstrad and Commodore spares and leads.

Ampower Video and Computers.

15A Alcester Rd, Studley, Warks, B80 7AJ (0527) 853374.

COMPUTERS REPAIRED All 8-bit and 16-bit machines.

PERIPHERALS Printers, monitors, disk drives etc.

PRICE Phone for information.

WARRANTY Three months.

BCL (Best Computers Ltd).

Galaxy Audio Visual, first floor, 230 Tottenham Court

Road, London W1A 3AP (01) 631-0139 or 580-6640.

COMPUTERS REPAIRED All 8-bit and 16-bit including PCs.

PERIPHERALS REPAIRED

All. **PRICES** A typical small repair would cost £15-£20.

WARRANTY Six months.

INFORMATION Free estimates. Galaxy Audio Visual also sell micros.

Cambridge Micro Surgery.

Unit 4, 377B Cherry Hinton Road, Cambridge CB1 4DH (0223) 410234.

COMPUTERS REPAIRED

Spectrum, C64, BBC, Amstrad, PCs.

PERIPHERALS REPAIRED

Printers, monitors, disk drives etc.

PRICES Cheapest is 48K Spectrum at £18.95 plus cost of parts; others from £23.50.

WARRANTY Three months.

INFORMATION Will provide annual maintenance for business micros, on a contract basis.

The Computer Factory.

Analytic Engineering Ltd, Unit 18A, Grainger Road Industrial Estate, Southend SS2 5DD (0707) 618455.

COMPUTERS REPAIRED All major models except Atari.

PERIPHERALS REPAIRED Disk drives and printers.

PRICES £7-£40.

WARRANTY Three months.

INFORMATION Free estimates.

Electronic & Computer Services.

1000 Uxbridge Road, Hayes, Middlesex UB4 0RL (01) 573-2100.

COMPUTERS REPAIRED The full range of home computers

Attention !
repair firms

If you would like a mention in the Back Bytes repair pages, please send the relevant details to Back Bytes, TGM, PO Box 10, Ludlow, Shropshire SY8 1DB, including a phone number and the manager's name (for our files).

PRICES Phone. There's a set repair price for each computer, regardless of the fault and including all parts and labour. **WARRANTY** Three months.

■ **RA Electronics.**
133 London Road South,
Lowestoft, Suffolk, NR33 0AX
(0502) 566289.

COMPUTERS REPAIRED All Spectrums.

PERIPHERALS REPAIRED Phone.

PRICES Spectrum 48K £14, Spectrum 128K £20.

INFORMATION RA Electronics also sell components.

■ **Roebuck Designs.**
Victory Works, Birds Hill,
Letchworth, Hertfordshire
SG6 1HX (0462) 480723 or
480929.

JOYSTICKS REPLACED

Roebuck Designs run a clever joystick-replacement service which offers faster turnaround than a repair firm might.

Send in your broken joystick — any model — and they'll send back a second-hand but working stick of the same model. Later, they repair yours and pass it on to another customer.

PRICE £4.50 including return postage.

■ **Telegames.**
Kilby Bridge, Wigston,
Leicestershire LE8 1TE
(0533) 880445 or 813606.

CONSOLES REPAIRED Atari VCS2600, Colecovision, Intellivision, Sega.

PERIPHERALS REPAIRED Phone to ask.

PRICES VCS2600 £17.95, Colecovision £14.95, Intellivision £19.95, Sega £14.95.

WARRANTY 90 days.

INFORMATION Telegames promise to return the console to you just three days after they've received it. They're also the official UK repair centre for Sega and Colecovision.

■ **Verran Micro-Maintenance.**
Albany Park, Frimley Road,
Camberley, Surrey GU15 2PL
(0276) 66266.

COMPUTERS REPAIRED Spectrum, Amstrad, Commodore.

PERIPHERALS REPAIRED Printers, monitors.

PRICES Range from £19.95 for Spectrum to £95 for Amstrad PC1512.

INFORMATION Established six years. Approved by Amstrad.

■ **Video Vault.**
140 High Street West,
Glossop, Derbyshire SK13 8HJ
(04574) 66555.

COMPUTERS REPAIRED Most. **PERIPHERALS REPAIRED** Phone.

PRICES From £19.95, according to machine.

WARRANTY Three months.

INFORMATION While-you-wait service in Manchester.

■ **VSE Technical Services.**

Unit 6, 8 Nursery Road,
London SW9 8BP (01) 738-7707.

COMPUTERS REPAIRED All Spectrum, Amstrad, Atari and Commodore models.

PERIPHERALS REPAIRED Opus Discovery drive (partner Ian Vaudrey is official repairperson for the Sinclair Discovery Club).

PRICES Each model has a set price which covers all repairs except very major ones like keyboard or disk-drive replacement. Spectrums range from £12.90 to £17.90; C64 is £19.90, C128 £24.90; CPCs range from £21.90 to £24.90; all PCWs are £31.90.

Parts, labour, VAT and return postage within the UK are all included.

WARRANTY Four months.

■ **Wight Computing Home Micros.**

122 High Street, Ryde, Isle of Wight PO33 2SU (0983) 68978.

COMPUTERS REPAIRED Most. **PERIPHERALS REPAIRED**

Printers and monitors, but check first that the service is available for older models.

PRICES According to the problem.

WARRANTY 90 days.

INFORMATION Wight Computing will also check, clean etc computers which are not obviously faulty.

■ **WTS Electronics.**
Studio Master House, Chaul End Lane, Luton, Bedfordshire LU4 8EZ (0582) 491949.

COMPUTERS REPAIRED All home computers.

PERIPHERALS REPAIRED Printers, disk drives, modems etc.

PRICES 'Very competitive on all models.'

WARRANTY Three months.

INFORMATION WTS Electronics promise to complete the repair within one week from the day they receive the machine. Authorised Amstrad/Sinclair repair firm.

■ **Wynter Electronics.**
Unit 30F, Atlas Village,
Oxgate Lane, Staples Corner,
London NW2 7HU (01) 452-5660.

COMPUTERS REPAIRED Spectrum, Commodore, BBC, Atari, PCs.

PERIPHERALS REPAIRED Phone for details.

PRICES £18 upward, depending on machine.

WARRANTY Three months.

INFORMATION Repair done in one week.

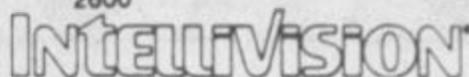
CESSATION OF SERVICE

■ **Swindon ITEC.**
6 Oppenheimer Centre,
Greenbridge Road, Swindon
SN3 3JD (0793) 611808.
Unfortunately ITEC have had to close down their computer repair service.

TELEGAMES

Europe's Largest Stock of Video Games & Cartridges for —

'NEW GAMES NOW IN STOCK'



SEGA MEGADRIVE NOW AVAILABLE
WICO JOYSTICKS FOR NINTENDO IN STOCK NOW
The leading Video game specialists.
Send for lists (state make of game)
TELEGAMES, WIGSTON, LEICESTER, LE8 1TE (0533-880445)

FAST REPAIRS

WE HAVE A FULLY QUALIFIED ATARI TRAINED ENGINEER ON THE PREMISES TO UNDERTAKE REPAIRS OF:

COMPUTERS, DISC DRIVES, PRINTERS AND MONITORS.

ALL WORK GUARANTEED FOR 3 MONTHS

• FREE ESTIMATES • FREE POSTAGE ANYWHERE IN THE U.K. FOR REPAIRED ITEMS.

MARK OR MARTIN (0527 85) 3374

HOURS OF BUSINESS: MON-FRI 9-8 SAT 9-9 SUN 1-8

AMPOWER
VIDEO & COMPUTERS

15a ALCESTER ROAD, STUDLEY, WARCS B80 7AG.



INSERT FOR ALL SPECTRUMS

POKES

Multiface POKE manual over 900 multiface POKES
Makes games playing easier.
Send cheque/PO payable to:

INSERT
OCTAGRAM
(T.G.M)
1 Druid Woods
Stoke Bishop
Bristol BS9 1SX

ONLY £3.99

**3 1/2" DISKS
EVEN BETTER DISKS - EVEN LOWER PRICE**

10 x3 1/2	DS/DD	8.50
25 X3 1/2	DS/DD	19.00
50 x3 1/2	DS/DD	37.00
100x3 1/2	DS/DD	72.00
250x3 1/2	DS/DD	170.00
500x3 1/2	DS/DD	325.00
1000x3 1/2	DS/DD	640.00

Ordering 100 or less?
Use our credit card hotline.
ACCESS -
0742 726485
- VISA
Trade enquiries welcome.
Dial our M.D Direct on -
0836 777592

SAME DAY DESPATCH. PRICES INCLUDE V.A.T AND NEXT DAY DELIVERY

CHEQUES AND POSTAL ORDERS TO -

"Our disks are cheap but they are top quality - LIFETIME GUARANTEED"

**HARDWARE DISTRIBUTION
19 DIVISION STREET
SHEFFIELD S1 4GE
Tel : 0742 726485**

COMMS ■ Doctor Do Little

Last month, Zog MD (Doctor of Modemology) answered a few questions from worried patients. This month the doc sees if all that well-researched advice has done them any good, and are they now afflicted with Modem Madness...

Since you may by now have grasped the basics of a good modem, and can manage to get on-line to a friend, leave messages on a Bulletin Board or tap into the Pentagon command network, then perhaps a further comment or three about them would help you on your way. Firstly, talking to your modem. Here are a few of the most commonly used commands which your friendly Hayes-compatible should understand, when in the correct mode, of course.

AT Precedes ALL

Dnnnn Dial the telephone number nnnn. Only the digits 0-9 are recognised as numbers to dial, so you can happily use brackets spaces and hyphens in your number. For example, the command ATD (01) 994-9119 will dial the Gods Bulletin Board and MUG system in London from elsewhere in the country.

The modem should also accept certain other characters which may be mixed in as needed. T,P and R specify the type of dialling to be carried out - T for tone dialling and P for pulse dialling. The letter R is used when dialling an 'originate only' modem and specifies a reverse dial mode (the modem uses reversed signalling frequencies). A comma in the dial string specifies a pause or delay (usually of one second), which can be used for such purposes as waiting for your office phone to give you an outside line. Finally, the semicolon is used at the end of the string to force the modem back to command mode after dialling.

Hn n=0 Hang up (drop the line).

n=1 Seize the phone line.

O Return on-line from command state.

Sn? Return the current value modem register n.

Sr=n Set register r to

value n. Hayes-type modems are quite clever beasts and all of the settings that you can tweak are stored in registers, which you can examine and change. Amongst other things, they control which speed the modem is going to work at (S25 to S30, preset to S18 automatically), whether the modem is in autoanswer mode or not (SO, number of rings before modem answers), and the character used by the modem as the escape code (S2, value in ASCII).

The default escape sequence. Your modem operates in one of two modes: Local Command state and On-line state. When first switched on, your modem will be in Local Command state and will sit at the end of your RS232 lead waiting for you to tell it what to do. Once it has dialled a number for you (without a ';' character at the end), or answered the telephone (if in autoanswer mode), the modem will switch into On-line state, and merely pass data up and down the phone line. To force the modem back into command state so that you can change a register or hang up, for example, you must enter a predefined sequence of characters. By default, the escape character is the '+' character. Because even three '+' characters could be present in normal data, the modem has a second condition which must be satisfied before it will change modes. This is known as the guard time (register S12, in units of 1/50 second). The guard time is the minimum period between the last character of data being transmitted and the first character of the escape code. Therefore, with a default guard time of one second, to get the modem to speak to you requires that you do nothing for over a second, type '+++' (or whatever your escape code is), and then wait at least one more



second. The modem should respond with some form of acknowledgement, such as an 'OK'. It will remain on-line for you, so to get back to your communicating you can type 'ATD'; alternatively, to hang up, type 'ATH' instead.

Error-correcting

Error-correcting modems are modems which are a) cleverer, and b) much more expensive than yer average bog-standard modem. They only work if the modems at both ends are error-correcting (and use the same error-correction standard). They sneak extra hidden characters into the stream of data which they are passing so that the modem at the other end can take them back out again. In other words, the process is invisible to the user at either end. The purpose of the extra characters is not so much to slow the whole process down, although this is the penalty that you pay for error correction, but to allow the receiving modem to detect whether the data is the same data that was transmitted to it. This is usually cleverly done with multiple Cyclic Redundancy Checks and suchlike, so the modem can often detect which part of the data is corrupted and convert it to the proper value before passing it on. If not, it can send a request back to the transmitting modem for a retransmission of the last chunk of data again. And again. And again...

Error-correcting modems are especially useful over noisy lines (BT has this annoying habit of providing a free random-number generator to your line) and at high speeds of operation. However, they add a layer of complexity that

most communications programs already allow for, using a protocol such as Kermit or XModem for error-corrected file transfers.

Getting baud?

The baud rate of a modem is the modulation rate. That is, the number of times per second that the carrier frequency is modulated to transmit bits of information. Since a single character consists of an 8-bit word (byte), with a start bit in front and 1-2 stop bits afterwards, a low speed link such as 300 baud will actually transmit something like 30 characters per second (300/10). This modulation is done using Frequency Shift Keying (or FSK). So far this is all pretty logical and sensible. However, FSK requires something like 1.5 times the baud rate as the minimum channel bandwidth. Over normal BT phone lines, the bandwidth is about 3100 Hz. Thus there is a limit to how fast you can send data, which is quickly reached.

The solution is to use a different form of modulation for speeds greater than 1200/75 baud. With either DPSK (Differential Phase Shift Keying) or QAM (Quadrature Amplitude Modulation), you get to confuse everyone by encoding two bits per baud. Therefore, data sent over a link running at 1200 baud full duplex is actually being modulated at 600 baud, even though you are sending 120 characters per second in both directions when at full speed!

And if you think that's confusing, then wait till you see what I've got prepared for the next installment of Zog's Guide to Life, the Universe and Modems.

"IT'S SWATHER SID!"
DOR BLIMEN!
STRIKE A
LIGHT!
WANTS SUM
CHEEP STUFF!
GO TO PAGES
74 & 75.
IT'S A BARGAIN!
 YOU'LL NEVER TAKE ME
 FOR A JOKE

Dear Sir,
 I'd like to complain
 about this advertisement
 because

Most advertisements are legal, decent, honest and truthful. A few are not, and, like you, we want them stopped. If you would like to know more about how to make complaints, please send for our booklet: 'The Do's and Don'ts of Complaining'. It's free.

The Advertising Standards Authority.

We're here to put it right.

ASA Ltd., Dept. Z, Brook House, Torrington Place, London WC1E 7HN

This space is donated in the interests of high standards of advertising.

PC Engine now only 159.95! with Pal converter and TV Booster(+ £5 p & p)

New Titles Now in Stock

Power Golf	29.95	Naxat Open	29.95
Pacland	29.95	Fire Pro Wrestling	29.95

Current Software Titles Available
 (We now stock 39 PC Engine Games)

1. Dragon Spirit	28.95	7. Drunken Master	28.95
2. Vigilante	29.95	8. Victory Run	28.95
3. Son Son II	28.95	9. Space Harrier	29.95
4. Nectaris	29.95	10. Dungeon Explorer	29.95
5. R-Type 1	28.95	11. Tiger Hew	29.95
6. R-Type 2	28.95	12. Deep Hue	29.95

TOO MANY TITLES TO LIST. SAE FOR FULL DETAILS

PC Engine Super Joystick with Autofire and Slomo - Only 24.95 (+2 p & p) 5 Player adaptor 19.95 (+2 p & p)

16 Bit Sega Megadrive (Scarl) available now - Only 179.95 + 5 p & p 8 Titles

Altered beast	28.95	Super Thunderblade	29.95
Mr Komatso	28.95	Space Harrier	29.95
Alex Kidd in Mircale Land	28.95	Super League	29.95
Fantasy Star II	29.95	Super Military Commander	29.95

Please add 1.50 p & p for Software or 2.75 for 2 or more titles.

Cheques and Postal Orders Large SAE for Details to:
Mention PO Box 18 Helensburgh G84 7DQ

We stock a large number of imported Nintendo games and pal TV Converter/booster (14.99) to run Japanese games.

Mention Bank with the Royal Bank of Scotland
 2 Colquhoun Square
 Helensburgh
 G84 8SJ

Mention

Monday-Friday 9am - 5pm MAIL ORDER ONLY Please allow 28 Days for Delivery

24 HOUR COMPUTER REPAIRS and SPARES

SINCLAIR QUALITY AUTHORISED REPAIR CENTRE

HOW TO GET YOUR 48K SPECTRUM REPAIRED FOR ONLY £19.95

TEN ★ REPAIR SERVICE

Commodores Repaired

Spectrums Repaired

BEST SERVICE - BEST PRICES!

ARE YOU ANOTHER CUSTOMER - fed up waiting weeks for your repair?

Need your computer repaired fast? Then send it now to the VideoVault 24hr Repair Service. We are able to repair your 48K Spectrum using all the latest in test equipment for only £19.95 (Spectrum 16K/48K and Plus models only). We also have a 'while you wait' department (please call for an appointment) for same day repairs. Commodore 64 computers repaired for only £35.00 including Vat & P+P (Power supplies and Tape Recorders excluded). Please note we give you a 100% low fixed price of £19.95 which includes return post and packing plus VAT. Don't forget we are Amstrad authorised for quality and speed, don't risk your computer to any other unauthorised repair centre. We don't just repair the fault and send your computer back, we give your computer a free overhaul, included in the price. We check sound, loading, memory, colour and ear/mike sockets to make sure your computer will give you years of service.

We now have available a Disc Drive and Printer System for the Spectrum call us for details.

Spectrum Power Supply (Units new model has its own plug) Only £10.95 + £1.75 p+p

Commodore 64 Power Supply Units Only £29.00 + £1.75 p+p

Replacement Keyboard Membranes Spectrum 48K £5.50 + £1.75 p+p
 Spectrum +1 £12.90 + £1.75 p+p

VideoVault Now over 6 years, repairing home micro's throughout the world, 1st class service and fast turnaround. All computers are soak tested before return.

URGENT NOTICE Don't be misled by adverts showing 'between prices.' A recent complaint against a Manchester repair firm, Mancomp, was upheld by the Advertising Standards Authority on two counts. "It had stated BBC repairs between £14 and £45 then charged the customer £85." Their guarantee policy was misleading as it did not make clear that all repairs were not covered.

THE VIDEOVAULT COMPUTER COMPANION
 EDITION NOW HOT OFF THE PRESS

New bigger catalogue now available containing over 3,500 items including software for all computers, joysticks, spare parts, business software, books, plus many more. Just send 3 x 19p stamps for your free copy. Over 24 pages full of top quality products delivered to your door by return post.

6 GREAT FREE GAMES PLUS BONUS TAPE TO TEST YOUR KEYBOARD MEMORY TEST

£39.00

VideoVault Ltd.
 Send your computer to: VideoVault Ltd., Railway Street, Hadfield, Cheshire SK14 8AA. Tel: 04574 66555/67761/69499. Main Office, enquiries and orders only.
 Manchester telephone 061-236 0376 While you wait centre only.
FAX No. 04574 68946 © COPYRIGHT VIDEOVAULT NO. 981013

PRINTERS

Low-cost printing

Read this month's printer guide? Evesham Micros stock a wide range of printers at discount prices. The Star LC-10 (RRP £263) is available for just £199 while the Citizen 120D (RRP £183) costs £139. Evesham Micros all stock printer accessories such as cut sheet feeders at competitive prices. Evesham Micros Ltd: 63 Bridge Street, Evesham, Worcestershire WR11 4SF. Tel: (0386) 765500

FLIGHT SIMS

Flight missions

Fans of Mirrorsoft's flight simulation Falcon will be pleased to know that a new mission disk is available. Costing £20 The Mission Disk features 12 new scenarios. Mirrorsoft: Tel: (01) 928 1454

ATARI ST

Spread 'em

The new updated version of the Kuma's spreadsheet K-Spread was recently launched at the Atari show. Some of the new improvements include: install on desktop, save/load Lotus format files and macros (a short cut to carrying out often repeated tasks). It also features Lotus style commands, security files and multiple worksheets. K-Spread 3 (version 3.5) costs £89.95 but is available free to owners of other versions of K-Spread 3. Kuma Computer Ltd: 12 Horsehoe Park, Pangbourne, RG8 7JW. Tel: (07357) 4335

AMIGA

Video art

Design 3D (£79.95) has just been released in the UK by HB Marketing. A 3D Design package for the Amiga it exploits all of the Amiga's graphic modes. Shadows can be constructed from four sep-

arate light sources to give your designs a realistic appearance and a perspective view option allows objects to be viewed from different angles. HB Marketing also distribute Video Wipe Master (£69.95) and Video Generic Master (£69.95) for the Amiga. A wipe is an effect used in TV to bridge the gap between two scenes. Video Wipe Master contains more than 20 professional wipe effects. It's fully compatible with most art packages so you can design your own effects. Video Generic Master is a video titler package which produces up to 300 lines of scrolling messages in 3 different colours. HB Marketing Limited: Brooklyn House, 22 The Green, West Drayton. Tel: (0895) 444433

OXFAM

Soft aid

Oxfam started their Special Computer Promotion selling period on June 27th. Just take along any old software programs, preferably games,

which will be sold through the charity's chain of shops. Alternatively pop along to your nearest Oxfam and see if you can pick up any bargains.

MUSIC

Music maestro

For one day in September the thousand-seat Logon Hall in London will be packed with keyboards, computers, lasers, video projectors, musicians and dancers for the 7th Annual Festival of Synthesizer, New Age and Computer Music. Every performer at the show has been composing using either the Atari ST or the CBM 128 and much of the live computer graphics show will be performed by a bank of Commodore Amigas. The show is set to take place at The Lgon Hall, 20 Bedford Way, London WC1 on Saturday September 23rd. For full ticket and travel details contact AMP Records, PO Box 387, London N22 6SF. Tel: (01) 885 5665

DISK DRIVES

Call it new technology

Miles Gordon Technology have finally launched their Lifetime disk drive (£199). What makes this drive so different from others is that it is compatible with the Amiga, ST, most PCs, BBC, Spectrum and QL; a suitable interface will be needed for the last three computers. So if you upgrade your computer you needn't change your drive. To connect the drive to your computer all you need is the relevant lead (supplied) then configure the six switches situated at the back of the drive to suit your particular computer and away you go. You may have to make a few changes to the computer's disk operating system to inform it that you are using a floppy disk drive or a second drive but other than that it's all perfectly simple. Watch out for future TGM Guides on disk drives. Miles Gordon Technology: Lakeside, Phoenix Way, Swansea SA7 9EH. Tel: (0792) 791100

Laid back drive sales from MGT



COMPUTER BOOKS

Manual dexterity

Finding the appropriate computer manual can be difficult. Sometimes you may wish to learn about a particular application or language but don't where to go to find more information. How about Computer Manuals Ltd? They stock books on most makes of home computer as well as programming languages, application packages, graphics and music. Computer Manuals Ltd: 30 Lincoln Rd, Olton, Birmingham B27 6PA. Tel: (021) 706 6000

ATARI ST

More STOS

STOS owners can now improve the sound of their games thanks to the newly launched STOS Maestro Sound Library. Presently the library includes samples of Porsche 911 Turbo engines, Suzuki 750 Isle of Man TT racing bikes as well as hundreds of others. Our

aim is to build up the world's largest library of sampled sounds', says Mandarin's Chris Payne. 'We've been out into the field to record the types of sounds that we believe will add that extra touch of professionalism to any arcade-style game'. The sound library will be put on disks and available as public domain software. Mandarin Software: Europa House, Adlington Park, Adlington, Macclesfield SK10 4NP. Tel: (0625) 878888

ATARI ST

Settling old scores

Anyone in need of producing music scores should take note of Real Music Publishing (£333) from Take Control. It's a brand new professional publishing system for composers and music copyists. It features the full range of music symbols (such as sharp, flat and arpeggio), notes and staves. Inserts, cut and paste commands help editing. Once a score has been perfected it can be output to a variety of printers including Epson FX and LQ compatibles. Take Control: Jonic House, Speedwell Road, Hay Mills, Birmingham B25 8EU. Tel: (021) 706 6085

ATARI ST

Birdie song

At the recent Atari ST show The Bath Computer Shack were showing off their stereo sound separation device The Tweety Board (£49.95). It's a small circuit board which is installed inside the ST. After that it's just a matter of connecting the sound leads to stereo monitor or Hi-Fi. Bath Computer Shack: 8E Chelsea Road, Lower Weston, Bath, Avon BA1 3DU. Tel: (0225) 310463

GAME HELP

Help is at hand

Electronic Arts are now supplying a range of cluebooks for the Bard's Tale series, Deathlord, Mars Saga, Neuromancer, Sentinel Worlds, Starflight, Wasteland

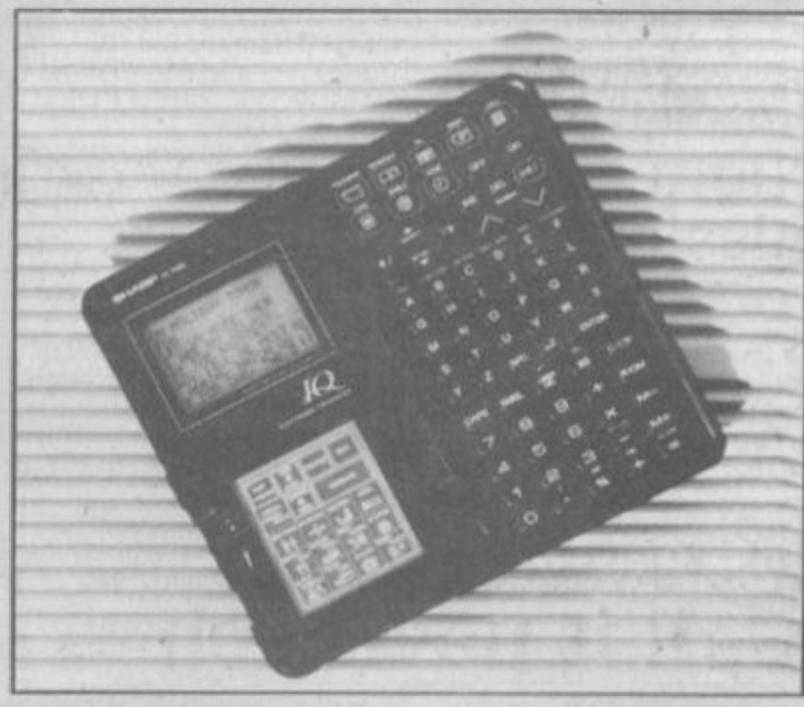
SHARP IQ

Sharp strike back

Just days after we finished our assessment of Psion's new Organisers (the LZ and LZ64) last month (Toolbox TGM020) what should arrive in the TGM Labs but Sharp's latest hand-held organiser. The size of cheque book, the new Sharp IQ (£169.99) is a touch larger than the Psion Organiser (about an inch all round). However, when closed the new IQ is just over half the thickness of Psion's hand-held. Where Sharp's organiser scores over Psion's is in its layout. The screen has two modes of display: 16 characters by 8 lines and 12x4 (Psion's is 20x4). The keyboard is also easier to use with 65 keys, and eight mode keys. Modes include calendar display, diary, calculator, addresses and telephone numbers, notepad, and world times. The IQ also features a very useful password system. There is the usual overall password and also a secret function which allows you to mark a piece of information (such as your bank card PINs) not to appear unless another password is entered. Where Sharp's IQ falls down is that it's a lot harder to become familiar with compared to the Psion. Nothing seems logical, and (surprisingly) there are too many keys. You tend to end up thinking 'Now is this function on the keyboard or

hidden away in a menu somewhere?', whereas the Psion is totally menu-driven. Also the IQ doesn't seem as robust as the Psion organiser (which you can throw around like a filofax). It is also worth noting that the IQ is — unlike the Organiser — not programmable. It is also limited to 32K, although extra RAM cards are to be released soon, so the only way to save your data records at the moment is onto cassette (yes, CASSETTE!). Expansion-wise the Sharp is just behind Psion, with a PC link (instead of sav-

ing to cassette data can be sent to a PC and saved to disk) and thermal printer (£109.99). Software support, due to its short and limited availability, is not as good yet but Sharp promise to remedy this shortly. Current IC cards (which slip in letter/postbox fashion) include a Time Expense Manager (£59.99), 8-Language Translator (£49.99 — very useful with 1992 coming up) and a Thesaurus (around £79.99). Looks are definitely the Sharp IQ's strong point. I'd feel distinguished using an IQ, however, I'd be more at home using the Psion Organiser. Sharp Electronics: Sharp House, Thorp Road, Manchester M10 9BE. Tel: (061) 205 2333.



and 688 Attack Sub. Each is available for only £5. Electronic Arts: Langley Business Centre, 11-49, Station Road, Langley, Berkshire SL3 8YN. Tel: (0753) 49442

PC COMPATIBLES

Get knotted

Anyone who remembers Tir Na Nog, Sweevo's World and Lightforce will be familiar with the work of Greg Follis and Roy Carter, the programming team behind Gargoyle Games. After a considerable break from the home computer scene they're back but not with a state of the art game but a Personal Data Manager for the PC. Applications packages tend to take themselves very seriously and can be rather alienating to new

users. Carter Follis Software promise that Executive Knot is intended for the 'non-expert user as well as the seasoned campaigner'. Executive KNOT (£91) is an all purpose organiser featuring diaries, things-to-do lists, phone-letters-meetings reminders, work and home index files. More importantly it is supplied with a large in-built database which includes a Gazetteer of Britain (incorporating a very useful route-planner), a literary companion for presentation and speech writing (which includes several hundred Shakespearean quotations), world time map, disk-directory doctor and an on-screen calculator. Many of these features would cost more than the overall package if bought separately. An extended version of the package, called The Professional KNOT will be released in the autumn, containing several extra features. Watch out for a future

Centre Bytes review. Carter Follis Software Ltd: Sedgley Road, Tipton, West Midlands DY4 7UJ. Tel: (021) 557 2981

JOYSTICKS

Sticking with the competition

The popular Competition Pro 5000 has been remodeled and dubbed the Competition Pro PC joystick. The new £15.95 stick is styled in a two-tone grey colour scheme and is suitable for the Amiga, Atari range, CBM 64 and Amstrad computers. Dynamics Marketing Limited: BD Coin House, New Coin Street, Royton, Oldham, Lancashire OL2 6JZ. Tel: (061) 626 7222

INFORMATION DESK

Look, don't stay at home wondering whether you can push Nintendo Game Boy cartridges into the PC Engine. Write to the Centre Bytes crew on Info Desk — they know the answer to everything (it's 42 by the way). This month, the oracles of wisdom solve a whole range of problems from some very confused readers...

Slave to the rhythm

Like Mr Murphy (information desk TGM 18) I'm interested in setting up a low-cost music studio. However, I own an Amiga and there seems to be a real lack of appropriate software. What software/hardware would I need to run my Yamaha keyboard from my Amiga. I am also interested in purchasing a recording and mixing desk; I know that Amstrad market such a product for £300 but is it any good? Finally when is STos BASIC going to be available for the Amiga.

Sam Flanagan, Horncastle

TGM and Centre Bytes in particular are about to undergo some radical changes. These include a new format regular music column featuring hints, tips and guides on setting up low-cost home studios. In the meantime, you will need a MIDI interface to get your Amiga talking to your keyboard (if your keyboard doesn't have any MIDI ports then there isn't really anything you can do). Trilogic produce one for £29.99. MIDI leads can be purchased from most music hardware stores for a few pounds.

While the ST dominates the music software scene the Amiga is rapidly improving. Steinberg and Dr T, regarded as two of the top ST music software producers, have recently started converting some of their popular titles to the Amiga — give HB Marketing a call for more details.

Multi-track home recording machines aren't essential for producing your own demo cassettes. If your only sound source is a synth linking it up to your hi-fi will produce a reasonable quality demo. However, if you also want to record vocal and guitar tracks a multi-track tape machine is a must. A multi-track tape recorder allows you to record different instruments onto separate tracks on the same

tape. The advantage of this is if you've recorded a bassline and a guitar lead and decide that the bassline isn't good enough you can rerecord it without interfering with the guitar lead. Generally you don't need to spend that much money to produce a reasonable quality demo, certainly no more than £500 unless you're fanatical about recording. The Amstrad hi-fi cum recording studio didn't receive rave reviews in the music press. However, TGM's guide to multi-track home recording machines (TGM 003) recommends the Tascam Porta 05, at £329 it represents tremendous value for money.

Amiga owners eagerly awaiting STos for their machine will be pleased to know that Mandarin Software will be releasing AMos in early September.

HB Marketing: Brooklyn House, 22 The Green, West Drayton, Middlesex UB7 7PQ. Tel: (0895) 444433.

Mandarin Software: Europa House, Adlington Park, Adlington, Macclesfield SK10 4NP. Tel: (0625) 878888.

Trilogic: Unit 1, 253 New Works Road, Bradford BD12 0QP. Tel: (0274) 691115.

What difference does it make?

I am thinking of upgrading to either a PC Engine or Sega Mega Drive. However, I've just heard that the NEC Turbo Grafx 16 has just been launched in America. How does this machine differ from the PC Engine?

Matthew Bauer, Rochdale

Exact details on the Turbo

Grafx 16 are still a bit sketchy but as far as we are aware it is the American version of the PC Engine with a redesigned black case. Incidentally the Mega Drive has also undergone a name change. In the States it is now known as the Genesis.

I still haven't found...

A friend has told me about an arcade machine called a 'PCB'. He said it cost about £200. I would appreciate any information on this cheap arcade machine.

Simon Oliver

Somewhere along the line you or your friend has got a little confused. A PCB (Printed

Circuit Board) is the electronic guts of an arcade machine which include the actual game program. The case this is housed in with the screen and joystick is known as the cabinet. Some arcade machines allow you to install a new PCB without having to change the cabinet. For instance you can install an Empire Strikes Back PCB in a Star Wars cabinet. The advantage of buying PCBs is that you only have to own one cabinet to play a selection of games. Unfortunately, there is no cabinet which works with all games — you couldn't play Out Run on a Defender machine. Costs of PCBs and cabinets vary according to the game you want to buy. For all information regarding buying arcade machines contact Coin Slot: 2 Daltry Street, Oldham, Lancashire. Tel: (061) 624 3687.

Tell me what

- 1) Which is the best out of the current and forthcoming consoles?
- 2) In TGM 19 you stated that the Sega Mega Drive wouldn't be available until 1990 yet some companies are selling them now and you carried reviews and game hints.
- 3) Is the PC Engine capable of producing graphics identical to any arcade machine?
- 4) What is the advantage of a console being 16-bit. I thought that the games carried their own memory?

Stephen, Kingsbury

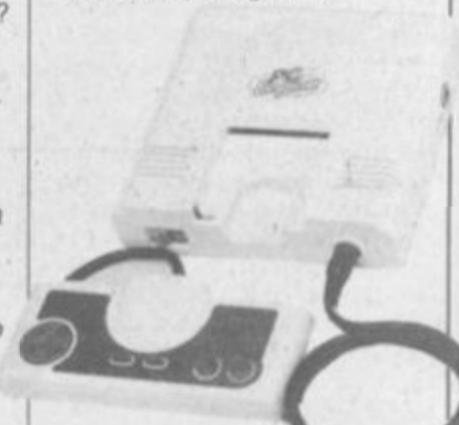
1) The general consensus in the TGM office is that the PC Engine and Mega Drive are the best consoles to date. However, we've yet to see the Konix Console, 16-bit Nintendo or the Atari hand-held console.

2) The Sega Mega Drive won't be officially released in the UK until early 1990 when the Virgin/Mastertronic group will be handling marketing. In the meantime a few companies are importing the Mega Drive from Europe, and adapting it to suit British TVs. It was one of these imports that TGM reviewed. It's also worth noting that the PC Engine

isn't 'officially' available in the UK either.

3) Generally no, although it depends what games you're comparing it with.

4) 16-bit refers to the console's (or computer's) central processor not memory. Basically the more bits there are the faster the processor can carry out the complex maths involved in software. The end result is faster and more complex games.



Dithering over disk drives? Surprised by sprites? Going crazy about CD ROM? Send all your computing questions to Information Desk, TGM, PO BOX 10, Ludlow, Shropshire, SY8 1DB. We regret due to the pressures of magazine schedules personal correspondence can not be entered into.

NEW SOFTWARE
ARRIVING DAILY
PHONE NOW!!
BUSINESS & UTILITY
SOFTWARE AVAILABLE



MURDER!

WE SPECIALISE IN
AMIGA AND ATARI
ST SOFTWARE
ORDER NOW
Mail order prices only

All Computer Prices are being
savagely slaughtered!!!
Phone NOW for amazing deals:
01 - 760 0274



AMIGA SOFTWARE

£13.50	Alien Syndrome	International Karate	£19.50
Afterburner	Art Of Chess	Interceptor	Chronoquest
Bombjack	Battlechess	Joan Of Arc	Dreamzone
Chuckie Egg	Bombuzal	Legend Of The Sword	Falcon
Crazy Cars 2	Bards Tale 1	Lombard Rac Rally	Hybris
Double Dragon	Bards Tale 2	Mortville Manor	King Of Chicago
Espionage	Corruption	Mindfighter	Rocket Ranger
Flying Shark	Carrier Command	Operation Wolf	Sword of Sodan
Galactic Conqueror	Colossus Chess	Obliterator	TV Sports Football
Menace	Chessmaster 2000	Puffy's Saga	Three Stooges
Mini-Golf	Dungeon Master (1	Powerdrome	
Pacmania	Meg)	President Is Missing	
Techno Cop	Daley Thompson	Roger Rabbit	
Trivial Pursuit 2	Elite	Space Harrier	£49.50
Zoom	Fusion	Speed Ball	Deluxe Photolab
	Firezone	Starglider 2	Deluxe Video
	Fish	Superman	Deluxe Music
£15.95	Fernandez Must Die	Star Ray	
Amiga Gold Hits	Garrison 2	Thunderball	
Amiga Gold Hits	Heroes Of The Lance	World Tour Golf	
Archon Collection	Hostages	Zany Golf	

ST SOFTWARE

£13.50	Mickey Mouse	£15.95	Powerdrome
1943	Mini Golf	Bards Tale	Questron 2
Alien Syndrome	Overlander	Barbarian (PSY)	Speedball
Afterburner	Operation Wolf	Chronoquest	Starglider 2
Bombjack	Pacmania	Captain Blood	Sinbad
Batman	Predator	Corruption	Times Of Lore
Baal	Rambo 3	Driller	Wizards Crown
Chuckie Egg	Space Harrier	Dungeon Master	Zany Golf
Double Dragon	Super Hang On	Elite	
Daley Thompson	SDI	Falcon	
Dragon Ninja	Soldier Of Light	Fish	
Flying Shark	Sargon Chess	Fernandez Must Die	
Football Man. 2	Stockmarket	Guild Of Thieves	
Game Over 2	Thunderblade	Gunship	
Galactic Wars	Technocop	Hostages	
Galactic Conqueror	Tiger Road	Heros Of The Lance	
IK+	Trivial Pursuit 2	Kennedy Approach	
Joe Blade 2		Lombard RAC Rally	
Leisure Suit Larry		Mind Fighter	
Live & Let Die		Obliterator	
Lancelot		Puffy's Saga	

Quickshot 2 Turbo	£8.95
Pro 5000	£11.00
Starprobe	£11.00
Mouse Mat	£4.50
10 Blank Discs (3.5)	£12.50

NAME:

ADDRESS:

TEL:

Full range of hardware and software
for all popular machines at discount
prices. Cheques and postal orders
made payable to:

**SABRE SIXTEEN COMPUTER
DISCOUNT CENTRE, DEPT GM20,
NO 5 THE PARADE, MEAD PLACE,
CROYDON, SURREY, CR0 3SQ**

Prices include P&P within the UK.
Europe: please add 1.00 per item.
Hardware (UK) please add 5.
Hardware (Europe) Please add 10.

Type of computer.....

PLEASE SEND ME THE
FOLLOWING ITEMS:

ITEM:	AMOUNT:

POST & PACKING
TOTAL:

**A500 512k
RAM CARDS
WITH CLOCK
ONLY
£109.00**

HARDWARE

A500 + TV Modulator	£375
1084S Monitor	£249
A500 + 1084S	£589

NEW RELEASES - AMIGA

£13.50	Baal
Fourth & Inches	Led Storm
Galdregon's Domain	Emmanuel
RoboCop	Breach
Grand monster slam	Vindicator
May Day Squad	Fright Night
Voyager	

£15.95

Balance Of Power 1990	Kennedy Approach
Space Quest 2	Gauntlet 2
Batman	Joan Of Arc
IK+	Populous
Trained Assassin	Microprose Soccer
Rampage	Demons Winter
Bio-Challenge	Stag
Deja Vu 2	Sorcerer Lord
Gold Rush	Running Man
Battlehawks 1942	Flying Shark
Black Cauldren	Battletech

£19.50

Rebel Charge	Personal Nightmare
Firebrigade	Shogun
Journey	

HARDWARE

520 STFM Explorer Pk	£275
520 STFM Super Pk	£349
1040 STFM Super Pk	£449

NEW RELEASES - ST

£13.50	Barbarian 2
The Games Winter Edition	Star Raiders
LED Storm	Road Blasters
Galdregon's Domain	Emmanuel
I Ludicros	Robocop
Time Runner	Typhoon Thompson
Breach	Grand Monster Slam
Dragon Ninja	Voyager
Legend	May Day Squad
MicroProse Socce	

£15.95

Demons Winter	Bio-Challenge
Stag	STOS Maestro
Battlehawks 1942	Deja Vu 2
Sorcerer Lord	Black Cauldren

£19.50

Kings Quest 4	Federation Of Free Traders
Personal Nightmare	

The Games machine

READER CLASSIFIEDS

WANTED

Atari ST software wanted. Please send your list to: PO Box 76, 2995 2J, Heenjansdam, Holland.

FOR SALE

Sega games for sale, light phaser + cart., Rambo III, Gangster Town, R-Type, Shinobi, Kenseiden, Phantasy Star, Miracle Warriors, Fantasy Zone, Power Strike, Afterburner, Thunderblade and Zillion 2. All half price! Ring 0633 614236.

Amiga A500, joystick, 50+ latest games (including Battlehawks, Populous, Grand Monster Slam etc.), diskbox. All in excellent condition, boxed. £330. Telephone Dave (031) 332 4618 (after 6pm).

Atari 1040STF with mouse, manuals, joystick and over £500 worth of software, including Gauntlet 2, Space Harrier, R-Type, Double Dragon, Afterburner. Very good condition, worth over £1000, sell for only £500 ono. Phone Rich on 0245 269174.

Wowie Zowie! Amstrad CPC6128, colour monitor, tape recorder, joystick, blank disks, £450 worth of disk/tape software inc: Three compilations, Robocop, Art Studio, magazines, books, leads. Perfect condition. Only £300! Phone Stephen (Brighton - 0273) 463224.

For sale CBM64 inc. data cassette, joystick, over £200 worth of software (Last Ninja, Target Renegade, + other recent games). Sell for £200 no offers. Tel: BP Auckland 730278 after 6pm. Ask for Kev.

Amiga games for sale. All originals. Carrier Command, Elite, Starglider 2, Virus, Double Dragon, Ferrari Formula One, Test Drive, Shadowgate, Mercenary and more! Phone Dan 0229 54348 after 6pm. Prices from £4.

Atari 520 STFM, memory upgraded to 1MB, clock, 1MB second drive, Vidist digitizer, software including Lattice C, STOS, over 80 games, PD, books, magazines. Worth over £2500, sell for £700 ono. Phone 061 437 9918 for quick sale. Also MIDI keyboard £175.

CBM 64, datasette, joystick, Music Maker, £700 worth of software eg. Armalyte, Robocop, Dragon Ninja and several magazines. Worth £900, sell for £200. Phone S upon A (0789) 842105 after 4pm.

CARROT! (Made you look!) 1040 STFM (1 meg memory), only the best games (about 30), utilities, up to date mags, six months old, used but not much, one careful owner (me). Phone Chris after 6pm (01) 948 0319. Nearly forgot - £375.

Sega system for sale with Hangon, Astro Warrior plus joystick £55 still boxed, plus 7 other games for sale inc Double Dragon, Shinobi, Kenseiden, Golvelius, Thunder Blade, £10-£15 each. Phone Gordon on (041) 776 0827 from 5pm to 7pm.

Sega console plus 9 games including Out Run, Space Warrior, Fantasy Zone II, World Soccer and many more + control pad and control stick. Worth £280, will sell for £175. VGC. Phone David on (0634) 365740 after 4pm.

Amiga games for sale: Super Hang-on, Voyager, Flight Simulator II, Mercenary, Starglider II, Carrier Command, Elite. £10 each. Also Eliminator, Buggy Boy for £5. Reuben Wilkinson, Harbledown, Westland Green, Little Hadham, Herts. SG11 2AQ. Phone 027984 2675.

CB4C, datasette, Star LC10 colour printer, 1541 2c disk drive, Quickshot Turbo Two joystick and Quickshot Two. MK IV Action Replay, reset cartridge, over £1000 of software. £550. Phone Chertsey 562005. Fully boxed and 2 mice.

Commodore 64 for sale with two joysticks and over 40 games including Op.Wolf, In Crowd, Dragon Ninja. Only £100. Tel: 01 310 6335 after 6pm.

Sega arcade machine for sale, 15 games including Outrun, Wonder Boy, Space Harrier, Quartet, Alex Kid, Kenseiden, plus joystick, leads etc. Still boxed, selling for £150. Worth over £300. Tel: Hook 2902. Ask for Mike.

Spectrum +3 and C64 both for sale. Good condition. With printer, Multiface 3, mags and over £400 worth of games. Some disk games. Worth over £900. Everything listed for £300. Bargain. Phone Russell on 0895 38487.

Spectrum +2, £350 worth of software includes Outrun, Super Hang-On, Match Day II, Sinclair interface. Excellent condition. All worth over £450, will sell for £160. Tel: 656 8082 after 7pm.

PD for the ST! All latest titles only £2 (£1 if you supply the disk). For the very best Public Domain send SAE to The Other PD Library, 108 Kenmare Road, Wavertree, Liverpool L15 3HQ.

Atari 520STFM boxed, as new, 1 meg second disk drive, ST Replay plus over £400 of original software. £350. Tel: (0449) 740441 or write to S.P. Elmer, 19 Brookfields, Bileston, Ipswich.

CBM64, as new, boxed, slimline keypad, tape deck, £800 of software inc. LED Storm, Elite. Quick sale. Make me an offer. Write to: Richard, 4b Current Lane, Harwich, Essex CO12 3DE.

Sega system for sale including light phaser and Konix joystick and two pads, plus five games including Shinobi and Double Dragon. Still under guarantee. All for £80. Phone 0645 22153 before 6pm. Ask for Andy.

Sega console with 12 games including Shinobi, Thunderblade and Penguin Land. Also light phaser and two games included. All worth over £300, sell for just £200. Phone Martin on 0268 416919 after 4pm.

Massive Amstrad games collection for sale. All originals, half price. New titles and many oldies. If you want it, I just might have it. Orders over £5 P&P free, otherwise add £1. Ring (0783) 71109 after 5pm. Ask for Richard.

Spectrum 128K+2A with 300 games, Alphacom 32 printer, Digital Tracer, lightpen, Turbo interface, Sinclair joystick and Kempston joyball. £245 or nearest offer. Phone Callum McFetridge on 0236 27506 after 5pm.

Amstrad PC games Airborne Ranger, Gunship, Lombard RAC, Balance of Power, Pawn, Guild of Thieves, Elite, Sentinel Worlds, Aces High, Mean 18, Hostages, Strikefleet. All £10 each. Tel: Jim on 0742 305430.

Multiface ST for sale with disk organiser £50. Acorn Electron with 50ish games offers around £60. Tel: (0744) 817507 (ask for Alan).

Sega Master System, 2 joypads, 8 games including Y.S., Thunderblade, After Burner, Wonder Boy 2, Enduro Racer + more. Still boxed and in VGC. Worth £250, will sell for £150 ono. Tel: (01) 467 0266.

Atari 520STFM (1 meg drive), with B/W portable television (both still boxed), over £500 software inc. Super Hang-On, Thunder Blade, Space Harrier, Falcon, Devpac ST (ver.2). Will sell for £300 ono. Phone Philip (0293) 884456 after 6pm.

For sale: Sinclair Spectrum 128K, Disciple disk interface, dual 5.25" disk drives with disks, Disciple compatible Kempston mouse, Comcon joystick interface, ZXLPint III printer interface. Sensible offers. Will split. Phone (0462) 711722 weekdays after 7pm.

Amstrad CPC6128 with colour monitor, diskdrive, joystick, Multiface 2, tape leads and over £400 of software. Also mags and literature. Excellent condition, excellent offer. Only £350 (offers considered). Tel: Chris 073 522 3269.

48K Spectrum+, Graphpad, cassette recorder, joystick interface, £750 worth of games, all originals. Worth £1000+. Sell for £350. Must collect from Swansea, W. Glam., Wales. Phone Swansea 467746 after 5.30pm. Quick sale if possible.

Amiga A500 includes TV modulator, mouse, joystick, manuals, mouse mat, dust cover, Amiga mags, 23 games, all originals, and several demo disks. Everything in excellent condition. Only £450 ono. Phone 0227 262276, ask for David.

Spectrum +3, Multiface 3, datacorder, 3 joysticks, 16 blank disks, 200+ games, 60+ on disk, leads, lots of mags, books and tips. Worth £960, a bargain at £325 ono. Phone 021 373 5424 after 6pm.

Commodore Amiga with 1 meg memory board, 3 disk drives, one metal computer case/monitor stand, mouse, joystick, latest Workbench V1.3, diskbox plus over £455 worth software. Tel: 01 674 7210 between 4-6pm.

Amiga A500, 1084S colour monitor, joystick, £200 worth of software, only 3 months old, boxed and in superb condition, still under warranty. All for £390. Phone Hailsham nr. Eastbourne on 0323 846906. Ask for Wayne.

C16 Plus/4 software for sale. Excellent games including Monty On The Run and Video Meanies. Send SAE for list and prices to Henry Mills, 26 Lancaster Road, St Albans, Herts. AL1 4ET. All originals reduced.

Sega console, good condition, still boxed, with guarantee, joypads rapidfire unit, leads etc. 11 games including Double Dragon, Lord of the Sword and After Burner. Worth £284, will sell for £165. Phone 04024 77619 evenings.

CBM64 for sale with joystick, C2N plus loads of games including Outrun, WEC Le Mans, Dragon Ninja etc. Worth about £600, will sell for £150. Call Mark (0592) 742207 after 4.30pm any day.

Atari 1040ST, boxed, mint condition, mouse, joysticks, SC1224 colour monitor, SMM804 printer, over £700 worth of software inc. R-Type, Dungeon Master and Speedball etc. Worth over £1,800, will sell for £700!!! or swap for Amiga package. Phone (0322) 863656 (Darren).

Nintendo Deluxe console, including joypads, R.O.B. robot, Zapper gun, Super Mario Bro's, Gyromite, Hogans Alley, Wild Gunman, Duck Hunt. Excellent condition and boxed as new. £120 ono. Phone (02576) 3333 after 4pm.

PEN PALS

Amiga contacts wanted to swap PD only - No pirates. I own a 0.5 meg 1.3 Amiga A500. Send disks to Grant Robson, 3a Castle Terrace, Bridge of Weir, Renfrewshire PA11 3EF.

Amiga contacts wanted. Write to Daz, 8 Empress Drive, North Shore, Blackpool, Lancs. FY2 9SE or phone 0253 52218 and ask for Daz now! for the latest stuff.

Amiga contacts required. Write to M. Hannonen, Ornie 2 D 39, 01200 Vantaa, Finland.

USER GROUPS

Commodore users. A new computing club has just started. We publish a monthly newsletter packed with news, reviews, hints, discounts etc. For further details contact: WCA, 295 Peniel Green Road, Liansamlet, Swansea SA7 9BJ. Tel: 0792 772745.

Summer special offer £1 off membership of the UK's Premier Computer Club. All machines, amazing selection of services + great discounts. SAE to CCC, 28 Criss Grove, Gerrards Cross, Bucks. SL9 9HQ.

SOFTWARE CITY

We welcome customers at
SOFTWARE CITY
 1 GOODALL STREET
 WALSALL
 Tel. 0922 24821

SOFTWARE CITY
 59 FOREGATE STREET
 STAFFORD
 Tel. 0785 41899

SOFTWARE CITY
 3 LICHFIELD PASSAGE
 WOLVERHAMPTON
 Tel. 0902 25304

EIGHT BIT SELLERS

	BB/EL	CASS	DISC	Disc
Airwolf	BB	£1.99	N/A	N/A
All New Blockbusters	BB	£5.50	£7.99	N/A
Barbarian	BB/EL	£6.99	£8.99	£9.99
Barbarian 2	BB/EL	£6.99	£8.99	£9.99
BBC Mastermind Quiz	BB/EL	£2.99	N/A	N/A
Brian Clough	BB/EL	£6.99	£6.99	N/A
Bullseye	BB	£5.50	N/A	N/A
Citadel	BB/EL	£2.99	N/A	N/A
Colossus Chess 4	BB/EL	£6.99	£9.99	N/A
Commando	BB/EL	£2.99	N/A	N/A
Cosmic Battlezone Lunar	BB	£3.99	N/A	N/A
Jetman, Alien B & Jetpac	BB	£2.99	N/A	N/A
Cricket	BB/EL	£2.99	N/A	N/A
Deathstar	BB/EL	£2.99	N/A	N/A
Elite	BB/EL	£8.99	£9.99	£13.99
Exile	BB	£8.99	£9.99	£13.99
Football Director	BB	£6.99	£8.99	N/A
Football Manager	BB/EL	£2.99	N/A	N/A
Footballer of the Year	BB/EL	£2.99	N/A	N/A
Gaforce	BB/EL	£2.99	N/A	N/A
Graphic Adv. Creator	BB	£9.99	N/A	N/A
Holed Out	BB/EL	£8.99	£9.99	£10.99
Impact	BB/EL	£2.99	N/A	N/A
Infinity	BB	£5.99	£9.99	N/A
Joe Blade 1 or 2	BB/EL	£1.99	N/A	N/A
Karate Combat	BB/EL	£2.99	N/A	N/A
Last Ninja	BB/EL	£6.99	£8.99	£9.99
League Challenge	BB/EL	£2.99	N/A	N/A
Life of Repton	BB	£4.88	£5.50	£6.99
Mini Office	BB	£2.99	N/A	N/A
Mr Wiz	BB/EL	£1.99	N/A	N/A
Percy Penguin	BB/EL	£1.99	N/A	N/A
Phantom Combat	BB	£2.99	£4.99	N/A
Plan B 1 or 2	BB/EL	£2.99	N/A	N/A
Question of Sport	BB/EL	£8.99	£9.99	£13.99
Ravenskill	BB/EL	£2.99	N/A	N/A
Repton 1 or 2	BB/EL	£2.99	N/A	N/A
Repton/Infinity	BB/EL	£8.99	£9.99	£13.99
Roundheads	BB	N/A	£2.99	N/A
Soccer Boss	BB/EL	£1.99	N/A	N/A
Star Wars	BB/EL	£6.99	£8.99	N/A
Steve Davis Snooker	BB/EL	£1.99	£2.99	N/A
Storm Cycle	BB/EL	£1.99	N/A	N/A
Strip Poker 2	BB/EL	£2.99	N/A	N/A
Strykers Run	BB/EL	£2.99	N/A	N/A
Thai Boxing	EL	£1.99	N/A	N/A
World War 1	BB	N/A	£2.99	N/A

SIXTEEN BIT SPECIALS

Academy	ST	4.99
Action Service	ST or Amiga	4.99
Afterburner	ST	4.99
Annals of Rome	Amiga	9.99
Atax	Amiga	4.99
Balance of Power	ST/Amiga	9.99
Captain Blood	Amiga	9.99
Dragons Lair 1 Meg	Amiga	19.99
Eliminator	Amiga	4.99
Empire Strikes Back	Amiga	9.99
Helibent	Amiga	4.99
Leather Goddesses	ST	4.99
Mindshadow	ST	4.99
Nebulus	Amiga	9.99
Pacland	ST/Amiga	9.99
Purple Saturn Day	Amiga	9.99
Roger Rabbit	Amiga	9.99
Skychase	Amiga	4.99
Soldiers of Light	Amiga	9.99
Spitting Image	Amiga	9.99
Star Ray	Amiga	9.99
Three Stooges	Amiga	9.99
King of Chicago	Amiga	9.99
Wizard Warz	Amiga	9.99
Marble Madness	Amiga	9.99
Zynaps	ST or Amiga	4.99

SEGA CARTRIDGES

3D Zaxxon	£24.95
Action Fighter	£22.95
Afterburner	£24.95
Alex Kidd Lost Stars	£24.95
Alex Kidd Mir World	£22.95
Alien Syndrome	£24.95
Astrowarrior	£22.95
Aztec Adventure	£22.95
Bank Panic	£14.95
Black Belt	£22.95
Blade Eagle 39	£24.95
Captain Silver	£24.95
Choplifter	£22.95
Double Dragon	£24.95
Enduro Racer	£22.95
F16 Fighter	£14.95
Fantasy Zone	£22.95
Fantasy Zone (Maze)	£22.95
Fantasy Zone 2	£24.95
Gangster Town	£19.95
Ghost House	£14.95
Global Defence	£22.95
Golvellius	£24.95
Great Baseball	£22.95
Great Basketball	£22.95
Great Football	£22.95
Great Golf	£22.95
Great Volleyball	£22.95
Kensiden	£24.95
Kung Fu Kid	£22.95
Lord of the Sword	£24.95
Mazehunter 30	£24.95
Mirade Warrior	£32.95
Missile Defence 30	£24.95
Monopoly	£29.95
My Hero	£14.95
Ninja	£22.95
Out Run	£24.95
Penquin Land	£29.95
Phantasy Star	£39.95
Poseidon Wars 30	£24.95
Power Strike	£22.95
Pro-Wrestling	£19.95
Quartet	£19.95
R-Type	£29.95
Rambo III	£24.95
Rescue Mission	£22.95
Rocky	£24.95
Secret Mission	£22.95
Shanghai	£22.95
Shinobi	£24.95
Shooting Gallery	£22.95
Space Harrier	£24.95
Space Harrier 30	£24.95
Spy V Spy	£14.95
Super Tennis	£14.95
Teddy Boy	£14.95
Thunderblade	£24.95
Transbot	£14.95
Wonderboy	£22.95
Wonderboy/Monsters	£24.95
World Grand Prix	£22.95
World Soccer	£22.95
Y's	£32.95
Zillion	£19.95
Zillion 2	£22.95

SIXTEEN BIT SELLERS

	ST	AMIGA			
3-D Pool	£13.99	N/A	Blood & Revenge of Doh	N/A	£16.99
African Raides	£13.99	£13.99	Red Heat	£13.99	N/A
Airbourne Ranger	£16.99	£16.99	R.V.F.	£16.99	N/A
Balance of Power 1990	£16.99	£16.99	Sikworn	£13.99	N/A
Battle Hawks	£16.99	£16.99	Skweek	£13.99	£13.99
Kick Off	£13.99	£13.99	Space Harrier	£13.99	£13.99
Populous	£16.99	£16.99	Super Hang On	£13.99	£13.99
Blood Money	N/A	£16.99	Sword of Sodan	N/A	£16.99
Cosmic Pirates	£16.99	£16.99	Voyager	£13.99	£16.99
Crazy Cars 2	£16.99	£16.99	War in Middle Earth	£13.99	£13.99
Denaris	N/A	£13.99	F16 Combat Pilot	£16.99	N/A
Dragon Ninja	£13.99	N/A	The Duel (Test Drive 2)	N/A	£16.99
Dungeon Master Editor	£6.99	£6.99	Battlechess	N/A	£16.99
Elite	£16.99	£16.99	Football Manager 2 Exp Kit	£8.99	£8.99
F-16 Falcon	£19.99	£16.99	Degas Elite	£16.99	N/A
Foundation Waste	£6.99	£6.99	Sidewinder	£6.99	£6.99
Forgotten Worlds	£13.99	£13.99	TV Sports Football	N/A	£19.99
Giants Compilatin	£19.99	N/A	Dungeon Master	£16.99	£16.99
Gunship	£16.99	£16.99	Speedball	£16.99	£16.99
Hawkeye	N/A	£13.99	S.T.O.S.	£19.99	N/A
Hollywood Poker Pro	£13.99	£13.99	STOS 600 Sprites	£9.99	N/A
The Krystal	N/A	£19.99	Double Dragon	£13.50	£13.50
Lombard RAC	£16.99	£16.99	Gauntlet 2	£13.50	£13.50
Lords of the Rising Sun	N/A	£19.99	Heroes of the Lance	£16.99	£16.99
Microprose Soccer	£16.99	£16.99	Robocop	£13.99	£16.99
Millenium 2.2	£16.99	£16.99	R-type	£13.50	£16.99
Navy Moves	£13.99	£16.99	U.M.S.	£16.99	£16.99
Operation Wolf	£13.50	£16.99	World Class Leaderboard	£6.99	£6.99
Outrun	£6.99	£6.99	Premier Collection (Zynaps, Exolon, Nebulus, etc)	£19.99	£19.99
Precious Metal (Super Hang On, Xenon, Captain Blood, Rev of Doh)	£13.99	N/A	Running Man	£16.99	£16.99
Precious Metal (Crazy Cars, Xenon, Captain					

EIGHT BIT DISC

	SP+3	CO	AMS			
6 Pak Vol 2	N/A	£3.99	N/A	Wec Le Man	£9.99	£9.99
Barry McGuigans	N/A	N/A	£2.99	X-terminator	N/A	£2.99
Batman	£9.99	£9.99	£9.99	Best of Elite (Commando, Bombjack, Airwolf & Frank Bruno)	£4.99	£2.99
Battle Island	N/A	£2.99	N/A	Four Top Games (Nemeses, The Warlock, Slaine, Catch23 & Pulsator)	£4.99	N/A
Big 4 Vol 2	N/A	£3.99	N/A	Sideways	£2.99	£2.99
Crazy Cars 2	£9.99	£9.99	£9.99	War in Mid. Earth	£9.99	£9.99
Emlyn Hughes	£9.99	£9.99	£9.99	Game Set & Match 1 or 2	£12.99	£12.99
Fernandez Must Die	N/A	N/A	£2.99	Five Star Games 3 (Trap Door, Uridium+, Tau Ceti Firelord, Way of the Exploding Fist, Aliens Strike Force Harrier)	N/A	£4.99
Fists & Throttles	£9.99	£9.99	£9.99	Edge Classic 1 (Bobby Bearing, Brian Bloodaxe, Quo Vadis, Wizardry & Firequest)	N/A	£4.99
Football Director 2	£13.99	N/A	£13.99	Marauder	N/A	£2.99
Football Manager 2	£9.99	£9.99	£9.99	North Star	N/A	£2.99
Football Manager 2 Exp.	£6.99	£6.99	£6.99	Skate Crazy	N/A	£2.99
Forgotten Worlds	£9.99	£9.99	£9.99	Bangkok Knights	N/A	£2.99
G. Linekers Hotshot	£9.99	£9.99	£9.99	Denaris	£9.99	£9.99
Gunship	£9.99	£13.99	£13.99	Gunslinger	N/A	£2.99
Hillsfar	N/A	£13.99	N/A	Hellfire Attack	N/A	£2.99
Lee Enfield-Amazon	N/A	N/A	£2.99	Hypersports	N/A	N/A
Lee Enfield-Tournament	N/A	N/A	£2.99	Last Ninja	N/A	£2.99
MacArthur's War	N/A	£13.99	N/A	Track and Field	N/A	£2.99
Microprose Soccer	£9.99	£13.99	£13.99	Legend of Kage	N/A	£2.99
Murder on the Atlantic	N/A	£2.99	N/A	Short Circuit	N/A	£2.99
Navy Moves	£9.99	£9.99	£9.99	Mean Streak	N/A	£2.99
Navy Seal	N/A	£8.99	N/A	Masters of the Universe	N/A	£2.99
Obiterator	£9.99	£9.99	£9.99	Superstar Ping Pong	N/A	£2.99
Pool of Radiance	N/A	£16.99	N/A	Time Tunnel	N/A	£2.99
Question of Sport	£13.99	£13.99	£13.99	Blood Brothers	N/A	£2.99
Realm/Spaced Out	N/A	N/A	£2.99	Rim Runner	N/A	£2.99
Rebel Star/Pneumatic				Through the Trap Door	N/A	£2.99
Hammers	N/A	N/A	£2.99	Rebounder	N/A	£2.99
Red Heat	£9.99	£9.99	£9.99	Breakers	N/A	£2.99
Revs +	N/A	£2.99	N/A	Bravestar	£2.99	£2.99
Robocop	£9.99	£9.99	£9.99	Flunky	N/A	N/A
Running Man	£9.99	£9.99	£9.99	I.K. +	N/A	N/A
Silent Service	£9.99	£9.99	£9.99	Red Led	N/A	£2.99
Sikworn	£9.99	£9.99	£9.99	Pulsator	N/A	£2.99
Task 3	N/A	£2.99	N/A	Terror of the Deep	N/A	£2.99
Test Drive 2 (The Duel)	N/A	£11.99	N/A			
Thunderzone/Think	N/A	N/A	£2.99			
Speedball	N/A	£8.99	N/A			
Soy V Spy Trilogy	N/A	£2.99	N/A			
Starglider 2	£12.49	N/A	N/A			
Stryfe	N/A	N/A	£2.99			
Sydney Affair	N/A	N/A	£2.99			
Ultima 5	N/A	£16.99	N/A			
Ultima Trilogy	N/A	£16.99	N/A			
Ultima Ratio/Gunstar	N/A	N/A	£2.99			
Xenon	£9.99	£9.99	£9.99			
Xor	N/A	£2.99	N/A			



EIGHT BIT SELLERS

	SP	CO	AMS		SP	CO	AMS
3-D Pool	£6.99	£6.99	£6.99	R-type	£6.99	£6.99	£6.99
Crazy Cars 2	£6.50	N/A	£6.99	Robocop	£6.99	£6.99	£6.99
Denaris	£6.99	£6.99	£6.99	Running Man	£6.50	£6.99	£6.99
Dragon Ninja	£6.99	£6.99	£6.99	Rambo 3	£6.50	£6.99	£6.99
Emlyn Hughes Soccer	£6.99	£6.99	£6.99	Red Heat	£6.50	£6.99	£6.99
Football Director	£6.99	£6.99	£6.99	Rock Star	£6.99	£6.99	N/A
Football Manager 2	£6.99	£6.99	£6.99	Run the Gauntlet	£5.99	£6.99	£6.99
Football Man 2 Exp Kit	£5.99	£5.99	£5.99	Silkworm	£6.99	£6.99	£6.99
Forgotten Worlds	£6.50	£6.99	£6.99	Siweek	£6.99	£6.99	£6.99
Four Soccer Sim	£6.99	£6.99	£6.99	Speedball	N/A	£5.99	N/A
Kenny Dalglish	£6.50	£6.99	£6.99	Starglider 2	£9.99	N/A	N/A
In Crowd	£9.99	£9.99	£9.99	Stormlord	£6.99	£6.99	£6.99
Last Ninja 2	£8.99	£8.99	£8.99	Timescanner	£6.99	£6.99	£6.99
Mike Reid Pop Quiz	5.50	£6.99	N/A	Tracksuit Manager	£6.99	£6.99	£6.99
Microprose Soccer	£6.99	£9.99	£9.99	War in Middle Earth	£6.99	£6.99	£6.99
Navy Moves	£6.99	£6.99	£6.99	Wellington at Waterloo	£8.99	N/A	N/A
Operation Wolf	£6.99	£6.99	£6.99	Xenon	£6.99	£6.99	N/A
Professional Soccer	£6.99	N/A	N/A	Xybots	£6.99	£6.99	£6.99



AMSTRAD CASSETTE

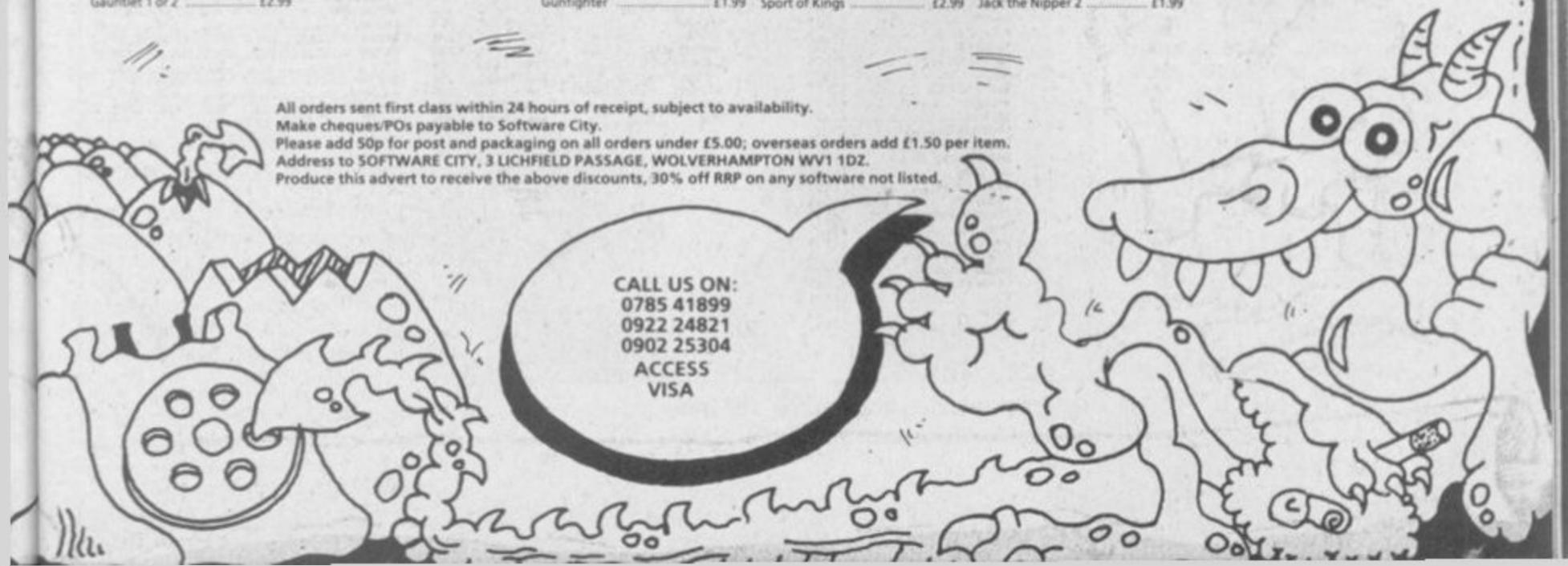
1942	£2.99	Ghostbusters	£1.99
Arkanoid	£2.99	Hardball	£2.99
Auf Wiedersehen Monty	£1.99	Indoor Soccer	£1.99
Blood Brothers	£1.99	Int Karate	£2.99
Blood Valley	£1.99	Jack the Nipper	£2.99
Empire Strikes Back	£2.99	Joe Blade 1 or 2	£1.99
Fifth Axis	£1.99	Kikstart 2	£1.99
Head Over Heels	£2.99	Kung Fu Master	£2.99
Mask 1 or 2	£1.99	Leaderboard	£2.99
Supersports	£1.99	League Challenge	£2.99
Bombjack 1 or 2	£1.99	Lee Enfield-Amazon	£1.99
Ghosts and Goblins & Bombjack 2	£2.99	Lee Enfield-Tournament	£1.99
Best of Elite (Commando, Airwolf, Frank Bruno & Bombjack)	£3.99	Manic Miner	£2.99
Cholo	£1.99	Masters of the Universe	£2.99
Chain Reaction	£1.99	Mig 29	£2.99
Fastfood	£2.99	Moto Cross Sim	£2.99
Guadalcanal	£1.99	Murder on the Atlantic	£1.99
Hive	£1.99	Nebulus	£1.99
Kinetik	£1.99	Netherworld	£1.99
Mega Apocalypse	£1.99	Ninja Commando	£2.99
Raputin	£1.99	Peter Shilton's Handball	£2.99
They Sold a Million (Beach Head, Sabre Wolf, Jet Set Willy, Daley Thompson's Decathlon)	£3.99	Pinball Sim	£2.99
The Fury	£2.99	Postman Pat	£1.99
Typhoon	£2.99	Powerplay	£1.99
720	£2.99	Premier 2 Football	£1.99
Academy	£2.99	Pro Snooker	£2.99
Ace 1 or 2	£2.99	Pulsoids	£1.99
Aliens	£1.99	Rambo	£2.99
Alternative World Games	£1.99	Road Runner	£2.99
American Football	£2.99	Rugby Boss	£1.99
Arcade Flight Sim	£2.99	Rugby Sim	£2.99
Army Moves	£2.99	Rygar	£2.99
Artura	£1.99	Saboteur 2	£1.99
B. McGuigans Boxing	£2.99	Sam Fox	£1.99
Beach Head	£1.99	Shanghai Karate	£1.99
Beach Head 2	£2.99	Skate Crazy	£1.99
Big Sleaze	£1.99	Slaine	£1.99
BMX Sim 1 or 2	£2.99	Soccer Boss	£1.99
Book of the Dead	£2.99	Speedking	£1.99
Bruce Lee	£1.99	Sport of Kings	£2.99
Chubby Gristle	£2.99	Spy Hunter	£2.99
Commando	£2.99	Street Cred Boxing	£2.99
Cybermind	£1.99	Street Cred Football	£2.99
D. Thompsons Decathlon	£2.99	Strip Poker +	£2.99
Deep Strike	£1.99	Super Cycle	£2.99
Dizzy	£2.99	Super Nudge 2000	£1.99
Eagles Nest	£1.99	Supersprint	£1.99
Enduro Racer	£2.99	Tetris	£2.99
European 2 Football	£1.99	Titanic	£2.99
Euro 5 a side Football	£1.99	Tomcat	£1.99
Football Manager	£2.99	Tour De Force	£1.99
Footballer of the Year	£2.99	Treasure Island Dizzy 1	£2.99
Frank Bruno's Boxing	£1.99	Turbo Esprit	£1.99
Frankenstein	£2.99	Turf Form	£2.99
Fruit Machine	£2.99	Twin Turbo V8	£2.99
Game Over	£2.99	Up for Grabs	£2.99
Garfield	£2.99	Venom Strikes Back	£1.99
Graham Gooch	£1.99	Way of the Exploding Fist	£1.99
Grand Prix Sim 1 or 2	£2.99	Way of the Tiger	£2.99
Gauntlet 1 or 2	£2.99	Werewolf Sim	£1.99
		Wolfman	£2.99
		Wolfpack	£2.99
		World Games	£2.99

COMMODORE CASSETTE

1942	£2.99	Hardball	£2.99	Star Glider	£2.99	Kaktus	£1.99
720	£2.99	Heavy Metal Paratrooper	£2.99	Star Wars	£2.99	Kamikaze	£1.99
Ace 1 or 2	£2.99	Hollywood Poker	£1.99	Steve Davis Snooker	£1.99	Mega Apocalypse	£1.99
Advanced Basketball Sim	£2.99	Hotshot	£1.99	Street Cred Boxing	£2.99	Marauder	£1.99
Advanced Pinball	£2.99	Impossible Mission	£1.99	Subway Vigilante	£2.99	Magnetron	£1.99
Afterburner	£4.99	Jack the Nipper	£2.99	Super Cup Football	£2.99	Mask	£1.99
Arc	£2.99	Jailbreak	£2.99	Supercycle	£2.99	Mermaid Madness	£1.99
Arcade Flight Sim	£2.99	Joe Blade 1 or 2	£1.99	Super Nudge 2000	£1.99	Music 64	£0.99
Army Moves	£2.99	K +	£2.99	Task Force	£2.99	Nightshade	£1.99
Around the World in 80 days	£1.99	Int Karate	£2.99	Tetris	£2.99	Nemesis the Warlock	£1.99
B. McGuigans Boxing	£1.99	Int Rugby	£2.99	Thunderblade	£2.99	Parallax	£1.99
Battle Island	£1.99	Int Speedway	£2.99	Tom Cat	£1.99	Pesky Painter	£0.99
Battle Valley	£2.99	Jet Boys	£1.99	Trap Door 1 or 2	£1.99	Psi Warrior	£1.99
Beach Head	£1.99	Jockey Wilson's Darts	£2.99	Trap	£2.99	Psycho Soldier	£2.99
Beach Head 2	£1.99	Kikstart 2	£1.99	Trivial Pursuit	£4.99	Quinx	£0.99
BMX Sim 1 or 2	£2.99	Knightmare	£1.99	The Tube	£1.99	Ranarama	£1.99
Bombjack 1 or 2	£1.99	Kokotoni Wolf	£1.99	Turbo Esprit	£1.99	Raid 2000	£1.99
Boulderdash 1 or 2	£2.99	League Challenge	£2.99	Turf Form	£2.99	Sea World	£0.99
Bruce Lee	£1.99	Loads of Midnight	£1.99	Uridium	£2.99	Sigma 7	£1.99
Chubby Gristle	£2.99	Maniax	£1.99	Way of the Exploding Fist	£1.99	Scrabble, Monopoly & Cluedo	£2.99
Colossus Chess	£2.99	Manic Miner	£2.99	Way of the Tiger	£2.99	Sideways	£2.99
Commando	£2.99	Masters of the Universe (Film)	£2.99	Werewolf of London	£1.99	Sidekick	£1.99
Cricket International	£1.99	Metrocross	£2.99	Who Dares Wins 2	£1.99	Speedking	£1.99
Cybermind	£1.99	Mini Office 2	£2.99	Wolfman	£1.99	Streets of London	£0.99
D. Thompsons Decathlon	£2.99	Netherworld	£1.99	World Games	£2.99	Supersports	£1.99
Dan Dare 2	£2.99	Ninja Massacre	£2.99	X-terminator	£1.99	Scary Monsters	£1.99
Deep Strike	£1.99	Ninja Command	£2.99	Zynaps	£1.99	6 Pak Vol 2	£3.99
Desolator	£2.99	Nebulus	£1.99	Golf Master	£2.99	The Archers	£1.99
Dizzy	£2.99	On the Bench	£1.99	Leaderboard	£2.99	Toy Bizarre	£1.99
Dizzy Dice	£1.99	Pastfinder	£2.99	Action Force	£2.99	The Fury	£2.99
The Double	£2.99	Postman Pat	£1.99	3-D Glooper	£0.99	Thanatos	£1.99
Dracoon	£2.99	Powerplay	£1.99	Alternative World Games	£2.99	Whirlynurd	£1.99
Eagles Nest	£1.99	Premier 2 Football	£1.99	Andy Capp	£1.99	Water Polo	£1.99
Empire Strikes Back	£2.99	Pro Snooker	£2.99	Burgerchase	£0.99	Chukie Egg 2	£1.99
Enduro Racer	£2.99	Rally Cross Sim	£2.99	Black Lamp	£1.99	Big Sleaze	£1.99
Endzone	£1.99	Rambo	£2.99	Bombuzal	£2.99	Guadalcanal	£1.99
Euro Five a Side Soccer	£1.99	Real Ghostbusters	£2.99	Cosmic Causeway	£1.99	Rogue Trooper	£1.99
Exolon	£1.99	Return of the Jedi	£2.99	Cholo	£1.99	10 Great Games 2	£4.99
F.A. Cup	£1.99	R.I.S.K.	£1.99	Chernobyl	£1.99	Ghosts and Goblins & Bombjack 2	£2.99
Football Manager	£2.99	Roadrunner	£2.99	Crazy Kong	£1.99	Best of Elite (Commando, Bombjack, Airwolf & Frank Bruno)	£3.99
Footballer of the Year	£2.99	Rygar	£2.99	Chain Reaction	£1.99	Best of Elite Vol 2 (Paperboy, Ghost and Goblins, Bombjack 2 & Battleships)	£3.99
Frank Bruno	£1.99	Saboteur 2	£1.99	Cybermind	£1.99	Space Harrier	£2.99
Frankenstein	£1.99	Sansion	£2.99	Defender of the Crown	£2.99	Hysteria	£1.99
Frightmare	£2.99	SAS Combat	£2.99	Deceptor	£1.99	Shoot Out	£2.99
Fruit Machine Sim	£2.99	Sentinel	£1.99	Deactivators	£1.99	Hellfire Attack	£2.99
Game Over	£2.99	Skate Crazy	£1.99	Druid 2	£1.99		
Graham Gooch	£1.99	Soccer Boss	£1.99	Flunky	£1.99		
Gauntlet 1 or 2	£2.99	Soccer Q	£2.99	Hacker 2	£2.99		
Grand Master Chess	£1.99	Shackled	£2.99	Heartland	£1.99		
Gridiron	£1.99	Shanghai Karate	£1.99	Hi Frontier	£1.99		
Gunfighter	£1.99	Solomon's Key	£2.99	I O	£1.99		
		Sport of Kings	£2.99	Jack the Nipper 2	£1.99		

All orders sent first class within 24 hours of receipt, subject to availability.
 Make cheques/POs payable to Software City.
 Please add 50p for post and packaging on all orders under £5.00; overseas orders add £1.50 per item.
 Address to SOFTWARE CITY, 3 LICHFIELD PASSAGE, WOLVERHAMPTON WV1 1DZ.
 Produce this advert to receive the above discounts, 30% off RRP on any software not listed.

CALL US ON:
 0785 41899
 0922 24821
 0902 25304
 ACCESS
 VISA



CONTROVERSY

Nothing in life is free

Software freebies—have they gone from bad to worse over the years? Nick Roberts delves into the desks of TGM writers to find out the truth.

It's a well-stated fact that life as a software reviewer for a computer magazine is an extension of homely interests, and a right knees-up is had by all. 'All you do is play games, isn't it?' Everyone here knows how untrue that statement is. However, like any other industry, the computer software world has its fair share of freebies. But there are some people who aren't affected by endless gift-giving on the software houses' part. CRASH's Nick Roberts is one of these reviewers, he took an unbiased look at the changing state of the software freebie...

What has happened to software freebies? One of the highlights of working in the magazine industry is (or was) the things software companies send out to promote their latest releases. According to many people at Newsfield (who will remain nameless for fear of victimisation) they have gotten gradually worse over the years. But the quality of the games has improved. And that's what matters, isn't it?

We've all seen the mass market freebie distributed by the likes of US Gold, Ocean and Gremlin, but there's much more to the world of freebies than a flood of T-shirts, badges, pens and posters. These perishables don't leave the reviewer with a long lasting impression.

MicroProse are well known for the lavish goodies they have distributed amongst the press. Not all have been material goods which you can keep for ever — although the tailor-made leather flying jackets went down a treat! Over the past couple years, the American giants have given away flights in helicopters and stunt planes, plus a very tasty trip to the States.

Exotic trips are popular with many companies (System 3 have one lined up for their Tusker release this year, which will take Roger Kean to Africa), but amongst us lesser mortals — read that as reviewers — it's what you can show that counts. However, if you've got any

sense, you show them to everyone then take 'em home quickly (just as well with those Spitting Image slippers).

More often than not, it's the stranger gift that proves popular. Weirder freebies include umbrellas, bath robes, pool balls, match books that turn into calculators, fruit baskets and varied inflatable animals!

Many of the freebies seem to be alcohol based, especially around Christmas time. You begin to wonder whether software companies are trying to get you drunk

so that your vision will be impaired when it comes to reviewing their product. Mind you, no reviewer would say refuse the odd bottle of champagne.

It has to be said that the latest batch of freebies to come our way have been a little poor. If you were wondering why the TGM staff have been looking a bit portly of late it is because they have been fed a steady diet of sweets. From a packet of Chewits for Gremlin's Muncher to a stick of rock promoting... Jaws, of course! Hewson are also getting into the tacky freebie game. To promote Space M*A*X*, their latest PC strategy game, they sent each magazine ONE lollipop in sherbert powder (ours was cherry), called,



Oil! He's pinching our hard earned freebies.

strangely, Splish!? And there was also a cheap-looking (although we're assured it was very expensive!) Pierre Cardin pen — they admit they were disappointed with the pens, too. Free trips to the dentist would be a good idea for the next promotion.

All reviewers look forward to a new conversion of a hit film. It is essential that the reviewer pre-views the film (preferably in the Empire, Leicester Square) if he is to appreciate the game (it is, honestly) — RoboCop from Ocean is the classic example. The latest films to come our way are the new Indiana Jones and James Bond movies, let's hope Warners allow a showing of Batman — things do not look good at the moment.

Back to T-shirts, though. As a mite portly chap myself, I must protest at this 'one size fits all' claim. Even for a 'normal' person, T-shirts are always either too big or too small. The colours of some of them are also a bit much. Seen a Thunder Blade one recently, or a Motor Massacre (Gremlin) top down your area? Thought not. Any streetwise reviewer avoids them like the plague (especially when going to someone else's press launch). However, if it wasn't for these I'd have nothing to wear whilst cleaning my bike on Sunday afternoon.

Barnaby Page is one example of a magazine writer who took the freebies and ran. The ex-TGM member received (with thanks): a Leisure Suit Larry towel, an IBM puzzle-toy, trips to Madrid, Frankfurt and Amsterdam, some Ocean wine (although this was donated via CRASH), an Oracle propelling pencil, a US Gold puzzle, a fake Filofax, a bottle of tomato ketchup, some green slime (Gilbert), an Electronic Arts watch, a shoulder bag and mountains of T-shirts! The sad thing is that some people can get very attached to these free gifts. Barnaby comments: 'I don't know what I would do without my Gremlin Coconut Capers T-shirt. It's so good I can't bring myself to take it off!'

'But what of us punters?' I hear you cry. Sadly, the buyer is probably the last person to receive a gift. However we take our Indiana Jones hats off to System 3 who included a free throwing star in Last Ninja II.

Now then, where's my Games Machine T-shirt?

FEAR

FANTASY, HORROR AND SCIENCE FICTION

Now monthly Britain's Best* Magazine of the Dark!

*Or may the goblins eat us...

Due to popular demand from readers who could not get enough news, reviews and fiction from the otherworld of horror, fantasy and science fiction FEAR now creepily provides a monthly dose of all that is full of dread.

But wanting to spare everything but your souls, the price of FEAR has plunged to a pitiful £1.50...

AUGUST ISSUE ON SALE NOW

Visit Stephen King country - part one of a photographic journey to the locations of his novels ■ Dante's Divine Comedies - the comic genius behind *Gremlins* talks about *Gremlins 2* ■ Hear No Evil, See No Evil - special effects master Tom Savini re-directs *Night of the Living Dead* ■ Necroscope III: The Source - an exclusive preview of Brian Lumley's new book ■ PLUS: FEAR FICTION EXTRA - pages and pages of short tales from new writers, now a monthly regular!

All this, and profiles, competitions and reviews of films, videos and books - enough to keep you trembling for a month. Until the next FEAR - it never stops...!

On sale now, from all good newsagents (or evil ones) - only £1.50.

Single copies available from FEAR, PO Box 20, Ludlow, Shropshire SY8 1DB at £1.50 incl. p+p.

A NEWSFIELD PUBLICATION



READERPAGE

"Who do the high street chains think they are in refusing to stock Astaroth with the artwork on the cover? What right have they to censor such fantastic work?"

...writes Christopher Hester, complaining about the censorship of Astaroth's artwork by high street chainstores. He wins this month's £50 worth of software



Censorship for censorship's sake

Dear TGM

I was reading TGM019 when I came across what I thought was an amazing piece of artwork used for an advert. Over the years I've taken to cutting out the best adverts and pasting them into a scrapbook — the Psygnosis and Thalamus adverts are usually the best, yet here was an advert from Hewson for Astaroth — The Angel of Death which impressed me considerably. The woman featured with her winged hands and insectoid figure was simple stunning. Just look at the figures in the background, letting in light from a webbed canopy. 'Great,' I thought. 'That'll really look good on the shelves when the game is released.' How wrong I found I was, for the cover of TGM020 boldly stated Hewson's 'risky package' had been censored. Censored? I'm incensed! I cannot understand the motives for banning this brilliant artwork. Is the woman too 'naked' for the censors to deal with? Too 'pornographic'? I feel not. There aren't even any offending nipples. The woman's body is almost like a costume, wonderfully depicted in a moody alien style. To my mind, only someone with a warped mind could possibly be offended by it, or even shocked. It is not a picture of a naked woman at all, but a picture of a creature, the Angel of Death. What angers me more is that I have seen far more erotically suggestive covers

used for games in the past that were never banned at all. Take Defender of the Crown for example, with the woman's oversized breasts, or Shadowfire. There are dozens more.

Who do the high street chains think they are in refusing to stock Astaroth with the artwork on the cover? What right have they to censor such fantastic work? The box for Licence to Kill showing James Bond holding Pam Bouvier is infinitely more 'sexy and seductive', with its golden flesh tones, than the browns used in Astaroth. The shops are censoring a work of art. I only hope this bad publicity for Hewson ends in added sales for their game, and that the artwork appears inside the box, if not allowed on the cover.

Finally, I like the new coloured lettering TGM is achieving with its computers. The sunrays used in the Console Dawn (TGM020) feature are a delight to look upon. But why do you keep changing the lettering on the spine? TGM019 used fatter text and now TGM020 has changed typeface altogether! When I put my copies of TGM in a neat pile on the shelf, they now look messy, and not one of the spines match. Can't you line them up the same each month? Having said that, I'm glad to see the return of an adventure column at last to TGM and let's hope it grows in strength — and pages!
Christopher Hester,
West Yorkshire.

Well, at least we've one guaranteed reader who'll be happy with the 175% increase in adventure space. As to the censorship of Astaroth, you'll be happy to hear that Hewson are including a poster of The Angel of Death in the

package, and illustrations in the manual are very revealing... sorry, artistic! But don't you think that covers like Astaroth's could still prove offensive, or even frightening, to very young children. Perhaps it is these software buyers the chainstores are trying to protect? After all, this woman is The Angel of Death



Is the woman too naked for the censors to deal with?

Sell your MSX (please!)

Dear TGM

As I own a popular 8-bit computer (Amstrad CPC) I think it's only fair if you print this letter on behalf of other 8-bit owners in reply to the anonymous MSX owner.

Firstly why did you bother printing a letter from somebody who clearly is unable to give constructive criticism on the three most popular computers in Britain. Saying a machine has graphics like blocks of ice (!) is hardly a mature statement, if he's going to say the MSX is better then this

almost extinct. I never see these machines or their software being sold in the high street and there is nothing around to make me want one.

The majority of people would rather own a Spectrum with tons of varied ENJOYABLE games than a machine with capabilities which are never exploited to the full and are never



person should state facts instead of silly little sentences.

I can't understand anyone living in the UK who still owns an MSX, it may have excellent graphics but it's been around for quite a while and is hardly going to pick up over the next year, software support is

used. Why don't MSX users look into the future. Clearly the machine isn't even putting pressure on a C16 let alone other 8-bits, so sell up and get a machine that is well catered for, or one which looks as though its got a bright future; you'll be a lot happier and you won't have to write a silly letter trying to get more users to buy a machine that died many years ago.

M Thacker, Leicester

I sold my ST!

Dear TGM

I have three computers. A Spectrum +2, Electron and a Plus 4. I used to have an Atari ST but got fed up with it so I sold it.

This is because the keyboard is rubbish, the graphics are good and colourful but things look flat, the games are too expensive and the joystick/mouse ports are in a stupid place which makes changing joysticks really annoying. The BASIC isn't built in and the one I got free with the ST is so naff I wiped the disk and used it for saves on adventure games. I still use my Plus 4 regularly.

Adrian Betts, Tamworth.

TGM only recommends computers, we try not to say 'DON'T BUY THIS', as someone somewhere will always buy it and jolly well enjoy using it. Horses for courses.

Zzzz...

Dear TGM

With reference to your competition on Page 35 TGM020 I enclose my entry to the competition.

The only three groups beginning with the letter 'z' I can think of are: Zeno, Zodiac Mindwarp and the Love Reaction, and ZZ Top.

Please could you pack my cornflake carefully as I would not want it to get damaged in the post. If, however, the cornflake proves to be unavailable I will accept Barbarian II on disk for the Amstrad 464. Or a twenty quid note.

Ta very much!

Paul Berrecloth, Cardiff.

Did we say groups? We meant GOOD groups! How much are cornflakes worth in your neck of the woods, anyway?

Just plain bad luck

Dear TGM

I have purchased every ZZAP! since Issue 3, and all THE GAMES MACHINES and have entered just about every competition available, yet I haven't won a thing. Ironically, I have only bought ACE once, sent it a letter, and won £25. It also seems unfair that a TGM reader wins two competitions in the same month (Ian S Ryder: Silkworm and Firelord comps). This is either unfair, or just plain bad luck on my part!

Grant Robson, Renfrewshire

It's the luck of the draw — honest! There's a reader over the page who has won more than once and on occasion twice from the same issue. But we'll try harder for you next month Grant.

Less violence

Dear TGM

Ever since I started to read Crash way back at Issue 11, a Newsfield article or letter has never prompted me to put the proverbial pen to paper, but Michael Hughes' letter in TGM018 was such nonsense that I feel I have to write.

Michael, when darling Rambo kills a 'commie' it is MURDER! Yes, I know it's only a film (or a game...) but the act of taking human life is murder. I'm not talking about technicalities of war where it's 'OK' to kill, but about plain reality.

Now, I'm not so short-sighted to believe that all violent games are 'mind-damaging' or 'influential' (I myself enjoy a good bash at

Star Wars or even Batman) but I do think a line must be drawn. Games like Operation Wolf are so blatantly pro-

American gratuitous drivel I do think they should be banned. There is a difference between a pixel spaceship exploding with a bang and a pixel soldier dying with a sampled scream.

Non-violent games can be

fun and horribly addictive — like adventure games such as The Pawn and Guild of Thieves. I hate to be a whinging old whatever, but Jet Set Willy was amazing (you really had to be there...)

People do need to get rid of their tension and anger but there are a multitude of ways to do this. Perhaps you could take up yoga, Michael...

If you are to criticise, try to come up with a better argument than 'Rambo is a good wholesome American who only kills commies.' Graphics are becoming lifelike: FACT. Sound is becoming more realistic: FACT. Some day there will be a computer game-related killing: FICTION?

Matthew Pass, Wokingham.

Amazing: Jet Set Willy — addiction without violence



Forget the spec spec

Dear TGM

Look, excuse me very much and all that, but let's not beat around the bush. Some people are just not being very nice to the Speccy lately and I think it's pretty damned ignorant.

Three people slagged the lovely Speccy in TGM019 Readerpage, just because they haven't got one they automatically think that they're crap. Well they're not, so there. Oh, STs and Amigas etc are all very well if you can afford them and if you want to pay up to £30 for a game, but for us lesser mortals with 8-bits, we (or most of us) are quite content with what we've got.

I for one don't go round saying 'Ooh, the Amiga's got really crap sound' (cos it hasn't, I know), so why should others slag the Spec? Just because it's got colour clash. Blame Sir Clive! The Speccy's graphics are not 'rubbish', they range from 'decent' to 'ooh lovely' (most of the time).

I have played several ST games, and what's the difference between one of those and a Spec game? Graphics. It's all down to graphics. My 128+2's sound easily match-

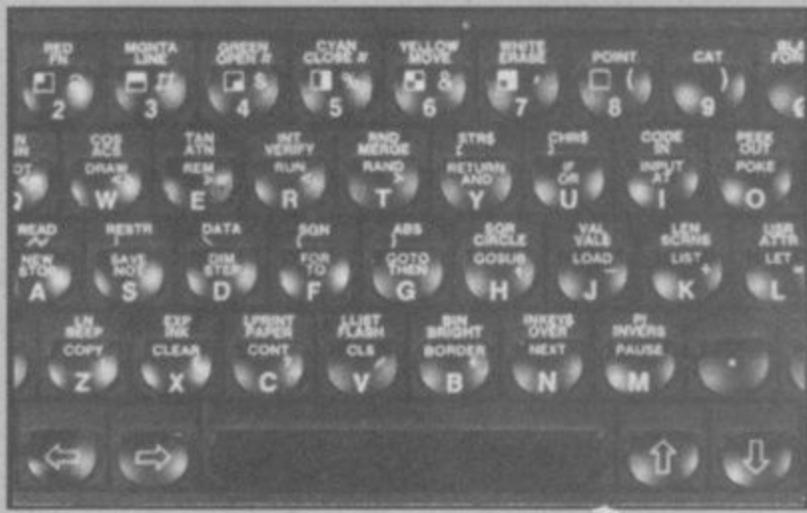
es the ST's (when programmers bother to use it), and I personally think my Speccy games play far better.

Admittedly all machines have their classics, and in time 16-bits will develop vastly better games, but for now just leave us alone. If we wanted 16-bits, we'd buy 'em, not all 8-biters are poor! TGM is also obviously moving towards 16-bit more and more, and will eventually leave 8-bits behind as the 16-bit market grows. But for now you provide good coverage for all popular formats, so let's all keep our snide comments to ourselves while it lasts.

Leigh 'Attribute problems

don't matter when the gameplay's fab' Loveday, West Glamorgan

I'll tell you something. When CRASH covermounted the Speccy classic Moon Cresta, everyone from TGM was playing it for days (when we could get it loaded!). We still haven't seen a version of RoboCop on any computer that's as good as the Spectrum version. And as for the Commodore, when the Zzap Sizzlers compilation came in EVERYONE on TGM was playing Dropzone at lunchtime and after work. Nuff said.



Lucky in luck

Dear TGM

Am I the world's luckiest TGM reader? I was reading TGM015 back in January looking for my name in the competition results page after US Gold told me I'd won a prize. I scanned the results and couldn't believe my luck when I saw I was runner-up in the Elite competition too. Me... Twice in one magazine!

But that's not all. Look in TGM020 and on the results page there I am again. Twice! One prize for the TGM questionnaire, and a runner-up prize in the *Silkworm* competition. Am I the only reader to appear twice in one issue on two separate occasions?

I buy many different computer mags and have every issue of TGM. I've had a computer since I was about 13 (six years ago) and have always bought computer magazines. However I only started to enter the competitions about eight months ago after a friend won three prizes in three consecutive months. Mark Shaw, Cannock.

No, it's only luck, Mark — and oddly enough, several people win twice in the same month.

Braying about MSX... again

Dear TGM

I am back to say more about 8-bit machines and my name is anonymous.

There is something I want to say and that is *Denaris* on the Commodore 64 looks good and also got a good mark from TGM. But on the other side the MSX 64 got a good mark for the *Nemesis 3* which

looked UNBELIEVABLE for an 8-bit machine.

Well the point I am trying to make is that I have played both of them. Well, *Denaris* is OK but *Nemesis 3* is just TOO MUCH in sound, colour, graphics, shades and many more other styles.

But don't get the feeling that just because I own an

MSX I am saying that *Nemesis 3* is better. I mean just check it out for yourself and decide between yourselves about which is better. But just remember *Nemesis 3* has...

- a) 2Mb ROM
- b) Arcade sound effects
- c) LSI custom sound chip mounted
- d) New eight voice polyphonic chip

Anonymous

He's back again. Poor old anonymous's letter had to be hacked down and corrected quite a bit but we think you know what he's trying to say... don't you?



Continued from page 44

should get paid, depending on experience etc.

What about the future of the SSA, are you looking to expand?

We're hoping to become international, and invite European and American developers. And once that happens, it's going to be a lot easier for UK developers overseas — and that's very important for us. The success of organisations like ours helps the success of the whole industry — it adds credibility so that we can get really established. In the future, we hope we'll be here

to help the Government on copyright problems, communications, data protection and contribute to their discussions. Perhaps, when we're established we'll have guest members — from Parliament — to add credibility.

Well-known programmers who are already members of the Society of Software Authors include Jez San, Steven Dunn and Raffaele Cecco. If you're a developer involved in any part of producing software, fill in the form for more details. All enquiries are totally confidential, and involve no obligation.

£50 WORTH OF SOFTWARE MUST BE WON!

There's £50 worth of software — your choice — for each month's Star Letter. Write to: Readerpage, TGM, PO Box 10, Ludlow, Shropshire SY8 1DB.

And rest assured that even if your letter doesn't get printed, it's been read and where necessary shown to all the TGM staffers who can use YOUR suggestions to improve the magazine.

NEW FOR YOUR COMMODORE FROM TRILOGIC!

AMIGA AUDIO DIGITISER

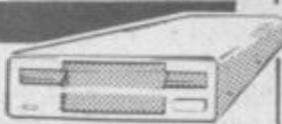
— NEW, CHOOSE MONO OR STEREO VERSION

Both Amiga audio digitisers give superb performance, unsurpassed at the price. No software is supplied, since they are fully compatible with Perfect Sound, Prosound Designer, Audiomaster, and Datel's Prosampler. Sampling rates up to 60KHz are possible depending upon the software. An audio lead is supplied for connecting to the headphone socket or line output of a radio, personal stereo, keyboard etc. Full instructions are included, and the mono version also has an L.E.D. overload indicator. A public domain "Sound Workshop" disk is available which has demo versions of Audiomaster & Perfect Sound etc.

MONO DIGITISER £27.99 POST FREE STEREO DIGITISER £37.99
SOUND WORKSHOP DISK £4.99 POST FREE IF PURCHASED WITH DIGITISER
ADAPTOR FOR A1000 £2.00

EXTERNAL 3.5" DISK DRIVES

- 880K FORMATTED CAPACITY
- THROUGH POST
- SLIMLINE STEEL CASE
- 3.5" DRIVE WITH ON/OFF SWITCH
- VERY QUIET OPERATION
- LOW POWER CONSUMPTION!



AMIGA MONITOR & PRINTER LEADS

RGB TV & MONITOR LEADS

We have leads to connect all AMIGAS to your TV or colour monitor provided it has an RGB input socket. All leads give a much clearer picture than using the AMIGA MODULATOR, permit ALL 4096 colours to be displayed and include the audio lead (to give stereo with stereo tv's).

ORDER AL 1 FOR TV'S WITH 21 PIN EURO (SCART) SOCKET. FITS PHILIPS, FIDELITY, SONY, GRUNDIG, NORMENDE, ETC. ONLY £9.99

ORDER AL 2 FOR FERGUSON TV'S WITH 7 OR 8 PIN DIN SOCKET. MODELS MC01 & MC05, ETC. ONLY £9.99

ORDER AL 4 FOR HITACHI & GRANADA TV'S WITH 7 PIN DIN SOCKET. MODELS CPT1444, ETC. ONLY £9.99

AMIGA TO MULTISYNC MONITOR (analogue RGB) AL11 £9.99

MANY OTHER AMIGA MONITOR/TV LEADS LISTED IN OUR FREE CATALOGUE.

OUR LEADS ARE GUARANTEED TO WORK WHERE OTHERS DON'T!

LEADS ALSO AVAILABLE FOR ATARI ST RANGE. PLEASE CONSULT US IF IN DOUBT.

NEW — MONITOR SHARER

SHARE 2 COMPUTERS WITH ONE TV/MONITOR

Plug-in the scart leads from any two computers eg AMIGA & ST, and connect the SHARER to the tv or monitor's scart socket. Just press the switch to instantly select either computer. MSW1 £15.99

OTHER LEADS

AMIGA 64 EMULATOR LEADS AEL 1 ONLY £4.99

MODULATOR EXTENSION LEADS MEL 1 ONLY £8.99

AMIGA PRINTER LEAD — Parallel Type 1.5M long AMP 1 ONLY £6.99

3.0M long AMP 3 ONLY £9.99

AMIGA A500/BBC EMULATOR LEAD BE1 ONLY £7.99

AMIGA A500 TO SERIAL (RS232) PRINTER 1.5m RS1 ONLY £9.99

AMIGA A500 TO MODEM (25W 'D') 1.5m RS6 ONLY £10.99

AMIGA NULL MODEM LEAD — LINKS TWO A500s 1.5m RS5 ONLY £7.99

AMIGA TO HIFI LEAD 3m 2 PHONO PLUGS EACH END HL1 ONLY £4.99

AMIGA TO HIFI LEAD 5m 2 PHONO PLUGS EACH END HL2 ONLY £5.99

OTHER LENGTHS OF LEAD AVAILABLE — PLEASE SEE OUR CATALOGUE

EXTERNAL DRIVE SWITCH FOR DF1 ADE3 ONLY £8.99

EXTERNAL DRIVE SWITCH FOR DF1 & DF2 ADE4 ONLY £10.99

PLEASE STATE WHICH AMIGA YOU HAVE WHEN ORDERING

MOUSE/JOYSTICK SWITCHER

- NO MORE UNPLUGGING MOUSE WHEN JOYSTICK REQUIRED
- EXTENDS THE PORT FOR EASIER ACCESS
- SAVES WEAR & TEAR ON THE MOUSE PORT
- PUSHBUTTON SWITCH CAN BE OPERATED WHEN THE COMPUTER IS ON

A VERY USEFUL GADGET — ONLY £10.99 order as DJA1



AMIGA MINI STEREO AMPLIFIERS

MINIAMP 2 combines a mini stereo power amp with two neat speaker units which connect directly to your AMIGA. They are ideal for use with mono TV's & monitors, & simply plug in for instant stereo sound. You'll be amazed at the difference. MINIAMP 2 WITH REMOTE VOLUME CONTROL & ALL LEADS ONLY £19.99

MINIAMP 4 comprises separate 4 watts per channel high quality mini stereo amplifier with loudspeaker/headphone socket, separate speaker units with 4" twin cone drivers, mains power pack & connecting lead for AMIGA. CAN BE USED AS 'WALKMAN' BOOSTER & WITH OTHER COMPUTERS.

MINIAMP 4 STEREO AMPLIFIER SPEAKER SYSTEM MA4 £34.99

MAINS POWER PACK FOR MINIAMP 2 MPP1 £5.99

LIGHTWEIGHT QUALITY STEREO HEADPHONES SHP1 £5.99



NEW — AMIGA MIDI INTERFACES

MIDI INTERFACE 1 FOR A500/2000 OR A1000 MIF1 £29.99

This has MIDI IN, OUT & THRU sockets. Self powered.

MIDI INTERFACE 2 FOR A500/2000 OR A1000 MIF2 £34.99

This has MIDI IN, MIDI OUT, MIDI THRU plus 2 UNIQUE switchable MIDI OUT/THRU SOCKETS to save you having to swap MIDI leads when using more than one MIDI instrument. Self powered.

SUNDRY ITEMS — BARGAIN PRICES

SONY 3.5" DISKS 100% Guaranteed DS/DD disks

Lowest Prices Per 10 £12.99 & Postage Lowest Prices Per 25 £28.49 Post Free

Lowest Prices Per 50 £55.99 Post Free Lowest Prices Per 100 £99.99 Post Free

3 1/2" DISK BOX FOR 50 DISKS. SMOKED LID, LOCKABLE, DSB4 ONLY £8.45

3 1/2" DISK BOX FOR 100 DISKS. SMOKED LID, LOCKABLE, DSB6 ONLY £12.49

A500 DUSTCOVER. ANTISTATIC TYPE, ADC1 ONLY £4.99

A4 NON-SLIP MOUSEPAD, AFM1 ONLY £4.99

WE ALSO STOCK AMIGAS, PCs, PRINTERS, MONITORS, HARD DISKS, MEMORY EXPANSIONS, VIDEO DIGITISERS, SELECTED SOFTWARE & BOOKS — PHONE FOR OUR FREE 20 PAGE CATALOGUE.

TRADE ENQUIRIES WELCOME. Please add 75p part postage + packing to orders under £15.00

FREE CATALOGUE WITH ALL ORDERS. EXPRESS DELIVERY £1.99 Extra



TRILOGIC, Unit 1,
253 New Works Road, Bradford BD12 0QP
Tel 0274-691115 Fax 0274-600150

FAST MAIL ORDER SERVICE • PROMPT DISPATCH • ALL PRICES FULLY INCLUSIVE PLUS 10 DAY MONEY BACK GUARANTEE ON ALL ITEMS. PAYMENT BY CASH, CHEQUES PAYABLE TO TRILOGIC BY POSTAL ORDER, ACCESS OR VISA. ADD £2.99 EXTRA FOR EXPORT ORDERS. PAYMENT IN STERLING ONLY PLEASE.

Software

SUPERSTORE

YOUR ONE STOP SHOP

MORE SOFTWARE THAN YOU CAN HANDLE!
MORE HARDWARE THAN YOU CAN USE!

AMIGA A500

inc. FREE Modulator

PLUS:- Workbench 1.3, Amiga Extras 1.3, Amiga Basic 1.2, Amiga "The Very First", Mouse Controller, Amegas, Art of Chess, Buggy Boy, Wizball, Terror Pods, Insanity Flight, Ikari Warriors, Barbarian, Thundercats, Mercenary Compendium, INDIVIDUALLY WORTH £643.49

ONLY £399 OR £17* MONTHLY

AMIGA HARD DISC A590 20mb DRIVE

Now Available

Only £399.00

*Subject to Status



FREE

Paint Program

(Photon Paint or Spritz)

when you buy an AMIGA 2nd Drive with switch & through-port

OUR PRICE

ONLY £99.99

STAR LC10

inc FREE cable

Unbeatable VALUE

ONLY £169.00!

Commodore 1230 Printer. (NLQ)
Centronics & C64 Interface as standard.
inc FREE cable ONLY £169.99

OCEANIC DISK DRIVE

C64 Compatible
Plus FREE

First World Logo
Intro to Basic II
Spirit of the Stones
Assembler/Monitor 64
Programmers Utilities
Zork III
Dragonworld

ONLY £129

WHY PAY MORE?

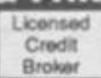
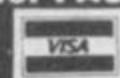
We may not be the very cheapest. But when it's down to service, selection and advice...

WE CAN'T BE BEATEN

Visit us soon and find out why so many wouldn't go elsewhere

MAIL ORDER:-
ADVICE HOTLINE
(0782) 268620

for FAST & FRIENDLY SERVICE



SEND S.A.E. FOR CATALOGUE

STOKE-ON-TRENT

11 Market Square Arcade, Hanley
Stoke-on-Trent
Manager: Wayne Tel 0782 268620
Open 6 Days

SHEFFIELD

6 Waingate, Sheffield
Manager: Tony
Tel 0742 721906
Closed Thursday

ST HELENS

27 Baldwin Street, St Helens
Manager: Adrian
Tel 0744 27941
Closed Thursday

STOCKPORT

6 Mealhouse Brow,
(Off Little Underbank), Stockport
Manager: Ray
Tel 061 480 2693
Closed Thursday

■ UNCLE MEL'S TRIVIA QUIZ ■

- | | | | | |
|---|---|--|---|---|
| <p>1) What was the name of the talkative computer in the 1984 movie Electric Dreams?</p> <p>2) What was the name of the friendly ship-board computer in The Hitch Hiker's Guide To The Galaxy?</p> <p>3) Name Jeff Tracey's arch-enemy in Grandslam's Thunderbirds series.</p> <p>4) A Spectrum basher is about to be launched. Is it called a) SAM o'nella, b) SAM Rushdie, c) SAM</p> | <p>Coupe, d) SAM Focks?</p> <p>5) Lasers are common as muck these days, but where did the name LASER come from?</p> <p>6) What TV crime-buster series has escaped the Ocean and gone over The Edge?</p> <p>7) What is an ArgAsm?</p> <p>8) What happened to the notorious German hacker Karl Koch in June?</p> <p>9) True or false, telephones can damage</p> | <p>your disks.</p> <p>10) Unscramble these two celebrity endorsements, GAD! SKINNY HELL and MOUSE HOB-KNOB.</p> <p>11) What is a hand-held Game Boy, a) Nintendo's low-end machine, b) the lead story in next week's Sunday Sport?</p> <p>12) Which is the greater threat to the computer games industry, ignorance or apathy?</p> <p>13) During which three</p> | <p>years were the original Star Trek episodes first shown, and how many episodes were there?</p> <p>14) What's the difference between the Konix games console and haemorrhoids?</p> <p>15) The first calculating machine was the abacus. Where does the word abacus come from?</p> <p>16) Which of the following is the author of Phobia: Mel Crowther, Tony Crowther, Leslie Crowther?</p> | <p>17) What is the DC4 computer system designed to track down?</p> <p>18) What is the highly appropriate name of the French software house responsible for Emmanuelle?</p> <p>19) What's the difference between Captain Crumble and Captain Crunch?</p> <p>20) RSI is a computer hazard. If it doesn't stand for Rod Seems Invisible, what does it stand for?</p> |
|---|---|--|---|---|

Answers

- | | | | |
|--|---|---|---|
| <p>1) Edgar.</p> <p>2) Eddie.</p> <p>3) The Hood.</p> <p>4) c) SAM Coupe.</p> <p>5) Light Amplification by Stimulated Emission of Radiation.</p> <p>6) Miami Vice.</p> | <p>7) The latest Amiga assembler from Argonaut, or the American word for ticklish.</p> <p>8) He committed ritual suicide by burning.</p> <p>9) TRUE, certain phones with memory storage, answering machine facilities and hands-free operation can corrupt data disks at close range.</p> <p>10) Kenny Dalglish, Bob Monkhouse.</p> <p>11) a) The LCD Nintendo.</p> <p>12) I don't know and I don't care.</p> | <p>13) 1966 to 1969, 78 episodes (plus one pilot which was never shown).</p> <p>14) Haemorrhoids always turn up in the end.</p> <p>15) ABQ, the ancient Hebrew word for dust.</p> <p>16) Tony Crowther.</p> <p>17) Poll Tax Refuseniks.</p> | <p>18) Coktel Vision.</p> <p>19) Captain Crumble features in Red Rat's Time Runner, Captain Crunch in king of the US phone phreak hackers.</p> <p>20) Repetitive Strain Injury, or keyboard basher's wrist.</p> |
|--|---|---|---|

NEW ORGANISER LZ AND LZ64

NOW AVAILABLE

	RRP	OUR PRICE
PRINTER.....	£225.00	£175.00
32K DATAPAK.....	£34.95	£28.00
COMMSLINK (RS 232) with IBM PC/XT PLUG.....	£59.00	£48.00
FINANCE PACK.....	£29.95	£25.00

LARGE SELECTION OF RE-FORMATTED DATAPAKS AVAILABLE—TREMENDOUS SAVINGS

We give further discounts to institutions such as colleges and hospitals and special prices to companies buying in bulk. We also have a selection of third party products available.

We offer prompt delivery on all orders, or you may collect, by arrangement from our West End Office.

Phone or write NOW for details and full price list!

DATA CLUB UK
PREMIER HOUSE
SUITE 116, 77 OXFORD ST
LONDON W1

0836 790159
01-539 9353
01-734 2603
Fax: 01-734 2603

COMPETITION RESULTS

I'VE BEEN CAPTURED

Capcom Issue 19

Emma Sharp from Preston wins a PC Engine and five Capcom games.

Ten runners-up also receive five Capcom games of their choice.

Raheil Mehdi, Cleveland TS5 7QH; D Fowler, Glasgow G20 8QZ; Michael de Ruiter, HOLLAND TP500771; Dominic J Carr, North Humberside HU19 2PF; Stephen Rogalson, Birmingham B36 8AD; Cecil Dyer, London E7 9HS; Nathan Hill, Woking GU23 7AN; Guy Hopkins, Merseyside L37 1NX; Jason Rust, Kings Lynn PE34 3HL; Miss P Stevens, London SE5 7NS.

I WANT TO BE A MIXMASTER

Software Horizons Issue 19

Kevin Patton of Hemel Hempstead receives a Master Sound Sampler and a £50 Sharp Stereo radio cassette recorder.

The ten runners-up who get a Master Sound Sampler are Mr N Taft, South Wirral L65

9EN; C B Simcoe, Northants NN16 9RN; P R Taylor, Oakham LE15 7AU; Alex Coles, Devon EX22 7QR; Mr John Shearing, Godstone RH9 8NE; Patrick White, Shrewsbury; David Jackson, Preston PR1 8HX; L Levett, Kent DA16 1DS; Mr C Kaye, Wirral L62 3NQ; Mark Craig Davies, Kendal LA9 6LF.

TECHNICALLY THOMPSON

Issue 18

Alain Pire from Marchin, Belgium, wins a £20 software voucher.

POWERFUL PLAY

Powerplay Issue 19

Craig Kirk and David Goorney take along a friend each on a free day out at Powerplay, help make a limited edition joystick, and spend the afternoon at Alton Towers.

The five runners-up who each receive a Crystal joystick are Howard Thorpe, SO1 8AX; Jason Dwight, HP1 2PR; Barry Parsons, GU27 1PJ; Martin Clifford, LS28 5AF; Robert Wright, YO13 0AY.



All illustrations by Martin Helsdon

PBM UPDATE

PBM games can be broken down into three types: power games, roleplaying games and sports games. Power games are probably the most popular so let's start there...

POWER GAMES

Perhaps you enjoy computer wargames? The problem is that after a while you master the computer program so the game gets left to collect dust. Now imagine such a wargame where instead of pitting your wits against a machine, you're battling it out with a hundred other players! That's when things start to get difficult. Not only will you be concerned with sound tactical decisions, you'll also need to negotiate alliances and watch out for the fearsome backstab. Power games vary in complexity, detail and settings; with most being run at least partially by computer moderation (a computer decides your fate!).

ROLEPLAYING GAMES

Many of you will have tried out the delights of Dungeons and Dragons, and similar tabletop roleplaying games (RPGs).

Many people are quite happily filling in little sheets of paper every week, in the hope of pushing their forces to the end of the universe before someone else (somewhere in Europe) does it first. We all have a rough idea of what Playing By Mail is, but how does it really work? John Woods gives a beginners' guide to PBM...

These are indeed great fun, but suffer certain limitations since there's only one Games Master (GM) and a group of around six players. The group generally has to stick together, and it's very difficult to have many secret plots going on (eg, the 'thief' calls the GM outside, so everyone automatically checks their pockets!). In PBM there isn't this problem — your character is free to interact in any way he/she wants, and with hundreds of other players the possibilities are very exciting. Each turn you give your char-

acter detailed instructions, and the reply will usually be around 1.5 pages of storyline detailing how things went. Most of these games are hand-moderated (fellow humans decide your fate!) although there are exceptions.

SPORTS GAMES

Most sport PBMs put you in the role of a team manager, competing in league and cup competitions with varying degrees of control. The main task is to pick your team each game, although the better games also include tactical decisions as well as financial controls on the club. Most sports have a PBM simulation. There's football, cricket, rugby, ice hockey, snooker... you name it! Most sports games are computer moderated.

So what actually happens in a PBM game? You start off, logically enough, by buying a start up. This includes rulebook(s) and your first turnsheet. The

cost of these varies from nothing up to about £10 — thankfully most are no more than £5. Each turn you send off a turnsheet and receive back a reply sheet which details how your actions went. You may also receive messages from other players, newsletters and so on. Turns again vary in price from 80p a turn up to about £4. PBM doesn't work out to be very expensive — in an average game you may be spending £1.30 a turn (fortnight) — less than a pint of beer, in London anyway (and I have plenty of those!).

So enough of introductions, let's now take a look at some of the better games on the market...

Continental rift

Continental Rails is a new release from Sloth Enterprises. The game is set in America in the middle years of last century. Each of the 15 players takes the role of a railway tycoon. With his few initial assets he must attempt to carve out a financial empire, and become number one honcho. The game is divided into two parts. Before the civil war comes the struggle for the railways of the east, as players attempt to build a sound financial base. When the war finishes the race is to link California with the east, and open up the farther frontiers of



the newly established United States. Start up for TGM readers is free, and further turns £2.50. Contact: Sloth Enterprises, Freepost, Southampton SO9 1BH.

Isles style

The Isles is a single character roleplaying PBM set in a fantasy land. You play the role of a recently released outcast who has little or no hope of survival unless you join one of the four guilds. The guilds are of Weapons, Stealth, Wilds and Third Eye. As your character progresses there are skills to learn, and plenty of adventures to keep you busy. Turns are word processed and stretch to at least a side of A4. Costs are low at £1.50 start up and 90p (plus SAE) for further turns. Contact: Wyvern Games, 34 Arnside, Stapleford, Notts NG9 7EY.

Puck stuff

Tactics have recently launched Slapshot, an ice hockey simulation. The players are coaches and make tactical decisions as well as coping with injuries, training and player trades. Start up is quite expensive at £5 (£4 if you mention TGM) with further turns at £2. The game is run by Mark Walton who is a real ice hockey fan, so much detail and realism has gone into the game. Contact: Tactics, 25 Low Friar Street, Newcastle Upon Tyne, Tyne And Wear NE1 5UE.

Lone crusade

Crusade is a century (100 per man unit) level correspondence wargame where intrigue and diplomacy are an important and integral part. There are 15 play-



ers in each game, with three factions: Crusaders, Muslims and Neutrals. Each with their own factional and individual victory conditions. The crusade follows the historical events fairly accurately. The rulebook is quite attractive and the game design well tested since it's been running in the US for some time. Set up costs £2 with further turns being £2.50. Unlike many of the games of this type there are no 'hidden charges'. Contact: WhiteGold Games, PO Box 47, Ayr KA7 4RZ.

Diskcovering PBD

A new idea I've recently heard about is Play By Disk. Micro-Genesis are offering this opportunity to owners of Amiga, Atari, Spectrum, Commodore and IBM compatibles. The game, Ranch Wars, is a 30-player wargame in which each turn's results are in the form of animated graphics and digitised sound. Start up is a bit steep at £11.45 (including one free turn) with further turns a more reasonable £1.73. Contact: Micro-Genesis, PO Box 1, Cropwell Bishop, Notts NG12 3GT.

All together now

One of the fun things about PBM is meeting new friends. A great place to do this is at conventions, and it just so happens that a couple have just taken place. The British PBMA 4th London Convention was held on June 3, and well attended and enjoyed by all. They had demonstrations of live roleplaying, PBM debates plus a well-stocked bar (in the morning).

The second convention called Fiasco was held in Leeds on the June 17. Although billed as a wargames convention, they had almost 20 PBM stalls. Both events were really cheap to get in to, so watch out for news of the next few events.

Another popular activity for

PBMers is attending pubmeets. There are several across the country of varying sizes and regularity. A pubmeet is an opportunity for players to chat with other players in their games, and perhaps get some hot tips. The biggest pubmeet is the monthly London meet. Around 50 players attend including a number of GMs. The event is held on the first Friday of every month at The Leicester Arms. To get there, go to Picadilly Circus, then down the little road by the Wimpy, and it's on the corner at the end. I'm there every month — so come and say hi!

Read all about it

For those who would like to know much more about PBM there are a couple of really good magazines available.

PBM Scroll is written and produced by yours truly, so don't expect an unbiased review! Now on its ninth issue, PBM Scroll has proved itself to be the most regular publication in the PBM market. This issue stretches to 68 A5 pages and includes a very up-to-date news section, reviews, offers, a readers' chart, pen-pals corner, interviews with top players, company profiles (that's

enough — Ed) plus lots lots more. At just £1.25 per issue or £4.50 for a year (four issues) it's pretty good value. Cheques payable to John Woods and sent to 91 Wandie Rd, Morden, Surrey SM4 6AD.

Flagship is the most professional looking magazine for the hobby. It's usually around 60 A4 pages and is a very well-written read. The reviews are always very comprehensive, but the news often suffers from being out of date, and there's also a fair amount of coverage of US games. Also the reviews of new games generally take a long time to appear. It's perhaps a little pricey at £2.25 an issue (£8 a year) but well worth it considering the depth of coverage. Contact: Flagship, PO Box 12, Aldridge, Walsall, West Midlands WS9 0TJ.

If you've any suggestions or comments on the PBM world then drop me a line. Remember, it's the postbag that keeps a column going; so if you don't want to see me disappear WRITE NOW! The address is PBM Update, TGM, PO Box 10, Ludlow, Shropshire SY8 1DB. We need your support!



CONTINENTAL RAILS

is the new game from

SLOTH ENTERPRISES

Play-by-Mail Company of the year 1986-87-88. Already with a cult following in the USA.

CONTINENTAL RAILS

breaks new ground for British Play-by-Mail.

In the game you take the role of an historical figure from the great entrepreneurial age of the American railroads. Starting with a little cash, and a few shares, in the new fangled steam railway companies, each player attempts to carve out an industrial and financial empire, in a rags to riches struggle across the length and breadth of the USA.

This fourteen player computer simulation lasting for approximately twenty turns, is simple to play, but offers sufficient depth to fascinate even the most experienced gamers. **With turns costing as little as £1.50** Continental Rails offers true value for money.

So confident are we in the quality of Continental Rails that the rules and set-up in this highly innovative game are available free of charge and with no obligation, from **Sloth Enterprises, Freepost, Southampton, SO9 1BH.** No Stamp Required from within the UK.

If you are not completely happy with the rules package simply return it to us.



INDIANA JONES

**THIS TIME,
HE'S
BRINGING
HIS TGM**

■ Turn yourself into Indiana Jones, with US Gold's complete Indy outfit!

■ Read how Indy does it in the 50 giveaway novels!

The man with the hat is back! Indiana Jones hits the screens in four new forms this summer. You can catch Dr Jones in the US Gold Action Game (programmed by Tiertex); the Adventure (programmed by Lucasfilm); the new Harrison Ford film, *Indiana Jones and the Last Crusade*; and in the budget buy release of the second Indy film, *Indiana Jones and the Temple of Doom* at £9.99 from CIC Video.

US Gold are jubilant about all this Indy action, and have loads of goodies to literally give away!

The first-prize winner will receive (deep breath): a fedora hat (just like Indy's), a whip (also like Indy's), Indy-style jacket, Indy sweatshirt, Indy game, and a massive Indy film poster. A real collectors' bundle!

FIFTY runners-up will receive a copy of the game and a *Last Crusade* book.

To stand a chance of winning any of these collectables, just answer the two questions below. Along with your computer format and name and address, send your answers to I'M BACK FOR MY HAT COMP, TGM, PO Box 10, Ludlow, Shropshire SY8 1DB. Entries must reach us by August 17, normal rules apply.

1 Name the three female costars in the three Indiana Jones movies.

2 List the three Indy movies in chronological order.



DREADING THE DAY

Judge Dredd — The Roleplaying Game

Hardback, 220 pages. £12.99
Published by Games Workshop

After a period of Games Workshop concentrating on its fantasy and science-fiction battle systems, it's good to see two new roleplaying games from the Nottingham-based company. Following on from the recent *Warhammer Fantasy Roleplay* softback edition, Games Workshop have now repackaged two other favourite roleplaying games systems in competitively-priced formats.

Each offers a complete system suitable for virgin roleplayers and experts alike, conveniently housed in a single volume and representing excellent value for money.

Judge Dredd is, of course, the roleplaying game of crime-fighting in Mega-City One. Based on the famous 2000AD comic strip, the game

lets players take on the role of rookie Judges patrolling the ultra-mean futuristic streets. As such, they are responsible for tracking down, capturing and sentencing criminals (or perps — perpetrators) of every kind, coping with crimes ranging from murder to tobacco smoking.

The chunky hardback rulebook is divided into two sections, one for players and one for referees. The players' section starts by introducing the basics of the game, and describes the simple process of creating a new Judge character. The players are then introduced to the various items of equipment they'll need to use in the line of duty; from the familiar (handcuffs and personal radios) to the ultra-sophisticated

Lawgiver (a Judge's gun, capable of firing anything from knockout darts to HE grenades) and Lawmaster (the ultra-powerful, heavily-armoured Judge's bike, bristling with armaments).

Now the Judges are fully equipped, the book moves on to the most important part of their duties — making arrests. In spite of all the firepower they pack, Judges must allow any perp, however dangerous, the chance to surrender. A nice touch in the rules is that players are encouraged to issue suitable challenges to wrong-doers they come across. So 'Halt or I shall fire!' might just impress a hardened criminal, but 'Hold it right there perp, or you'll be wearing your hat on the wet end of your neck!' stands a better chance. If the perps refuse to come quietly, the players' section includes full details of the combat rules. These are quite simple but comprehensive, allowing for the use of all sorts of weapons in various situations.

The Game Master section of the book goes into more detail on the running of adventures in Mega-City One. There is a chapter on the geography of the city, including instructions for designing your own 248-floor city block. Then comes a section entitled People, Places and Products which gives more

useful background information including a list of famous individuals (Judges, informers and perps) for players to meet — those featured include Judge Dredd himself (with a truly impressive set of abilities, of course!) and the four Dark Judges — the evil beings from another dimension.

Concluding the Game Master's section are chapters on equipment, giving all the necessary details required by the referee to determine effects and abilities of Judges' weapons, vehicles and other gadgetry, and also a short introductory adventure. Also included with the book are a sheet of cut-out cardboard figures representing Judges, perps and bystanders, and a large colour map sheet containing floor plans for use in the introductory adventure.

The rules system of *Judge Dredd* is simple but effective, allowing a fast-moving game that doesn't get bogged down in details. It's an ideal system for beginners, and will appeal to experienced players who enjoy a fast-moving, action-packed game with an element of humour. The game captures the atmosphere and tone of the comic extremely well. Any roleplayer who enjoys *Judge Dredd's* adventures should get a lot of fun out of it.

RuneQuest Fantasy Roleplaying Game

Softback, 95 pages. £4.99
Published by Games Workshop

RuneQuest is an old favourite of mine. It's a fantasy roleplaying system that has seen several incarnations, the most recent of which is the Third Edition, published in the States by Avalon Hill. Games Workshop originally released a UK version of this in the form of a series of hardback books. Now the first of these is back in print in the new, low-price softback format.

Purchasers get a lot of game for their five pounds. The *RuneQuest* rules system

is extremely comprehensive and allows players to develop characters with highly detailed sets of abilities. For example, characters have not just the usual Hit Points, (describing the effects of injuries) but also Fatigue points, which keep track of how exhausted they become through their exertions. Characters who wear heavy armour will find themselves rapidly running out of puff in a prolonged battle! In spite of the high level of detail, the underlying rules system is in fact quite simple and easy to



use in play, seldom requiring reference to charts and tables.

As well as rules for combat and day-to-day skills like Tracking, Climbing, Swimming and First Aid, there is also a large section of the rulebook given over to magic. There are three types of magic in *RuneQuest*: Sorcery, which is like classical wizardry; Spirit magic, which taps the power of the ethereal world; and Divine Magic, which is carried out with the help of the gods



themselves. Not all types of magic necessarily exist in a given fantasy world, but the three sets of rules allow for almost any possible type of magic to be fitted into the game system.

The book is almost entirely given over to rules — the only background material included is a section on monsters and non-human races for players to encounter. So this book by itself isn't enough for a complete game. A referee must add background details of a suitable fantasy setting for his or her campaign by borrowing from other games or getting hold of one of the imported *RuneQuest* background packs. Sadly these aren't currently available in UK editions, and subsequently not as competitively priced as the rulebook. Hopefully Games Workshop will release at least some of these add-ons in a low-cost format. That limitation in mind, this is an ideal purchase for any GM who is looking for a realistic, sophisticated and playable system of rules for a fantasy campaign.

Get civilised

Outstanding amongst the recent boardgame releases is a new British production of the classic strategy game *Civilisation* (published by Gibson Games, about £13).

Covering the period from the dawn of history until about 250BC, the game recreates the birth of Western civilisation as the various Mediterranean tribes struggle for dominance. But this is no dry historical simulation! Players each take the part of a single tribe and must expand their population to control more territory, construct cities to generate wealth and survive many natural and man-made disasters.

Combat will inevitably take place as rival cultures clash over much-needed land, and huge armies will be raised to sack opposing cities and shatter the enemies economic base.

There is also a cooperative side to the game. Players must trade with one another to generate wealth which can then be used to purchase *Civilisation Cards*, the acquisition of enough of which is the ultimate aim of the game. The cards cover the various cultural, technological and artist accomplishments that are available to the various nations. These range from humble crafts such as pottery and clothmaking to the ultimate heights of law, philosophy and democracy.

Many *Civilisation Cards* also provide an immediate benefit to the owning nation. For instance, a player with pottery can store grain, thereby reducing the effects of famine.

The nation that can survive all the inevitable setbacks and be the first to reach the pinnacle of civilisation wins the game. The game works best with between five and seven players, but can be played with fewer.

Civilisation is an unusual and compelling boardgame with the added advantage of an attractive and functional presentation. The simple rules and the complexities of the play, with both competitive and cooperative elements, should appeal to both boardgamers and wargamers alike. A worthy addition to any games cupboard.

All programmers have EGOS. And these egos are not just large, they are planet-sized. Every programmer is *The Programmer*. His programs are not just good, they are the best that have ever been written. Does his scroll jerk? Not his fault. It is IMPOSSIBLE, watch my lips, IMPOSSIBLE to get a smooth scroll given the limitations of 'this crap machine' he has to work on. The animations aren't right? Speak to the Graphic Artist, matey boy, not *The Programmer*. There's a bug in the sprite routine? Never! Your hardware's up the f---ing spout. This is *The Programmer's* game you're talking about. So go f--- yourself.

It should also be noted that most programmers have IVs — Interesting Vocabularies.

PROGRAMMERS TYPE #1: The Unbearably Enthusiastic

Distinguishing Marks

MALE — Aside from the fanatical light in his eyes, there is very little about the UEP to alert you to the horrors in store for you if you encounter him. These will become hideously apparent within two seconds of him opening his mouth. Once started, nothing will stop him talking, short of a blow with an extremely heavy object — preferably a meat cleaver. If you have anything at all to do with the games software industry you are advised to carry one.

FEMALE — The UEP has not yet been able to infiltrate the female of the species, but HE'S WORKING ON IT.

Habitat

Wherever there is a computer, you will find a UEP. Unable, as

yet, to master the art of rising above nonentityism, the UEP is always employed in a very, very junior capacity. Freelance UEPs are kept chained to their keyboards by desperate parents, who can be instantly recognised by their haunted expressions and severe nervous tics.

The company UEP (every company has one) will be found in the broom cupboard, or if a broom cupboard is not available, in a room full of people who have developed a sudden, pathological and total deafness.

Incidentally, if your broom cupboard has a spider, rat or cockroach problem you will find that the UEP makes an excellent pest controller.

Behavioural Patterns

With the emotional development of a two-year-old, the UEP brings a new meaning to the work monomaniac. He lives,



An Industry's Idiot's Guide to the Software Industry

BY RUTH PRACY

PART 1: The Programmers

breathes, eats, sleeps and dreams programming, and indeed, he is capable of nothing else. Failing a human audience, he will discuss his new routines with carpets, desks and the small bits of green fluff that grow between his toes. The mundane things of life, like survival and personal cleanliness are totally beyond his ken.

Unless helped, he will not eat, sleep or blow his nose. His bed is the floor beneath his keyboard and his home, if he ever had one, is something that is profoundly grateful to be rid of him. If he still HAS a home it will undoubtedly be making strenuous efforts to get rid of him. His heating will malfunction, his taps seize up, his

fridge putrify and his parents will long since have been removed to the security of a nice mental home for repeated attempted assaults with a meat cleaver. (One of the most annoying traits of the UEP is that he leads a charmed life.)

There are those who will say that these malfunctions occur because the UEP is so dedicated that he does not have time for the routine things of life. Anyone who has ever met one, however, knows differently. Even inanimate objects and parents have a sense of self-preservation.

Other Remarks

If you see him — RUN!!!

solitary splendour researching new and esoteric methods of programming that are potentially dazzlingly lucrative. Here, His every need is attended to by a bevy of suitably subservient lackeys who make His coffee, and listen with fervently bowed heads to the pearls of coding wisdom that fall from His lips.

Behavioural Patterns

Mr Universe knows His worth, and expects others to know it too. In His beneficence, He realises that the lower orders, whose brainpower is not of the greatest, need constant reminding of this simple fact, and, duly, He so reminds them. He walks tall; better to look down on the world and remind it of its proper position in His scheme of things. He has many, many friends, all of whom main-

tain the suitable distance from Him and come only when summoned (ie, they keep out of his way). All are eager to please Him, and express their goodwill by leaving Him to the solitude He so cherishes.

He is far too talented to stay with any one company for long, and therefore tries to grace as many as possible with His presence, so that all may have the benefit of His great talent (ie, he gets fired a lot). So that up-and-coming lesser souls may gain the maximum advantage from His presence, He always leaves His games unfinished when He moves on, that they may have the chance to learn from His code by completing it. He is magnanimous in the extreme. He has had 20 bestselling games to date.

PROGRAMMERS TYPE #2: Mr Universe

Distinguishing Marks

MALE — Mr Universe is the Best of the Best, the Creme de la Creme, the Greatest the World Has Ever Seen. In a world of geniuses He is The Genius: the Ultimate Zenith. You know this because He has said so, and His word is Law.

FEMALE — No Ms Universe, He knows the way to succeed in this business. At puberty He saw the blinding vision of His glittering future and decided it was not enough. Accordingly, He programmed a best-seller at the speed of light and invested

the proceeds in a sex-change operation, emerging as The Most Wonderful Person The World Has Ever Seen (see above).

Habitat

As a freelancer, He has a beautiful maison in a righteous suburb that He bought when He was 17, where He lives in luxury surrounded by His cherished machines, and where His every need is attended to by a bevy of ravishing maidens. In-house, He has the largest office (the MD, of course, takes second place), where He sits in



Other Remarks

For those of you not au fait with computer world technospeak, the following translations are provided:
 'beautiful maison' — 'Mid-Victorian Terrace'
 'luxury' — 'squalor'
 'bevy of ravishing maidens' — 'wife' (or 'mother')

'largest office' — 'standard desk'
 'his every need is attended to' — 'ignored'
 'subservient lackeys' — 'antagonistic colleagues'
 'pearls of wisdom' — 'crap'

*Divide by ten and for 'best-selling' read 'mid-chart entries'

skiers or small children who missed the snow last winter. A really laid back Laid Back Programmer can produce enough grease from a single follicle to keep a medium-sized McDonald's supplied with fries and fishburgers all year round.

FEMALE — No, surely, there couldn't be, could there?

ly what he uses to keep himself Laid Back. His keyboard is always missing at least three keys, its cover having long since gone where the dead crabs go. His desk is supported by two legs, a stack of paint pots (half full, congealed) and prayer.

Behavioural Patterns

The LBP has no worries, none at all, ever. He never finishes a game (see Mr Universe) — it's too much bother. Nothing fazes him. The building's burning down? Let it burn. It's somebody else's problem, not his. Like the UEP, he leads a charmed life and knows, with perfect confidence, that the flames will go round him, just like everything else does. Bomb a software house and you will find, once the dust has cleared, that a desk-sized pinnacle remains rising up from the ruins in solitary splendour and perched on top, the LBP, programming away with not a care in the world. If anything, he will be happier, because there's nobody to bug him up there.

MORE IN THIS OCCASIONAL SERIES SOON...

PROGRAMMERS TYPE #3:

The Laid Back

So Laid Back he's horizontal

Distinguishing Marks

MALE — The LBP is not so much a person as an experience. Conversations with him are best conducted through 15 metres of the kind of reactor shielding Chernobyl lacked, or failing that, a space suit. This is largely due to the interesting aroma that accompanies him wherever he goes. Never let it be said he doesn't wash: he does... whenever he can be bothered. Depending on how Laid Back he is, this could be once a month or once a year: you can gauge his Laid Backness by the depth of the



trail of grease he leaves behind him on his perambulations. These are frequent, and the path between his desk and the coffee pot is usually only negotiable by Olympic-standard

Habitat

One out of every 15 programmers is an LBP. This means that every company and club in the country has one. You'll find him lurking in a darkened corner surrounded by half a ton of dandruff and a mountain of half-chewed and excitingly fungoidal sandwiches, rolls and empty crisp packets. Gas masks are usually hung by the entrance to his domain for use by those brave enough to enter, along with a shovel or two to clear the track to his desk.

Like many programmers, the LBP has no home. When not hunched over his keyboard muttering strange oaths in an arcane tongue, he can be found under his desk, resting his head on a pile of old beer cans or discarded Risia papers and tobacco shreds, depending on exact-

LOOK

**If you own a Sega,
 Nintendo or PC Engine
 contact The Console Club
 on 0206 751217 **NOW!****

WIN £1000 CASH!

We're giving away £1,000 CASH — it could be yours if you're this month's **GAMES MASTER!!**

WOTTA LOTTA DOSH!!

You're in the running for £1,000 when you dial

0898 555 080

YES!! TGM is giving away £1,000 in straight CASH and all that stands between you and an improved bank balance is a set of ten QUESTIONS (and the luck of the draw)!!!

This is the second TGM GAMES MASTER Jackpot game. We're searching for this month's GAMES MASTER — the person who can answer ten software questions and have enough games-playing luck to have their answer pulled out of the golden-lined sack first on August 20.

The questions are all related to the games featured in this month's issue.

Just pick up your phone and dial **0898 555 080**

and you'll hear the questions read out, along with three possible answers. As you listen to the three possible answers tick the box on the entry form below which you think corresponds to the right answer — A, B or C.

When you've answered all TEN questions, complete the form with your name, address and phone number and send it to: GAMES MASTER JACKPOT GAME, THE GAMES MACHINE, PO Box 10, Ludlow, Shropshire SY8 1DB. We'll put all the entries in a sack and the first entry pulled out at 9.30am on August 20 wins £1,000! It could be you!!!

TGM's Games Master Jackpot Game is produced in conjunction with Chatterbox Ltd. Calls cost 25p per min off-peak, 38p all other times. If you don't pay the 'phone bill — please ask the person who does before making this call — okay? Standard competition rules apply.

Information and tips!

£1,000 JACKPOT ENTRY FORM

1.	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	I'm incredibly desperate to win £1,000 cash, so I've ticked what I hope are the right boxes in answer to the TGM Games Master Jackpot game...
2.	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	
3.	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	
4.	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	Name
5.	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	Address
6.	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C
7.	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> CPostcode
8.	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	Telephone number
9.	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	
10.	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	

GAMES MASTER JACKPOT GAME, TGM, PO BOX 10, LUDLOW, SHROPSHIRE SY8 1DB

Printed here are the numbers which connect you directly to the TGM Hotline services. We've got 160 lines, open 24 hours a day, so don't worry about the service being engaged.

Grab the latest news on what's happening on the TGM News Update line **0898 555 088**.

Games players are also well catered for... Robin Candy is working overtime and getting all the hottest tips on the latest games. Need help, ring the TGM Tips Hotline **0898 555 087**

TGM ►►► SHOPP ▼ SOFTWARE ► HITS

How to order

Apart from our highly recommended games list, you can order any game released by the major software houses to date on cassette, disk or cartridge. The offer prices on our games list include a generous discount and are inclusive of First Class postage. If you wish to order a game not included in the list, please use the following Special Offer discount table to calculate your Offer price from the recommended retail price quoted on the software houses adverts.

RRP	OFFER	SAVE
4.99	3.99	1.00
5.95	4.74	1.20
7.95	6.40	1.55
7.99	6.44	1.55
8.95	7.20	1.75
8.99	7.24	1.75
9.95	7.95	2.00
9.99	7.99	2.00
11.99	9.99	2.00
12.95	10.40	2.55
12.99	10.44	2.55
14.95	11.95	3.00
14.99	11.99	3.00
19.95	15.95	4.00
19.99	15.99	4.00
23.00	18.40	4.60
24.95	19.95	5.00
28.95	23.15	5.80
29.95	23.95	6.00
34.95	27.95	7.00

Remember, apply the discounts to RRP prices only, not to our discounted Offer prices quoted on this page! Don't forget to indicate which computer you own and whether you require the software in cassette, disk or cartridge form. Similarly, don't forget to indicate garment size for T-shirts.

Prices valid for UK/Eire/Europe only. For Overseas orders please add \$2.00 per item for Air Mail delivery.

Not all listed or advertised products will have been released at press time. Goods will be despatched as soon as possible. Customers will be informed of any long delays.

Please ring (0584) 5620 for release dates!

BUDGET SPECIAL OFFER!

Order four games in the \$1.99 range and pay for three (\$5.97 payment total - a saving of \$1.99)

Order four games in the \$2.99 range and pay for three (\$8.97 payment total) - a saving of \$2.99!

TX.001 Oct/Nov 87
Light Wars - the Laser Tag craze! Console Overview! Computers in the Movies! The Robosystem - the presentation system of the future! TV Gaming - Anglia TV's new adventure game! The Compact Disc Revolution! Mel Croucher's Software System! Ben Dalglish and Rob Hubbard speak out!

TX.002 Dec/Jan 87/88
Robots in Video! Mel Croucher's Violence in Software! Getting in to Satellite TV! Licensed to Kill - The race for the latest licenses! Not A Penny More - An adventure story! Robin Candy paints with Decca Elite (ST) Interview with Stephen Blower, the man behind the Ocean/Imagine adverts!

TX.003 February 88
Coin-Op Contributions! TGM On-Line - A look at Computer! Consulting Computer Games! Mel Croucher's Hierotypes in Software! Robin Candy paints with Deluxe Paint III! Low-cost multi-track recorders reviewed! Rob Steel's reviews of new adventures! A round-up of Board Games! Robin Evans's Mercy Dash!

TX.004 March 88
Child Abuse - Flipped off programmers reveal all! Mel Croucher's guide to making your own video promo! Digital Pictures, the leading edge in Computer Graphics! John Gilbert takes a look at 16-bit simulations! Coin-Op Contributions! John Woods on Fantasy Games! Sequencing and MIDI!

Title	Label	Offer	Title	Label	Offer
A M I G A			C 6 4 C A S S		
TIME SCANNER	Activision	\$19.99	DOMINATOR	System 3	\$11.99
AFRICAN RAIDERS	Cocktail Vision	\$15.99	RED HEAT	Ocean	\$11.99
THE CHAMP	Line1	\$15.99	C 6 4 C A S S		
SKWEEK	US Gold	\$15.99	SUPER SCRAMBLE SIM.	Gremlin	\$ 7.99
PHOBIA	Imageworks	\$15.99	ROCK STAR ATE MY HAM.	Codemasters	\$ 7.99
NAVY MOVES	Dynamics	\$19.95	SPHERICAL	Rainbow Arts	\$ 7.99
COLOSSUS CHESS 10	CDS	\$19.99	BAAL	Psychosis	\$ 7.99
MICROPROSE SOCCER	Microprose	\$19.95	CITADEL	El Dreams	\$ 7.99
HIGH STEEL	Screen 7	\$15.99	HATE	Gremlin	\$ 7.99
LICENCE TO KILL	Damark	\$15.99	LICENCE TO KILL	Damark	\$ 7.99
DOMINATOR	System 3	\$15.99	JAWS	Screen 7	\$ 7.99
A T A R I S T			PHOBIA	Imageworks	\$ 7.99
CIRCUS ATTRACTIONS	Rainbow Arts	\$15.99	DOMINATOR	System 3	\$ 7.99
LICENCE TO KILL	Damark	\$15.99	RED HEAT	Ocean	\$ 7.99
B.B.'s WILD WEST RODEO	Tynesoft	\$19.95	A M S T R A D C P C D I S K		
SLEEPING GODS LIE	Empire	\$19.95	SUPER SCRAMBLE SIM.	Gremlin	\$11.99
XYBOTS	Tengen	\$15.99	TIME SCANNER	Activision	\$11.95
GARFIELD-WINTER'S TALE	The Edge	\$15.99	XYBOTS	Tengen	\$11.99
AFRICAN RAIDERS	Cocktail Vision	\$15.99	SKWEEK	US Gold	\$11.99
G.NIUS	Infogrames	\$15.95	THE GAMES-SUMMER ED.	Epyx	\$11.99
SAVAGE	Firebird	\$19.99	SILKWORM	Virgin	\$11.99
SKWEEK	US Gold	\$15.99	A M S T R A D C P C C A S S		
NAVY MOVES	Dynamics	\$15.95	SUPER SCRAMBLE SIM.	Gremlin	\$ 7.99
SKYFOX II	El Arts	\$ 9.99	TIME SCANNER	Activision	\$ 7.95
JAWS	Screen 7	\$15.99	XYBOTS	Tengen	\$ 7.99
ASTAROTH	Hewson	\$19.99	SKWEEK	US Gold	\$ 7.99
P C			THE GAMES-SUMMER ED.	Epyx	\$ 7.99
AFRICAN RAIDERS	Cocktail Vision	\$15.99	SILKWORM	Virgin	\$ 7.99
CIRCUS ATTRACTIONS	Rainbow Arts	\$15.99	S P E C T R U M D I S K		
P C E N G I N E			SUPER SCRAMBLE SIM.	Gremlin	\$11.99
SON SON II	Hudson Soft	\$24.99	K.DALGLISH SOC.MAN.	Cognito	\$11.95
ALIEN CRUSH	Hudson Soft	\$24.99	XYBOTS	Tengen	\$11.99
C 6 4 D I S K			JAWS	Screen 7	\$11.99
SUPER SCRAMBLE SIM.	Gremlin	\$11.99	THE GAMES-SUMMER ED.	Epyx	\$10.44
ROCK STAR ATE MY HAM.	Codemasters	\$10.44	RED HEAT	Ocean	\$11.99
SPHERICAL	Rainbow Arts	\$10.44	S P E C T R U M C A S S		
BAAL	Psychosis	\$11.99	SUPER SCRAMBLE SIM.	Gremlin	\$ 7.99
CITADEL	El Dreams	\$11.99	K.DALGLISH SOC.MAN.	Cognito	\$ 6.40
HATE	Gremlin	\$11.99	XYBOTS	Tengen	\$ 7.99
LICENCE TO KILL	Damark	\$11.99	JAWS	Screen 7	\$ 7.99
JAWS	Screen 7	\$11.99	THE GAMES-SUMMER ED.	Epyx	\$ 7.24
PHOBIA	Imageworks	\$10.44	RED HEAT	Ocean	\$ 7.24

POWERPLAY CRYSTAL AUTOFIRE IN RED OR GREEN
Same as CRYSTAL, but includes fast Autofire action.
OFFER £14.99

JOYCON ADAPTOR
Finally, Amstrad CPC owners have a choice of connecting any two Atari compatible joysticks to their Amstrad CPC 464, 664 and 6128 computers for two player games.
OFFER £4.50

SPECTRUM+3 CASSETTE LEADS
Link your Spectrum+3 to your cassette recorder and gain access to your large collection of Spectrum 48K tape software.
OFFER £3.95

LOAD-IT
Eliminates tape loading problems on your C64. Achieves 100% loading success even on the most obstinate tapes. It provides permanent head alignment adjustment with the help of an LED array for optimum signal indication. Guaranteed for one year.
OFFER £39.99

AMIGA A501 512K RAM EXPANSION UPGRADE + CLOCK CARD
Internal Ram upgrade to 1024K RAM.
OFFER £129.99

AMIGA A520 MODULATOR
Use your Amiga with a domestic TV set or composite video monitor.
OFFER £24.99

AMIGA DIGIVIEW GOLD V3.0
captures images via your video camera for use with A500/2000
OFFER £129.95

PANASONIC WV1410 CAMERA
Black & white video camera with 8mm lens
OFFER £263.82

AMIGA DIGIDROID
A motorised filter wheel that automates colour digitising with Digiview
OFFER £59.95

AMIGA COPYSTAND FOR DIGIVIEW
A 2' stand for digitising objects
OFFER £59.95

AMIGA RENDALE 8806 GENLOCK
Professional genlock for A2000
OFFER £750.00

AMIGA COMBINER RGB
Allows in combination with Digiview and Rendale 8806 genlock the digitising from colour video sources
OFFER £172.50

AMIGA RENDALE 8802 GENLOCK
RGB genlock enabling the A500/A2000 user to merge computer graphics with live video and record the results on VCR
OFFER £299.00

AMIGA MINIGEN
A lowcost composite video genlock for A500/A2000
OFFER £99.00

XEROX 4020 COLOUR INK JET PRINTER
Best colour ink jet printer for Amiga with excellent driver support. Can also be used for normal black text at 80cps draft or 40 cps letter quality using five resident fonts.
OFFER £1250.00

XEROX CONSUMABLES STARTER PACK
Includes paper roll holder, roll of paper, inks, maintenance fluid, OHP film and A4 sheet paper.
OFFER £127.55

AUTO CUT SHEET FEEDER
For automatic sheet paper insertion.
OFFER £220.00

BACKNO'S

KONIX NAVIGATOR
Brand new ergonomically designed handheld joystick with Fire Button positioned directly beneath the trigger finger.
OFFER £14.99

KONIX MEGABLASTER
Precision moulded control knob with steel shaft for complete reliability. Dual fire buttons for left and right hand use. Heavy duty leaf switches and rubber suction cups.
OFFER £5.99

KONIX SPEEDKING
The joystick that actually fits your hand. Solid steel breakproof shaft. Neat clicking sound.
OFFER £10.99

EUROMAX COBRA
Brand new design with 8 microswitches. 3 Autofire buttons and single normal fire button provide trigger readiness.
OFFER £11.95

EUROMAX ELITE STANDARD
Short travel microswitch action in ergonomic and highly durable design.
OFFER £9.95

EUROMAX ELITE GRIP
Same as Elite Standard, but with new ergonomic grip.
OFFER £10.95

EUROMAX PROFESSIONAL STANDARD
High durability, rapid response and ultra sensitive movement.
OFFER £15.95

EUROMAX PROFESSIONAL GRIP
Same as Professional Standard, but with ergonomic grip.
OFFER £13.95

EUROMAX PROFESSIONAL AUTOFIRE
Same as Professional Standard, but with Autofire.
OFFER £18.95

EUROMAX MICROHANDLER
An array of features: extra-sensitive microswitch action, two integrated paddles, variable Autofire, extra large fire buttons and solid metal casing with rubber suction cups.
OFFER £19.95

DYNAMICS COMPETITION PRO 5000 (NORMAL)
Features arcade quality microswitches, dual fire buttons, robust steel shaft and rubber return for smooth control.
OFFER £13.50

DYNAMICS COMPETITION PRO 5000 (CLEAR)
Same as PRO 5000 NORMAL, but with see-thru body.
OFFER £14.00

DYNAMICS COMPETITION PRO EXTRA
Features Rapid Fire, unique slow motion and see-thru body.
OFFER £15.00

POWERPLAY ALL BLACK CRUISER
With dual lead for Spectrum 48K/128K/Plus/Plus2/Plus3.
OFFER £9.99

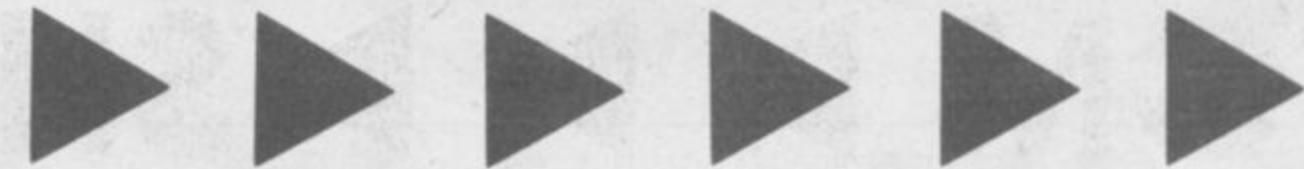
POWERPLAY MULTICOLOURED CRUISER
For lovers of garish coloured joysticks.
OFFER £9.99

POWERPLAY CRUISER CLEAR AUTOFIRE
Simply by holding down either of the fire buttons engages Autofire.
OFFER £12.99

POWERPLAY CRYSTAL STANDARD
Clear joystick with red fire buttons and pistol grip handle.
OFFER £14.99

POWERPLAY CRYSTAL IN RED OR GREEN
OFFER £12.99

SHOPPING



SUBS OFFER

£8 software voucher



- TX:005 April 88**
Mel Croucher's chart rankings! Ebie interview! John Gilbert at the Toy Fair! Toys For The Boys - Mel Yuppe's Guide to Electronic Rubbish! Jon Bates in drumming mood!
- TX:006 May 88**
Interview with Bulletin 1000! Grow your own radio - Mel Croucher on the broadcasting revolution! TGM has a go at KJC's Play By Mail game! Boardgame news! Jon Bates rehearses Atari ST instruments!
- TX:007 June 88**
Mel Croucher investigates Big Brother and how he watches you! TGM looks at the ST Pascal Graphics System! Stocktake: The MSX-II computer range! The weird effects of music and sound on computer games! STAC - Tony Bridge takes a look at the ST Adventure Creator!
- TX:008 July 88**
Bulletin Beasty - Mel Croucher investigates the bulletin board! Marshall T Rosenberg files the shuttle - the biggest video game in the world! New wave multimedia SF game CYBER-PUNK! Robin Candy engages Microsoft's Photon Drive!
- TX:009 August 88**
I Amuse - Mel Croucher discovers some famous films which have borrowed their themes! Disney Spells - Microdeal are selling the laser disc game Dragon's Lair! Deluxe Photoblast reviewed!
- TX:010 September 88**
Conning the Computer - Mel Croucher looks at computer fraud! Archimedes Special - games and graphics on the 32-bit micro!
- TX:011 October 88**
Whatever happened to the Nintendo?! Robin Candy plays Trip-a-Tron with Jeff Minter's amazing new ST light synthesizer! Susan Wynne talks to Interplay (Bard's Tale people)! Cyberpunk book reviews!
- TX:012 November 88**
The First British Console? - The Slipstream! The Pixel Cybertanks - Cyberpunk and Robotics! The World of Nintendo! TGM looks at STOS - The Game Creator!
- TX:013 December 88**
Pirates - an investigation of the wrong side of the law! Mel Croucher looks at computers in the brave new world! Pictures from an exhibition! Trillion Bytes Trips - SF book reviews!
- TX:014 January 89**
The Gift of the Guppel! Confrontation Con-Op! The Electric Ephemera's PCA software! SAM - the secrets of a new machine!
- TX:015 February 89**
Flight Formation - Diary: Creation of a new 16-bit flight game - BDN - playing games over the phone - Fly the devastating aircrafts of tomorrow, on the computer!
- TX:016 March 89**
The Power Generation: The Konix Multisystem - Funny money from the future: Intelligent cards - Jez Sen and Argonaut: Latest developments with project X.
- TX:017 April 89**
The Rising Sons: Nintendo's 16-bit Super Famicom and Sega's Mega Drive - Robin Hancock, top recording engineer at Sarm West's recording studio, talks about state-of-the-art music tech and home computers.
- TX:018 May 89**
DPaint 3 reviewed - Report from the Frankfurt Music Fair - Argonaut's F117A Agressor preview.
- TX:019 June 89**
Console Desert: Japan's 16-bit attack on Europe - TGM takes a look at CAPCOM and the coin-up conversion scene - Jez Sen - Confessions of a Coder.
- TX:020 July 89**
Indy's back! Interview with Lucasfilm's ace programmers - Vector Graphics, the men behind solid vector graphics - Why Haswell's Asterix package was censored - Mel Croucher talks about CD-G, interactive CD with graphics - The low-down on big, successful American software house Accolade's move to Britain.

Yes, subscribe to THE GAMES MACHINE and you get a free £8 SOFTWARE VOUCHER as a subscription gift!

Take your pick from any of the fab games in our mail order range - It's yours with a massive £8 discount when you subscribe to THE GAMES MACHINE. And remember: You'll get

- ☛ 12 brilliant issues of THE GAMES MACHINE delivered straight to your door!!!
- ☛ FREE £8 voucher redeemable against your next TGM shopping purchase!!!
- ☛ the chance to participate in future special subscription offers!!!

Send in your coupon today!!!



Yes, I would like to subscribe to THE GAMES MACHINE!
I want to subscribe to 12 issues of TGM and receive my £8 software voucher.
If I've already got a TGM subscription, and it is running out soon, I extend it for a further twelve issues - and still get my £8 software voucher.

Please tick the appropriate box:

I enclose £18.00 for a new subscription mainland UK

I enclose £25.00 for a new subscription out side mainland UK - surface mail

I enclose £38.00 for a new subscription out side Europe - Air mail

I am a new subscriber

I am an existing subscriber. My subscription number is

Please extend my subscription starting with issue No

EARLY WARNING:
If you wish your sub to commence with issue 22, we must receive your coupon no later than 26th July 1989.
Please allow 28 days for your free gift.

ORDER FORM

MY COMPUTER IS:

CODE	ITEM	PRICE

The software discount table may only be applied to recommended retail prices as seen in the ads of this magazine, not on OFFER prices shown within the TGM SHOPPING pages. No other discounts may be applied.

SUBTOTAL £

TGM BACK NUMBERS
Back issues £1.45 (inclusive P&P)
OVERSEAS please add £0.80 to above prices.
SPECIAL QUANTITY DISCOUNT:
Order 4 issues and pay for 3
Please supply the following BACK NUMBERS (Circle required items)

001 002 003 004 005 006 007 008 009
010 011 012 013 014 015 016 017 018
019 020

BACK NUMBER ORDER TOTAL £

ORDER TOTAL £

Name

Address

Postcode

Please make cheques/postal orders payable to TGM. It is best to avoid sending cash payments. Please DO NOT enclose ANY order with mail to the EDITORIAL side of the magazine as this will result in DELAYS! Send your orders to the address below.

I enclose a cheque/p.o. for: £

I wish to pay by VISA/ACCESS (Delete as appropriate)

Please debit my VISA/ACCESS ACCOUNT by: £

My account No. is:

Expiry Date Signature

SEND THIS FORM TO:
**TGM SHOPPING, PO BOX 20
LUDLOW, SHROPSHIRE SY8 1DB**

Video killed the

Portable entertainment has advanced in leaps and bounds since we first slipped on a pair of lightweight headphones and boogeyed on the bus. Now you can watch the tube on the Tube, or playback your own replays while you're watching the cricket. Mel Croucher looks at the revolution that we cannot ignore. What we want to know is, will it all end up with Max Headroom?

Television has been around longer than you think. When HG Wells predicted pocket videos in 1903, he was looking into the past as well as gazing into the future. Way back in 1817 a Swedish boffin named Berzelius transmitted tones of light over distances, and as far back as 1839 radioactive Edmund Becquerel was using the electro-chemical effects of light. The photosensitive selenium cell was up and running in 1873, and prototype TV sets were constructed in 1884 by Paul Nipkow using scanning discs. Five years later an alternative system was built by Lazare Weiller using revolving mirrors. Neither of them could amplify their images.

But what about Baird? I hear my Scottish readers cry. Sorry Scotland, but John Logie Baird didn't invent television on 11 April 1925 as *The Times* would have it, he didn't even come close. Television was invented by a Russian Jew named Boris Rosing, the year was 1907, and he successfully used cathode ray tubes connected to revolving mirrored drums. Four years later Mr Campbell Swinton nicked the idea, and tried to make a portable machine. Well, it was on a flatbed trolley, but it's the thought that counts.

So how did we get from there to pocket vision? By 1923 two Yanks named Jenkins and Moore were happily sending shadows down wires, and Belin and Holweck were doing the same thing without wires through the French airwaves. The same year another Russian, Vladimir Zworykin, cracked it, and took out a patent for an electronic television system. He was bought out by a little outfit in the States called EMI. Then, and only then, comes Baird. Wee Johnny Baird also took out a patent in 1923, based on the old spinning disc idea. In September 1929, the youthful BBC started experimental broadcasting using his system, and at 3.30pm on Monday, 2 November 1936, the world's first television service was launched from the Ally Pally, London. It was crap. In fact the 240-line picture quality was so dire that the whole system was scrapped after three months.

Meanwhile back in the States, Zworykin, now a refugee from the dreaded Bolsheviks, had roped in the radio pioneer Marconi as well as EMI, and by 1934 they had a system which would be easily recognized today. 405 lines, 50 interlaced frames a second, giving 25 complete images a second. They had electronic cameras, transmitters and receivers, 14-inch by 11-inch black and white screens retailing at around eighty quid, and just like Rupert Murdoch's Sky channels they had no audience because they had no programs. The Beeb took one belated look at the system and the rest, as they say, is history.

Apart from a load of old gimmicks, nothing much changed in the world of portable television until the Seventies. The sci-fi buffs were way ahead of the field, as they always are. Pulp mags of the Forties and low-budget SF films of the Fifties regularly featured the next televisual revolution: personal TV. Wrist-watch TVs, pocket receivers, perfect images coming from tiny flat screens. When the Japanese actually produced a wrist-watch TV in 1971 nobody was the least bit surprised, and when Uncle Clive threw his mono 2-inch screen Sinclair into the market place a decade later, the only reaction was what kept him so long, and why do the batteries keep running out.

From 1971 onwards, portable mini TVs were available to anyone in Britain with a bit of money and a lot of muscle. The Rikondas from the USSR being chunky, metallic, cheap and weighing a ton; the ubiquitous Japanese brands being fussy, plastic, overpriced and also weighing a ton. But, and stop me if you've heard this one before, after Sinclair paved the way he was blown out by competitors within a couple of years, and minitelevision started to take off. Outfits like Casio produced very sexy personal receivers, like their 3-inch model, costing £96, weighing a few ounces, and folding down to a 3-inch by 4-inch package. The image was black and white, and reflected onto a flip-up mirror. The general public was sceptical, but the yuppies bought them by the thousand. They are now buying colour portables just as eagerly.

Miniature television screens will soon be as epidemic as canned music. The Germans are already fitting an interactive audio-visual unit into car dashboards as a navigation system. Three West German cities have been sprinkled with information nodes and the entire country will be electronically mapped by 1994.

Back home, Virgin's Richard Branson, has ordered over three million quid's worth of 5-inch LCD colour screens, to fit on the back of all his airline seats. Passengers can choose between ten video channels, they can order booze, grub and duty-frees off screen. They can also play a selection of silent (!) video games including chess, by using interactive pads built into their food trays.

Not to be outdone, Philips and Warner Bros have joined forces in a joint venture called Airvision. First customer is British Airways who are fitting out Boeing-747s with back-of-seat 3-inch LCDs. Passengers will have access to six channels, and can watch *Airplane 2* in living colour, just as the pilot announces the traditional emergency landing for real. When it comes to personal minivision, science-fiction is already fact. So here's my guide to what's new and currently available.

PERSONAL TELEVISIONS

(Dimensions in inches)

BOOTS (own branded) MTV-5, £70

6x8x9, 5-inch mono tube, mains or adaptor. Cheap and nasty hot little cube, but it's portable. Just.

CASIO TV-500, £99

2.5x4x1.5, 2-inch LCD colour screen, batteries (included), car lighter socket or mains adaptor (£29.95 extra). In a word, absolutely bloody marvelous! It weighs less than twelve ounces, the picture is pin sharp. You can use the thing as a video or camcorder monitor, it's got an automatic channel search for both VHF and UHF frequencies, and if the telescopic antenna isn't good enough for you, there's an external jack for any other source of signal. Eat you heart out Clive Sinclair.

BOOTS (own branded) CTV-5R, £160

6x8x9, 5-inch colour tube, mains or adaptor. Not so cheap as the Boots MTV-5, but just as nasty plastic box with dreadful picture and reasonable sound. For £199 you get a FM/MW radio included.

SEISHO CTV-5.5, £160

7x7x10, 5.5-inch colour tube, battery, mains, car-lighter adaptor. Dixons own-brand machine includes an FM/MW radio, and qualifies as a Herriaman in the portability stakes. Picture quality is surprisingly clear, and the sound isn't bad either. Beats the Boots opposition hands down.

FERGUSON PTV02/A, £299

4x4x2, 3-inch colour LCD screen, mains or inclusive rechargeable battery. A true pocket machine, with a frustrating hour or so of watchability using the battery pack (although it does have a battery-saving audio-only feature which is an amazingly naff concept for a television set). Weighing in at only 350 grams, and with an active matrix hi-res screen, the image is excellent, the sound as poxy as you'd expect. The optional high-capacity battery pack is recommended if your wallet can stand it. The camcorder mount is particularly useful for location monitoring, and the controls are perfect for a pocket machine, being membrane switches you can't knock them off. A superb product.

PANASONIC TC-L3G Minivision, £329

4x5x2, 3-inch colour LCD screen, mains, battery or adaptor. Looking like a communicator from the USS Enterprise, this hand-held has a huge advantage over most minivision sets: it works anywhere in Europe. All you have to do is switch to the appropriate system, and reception via the telescopic aerial is unsurpassable. Absolute state-of-the-art wafer-thin screen comprising over 100,000 pixels, each individually controlled. The audio is crummy, and a decent earphone is needed to get anything approaching decent sound. The flip-up screen seems very vulnerable and prone to getting itself sheared off, and for this sort of price tag something more robustly constructed would seem to be in order. But the best picture I have ever experienced, which is quite something from a genuine mini.

Mel's Recommended Best Buys in personal TV

CASIO TV-500, £99
FERGUSON PTV02/A, £299

eradio star

PERSONAL VIDEOS

I have some difficulty understanding the whole concept of portable mini video systems. Isn't the whole point about personal TV to enable the viewer to watch on the hoof? So why time-shift on the move when you can do it at home? Obviously the manufacturers have researched their global marketplace, but with price tags like these I remain unconvinced. A personal video is not a camcorder, but a miniaturised VCR plus monitor, often with a radio receiver bunged in. No doubt these machines are precursors to the inevitable global pocket communicator: featuring TV, VCR, video telephone, personal organiser, computer and database. Shall we say by 1995? I think we shall.

CANON Canovision-8

Badged version of the Sony Video Walkman, TV/Video-8 machine. (see below)

SONY GV-8 Video Walkman, £tba

4x8x2, Video-8 format, 3-inch colour screen, battery, mains adaptor. Sony are so confident about this product that they have launched 400 prerecorded titles to go with it. Beautifully produced, robust, sleek, just what you'd expect from the market leaders and inventors of the original Walkman. Excellent sound via headphones, but the 'live' picture was a little disappointing. Prerecorded Video-8 tapes gave excellent results, but off-air home-recorded tapes suffer from the handicap of time limitation. This can be extended by using 90-minute tapes in long-play mode. When it was launched in Tokyo it cost the equivalent of £570. But the UK launch is rumoured to be priced at a horrific £800! (Check with retailers!!)

PANASONIC NV-1 S-VHS-C, £840

12x6x3, VHS-C format, 3-inch LCD colour screen, mains, rechargeable power pack. A truly amazing machine, and so it should be at this price. Brilliant picture, nine heads using the mini-VHS system, hi-fi sound, built-in radio, long-play option, and all in a genuinely portable package weighing 1.5kg. The accessories are verging on the insane, with a micro camera costing £440 and weighing 349g that you wear on a headband (£40 extra!). I can see those Japanese tourists already, which is just as well cos I don't know any Brits who can afford gizmos like this.

CASIO VF-3000, £558

3.3-inch LCD colour screen, standard size VHS format, mains, adaptor or power pack. The two kilo weight is just about acceptable, but the image seems somewhat washed out unless lighting conditions are perfect. Obvious advantages with the standard VHS cassettes mix and matching with home-based sys-

tems, but disappointing that Casio have not opted for licensing the new, improved, third generation Super or HQ VHS. This is not for reasons of picture quality but because of the horrible sound that VHS produces, and the tremendous sound quality of other Casio products.

HITACHI VT-LC5, £tba

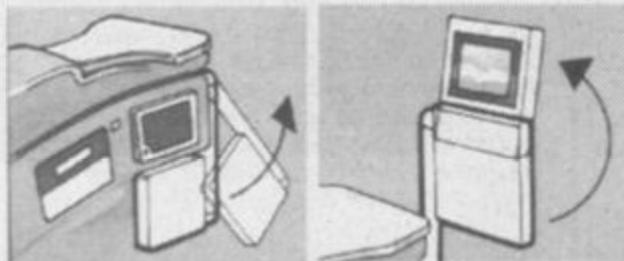
16x6x2, 5-inch colour LCD receiver/monitor plus VHS recorder, mains or battery. If you think that over three and a half kilos counts as fully portable I won't disagree, but hand-held this ain't. The liquid crystal image is superb, and the hinge-up screen reveals surprisingly robust controls and assorted gimmicks. The design is reminiscent of the slab-like music centres of the early Seventies, and already looks like a museum piece, but is a distinct alternative to the dwarf stack systems on offer.

SONY EV-DT1, £900

6x9x12, 6-inch colour monitor, Video-8 format, mains, 12/24v adaptor. Nearly six kilos make this one a lap-top, and only then if you're not considering reproduction. Classic layout of monitor sitting on top of VCR, with twin telescopic antennae looking just like a kid's drawing of a Martian. One for the luxury camper/yachting brigade, and the deaf. The sound is appalling and an intrusive cooling fan cuts in every time the damn thing is switched on. Other than that, no complaints at all. Beautifully engineered with every gimmick imaginable built in, but as you can't record anything except the channel you're watching, what the bloody hell is it for?

Mel's Recommended Best Buy in personal video

SONY GV-8 VIDEO WALKMAN at £570 seemed slightly less of a waste of money than the rest, but the price hike forces me to say wait a year or two before popping a video in your pocket. A playback-only model will soon be available at a more realistic price.



British Airways are installing the Skyview System. Passengers simply pull up a screen on their armrest, plug in a headset and load one of the available Video 8 cassettes. Volume, brightness, tint and colour can all be adjusted.

Above, clockwise from the top left: The Ferguson PTV02, with 3-inch LCD screen, the Sony EV-DT1 with 6-inch screen, Casio TV6500 at 2.7 inches, and the amazing Sony GV-8 Video Walkman with a 3-inch screen. The appliances shown are not in scale with each other!



OUR MAN IN

TGM's Japanese correspondent, Shintaro Kanaoya, gives the lowdown on Far Eastern news

that dire Stallone movie, is in fact based on a comic. The Cobra of the story is an heroic space pirate. A long time ago, he had his left arm surgically removed with an axe, and now possesses a Psycho-Gun there instead. Being a Japanese game, all the women wear shoelaces as costumes and do and say provocative things.

Hudson (its designers) are bringing out an external Battery Back-Up System. This save-game idea has proved to be a huge success on the Nintendo, most notably on RPGs, where previously long passwords had to be entered. With a press of the button, the game is saved to memory, powered by a small battery while the computer is

Welcome to a new regular column that will try to uphold truth, justice and the Japanese way of playing computer games. Each month I'll be bringing you the latest news, views, gossip and totally unconfirmed rumours in the hope that one of them will be true.

I'll primarily be covering computers and software but if something catches my eye, or ear, I'll try to mention it here. Most Japanese machines will be looked at, from the Nintendo to the FM Towns, from the PC Engine to the MSX (well, maybe the MSX). From time to time there may be the odd tip. Here's two. On the Engine's CD-ROM, if you play an audio CD with the Systems Card in, you have

access to a CD menu with functions such as Fade Out and A-B Repeat. And did you know that you can run an unconverted Engine on a monitor with only the loss of colour? However, I'll leave the game tips to Robin Candy.

Naturally, most of the things mentioned won't be available here for a while, apart from PC Engine goods which are now constantly entering Britain. But most things will probably get over here eventually — and TGM's here to prepare you.

Now, firstly, the ever-growing PC Engine. *Twin Cobra* which was mentioned last month as both a ROM card game and a CD-ROM game is in fact two games. I haven't seen the ROM version but the CD version, just called *Cobra*, and not based on

Astaroth has nothing on this. I bought the game on a Monday evening. Tuesday 8:00pm it was completed. Yup, *Cobra* is one mean game. Although it's less of a graphics and sound demo than *Dragon's Lair*, it still looks, and mostly sounds, like a CD-ROM demo. Oh and it's an adventure — in Japanese, of course!

One game that I'm especially looking out for is *Altered Beast*. This could prove to be a testing point between the Engine and the Mega Drive. Graphically the Engine's actually not up to the Sega machine, but playability is the Engine's strong point. In fact, Sega's games are appearing quite regularly on the Engine: *Out Run*, *Shinobi*, *Afterburner*, *Thunder Blade* etc.

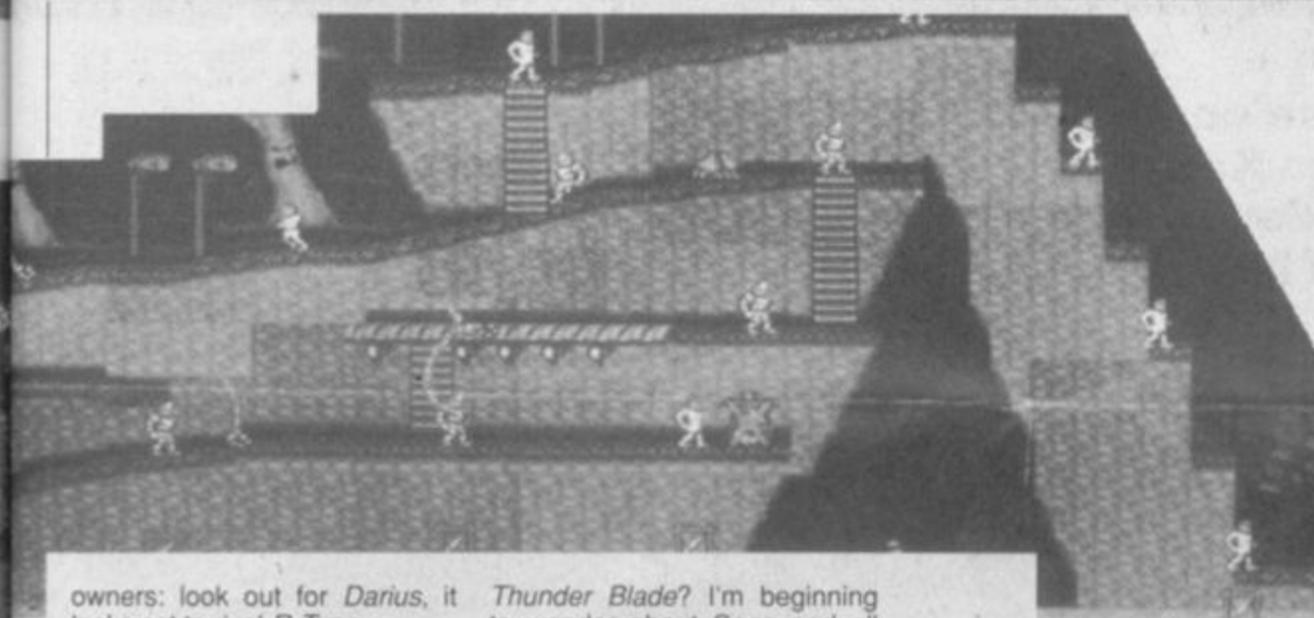
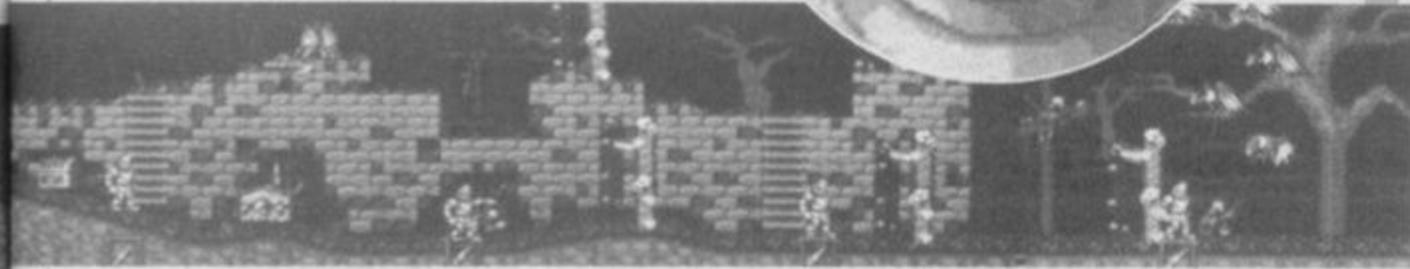
Staying with the Engine,

off. (Bit like the Amiga's clock add-on.)

Because of the size of the Engine's media (the ROM card), this method had not been used before. Hudson's system fits on the expansion port at the back of the machine so there may be a problem with some Engines over here. However, Micro Media tell me that they're looking into producing dual expansion ribbons for PAL TV users.

What about CD-ROM? Well no, it probably wouldn't fit into the CD-ROM, but the CD-ROM has got its own back-up system in the RAM interface (and not a lot of people know that). Looks like RPGs can finally make it to the Engine. (Boo, I hate Japanese RPGs, after all, when did you last see a cutesy zombie?). A quick tip for Engine

JAPAN



A lively selection of maps from two Japanese games: screens at the top from the new *Ghouls 'n' Ghosts*, and four levels from *Altered Beast*. The roundels are also graphics from *Altered Beast*.

owners: look out for *Darius*, it looks set to rival *R-Type*.

Onto other machines. The Nintendo 8-bit has, once again, gone into *Dragon Quest* mania. This fourth one will probably have kids killing their parents for cash to buy it. You know Japan! The last one had kids bunking school on the day it was released, and adults not going to work! I can't see what the fuss's about, though. Also on the Nintendo front, prepare yourself for the coming of another baseball season. Although the real season has already started, the games are still in their starting blocks. This year there are 14 of the damn things coming out. Japanese eccentricities... I guess they balance out the hard work, global monetary domination, and the destruction of the motorcar and bike industry. Nyah Nyah. Oh, and *Hostages* will be coming out in November for the Nintendo.

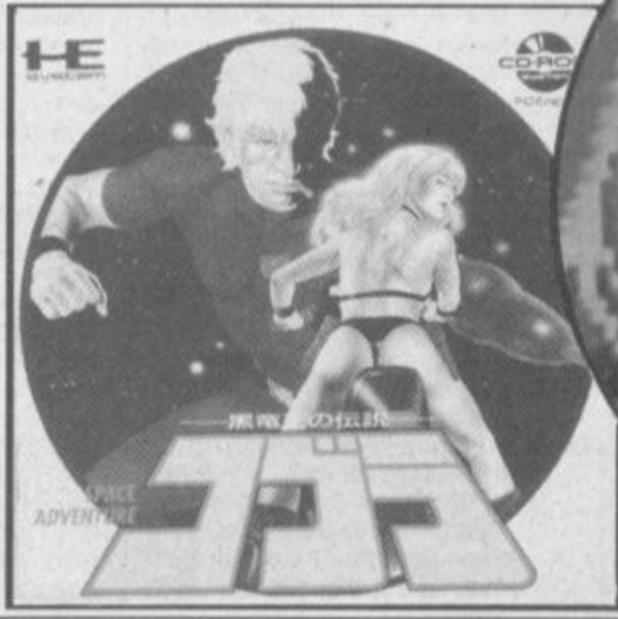
The Mega Drive has, out of nowhere, brought out *Daimakaimura*. *Ghouls 'n' Ghosts* to you. And it looks awesome. The graphics are of pure arcade quality and comparing them to the arcade version seems pointless: you won't spot any difference. As for how it plays, we'll all have to wait until August. Also coming out for the first of the two 16-bits is *Super Hang-On* and *Super Masters*. Remember *Super*

Thunder Blade? I'm beginning to wonder about Sega and all their Supers. Also, watch out for *World Cup Soccer* and *Fist of the North Star* — the comic has just come out in Britain, complete with appalling translation and lots of blood. *Fist's* predecessor appeared on British Segas as *Black Belt*.

And finally, following last month's Game Boy story, Sega and Atari are launching hand-held machines. The Sega machine has gone right back to the Game & Watch roots of one machine, one game, no cartridges. Still, they only cost about £15 so that's not too bad a price and cheaper than most Amiga games. The games are

Out Run *F-1*, *Submarine Wars* and *SDI*. And you may even see them in the Virgin Megastores, thanks to Richard Branson's importing console deal with Japan.

Till next month, sayonara.



STAR-SPANGLED SOFTWARE

Paul Rigby takes a look at the phenomenon of American imports. TGM's regular columnist tells about shadow software, what's out, and where to get it from...

Pick up any computer magazine with a leisure software section and you will encounter such names as Ocean and US Gold, American-based companies such as MicroProse and Electronic Arts, a sprinkling of European and Antipodean software houses and the Japanese console phenomenon.

While basking in this comfortable state of familiarity you may be surprised to learn that, within foreign shores, there is another large, thriving software industry producing quality, innovative and sometimes revolutionary products. Yet you have probably heard little or nothing about them.

The principle country which houses this 'shadow' software market is the USA. However, there are other countries, such as Japan, who have an increasing shadow home market (and I am not referring to consoles here). But for the moment all such products tend to filter towards the more mature American arena.

When I describe these home markets as 'shadow' markets what I mean is that the said products are, in the main, researched, designed and marketed (at least initially) for the home market (a possible UK parallel being home-produced adventure games). With national economies and the large number of computer literate users in the USA and Japan, the shadow software market does very well thank you. There is no pressing need to export the products to the likes of Europe.

In the case of the USA this is amplified by several contributory factors such as the USA having a long history of serious, disk-based software with a higher shelf life. Thus shadow software houses have been able to survive the turbulent and periodic market slumps by being able to fall back on the steady, mature software buyer. That is, the person who purchases disk-based adventures, RPGs and strategy games.

In this country and, in fact, Western Europe as a whole we are only now seeing serious attention being paid to the latter software categories by the likes of US Gold and Ocean. Companies who have been hampered by the popularity of tape-based software.

But what form does the shadow software take?

The shadow unveiled

Well, you may have heard of several examples filtering through as imports from obscure sources. One or two popular and familiar titles used to be obscure, importware. The Ultima series is a good example, made popular with MicroProse's backing.

I brought two pieces of importware to the notice of the UK

gamesplayer when I recently reviewed (elsewhere) two games called *Breach* and *Paladin* from a US



shadow software house called Omnitrend. Both of these games have been snapped up and will now be distributed by Artronic. Other cases have occurred where a European distributor has grasped, with both hands, a possibly juicy piece of shadow software. So you may find a piece of shadow software being monitored (for good or bad reviews, sales performance, etc) by outside sources for a short period before any formal approach is made to the shadow software house. But this is all rather general. Let's look a little more closely at a few of the players in the game whose teams always play at home.

Simulations Canada, or Sim Can to the streetwise, are, as you may have guessed, based in Canada. They deal largely in wargames. No surprises so far. Fine — but how many computer-based wargames have you played without graphics? Sim Can's whole gaming policy revolves around the principle of the much-heated subject of the 'Fog of War'. Which, basically, means that the player, as the commanding officer, is severely restricted in his supply of intelligence regarding the enemy (your opponent's strength and location, for example), as well as having limited observation about what the enemy is up to and having more than your fair share of bad luck. In other words, a true simulation of military combat.

The ADVENTURE STRATEGY ROLEPLAY Column



GRAND FLEET

Tactical Naval Combat
in the North Sea, 1914-1918



Star-spangled: Masterplay's Star Saga: One packaging (left), First Row's unusual DIY TV show game, Prime Time, (top), and Simulations Canada's Grand Fleet

As Steve Newburg, President of Sim Can has said: '...when your carefully planned attack goes wrong, welcome to the real world. Do you really want to know everything about your forces and the enemy's? If so, why are you playing a computer game? Board games are great at letting you know pretty much everything and they cost a lot less.'

Which is why Sim Can games are, largely, text-based. Feeding you a variety of reports from your officers, recce aircraft and so on. You try your best to keep track of all the movements by using the included map and counters (or laminated map sheets and pencils). Sim Can games are a breed apart and are, generally, an acquired taste for all of those strategy players so used to graphic-based wargames.

Roleplaying games too

The dedicated American RPG player waits with bated breath for the next in the series of two well-known products. The first is the latest *Ultima* game. The second is the next *Wizardry* RPG. Sir-Tech's *Wizardry* may be familiar to one or two of you out there. They did try to introduce the series to the UK many years ago but high prices and bad timing let them down, so they retreated to the USA. However, *Wizardry* is recognised as one of the top RPGs in the field — ranking along *Ultima* for sheer playability and quality of gameplay (even though the graphics are terrible). The series has

already reached *Wizardry V* on the PC while C64 conversions are catching up — *Wizardry III* having just been released.

One of *Wizardry's* main contributing authors, Andrew Greenberg, recently formed his own company, known as Masterplay. Their first product just happens to be extraordinary. *Star Saga: One* is, probably, the very first multiplayer computer RPG. Each player takes control of an individual character (a maximum of six playing) within the same game world. Each character has his own quest and it is possible to travel the game world and never see another player. Although cooperation soon plays a part between players. *Star Saga: One* is, in a word, revolutionary. In fact Greenberg has termed it as 'Participation Drama' to set it apart from other RPGs.

Koei are another shadow software house, but this time from Japan. It is strange to think of 'serious' software emanating from this source. However, Koei have gone down a storm in their home country, as well as the USA, for their series of strategy games which allow the player to take economic, diplomatic and military decisions. All of their creations are based upon the historical East. Scenarios include the second century Japan and sixteenth century China.

Paragon Software are about to step out of the shadows. Having previously published their adventure games in the USA, Paragon have been picked up by MicroProse. So a European debut cannot be far away. Two titles figure in the deal, at the moment. The first, *Twilight's Ransom*, involves you on a frantic search for your girlfriend who has been kidnapped by terrorists. The second, *Guardians of Infinity: To Save Kennedy*, is an adventure full of secret agents, time travel and JFK. The latter adventure was written in the artificial intelligence language, Prolog (the first of its kind to my knowledge), so it has the capability to wipe the floor with Infocom — we shall see.

There are many other shadow software companies and games which I have not had space to mention. But, if the above makes your mouth water, you will be pleased to learn that I will be taking a regular look at the reams of importware available, as well as news of new products. As you may have guessed, the one drawback with importware is the high price. However, many of these games are worth it. But which ones, you ask? Stick with The Games Machine to find out.

Where can you buy these weird and wonderful games? Well, you can buy direct from the USA. However, there are a small number of dedicated UK outlets who specialise in this form of software, contact:

**Strategic Plus Software, PO Box 8,
Hampton, Middlesex TW12 3XA.**

Tel: (01) 979 2987.

**Computer Adventure World, Bank
Buildings, 1A Charing Cross,
Birkenhead L41 6EJ.**

Tel: (051) 666 1132.

**Software Circus, The Plaza On Oxford
Street, London W1.**

Tel: (01) 436 2811.

I do know that Strategic Plus and Computer Adventure World have a catalogue (including updates) but Software Circus, at the time of writing, do not. However, please give them a ring to check.

LARRY'S BACK!

Going over to your friend's house to see his latest game can be fun — but think how great it is when you're visiting Sierra On-Line in California. Marshal M Rosenthal, looks at their newest games — including *Leisure Suit Larry 3*.

Colonel's Bequest begins another 3-D animated adventure, one crafted by Roberta Williams of *Quest* fame. Take parts of Mel Brooks and Agatha Christie, and the result is a 1920s murder mystery set on a plantation mansion deep in the Bayou of New Orleans. There's a rumour of Civil War treasure, and perhaps a killer to discover — let's hope young Laura Bow is up to the task. A new feature is that the game runs in real time — events occur whether you're there to witness them or not.

Jim Walls leaves the police scene to bring us *Codename: Ice Man*. Play the part of Johnny Westland, one of the elite US Navy SEALs (SEa, Air, Land Service). Your mission is to rescue the Ambassador who's held hostage in North Africa. The new Sierra Command Interface (SCI) gives this animated adventure great music and double the graphic resolution of before (a feature that can be found now in all of Sierra's new products). A new wrinkle has been added — simulation. Part of your mission will require piloting an advanced nuclear submarine to your destination, avoiding detection and destroying enemies.

As a bit of change of pace, there's *Hoyle's Book Of Games*. Give a go at crazy eights, cribbage, solitaire and five other favourites. With a difference, of course, because you're playing against three extremely animated opponents. Your point of view is that of sitting down at a card table, your hand face up (everyone else has their cards face down). And don't take too long to make a move, or one of your opponents will give you a VERY dirty look! The cards, by the way, are not quite as inanimate as you might think.

King Arthur And The Search For The Holy Grail is an animated adventure that draws heavily on the legend. There's Arthur, his sword Excalibur, Guinevere, Sir Lancelot and Merlin. Plus plenty of trouble, as Arthur's quest takes him throughout Camelot and the Holy Land. Designed by Christy Marx and Peter Ledger (a husband and wife team), Arthur benefits from their experience and expertise as writers and cartoon animators.

Finally (I know you've been waiting for this) there's *Leisure Suit Larry 3*. Info here is sketchy, but it appears that poor Larry's marriage is on the rocks. A new character, Passionate Patty, makes her debut — and she'll be figuring pretty heavily in the action. In fact, you'll be controlling her some of the time rather than just old Larry (a good opportunity to see the woman's point of view). How to describe PP? I've heard that she's a (shudder) female Larry.

All games are out in the States this Autumn, so expect a Christmas UK release.

PRESS ANY KEY

Launch Date
1 August



Adventure Helpline

HINTS TIPS & REVIEWS
COMPETITIONS
WITH SOFTWARE PRIZES

TELEPHONE:
0898 338 933

25p per min Off Peak
38p per min Peak Time

If you don't need us now,
think of the times you've needed help.
KEEP THIS NUMBER

Ratings — The Whole Story

Over the page the reviews start; Paul Rigby explains the ratings...

Due to lack of space last month, I was unable to explain what on earth the ratings meant. I now hope to rectify the situation. As this column covers adventures, strategy and RPGs (three game categories with fundamental differences) I thought it would be foolish to give meaningless general ratings. I have, therefore, adopted a different ratings format for each category. More complicated? Maybe. However, they will provide more information than a simple 'Graphics' or 'Sound' rating.

ADVENTURE RATINGS

- **Presentation:** graphics (quality, relevance, atmosphere conveyed), packaging, plus things like: does the adventure have a whopping graphics window so there's only room for one line of text?
- **Interaction:** encounters with other characters and the parser quality.
- **Atmosphere:** quality of the storyline. Does it make you feel involved?
- **System:** puzzle quality. How the whole game hangs together. Does the game consist of hours of boredom with a few minutes of excitement? Bug-ridden? Spelling mistakes?
- **Overall:** taking all the above into

account, plus the price.

RPG RATINGS

- **Attributes:** character complexities. Choice of different races? Amount of skills available.
- **Presentation:** graphics, interest of game world, organisation of onscreen information.
- **Interaction:** quality of parser, if any. Depth of interaction with characters.
- **Atmosphere:** involving storyline.
- **Engagement:** combat system, magic system.
- **Overall:** taking all the above into account, plus the price.

STRATEGY RATINGS

- **Presentation:** packaging, graphics, organisation of screen info.
- **AI:** quality of artificial intelligence.
- **Atmosphere:** Involved? Good history or scene setting information.
- **Engagement:** quality of combat system.
- **System:** does the game have you on the edge of your seat? Bugs?
- **Overall:** taking all the above into account, plus the price.



Computer Adventure World



ADVENTURES-FANTASY-WARGAMES-STRATEGY

LATEST PROGRAMMES - INCLUDING IMPORTED PRODUCTS:

- REVIEWED THIS ISSUE: STAR SAGA I-IBM .. £69 : PRIME TIME- ST/ AMIGA .. £32-50 : NORTHERN FLEET- ST/IBM .. £35-00
 FROM SIM CANADA: GRAND FLEET: WWI NAVAL COMBAT: MANY SCENARIOS PLUS DESIGN OWN - ST & IBM £35-00
 MOSCOW CAMPAIGN: GERMAN CENTRAL ASSAULT ON RUSSIA IN WWII - ST, IBM & C64 £35-00
 KURSK: THE BIGGEST ARMORED BATTLE IN HISTORY: WWII-EAST FRONT ST, IBM & C64 £35-00
 OPERATION OVERLORD: THE ALLIED INVASION OF EUROPE IN WWII - ST, IBM & C64 £35-00
 ROMMEL AT GAZALA: FLUID MECHANIZED COMBAT IN N.W. AFRICA WWII- ST, IBM, C64 £35-00
 SEVENTH FLEET: MODERN NAVAL CONFRONTATION USA V. USSR IN PACIFIC- ST & IBM £35-00
 SIM CITY ... DESIGN, CONSTRUCT AND ADMINISTER YOUR OWN CITY IN THIS FASCINATING GAME - AMIGA £35-00
 FIRE KING ... 1st. FANTASY GRAPHIC RPG/ADVENTURE FROM SSG: LOTS OF COMBAT AND ACTION - C64 £35-00
 MIGHT & MAGIC II ... EXCELLENT LARGE SCALE & COMPLEX FANTASY GRAPHIC RPG: MANY QUESTS - IBM £35-00
 LEGEND ... FANTASY GRAPHIC WARGAME: 64 ARMY TYPES, SEIGES, ASSASSINS & MORE: 1 / 2 PLAYER - ST £18-50
 BORODINO ... REALISTIC NAPOLEONIC MULTI SCREEN WARGAME: REAL PERSPECTIVE BATTLE VIEWS - ST £26-00
 WIZARDRY SERIES ... CLASSIC DUNGEON GRAPHIC RPG: HIGHLY DETAILED & EXTENSIVE MAPPING REQUIRED:
 PARTY OF 6: PARTS I, II & III AVAILABLE ON C64: PARTS I TO V ON IBM & APPLE: EACH £39-50
 SIERRA ADVENTURE BARGAINS: LATEST TITLES - KINGS QUEST IV OR SPACE QUEST III - ON THE IBM EACH ... £17-50
 MANHUNTER NEW YORK OR POLICE QUEST OR SPACE QUEST OR GOLD RUSH - ON ST, AMIGA & IBM EACH £15-00
 LATEST 'OFFICIAL' HINT BOOKS: ULTIMA V .. £9 OR III / IV EACH .. £8 : DUNGEONMASTER .. £9 : POLICE QUEST .. £7
 KINGS QUEST I, II OR III EACH .. £7 : BARDS TALE I, II OR III EACH .. £6-50 : MARS SAGA .. £8 : MIGHT & MAGIC I .. £10-50
 LEISURE SUIT LARRY I .. £9 : SENTINEL WORLDS I .. £9 : 'QUEST FOR CLUES' - 50 DETAILED SOLUTIONS - ONLY ... £12-95

SEND A4 SIZE 38p STAMPED ENVELOPE FOR FREE CATALOG & VOUCHER

POSTAGE: UK IS FREE: PER GAME EUROPE £2-00 OR ELSEWHERE £4-00: SENT 1st CLASS / AIR MAIL
 PAYMENT: VISA-MASTERCARD/ACCESS-UK CHEQUE OR POSTAL ORDER-EUROCHEQUE-REG'D CASH



Computer Adventure World

Bank Buildings, 1A Charing Cross, Birkenhead L41 6EJ
 Telephone: 051-666 1132



THE COMPI LATION OF EXCELLENCE



CAPTAIN BLOOD "...the most stylishly evocative game the ST has yet seen". Evocative graphics coupled with music by Jean-Michel Jarre have helped make Captain Blood the most eagerly awaited French 16-bit computer game ever. - *Carriers Machine*
ARKANOID II "The screens are well designed and will have you burning the midnight oil in order to reach Doh. A polished game that will appeal to all fans of the original". - *ST Action*
XENON "The graphics are superb, the installations and explosions are wonderfully drawn". - *A.C.E.*
CRAZY CARS "This must be the ultimate car game". - *ST World*
SUPER HANG ON "The definitive racing game ever for the ST". - *ST Action*
 CRAZY CARS replaces SUPER HANG ON on the AMIGA.



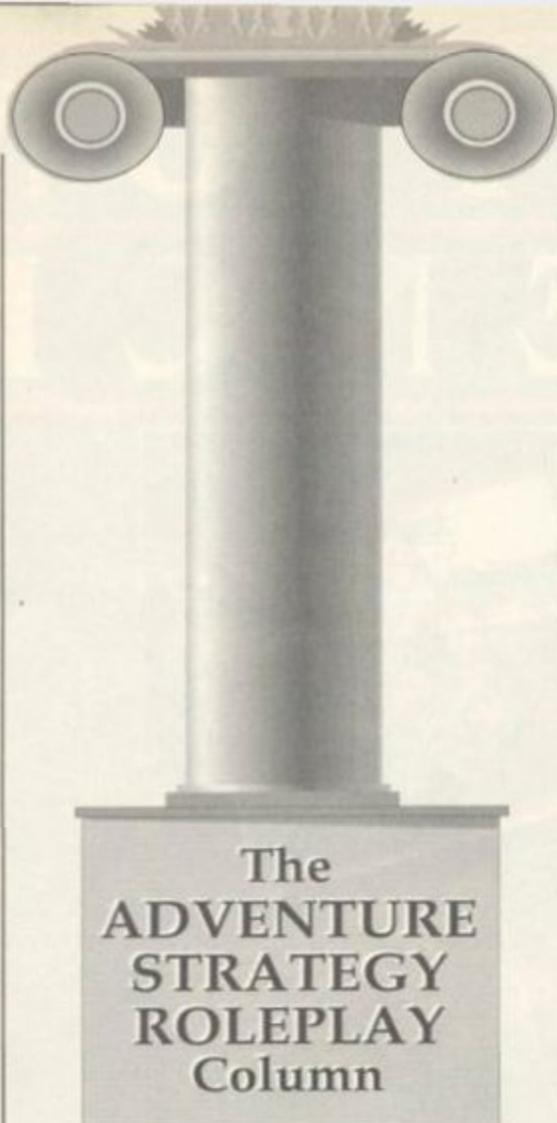
4 OUTSTANDING
GAMES IN
ONE
SPECIAL PACK



AMIGA
(CRAZY CARS replaces SUPER HANG ON)

ATARI ST

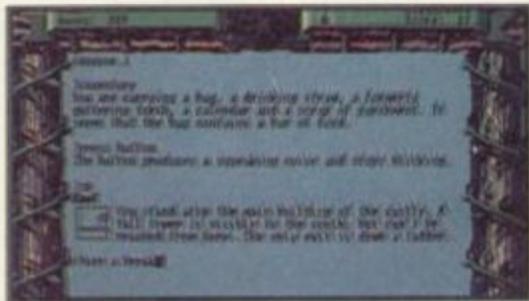
24.99



The
ADVENTURE
STRATEGY
ROLEPLAY
Column

Amiga £24.99

ZORK ZERO Infocom



The Great Underground Empire is being evacuated, the inhabitants are fleeing in terror and the Royal Family have all but been disposed of. This is the result of the dreaded curse issued by Megaboz the wizard.

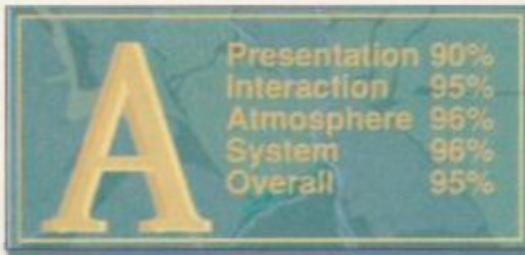
Although the curse has been delayed by the Royal magicians it cannot be removed. No-one else has been able to banish the curse and claim the reward offered by Wurb Flathead, the current occupant of the throne. You are the last chance. Yet what can a peasant from an obscure village, in an out-of-the-way province, do to save the Empire before Curse Day arrives? Well, maybe the scrap of parchment that one of your ancestors found, belonging to Megaboz himself, could be of some use.

After actually 'playing' the said ancestor during a brief prologue (good idea that) during which you witness Megaboz cast the curse, the game fast forwards to the day of the curse. You awake from the Castle floor and immediately notice that everyone has fled — everyone, that is, except the Court Jester. This chap pops up when you least expect him, giving you clues and riddles to aid your progress but also slipping in a few deadly tricks to keep you on your toes.

Although Activision have classified *Zork*

Zero as an 'Infocom Graphic', it's more of a text adventure with the occasional picture thrown in for good measure. The adventure is big. However, onscreen mapping is available to ease your search of the area. As well as the usual puzzles, and the unusual riddles provided by the Jester there are graphical puzzles which provide a touch of variety. The text side of the game benefits from Infocom's improved parser adopted by Infocom's other recent adventures. The additional contents of Infocom adventures have always achieved a fascination for many devotees. In *Zork Zero* you are given the infamous scrap of Megaboz's parchment, a Flathead Calendar for 883 (which contains one or two clues) and a set of phase-two blueprints for the Rockville Estates.

Zork Zero is, frankly, superb. The adventure is a joy to play and, while being entertained with Steve Meretzky's unique humour and becoming totally absorbed by the game's atmosphere, you will experience a range of excellent puzzles which vary widely in difficulty. I must say that I have been totally impressed by Infocom's recent releases. They have been going through some shaky times recently but they are now looking like the Infocom of old.



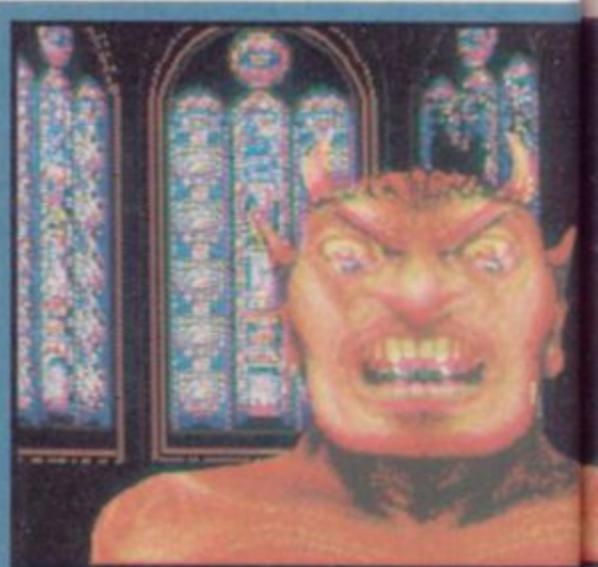
Atari ST, Amiga £9.95

DUNGEON MASTER EDITOR Softex

The *Dungeon Master Editor* is, basically, a cheat program for FTL's *Dungeon Master*. Features include being able to create new doors and passages in walls, remove secret doors, open doors without a key and print out the plans in all dungeon levels. In addition to this is a short hints and tips section. The whole pack arrives in a re-sealable plastic bag, complete with a single disk and a 20-page manual. The difference between the ST and Amiga versions is generally one of screen presentation. The Amiga having the better presentation than the ST. However, they both do the job.

Right that's the facts, now the comments. When I first heard about this program I was none to pleased. How anyone can cheat their way through an excellent game, such as *Dungeon Master*, and then honestly say that they have finished it is beyond me. Why spend your cash to buy the game in the first place? By all means, consult hints and tips to guide your way around any difficulties. But cheating? What's the point? Anyone who actually enjoys playing RPGs will not buy this program. Anybody else will probably not buy *Dungeon Master* in the first place. Unless they revel in some sort of egotistical delusion of 'defeating the computer'. My advice? Save your money for the sequel. The overall mark's for the few hints and tips.

UTILITY Overall 15%



Atari ST, Amiga £29.95

PERSONAL NIGHTMARE Horrorsoft

Personal Nightmare, an everyday tale of possessed villagers, was designed on Horrorsoft's own game system — Agos. You play the Vicar's son trying to free

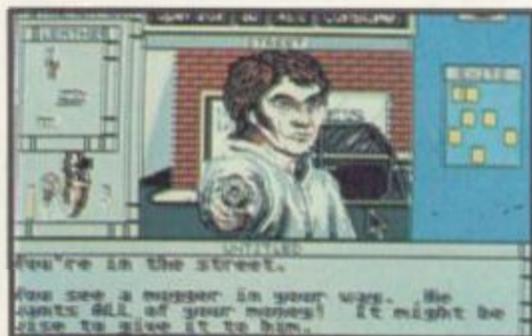


Atari ST, Amiga £24.99

DEJA VU II Mindscape/ICOM

You're up to your neck in debt. Trouble is, the debt collectors are the hulking great cronies of Tony Malone — mobster extraordinaire. You've got seven days to find the cash. However, Malone's boys are watching your every step so you don't get any ideas of skipping town.

Deja Vu II comes with a 14-page manual and a reference card. The ST version comes on two disks while the Amiga arrives on one. The difference between the two is that they both have a slightly differ-



Deja Vu? Mugged by the original on the streets of the Atari ST version

your village from the evil presence.

Graphics are quite good with realtime animation. So if you sat in the bar of the Dog & Dog and did nothing, life would revolve (animate?) around you. Items may be picked up from the screen while open doors actually open onscreen. Extensive use is, therefore, made of the mouse. The ST (five disks) and Amiga (three disks) versions are very similar but the Amiga has slightly better graphics and sound. While the system is pretty good, the actual adventure is only so-so. The game appears increasingly shallow the longer you play it. Horrorsoft have

great potential, and *Personal Nightmare* is a good development game. However, they will have to improve the gameplay with their next release.



Terror on the ST becomes a Personal Nightmare for someone

A	Presentation	76%
	Interaction	74%
	Atmosphere	70%
	System	80%
	Overall	73%

ent screen presentation while the Amiga has improved sound effects. *Deja Vu II* is enjoyable but rather linear. However, my one big disappointment is that ICOM did not see fit to improve their system. It can be extremely frustrating as there are so few commands to choose from.



An impatient train conductor wants your Chicago ticket fare in the unimproved *Deja Vu II* on the Amiga

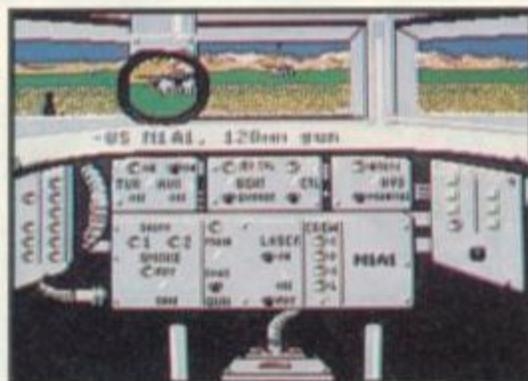
A	Presentation	92%
	Interaction	45%
	Atmosphere	73%
	System	68%
	Overall	78%

PC £24.99

STEEL THUNDER

Accolade

Steel Thunder comes with two disks, two keyboard overlays for both PC keyboards, a 48-page manual and an anti-piracy code sheet. You take command of one of four armoured vehicles (Abrams, M60, M48 Patton and the M3 Bradley. The latter being a welcome inclusion). There are 24 day and night missions based in either West



Germany, Cuba or Syria. Selecting your three crew is important as each man has his own skill gradings which directly affect your performance.

The screen is mostly filled with the particular crew station's instrumentation. The view to the world outside is restricted to a small band along the top of the screen. Graphics, while not staggering, do the job well. While not a true simulation, *Steel Thunder* is still fun to play. The choice of vehicles and the variety in missions ensure lasting interest.

S	Presentation	83%
	AI	77%
	Atmosphere	80%
	Engagement	73%
	System	81%
	Overall	78%

PC £29.99
(also on C64 £24.99)

THE ULTIMA TRILOGY

Origin

Good grief, this one brings back some memories. The first computer RPG that I ever tackled was *Ultima I*, back in the days when people responded to computer RPGs with either a sneer or a vacant expression.

Origin are giving you three for the price of one here. *Ultima I*, which is displayed in glorious EGA, and the CGA-only *Ultima III* are familiar to many. However, it is the appearance of *Ultima II* which may interest roleplayers. Rumours abounded that Richard Garriot (Lord British himself) was disappointed with the original *Ultima II* (which was developed by Sierra On-Line, of all people) and that he was going to re-design it for general release (I have only seen Sierra's *Ultima II* on the ST). This version may be the re-designed version. However, if it is, why is it in old-fashioned CGA? I'll get back to you on this one, when the fog clears.

The pack comes on four disks, a 100-page manual, a quickstart leaflet, a player's guide and three colour maps. One for each game.

Beginners could not find a better introduction into the world of computer RPGs. Even if you are an experienced RPG player, and have missed any of these games — treat yourself to an interactive history lesson. It is worth it just to play *Ultima II* — I know I will. Primitive they are but the Trilogy is nostalgia at its best.

R	Attributes	64%
	Presentation	58%
	Atmosphere	65%
	Interaction	40%
	Engagement	63%
	Overall	75%

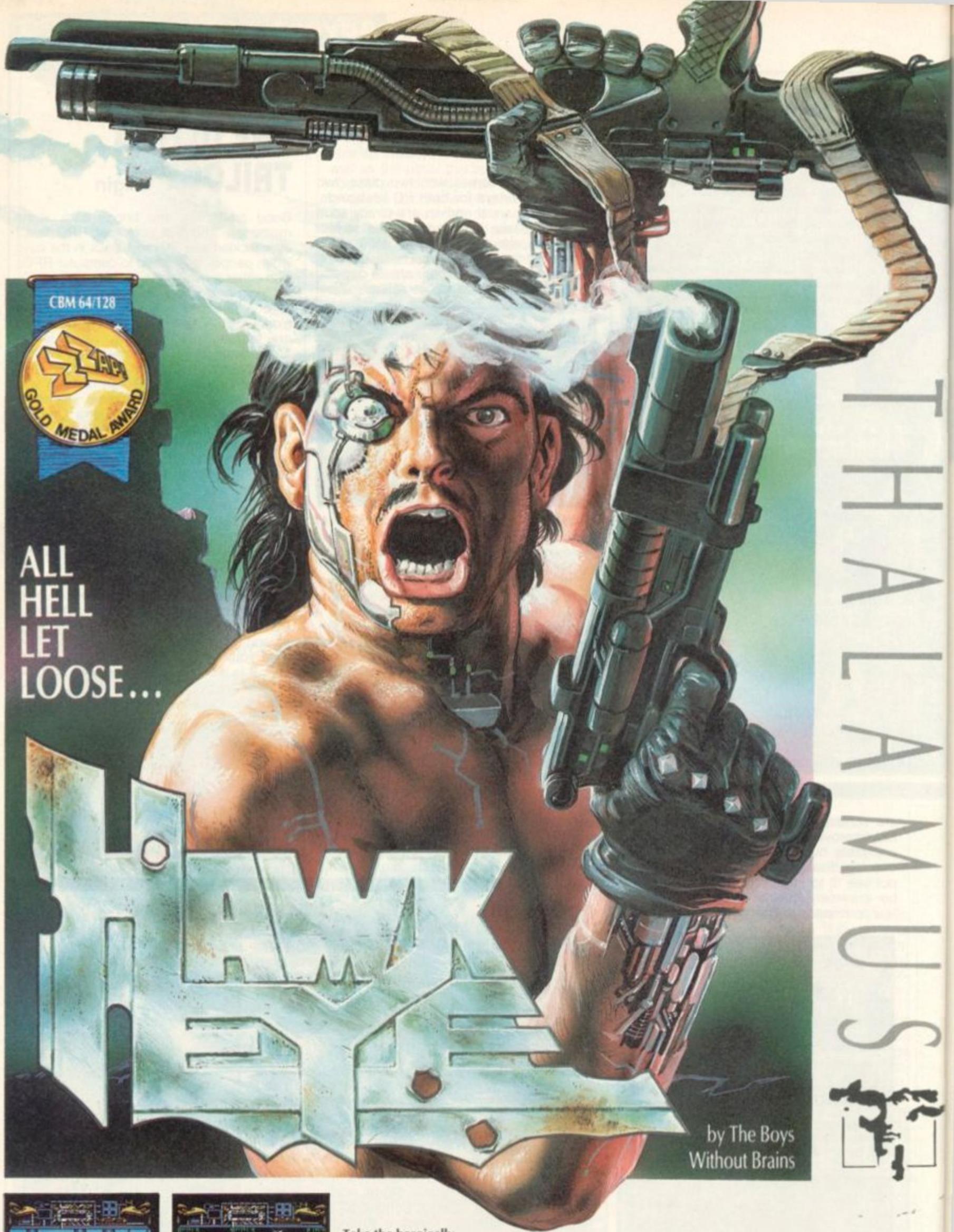
FUTURE SHOCKS!

I must say that I have never been happy with SSI's *Pool of Radiance*. Their first AD&D game appeared, to me, to be more akin to the basic D&D. Many character classes were unavailable (such as Paladin) and many of the spells were missing (such as raise dead). However, I have been playing through the Beta Test version of the second in the AD&D series, *Curse of the Azure Bonds* (CAB), and it looks like these criticisms have been allayed. Six extra character classes, 20 extra high-level spells and a bunch of new monsters make CAB a very promising product. It is possible that I will have a full review next month. Stay tuned.

Staying with SSI, I have also had a glimpse at their latest strategy game *Storm Across Europe*. SSI have taken a Colonial Conquest/Risk-type presentation to give the player a strategic wargame covering the whole second world war in Europe. Each turn covers one season, beginning in Autumn 1939. With a user-interface that looks decidedly foreign to SSI — friendly, *Storm Across Europe* is another promising release.



Slick and slinky action: the alluring packaging for SSI's *Curse of the Azure Bonds*



CBM 64/128



ALL
HELL
LET
LOOSE...

THALAMUS


by The Boys
Without Brains



Take the heroically
bronzed HAWKEYE through 12 individually loaded levels
of non-stop combat action, featuring real parallax
scrolling, dazzling graphics and sound destined to give
your ears the treat of their lives.

ATARI ST & AMIGA £19.99

An addictive and beautifully presented shoot 'em up of the highest calibre! GOLD MEDAL Zzap! 64 CBM 64/128

Thalamus, 1 Saturn House, Calleva Park, Aldermaston, Berkshire RG7 4QW ☎ (0)356) 77261/2

The Games machine

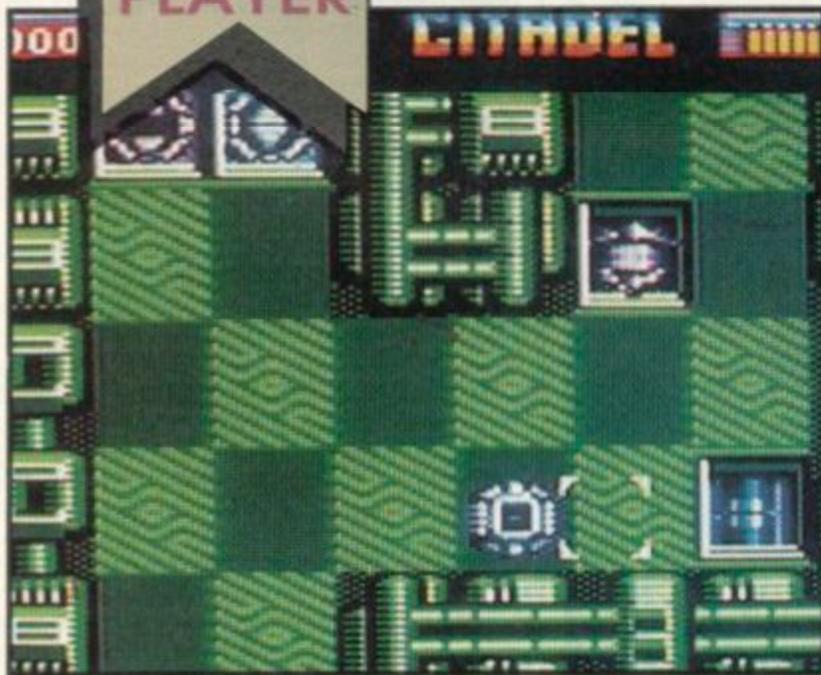
REVIEWS

The Games machine

STAR PLAYER

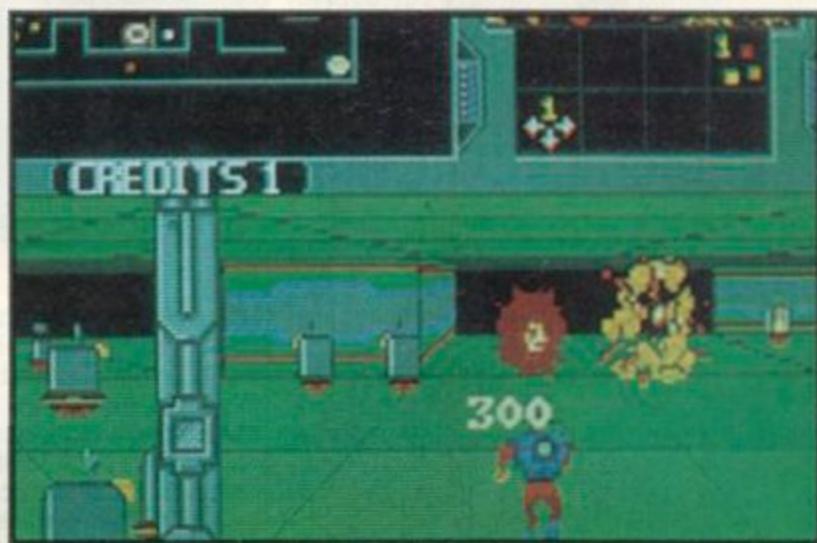
94 ■ CITADEL

Electric Dreams have done it again. Last month Wicked received a well deserved Top Score accolade, now Martin Walker's latest game (his last was Hunter's Moon) appears in all its glory. So power up your Monitor remote device and prepare to battle your way through a city full of defence drones and gun emplacements, or alternatively the not so brave can read the review.



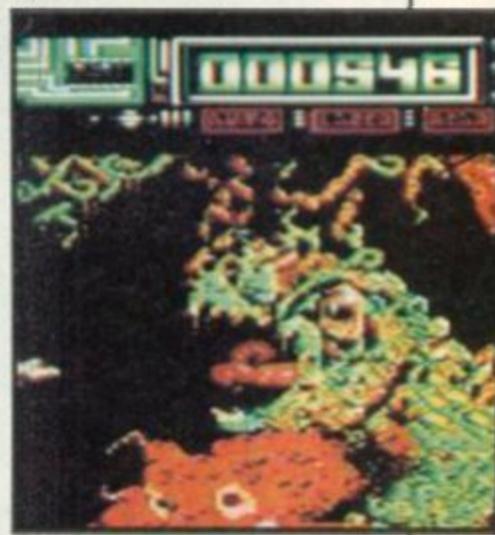
88 ■ DOMINATOR

Pinner's pride and joy have been out of the limelight for a while, Dominator is System 3's latest offering. Set in the guts of a greedy alien creature the brave adventurer must destroy it before it noshes Earth Fantastic voyaging fellow intestinal enzymes.



102 ■ XYBOTS

Major Rock Hardy and Captain Ace Gunn are the clean-cut hero types chosen to defend Earth's honour against the Xybot overlords and their minions in this famous split-screen actioner from the arcades. Join the battle of the century thanks to Tengen/Domark.



STAR UPDATES

So's not to confuse, although there were some excellent updates this month, none quite made the Star Update level. We eagerly await the end of the summer software slump...

AMIGA

African Raiders	96
Colossus Chess 10	101
Dominator	88
High Steel	101
Licence To Kill	100
MicroProse Soccer	102
Navy Moves	97
Phobia	104
Skweek	107
The Champ	108
Time Scanner	97
Xybots	102

ATARI ST

African Raiders	96
Astaroth	111
Buffalo Bill's Wild West	

Rodeo Games	112
Circus Attractions	107
Garfield-A Winters Tail	97
G.Nius	112
Jaws	89
Licence To Kill	100
Navy Moves	97
Savage	95
Skweek	107
Skyfox II	101
Sleeping Gods Lie	98
Time Runner	112
Xybots	102

COMMODORE 64/128

Baal	89
Citadel	94

Dominator	88
HATE	101
Jaws	89
Licence To Kill	100
Phobia	104
Red Heat	102
Rock Star Ate My Hamster	97
Spherical	107
Super Scramble Simulator	113

AMSTRAD CPC

Silkworm	103
Skweek	107
Super Scramble Simulator	113
The Games-Summer Edition	107
Time Scanner	97
Xybots	102

SPECTRUM

Jaws	89
Kenny Dalglish Socce Manager	103
Red Heat	102
Super Scramble Simulator	113
The Games-Summer Edition	107
Xybots	102

IBM PC

African Raiders	96
Circus Attractions	107

PC ENGINE

Alien Crush	94
Son, Son II	90

PRESS ANY KEY

Greedy guts eats something that disagrees with him

DOMINATOR

System 3

Famed for their highly successful oriental beat-'em-up games (namely *International Karate*, *IK+* and *Last Ninjas I and II*), Pinner's pride and joy now tell a terrible tale of 'orrible planet-munching monsters and very expensive spaceships which will probably be pranged into passing asteroids by the foolish player.

You're the brave volunteer chosen to battle a vast alien who — probably through no fault of his own, it was the way he was brought up — devours planets to keep up his strength (a bit like the Galactus character in *Marvel* comics). But there's a sinister purpose to this planet noshing, Mr Alien wants to become the most powerful being in the universe.

Now Earth is in danger of being gobbled up, so leaping into your spacecraft you head into battle. *Dominator* consists of four levels, with each path leading to an anatomical part of the beast to be destroyed. But don't think it's that easy, the galactic gourmet ain't too chuffed to have his culinary plans disturbed by a meddler like you, so as you zoom through the different guggy bits of organic matter various horrors attack without mercy.

In section one you're battling your way



Dominator faces the ordeal of alien digestive juices in the Commodore 64 version

you to continue. It's here that the Commodore 64 and Amiga versions diverge slightly (due to the fact that they were programmed by different teams). On the C64 Level Two boasts a mid-level frog who spits maggots, and a vast honeycomb area filled with vicious bees and hornets, with the final obstacle being a large yellow nodule. The Amiga's Level Two has mushy faces, large stinging tentacles and a huge



The Commodore 64 and Amiga versions differ from each other in game structure. Here, on the Amiga, an intestinal tract reveals honeycombs full of angry and vicious bees.

up a vertically scrolling screen flanked by the creature ribs, and from all angles nasty aliens bombard you. Bonuses are present (you need them) in the form of extra points, limited invincibility, smart bombs and extra lives. Extra weapons are handy, too, and rear-mounted cannon, auto-fire and a pulse cannon (among others) can be picked up to make mincemeat out of the icky hordes.

At the end of level one lies the creature's heart, and this must be destroyed to enable

bee-as its obstacles.

Level Three on the C64 is the 'metallic' level. Here, large gun turrets, tortuous mazes guarded by mobile guns and the occasional asteroid storm try destroying the battered ship as it attacks the end-of-level generator. On the Amiga a toothy problem faces you. Apart from the obligatory aliens there's a row of teeth perfectly capable of giving a dentist cardiac arrest. But once the end-of-level brain is reduced to a messy

The Games machine

STAR
PLAYER

C64/128

87%

£9.99
cass,
£14.99 disk

The usually blocky C64 graphics are surprisingly well defined here. We also found that the C64 game was slightly more playable than the Amiga version, but whichever format you own *Dominator* is well worth the asking price.

sludge, victory is almost at hand because the fourth and final level has been reached.

This is the Amiga's 'metallic' level, with a myriad of metal monsters preventing you from reaching the final challenge — a gigantic toad. Similar problems are faced on the C64, with particularly vicious aliens (including furry creatures resembling Tribbles) trying to stamp your card on the way to disintegrate the brain residing at the end of a long and harrowing journey.

On both machines playability is high — at first frustratingly so — but once the alien attack patterns have been learned (rest assured this will take a fair few games) the joystick is difficult to put down. Ship control

AMIGA

87%

£19.99

Presentation is damn near flawless, with graphics that are disgustingly realistic backed by great sound effects. We've seen it all before, but rarely so well implemented.

OTHER FORMATS

Available on most popular formats, *Dominator* should be available by the time you read this.



is responsive, scrolling is smooth and the enemy are vicious swine who fling out the bullets mercilessly. Buy *Dominator* today, Mark Cale needs the money to keep his second Ferrari on the road.

A giant frog acts as an end-of-level monster somewhere in the depths of a planet-eating alien. Only you and the Dominator can save Earth from a feast worse than death

No, it still isn't safe...

JAWS

Screen 7

Though released way back in 1975, *Jaws* still stands as one of Spielberg's most popular and successful movies, a great translation of Peter Benchley's original novel. It gave its name to an early Spectrum game in the days before official licences were thought of, but this one is based on the film's plot. You're Brodie, chief of police in the tourist town of Amity, played by Roy Scheider in the film.

Aboard the trawler *Orca*, with its owner, Quint, and Hooper, an oceanographic expert, status panels above and below the *Orca* graphic control much of the game's action. Though the main objective is to kill *Jaws*, Brodie has to keep his job by keeping the death toll down and as many beaches open as possible. To this end, there's a map, temperature/weather gauge, 'Mayorometer', and swimmer death count. These are given to keep track of *Jaws*'s actions as weather changes; using a map screen, beaches are opened and closed at will and the Mayor's reaction to deaths and closures measured on the Mayorometer — if it reaches the top Brodie's sacked.

Other than Quint and Hooper, Brodie also has the help of three divers. The special weapon required to kill *Jaws* has been split into four pieces and lost amid a reef. One-by-one, the divers — aboard submersible craft — explore the flick-screen undersea mazes, in search of the weapon parts and ammo. Nasty aquatic creatures are destroyed with a gun, flashing ones with mega-bullets, some leaving behind pieces of equipment (see box).

Ultimately, with the special weapon assembled, Brodie, Quint or Hooper faces *Jaws*, with four mega-bullets and 80 seconds in which to kill the monster.

Screen 7 have chosen a big name for their first release, but the flesh-eating name is virtually all there is to it. Much of the game consists of exploring a maze, shooting enemies and looking out for special items to collect — an aged format, and though *Jaws* is a passable game of the type, it hasn't been done particularly well. The 'strategy' of closing/opening beaches is little more than a filler to make it seem more substantial — keeping an eye on the displays helps break up the shoot-'em-up/maze action but it's limited, dull and — excuse the pun — lacks bite.

WL

£9.99
cass.
£14.99 disk

SPECTRUM
44%

Though maze floors and walls are a yellow/green/cyan patchwork, there's a nice spread of colour amongst the underwater creatures. They're compactly drawn, well animated, and mill about busily. Cleanly programmed, Spectrum *Jaws* (pictured right) isn't at all bad but the machine's had more

Jaws misses the mark on the Atari ST



VERSION UPDATES

COMMODORE 64/128

Baal

PSYCLAPSE £9.99 cass, £14.99 disk
Atari ST 81% — TGM015, Amiga 65% — TGM018

After the success of the ST version and the less enthusiastic welcome for the Amiga version, the first of the 8-Bit games now wings its way to our desks. *Baal* is still pretty playable, but due to the drop in the sound and graphic departments, the overall presentation is unfortunately dull. The ST version of *Baal* is certainly the best to date.

Machine update 61%



£19.99

ATARI ST
42%

A nice intro sequence — in a cinema, the Screen 7 logo spins as the famous pace-gathering *Jaws* music builds up, and a swimmer is swallowed in a bloody gulp — leads to sprite and background graphics which are badly drawn: undetailed, lacking in colour, with simple animation and overall crudity of design. Sound makes no attempt at getting something out of the ST.



£9.99

cass.
£14.99 disk

C64/128
43%

The Commodore misses out on the status and map screens, leaving just the maze shoot-'em-up, apparently due to memory restrictions — strange as there's nothing sophisticated about the game. Title music warbles irritatingly and sound effects are bleeps and

OTHER FORMATS

Amiga (£19.99), Amstrad (C64 prices)

A load of monkeyshine

SONSON II

Hudson Soft

The exact intricacies of the plot are unknown to us (we really must get around to learning Japanese sometime), but *Sonson II* follows the usual oriental scrolling platform gameplan in that the hero's friends have been captured by a corrupt magical beast and must be returned to safety. There's a difference, with the typical sickeningly cute good guys here though: they're based on the wild, wacky and horrendously dubbed characters of the television series, *Monkey* (broadcast a few years back on BBC2).

Yup, you get to play as being Monkey himself, the overly-yellow guy with a predilection for flying around on a nice camp pink cloud and beating people about the head with his size-changing stick.

His weapon plays an important part in the game (no comment) — jabbing it forward into the stomachs of the minions sends them rapidly away. The stick also smashes pots that, like the bad guys, reveal fruit and veg collected for various point values.

At intervals through the levels shops are found where a woman kindly swaps Zenny — money gained along with points — for helpful items such as extra life and magic energy. The latter is needed for the famed Monkey Magic which powers his flying cloud. As progress is made through the levels, Monkey's friends are rescued and numerous bad guys, including ever-stronger and more resilient end-of-level creatures, are beaten to a pulp till the mysterious ultimate enemy is faced.

Gaining some inspiration from *Super Mario Bros* — hitting the pots to gain fruit is a martial arts slant on the brick head-butting of Mario — *Sonson II* has its clever hidden bonus features and devious platform layouts. Shops, magic, many collectable items and tough adversaries to beat up all help expand a very used game style in the consoles market, but can't disguise the run, jump and collect that makes

up the majority of the gameplay.

Sonson II is one of the more playable works of the *Mario/Shinobi* school of game design, with the added 'bonus' of cutesy caricatures of the silly over-the-top Monkey characters so people lucky enough (what?!) to have seen the programme are likely to get more involved in the game. Experienced gamers may soon yawn at



Sonson's clichés but most will find it a fun and highly enjoyable Japanese romp.

WL

Monkey's magic? Well we wouldn't say the game's that good, but it's certainly fun and quite addictive



PC ENGINE
80%

ROM
card
£24.99

As befitting the game design, *Sonson II* is highly colourful, with bright, bold backgrounds and cartoon-like sprites. They may be too sweet and cuddly for some people, but you must admire the detail packed into the (generally) small characters. Animation is quite simplistic but, apart from the occasional mild jerkiness/juddering (unnoticeable while involved in a game), the multidirectional scrolling is smooth. Obvious jingly sound effects and happy kiddy music suit the game, though not necessarily the ears.

WORLDWIDE SOFTWARE



TELEPHONE
ORDER LINE
NORTH
0896 57004

SHIPPING COSTS:
POST AND PACKING IS FREE IN UK
EUROPE: 1.50 PER CASS/DISK FOR
NORMAL AIR MAIL
2.50 PER CASS/DISK FOR
EXPRESS AIRMAIL
OUTSIDE EUROPE: 2.00 PER
CASS/DISK FOR NORMAL AIRMAIL
3.00 PER CASS/DISK FOR
EXPRESS AIR MAIL



TELEPHONE
ORDER LINE
SOUTH
0602 252113

3D POOL	17.95 17.95	HAWKEYE	14.95 14.95	SPHERICAL	14.95 14.95
ADV FLIGHT TRAINER	17.95 17.95	HIGH STEEL	14.95 14.95	STARGLIDER II	17.95 17.95
AFRICAN RAIDERS	14.95 14.95	HOLLYWOOD		STEVE DAVIS	
AFTERBURNER	14.95 17.95	POKER PRO	18.75 18.75	SNOOKER	14.95 14.95
ARBORNE RANGER	17.95 17.95	JAWS	14.95 14.95	SUPER SCRAMBLE	14.95 14.95
ANNALS OF ROME	17.95 17.95	JOURNEY	- 22.95	TALESPIN	22.95 22.95
ARCHIPELAGOS	17.95 17.95	KENNEDY		TANK ATTACK	- 17.95
ASTAROTH	17.95 17.95	APPROACH	17.95 17.95	TARGHAN	17.95 17.95
BALANCE OF		K DALGLEISH MGR	14.95 14.95	TEST DRIVE 2	
POWER 1990	17.95 17.95	KEYBOARD/		TEST DRIVE 2	- 11.99
BARBARIAN II	17.95 17.95	COMPUTER COVER	6.99 6.99	TEST DRIVE 2	- 17.95
BATMAN	14.95 17.95	KICK OFF	14.95 14.95	THUNDERBIRDS	17.95 17.95
BATTLEHAWKS 1942	17.95 17.95	KRISTAL	22.95 22.95	TIME SCANNER	14.95 17.95
BEAM	17.95 17.95	KULT	17.95 17.95	TIMES OF LORE	17.95 17.95
BIO CHALLENGE	17.95 17.95	LAST NINJA 2	17.95 17.95	TOTAL ECLIPSE	17.95 17.95
BLACK CAULDRON	17.95 17.95	LEISURE SUIT		TV SPORT FOOTBALL	- 22.95
BLOOD MONEY	17.95 17.95	LARRY	14.95 14.95	TYPHOON THOMPSON	- 14.95
BLOODWYCHE	17.95 17.95	LEISURE SUIT		UNIV MIL SIM	17.95 17.95
BOOTIFUL BABE	11.99 -	LARRY 2	22.95 22.95	U S GOLD GIANTS	22.95 -
BRIDGE PLAYER		LICENCE TO KILL	17.95 17.95	VIGILANTE	11.99 11.99
2000	- 14.95	LITTLE COMPUTER		VINDICATORS	14.95 14.95
BUTCHER HILL	14.95 14.95	PEOPLE	11.99 11.99	VOYAGER	14.95 17.95
CASTLE WARRIOR	17.95 17.95	LOMBARD RAC		WAR IN MIDDLE	
CHAOS STRIKES		RALLY	17.95 17.95	EARTH	14.95 14.95
BACK	14.95 -	LORDS OF THE		WEC LE MANS	14.95 17.95
CHARIOTS OF		RISING SUN	- 22.95	WEIRD DREAMS	17.95 17.95
WRATH	17.95 17.95	MAN HUNTER		WICKED	14.95 17.95
CIRCUS		NEW YORK	22.95 22.95	XENOPHOBE	17.95 17.95
ATTRACTIONS	14.95 -	MASTER SOUND	28.95	XYBOTS	14.95 17.95
COLLOSUS		MICROPROSE		ZORK ZERO	22.95
CHESS X	17.95 17.95	SOCCER	17.95 17.95		
COSMIC PIRATES	14.95 17.95	MILLENIUM 22	17.95 17.95	JOYSTICKS	
CYBERNOID 2	14.95 14.95	NAVY MOVES	14.95 14.95	CHEETAH 125+	6.95
DARKSIDE	17.95 17.95	NEW ZEALAND STORY	14.95 17.95	CHEETAH MACH 1	10.95
DEJA VU	17.95 17.95	NIGHT DAWN	17.95 17.95	CHEETAH STAR	
DEMONS WINTER	17.95 17.95	OPERATION WOLF	14.95 17.95	PROBE	12.95
DIGICALC	29.95 29.95	PERSONAL		QUICKJOY	
DOMINATOR	14.95 14.95	NIGHTMARE	17.95 17.95	SUPERCHARGER	12.95
DRAGON NINJA	14.95 17.95	PHOBIA	17.95 17.95	COMP PRO 5000	11.99
DUNGEON MASTER		PIRATES	17.95 17.95	COMP PRO 5000	
EDITOR	7.99 7.99	POPULOUS	18.75 18.75	CLEAR	12.95
ELITE	17.95 17.95	POWERDROME	17.95 17.95	COMP PRO 5000	
EMMANUELLE	14.95 14.95	PRECIOUS METAL	17.95 17.95	EXTRA	14.95
F16 COMBAT		PREMIER		KONIX SPEEDKING	10.99
PILOT	17.95 17.95	COLLECTION	22.95 22.95	KONIX SPEEDKING	
F16 FALCON		RAMPAGE	- 17.95	AUTOFIRE	11.99
MISSION DISK	14.95 14.95	RED HEAT	14.95 17.95	CRUISER	8.99
F16 FALCON	17.95 17.95	RICK DANGEROUS	17.95 17.95	QUICKSHOT 2 TURBO	10.95
FIREBRIGADE		ROBOCOP	14.95 17.95		
(1 MEG)	- 22.95	ROCKET RANGER	17.95 17.95		
FLYING SHARK	- 17.95	RUN THE			
FORGOTTEN		GAUNTLET	14.95 17.95		
WORLDS	14.95 14.95	RUNNING MAN	17.95 17.95		
FOOTBALL MAN		RVF	17.95 17.95		
2 EXP KIT	9.99 9.99	S D I	14.95 17.95		
FUN SCHOOL 2		SAVAGE	17.95 17.95		
(6-8 YRS)	14.95 14.95	SCENERY DISK 9	11.99 11.99		
FUN SCHOOL 2		SHOGLUN	- 22.95		
(OVER 8 YRS)	14.95 14.95	SHOOT EM UP			
FUN SCHOOL 2		CONST SET	17.95 17.95		
(UNDER 6 YRS)	14.95 14.95	SILKWORM	14.95 14.95		
GOLD RUSH	17.95 17.95	SKWEEK	14.95 14.95		
GRAND MONSTER		SLEEPING GODS LIE	17.95 17.95		
SLAM	14.95 14.95	SORCERER LORD	17.95 17.95		
GUNSHIP	17.95 17.95	SPACE QUEST 3	22.95 -		
		SPEEDBALL	17.95 17.95		

WORLDWIDE
SOFTWARE
1 BRIDGE
STREET
GALASHIELS
TD1 1SW

Please Make Cheques And Postal Orders
Payable To WORLDWIDE SOFTWARE
Advertised prices are for mail and telephone
orders only.

All prices are correct at time of going to press.
E & OE.

WORLDWIDE
SOFTWARE
106A
CHILWELL
ROAD
BEESTON
NOTTINGHAM
NG9 1ES

THE FOLLOW UP TO FOOTBALL DIRECTOR

FD II

WARNING
ONLY FOR THE
SPECTRUM 128K,
+2 AND +3, ATARI
ST, AMIGA, IBM
PC, AMSTRAD
DISK

FOOTBALL DIRECTOR 2 IS 170K
OF PURE STRATEGY.
4 X THE SIZE OF A NORMAL 48K
GAME

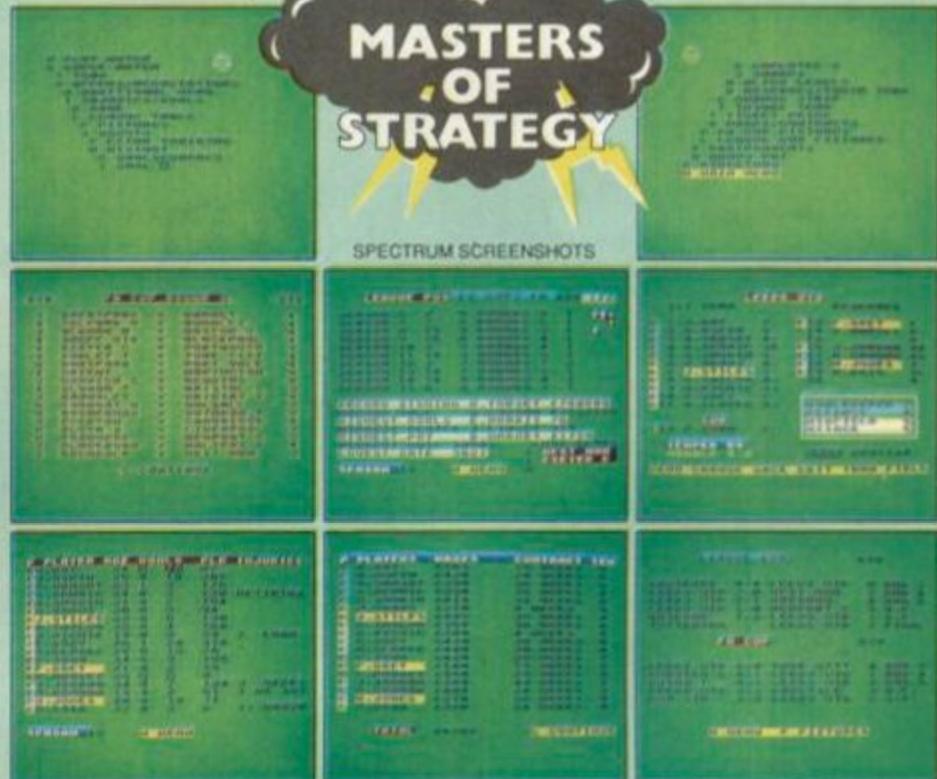
DISC OR TAPE **£19.99**

CURRENTLY ONLY AVAILABLE BY MAIL ORDER

FEATURES INCLUDE

TRANSFER REQUESTS 2-3 POINTS FOR A WIN SEE ALL CUP ROUNDS NON LEAGUES CUP FIXTURE LIST 3 SCOUTS / EXTRA TIME 7 YOUTH PLAYERS CONTRACT LENGTH WAGES PW SIGNING ON FEES CHANGE CLUB PLAYERS AGES * GOALSCORERS / LEAGUE CHANGE PLAYERS POS EUROPEAN OFFERS * BONUS PAY * INSURANCE / FORMATION BUILD STANDS ALTER TICKET PRICES	ATTENDANCE TEAM SHIRTS LOAN PLAYERS TRANSFER LIST CLUB LOTTERY POLICE BILLS DIRECTORS * TAX REBATE SEE ALL FOUR DIVS * HISTORY PAGE REPAY BANK TEAM MORAL SACK PLAYERS SEE POSTPONEMENTS MANAGER OF THE MONTH POOLS PANEL VAT RETURNS VOTE OF CONFIDENCE INJURY TIME	STAFF RETIREMENT FOUR LEAGUES 30 TEAMS EACH 36 GAME SEASON HOME & AWAY FA / LEAGUE CUPS REPLAYS / INJURIES EUROPEAN CUP U.E.F.A. CUP CUP WINNERS CUP 2 LEGS / PENALTIES AGGREGATE / PLAYERS MORAL / SKILL FIELD POSITION SCORED / CONCEDED PLAYED / COACH PHYSIO / 3 LEVELS FIXTURE LIST P.W.L.D.F.A. PTS	* EXTRA TRAINING SUBSTITUTIONS SENDING OFFS MIDWEEK GAMES FREE TRANSFERS SELL & BUY SHARES RETIREMENTS INTERNATIONALS EURO TOURS MANAGER RATING * PRINTER OPTION & RESERVES PROMOTION RELEGATION WEEKLY NEWS BORROWING MORTGAGE SAVE GAME INTEREST / TAX	SPONSOR / SACKINGS FULL RESULTS SEASON TICKETS TV CAMERAS CROWD VIOLENCE APPROACHES TESTIMONIALS WEEKS PROFITS NAME / TEAM EDITOR L.M.T.G. COUNTER LEAGUE TITLES
---	--	---	--	--

MASTERS OF STRATEGY



SPECTRUM SCREENSHOTS

TO OBTAIN A FREE CATALOGUE OF ALL OUR
STRATEGY GAMES JUST ENCLOSE A LARGE S.A.E.

OTHER GAMES STILL AVAILABLE BY MAIL ORDER

FOOTBALL DIRECTOR(48K)	□	○	■	▲	£9.99
WEMBLEY GREYHOUNDS	□	○	■	▲	£7.99
INTERNATIONAL MANAGER	□	○	■	▲	£7.99
2 PLAYER SUPER LEAGUE	□	○	■	▲	£7.99
RECORDS FILE	□	○	■	▲	£3.99

SPECTRUM 48K □ SPECTRUM 128K ○ COMMODORE 64 ■
AMSTRAD CPC 464 ▲ AMSTRAD CPC 6128 ▼

PLAYING TIPS FOR ALL OUR GAMES £1.00

Cheque/P.O. made out to D & H Games plus a large S.A.E. with 25p stamp
attached. Please state clearly which game or games you require & for
which computer. Also write your name & address on the reverse side of
any cheques. Overseas orders please include £1.50 Postage & Packaging.



DEPT GM, 19 Melne Road,
Stevenage, Herts SG2 8LL
ENGLAND

☎ (0438) 728042

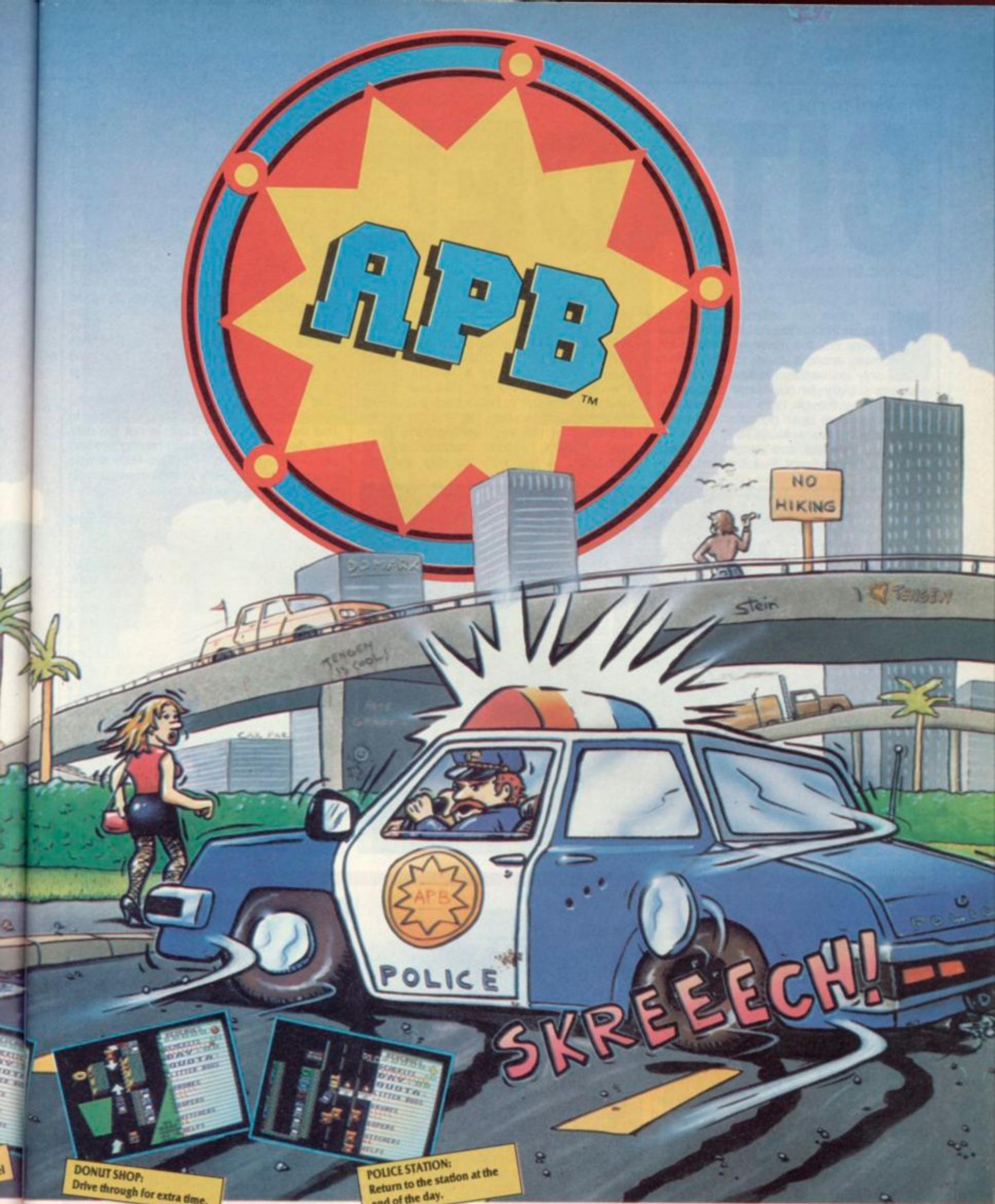
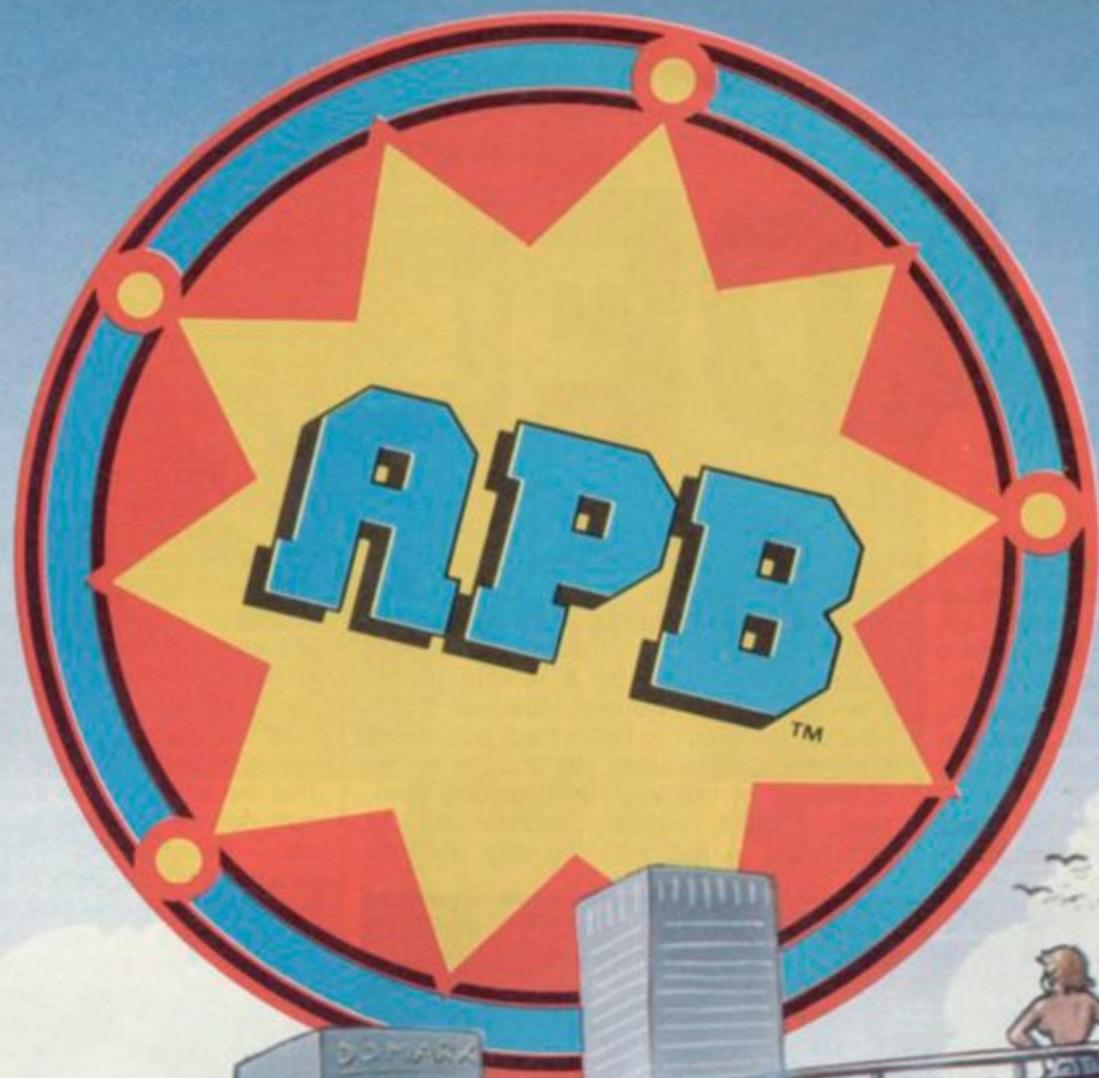
PLAYING COPS AND ROBBERS HAS NEVER BEEN THIS FUN BEFORE . . .

High speed chases, dangerous arrests and shoot-outs are brought to life with a touch of humour in Tengen's new APB. You become Officer Bob for 7 days in his action-packed pursuit of common lawbreakers and hardened criminals.



TENGEN

The New Name in Coin-Op Conversions.



DONUT SHOP:
Drive through for extra time.



POLICE STATION:
Return to the station at the end of the day.

	Cass	Disk
Spectrum	£9.99	£14.99
Commodore	£9.99	£12.99
Amstrad	£9.99	£14.99
Amiga		£19.99
Atari ST		£19.99
IBM PC		£19.99

Distributed by **DOMARK**

Ferry House, Lacy Road, London SW15 1PR 01-780-2224.

Programmed by Walking Circles.
© 1989, 1987 TENGEN INC. All rights reserved.
Atari Games Corporation

Forward to the past

CITADEL

Electric Dreams

The ominous deserted cities of Martin Walker's latest creation have been on the drawing board for many months now, a fact known only too well by readers of his programmer's diary in our sister magazine, ZZAP!. Now, though, all's well, and the dust-covers have been pulled off the player's remote vehicle — MONITOR.

A small, modest and apparently dead planet, so insignificant that it hasn't even

been named, has been discovered to be more than anyone bargained for. Near Atenapool, faint signals from the planet were picked up by chance and subsequently investigated by a remote probe. The probe never returned. However, it survived long enough to beam back pictures of the entrance to a silent city and the earlier chambers of the vast underground complex. Ancient, almost prehistorical, but technically in line with the day and still

humming with energy. Still alive.

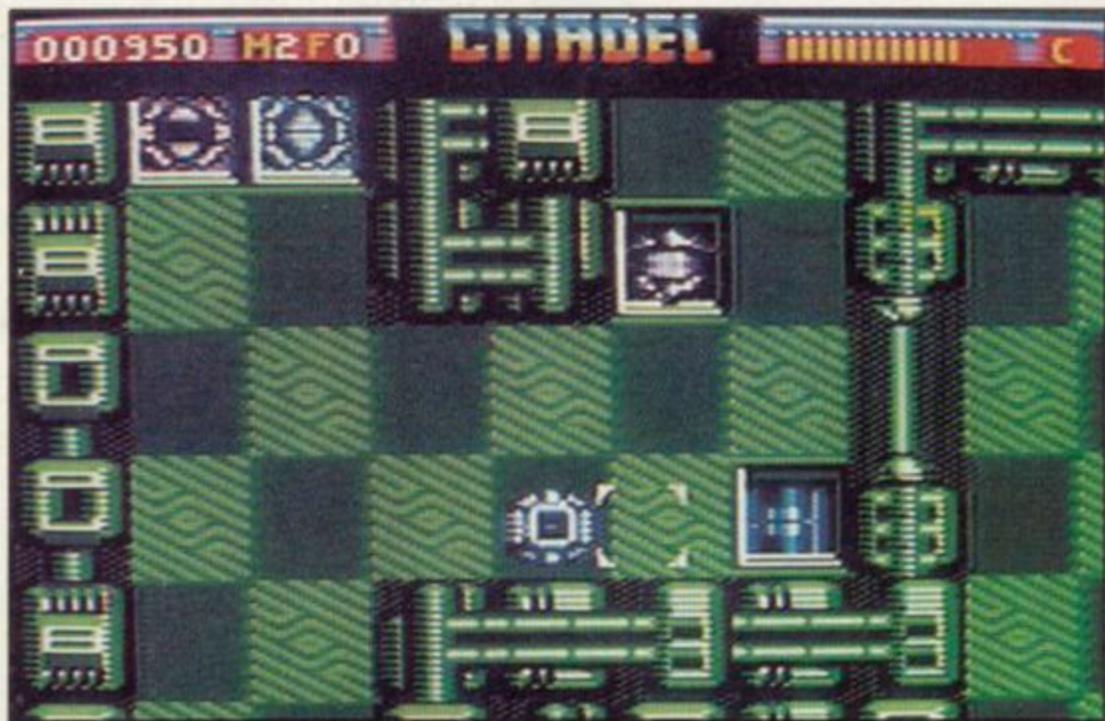
The logical assumption made by the council elite that the city complex had eliminated the probe led them to forbid any human(-oid) to approach it. But the untold secrets of the city aroused their curiosity, especially what vastly aged yet advanced devices could be held at the bottom of the arcane complex.

You will be the one who discovers the truth. From your distant and cosy control centre, you view Monitor, a Hoverdrone Mark IV remote device. This floating vehicle can move in the four main compass directions and has a built-in multi-direction cannon and capture probe — and of course all its functions can be utilised with a joystick thousands of miles away and viewed on a vid screen via a search probe above Monitor.

At the entrance to the first city, Alien, the aim (same for all eight cities) is simply to find the exit. This, in itself, is not too difficult; despite the cities each having two levels — linked by lifts — they're fairly simple mazes. They're also mazes packed with traps, set off by nearby moving objects — Hoverdrones, for example.

Some traps are just gun emplacements which fire vertically and horizontally or diagonally, but others are generators for various mobiles. These have different characteristics in speed, firing and movement: watchers mill around Monitor but don't attack, aggressors move in fast and close before firing, cylons move slowly but take a lot of beating, and so on.

It's not all for the bad, though. Launching your capture probe and targetting it on a mobile allows you to take it over, providing you have enough energy. The energy required is shown on a mini-screen in the centre of Monitor (next to the letter C) and that amount is deducted from your supply should you decide to capture the mobile. If so, it follows your movements and fires like a drone/multiple, till its energy is expended. The mobile can be locked into a particular position relative to Monitor with the space bar (useful for certain assault tactics). Some traps are really quite friendly — see



Monster pinball for masochists

ALIEN CRUSH

Hudson Soft

Computerised (console-ised?) pinball has never really caught on, with just a few games of that ilk released over the years — it's quite a coincidence that the long-overdue conversion of Sega's *Time Scanner* synthesised pinball was reviewed last issue (updated in this).

In an oldie of the pixelised flippers, *Slamball* (rereleased on Americana a few years back), the ball was a Smiley character trapped inside a monster's stomach, which just happened to be formed like a pinball table. *Alien Crush* is of the same nature in that the table is of organic composition and features monsters of various descriptions affecting the life of the ball.

A squid-like creature projects the ball up

into the arena and from then on the player has two sets of flippers to keep the ball in play on the two-flick-screen 'table'. Amongst the usual bumpers and targets, giving points and score multipliers, those adjacent to the lower flippers are eggs which hatch scampering spidery-legged amphibians (much like Aliens' Face Huggers); luckily, they don't eat the ball.

However! There are a number of hungry mouths at either side of the arena. Some just chew the ball thoughtfully before spitting it out. Others lead to a bonus screen where different types of monsters — skulls, snakes, obese frogs — are killed with the ball. The longer you keep the ball in play, the more bad guys get hit by the ball and the more bonus points are scored.

Alien Crush adds to the genre with its bonus screens and, most importantly, its unusual and original graphic design. Expect the unexpected: it's obvious when the anemone will seize the sphere but the splitting of the brain and hatching of the amphibians is an unpredictable and surprising event.

Alien Crush is dubious value for money (although you can shop around a little for Engine cards) as there's no real variation in

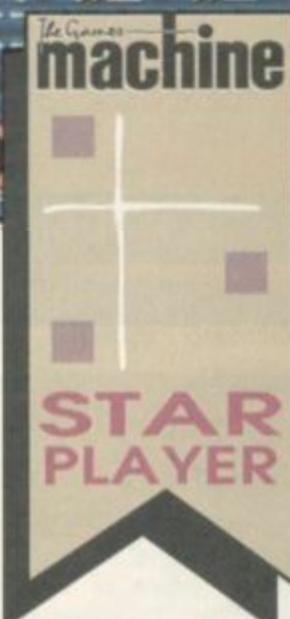




C64/128
89%

£9.99
cass.
£14.99 disk

The polished attract sequence, showing scores and elements of the game and backed by a dramatic Walker piece, are a taster for the highly professional and detailed graphics. Silky-smooth multi-direction scrolling of a variety of cities, all drawn with a convincing metallic sheen that puts bas-relief in its place. Colour is brilliantly used on sprites so that even within a small graphic area they're suitably synthetic and robotic looking. Monitor itself has nice little touches, like the way the appropriate thruster ports flap as it moves and the hatches which closes over the neat mini-screen when not in use. All this is backed by a selection of great sound effects including some very atmospheric city sounds in the background. A must for C64 owners.



Martin Walker's highly professional graphics are set off by silky smooth scrolling in a shoot-'em-up requiring rather more of the player than the average

'FRIENDLY' TRAPS

Not every trap is an aggressive rotter, some can be quite helpful, though only for a limited period:

- (F) Extra firepower gives rapid, 2-way, 3-way or burst fire.
- (E) An energy pod recharges your supply
- (S) A switch opens (or closes, depending on its state) a force beam barrier.

the panel.

We reviewers here at Newsfield expected *Citadel* to be yer average (though not everyday) fast shoot-'em-up, but we've been very pleasantly surprised. It's actually a shoot-'em-up which requires thought, intelligence and planning. The latter quality is possible due to the nonchalant traps which generally only fire or move when you move or fire yourself; its best to move only one or two squares at a time. It's even more like a board game when you consider, chess-like, the firing and moving patterns of traps.

A captured mobile is a lot more than a simple multiple. As well as following Monitor around, it can be used as an out-board directable gun, a battering ram, a shield, and with use of the locked position facility, a tactical assassin.

Unlike the vast majority of shoot-'em-ups, *Citadel* isn't a game you can get straight into — treat it like a mindless blaster and game over will come much sooner than expected. It takes a good while to get to know its ins and outs and for the first hour or so of play you'll find it tough going. Patience reaps its own reward, though, and it's playability comes shining through.

The difficulty level's set just right so you get a little further each game, ensuring you become well and truly hooked and don't rest until you've completed the *Citadel* complex. Even then, there's plenty of game left: there's an option which sets the trap layout at random so the cities never repeat themselves.

For once, *Citadel* is a shoot-'em-up which breaks new ground, adding puzzles and strategy to blasting in an addictive package. A classic combination of styles, *Citadel* is a game you shouldn't miss.

WL

OTHER FORMATS

Conversions are under consideration — for both 8- and 16-bits — but no firm plans have been made as yet.



The friendly ball, hesitant to slip between your flippers, means that if luck is with you Alien Crush can become a bit easy

gameplay (the bonus rounds help but rapidly become an integrated part of the game) and pinball is a simple game anyway. With only one 'table' layout, it soon becomes familiar and then a little boring, but it's certainly fun and worth playing.

WL

PC ENGINE
75%

ROM
card
£24.99

Exxos should be positively green with envy. The graphic design is so classically alien that it puts Captain Blood, Purple Saturn Day et al to shame. Various types of monster are drawn with clever shading and brilliant use of colour. The best graphics are the eyes in the middle of the table which flick open menacingly when hit. The ball moves well, though it's often strangely reluctant to fall down the escape chute; it's just a shame that the game is flick-screen rather than a scrolling creature table. Most music competent but forgettable Japanese ditty, but there are arcade quality spot effects and one of the bonus screen tunes is brilliantly melancholy, with a moody echoing lead sound.

VERSION UPDATES

ATARI ST
Savage

FIREBIRD £24.99
Commodore 64 74%, Amstrad CPC 75%,
Spectrum 72% — TGM014

Graphically *Savage* on the ST is good, but even with the three levels there isn't really enough variety to warrant the high price tag.

Machine update 58%



PRESS
ANY
KEY

And not a drop to drink...

AFRICAN RAIDERS

Tomahawk

The 1/24th scale remote control racing cars that speed around the park scaring the wits out of little old ladies and sending dogs into a mad frenzy were translated into pixels in Rare's RC Pro-Am for the Nintendo — the first ever TGM Star Player (TGM014). Now French-originated Tomahawk have decided to put you at the controls of the real thing and race against the type of trucks and buggies that the models are based upon.

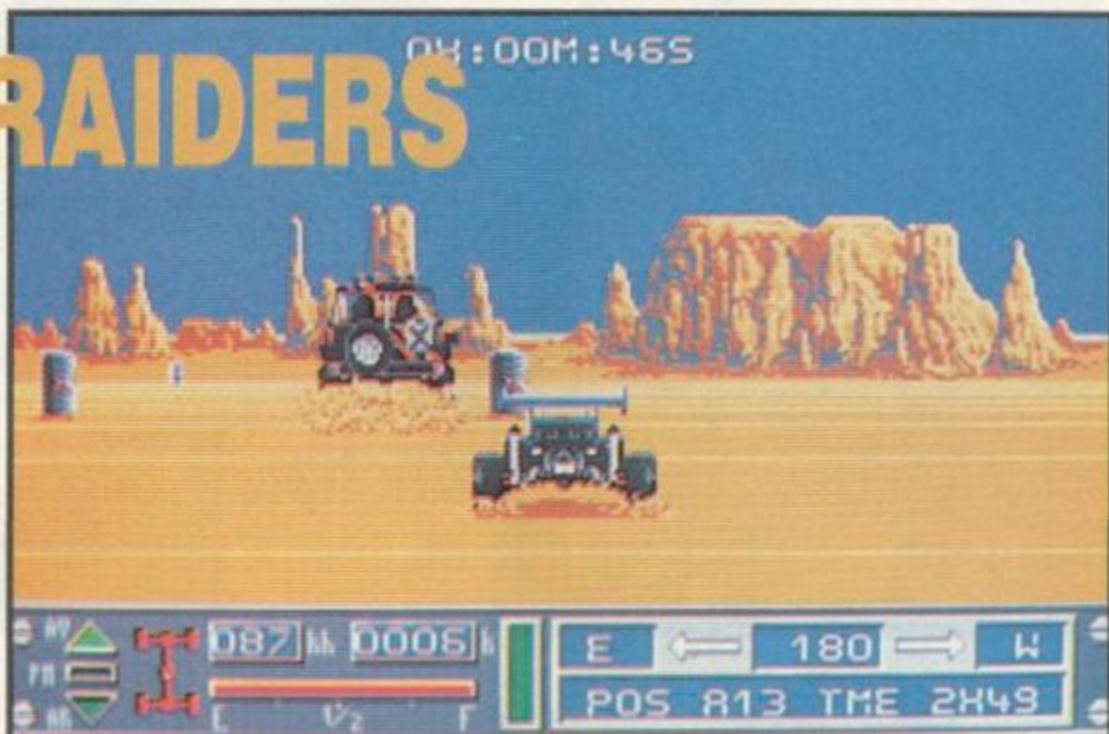
Nothing so conventional as the Paris-Dakar rally, the five-stage route takes you from Tunis to Dakar, taking in such African sights as In Salah and Ouagadougou (well, lots of sand and dust and some more sand, actually, then there's the odd grain or two of sand, but you can't have everything).

Viewing the player's buggy from behind, barrels mark out the course in the sand. Normal racing control convention applies except that the buggy has a reverse gear. The status panel indicates gear, two- or four-wheel drive, speed, distance covered and fuel remaining.

While the obvious thing to do is to follow the marked course, it's possible to drive off the sand track and take a short cut across the... sand (thought that'd surprise you). To this end, there's a compass (an electronic one, no less) and a mini-screen, which gives the current and last grid square numbers visited, allowing a course to be followed on the map included in the packaging. The mini-screen can also give the time and position of competitors.

Should fuel run out, the player get lost, get trapped in quicksand, ruin the gearbox, get sand in the engine, or whatever, a rescue helicopter can be summoned — but that's the end of the race.

Which is likely to be something of a relief. Following the track is a chore and going off it, by accident or design, results in long



The obvious thing is to follow the course marked by barrels, but if you do deviate, there's plenty of sand to see — ST screen

£19.99

ATARI ST
53%

The helicopter sample is badly edited, so there's a clicking sound where it's looped, and screen update is a little jerkier than the Amiga, but otherwise it's virtually identical to the 16-bit Commodore. That includes the barrels which, when hit, fly high up into the air never to be seen again and the 'bag of spanners' sample when the buggy's sent spinning.

minutes of rolling along an empty plain, with an occasional sandy hillock and sometimes an opponent trundling along just ahead. The manual suggests that a friend should keep an eye on the map and the heading, acting as a navigator, but knowing where

Sand, sand, sand — even when it's blue and white on the PC (below) — is mostly what you see when raiding Africa

you're going doesn't help the cliched racing.

If you've a sand fetish by all means take a look, but others are most likely to find it mildly more interesting than counting grains of the stuff.

WL

£19.99

AMIGA
53%

The intro sequence of a helicopter hovering over a hastily serviced buggy is perhaps the best part, although the game starts from there whether or not you've touched the controls. The sprites are neat as are the occasional 'roadside' features, but sand thrown up by vehicles' tyres is a bit over the top — some appear from the distance from within a huge dust cloud. You can guess what the background graphics are like. Yup, sand. But still, there's some nicely shaded hills and dunes in the distance. The engine sound groans irritatingly and turning response is sluggish.

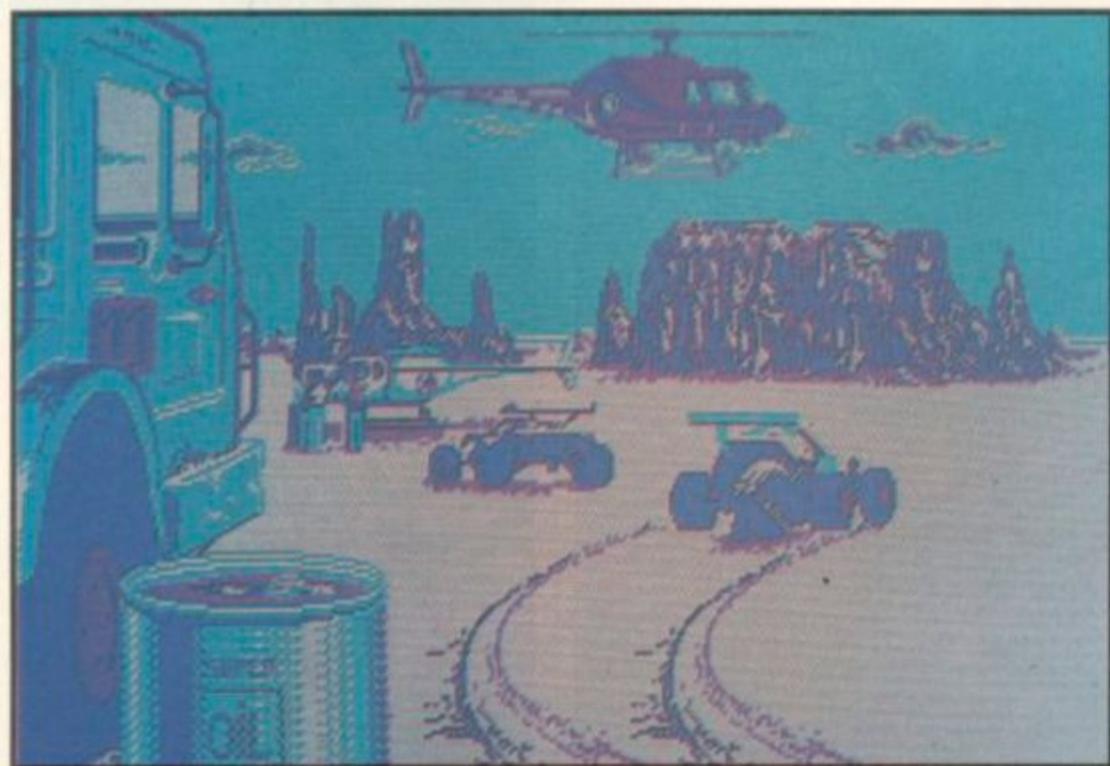
£19.99

PC
48%

CGA is used badly. The ground is white with dark blue pinstripes, hills are pink and blue... colour is generally used in an ugly way and definition is thick and lacking in detail. Screen update, particularly when turning is jerky, though speed in itself is fine.

OTHER FORMATS

No 8-bit versions planned. Though there might be a bit more sand.



A tabby tail to tell

GARFIELD — WINTER'S TAIL

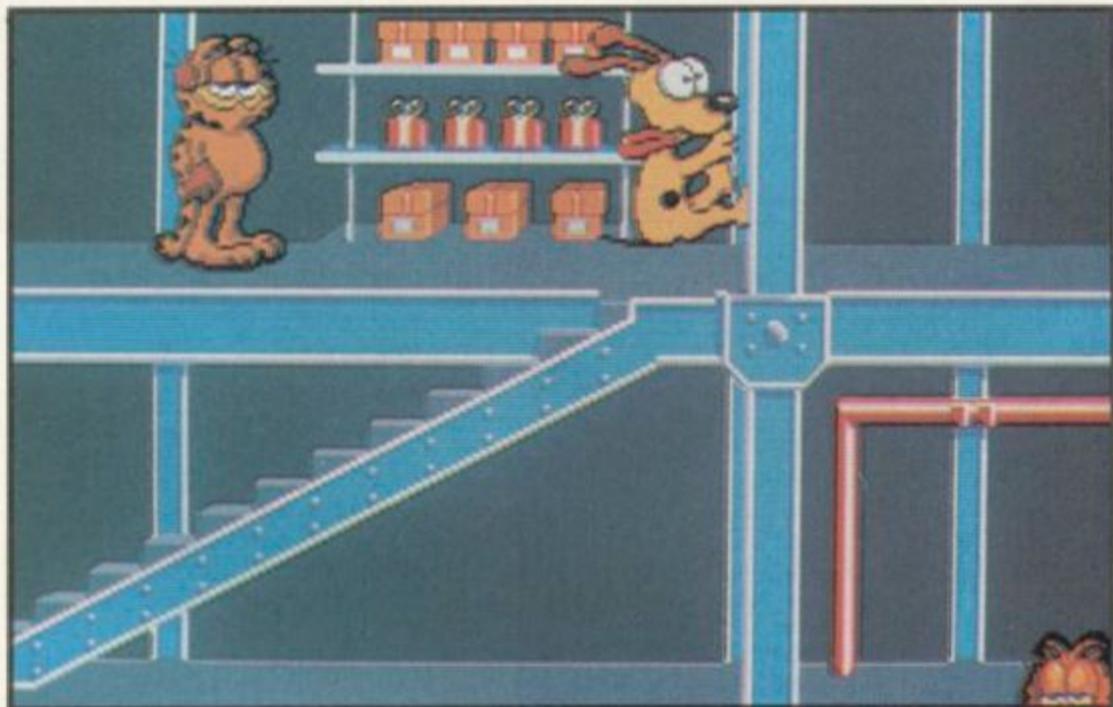
The Edge

Once again it's time again to hide your food, dog and teddy bear in a safe place because he's back. *Garfield — Winter's Tail* starts with our feline hero catching a few zzz's after a hard day tidying out Jon's refrigerator (with most of the contents finding their way into his stomach), and he's dreaming of five exciting game levels: skiing, a lasagna factory, a chocolate factory and the lake. Four levels can be visited in any

order, the fifth only after completing the other four. aim is to re-route the chocolate (using junctions in the pipes) to the chickens. This causes them to lay choccy eggs. Once they're all at it, he can face down the chicken that eats them all.

But the feathered felon has flown the coop so Garfield chases him across a frozen lake and into the Swiss Village... and on it goes.

Garfield — The Big Fat Hairy Deal was too strategy orientated. *Garfield —*



In skiing Garfield dreamingly visits the Alps and participates in the death defying sport of hurtling down a heart-stopping slope avoiding the many obstacles in his path. Contact with the objects littering his path gradually wake our hero up. This can be avoided by eating food offered by the occasional spectator, but watch out for Garfield's oldest enemy, Odie the dog zips down the slope on what looks like a dustbin lid. He attempts to nab the food before you.

If the final obstacle is successfully jumped Garfield finds himself crashing through the roof of a lasagne factory. The idea's simply to eat as much lasagne as possible by rapidly wagging the joystick back and forth till Oldie informs you it's dessert time (ie time for the next screen). The Chocolate Factory is where Garfield starts his search for the chicken that eats the chocolate eggs. In the many corridors that make up the Chocolate Factory Garfield comes across red pipes carrying liquid chocolate to several mechanical chickens scattered around the maze. The

Winter's Tail is much more action packed, with the fat hairy one participating (probably for the first time in his life) in some strenuous exercise... mind you this is just a dream. With four subgames in one package *Garfield — Winter's Tail* provides a fairly stiff challenge.

MC

£19.99

ATARI ST
80%

The graphics are cute and cuddly and Garfield is his usual canine-punting, lasagne-gobbling self. Its attractions are more aimed at a younger audience, but it probably remains a game for anyone.

OTHER FORMATS

Expect an Amiga version to be available by the time you read this, 8-Bit owners should see Garfield on their computers soon.

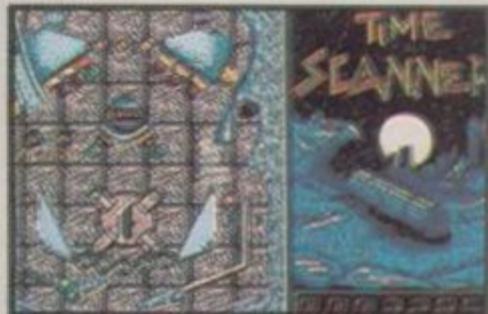
VERSION UPDATES

AMIGA ■ AMSTRAD CPC

Time Scanner

ACTIVISION 16-bit £24.99
8-bit £9.95 cass, £14.95 disk
Atari ST 70% — TGM020

Taken from the Sega arcade game, the Amiga version boasts very pretty graphics and some impressive tunes. And it also features the same wildly anarchic ball which seems at times to have a mind of its own. The Amstrad game obviously lacks the graphical capabilities of the 16-bit game, but is rather



playable despite this. Overall, if you are after a pinball game take a look, but the general Machine feeling is that *Alien Crush* on the PC Engine provides a stiffer challenge.

Machine update: Amiga 66%
Amstrad CPC 64%

COMMODORE 6/1284

Rock Star Ate My Hamster

CODE MASTERS £9.99 cass
£12.99 disk
Spectrum 74% — TGM017

With 50,000 quid in the bank, Cecil and Clive have just one year to make themselves and their 'rock stars' millionaires. Although the sound has been improved, the graphics are very similar to the Speccy version and the 'action' is rather slow and grows repetitive quickly.

Machine Update 60%

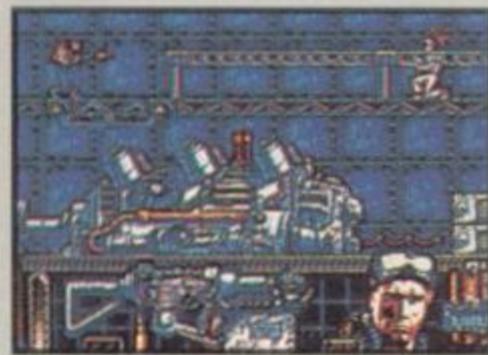
ATARI ST n AMIGA

Navy Moves

DINAMIC Atari ST £19.95, Amiga £24.95
Amstrad CPC 67% — TGM019

On both formats the hero gains plenty of chances to practise both his commando and Jacques Cousteau techniques on a variety of enemy troops. Graphics are good, especially when he gets his hands on a flamethrower. Sound is also good, with a lively title tune and apt sound effects. *Navy Moves* is tough but worth the effort.

Machine update: Amiga 74%
AtariST 72%



The beauty of sleeping

SLEEPING GODS LIE

Empire

Sleeping Beauty meets RPG and Tolkien in this Empire release, with you as the hero having to awaken a slumbering, prone (and honest) god, N'Gir. This fantasy world of Tessara was created thousands upon thousands of years ago by the old gods, but most of them got bored with it (well you know how it is: if you've created one planet teeming with life you've created 'em all). N'Gir is the only remaining god (presumably because he was asleep when the others left) and so is the only being capable of preventing a disastrous future for Tessara.

Recent years have seen the rise of the archmage, chief wizard to the emperor. He's hardly a faithful wiz, though, because he gradually took over power from the ever-wrinkling amperor and now holds him captive while maintaining power with an army of flesh-eating demons.

Other things in these times aren't exactly going swimmingly, either: recent harvests have given low yields and the poor of the world are being struck down with a mysterious illness.

N'Gira was expected to awaken but still lies in peaceful slumber. However, a dying follower of the gods, the Kobbold Old Way, has entrusted you with a device that should rouse The Sleeper. It's not a simple job. N'Gira rests in an unknown location in a distant kingdom and only the old hermit can give you the clues you require.

Beginning in your humble home (very humble — your household possessions are a chair and a bowl!), the quest is spread across eight 3-D perspective kingdoms, all of which are happily angular in shape. Magic barriers lie between them so portals must be used for inter-kingdom transportation.

In true adventuring style, objects are found, used and exchanged, and many creatures encountered. These range from



various humans to weird monsters, but of course many of them are inclined to hostility. To this end, provided you have the ammunition or magic power, there are a range of weapons at your disposal: from bare hands, through heavy crossbow, to the hefty (understatement) Ring of Annihilation.

Adventure/RPG meets Freescape here, but as *Sleeping Gods Lie* mostly consists of open landscapes, it's less visually impressive than Incentive's 3-D games. *Sleeping Gods Lie* has its own speciality: characters and objects are bit-mapped in 3-D perspective, giving different approach angles.

In gameplay, combat can easily be fatal. To get anywhere in the game, a good set of armour, fast reactions and a healthy trigger finger are needed, the latter two essential, initially, to combat (no pun intended) the dif-

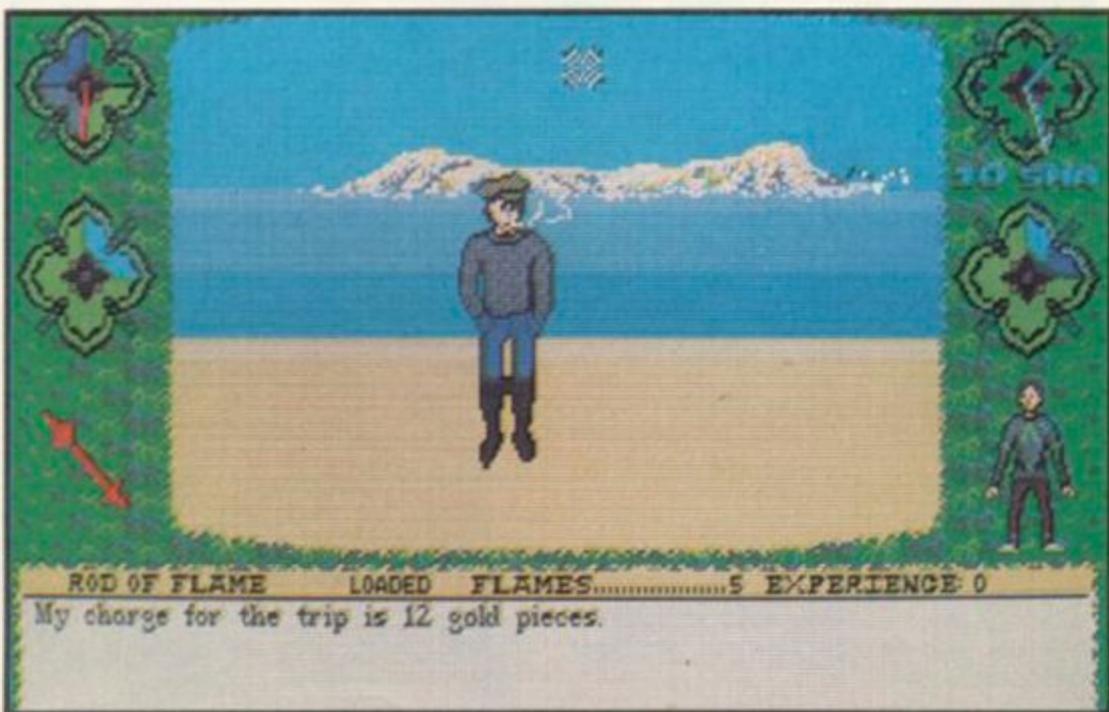
Adventure/RPG meets Freescape, with bit-mapped 3-D graphics, in Sleeping Gods Lie, providing some interesting characters

ficulty level.

Sleeping Gods Lie comes into its own with the depth and overall complexity of the puzzles and actions that are required to get anywhere. Completing a kingdom is task enough in itself, but it will take many, many hours of play (and tactical game saves) before N'Gira has his cornflakes.

Though most suited to RPGers (and adventurers), the arcade elements of combat and exploration open up the involving fantasy world of Tessara to action freaks also. Would I lie to you?

WL



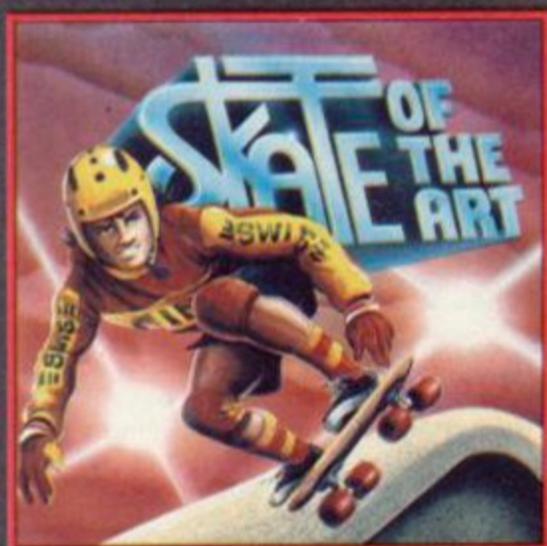
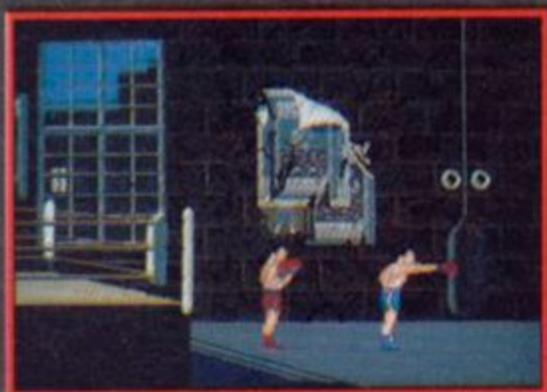
ATARI ST
76%

£24.95

Though not perfect, the 3-D movement of scenery is good — smooth and swift — especially with the added reference points within rooms. The characters you meet are often deformed (small legs, severely rounded shoulders) but others are neatly done and some are brilliant in the imaginativeness of their design. The storage and display of character graphics results in them being blocky when particularly close to the viewscreen, and they're also indistinct at a distance. Sound is MOR, but the game's size makes up for its aesthetic faults.

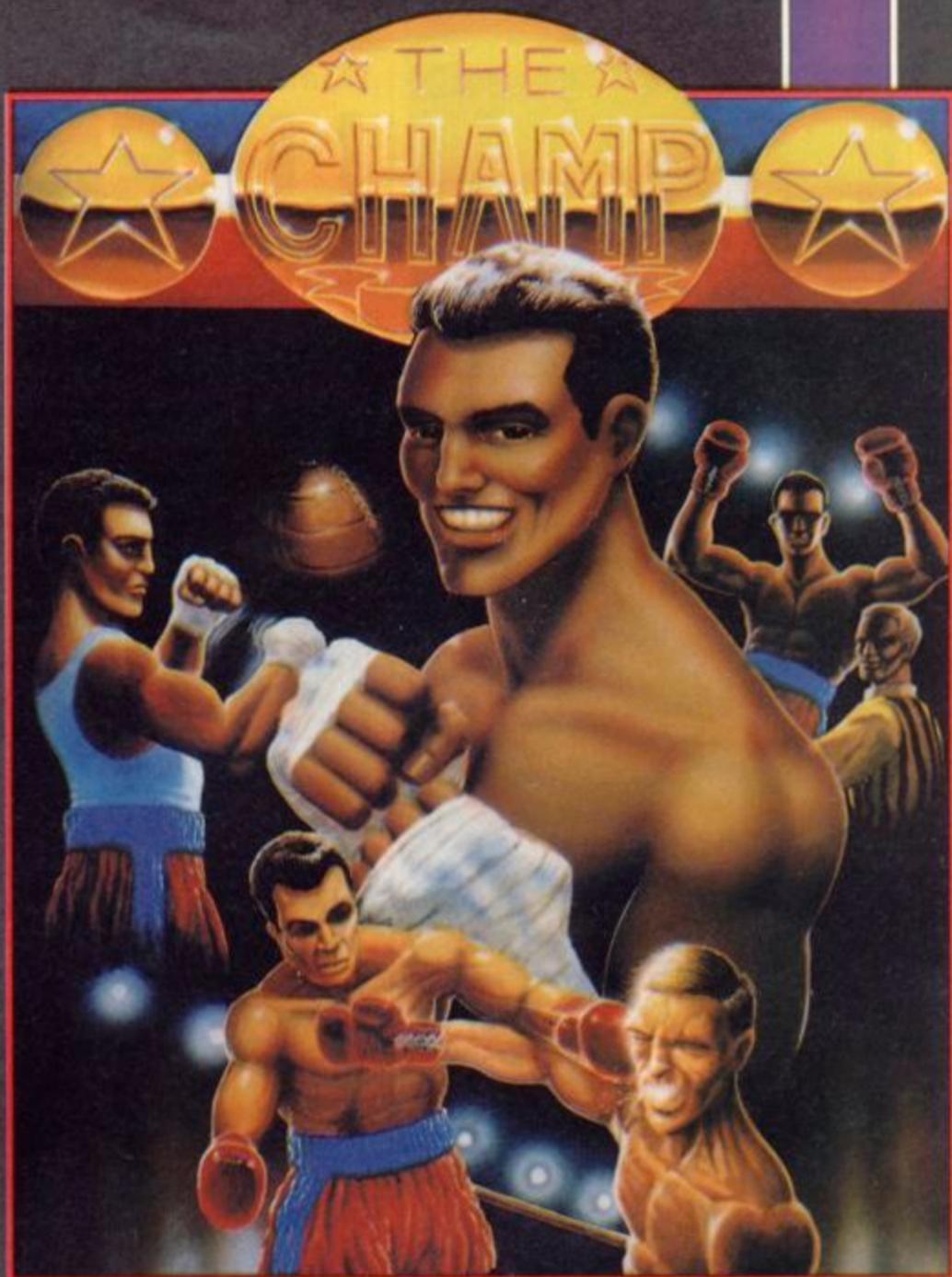
OTHER FORMATS

Amiga very soon and PC shortly, both £24.95.



SKATE OF THE ART

The crazy game for all Skateboard fans
Out on the **Amiga** from mid July.
Don't miss it...



THE CHAMP

Endorse by the **WORLD BOXING COUNCIL**, **THE CHAMP** is simply the most realistic boxing simulation ever written for the computer:

- With the original '**Rocky**' theme tune -
- More than 1300 Frames of animation -
- One or two player mode -

A Booklet with the history and rules of boxing -

- Keyring with mini boxing gloves -
and a lot more. No surprise that everyone is enthusiastic about it: TILT HIT in France, SMASH GOLDMEDAL in Germany ... a great simulation.

Now available for **Amiga** soon out on **Atari ST, C64, Amstrad and Spectrum**

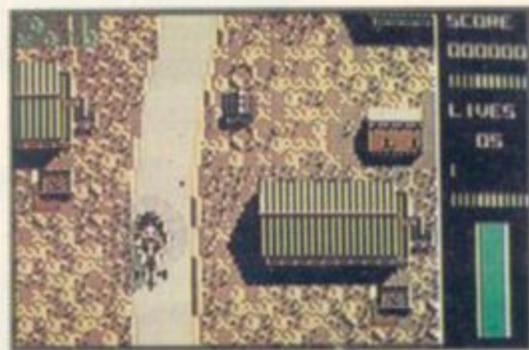
Distributed by

SOFTWARE SUCCESS MARKETING LTD
Alban House
24a White Pit Lane
Flackwell Heath
Nr High Wycombe
Buckinghamshire HP10 9HR

LINEL

LINEL Products MERIMPEX Ltd

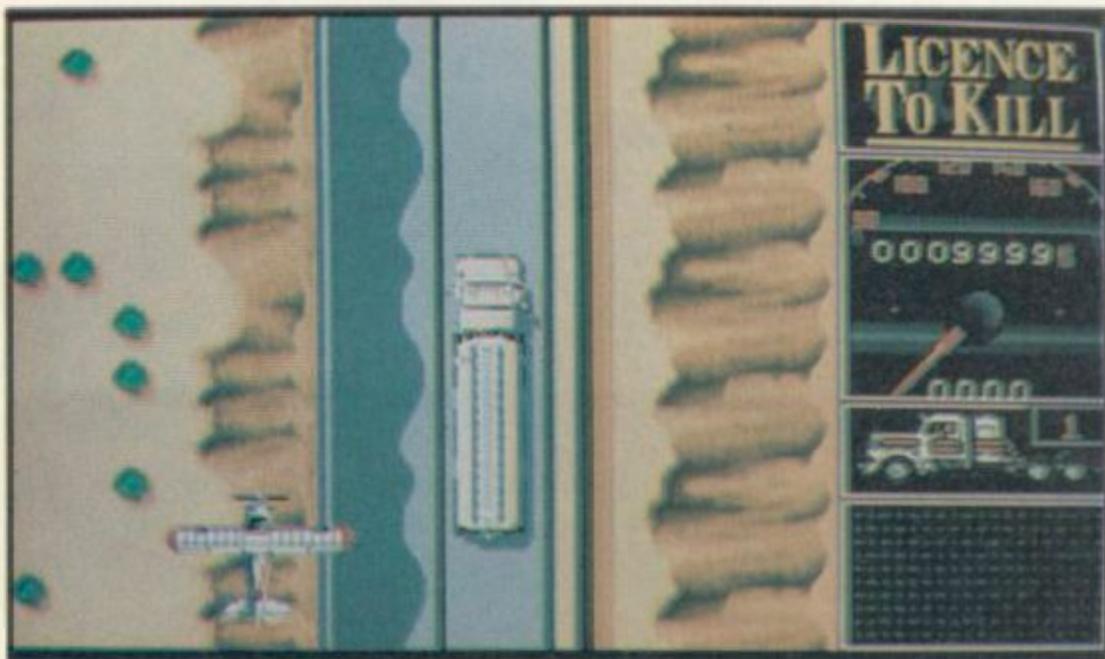
Am Schrägen Weg 2, 9490 Vaduz
Principality of Liechtenstein
Tel: 01041 75 283 68
Fax: 01041 75 206 56



Domark's Bond licence is revoked

LICENCE TO KILL

Domark



Top two: bombing Cray Cay and Cessna hooking (ST). Left: water skiing behind the plane (Amiga), and, above, the tanker finale (Amiga)

From Sean Connery, through the failed George Lazenby and eyebrow-twitching Roger Moore, to the fresh-faced Timothy Dalton, Bond in the movies has always been elegant, intelligent, macho, womanising and very British. This, despite the Scottish Connery, American Lazenby and Irish Dalton. The computer game translations of the 007 films (*A View To A Kill*, *The Living Daylights* and *Live And Let Die*) have been less consistent, in both design and execution, but now Domark are set to change all that with *Licence To Kill*.

Operating independently from Her Majesty's Secret Service, Bond has a score to settle with notorious big-time drug smuggler Sanchez — this time it's personal.

In the first scene Bond is piloting a helicopter, aided by US friend Felix Leiter, dodging buildings and bullets to shoot out the gun emplacements which protect Sanchez's home in Cray Cay. This is similar to stage one of *Thunder Blade*, but without the multi-layer 3-D buildings.

Then, pursuing the smuggler on foot, gun-toting Bond runs, *Commando*-style up the screen, collecting ammo to replace that used on the Sanchez henchmen and land vehicles. Picked up by Felix in the 'copter, Bond dangles from a rope in an attempt to grab onto the tail of Sanchez's light aircraft and climb aboard.

Interrupting a smuggling transaction in scene two, Bond has to escape from boats and divers. Bond must swim under the surface to avoid the boats' fire — with a knife as his only weapon against divers. Collecting drug caches are a mild consolation for his predicament.

Once the 'drop' seaplane arrives, 007 hooks onto it with a harpoon and waterskis barefoot behind it. While making his way toward the plane, Bond has to swing from side to side to avoid the catamarans intent

on his capture.

A leap forward in time for the third and final scene: Bond has destroyed Sanchez's drug factory but the smuggler has evaded him yet again. Sanchez has taken the lead of a convoy of 18-wheeler petrol tankers filled with drugs. Bond is at the back and

must force them off the road or blast them out of the way. Once all the tankers have been destroyed Bond comes up against the evil Sanchez — hopefully for the last time.

Determined to improve on the standard of their previous three Bond games, Domark have designed *Licence To Kill* on a grand scale, with the package consisting of six different sub-games. Though they're all firmly in the action/arcade mold they follow the film quite well, albeit with scenes simplified to shoot-'em-up and dodge games.

None of the sub-games are particularly good but they're all attractive and playable in their own right; and when combined form an action-packed high-value product. *Licence To Kill* is a fun and challenging computer translation of a lively (as ever) Bond movie, and should be snapped up by anyone who likes their games fast and furious.

WL

£19.99

AMIGA
84%

The title screen shows a great Dalton portrait, apparently digitised, backed by a 'interesting' rendition of an alternative Bond theme, strangely using pan-pipes (or similar) as one of the main voices. The graphics are very arcade-like — lots of colour and detail — and scrolling is very smooth, overlaid with stylish, fast-moving sprites. A few appropriate, but unoriginal, gun-fire and explosion samples (it's a shame there's no vocal ones) match the gameplay nicely.

£19.99

ATARI ST
84%

Barely different from the Amiga, graphics are a little smaller and marginally less colourful, and scrolling slows down for a moment occasionally, though this is hardly perceptible within the game. Sound effects and music are standard ST fare and jolly everything along. A stirring game from Domark.

£9.99
cass,

C64/128
83%

£14.99 disk

With its 8-bit graphics, the Commodore still has the professional arcade atmosphere, with colourful and well-drawn backgrounds and sprites. The buildings of scene one, part two, being particularly good. The man sprites in this stage of the game are reminiscent of those from Sensible Software's *Parallax* — compliment enough — and scrolling, as with every scene, is smooth. Sprites move around quickly and neatly, effects are loud and lively, and *Licence To Kill* proves itself to be a great Bond game.

OTHER FORMATS

PC (£24.99), Spectrum and Amstrad (C64 prices) should also be out now.

Hi-ho, hi-ho, it's off to work we go...

HIGH STEEL

Screen 7

Build-'n'-dodge games hark back from the earlier days of computer games, but there's been so little made of them in recent times that *High Steel* — which is one — appears quite fresh. Your job of constructing buildings, each of a required number of floors, is made difficult by sites infested with all manner of cuddly but disruptive monsters and further still by a time limit imposed by the contractor.

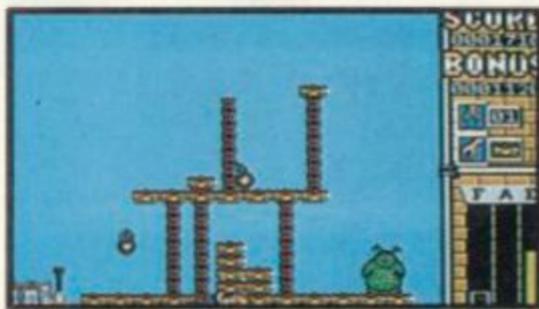
A friendly crane lowers both girders and floor segments onto a pre-built base. The vertical girders are picked up and locked into place on a clear piece of base segment and then they can be climbed to place a floor segment on top followed by a segment to either side. At least two girders and five connected segments are needed to make up a floor.

Small bouncy gremlins unlock segments and stun you if they land on you; they also drop bricks and slippery banana skins.

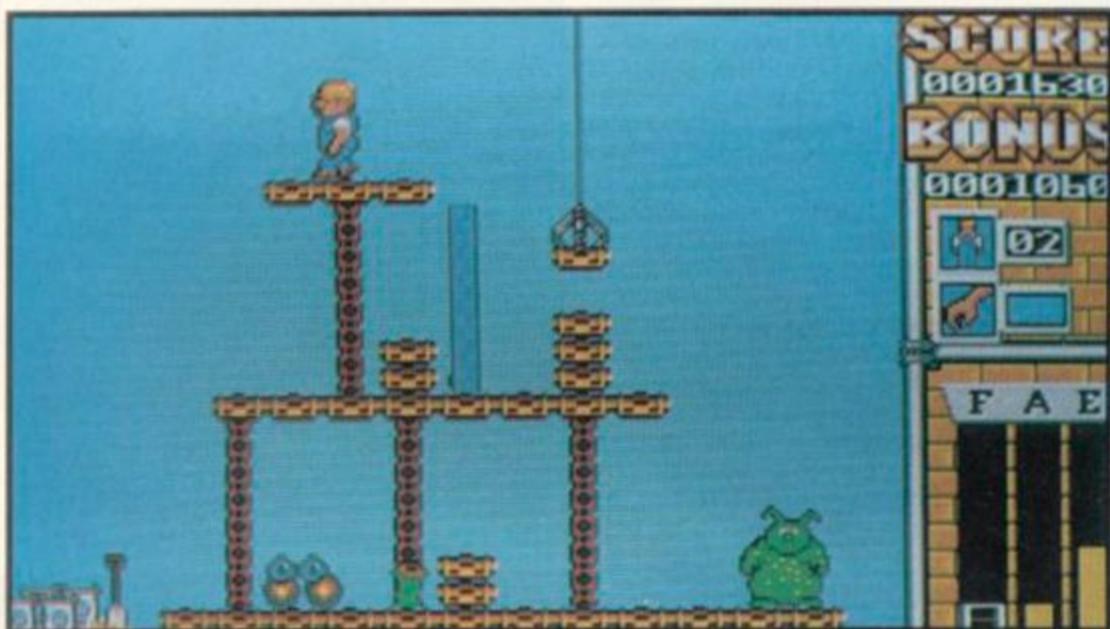
Mothers and crawlers have different movement patterns, but both are fatal to the touch and killed by throwing spanners at them. Spitters grow out of girders and are fatal, but the acid globules they spit aren't so dangerous.

Energy lost to gremlins, bricks, banana skins and globules can be restored by collecting sandwiches and Thermos flasks.

There's no more to it than picking things



Old-style game and graphics proves playable on the Amiga



£19.99

AMIGA
61%

The well drawn title screen (a construction worker looking distraught on a girder) is backed by a basic monophonic ditty. Sonics improve in the game itself, but graphics become quite simple. Though short on colour, the sprites' style, complete with black outline, makes them very cartoon-like. Animation is merely average, but the characters move in an amusing way fitting to their jokey definition. Backgrounds are either non-existent or crude outlines of buildings and skyscrapers, sometimes with thickly drawn 'detail'. Spot effects are a mixture of fitting samples, from loud, clumpy footsteps to tweeting birds as stars revolve around the builder's head.

up from one place and putting them down elsewhere, while avoiding nasties, but the simple fun can be quite absorbing. Unfortunately there's always a pile of segments at the start of a level, preventing a girder from being locked there, and just as you shift a segment, more often than not the crane puts a new segment right back in its place!

Frustration may soon develop, from the friendly but capricious crane as much as the monsters and time limit, so that it combats the involving and playable elements of the game. Probably best avoided unless the gameplay particularly appeals to you.

WL

OTHER FORMATS

Atari ST (£19.99), PC (£24.99) and C64 (cass £9.99, disk £14.99) by the end of July, Spectrum and Amstrad (C64 prices) to follow.

VERSION UPDATES

Commodore 64/128

H.A.T.E.

GREMLIN GRAPHICS £9.99 cass,
£14.99 disk

Spectrum 80% — TGM019, Amstrad CPC xx%
— TGM020

The graphics are small and blocky, whilst the difficulty level posed by enemy ships is painfully high. The 'jump back a screen when you die' which proved an annoyance on the Spectrum where it came into effect on the third level has been taken to a ludicrous degree here where it starts on level one. With this and xenophobic aliens pumping bullets into your craft your first few games are very short.

Machine update **58%**



ATARI ST

Skyfox II

ELECTRONIC ARTS £9.99

Commdore 64 85% — TGM004, PC 77% —
TGM009

Just over a year after the 3-D aerial blaster lammed onto the C64, ST owners can battle the despicable Xenophobes at a (for the ST) budget price. There are plenty of opportunities to slaughter the enemy in the ten missions available. But perhaps too much time has slipped past, for sadly *Skyfox II* didn't thrill us a great deal — perhaps the game type is getting a little long in the tooth. At ten quid this may give *Star Raiders* fans a happy few hours, but long term playability is lacking.

Machine update **59%**

AMIGA

Colossus Chess 10

CDS £24.99

ST % — TGM020

Nothing much to add to the ST review of last month, since appearance and playing are identical, except to reapeat that CDS have provided probably the very best computer chess game of the moment, with a manual kind enough to take chess tyros through the early stages.

Machine update **82%**



PRESS
ANY
KEY

Rock 'ard robotics

XYBOTS

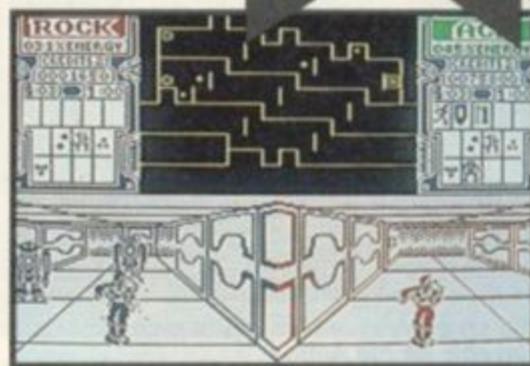
Tengen/Domark

Way back in TGM003 (February '88, where *Platoon* was the top reviewed game), our then-resident arcade expert Robin 'mad scientist' Hogg enthused in ringing Welsh tones over this high-tech maze game. It's taken a long time in the conversion but now, following anticipation, Domark have come up with the goods.

It's hardly a dazzling and in-depth plot, though: an army of robots and cyborgs called the Xybots have invaded a nearby moon and constructed a vast, multilevel base. The heroes, Major Rock Hardy and Captain Ace Gunn (trying to live down their parents' horrendous taste in names), have volunteered to infiltrate the base and eliminate the Master Xybots, thus transforming the Xybots into an unorganised rabble and preventing system-wide invasion.

Designed as a two-player game, a single person can select a character and play on their own. The screen is split into three main parts. The upper half gives the score, lives, bonus attributes and so on for both players, plus a map of the maze level. The lower half is divided vertically, both sections independently showing a 3-D isometric view of the maze-like corridors from behind the appropriate player character.

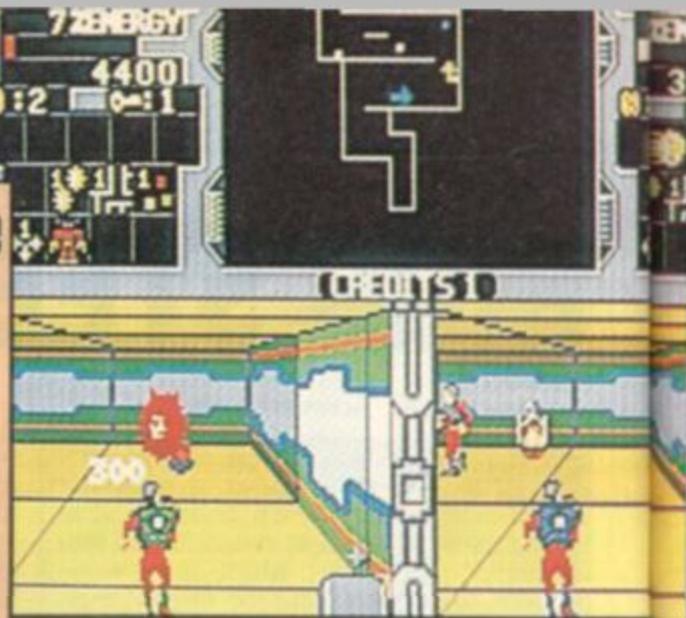
Rock and/or Ace move (and slide strangely) around the maze and can shift their viewpoint through 90 degrees. A standard blaster takes care of the Xybots (some more easily than others) and a limited-energy Zapper can freeze them for a while; damage taken from them is restored by collecting pods. Keys open up previ-



ously inaccessible areas.

In between levels, extra equipment is bought with coins pocketed from the corridor floors (the lift apparently doubling as an international armoury). Increased shot speed and power, laser cannons, guard monitor for the map, extra speed, stronger armour and increased Zapper energy can all be acquired if you have the necessary cash.

At intervals between the ever more difficult and complex mazes, a duel with a Master Zybot is a tough and unpleasant experience. Not beating around the bush, Domark have produced a highly accurate conversion of a playable coin-op. The game is approximately a 3-D *Gauntlet* (but adds the futuristic robot-blasting of oldie



Tough men Major Rock Hardy and Captain Ace Gunn have a fine old time, each in their own screen on the ST, above, Spectrum, below, and Amiga, right. The Amstrad screens look very similar to those on the Spectrum version

Berzerk), with the advantage in the two-player version that you can both do whatever you like rather than the restrictive following of one another — although team work can provide fun itself.

The 3-D environment adds tension and realism to the maze game format; *Gauntlet* was exciting but being able to



£9.99
cass,
£14.99 disk

Monochrome has been thoughtfully used to differentiate the player areas — Rock's in white and blue, Ace's white and red. They and the robots move about neatly and the coin-op's section-by-section update means the conversion isn't a strain for the Spectrum. The controls need getting used to, and very average sound won't set the world on fire, but it's a pretty nifty conversion at that.

RED HEAT

Ocean

Arnold Schwarzenegger's back as Captain Ivan Danko, a top Russian cop teamed with his American equivalent to track down Viktor Rostavili, a Soviet at the head of an international drug ring.

The Yankee cop doesn't take part in the game, it's just you controlling Arnie and his muscles through four levels. Beginning in a Russian sauna, his upper torso flexes through scrolling screens, punching and head-butting criminals and ducking their blows. A gun and ammo can be collected but are best spared for the toughest thugs.

The game progresses to a hospital, then a hotel, and finally a goods yard where Rostavili is found. Each level has a sub-game, from a rock-crushing wobble in level one to a shoot-out scene where gangsters appear unexpectedly from behind closed

doors. That, as they say, is all there is to it...

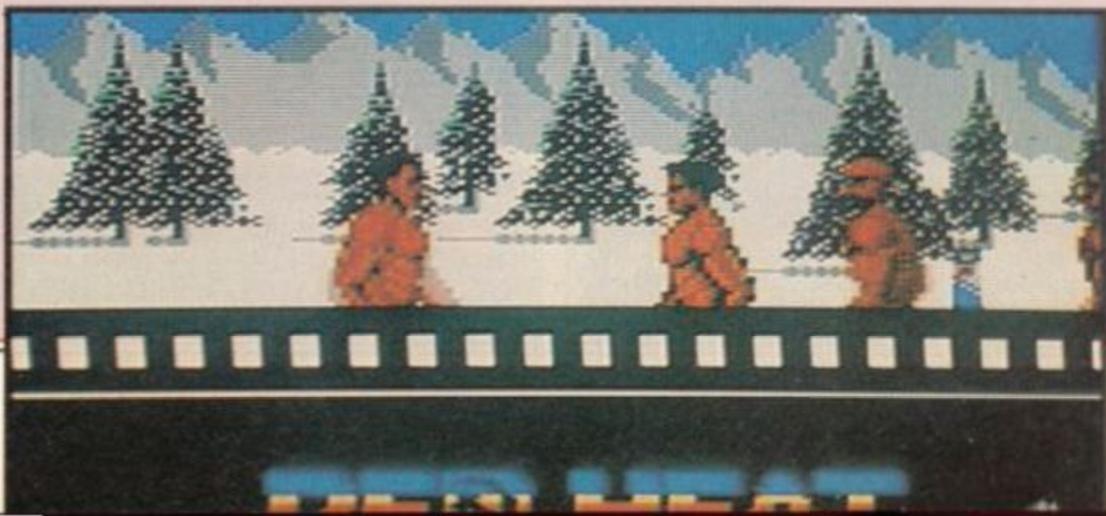
Red Heat is a simple beat-'em-up. Reading the instructions, the very real limitations make themselves known: a mere two offensive moves and one defensive severely limit control freedom. In playing, it's a case of crawling along each level KO'ing villains with the same joystick move — not exactly designed to instil wild excitement. The sub-games help a little but only take up a small amount of playing time.

It's a tough game; even picking up energy capsules, positioned at intervals through each level, two or three screen lengths are the limit for a beginner. Certainly, practice



£8.99
cass,
£14.99 disk

Monochrome has been taken a bit too far — black and white for the whole screen — but there's plenty of attention to graphic detail, bar the odd plain wall or skyline. Arnie and the bad guys are semi-caricatures of real people and are almost cartoon-like.



VERSION UPDATES

AMIGA

MicroProse Soccer

MICROPROSE £24.95

Commodore 64 89% — TGM015, Spectrum %, ST %, Amstrad % — TGM020



FA rules and American six-a-side are the two games featured in this package from the people more accustomed to MACH speeds, sidewinder missiles and multimillion-dollar aeroplanes. The Amiga game, trailing behind the other formats, is not tardy in its presentation, however, and is just as playable as the others. With all its frills 'n' fun, one of the best action football games around.

Machine update 80%

SPECTRUM

Kenny Dalglish Soccer Manager

COGNITO £7.95 cass, £14.95 disk

Amiga 64% — TGM018

Yet another famous footy player has discovered that he can make more money endorsing a computer game than booting a spherical air-filled cow bladder up and down a nicely mown pitch. Kenny Dalglish is the gent in question, and (for the Spectrum) many games of this type have appeared since its birth, but sad to say this one barely manages to make it out of the training camp.

Machine update 62%

AMSTRAD CPC

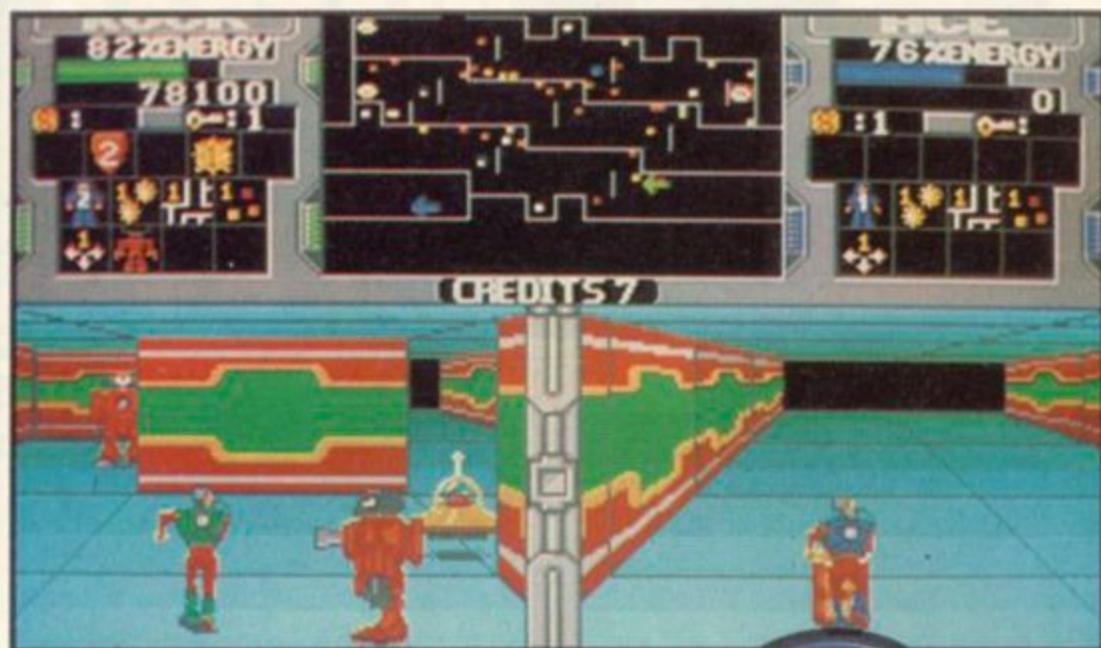
Silkworm

VIRGIN GAMES £9.99 cass, £14.99 disk

Atari ST 83%, Amiga 86% — TGM017, C64 75%, Spectrum 77% — TGM020

The Amstrad version of *Silkworm* is colourful, hectic and very tough. Okay there are times when the action slows down to a pace that a snail could manage, but on the whole it's satisfyingly-fast and furious, making this another quality version of a highly enjoyable game.

Machine update 79%



see who and what was going to attack you, and when, provided no surprises. Though it's cliched in concept and fairly simple in execution, *Xybots* generates a

ATARI ST
85%

£19.99

In the arcades *Xybots* wasn't exactly amazing visually; neither's the ST conversion. Walls have few colours and darken unrealistically as they recede, and the maze is updated section by section. The Ace and Rock sprites are very nicely done, though; not overwhelming in colour but with an amusing manly swagger as they jog along. The Xybots themselves aren't so endearing but are certainly adequate. Spot effects are warbles, bleeps and blasts and title music grumbles along. Playability is what counts, though, and when the mildly awkward controls have been mastered, *Xybots* has bags of this.

allows greater progress through the game but no incentive is given for the effort that requires. Only beat-'em-up addicts need apply.

WL

C64/128
50%

£9.99
cass,
£14.99 disk

The graphics (pictured), with a long cinematic strip, against which realistic, muscular men move, impress, and the restricted colour palette has been used well to shade the sprites. The very average backdrops scroll slowly by and it's infuriating to be sent back to the start when a life is lost.

OTHER FORMATS

Atari ST (£19.99) and Amstrad (C64 prices) available as you read this, Amiga (£24.99) to follow.

AMIGA
88%

£19.99

A marginal improvement over the ST, graphically — more shades are used in the corridors and the look is smoother overall. When few characters are on the screen the Amiga is noticeably faster than the Atari, but with a few Xybots on-screen it slows considerably, though thankfully not enough to spoil gameplay. Spot effects are sampled and add a loud, lively arcade atmosphere — particularly the vocoded 'intruder alert!'

good atmosphere and its gameplay is addictive. It's a bit tricky (sometimes frustratingly so) but it's the sort of direct action which has you coming back again and again. Even if you're no Gunn or Hardy, go and grab hold of this — before the Xybots grab you!

WL

AMSTRAD
82%

£9.99
cass,

£14.99 disk

Disappointingly similar to the Spectrum in terms of colour restriction. Black corridors are patrolled by single-colour robots and explored by likewise plain Rock and Ace — it's a great shame Mode 2 wasn't used. Though definition is good enough, the two adventurers hobble along the block-scroll corridors as if deformed (or at least with blistered feet). Sound effects and title music are the usual CPC collection of drones and belches, but it's the control response that's this version's Achilles heel. Sometimes the hero turns when you don't want him to and at others he WON'T turn when you DO want him to. Luckily, playability still comes through.

OTHER FORMATS

PC (£19.99) and Commodore 64 (cass £9.99, disk £12.99) were scheduled for early July release.

Nine, ten, never sleep again.

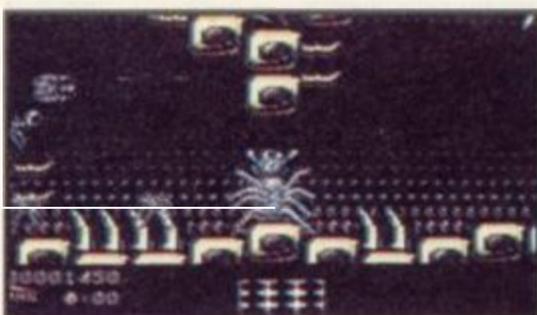
PHO

Imageworks

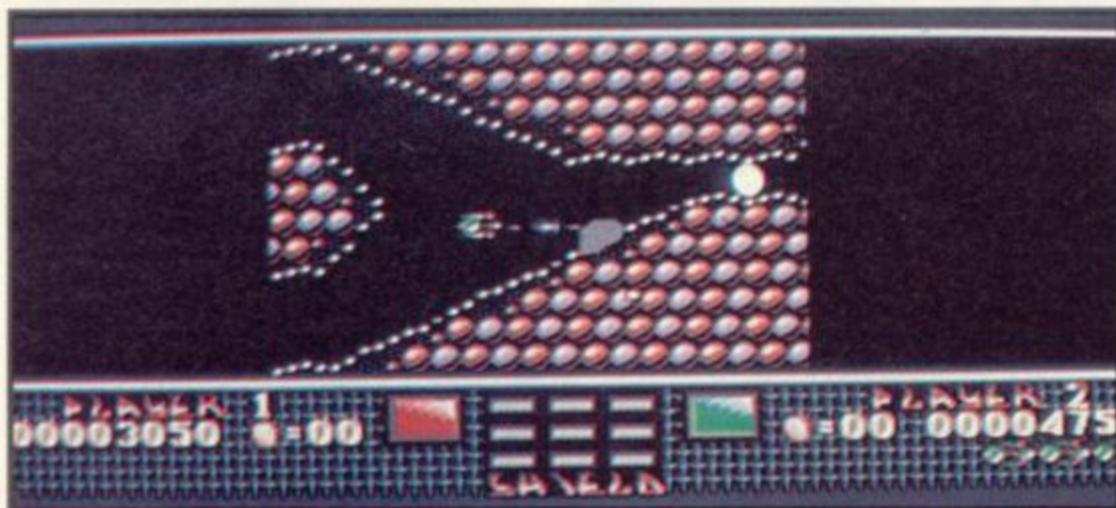
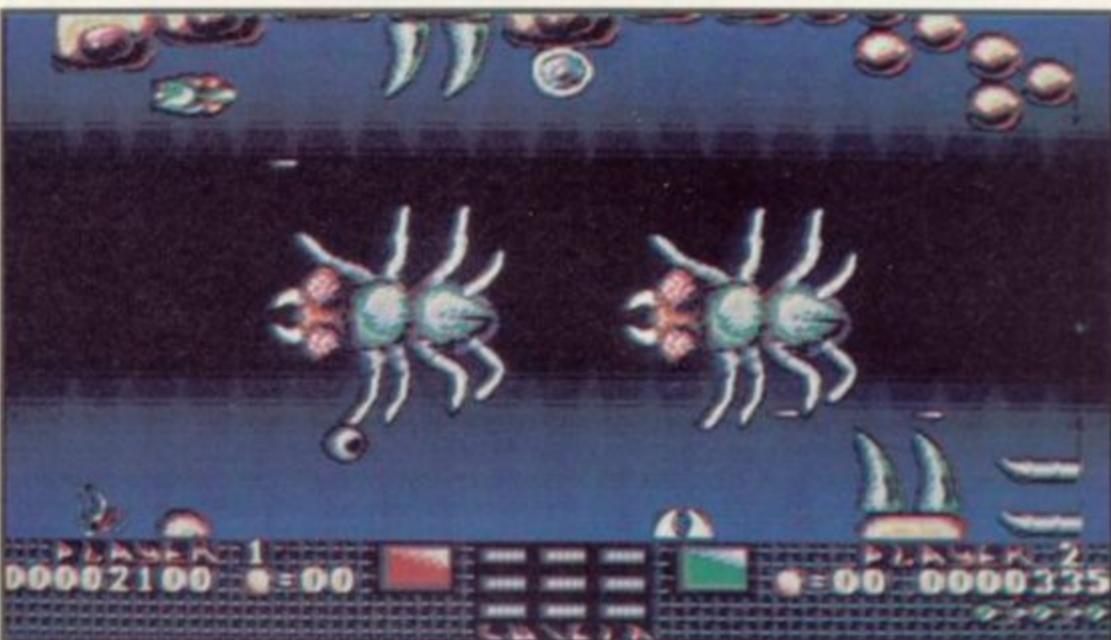
For a complete reversal of the usual role of shoot-'em-up 'plot' characters, the Galactic Emperor in *Phobia* is a good guy. And he's allowed himself to be captured by someone with the ludicrous name of Phobos — so he must be a bit dim, too. Natch, you're the one who must save the Emperor.

He's being held in the sun at the heart of Phobos' home system (a physical impossibility but we didn't write the plot), a location far too hot for your humble one man ship. Parts of a protective shield are held on nine of the planets orbiting the sun. Collecting all of these prevents your ship from becoming a lump of molten metal and plastic as soon as it gets within a few hundred thousand miles of the sun.

Before the game gets underway, a planet to be tackled is selected from a network of 15. You're in for a shock on each horizontally-scrolling planet/level as the nasties



BIA



With Crowther's graphics working better on the C64 (top) than the Amiga (above and left), *Phobia*'s a game made from the stuff of nightmares

and landscape features are all based on phobias (now the reason behind the game title becomes clear). Spiders, snakes, decapitation, dentists' chairs(!), all manner of vile creatures; the stuff that nightmares are made of.

As well as your average laser cannon, blasted bad guys leave behind icons to be collected for the ubiquitous add-on devices: high-power engines, bombs and extra lasers. The good news is there is also a drone ship. The bad news is that, unlike those in most shoot-'em-ups, it's as vulnerable as you are.

And with *Phobia*'s difficulty level in mind, that's an extremely unsafe situation to be in. It has to be said that it's a toughy (sometimes making *Sanxion: The Spectrum Remix* look rather tame!), with many and diverse enemy sprites swarming towards you while awkward scenery, often with animated elements, restricts your flight possibilities.

While gameplay has all been seen before, the design of the levels and their sprites are most unusual. Inspiration struck

AMIGA
77%
£19.99

Naturally, 16-bit pixels allow both greater detail and more colour to define the phobias, but unfortunately not enough has been made of them to make the graphics as horrific as they could be. Scrolling is smooth, but rather than being in parallax the background pattern flows toward the centre of the screen, almost as if the ship is moving away from the background. *Phobia* also allows hi-res mode to be switched on so that the playing area is compressed into a small area in the centre of the screen, a la *Dragon's Lair*. This makes playing fiddly but is good for showing off to non-Amiga owners! With adequate sound and difficulty a little lower than the 64, *Phobia* is a great blaster on both Commodore machines.

veteran programmer Tony Crowther when he decided to base the game's levels on fears and nightmares. *Phobia*'s levels range from the bizarre to the surrealistic — you're not likely to have seen a game like this before and it's its weird graphic design which helps keep you playing.

Experienced shoot-'em-up players will warm greatly to *Phobia*, a game where your worst nightmares reappear as great sprite-blasting dreams.

WL

C64/128
80%
£8.99
cass,
£12.99 disk

Typically for Crowther, graphics are bright and colourful; here original enemies and upper/lower background graphics are supplemented by smooth multi-layer parallax scrolling. Definition is on the blocky side in places but nothing's actually bad. Spot effects are unspectacular but mesh in well with the action, and the syncopated beat on the title pages is strangely compelling.

OTHER FORMATS
The ST version (£19.99) will be released soon and is sure to be close in appearance to the smooth Amiga.

CAPTAIN LIGHT

DARK DESTROYER

DARK DESTROYER, THE FIEND WITH A SEVERE PERSONALITY PROBLEM IS TRYING TO DESTROY ALL THE GAMES SOFTWARE IN THE CITY.....

Y'WANNA PLAY GAMES SUCKERS? HAW! HAW! HAW! NO MORE FUN MEATHEADS!



HOLD IT RIGHT THERE SCREWBALL!



CAPTAIN LIGHT YOU BRAINGLESS WIMP!



SO IT WAS A BIT BELOW THE BELT, WHO CARES? ONLY TROUBLE IS, HE'S DESTROYED ALL THE GAMES SOFTWARE



HEY, WAIT A SECOND THERE MIGHT BE ONE GLIMMER OF HOPE...

Post To: The Personal Computer Show, Ticket Office, 11 Manchester Square, London W1M 5AB. Please send me my ticket(s) to the Personal Computer Show

No of Tickets _____
 Name _____
 Address _____

ENCLOSE A CHEQUE/POSTAL ORDER MADE PAYABLE TO: THE PERSONAL COMPUTER SHOW
 FOR _____ (£3.50 per ticket)
 Under 18's will not be admitted on the 27th, 28th and 29th September as these days are exclusively for Trade and Business visitors. Under 18's will not be allowed in the business hall. GMM

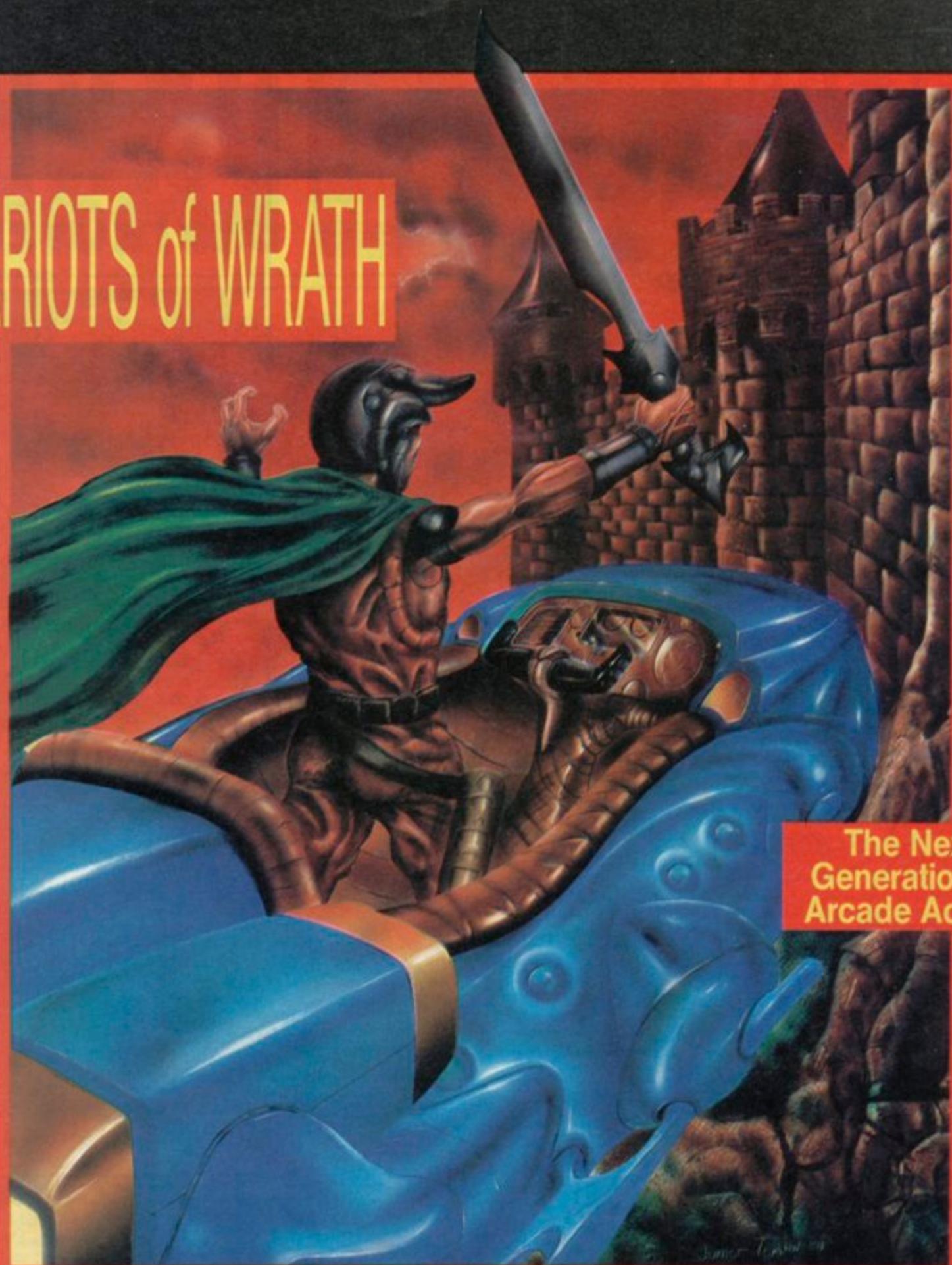
THE PERSONAL COMPUTER SHOW
30 SEPT-1 OCT 1989
EARLS COURT LONDON
PRESENTED BY PERSONAL COMPUTER WORLD

CREDIT CARD HOTLINE: 01-741 8989

SWITCHED ON FOR LEISURE

The Personal Computer Show is presented by Personal Computer World Magazine a V.N.U. publication. Organisers: Montbuild Ltd., 11 Manchester Square, London W1M 5AB.

CHARIOTS of WRATH



The Next
Generation in
Arcade Action

AMIGA - £24.99
ATARI ST - £24.99



Mail Order: please send cheque to:

6, Dykewood Close, Bexley, Kent DA5 2JN

Pretty in pink

SKWEEK

Loriciels/US Gold

Skweez'Land was once a peaceful and pleasant world... Then along came Pitark, an evil villain if ever there was one. With his accomplices — the Skarks and the Schnoreuls — Pitark infected Skweez'Land with a dangerous, blue skweeticide, forcing the Skweezes to flee their planet and set up home on Refuznoid.

Many years later Pitark and his not-so-merry followers died off, but the Skweezes

tiles in an attempt to turn them pink again. The Skarks come in various guises; including small furry bundles, ghost-like creatures, and some even donning hats. Watch you don't touch one of them or fall down a trap; doing this results in a loss of life (as well as face). Falling off the edge of platforms or failing to beat the timer also results in death.

Skweek's not totally defenceless, though. He's come armed with an infinite supply of fur balls to throw at his oppressors. You can also pick up bonus objects, these include: power-up weapons, shields, shoes (to stop you sliding on ice) and teddy bears (collect all four and you will be awarded five extra lives and get warped to the next continent). There are also BOOM tiles; the green ones act as smart bombs, but blue tiles disintegrate a ring of tiles around you. And, don't



still remembered their homeland and vowed to return.

However, the 99 continents that make up Skweez'Land are still infected and it needs one brave volunteer to decontaminate them. This is where Skweek comes in. But the Skarks haven't completely forgotten their battles, so getting around the place is going to prove a mite difficult for our cuddly friend.

You start the game on a platform far above the ground, and must run over all the

Attractive screen backgrounds and foreground graphics speak of a game which doesn't rely on violence for effect

forget, your pals are counting on you.

It's nice to see a game that doesn't contain too much violence. The main character walks around the mazes in a highly amusing fashion, with some very weird baddies chasing him. Although instantly attractive, the addictive may not last too long for older teenage players.

MC

ATARI ST
72%

£19.99

Acceptable ST title track, although too repetitive, with many in-game effects. Graphics are very colourful, with smooth scrolling and animation.

AMIGA
72%

£19.99

Looking exactly the same as the ST version, Amiga Skweek is only sonically improved.

AMSTRAD
60%

£9.99
cass,

£14.99 disk

Out goes the scrolling, replaced by the more annoying flick screen technique (you've no idea what's coming). However, the Mode 2 garish colours are even more annoying. Sound is similar to the ST — not very good.

OTHER FORMATS

A PC version priced £19.99 is available now, C64 and Spectrum versions are not expected at this time.

AMSTRAD CPC ■ SPECTRUM

The Games — Summer Edition



EPYX Spectrum £8.99 cass, £12.99 disk; CPC £9.99 cass, £14.99 disk
C64 66%, PC 76% — TGM013

On both formats the game is very playable, the Amstrad version is the most colourful of the two (though the Speccy isn't all monochromatic). The list of sports games that have appeared over the years is almost too long to read, but Epyx are still producing them, and very well too.

Machine update:
Spectrum 73%
Amstrad CPC 71%

COMMODORE 64/128

Spherical

RAINBOW ARTS £9.99 cass,
£12.99 disk
Atari ST 73% — TGM020

The wizard with the hat is back (but he hasn't brought his dad). *Spherical* on the C64 is graphically good with sound to match. Playability is high, mainly because a lot of thought is needed to escape, so if you like platform shoot/collect-em-up games take a look.

Machine update 74%

ATARI ST ■ PC

Circus Attractions

GOLDEN GOBLINS/RAINBOW ARTS
£19.99
Commodore 64 87% — TGM020

Automatically sensing EGA or CGA, the PC version of *Circus Attractions* is definitely attractive — on either version, with the ST looking similar to the EGA. Both versions have good soundtracks, and both are as difficult as the C64 version — tough. The fun elements are all still there, making *Circus Attractions* a multievent extravaganza on all versions.

Machine Update: PC 83%
Atari ST 85%



PRESS ANY KEY

THE AMAZING AMIGA...

COMMODORE AMIGA 500



Pack Includes:

A500 CPU, Mouse, P.S.U., T.V. Modulator, Very First Tutorial, Workbench 1-3, Basic, Extras and Manuals.

PLUS POSTRONIX BONUS PACK

WORTH OVER £250 which includes 10 Blank Disks, Disk Storage Box, 10 Excellent Games, Mouse Mat, Mouse Bracket (Mouse Holder) Deluxe Paint.

£399.00 + £5.00 post and packing

AMIGA 500 PLUS DISK DRIVE

Instruction Manuals, Extra Disk, Workbench 1-3, The Very First Tutorial, T.V. Modulator, Photon Paint, Mouse PLUS additional Amiga Compatible Disk Drive and 10 Blank Disks.

£449.00 + £5.00 post and packing.

AMIGA 500 + 1084S STEREO/ COLOUR MONITOR

(including the Amiga 500 deal) **£649.00**
+ £10.00 post and packing



1084 HIGH RESOLUTION COLOUR MONITOR

1084S STEREO/COLOUR MONITOR

Compatible with PC,
Amiga, C64c, C128

£259.00
+ £5.00 post and packing

AMIGA 1010 DISK DRIVE



AMIGA 1010 DISK DRIVE

Amiga 3.5" external drive. Capacity 880K

PLUS FREE DISK
STORAGE BOX &
10 BLANK DISKS

£149.99
+ £5.00 post and packing

A501 RAM PACK

512K for the Amiga

£149.99
+ £5.00 post and packing



MPS 1500C

MPS 1200P

MPS 1200P

£229.99
+ £5.00 post and packing

The Commodore MPS1200P printer presents the state of the art in dot matrix printers, with all the features of a printer that would cost much more. The MPS1200P is designed to be like three printers in one. It can act just like an Epson FX printer, or with the flip of a switch, it can act just like an IBM Graphics Printer with IBM Group II-1 character set (Danish/Norwegian character set) support. It can also print all the characters available with the Amiga in the Amiga configuration. The MPS1200P is capable of all the printing functions you would expect, as well as some additional features you may not expect.

MPS 1500C COLOUR PRINTER

£199.99
+ £5.00 post and packing

A. TECHNICAL CHARACTERISTICS

PRINTING TECHNIQUE Impact dot matrix (9-needle print head).

DRAFT MODE - matrix: 9 vertical dots x (5 + 4) horizontal dots; - print speed: 120 char/s, at 10/char in

TABULATION SPEED 2 char/s

PRINTING DIRECTION bi-directional, with optimised head movement

PRINT PITCHES 10 char/in to 24/char/in programmable from line, and in SET-UP mode

LINE FEED - 1/6in (4.23 mm), 1/8 (3.17 mm) and 7/72 in (2.4 mm); - n/216 in and n/72 in.

CHARACTER SET ASCII characters and special characters.

MAX. PRINT LINE LENGTH 40 top 192 characters, according to print pitch selected.

FREE
DISKS

... AND MORE BESIDES!

COMMODORE OLYMPIC PACK



THIS TOPICAL GAMES COMPENDIUM OFFERS A TRUE SPORTING CHALLENGE

Pack contains: C64c Computer 1530 Datasette, Quickshot Joystick, Matchpoint (Tennis), Snooker, World Championship Boxing, Daley Thompsons Supertest, Hypersports, Basketball, Matchday II, Daley Thompsons Decathlon, Basket Master, Track and Field.

PLUS POSTRONIX BONUS PACK OF £100 OF FREE SOFTWARE

£149.99

+ £5.00 post and packing

1541 DISK DRIVE PACK

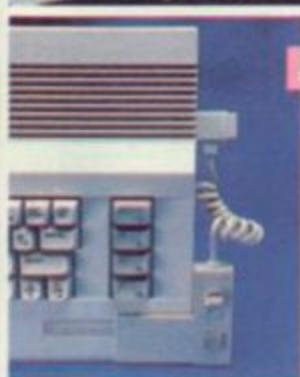


1541 II DISK DRIVE PACK

Pack includes: 1541 II Disk Drive, 10 Excellent Disk Games, 20 Blank Disks, 5 1/4" Diskette Storage Box. AND GEOS!

£169.99

+ £5.00 post and packing



ICONROLLER

ICONROLLER

Iconroller is semi permanently mounted on your computer console. Iconroller leaves hands on the keyboard while executing Icon commands with your fingertips.

£15.99



STARFIGHTER

Compatible with Sinclair Spectrum, Commodore, Atari Computers, Atari 2600 Video Games Systems.

£14.95



CHALLENGER DELUXE

Compatible with Spectrum (with optional interface), Commodore, Atari 2600 Video System, Atari Computers, Amstrad computers.

£4.99



CHEETAH 125+

Compatible with Spectrum, Commodore, Atari 2600 Video System, Atari, Amstrad PC, Amstrad.

£8.95



TAC 5 CONTROLLER JOYSTICK

Compatible with Atari, Commodore.

£13.99



SLIK STIK JOYSTICK CONTROLLER

Compatible with Atari Computers, Atari Games System, Commodore.

£6.99

COMPETITION PRO 5000
Compatible with Commodore 64 and Vic 20, Sinclair ZX Spectrum (interface required).

£14.95



TAC 2 CONTROLLER JOYSTICK

Compatible with Commodore 64 and Vic 20, Atari Computers, Atari Game Systems.

£10.99



THE HOLLYWOOD PACK

AN EXCELLENT PACK PROVIDING HOURS OF ENTERTAINMENT FOR ALL THE FAMILY

Pack includes: C64c Computer 1530 Data Cassette, Quickshot II Joystick Personal Hi-Fi, Commodore Juke Box Audio Tape (10 Hits), Yamaha SHS10 FM Digital Keyboard with Midi, Ghostbuster, Rollaround, Tau Ceti, Agent X11, Surprise Game.

Plus: POSTRONIX BONUS PACK OF £100 OF FREE SOFTWARE

ONLY £199.99

+ £5.00 post and packing

A GREAT DOUBLE THEME PACK OFFERING THE BEST OF HOLLYWOOD, PLUS A COMPENDIUM OF T.V. GAME SHOWS

Pack includes: C64c 1530 Data Cassette, Quickshot II Joystick, The Great Escape, Miami Vice, Platoon, Rambo, Top Gun, Every Second Counts, Blockbusters, Bullseye, Trivial Pursuit, Krypton Factor.

Plus: POSTRONIX BONUS PACK OF £100 OF FREE SOFTWARE

ONLY £149.99

+ £5.00 post and packing



COMMODORE ADD-ONS

A) 1750 RAM EXPANSION MODULE FOR CBM 128

Simply plug it into the expansion port on your CBM 128 and 512K Bytes of additional Ram are available.

B) 1351 COMMODORE MOUSE

The Commodore 1351 Mouse is controller designed for use with the CBM 64/128.

C) 1764 RAM EXPANSION MODULE FOR COMMODORE 64

How do you get a total of 320K Ram on your 64, just plug in the 1764 Module.

A £149.99 B £19.99 C £99.99

All prices + £5.00 post and packing.

SEIKOSHA PRINTER

SEIKOSHA PRINTER

Compatible with most makes of Commodore computers. Features variety of fonts including graphics and near letter quality, reverse printing, italics, tractor feed and paper separator. Comes complete with serial cable.

£159.00

+ £5.00 post and packing



RAM DELTA DELUXE MICROSWITCH JOYSTICK

Compatible with Atari computers and Video Games Machines, Amstrad PCW (with adaptor), Spectrum (with adaptor), Commodore.

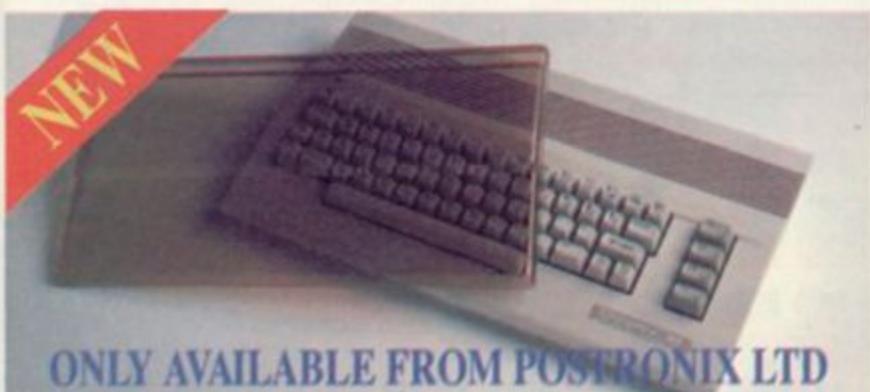
£9.99



MICRO HANDLER MULTI FUNCTION JOYSTICK

Compatible with Commodore, Commodore C16+4 (adaptor required), Atari.

£24.95



ONLY AVAILABLE FROM POSTRONIX LTD

A whole new range of innovative computer covers, made from durable clear plastic. Designed to fit your computer perfectly ... not only safe from dust but also all forms of accidental damage.

C64 OLD STYLE	£6.99
C64C NEW STYLE	£7.99
AMIGA 500	£9.99
ATARI 520ST	£9.99
ATARI 1040ST	£9.99

LARGE STOCKS OF SOFTWARE & ACCESSORIES FOR ALL 16 BIT, 8 BIT COMPUTERS - ALSO ALL MAJOR GAME CONSOLES - PHONE (0664) 791771 NOW WITH YOUR REQUIREMENTS.

postronix FULL PRICE: INITIAL: SURNAME:	
SEND YOUR ORDER TO: POSTRONIX HOME ENTERPRISE CENTRE PROSPECT STREET NORTHAMPTON NN4 0JW	
CUSTOMER NO IF EXISTING: POST CODE:	
ALL SOFTWARE TERMS ARE INCLUDING OF A.P. ALL OVERSEAS TERMS ARE P.P. 20. FOR NEXT DAY DELIVERY PLEASE CONTACT LEAD & CASH ORDERING LINE 011	
AC/DENOV DATE: REF: TOTAL QUOTE POSTAGE & PACKING GRAND TOTAL	IF YOU REQUIRE A FREE CATALOGUE PLEASE TICK <input type="checkbox"/> PLEASE SIGN MY CREDIT CARD DATE: REF: TOTAL QUOTE POSTAGE & PACKING GRAND TOTAL SIGNATURE: DATE: REF: TOTAL QUOTE POSTAGE & PACKING GRAND TOTAL CARD HOLDERS PLEASE STATE EXPIRY DATE: DATE: REF: TOTAL QUOTE POSTAGE & PACKING GRAND TOTAL

OFFER APPLIES TO U.K. ONLY. OVERSEAS ORDERS CHARGED AT OVERSEAS RATE.



Receiving multiple blows to the head and body isn't a pleasant experience — boxing isn't the sort of sport to take up on a whim, as Linel advise in their packaging. Producing an accurate boxing game so that computer owners can enjoy the sport without the bruises is also something the Swiss software house doesn't take lightly: *The Champ* is endorsed by the prestigious World Boxing Council and the Rocky theme music is officially licensed!

Once your name has been entered, either from the keyboard or — if you've played before — from a disk holding the name and its associated records, you are launched into a match. If this is your first game under that particular name, you'll find yourself in a seedy alleyway — although, strangely, three-minute rounds are still used, marked by a mysterious unseen bell.

In the beat-'em-up tradition, joystick moves, with or without the fire button, produce defensive, offensive or lateral moves. Energy bars for both boxers are supplemented by a round timer and points, awarded for winning rounds, knocking down the opponent, and so on.

Hopefully your fists won't go unnoticed for long and a trainer will adopt you. The first fruits of this are the use of a gym. Upward stick moves make you jump while skipping, but mistiming sends you sprawling in a tangle of rope. The trainer shows himself for the sandsack. He punches the sack in combinations of different blows, then lets you repeat the sequence. A correctly copied blow is shown by a blue light, wrong by a red. Left and right stick moves are made in time with your graphic fists.

Professional matches, with a proper ring and portly referee, follow, allowing progress up the world rankings. The ranking table can be viewed or reset in-between bouts, and a high score table called up. Eventually, with many fights under your belt, you may find yourself number one

You coulda been a contender...

THE CHAMP

Linel

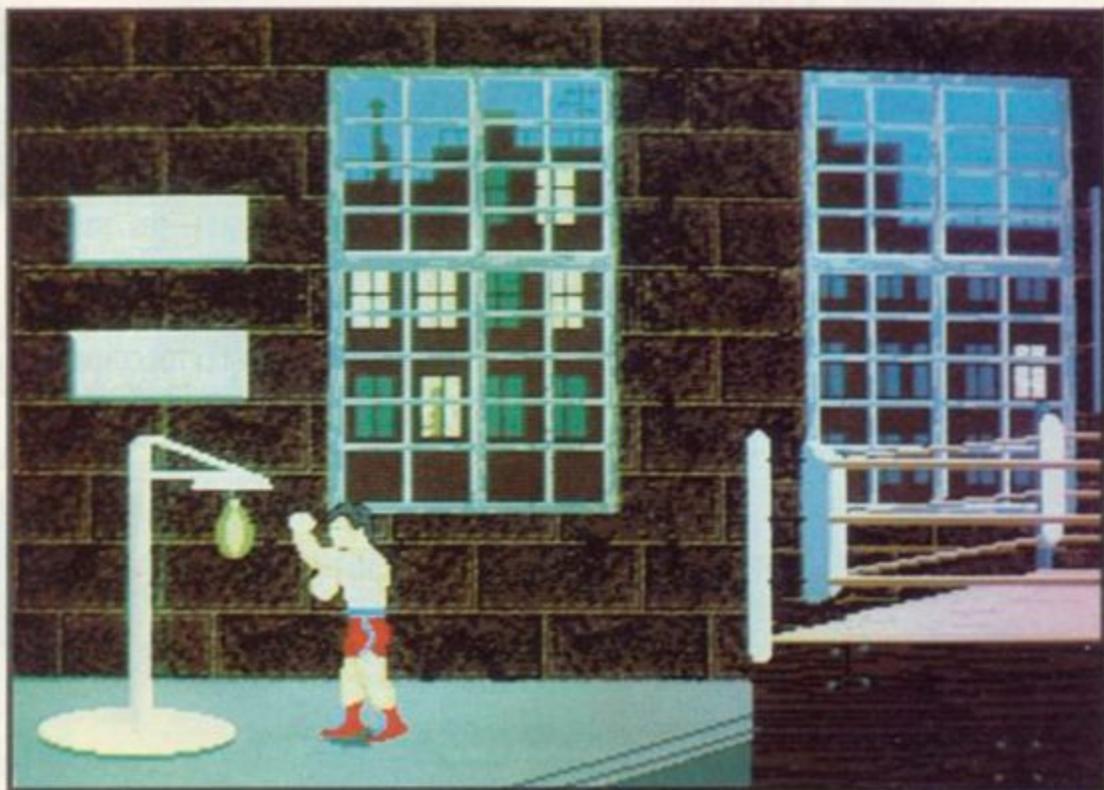
contender and get a shot at being World Champ.

Getting to that championship fight is a lot easier than you'd imagine. First bouts are often ridiculously easy — half-a-dozen 'killer' punches (as the manual calls them) and your opponent's flat out on the floor. He instantly springs back up but then one or two 'killers' flatten him again. This goes on, the boxer sometimes being knocked over a dozen times in the same round, until he

ory test and skipping seems to trip you up when the computer feels like it.

The Champ is enjoyable in as much as the masochistic knock-down, spring-up boxers and sometimes silly movements of the sprites are laughable at first. Ultimately, playing is a boring slug-out, the two-player one-on-one being little improvement over the computer's championship. Something of a self-inflicted KO for Linel?

WL



finally runs out of energy; a trifle unrealistic, I think you'll agree!

Once on the professional circuit things toughen up and some skill is required, but even then the computer doesn't put up much of a fight (sorry) and a little luck is all you need.

The training 'events' are nothing to write home about, although the punchbag is quite fun. Sandsack is more a Simon mem-

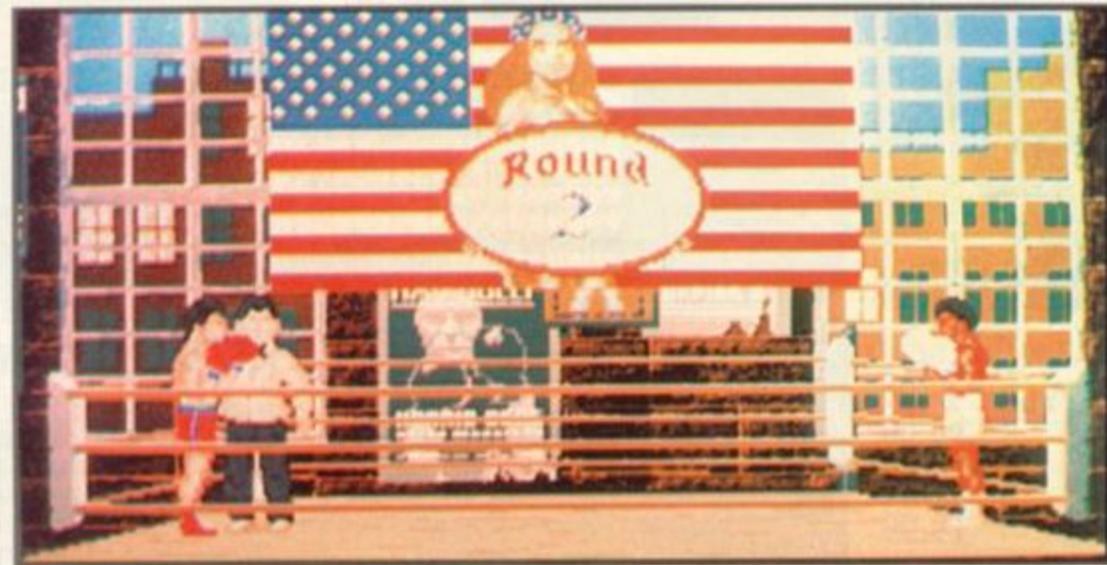
£19.99

AMIGA
47%

The introductory sequence where a boxing MC announces the game then *The Champ* logo appears, accompanied by the Rocky theme, is probably the best part of the game. Despite flat faces, the boxers look okay and are well-animated — despite their strange felled-tree falling movement, stranger knock-over recovery and downright stupid victory jump. The ref is a jolly round fella who walks sideways and whose cries of 'Box!', 'Break!' and knock-out counts are cleanly digitised. There are also some sampled grunts and groans but for some reason there's always the (extremely repetitive) sound of machinery in the background and an occasional dog bark or car horn.

OTHER VERSIONS

Atari ST version is planned, although no release date has been fixed.



It's all in the mind

ASTAROTH

Hewson

Astaroth is the name given to The Angel of Death. And ever since her conception, she's been bent on destroying all in her way. It is your fate, as the brave Ozymandias, to enter her domain within the catacombs, and confront her face to face. However, your mind is not yet prepared for such an encounter. On your travels you must pick up nine mind powers which are to be found in large bell jars (see box). With these you can battle, cell for cell, against the Angel of Death.

Astaroth's vicious minions patrol the dank caves. Watch out for Impalers, Bludgeon Beasts, Harpies and Tortured Souls (the remains of previous adventurous souls like yourself). Until you collect a mind power, it's best to avoid them (unless you approve of the brain drain!).

Jump the proliferating traps, and keep looking for mind powers that will get you past ice and stone walls, acid drops, and axes and spears which also drop from the ceiling. Once past all these obstacles, your

nine mind powers really come into use as you face your final obstacle — Astaroth. It's mind against mind, so keep your wits about you. *Astaroth* is certainly a tough game to play, the enemies take their jobs very seriously and it's often very hard to get going (even after a few hours). We were very split on whether *Astaroth* was original enough to be successful. However, everyone agreed it was well-programmed and **VERY DIFFICULT!**

MC

ATARI ST

84%

£24.99

Graphically *Astaroth* is terrific. Ozymandias is a very smooth character, and Astaroth's minions carry out their duties with great zeal. Extremely disappointing soundtrack, trying to be 'atmospheric'.



MIND POWERS

Telekinesis: Move objects with the power of your mind

Pyrokenetics: Create fire

Telepathy: Read other people's minds

Shape Shifting: The ability to change the shape of your body

Levitation: Defying the laws of gravity

Transmigration: Hyperspacing

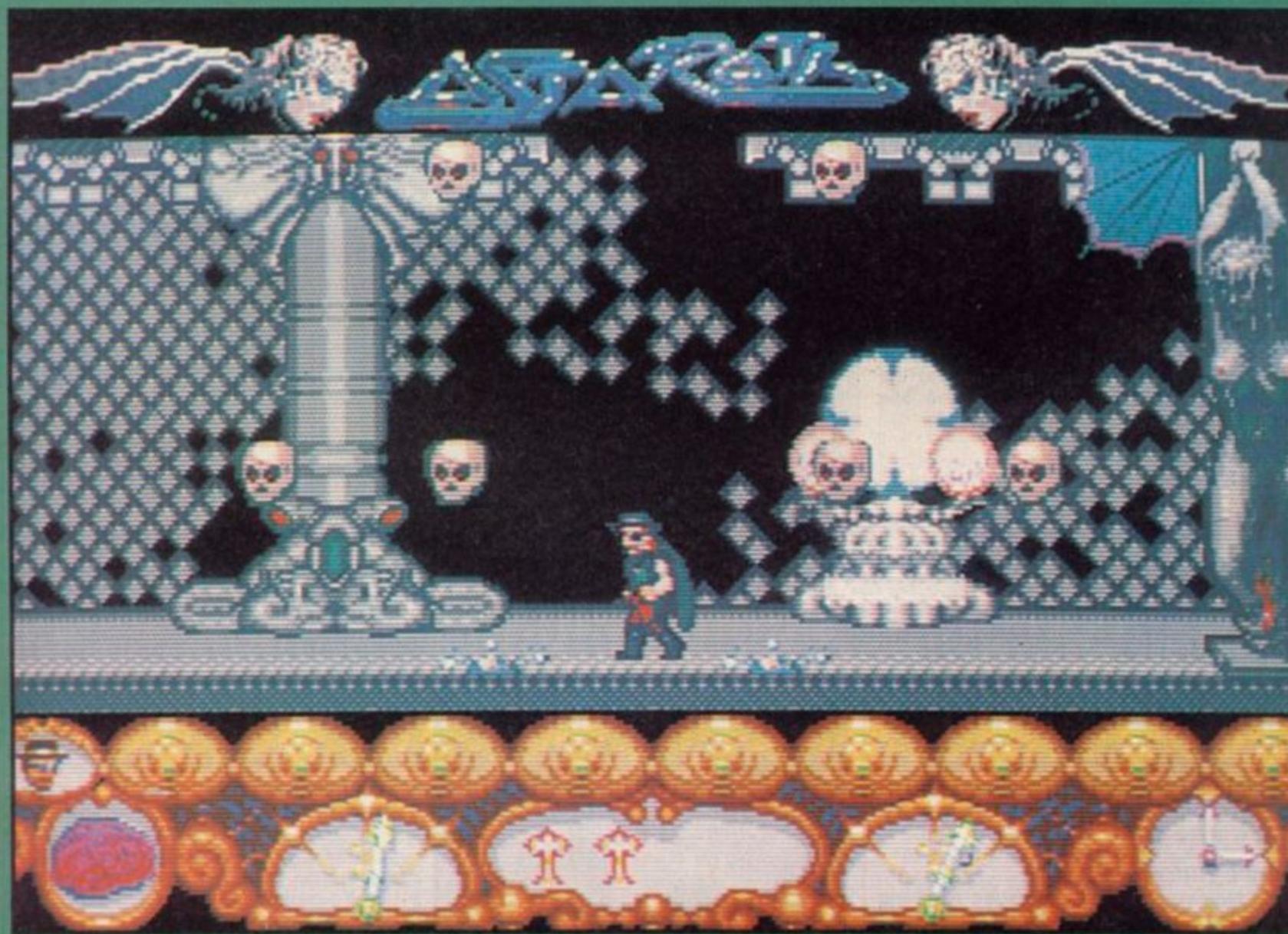
Cryokenetics: Freezing objects

Night Vision: Seeing in the dark

Meditation: Relaxing the body and mind to refresh yourself

OTHER VERSIONS

An Amiga version is imminent. Same price, same game — same sound!



PRESS ANY KEY

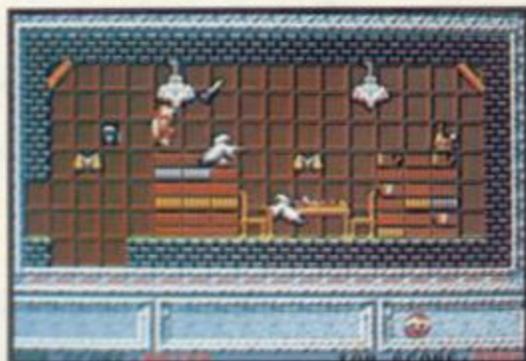
SOFTWARE SNAX

TIME RUNNER

Red Rat Software ■ Atari ST
Price TBA (probably £19.99)

Teezles aren't dangerous, we're told, but they are small, yellow, very ugly and very, very mischievous. A gang of them have escaped from their cages and are now having a good time in the Time Corridors (which means trouble for everyone else). Enter stage left the very unlikely hero of *Time Runner*, Captain Crumble — ex-star fighter pilot who keeps the Time Corridors tidy in his capacity as Janitor.

Pausing only to don a jet pack, grab his trusty sonic smasher and a Teezle trap, the good Captain heads into battle. There are



six Teezles to capture on each level, but the denizens of this netherworld aren't too chuffed at his actions, so as he zips around the various rooms and corridors of the Time Zones, ghosts, skulls, skeletons and a host of nasty creatures belt him in an attempt to knock down his energy meter.

But whether Captain Crumble saves the Time Corridors from the rampaging Teezles is a matter of how long you can stand playing this sleep-inducing game. Graphically *Time Runner* is good, but the whole shooting match is brought to a grinding halt by impossible character control. Some of the gaps Crumble has to squeeze through (without touching) are ridiculous, and the amount of baddies chasing him give little chance to survive their onslaughts.

Machine rating 39%

G.NIUS

Infogrames ■ Atari ST £19.95

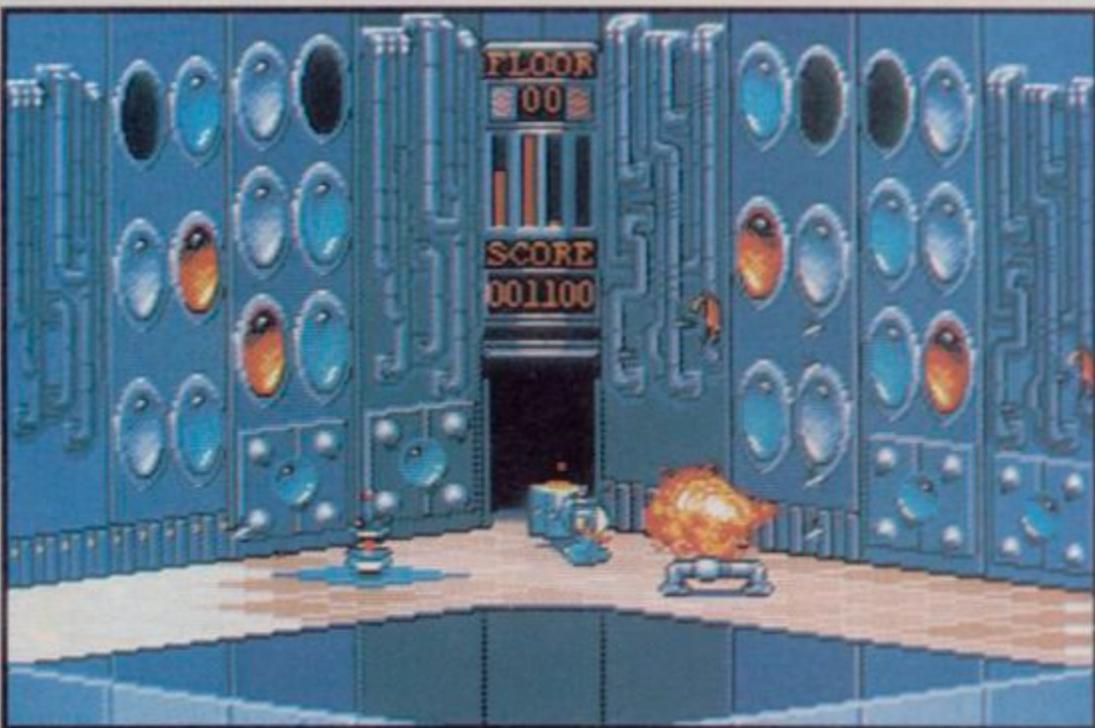
Ahh this is the life, sitting with a can of oil counting the robosheep as they leap over the laser mesh fence. Oh sorry I was just dozing off there, I am G.nius the robocommander of this interstellar cargo ship on its way to trade with alien civilisations.

What was that?, it sounded like an Acturan Mega-Elephant breakdancing. Oh dear it was worse. A huge asteroid has

honourable thing and leg it before the damn thing goes BOOM. Unfortunately various obstacles stand between me and freedom — the maintenance robots fr'instance, they were quite friendly little chaps yesterday. They obviously suffered a nasty bang on the bonce in the crash because they seem more intent on destroying me than fixing the ship.

Extra energy, shields and ammo can be collected by destroying the maintenance robots, but survival is the main consideration so I can't stand and natter any longer as the ship's about to disintegrate.

G.nius is admittedly rather confusing at



smashed into the side of the ship, so I have programmed the auto pilot to take us to the nearest planet for repairs.

Ah, here we are. Looks a bit of a dump. Never mind, we can't be choosers I suppose. We're coming in too fast, fire the retro rockets you fool... Well we're down I suppose, let's have a look at the damage.

The ship's too badly bashed about to do anything about it, so I'm going to do the

times (although mappers among you will be annoyed to discover that putting pen to paper is useless because the room layouts change from game to game). But a little practice soon sets our robo hero on the right path to freedom. A game worth considering if you like blasting games requiring a bit of thought.

Machine rating 73%

BUFFALO BILL'S WILD WEST RODEO GAMES

TYNESOFT £24.95 ■ Atari ST

This is the game that sorts out the men from the boys. Take part in Buffalo Bill's own anthology of wild west tough tests. Six events must be successfully executed, and your reward being that of fame and glory, and a high score!

KNIFE THROWING

You face your beautiful assistant revolving on a target. By throwing knives at her you



obtain points. The nearer you throw, the higher your score. (Hitting her results in her death — obviously!)

TRICK SHOOTING

Consisting of two sections, Trick Shooting first sees you shooting targets as they pop up from the ground. Avoid hitting innocent bystanders as they deduct points. The second part is much less dangerous as you shoot flying bottles thrown into the air by a (now male) assistant.

BRONCO RIDING

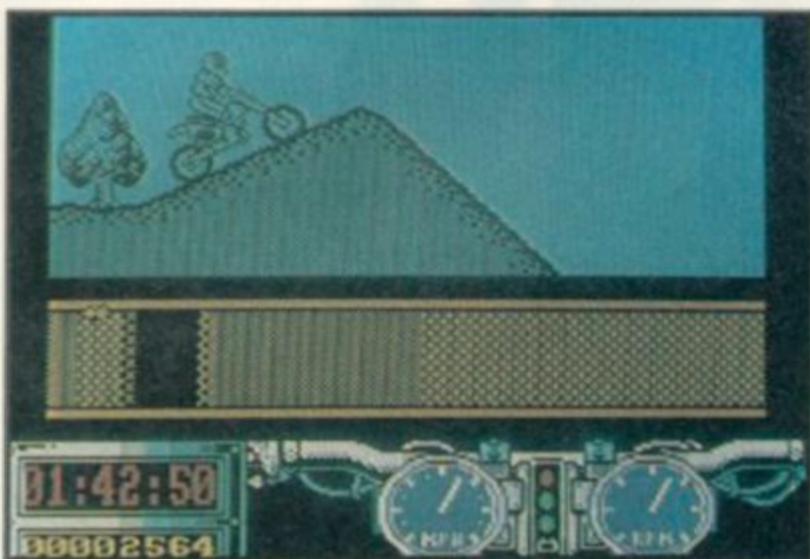
Here your reputation as a rootin' tootin' cowboy is at stake, so take ahold of what nerve you have left and leap onto the horse's back. Hold on for dear life, as the beast throws you all over the place.

SUPER SCRAMBLE SIMULATOR

Gremlin Graphics ■ Spectrum, Commodore 64 £9.99 cass, £14.99 disk

No, this isn't a computer reproduction of a sequel to an infamous bomb and laser scrolling shoot-'em-up (and it certainly isn't from Code Masters), but a sim of cross-country motorcycle trials. It's undoubtedly inspired by BBC TV's *Kick Start* programme (hosted by hairy Dave Lee Travis), especially as it was created by Shaun Southern, author of C64 *Kik Start* and *Kik Start II*.

As this is a computer game, the competition you are taking part in is the ultimate challenge (it always is). 15 testing courses — arranged into five sets of three — await



you, with nasty steep slopes and obstacles such as logs, cars, water hazards and lorries. A plan view of the current section of the current course is displayed toward the bottom of the screen.

Each course is against a time limit so care should be taken to avoid stalling. Precious seconds are also lost if the bike lands incorrectly from a jump.

Immediately this is seen as a (nother) sequel to *Kik Start*: same sport, same viewpoint. There is in fact less variety of obstacles than in *Kik Start II* and there's no construction kit.

The ability to steer left and right has been added — though this has little effect — and it's a simulation in as much as it's possible



to stall the bike, and landing incorrectly can damage suspension. The benefits of this depends on your point of view. The game isn't all-out race and jump (it would be a jolt and a shudder if you tried) but the restraint of driving the bike carefully and properly can have its own rewards.

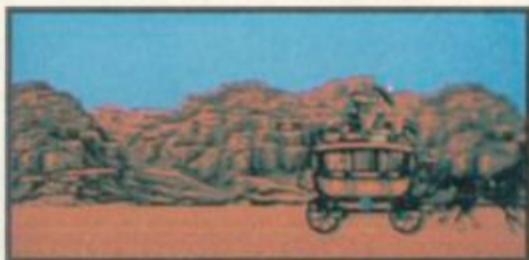
On the Amstrad the biker hunches over his small-wheeled cycle and trundles along a juddery-scrolling course. Detail is adequate if a little sparing, but play elements (bike, rider, scenery) are each in two colours — better than monochrome but fairly bland. A boppy number plays on the title screens but in-game sound is the usual engine drone.

In a similar awkward position, the Spectrum rider and whole playing area are in the same two colours, but scrolling is smooth and animation is quite realistic in the way the biker bobs around as he passes over obstacles and bumps. Jingles (usually of condolence) break the silence.

A bit blocky and white on the C64, the bike and its rider are adequately drawn, and though the colours are gaudy, bushes are well shaded. Scrolling's fine but the title music drones on — though not in such an irritating manner as the jingles and engine noises.

Gameplay requires too much discipline — and has too little fun — for most people, but if the idea appeals to you, try before you buy. Atari ST and Amiga (£19.99) versions will follow (provided they don't stall, land on their front wheel, hit an obstacle, run out of time...)

**Machine ratings: Amstrad 48%
Commodore 64 51%
Spectrum 55%**



STAGE COACH

Once out of hospital you hear that the stage coach is being attacked by Indians, so you race to the rescue. Watch out for the luggage being thrown off the coach by a very unobliging Indian, then clamber on board. A good punch in the face is what that darned

Indian deserves, and you must dish out what's due.

CALF ROPING

Take your lasso in one hand and aim precisely to get the calf under your control.

STEER WRESTLING

The final event is the toughest of all. Tame that anarchic animal and become the wonder of the west.

Graphically and sonically Buffalo Bill's Wild West Rodeo Show is very good, especially on the static displays between events. Those of you who have ever dreamed of being a cowboy should try this game, but watch out for them varmints.

Machine rating 82%

THE ZZAP! SIZZLERS COLLECTION: VOL I

US Gold/ZZAP! ■ Commodore 64, £12.99 cass, £14.99 disk

The naming of this five game compilation is a little deceptive as our sister magazine didn't award *Solomon's Key* a Sizzler, although it still stands as a great arcade puzzle game. As a wizard, you have to collect treasure as you make your way through a maze of caverns, magically forming and destroying blocks and avoiding monsters.

Impossible Mission II again has Agent 4125 exploring rooms for clues and codes, avoiding various types of robot and hoping to prevent Elvin Atombender from world domination. For a more relaxing time, the sun beats down while competitors play in the six-event *California Games*, involving such pastimes as surfing, Frisbee throwing, and BMX racing. The fantastic playability of Capcom's shooting, swinging coin-op is reproduced nicely in *Bionic Commando*, where a cyborg hero must fight through five soldier-infested levels.

Finally, *Dropzone* is another misfit — it was awarded a Gold Medal, and rightly so. The jet-packing sprite patrols the surface of Mars's moon, lo, saving scientists while fighting off waves of aliens. Inspired by coin-ops *Stargate* and *Defender*, *Dropzone* is a fast, furious and thoroughly addictive blaster that no Commodore owner should be without.

This package is good value just on the strength of *Bionic Commando* and *Dropzone*, but together with the other three high quality games, ZZAP! Sizzlers is a compilation well worth anybody's money.

Machine rating 93%

WL

THE CRASH SMASH COLLECTION: VOL I

US Gold/CRASH ■ Spectrum £12.99 cass, £17.99 disk

Like ZZAP! Sizzlers, *CRASH Smashes* isn't exactly accurate. 720 — the fab Atari skateboard coin-op — wasn't a Smash, but it deserves to be here.

Bionic Commando, from the Capcom coin-op, is an extremely addictive platform game. Equipped with your bionic arm, you must climb to the top of each level in a hope to advance. Great graphics and very playable.

Spy Hunter, from the Sega coin-op, is a classic not to be missed. Jump in your car, viewed from above, and race through land and water blasting all-and-sundry.

Next comes *Impossible Mission II*. More super graphics, with excellent animation. The game's very tough; a real challenge for puzzle fans. And finally we travel to snowy slopes and prepare for plenty of wrist ache in *Winter Games*. With a double loader on 48K machines, it's tough to decide which four of the eight to play. All the games may be old, but they're all real classics. A super compilation — great value for money.

Machine update 92%

MC

The Games

machine

NEXT
MONTH

■ DAVID CRANE SPEAKS

After years of silence, the programmer of probably the BEST-SELLING computer game EVER, *Ghostbusters*, speaks in an exclusive interview to TGM. David Crane talks to us about everything imaginable, plus a few plugs and pictures for his latest game entitled *The Boy and his Blob*. An interview NOT to be missed...

PLUS, in Centre Bytes

■ EMULATION

Ever wanted a Macintosh but could only afford an Amiga? Ever wanted the massive software support of the IBM PC without forsaking your STs MIDI ports? Since the dawn of time, every computer has had its pros and cons but now — thanks to the Centre Bytes investigative team — we solve all

those urges to buy another machine by revealing all about the world of emulation.

■ TGM GUIDE TO DIGITISING

Without a hint of *Hellraiser* anywhere the Centre Bytes crew take to the TGM Labs for the definitive guide to getting video and TV pictures pixelated. This month was just the tip of the iceberg...

■ COMPUTER SYSTEMS GUIDE

It's back. After many many requests from readers, the TGM Guide to Computers returns. All the specifications on all the popular, and not so popular, computers available today in the UK.

All this, plus the usual up-to-date news, reviews and previews, and much much more in the next issue of *The Games Machine*.

AT YOUR NEWSAGENT FROM AUGUST 18.

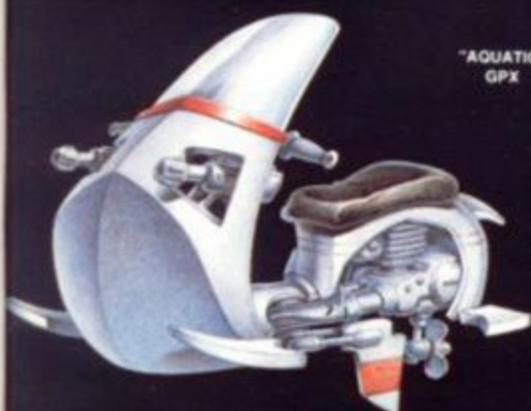
EDITORIAL OFFICE 47 Gravel Hill, Ludlow, Shropshire SY8 1QS (0584) 5851/2/3 **Editor:** Roger Kean **Features Editor:** Dominic Handy **Staff Writers:** Robin Hogg, Warren Lapworth, Robin Candy, Mark Caswell **Editorial Assistants:** Viv Vickress, Caroline Blake **Photography:** Cameron Pound, Michael Parkinson (Assistant) **Contributors:** Mel Croucher, Don Hughes Paul Rigby, Marshal M Rosenthal (USA), John Woods & John Woods **PRODUCTION DEPARTMENT** 1/2 King Street, Ludlow, Shropshire SY8 1AQ (0584) 5851/2/3 **Production Manager:** Jonathan Rignall **Reprographics:** Matthew Uffindell (Supervisor) Robert Millichamp, Robb (the Rev) Hamilton, Tim Morris, Jenny Reddard **DESIGN** Roger Kean, Mark Kendrick **Mac Systems:** Ian Chubb **Publisher:** Geoff Grimes **Group Advertisement Manager:** Neil Dyson **Advertisement Sales Executives:** Lee Watkins, Wynne Morgan **Assistant:** Jackie Morris (0584) 4603 or 5852 **Group Promotions Executive:** Richard Eddy **Mail order:** Carol Kinsey **Subscriptions:** PO Box 20, Ludlow, Shropshire SY8 1DB Designed and typeset on Apple Macintosh II computers running Quark Xpress and Adobe Illustrator 88, output at MBI, Wellington, Telford, with systems support from Digital Print Reprographics, Wirral Business Centre, Merseyside. Colour origination by Scan Studios, Islington Green, London N1. Printed in England by Carlisle Web Offset, Newtown Trading Estate, Carlisle, Cumbria CA2 7NR — a member of the BPCC Group.

DISTRIBUTION by COMAG, Tavistock Road, West Drayton, Middlesex.
COMPETITION RULES The Editor's decision is final in all matters relating to adjudication and while we offer prizes in good faith, believing them to be available, if something untoward happens (like a game that has been offered as a prize being scrapped) we reserve the right to substitute prizes of comparable value. We'll do our very best to dispatch prizes as soon as possible after the published closing date. Winners' names will appear in a later issue of TGM. No correspondence can be entered into regarding the competitions (unless we've written to you stating that you have won a prize and it doesn't turn up, in which case drop Viv Vickress a line at the PO Box 10 address). No person who has any relationship, no matter how remote, to anyone who works for either Newsfield or any of the companies offering prizes may enter one of our competitions. No material may be reproduced in part or in whole without the written consent of the copyright-holders. We cannot undertake to return anything sent into TGM — including written and photographic material, hardware and software — unless it is accompanied by a suitably stamped, addressed envelope. We regret that readers' postal enquiries cannot always be answered. Unsolicited written or photographic material is welcome, and if used in the magazine is paid for at our current rates. Colour photographic material should be 35mm transparencies wherever possible. The views expressed in TGM are not necessarily those of the publishers.

Copyright TGM Magazines Ltd 1989 A Newsfield Publication ISSN 0954-8092

Cover Design by Roger Kean

NAVY MOVES



"AQUATIC" GPX



AMIGA



FLAMMENWERFER FLAMETHROWER 5.56 mm. FA RIFLE

YOUR MISSION: DESTROY THE U-554 NUCLEAR SUBMARINE

To accomplish this you have to master all types of oceanic warfare:
ON THE SURFACE, piloting your pneumatic punch and fighting against the enemy comandos on their aqua-jets.

BENEATH THE WAVES, where you will use a harpoon with explosive arrows to make your way through the shark infested waters.

IN THE DEPTHS OF THE SEA, inside a bathyscaphe loaded with missiles, fighting against bloodthirsty octopii and a giant sea-monster.

INSIDE THE ATOMIC SUBMARINE, sustaining man-to-man combat against the crew. Your flamethrower-rifle will be a great help, but you will also need to be an expert «hacker», manipulating the submarine's computers.

NAVY MOVES INCLUDES A DOSSIER FOR THE COMANDO AND A COMPLETE MAP OF THE SUBMARINE.

 SPECTRUM-AMSTRAD-COMMODORE 64 £ 9.95

 AMIGA-PC & COMPATIBLES £ 24.95

 ATARI ST £ 19.95



PC



BATHYSCAPHE



ATARI ST

DYNAMIC

DISTRIBUTED BY

ELECTRONIC ARTS

Electronic Arts, 1148 Station Road, Langley, Berkshire SL3 7YX, England. 053 6488

RED HEAT

The heat is on ... and the chase is in full cry as East and West join forces to hunt down a Soviet drugs-dealer. The two detectives, one Russian, one American have very different methods of capturing their prey, but together they face the worst of Chicago's underworld - street fights, the 'Cleanheads'

gang, gun fire and a breath-taking bus chase. The hottest film tie-in to date - it's all action with stunning graphics - feel the heat - RED HEAT.

SPECTRUM
COMMODORE
AMSTRAD
ATARI ST
AMIGA

£8.99
£9.99
£9.99
£19.99
£24.99



**MOSCOW'S TOUGHEST DETECTIVE. CHICAGO'S CRAZIEST COP.
THERE'S ONLY ONE THING WORSE THAN MAKING THEM MAD... MAKING THEM PARTNERS.**

© 1988 Carolco Pictures Inc. All Rights Reserved.

Ocean Software Limited
6 Central Street
Manchester · M2 5NS

ocean[®]

Telephone: 061 832 6633
Telex: 669977 OCEANS G
Fax: 061 834 0650