

# The Games machine

THE FUTURE IN YOUR HANDS

TX: 018 MAY 1989

It's a whopper!

**111**  
Reviews  
72 products

Land and Air

**3-D WARFARE!**

Hi-tech death in

**VOYAGER**

OCEAN'S GREAT NEW HIT

Exclusive!

Exclusive!

FIRST PICTURES OF ARGONAUT'S

**F-117a AGGRESSOR**



GET 'EM  
OFF —  
LECHING  
WITH  
HOLLYWOOD  
POKER PRO

CREATE OR  
ANIMATE  
WITH  
DELUXE PAINT III  
& ZOETROPE

A Kayak or A helicopter flight over London!



05



# SLEEPING GODS LIE



*Sleeping Gods Lie – A Real-Time fantasy that combines fast action and combat with the thrill of adventure.*

*An epic 3-D game fought over 64 landscapes and drawing on megabytes of high resolution graphics. A unique world of sight and sound, created over two man years, by the award winning Oxford Digital team.*

**AVAILABLE OVER 3 DISKS FOR AMIGA,\* ST AND IBM PC AT £24.99**



Empire Software, 4 The Stannets, Laindon North Trade Centre, Basildon, Essex SS15 6DJ. Telephone: 0268 541125. Fax: 0268 541125

\*AMIGA 2 DISKS



# The Games machine

## THIS ISSUE .

### REGULARS

- 7 TGM NEWS AND PREVIEWS**  
If it's newsworthy, it's here – plus loads of luvverly screens from forthcoming games
- 31 REVIEW CATALOGUE**  
A positive plethora of software this month, including the awesome *Voyager*, *Vindicators*, *Ballistix* and *Vigilante*

It's a whopper!

**1111**  
**Reviews**  
72 products

**DIAL 0898 555080 FOR A CHANCE TO WIN COPIES OF STORMLORD FROM HEWSON**

See page 15 for details



### WIN!

## A HELICOPTER FLIGHT OVER LONDON

Courtesy of The Sales Curve. Plus copies of *Silkworm* for the runners up  
See page 27

### WIN!

## A KAYAK

Plus copies of the incredible *Typhoon Thomson* from Broderbund for the runners up  
See page 22

### AND THERE'S MORE . . .

#### GRAPHICS

TGM looks at the latest art packages including *Zoetrope* and *Deluxe Paint 3*

#### MUSIC

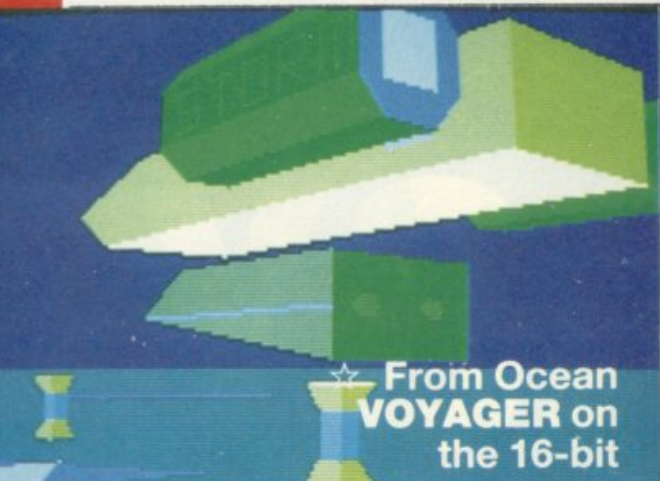
TGM reports from the Frankfurt music fair

#### JEZ SAN

A first time look at the amazing vector graphics of *F117A Aggressor*

#### PLAYING TIPS . . .

including a full map of Baal



From Ocean  
**VOYAGER** on  
the 16-bit

- 74 ROBIN HOGG'S PLAYING TIPS**  
Quite a few playing tips this month, including a full map of Baal
- 78 FANTASY GAMES**  
John Woods discovers a past different from the one we've known in *Space 1889*
- 79 BACK BYTES**  
All the latest in hardware and applications software, including Infodesk and Readerpage

### FEATURES

- 16 AMAZING GRAPHICS**  
Five pages of the most amazing screens created by the very latest art packages: *Deluxe Paint 3* and the animation program *Zoetrope*
- 24 POWER TO THE PEOPLE**  
TGM reports from the Frankfurt Music Fair to bring you news of the latest developments in the computer music world
- 72 JEZ SAN**  
The mystery project is named at last, as we look at the first screens of Argonaut's *F117A Aggressor*

■ TGM 019 goes on sale from May 18. Miss it and know what misery really means





# PIRACY

---

**It's no game any more.  
For every game you copy you  
are depriving programmers of  
their livelihood.**

Placed on behalf of FAST (Federation Against Software Theft)



# SEGA®

## Number 1 for TV Arcade Action



£99.95



£129.95



£14.95



£39.95



£79.95



£29.95

### Spring Madness

\*SUBJECT TO AVAILABILITY FROM PARTICIPATING STOCKISTS

The Sega Mastersystem inclusive of Light Phaser \*available to you for only £89.95.  
Recommended Retail Price £109.90

### The No.1 best selling console in the UK

Distributed by  
Virgin Mastertronic, 2-4 Vernon Yard, Portobello Road, London W11 2DX.



#### RAMPAGE

You and your buddy are ready for a little action tonight 'cause you just happen to be in the mood to tear up the town. You'll demolish buildings, grab and chomp horrified spectators and other yummy morsels, and flatten puny helicopters and other antagonists who try to stop you!

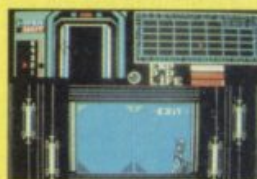
Addictive gameplay, marvellous graphics combined with originality and a great sense of humour! C+VG, March 1989



#### 'R' TYPE

They came from a Dimensional plane clear across the galaxy, wreaking havoc and chaos from star system to star system. With an evil that smothered all resistance with fear and terror, the horrid creatures of the Bydo Empire are now knocking on, Earth's front door.

Is by far the best blast available on the Sega, so it goes without saying that no shoot 'em up fan should be without it! C+VG, March 1989



#### CYBORG HUNTER

The year, 2242 you are Paladin, the toughest bounty hunter in the galaxy. Monstrous Cybags are threatening to take control of the Universe under the direction of their evil leader, Vipron. Your mission is to gain access to Vipron's chambers and destroy him. Sound easy enough? It isn't!

Horizontally scrolling arcade adventure, action packed! C+VG, March 1989



#### Y's

You are Aron Christian, a swordsman washed ashore by the might and fury of a hurricane. You were found half dead by a kind and humble fisherman and he restored you to health. The fishing village sat at the edge of the great plain. Rising in the distance was a small mountain range with an ominous tower at its peak. 'That is the Tower of the Doomed', the fisherman told you as they made the sign of the evil eye. 'It is the place where the troubles of our land began'. As you watched the tower, you knew that your destiny waited there.

The whole thing looks incredible - the best I've seen on the Sega. Y's offers depth and playability and will keep you engrossed for weeks. It's a must! C+VG, March 1989



# TGM REPORT

## ■ AMIGA – WHAT A SHOW-OFF!

What answers the phone, tells you to do the washing up, and beats every other computer at 3-D animation? The Amiga, of course...

Marshal M Rosenthal reports on Amy's latest goodies the from AmiExpo, the major US Amiga fair.

Too much, too much! The Amiga isn't a computer – it's a swirling vortex shooting out endless creative software.

If you remember how Grandma used to nag you to do the right thing, you're ready to use *Nag Plus 3.0* from Gramma Software. *Nag* is a full-featured, hidden-in-the-background, multisorting datebook, calendar – and all-round reminder.

Its voice/sound effect alarms (nothing like an elephant's blare to get your attention) remind you of important events, while full information is displayed in configurable screens.

Once *Nag's* reminded you of an important phone call, why not dial with your Amiga – using the *Nomo* add-on, also from Gramma? Because phones in the States beep at a different pitch every time you dial a different digit, the combination of *Nomo* and a simple phone-dialer program can do the work for you.

Then, of course, you have to pick up the handset for normal voice transmission... unless you want the computer to speak, too. For incoming calls can interact with the Amiga's voice output to give messages.

*Nomo* connects via RCA plugs to the sound output of the Amiga and into the telephone line, and it retails for only \$25 (about £14.50). It's not much use in Britain at the moment, because UK phones don't use the tone system, but they're on the way.

### A matter of fax

Phones are rapidly being replaced by fax machines for many messages, and they've become the rage in the States – unfortunately one of the results is that there's now another source of junk mail from. But leave it to computers to find an extra use for faxes – sending a video image over a standard telephone line.

*Videofax*, by Interactive Picture Systems, captures a video image and can compress over 1,000 frames on one hard disk, without losing any image

quality. A video camera interfaces with special hardware and software to produce the image, and then automatic processing enables an ordinary fax machine to send a broadcast-quality, high-resolution colour image across the country – or the world – in about three minutes.

It's displayed on a monitor on the other end, just as you sent it. And all this is done over regular phone lines – no need here for the new technology of ISDN (TGM015).

### Money and music

Finally, to keep track of those phone bills you'll need Gold Disk's *Desktop Budget*. It's a quick'n'clean method of keeping a business running – doing books and storing data.

UK import seems likely, considering the popularity of other Gold Disk products like *ComicSetter* (TGM014).

And when the phone breaks down and the burdens of high finance become too much to shoulder, just settle down to some soothing music – and check out *Czar*.

This graph-oriented synthesizer program allows full control over any Casio tone generator or keyboard deck that interfaces with MIDI. There are too many features to go into here, but American Amiga-owners were oohing and aahing at how easy it is to create waveform patterns and sound shapes with just the mouse, and how notes and music become graphics which can then be altered.

**CONTACTS:** *Czar* is available from Creative Computing – South Bay, 4453 Redondo Beach Blvd, Lawndale, CA 90260, USA.

*Desktop Budget* is produced by Gold Disk, PO Box 789, Streetsville, Mississauga, ON, Canada L5M 2C2, but may well be available from UK mail-order dealers.

And both *Nag Plus* and *Nomo* come from Gramma Software, 17730 15th Avenue NE, Suite 223, Seattle, Washington 98155, USA.

## A PC in your Amiga?

Among the hot Amiga topics Stateside is Commodore's not-yet-released 2286 Bridgeboard, which fits a fully functioning 80286 PC AT, 'the latest and the fastest yet', into the Amiga. Besides one AT and two XT expansion slots, the board drives CGA colour and MDA mono PC windows simultaneously with Amiga graphics, all on an Amiga monitor.

The board autoconfigures, of course, and has autoboot as well. And new *Janus 2.0* software lets the bridgeboard share a hard disk, RAM, floppy drives and mouse with the Amiga.

The price has yet to be set, though all signs indicate a retail of about

## The ultimate disk

Roll over, floppies, and tell the hard disks the news... among the most exciting high-tech peripherals around is the Discus Rewritable 5.25-inch Optical Disk System (from AGA).

Yes, a laser reads and writes to the disk, and that means being able to store the equivalent of 100 books (five encyclopaedias, say) on one hard-cased disk – roughly half a million pages of text!

And, unlike a CD-ROM, it can be erased and reused repeatedly.

All the glamour is in the execution: in use the system feels like a moderately fast hard drive. Discus is designed right now to work with expensive AT&T systems (though an Apple Macintosh version in the works), and the controller can also access floppy drives and CD-ROM.

The price is a bit steep at \$4,500 (about £2,600) – but then so were the first personal computers when they appeared.

## MUGging up

Shades, the multiuser adventure played for over 450,000 hours on Micronet, should soon be joined by *Trash* – another multiuser game (MUG) from the same pot.

For Shades developer Neil Newell has joined forces with programmer Matthew Ward and former Micronet supremo Mike Brown, to develop as many MUGs as they can handle.

Calling themselves Third Millennium Systems, they're using a special MUG development language called MUGICK.

And they'll also be looking at the gaming possibilities of new technology like ISDN (TGM015).



Pouring out MUGs: left to right, original Shades man Neil Newell, Mike Brown, and Trash developer Matthew Ward

## Piracy: just say no!

A massive crackdown on piracy and more games under the Christmas tree are among the targets of the software world.

Those were decisions made at the Computer Arena conference in Majorca last month – the annual get-together of major figures in both software and hardware, run by TGM's publishers.

The assault on piracy, spearheaded by the Federation Against Software Theft and its Coordinator Bob Hay, is aimed not at making piracy more technically difficult but at convincing people it's wrong.

So slogans on packaging, a barrage of FAST leaflets, advertising in magazines and literature with Com-



modore computers will emphasise that copying software is illegal.

Cooperating in the project will be the new Entertainment Software Publishers Association (ESPA), a society composed of major software houses including US Gold, Ocean, Mirrorsoft and Virgin Mastertronic.

And the ESPA, chaired by eponymous Hewson boss Andrew Hewson, also hopes to increase publicity for games in newspapers and on TV – claiming this way 'it will be easier to persuade parents to buy software or hardware as Christmas presents'.

No word yet on a mailshot to Santa's elves, but we'll keep you up to date on both stories.

## Altered Alton

There's no need to go helter-skelter if you're entering Audiogenic's £500 Alton Towers comp – for the closing date has been put back three months to June 30.

The comp, which can be entered by anyone who buys *Helter Skelter* on the ST or Amiga, is a challenge to design the best screen using the game's built-in designer section. The first prize is a weekend for two at the Alton Towers leisure park in Staffordshire, including hotel rooms and meals.

The decision to postpone the closing date came after delays in the release of *Helter Skelter*. Information on how to enter is included with every copy of the software.

## Animals in computing

■1 Thalamus's mascot Rocky, commonly known as the Thalapuss (*Felix Fasoulis*). His natural habitat has long been the C64, but recent sightings have been made on the Spectrum and 16-bits.

■2 Activision's *Might & Magic II* horse (*Equus Mirabilis Fortis*). This large but gentle beast can be seen in all the environments of the PC/C64 RPG: forests, deserts, snowy wastes and urban areas. Surprisingly docile, it is easy to ride without prior acquaintance – just as *Might & Magic II* is ready to play whether or not you know the original *Might & Magic*.



■3 The ThetaComm Introvoice dog (*Canis Vocis*). A distant descendant of the creature seen for aeons on HMV records, this remarkable speaking breed will both listen and reply to you – like the PC voice-recognition/synthesis hardware supplied by ThetaComm for £395 upward from FREEPOST, 38A Queens Road, East Grinstead, Sussex RH19 1BD ☎ (0342) 325600.

■4 The Code Masters Hamsters (*Rodenti Magistris Codis*). Not animals but a supposedly existing band assembled to promote *Rock Star Ate My Hamster* (TGM018).



## Telecomsoft goes up for sale

by Barnaby Page

Telecomsoft went on the auction block on the evening of February 22 – but not even staff know whether a new owner will make dramatic changes to the successful three-label software house. Telecomsoft publish Rainbird, Firebird and Silverbird.

Frequently-mentioned possible buyers include Mirrorsoft, Mediagenic and PC Engine manufacturers NEC. MicroProse, keen to expand dramatically in the next few years, also seems a likely candidate – and it certainly has a high regard for the company, having hired three key ex-Telecomsoft employees in recent months.

Mirrorsoft, ultimately under the control of acquisitive media tycoon Robert Maxwell, is already a major software house and would turn itself into a power of the Ocean/US Gold rank if it picked up Telecomsoft. But Marketing Manager Tom Watson told TGM 'I have absolutely no comment'.

Mediagenic, meanwhile, is known to have made a bid.

Rumours of a buy-out by NEC have been circulating for weeks, but it's difficult to see what the computers-to-cash-registers firm would gain from buying Telecomsoft – unless they're looking for a ready-made sales and marketing setup for their PC Engine.

### Scarce truth

Indeed, Telecomsoft has been the subject of rumours for years. Mirrorsoft's Watson, who worked there one-and-a-half years ago, recalls that 'we were being closed down every day, we were being bought every day... only 1% [of the rumours] were true'.

The sale has apparently been planned by owner British Telecom (BT) for some time, but Telecomsoft only went on the open market after five months of negotiations over a management buy-out, led by General Manager Paula Byrne, failed.

BT's motive for selling Telecomsoft is probably that though the software house is highly esteemed and commercially successful, its £6 million turnover in 1987-88 is paltry beside BT's £10.1 thousand million in the same period.

BT, the nation's fourth-largest company, may have found that Telecomsoft – which does not fit into its main business of phone services – was more trouble than it was worth.

At press time, BT spokesmen would only confirm that Telecomsoft is up for sale, so – whatever the rumours – it's too early to start worrying about the possible effects on computer users.

## Hot Toaster pops up

New Tek's booth at AmiExpo is always too crowded, with people chanting the same slogan over and over: 'Where's the Toaster?'

The Video Toaster, that is.

But the Toaster still hasn't been released; bits and pieces are seen, just enough to whet the appetite and make you bang the spoon against the plate in frustration. 'The delay is partly due to circumstances,' notes President Tim Jenison. 'Remember, the Toaster is a complicated beast – a genlok, frame buffer, and geometric engine rolled into one A2000 card.'

Now to the meat, er, make that the bread of the Toaster. Imagine you're watching a picture of a box on the Amiga as it soars gracefully around on the screen. There's a live, real-time video image in that box – an image that continues its movements within the box's confines.

Now take a cube – let it spin for you. Again, a face is superimposed

within and will rotate as the cube does (shades of the Konix Multi-System demo, TGM016).

The Toaster allows for this using 'time warping', and switching techniques built into the system, like fades and soft edge matting. It's an amazing device, and one that could only be done on an Amiga – which allows for video interfacing at high speed with no loss of quality. The retail price should be about \$1,500 (£870).

And there's also the tentatively-named *Toaster 3D*. Like the other Toaster, 3D is still in development. Software master Alan Hastings – creator of Aegis's *Animator* program many moons ago – is a bit reticent to give details, but one look at the videotape says it all. Solid 3-D imaging, moving at impressive speeds, speaks louder than words here. This is one of the hot programs to watch for.

Hassle New Tek at 115 West Crane Street, Topeka, Kansas 66603, USA.



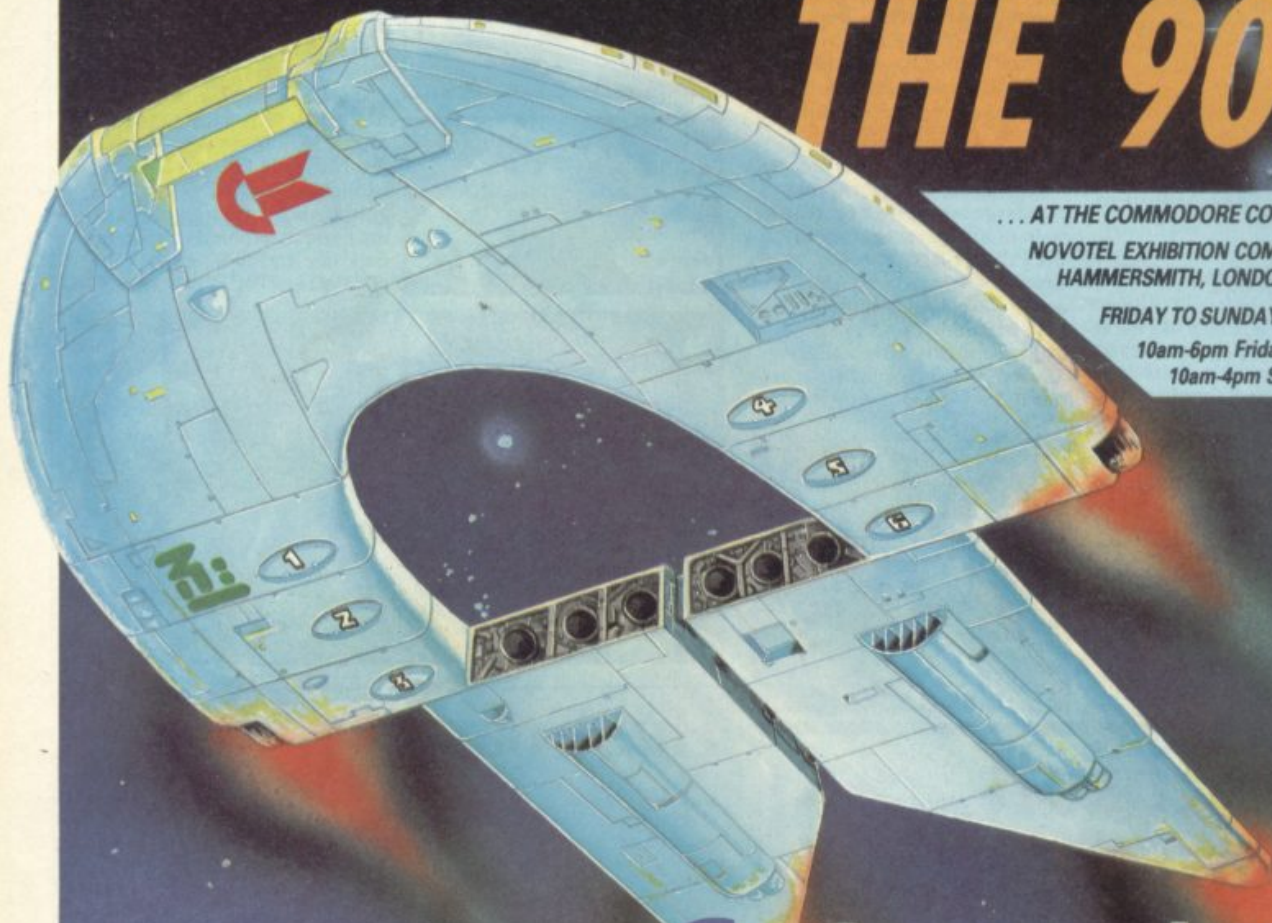


# BLAST INTO THE 90s

... AT THE COMMODORE COMPUTER SHOW  
NOVOTEL EXHIBITION COMPLEX,  
HAMMERSMITH, LONDON W6

FRIDAY TO SUNDAY JUNE 2-4, 1989

10am-6pm Friday & Saturday;  
10am-4pm Sunday



## HOW TO GET THERE

By Underground: Hammersmith  
(Piccadilly, Metropolitan & District)

By Bus: 266, 714, 716,  
290, 30,

Car parking  
at the Novotel



## Commodore COMPUTER SHOW

Be the first to see the products which will take Commodore into the 1990s.

**VISIT** more than 100 stands selling a massive range of software and hardware

**EXPERIENCE** the spectacular Leisurama with the latest in music and hobby software

**BEAT** top programmers at their own games in the Arcade Forum

**MEET** some of the leading computer journalists

**TRY OUT** the latest educational software in the Electronic Classroom

**PLUS:** Professional and business applications including the very latest in desktop publishing software and presentation graphics.

POST TO: Commodore Show Tickets,  
Database Exhibitions, PO Box 2,  
Ellesmere Port, South Wirral L65 3EA.

Please supply:

☐ Adult tickets at £4 (save £1) ..... £ \_\_\_\_\_

☐ Under 16s tickets at £2.50 (save £1) ..... £ \_\_\_\_\_

☐ Family ticket at £11 (save £7) ..... £ \_\_\_\_\_

Total £ \_\_\_\_\_

☐ Cheque payable to Database Exhibitions

☐ Please debit my Access/Visa card no:

\_\_\_\_\_

Expiry date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Admission at door:  
£5 (adults),  
£3.50 (under 16s)

Advance ticket orders  
must be received by  
Wednesday, May 24

Name .....

Address .....

Postcode .....

Signed .....

PHONE ORDERS: Ring Show Hotline: 051-357 2961

PRESTEL ORDERS: KEY \*89, THEN 614568383

MICROLINK/TELECOM GOLD ORDERS: 72:MAG001

Please quote credit card number and full address

DATABASE EXHIBITIONS

AG 87



# TGM PREVIEWS

## Sports onscreen

Fed up with Frank Bruno? Enervated by Emlyn Hughes? If you're a sports-sim fan, try CDS's latest in the ever-growing collection of ball'n'table games – Steve Davis World Snooker. 16-bit-only, it's pitched as an upgrade from the 8-bit Steve Davis Snooker, and should be available now for ST and Amiga (£19.99).

Features include the now-standard zoom, adjustable shot strength, and digitised music (in this case TV snooker theme Dragnet). Four different games are included: British and American pool, billiards, and carom (a kind of billiards without pockets).

A PC version is expected eventually.

Meanwhile, for the more strategically minded, new horse-racing games are available for the ST and CPC. A Day At The Races, a mouse-controlled ST package from US-based Team Software, supports up to 15 players. And it features animated races as well as a large menu-driven management section: buy and sell horses, choose jockeys, place bets, print out the results for up to 500 different horses and 50 jockeys. It's available



Steve Davis: putting on his crown again for CDS

from Team Software (address below) for \$39.95 (about £23 at press time).

And D&H Games have released The National for the CPC (464 and 6128), following a successful Spectrum version. Again putting you in charge of a stable of racers, it takes you through a season including major races like the Derby and

Grand National. At £9.99, it should be in many software shops now.

Team Software: PO Box 7332, Washington, DC 20044, USA ☎ (from UK) 010 1 703 533-2132 or 010 1 603 679-1211.

■ Software for a profitable day at the races: see Toolbox in Back Bytes, page 82

## Up to par

Play that stroke of genius in Accolade's *Mean-18*, a leading American golf game now available in the UK through MGA Softcat. On PC, Amiga, Apple IIGS or Mac, four players can compete against each other or try to beat the par, and when you've exhausted the possibilities just turn to the four *Famous Courses* disks.

These recreate the terrain of courses like Las Colinas, Muirfield and Inverness Club, and are fully compatible with *Mean-18*.

*Mean-18* itself costs £29.95 on all the formats except PC (£19.95), while the *Famous Courses* disks range from £14.95 to £24.95.

## Nicklaus

MGA Softcat also have two other Accolade golfing games, including ST and C64 packages. *Jack Nicklaus Golf* is available for C64 (£24.95), Amiga, PC and Apple IIGS (all £29.95), while for the faint at heart *Mini-Putt* is out for C64, ST, PC and Apple IIGS (all £29.95).

MGA Softcat: Pear Tree, Appledore, Kent TN26 2AR ☎ (0233) 83571.

## Creatures feature in Ocean Nightbreed game

Ocean came out a surprise winner in the bidding for the *Nightbreed* licence – and now they're hoping that the game-of-the-movie, to be released around Christmas, will

### Not going for Gold

US Gold had been expected to win the licence after long negotiations, but clearly Ocean – recently noted for their film-based games – offered the movie company more, whether in money or in guaranteed experience.

Ocean Software Manager Gary Bracey puts it down to 'our record with movie treatments... I think we've got the strongest stable of movie releases of any [software] company'.



Author Clive Barker: raising hell again

match the success of previous licences like *RoboCop* and *Platoon*.

The programmers of this multisection arcade adventure will likely be Impact Software, who recently scored with *Run The Gauntlet* for the same software house.

The movie, which recently

started shooting, is based on horror master Clive Barker's novel *Cabal* (Barker on software: TGM018). But 'it's not exactly a horror movie,' says Ocean Software Manager Gary Bracey. 'They're going for a 15 certificate. It's more a creature movie. And they're just creatures, not gory... there's going to be more creatures in this than any other movie.'

Barker is also writing and directing the film, his first since *Hellraiser*. So, with the game's development team allowed full access to the film sets, Ocean should be able to get their *Nightbreed* close to the author's intended atmosphere.

Says Bracey: 'We are getting every cooperation from the film company, we're there practically weekly, we've access to storyboards.'

For their part, the film-makers – and particularly special-effects team Image Animation – are 'hav-

ing direct input' into the game, says Bracey. 'They're actually involved in the storyboarding of

## Grave matter

Ocean may be pitching *Nightbreed* as 'creature' not 'horror', but for US-based Pedersen Systems there's only one way to go – straight down the grave.

For their new game *Zombies: Undead Or Alive!* (PC, C64, Apple II) features 'fast action arcade horror', 'lifelike horror scenes' and – the ears boggle – 'realistic sound effects'.

Squelch along with 'the first 3-D horror game' from Pedersen Systems, 2 N. Highway Avenue, Nanuet, NY 10954, USA ☎ 010 1 914 623-2245.

PRESS ANY KEY





Ocean's Gary Bracey: working closely with film team

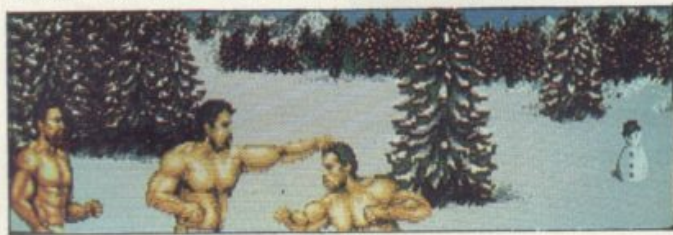
the game – but they wouldn't let us write the movie!

Look for Ocean's game on ST, Amiga, PC, C64, CPC and Spectrum this autumn. Meanwhile,

the *Nightbreed* movie will debut in North America in August, and presumably hit Britain at much the same time as the computer version.

## Red Heat

Out soon – Ocean's movie licence

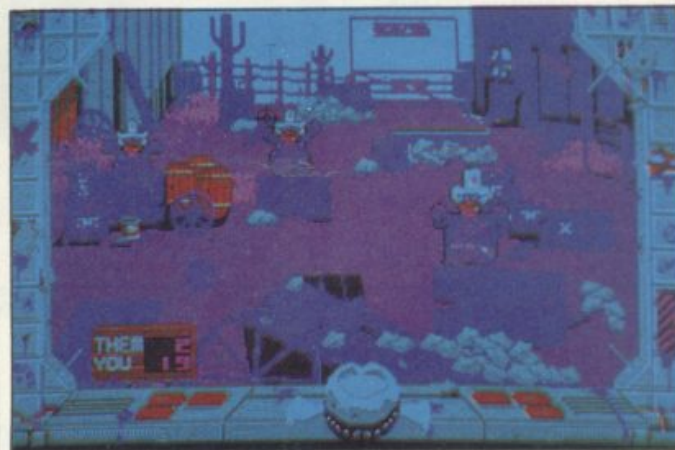
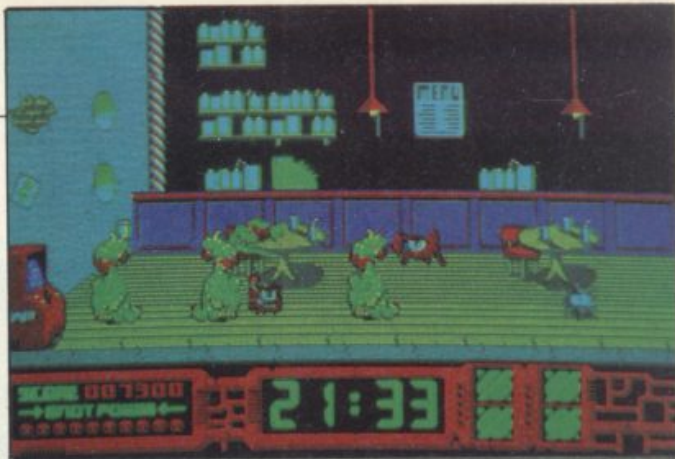


*Red Heat* starts in the Russian snow, where the player – Arnie Schwarzenegger in the film – is tracking down a drug dealer. Flex those muscles and move outside, away from the warmth and into the desolate wastes – for hand-to-hand combat.



Described by programmer Jonathan Smith as a Green Beret-style scroller, *Red Heat* has four levels of combat in America and the Soviet Union.

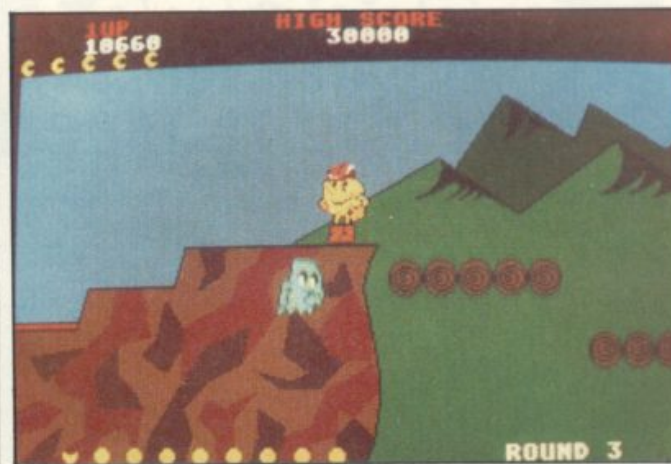
ST and Amiga versions are planned (ST screens are shown here, but because it's a direct port, Amiga will be very similar), along with Spectrum, C64 and CPC. Programmers Special FX, previously responsible for *Batman*, were hoping to complete work in mid-April, so expect release soon.



## Yeeuch!

It's simply disgusting. Revolting TV character Gilbert the Alien (from *Get Fresh*) is spilling his gooey self over all major formats this month in *Gilbert – Escape From Drill*.

The *Again Again* game sees Gilbert going in search of his personal Holy Grail... a dismantled toilet. And to find it he'll have to beat a time limit in five different arcade sections, including Snotfight at the OK Corral, shown here. Gross out on ST, Amiga, Spectrum, C64 and CPC.



Pac again: *Grandslam* must reckon that if it's worth doing once, it's worth doing twice. For pill-popping Pac-Man is back in *Pac-Land*, this time with limbs. (ST screen).



## Divine music

Top micro composer Rob Hubbard has done the impossible – improved on *Creation!* For after seeing Electronic Arts's godly game *Populous* (TGM017), Hubbard agreed to produce an introductory soundtrack.

Now working at Electronic Arts's California HQ, Hubbard has used medieval church music as the basis for his atmospheric score.





From France with death: Bio Challenge is the first game from Paris-based Delphine Software to hit these shores, thanks to Palace.

Just because you're a robot doesn't mean you're immortal, as six monster-packed levels of parallax scrolling will soon prove. And each kind of enemy needs a different kind of killing.

Programmed by the men behind Elite's Space Harrier, Bio Challenge features an amazing 160 onscreen colours on the ST – and more on the Amiga. Expect release very soon.



Boost for 8-bit Atari: Virgin Mastertronic are releasing the classic Ghostbusters for this neglected machine



Dubbed the 'Wild Weasel', this F-4 Phantom is one of 14 planes in Bomber described by Vector Grafix's Andy Craven as 'the most exciting modern aircraft, those with the multirole capability: air-air and air-ground'.

## Bomber: 'Test Drive of the skies'

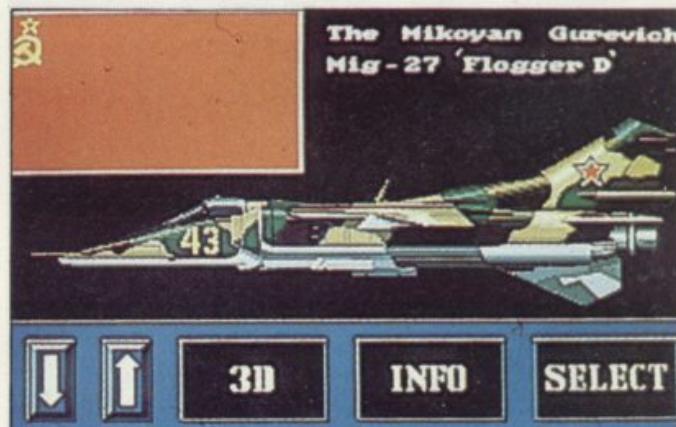
That's how Vector Grafix boss John Lewis describes their latest 3-D project – a simulation of 14 different state-of-the-art planes, based on a real-life bombing competition!

And it also marks the beginning of Vector Grafix's four-game deal with Activision – previously the development team wrote Star Wars and The Empire Strikes Back for Domark.

Put Bomber on your shopping list: it's scheduled for all major formats including PC. But first take a look at what you're going to fly... and wait for up-to-date news on the project.

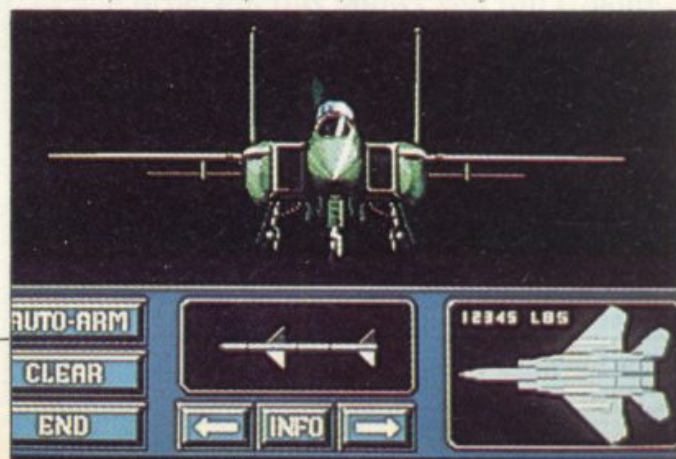


Armed and ready: F-15 Strike Eagle in Activision's Bomber

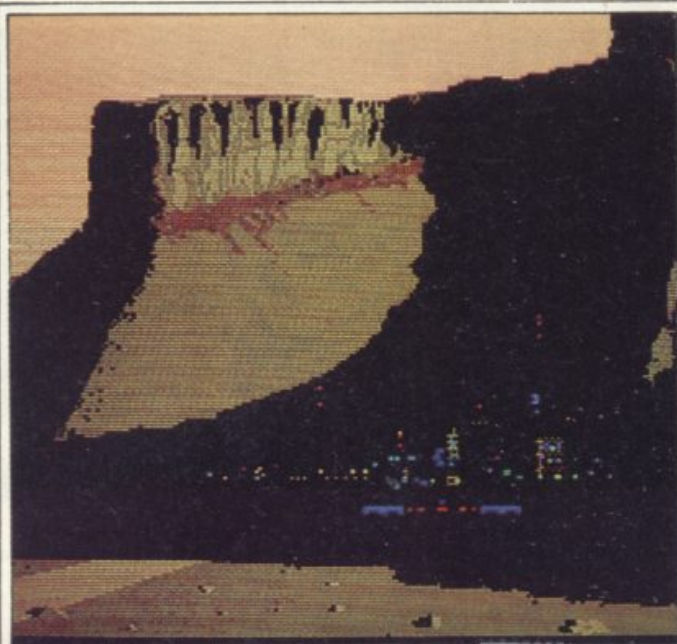


Simulated Soviets: Bomber features a rare chance to fly a plane under the hammer-and-sickle flag. Test the Mig-27 Flogger against its NATO rivals.

A HUD act to follow: Bomber's representation of the F-15 Strike Eagle

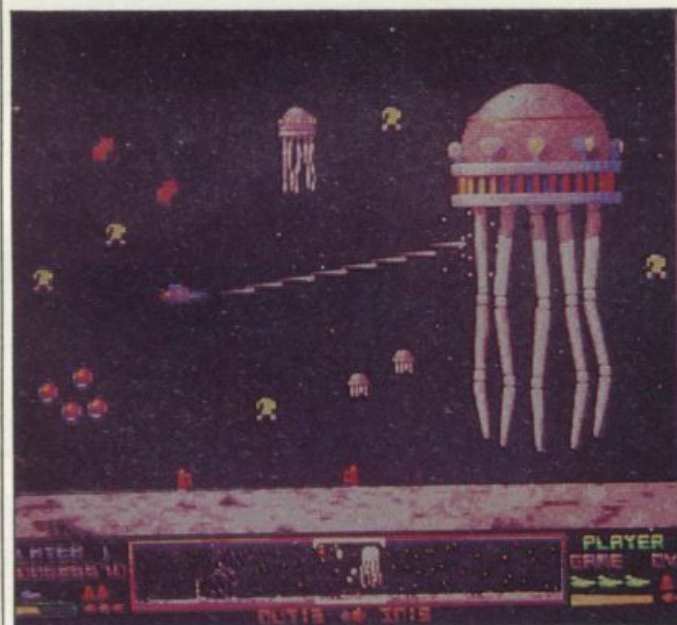






## Mars patrol

16-bit gamers can go to the red planet with Arcana – they'll soon release *Mars Cops* on Amiga and then ST. Gasp at the amazing screens of Mars's hostile landscape as you descend, and thrill to the fast action as you defend the now-colonised planet from the instrument panel of this patrol vessel.



## Visions of deepest space

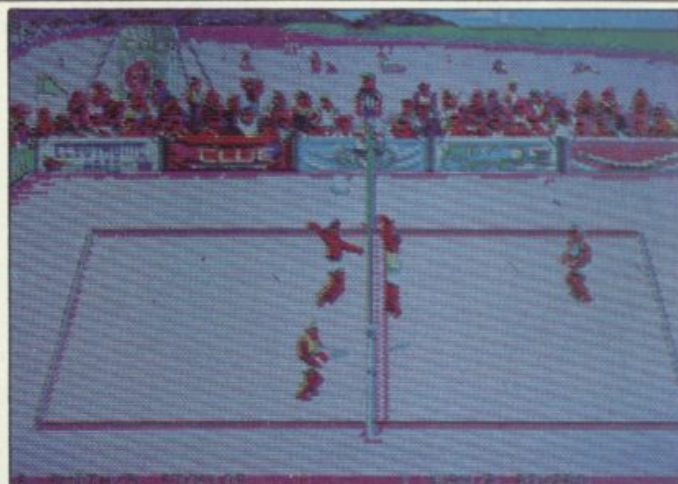
Visionary Technologies may not be a familiar name, but you know their creations – *Sword Of Sodan* and *Dragon's Lair*. Now they've decided to produce under their own label, and the first game is *Datas-torm*, on the Amiga.

We won't try to fool you – this *Defender*-like game is tough! Your spaceship is buffeted from all sides by multiple aliens, space mines, flying whatsits.

As usual, you've a radar screen, laser guns, and smart bombs. But it's the sheer multitude of stuff that blows you away (or perhaps it was that enemy missile?). Animation is as fast and furious as the action, with really great sound effects.

Nobody can say that the Amiga isn't put through its paces here, and though there's no word on UK availability yet, the success of *Sword Of Sodan* surely means someone will import it.

**Marshal M Rosenthal in New York**



It may never supplant cricket as our national game, but beach volleyball is big in the States – so big that Electronic Arts have chosen it for their next sports sim. Out now on PC, *Kings Of The Beach* features a 15-match season in different locations, for one or two players. Look out for the 'Pixel-Mate pin-ups', too . . . and don't forget your suntan lotion.

## Shinobi on all formats!



Sega's smash *Shinobi* is set to beat its way from arcades to micros, with Virgin Mastertronic planning release on all 16-bit and 8-bit formats later this year. Developed by The Sales Curve and mostly programmed by Binary Design, *Shinobi* has 19 martial-arts sections with some massive opponents – including a helicopterload of ninjas!

C64 owners may get a slightly different game style, as their format is being programmed by Random Access, the Silkworm team.



Oh no . . . as if arcade adventures weren't hard enough already, Microdeal come up with *Airball* on the Amiga. Take the form of a rubber ball, search through over 300 *Head Over Heels*-style rooms for the spellbook which will turn you back into a human, try not to burst on the spikes, and don't forget to recharge yourself at air pumps – deflating could be fatal.





# **FutureSound 500<sup>TM</sup>**

Possibly the best Sound Digitizer around?

**In STEREO for the Amiga 500 and 2000.**

- .Records two tracks Simultaneously
- .Separate microphone input with built in amp
- .Samples up to 42,000 samples per second, 20,000 samples per second per channel in stereo
- .Sliding input volume control
- .Ribbon Cable attaches to parallel port
- .Easy to use software editor with many features

- .Full support for all hard disks
- .Support for RAM disks & VDO devices
- .Works with all Amiga operating systems including 1.3 and the new Fast File System
- .Listen to input through digitizer
- .Uses expanded memory where available, up to 8Mb
- .Sampling rates up to 56,000 samples per second if used with a 68020 processor and AudioMaster II software

Available from,

**Applied Visions (UK),  
Jersey Supreme Works,  
538-546 Whippendell Road,  
Watford, Herts, WD1 1QN,  
Tel:0923 818078**

**H.B.Marketing Ltd  
Brooklyn House, 22 The Green,  
West Drayton, Middx UB7 7PQ.  
Tel: 0895 444433**

**SDL (UK) Ltd  
Unit 10, Ruxley Corner Ind Est,  
Sidcup-By-Pass, Sidcup, Kent  
DA14 5SS, Tel: 01-309 0300**

**Only.  
£79.95 Inc**

And all good Amiga Dealers.

## **A CSA Turbo 68020 For ONLY £295 Inc ?**

Hard to believe isn't it ? But its true CSA broke the price barrier in 32 Bit technology. Now you don't have to settle for a far less capable 68000 accelerator, you can have affordability, capability, and speed in one easily installed package.

CSA's new 68020 Midget Racer Board for the Amiga A500, 1000, and 2000 supports a 68881 or 68882 co-processor at speeds up to 33MHz, and is available today.

Programs like Sculpt & Animate 3D or 4D and X-Cad have been written to directly access the 68020 & 68881, and may not even run with a 68000 based accelerator.

**For further information on this and all other CSA products please write to :**

In the U.S.A.

**CSA Inc.**

**7564 Trade Street  
San Diego  
CA 92121**

In Europe.

**A.T.H.**

**Jersey Supreme Works  
538-546 Whippendell  
Road, Watford, Herts,  
Tel:0923 817549**

## **ASDG (UK) Announce ProScanLab for the Amiga 2000.**

ProScanLab allows full control of the Sharp Colour Scanners, giving full 24Bit colour input and output to the Amiga for Desktop Publishing and graphic editing. The full colour graphic output is compatible with all postscript printers. And can be output as a file for printing by your local DTP bureau or direct to your own Linotronic device. ProScanLab allows editing of the input so you can pick just a small area of your Image for output. If used in conjunction with Gold Disks Pro Page program this allows you full Colour DTP with 16.7 million Colours output. **ProScanLab Board & Software £900**  
**ProScanLab & Sharp A3 Scanner £7500.**  
**ProScanLab & Sharp A4 Scanner £3000.**  
**All prices include VAT.**

For further details on this and all ASDG product please contact.ASDG (UK)

**ASDG Inc**

**925 Stewart Street.  
Madison. WI 53713  
U.S.A.**

**Jersey Supreme Works  
538-546 Whippendell  
Road, Watford, Herts,  
WD1 1QN  
Tel:0923 818079**



# H S T A G E S



+ ATTENTION ALL C64 & CPC OWNERS + FOR YOUR EYES ONLY + URGENT + YOUR MACHINE IS ABOUT TO BE TAKEN HOSTAGE + PREVIOUS ATTEMPTS TO CAPTURE 16 BIT MACHINES SUCCESSFUL + TOP SECRET REPORTS FOLLOW +



## ST ACTION December 1988

"I can find absolutely nothing to fault in *HOSTAGES* - it really is state-of-the-art software: it has excellent graphics and atmospheric sound, and the game itself is totally engrossing. Infogrames have taken a seemingly impossible theme, and have created a veritable masterpiece"

## ATARI ST USER January 1989 Star Game

"The gameplay is totally addictive, graphics outstanding and sound effects thrilling. Definitely an exercise involving as much cerebral activity as joystick dexterity. My personal game of the month" (Jayne West)

## ST AMIGA FORMAT October 1988

"*HOSTAGES* manages to effectively capture the edgy realism of an armed siege ... so if you're after convincing atmospheric tension and the chance to feel the sharp end of law enforcement you'll find *HOSTAGES* quite a liberating experience"

## THE ONE October 1988

"...slick graphics and on-screen presentation ... *HOSTAGES* is a well-polished program. Gameplay, too, is involved and compelling ... should prove a satisfying challenge for quite some time"

## ACE December 1988

"Fun to play and will have you on the edge of your seat..."

## THE GAMES MACHINE December 1988

"The action in *HOSTAGES* really gets the adrenalin going. Graphics and sound are used effectively to create a gripping atmosphere"

+ SET YOUR SIGHTS ON *HOSTAGES* + C64 & CPC £9.95 TAPE £14.95 DISK

AMIGA, ST & PC 3½/5¼" £24.95



INFOGRAMES

Mitre House, Abbey Road, Enfield,  
Middlesex, EN1 2RQ.  
Telephone: 01-364 0123



# Dial A Prize!

## Phone-in fun with TGM!

**B**zzzzt! Klikk, klikkk, wrirrrrr, brrr brrr CLICK! Yes, the TGM phone-in lines are ready and waiting with all-new information. Just pick up your phone and dial the Hotline number to hear a fact-packed two minutes of information detailing release dates for the top games for April and May – or call the News Update line to find out what secrets and scandals the TGM team have unearthed this month.

And of course there's a massive series of prizes too. This month we're offering you the chance to win one of 50 copies of Hewson's **Stormlord**!

Every month we'll be adding more and more to this unique service – coming soon we'll have a Billboard line with hot news delivered direct to you, leading up to full story in the following issue of TGM.



## Information – online!

Printed here is the number which connects you direct to the TGM Hotline service. And we've got 160 lines, open 24-hours a day, so don't worry about the service being engaged. Ring this number and listen for just two minutes as we tell you what games are coming out, and when!

For the information you're getting, the Hotline is cheap. The phone call will cost you 25p per minute when you call during off-peak time (Mon-Fri 6pm-8am, Saturdays, Sundays and Bank Holidays), or 38p per minute during standard and peak times (8am-6pm Mon-Fri).

Or grab the latest news on what's happening in software by ringing TGM's News Update line. We can get hot stuff on the News Update service quicker than any magazine can get it in print – so don't lose touch, use News Update!

Now smile and dial . . .

**Hotline**

0 8 9 8  
5 5 5  
0 8 0

**News Update**

0 8 9 8  
5 5 5  
0 8 8

**WIN**

## STORMLORD

50 COPIES OF HEWSON'S  
SMASH HIT UP FOR GRABS

Blast your way through space with Hewson's classic shooter **Stormlord** on Spectrum, C64, Amstrad CPC, ST and Amiga. It's the dead brilliant game written by Raff Cecco, of Cybernoid fame – endless(ish) screens of action packed with gorgeous graphics and sexy sound. (Even if you don't win you can get Stormlord in the shops now, or directly from Hewson.) Here's your chance to win one of the 50 copies Hewson are offering in the Hotline quiz!

## HOW TO ENTER

Dial the number (prod, prod) and listen carefully to the three questions. Fill in your answers in the boxes provided and complete the tiebreaking sentence given to you over the phone.

When you've finished the questions, fill in your name, address, and computer format, and send it all to: **STORMLORD COMPETITION, TGM, PO Box 10, Ludlow, Shropshire SY8 1DB**. All entries must reach us by May 18 1989 and, as always, remember the competition rules on the contents page!

The TGM Hotline is produced by TGM Magazines Ltd in conjunction with Chatterbox Ltd.

1

2

3

Complete the sentence given to you over the phone in no more than 20 words:

Name .....

Address .....

Postcode .....

Computer format .....

My choice of game .....



# MOVING PICTURE MAGIC

Amiga animation becomes a reality this spring with the arrival of *Deluxe Paint III* and *Zoetrope* – powerful software for high-powered creation.

For TGM's in-depth report, **Robin Candy** tested the pair... and they both came out winners.



*Deluxe Paint III's move requester in action: just four frames from a 25-frame animation. The background remains static while the TGM logo zooms into the foreground, in cinema fashion.*

**W**e'd all thought Amiga art utilities had gone as far as they could. *Deluxe Paint II*, *Photon Paint* and *Deluxe Photolab* all featured exceptionally powerful commands which pushed the Amiga to its limits. But now the latest wave of art utilities have branched off into a new area – animation.

Users of Electronic Arts's *Deluxe* series of art utilities will be instantly at home with *Deluxe Paint III*. The main tools menu, complete with spray can, fill and shape tools, is identical to that in *Deluxe Paint* and *Deluxe Paint II*. It's only when you look at the other menus behind the title bar, and the tool-mod-

ification windows, that the differences between *Deluxe Paint III* and its predecessors become apparent.

There are four new fill types – tint, brush, wrap and halfbrite – as well as the old favourites, solid, gradient and perspective. And colours can be created two ways: either by defining the red, green and blue (RGB) components of each colour or the hue, saturation and value (HSV) levels.

When a tint operation is performed, the hue and saturation levels of the current background colour are replaced by those of the current fill colour, while the value level remains unchanged. *Deluxe Paint III* then cal-

culates the RGB value of this colour and fills the area with the closest-matching colour from its palette. So the tint depends on the colours available in the current palette.

A brush fill uses the current custom brush and resizes it to fit the fill area. Wrap is used to give the illusion of wrapping the brush around a 3-D object, by adjusting the size and shape of the brush to the horizontal and vertical lengths of the fill area. Finally, halfbrite only works when in extra-halfbrite mode – it replaces the colour in the fill area with one half as bright.

The perspective commands of the earlier *Deluxe Paint II* are among its most powerful features. A custom brush can be rotated through x, y and z coordinates to occupy a new plane – very useful when trying to create 3-D





Dorset – the name comes from a Tolkien story – was drawn in Deluxe Paint III's extra-halfbrite mode, making extensive use of the airbrush facility



scan painting (allowing you to paint on an overscan screen) and extra-halfbrite, doubling the size of the palette to a maximum of 64 colours.

Here, the palette is split into two banks of 32 colours. The first is user-defined, while the second repeats the colours of the first but displayed at half their brightness.

However, if you already own a reasonable art utility these improvements alone do not justify £79.99. It's the animation commands which make *Deluxe Paint III* special.

## They wuz framed

The illusion of motion is achieved by creating a series of pictures, or 'frames', that differ slightly from each other. When these are displayed rapidly one after another, animation is created.

Drawing each frame individually can be a long and laborious process, so *Deluxe Paint III* includes commands to make this process faster and easier.

One of the utility's unique features is animapainting. This is a very quick



effects.

But though the commands are powerful enough, the manual leaves a lot to be desired. Thankfully that has been rectified with *Deluxe Paint III*. The manual includes detailed (and understandable) instructions along with a tutorial to demonstrate the potential of the perspective commands.

Other new additions include over-



method of creating an animation, and when it's combined with other commands such as an animated brush the results are even more complex.

The first step is to set the number of frames you wish to paint across. As you move the mouse across the screen, one copy of the current brush is pasted onto each frame, following the movements of the mouse.

When the sequence is played back, the brush moves across the screen, mimicking the movements of the mouse.

An animated brush is simple to create. Just create an animation using one of the other animation commands, or by painting on each frame individually. Then use the ANIMATED BRUSH command to pick the animation



The famous King Tut picture, used for years to promote Deluxe Paint, undergoes some radical changes with Deluxe Paint III's SMEAR command



Altered states: this time King Tut is subjected to Deluxe Paint III brush-manipulation commands, using the FLIP, BEND, HALVE and PERSPECTIVE options

up. You can now use it as a normal brush, but as you paint the brush cycles through its animation.

The usefulness of this can easily be shown. If, for example, you wanted to animate a figure walking across the screen, you'd first draw the various movements of the figure's legs, arms etc on successive frames.

Then pick these up as an animated brush, and use the ANIMPAINTING command to move the figure across the screen. When the animation is played back, the figure will appear to walk smoothly across the screen.

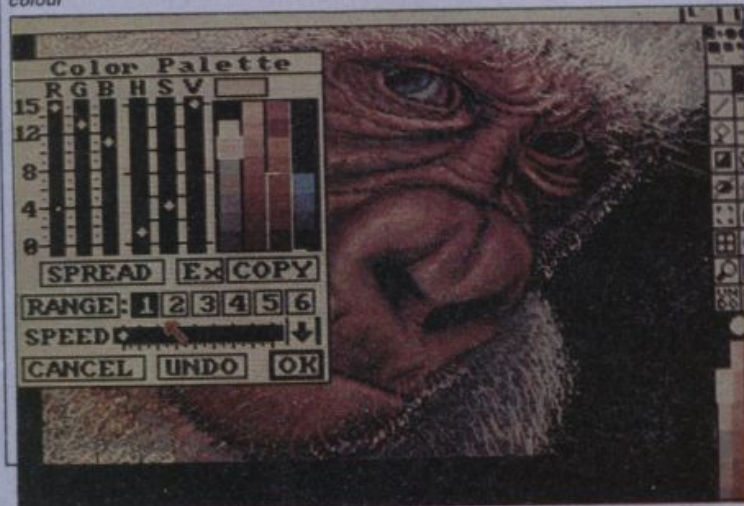
The move requester automatically moves or rotates a brush through three dimensions across a series of

frames. Brushes can be made to shoot off into the distance, rotate, expand or perform a combination of all three.

The results look complex, but in fact they're very easy to do. All you have to do is specify the distance, direction and angle at which the brush is to move, preview it to check that everything is okay, and hey presto – instant animation.

The main drawback of the animation commands is memory. *Deluxe Paint III* requires a minimum of 1Mb RAM to operate, and ideally 2Mb RAM for better results. Saving long animations will also require high-capacity disks, of course.

*Deluxe Paint III*'s palette selector uses both HSV and RGB methods to create instant colour



It's so easy: Deluxe Paint III's move requester. Just type in a few numbers, and in no time your brush is swirling around the screen.

The higher the resolution the less memory there is for animation, and more complex animations will also require more memory.

## Zoetrope

Antic's *Zoetrope* is the much-improved Amiga conversion of *Cyber Paint*, previously available on the ST only. It's primarily concerned with animation, so the painting side of things has been neglected: the basic graphics tools such as airbrush, zoom and shapes have been included, but there are no innovations.

Customised brushes can be grabbed, rotated and resized, but once again there's nothing you wouldn't expect from an average utility. Artists used to other utilities supporting 64-colour or even 4,096-colour modes will be disappointed to find that *Zoetrope* operates only in low-resolution 32-colour mode.



But what *Zoetrope* lacks in these departments, it more than makes up for in animation.

All animations are controlled from the onscreen playback bar, which is small enough not to obscure great portions of your work. It's similar to the controls on a VCR: you can play the animation forwards or backwards, or fast forward/rewind to a particular frame. The package also includes an additional program to run your animations independently of *Zoetrope*.

When you're animating an object such as a moving figure, there are only slight differences between the frames, so it wastes time having to redraw the figure for each frame. It's far quicker if you only have to draw the slight differ-

## Upgrade offer

Owners of *Deluxe Paint* and *Deluxe Paint II* can purchase *Deluxe Paint III* at a reduced price.

Just send in proof of purchase – such as a page from the manual, or the command summary sheet – to Electronic Arts and a cheap *Deluxe Paint III* can be yours.

The upgrade costs £55 for *Deluxe Paint* owners and £35 for *Deluxe Paint II* owners. Find Electronic Arts's address in the item headed Where To Find 'Em.



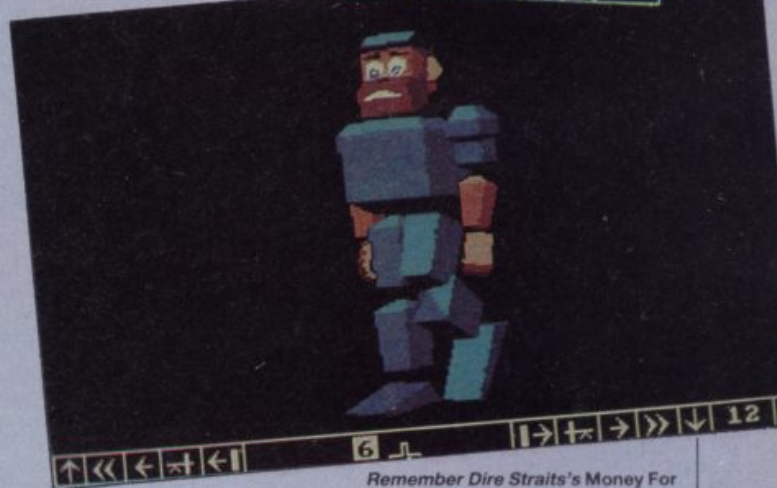
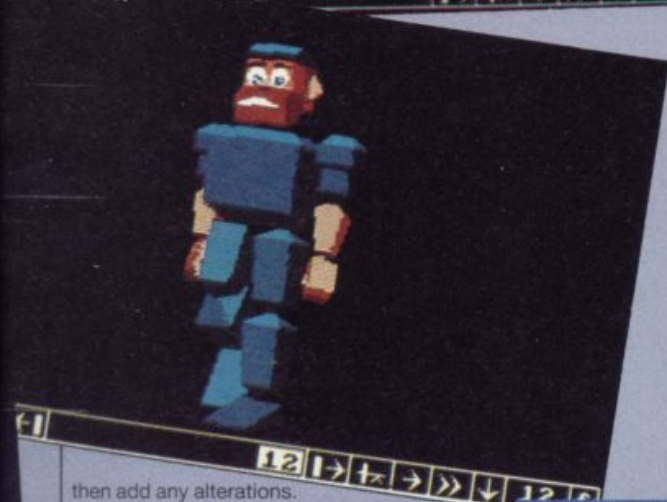
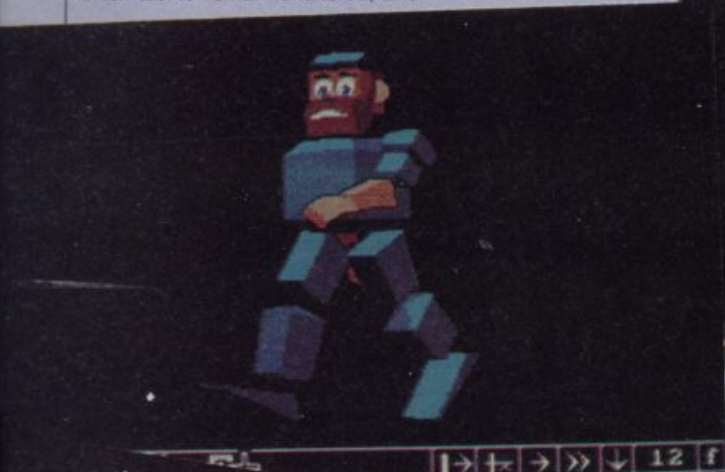
ences – and that's exactly how *Zoetrope* works.

*Zoetrope* features blueing commands which enable you to do this (blueing is a printing term). Each frame (except the first) displays the contents of the previous frame, highlighted by the first colour in the palette. All the animator has to do is to trace over those parts of the previous frame which are to remain unaltered, and

tions; *TWEEN* then spreads the movement across all the frames.

*Zoetrope* is a daunting package to use. Unlike many art packages it isn't instantly 'friendly': when it's loaded

you're presented with a screen which, except for the command cursor, is blank. However, the manual has a series of tutorials to illustrate the functions of each command, and with a little practice most of it soon becomes easy to use.



Remember *Dire Straits's Money For Nothing* video? Here are five frames from one of *Zoetrope's* demonstration animations.

then add any alterations.

This package's most powerful feature is the APM (Antic Pixel Mover) effects menu. Just like *Deluxe Paint III's* move requester, the APM allows you to create stunning animations in minutes.

And the list of available options is impressive. With *TURN*, you control how your brush rotates, including the centre of rotation, the number of rotations and the axis. *SIZE* allows you to shrink or expand a brush to a specific centre or vanishing point. *MOVE* moves a brush a specified distance along x, y and z coordinates. And *PATH* allows you to draw the path which you wish the brush to move along.

### Tweening

'Tweening' is a term invented in the early days of animation. A master animator would draw the key movements of an animation, and get an apprentice to fill in the missing frames.

So *Zoetrope* also features a *TWEEN* command to help speed up the animation process. *TWEEN* works in conjunction with the APM effects menu and brush-manipulation commands, to produce a series of frames each featuring the brush in a new position. You set the starting and ending posi-

## AND THE WINNER IS ... Deluxe Paint III vs Zoetrope

Both *Deluxe Paint III* and *Zoetrope* are contenders for the coveted title of best Amiga art package. On the animation front *Zoetrope* is the winner: the blueing commands are a real plus when drawing an animation frame by frame, while the APM effects menu is great for creating animated title sequences.

But *Zoetrope* is limited in other areas where *Deluxe Paint III* excels. It only operates in low-resolution 32 colour mode – hardly exploiting the Amiga's potential. *Deluxe Paint III* caters for a variety of resolutions and palette sizes, making it more flexible for screen designing – but this all eats up memory.

And indeed, memory is one area where *both* packages are limited, *Deluxe Paint III* more so than *Zoetrope*. Both need a minimum of 1Mb RAM to operate, and ideally 2Mb or more to create animations that last any decent length.

### Some skill required

It's also worth pointing out that though both packages feature powerful commands, the quality of animations depends on the abilities of the user. Complex animations still involve a fair amount of drawing, and neither of the programs will design brushes for you. This is where *Deluxe Paint III* scores points; the paint section is far superior to *Zoetrope's*.

It takes time to get good at animation. If you've had little previous experience, *Deluxe Paint III* is the better package – not only do you get a good animation program, but also a fantastic art program. The manual is clear and the program surprisingly easy to use.

*Zoetrope* is really for those who are already familiar with animation techniques, or trust their artistic abilities enough not to need a good art utility.

### Where to find 'em

**Deluxe Paint III** Electronic Arts, Langley Business Centre, 11-49 Station Rd, Langley, near Slough, Berkshire SL3 8YN ☎ (0753) 49442. £79.99.

**Zoetrope** ISM, Grove House, Ventnor Road, Apse Heath, Isle of Wight PO36 0JT ☎ (0983) 864674. £99.95.



# THE GREATEST SHOW ON EARTH

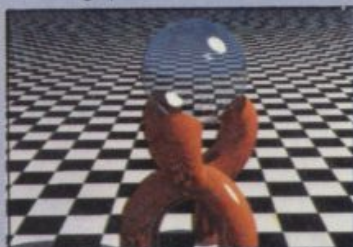
You won't find bearded ladies or elephants on the Amiga screen – but there's no reason you shouldn't make some, with the vast variety of high-tech tools available.

From two major New York shows, Marshal M Rosenthal reports on the magnificent caged beasts of Amiga graphics.

It's like a circus – bright swirling lights and people staring with open mouths that ooh and aah. But it's not a trapeze artist or a clown that's causing all the excitement; it's the New York Computer Graphics Show. Here can be found not only the most stunning graphics and animations, but also the newest technologies to create them.

Everywhere you look are graphics, animations, complex imaging workstations – with companies touting their latest efforts in 3-D imaging. One of the most impressive is an Amiga running *Sculpt Animate 4D*, from Byte by Byte.

In the latest upgrade of this popular ray-tracing package, new features have been added that really make the program fly – features like grids, assignable hot keys, metal texturing, motion blur, an animation-scripting language, and (whew) improved rendering speed.



*Light touch: Sculpt Animate 4D from Byte by Byte simulates ray-tracing for realistic, quickly-produced animations. And it's available in London, too.*

But why did they do it when *Sculpt Animate* already had people standing up to cheer? Floyd Wright, head of Bytes Video Production, puts it thus: 'People weren't happy with food for the Gods, they had to have dessert too.'

Scanline rendering is a new process that allows you to shade 3-D images and give them the glow of reality. It isn't true ray-tracing, but speed is the advantage: animations can be rendered in hours, not days or weeks.

The program can also take full advantage of 68010/20/30 upgrade boards, improving on the performance of the Amiga's standard Motorola 68000 processor, and maths coprocessing chips [a 400-page manual is an essential part of the package].

There are also ready-made 'parts' available, including 3-D fonts, and the components necessary to assemble

your own Orbiter Space Station – at least on the computer tabletop.

## Amiga grows up

Graphics shows also bring people together, and in New York designers and hardware makers had a chance to talk one to one. Roman Ormandy of Octree Software, New York, was one of those who stopped to chat.

'You get a chance to stretch your mind, see what others are doing,' he notes. 'This kind of interaction can only prove helpful – from this comes new developments, and better ways to improve systems. It's good to know that the 'little' Amiga is a fully-fledged member of this ongoing process.'

Ormandy's Amiga program, *Caligari*, is a high-end 3-D animation program for professionals, and an excellent example of just how far an Amiga can go. Animation director/ animator Isaura Del La Rosa is one of those using *Caligari*. 'The interface is so simple that it only took me an hour to make a 3-D object,' he remarks.

Del La Rosa is really sold on this product, despite the US price of \$1,999 (about £1,160 at press time). 'It's really amazing,' he proclaims. 'You can design a wireframe animation within hours, do it all and play it back in almost no time at all. For a designer, it's a dream program of 3-D graphics.'

## Cell-animation

There was animation aplenty at AmiExpo, the recent New York Amiga show, too (see this month's news for more on the show). Visionary Technologies had C.A.S.T. – the system used to create the animation of *Dragon's Lair*. This is a traditional cell-animator's workstation transferred to the Amiga, and geared to the professional.



*Sailing into high-res: a picture created with Gold Disk's Pro Draw*

Another cell-animation tool is *Lightbox*, from R&DL Productions: it's a nifty professional package based on



*Look at the detail: this frame comes from a Caligari animation. 'It's a dream program,' says one professional animator of Octree Software's package.*

its namesake, the cell-animator's light source.

Of course it adds the power of the Amiga, but you still do all the art yourself (or import from other IFF files) before saving it to disk as a file that can be animated using page-flipping programs.

What sets *Lightbox* apart is that it is not an animation program, but a user-controlled alternative to doing cell drawings on paper. RAM holds as many working frames as possible – yet all is automatically saved to disk for safety. Add to that a 'flip rate' of 30 images per second and 'invisible' reference lines to help you place each cell correctly – all in a simple, elegant package.

For MIDI users, Mindware have *Pagesync*. The bottom line is that with *Pagesync*, signals from a MIDI instrument can make the Amiga start/stop/reverse an animation.

Conversely, an animation could be the controller for a MIDI performance. This really opens the door wide to all kinds of musical possibilities, as support is also included for two other Mindware products: *Pageflipper Plus F/X* and *PageRender 3D*.

And finally, another way to control animations: *Elan's Performer*. This works with all types of files – ANIM, RIFF, HAM, IFF, RGB. Full control is given over speed, number of frames to play, and forward/reverse. Multitask with music and sound software – even pull out, change any image and then put it back in the file. Precise real-time control is the ticket here.

## Anims on tape

Still with animation, but back at the New York Computer Graphics Show, how do we get those great graphics on the screen?

Mission Graphics's solution is a reasonably-priced transfer of anima-

## Drawing on experience

Be happy with HAM – try *Digipaint 3.0*, from New Tek.

Expanding on the capabilities of the first HAM-mode drawing program, it lets you take advantage of overscan, three forms of texture mapping, and high-speed anti-aliasing (a technique that removes those infernal 'jaggies' that result when you draw circles and angles).

Meanwhile, *Gold Disk's Pro Draw* creates brilliantly pure colour art. Built on the same interface as *Professional Page*, the program uses structured graphics in high-res mode, and high-res results are the norm on any printer. Anybody serious about drawing on the Amiga will find this the one to get.



tions to video tape, giving the same high quality as professional studios. The firm's Vince Bilotta explains: 'First off, you have to understand that you can't just use any VCR if you want a continuous and professional-looking image.'

'Now let's consider disk space,' Vince continues. 'A 30-second animation can easily require 90Mb to contain it. Even a hard disk fills up mighty quick, and not everybody can afford 8Mb of RAM to play with. So what we've done is combine the Amiga with a Panasonic 7500A.'

'It's probably the least expensive way to go totally professional: a Super VHS deck for high-quality reproductions, with single-frame recording, a rock-steady transport mechanism, and a host of other professional controls. The price isn't bad, either, a retail of \$5,000 (£2,900).'

'It may sound a bit expensive,' notes Vince, 'but consider what it costs to go into a studio situation for a tape transfer. Forget it—they charge a fortune! We realise that most people can't go out and buy all their own equipment, so we do it for them, by taking their creations off a disk they send in. This eliminates many problems, and the end result is a video tape of as high quality as the image that's on it.'

Well, it's a bit weird looking at a

## ■ Colour seps in Professional Page

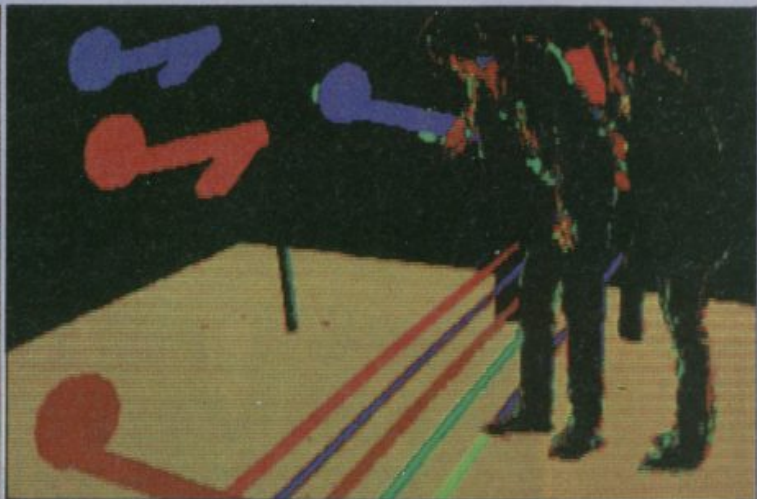
You often find magazine publishers at these shows—showing their wares. But at AmiExpo there was a new advance in high-tech Amiga publishing.

ASDG's *Resep* enables 24-bit colour separations to be inserted into *Professional Page*, generating 16,000,000 (yep—16 million) colours!

But there's a catch, of course: you have to scan the original image using a JX-300 or JX-450 colour scanner from Sharp, and these babies don't come cheap.

*Professional Scanlab* is ASDG's program to fire up the scanner with the Amiga—for amazing results. HAM images become used as proofs, and saved as colour separations.

*Resep* then replaces them in their Postscript file with a 24-bit image that can be used to produce the colour films required for printing.



Playing on: another Amiga screen by Steve Speers. With this kind of quality, the Amiga should soon replace the Apple Mac as the commercial artist's machine of choice. Next stop DTP?

Still, you need a way to get those ideas onto the computer screen. Drawing with a joystick has never been easy, and many find using a mouse sheer agony. Anakin Research's *Easy!* pad (think of 'easel') may be the solution. Unlike other pads, *Easy!* is pressure-sensitive—it doesn't rely on a stylus to transmit information to the screen.

The 8.5-inch-by-12-inch working area responds to pressure, whether from a lead pencil or a blunt spoon (not recommended). And the Amiga version (A1000/A500/A2000) even lets you continue to use the mouse to select from menus and the like.

Installation is simple. An interface box attaches to the expansion port on the A500 or A1000's side (with a pass-through for further use), while the A2000 takes an internal card. The pad then connects to the interface/slot with a wired plug (which can be removed when storing the pad, if space is a problem).

*Easy!* can also be configured for either left-handed or right-handed use, and there are membrane panels that simulate mouse buttons. A drawing button is depressed to tell the pad to 'draw', just like using a mouse—but this can be reversed as well, in which case pressing and holding the button stops drawing.

A special painting program designed for *Easy!* increases the communication between the board and the computer, giving better quality. The program works in all resolutions and contains most of the features you'd expect in a paint program today. Animators aren't forgotten either—registration pegs can be attached so images placed down will be in the same place each time.

The PC version of *Easy!* works in a similar way, but here the card that goes into one of the expansion slots has a pleasant surprise: it includes a standard RS-232C serial port. This means that a serial mouse can be used, just like its Amiga brother.

*GEM* and *Windows* graphic environments are supported, and of course a wide variety of software packages. *Easy!* works with all the PC/XT/AT line.

The carnival atmosphere continues—in fact it would take a power shut-

down to stop the flood of graphics, animations, and hardware. The technology keeps improving, breaking new ground. Computers are number crunchers—machines that can do amazing things only because they're so dumb and people so smart.

■ *Marshall M Rosenthal* is TGM's US correspondent.

**Artist Realvision 24** Control Systems, 2675 Patton Rd, St Paul, Minnesota 5513, USA

**Caligari** Octree Software, 311 West 43rd St, suite 904, New York, NY 10036, USA

**C.A.S.T.** Visionary Design Technologies, 45 Whitehorn Crescent, Willowdale, ON, Canada M2J 3B1

**Easy!** Anakin Research, 100 Westmore Drive, Unit 11C, Rexdale, ON, Canada M9V 5C3

**Lightbox** R&DL Productions, 11-24 46th Avenue 2A, Long Island City, NY 11101, USA

**Mission Graphics** 433 East 6th St, New York, NY 10009

**Nikon Film Scanner LS-3500** Nikon Electronic Image Engineering Division, 623 Stewart Ave, Garden City, NY 11530, USA

**Pagesync** Mindware International, 230 Bayview Drive, suite 1, Barrie, ON, Canada L4N 4Y8

**Performer** Eian Design, PO Box 31725, San Francisco, CA 94131, USA

**Pro Draw** Gold Disk, PO Box 789, Streetsville, Mississauga, ON, Canada L5M 2C2

**Professional Scanlab/Resep** ASDG, 925 Stewart St, Madison, Wisconsin 53713, USA

**Sculpt Animate 4D** Byte by Byte, Arboretum Plaza II, 9442 Capitol of Texas Highway North, suite 150, Austin, TX 78759. Available in the UK from Software Circus, The Plaza on Oxford Street, 120 Oxford Street, London W1N 9DP ☎ (01) 436-2811.

**UltraCAD** Progressive Peripherals & Software, 464 Kalamath St, Denver, Colorado 80204, USA

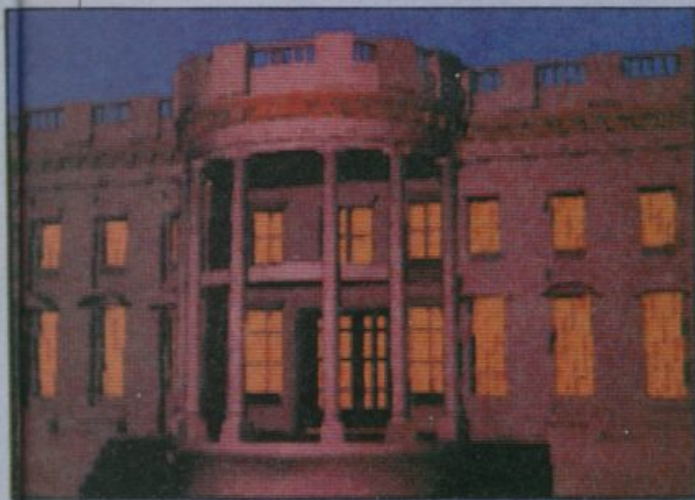
**Videofax** Interactive Picture Systems, 42 East 23rd St, New York, NY 10010, USA

**Video Toaster/Toaster 3D/Digipaint 3.0** New Tek, 115 West Crane St, Topeka, Kansas 66603, USA

**PRICES AND ORDERS:** Prices given in Marshall's report are in US dollars, roughly translated into sterling. Bear in mind that if the products are released here, or imported by mail-order firms, they may be more expensive. And if ordering goods from the States, you'll probably have to pay postage.

Hardware imported from the US will require a power adapter to work in Britain; hardware and software will work only with monitors, not TVs.

Finally, if you're one of TGM's overseas readers, remember that US rules forbid the export of some computer technology to some non-NATO countries.



Magnificent mansion: Steve Speers's Amiga pic is typical of the machine's rapidly-increasing graphics applications

large blue metal box and handles, and realizing that it's an Amiga that's been rack-mounted by Mission Graphics for easy internal access and portability. But as long as it works...

## Huge palette

Elsewhere on the hardware front, Artist Realvision 24 from Control Systems took many a person's eyes right out of their sockets. Imagine being able to combine high-resolution graphics with a lifelike rendering of 16 million colours!

This real-time colour controller displays a bright, flicker-free picture—a double buffering system enables you to digitise into one buffer while displaying the other. Both NTSC and PAL are supported, and a fully-integrated video genlock combines live images with computer graphics. All this and a screen resolution of 1024 x 482...

## ■ Amiga CAD

Progressive Peripherals's *UltraCAD* is a high-end 3-D system with an 'intuitive user interface' (ie it's easy to operate) and rapid rendering. A separate paste-up program supports many kinds of printers, and allows the finished image to be output over several pages if desired.

A conversion utility bridges the gap to other CAD (computer-aided design) programs to make for file compatibility, and even lets you design additional fonts.



# W T H E

# W

# S



● **LIKE YOU'VE  
NEVER SEEN IT  
BEFORE! WIN THIS  
SUPER 'TYPHOON  
THOMPSON'  
KAYAK FROM  
BRODERBUND**





SEA



K	A	Y	A	K	A	Y	A	K
A	A	K	A	A	A	Y	A	A
Y	K	Y	A	Y	K	Y	A	Y
A	A	A	A	A	A	K	A	A
K	Y	A	Y	K	Y	Y	A	K
Y	A	A	K	A	A	Y	A	K
K	K	A	K	A	K	K	A	A

## Special prize for programmers

Anyone can enter Broderbund's Typhoon Thompson comp, but to keep the technical types amused during a long wet spring TGM is offering an extra prize of £20 worth of software.

What we want is a program to solve the KAYAK word puzzle, in any reasonable language (no

assembler or machine code, please). Get working on those arrays, and send a listing to **TECHNICALLY THOMPSON COMP** at the usual competition address.

No time limit on this one; the first working program in wins the prize, and gets printed in Back Bytes.

W

hat's small, bright and zooms across the deep blue sea? Typhoon Thompson – and it could be you too, when you win this professional-style 3-metre Spirit 300

kayak from Broderbund. It's perfect for lakes, rivers, sea and even swimming pools – just row and go. And for runners-up there are five pairs of trendoid two-tone cycling shorts.

It's a prize and a half for a game and a half, the first title from American software house Broderbund to be released over here by Domark. As a Star Player, *Typhoon Thompson* scored a whopping 90% on the ST this issue (page 34). And it's so addictive and amusing – zipping over the water at breathtaking speed, searching the islands for sneaky sea sprites, and then playing a crazy, top-speed chase'n'catch game, all with incredible animation! You'll want to take it in the kayak with you . . .

## Don't miss the boat

To win, find *all* the occurrences of the word KAYAK in this puzzle. The word can go up, down, left, right, or diagonal – and remember 'kayak' backwards spells 'kayak' too . . .

There's no need to send the actual puzzle in if you don't want to – just write the number of occurrences on a postcard or the back of a sealed envelope, add your name and address, and send it all to **TYPHOON THOMPSON'S KAYAK KOMP, TGM, PO Box 10, Ludlow, Shropshire SY8 1DB** to arrive by **May 18**. Usual rules as printed on the contents page apply.

Now, as *Typhoon Thompson's* guardians say: bring us the postcard!





# POWER TO THE PEOPLE

Don't **despair!** More **power** and better **presentation** were the buzz words at the world's biggest micro-music show – as the range of sophisticated software showed.

Graham Wayne reports with words and pictures from Frankfurt, West Germany.

**T**he halls are filled with short German piano vendors talking with obsequious politeness to Italian organ vendors, whose beautiful wives are flirting with several Korean accordion manufacturers deceived by the nuances of Italo-Nipponese into believing they're making a sale.

Meanwhile, unbeknown to the middle-aged businessmen in blue suits, the newfangled music stuff you plug in the wall is hidden on two floors of a smaller hall across the way – though 'small' means a floor area merely equivalent to that of London's Olympia.

This is the Messehalle, on the outskirts of Frankfurt's concrete-hard centre, the site of the 1989 Musicmesse – the world's biggest exhibition of music equipment, ancient and modern-style.

It wasn't hard to find the right areas of the exhibition amid the vast complex of glass and steel; all one needed to do was follow the hordes of German leather-clad heavy-metal freaks, mostly guitarists and drummers judging from the coiffure and accessories, along the moving walkways as they flocked to study the vast array of guitars, amps and drums that permeated the show.

Virtually every kind of hardware was displayed, from lighting rigs and disk-based digital recording systems to flight cases, guitar bags, sticks and plectrums. Of course, there were plenty of keyboards, samplers and so

on, round which were gathered the more moderately-dressed keyboardists, with Korg, Casio and Roland sporting impressive stands that, combined, equalled nearly half the space taken by Yamaha.

I had to look a little harder to find the MIDI and computer products; I guess I'm spoiled by shows where computers are the main item on the agenda, so it took time to see the silicon for the trees. Most good music-software companies were present, but there were a few interesting hardware items too.

Digigram, a French company, were demonstrating the Midimic – a sleek, rather futuristic-looking microphone that converts audio signals into MIDI pitch and velocity information. It can also transpose the input if required, before transmitting the information on one of two channels.

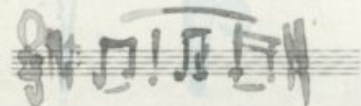
Long-established manufacturers Schaller were marketing a MIDI conversion pickup and controller unit for saxes and clarinets, and there were several MIDI switchers, patch bays and instrument controllers for guitars, basses and drum pads.

Nearly all the computers were STs, not a surprising state of affairs considering the machine's pre-eminence in MIDI applications and its popularity in Germany. There was just a handful of PCs, and a few Amigas and Macs (though several more Apple machines were to be found interfacing with high-priced hardware).

And there were two general themes



running through the show: the need for more processing power, and the redesign of user interfaces.



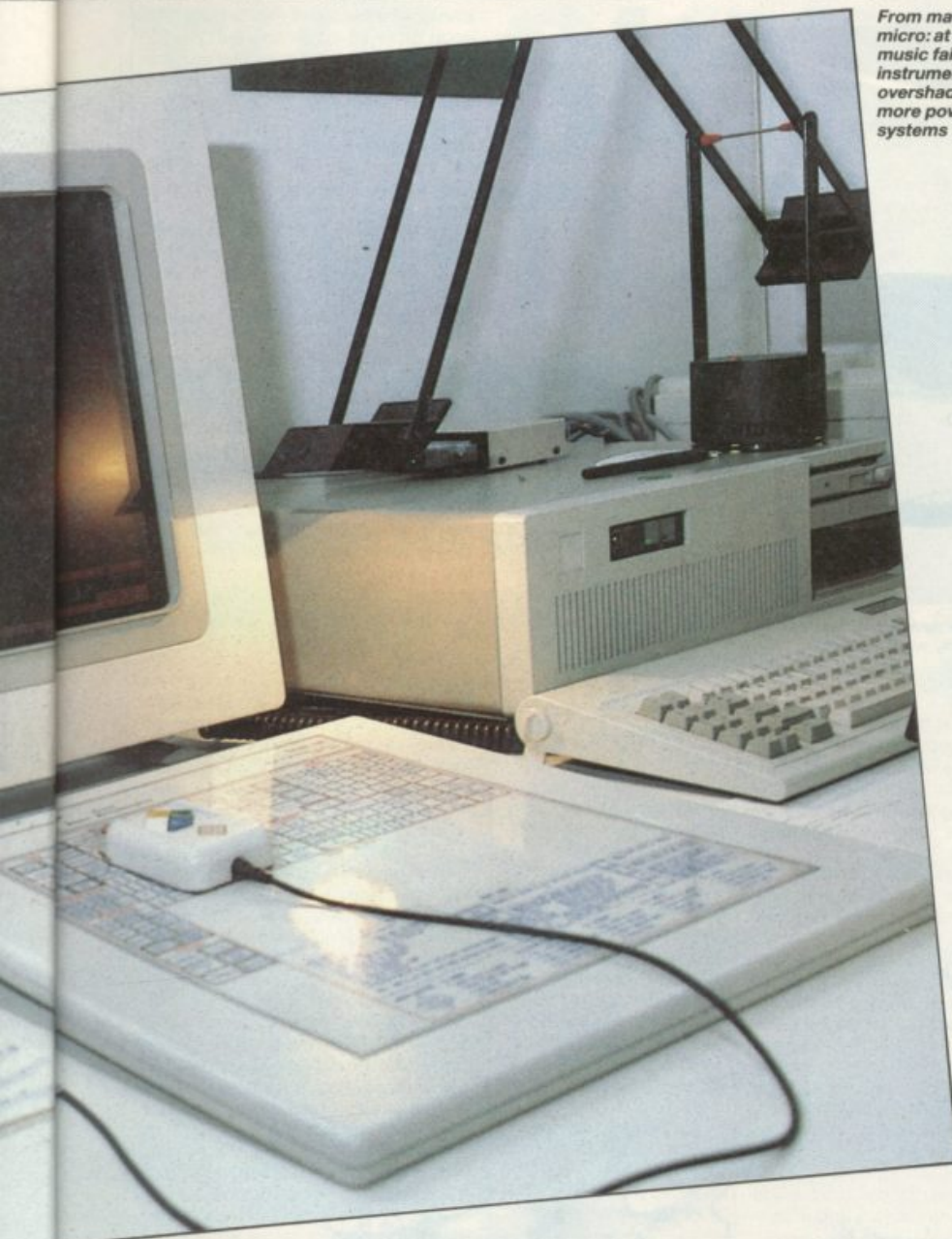
## What you see . . .

All the recent products I've seen are providing several alternative ways of viewing data within one system. There are no real innovations, only the imitation of other interfaces from rival products.

Yet everybody has to have piano-roll scrolling, it seems. Many have windows providing standard music notation. Windows to draw in controller data and so on are becoming passé; score-writing is the latest rage.

**"Are software houses really serving the user's best interests?"**





From manuscript to micro: at Frankfurt's giant music fair, 'conventional' instruments were overshadowed by ever more powerful computer systems

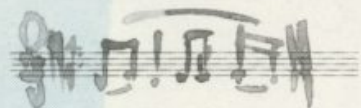
The result of this imitation? All the systems get to be mighty similar. Exhibitors at Frankfurt were showing very powerful, capable software, but I wonder how buyers are going to be able to make a selection, with so much to understand about the finer aspects of sequencer operation and so little to choose between the facilities.

But one of the criteria to consider is processing power. For some time, it's been clear that overheads on the ST's Motorola 68000 chip will have to be cut down if it's to do more work quicker, since the processor cannot be upgraded or accelerated like a PC's or Mac's.

There are several areas where improvements need to be made. Screen-handling in GEM is notoriously slow. Languages like C, though portable, cannot achieve the performance of machine code. And, for those with enough memory, the need to have more than one program running at once becomes urgent the first

time you want to edit your Roland MT32 or Yamaha TX7 while a sequencer is loaded into the computer.

At the Musicmesse, several companies were demonstrating solutions to this problem.



### Multitasking

On the chic Steinberg stand, their new operating system M.ROS was announced across three formats – Mac, PC and ST. The M.ROS system is properly multitasking, a term that suffers a fair bit of liberal interpretation these days, if not abuse.

In other words, M.ROS runs different applications concurrently – if you enter an editor program in memory, the sequencer also in memory continues to function. And it also acts as a network controller whereby, Steinberg claim, several STs can be synchronised together and any one of

them can command all the others.

While such a facility does lead to rather grandiose speculations about vast numbers of computers, the multitasking operating system makes real-time sound editing possible while the device plays its sequence.

Sample or effects editors can control their devices, while mixer-automation or score-transcription programs output their output, if you see what I mean (all this being dependent on Atari, or some other company, releasing an 8Mb ST, of course – or a user linking two 4Mb STs, if you go with the Steinberg view).

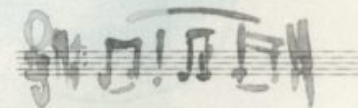
And M.ROS also controls access to the 68000 processor, ensuring that a clock-synchronised program such as a sequencer will have priority over other programs running at the same time.

So far, Steinberg have announced four products that run under the new system. The first is a sequencer called *Cubit*, featuring what they call 'visual song processing'.

This amounts to resizable windows, click-and-point editing and drawing in data with the mouse; hardly new concepts, if the truth be known. But carping aside, this is a very powerful successor to the same company's *Pro 24* (the Amiga version of which has just been released, by the way), featuring high resolution, 16 'arrange windows' each with 64 independent tracks, MIDI-simulated effects (delay and echo) and score-editing of sequences, plus a separate drum-editing window with individual quantise on each of the 64 drum tracks.

The demonstrator told me the sequencer will also sync to input from the instrument currently being played, but I'm not sure how this could work; it seems an enormous feat to expect of a computer. And I was surprised to discover that the sequencer will only record on four MIDI channels at once, which isn't really up to the mark.

*Cubit* should hit the streets at a hefty £500, but there isn't anything radically new about the sequencer – it's just a well-conceived amalgamation of virtues from several systems, even down to the Mac font used in the screen display. Funny business, that, though it's nice to see the new Steinberg range appearing on the Mac and PC too...



### M.ROS sampling

Also on show were the latest versions of the well-known Steinberg lines, including the *M1 Synthworks* editor. Rather more upmarket is Steinberg's *Avalon* sample-processing software on the ST: this is a 16-bit-resolution editing librarian and conversion facility. *Avalon* offers 40 seconds of storage on a 4Mb Mega ST4 at a 44.1kHz sampling rate, time and frequency domain editing with FFT, resynthesis, sample conversion between different samplers and sample rates, plus networking between samplers to transfer samples easily.

*Avalon* runs under M.ROS and will





Smooth operators: Steinberg had four products using their new operating system M.ROS. The Cubix sequencer is an upgraded Pro 24, while Avalon offers powerful sample-processing

operate with an optional hardware board that replays samples at 12-bit resolution (even if they're held in the ST at 16-bit), and has an AES/EBU interface for direct digital data transfer.

Last but not least, Steinberg had the *Mimix* mixer-automation system, a hardware-and-software combination that also runs under M.ROS. I see racks of STs filling the studio, piles of dead mice in one corner...

Steinberg apart, there was little new. Hybrid Arts were showing the *Genedit* generic editor, which allows users to design their own editors using graphics tools and Systems-Exclusive assignments to cope with the growing number of MIDI-programmable devices.

They were also showing the 'final, official versions' of their four sequencers, for which no further upgrades are planned. New to the

range is *Editrack*, a revised version of their 60-track sequencer which generates and reads MIDI clock and pointers in software. The *ADAP* disk-based recording system was also on show for those with understanding bank managers.

And Hybrid Arts, like Steinberg, are developing their own operating system, called *Chaos* - there are few details yet.

Also working on an operating system are Dr. T, who call theirs *Supergem*. Part of this can be seen in *Tiger*, a GEM-style interface for the KCS programs which finally replaces the CLI environment they originally offered for reasons of speed. The trade-off now seems to be made against user-friendliness, but *Tiger* appears considerably faster than GEM.

Such problems do not trouble the Mac fraternity, however, and Pass-

## Who to call

Steinberg's M.ROS should be relatively easy to find - most major music-tech stores carry Steinberg products. If you're having trouble, try Evenlode Soundworks, *The Studio*, Church Street, Stainesfield, Oxford OX7 2PS.

For Dr. T, Passport and Hybrid products, try Chips Computer Centre, who also run a mail-order service: Data Direct, 53 Rugby Road, Worthing, West Sussex BN11 5NB ☎ (0903) 700804.

The other products mentioned should be available from specialist retailers, but if in difficulties write to TGM's Information Desk.

port's *Mastertracks Pro* version 3 - soon on all 16-bits - now features 32 MIDI channels via printer and modem ports, plus extensively improved SMPTE control aimed at those synchronising to picture. The latest version, fairly bug-free, is already available for the Mac, with ST, Amiga, PC and Apple II versions due within a year.

US company Sonus were showing version 2 of *Masterscore*, which is much improved by the combination of sequencing and editing in one program. *Superscore* is also revised, and offers useful functions like suppressing unwanted rests which may occur when sequences are converted.

Putting on a brave show were new British developers The Digital Muse, yet another company who found it necessary to write their own operating system. They were demonstrating a new sequencer, *Virtuoso* - a fast, 100%-assembler program that they intend to expand by adding programs like score-writing according to demand.

But that's enough of the ST. Believe it or not, there were other computers at the show, though I'm sorry to say the 8-bits seemed virtually extinct; the only one was the C64, for which German company Geerdes make an extensive range of MIDI software, including an M1 editor just released. Unfortunately, they told me they don't have a UK distributor at present, which is a shame.

The machine I really expected to see in some strength was the PC - but I was disappointed. Still, the nicest bit of kit I saw was a PC product, admittedly priced beyond reasonable means. I'm referring to the *Erato* score-writing and publishing system, which comes complete with a dedicated Quantel-type graphics tablet and a truly wonderful gas plasma screen, a snip at \$4,000 (about £2,300 - just the screen, that is).

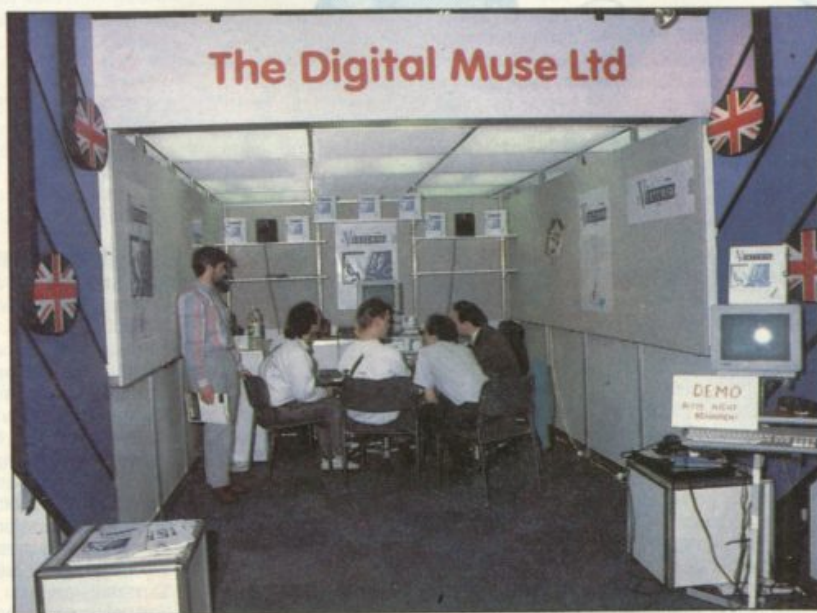
So that was Frankfurt: a formidable amount of equipment in a forbidding environment. My overall impression was one of consolidation, of various manufacturers trying to come up with some combination of facilities that will give them a competitive edge in the market.

More power, more channels, more tracks and higher clock resolutions were the first order of the day, with variety in user interfaces coming a close second.

But I wonder if the user's best interests are really being served. So much money has to be invested in these state-of-the-art packages that it's difficult to make important choices, given the appalling quality of most demonstrations in shops.

Still, there is one benefit to those of more modest means and aspirations: as companies develop new programs, the obsolete code from earlier products often finds its way back onto the streets, repackaged at half the price. And there are always the interesting little independent developers, with a trick or two up their sleeves to rattle the cages of the big boys. I remain optimistic.

■ Graham Wayne, a former Development Manager for Rainbird and Firebird, now runs a dubbing studio and writes for such magazines as *Sound On Sound* and *CD Review*.



Born British: The Digital Muse, a new UK firm, developed their own operating system for an ambitious product line called *Virtuoso*



# THE SKY'S THE LIMIT!

- WIN A HELICOPTER FLIGHT and
- MEET THE SILKWORM TEAM – thanks to
- THE SALES CURVE

# T

he sky's the limit when you're a new software house – like **The Sales Curve**. They've recently signed major deals with a series of coin-op producers to release five major conversions... of *Silkworm*, *Gemini Wing*, *Ninja Warriors*, Taito's *Continental Circus* and Sega's classic *Shinobi*.

And to mark the first of these releases – *Silkworm*, the two-player horizontal shoot-'em-up which received a smart 83%/86% last issue – The Sales Curve are offering a prize that's really not pie in the sky. Just by answering the four questions, you could win:

- A helicopter flight over London
- A visit to programmers Random Access
- An arcade orgy on the machines The Sales Curve are converting
- Copies of *Silkworm* AND the next four Sales Curve titles as they appear, on your format!

And ten runners-up will also receive copies of *Silkworm* and the next four coin-op conversions from The Sales Curve.

To enter, just answer the four questions on a postcard or the back of a sealed envelope, scribble on your name and computer, and send the whole lot to: **SILKWORM IN THE SKY COMP, TGM, PO Box 10, Ludlow, Shropshire SY8 1DB** to arrive by **May 18**. As always, competition rules as printed on the contents page are final – unless you want to fall out of a 'copter.

- 1) Which of the following would you *not* control in *Silkworm*: a) a plane, b) a jeep, c) a tank?
- 2) Which of the following might you see in a flight over London: a) Stonehenge, b) St Paul's Cathedral, c) TGM headquarters?
- 3) Which well-known arcade firm produced the *Silkworm* coin-op that Random Access are converting for The Sales Curve?
- 4) **Tiebreaker.** The Sales Curve's big prize has four parts, listed in the text here; explain, in not more than 20 words, which you think is the best and why.

**Silkworm**, distributed by Virgin Mastertronic, should be out now on ST, Amiga, Spectrum, CPC and C64

MAIN PICTURE: ART DIRECTORS PHOTO LIBRARY



# 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 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-I 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.









ALL  
HELL  
LET  
LOOSE...

# HAWKEYE

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.

**CBM 64/128**

Cassette £9.99

Diskette £12.99 (includes free demos - The Monster Show and more!)

*An addictive and beautifully presented shoot 'em up of the highest calibre! GOLD MEDAL ZZAP! 64*

Thalamus, 1 Saturn House, Calleva Park, Aldermaston, Berkshire RG7 4QW ☎ (07356) 77261/2

**SOON  
FOR  
ST & AMIGA  
£19.99**



# The Games machine

It's a whopper!

## 111

### Reviews

72 products

### 32 ■ VOYAGER

Ocean have got themselves another winner — and a well deserved one. Voyager marks the first in what Ocean is hoping to be a long line of top-notch games, exclusive to the 16-bit machines. Jump in the 3-D tank and enter into battle on alien terrain!



## TOP SCORE

## The Games machine

## STAR PLAYER

### 34 ■ TYPHOON THOMPSON

Squeaky sound, tiny graphics — but hell, are they well animated. Domark's new deal with American software house Broderbund has found them a brilliantly addictive, simple, fun game: it's just like the good old days!

### 44 ■ VINDICATORS

Ten pages later and Domark have done it again! Hurrah! This time with the first Tengen licence — Vindicators. A fast and colourful game with you in control of a lethal tank with an obvious objective — blow the b\*\*\*\*\*s up!

### 50 ■ BALLISTIX

From Psyclapse comes a future sports simulation — 50 different pitches for two players, the best way to play this version of death hockey, and 80 for a single player — it's a whole new ball game.

### STAR UPDATES

35 R-Type (Amiga)  
37 War In Middle Earth, (PC, ST, Amiga)  
39 Carrier Command (Spectrum)  
45 Dungeon Master (Amiga)  
49 Cybernoid 2 (Amiga)  
55 RoboCop (Amiga)

#### AMIGA

Afterburner	39
A Question of Sport	49
Baal	35
Balance of Power	38
Ballistix	50
Batman	55
Chase	61
Cybernoid 2	49
The Deep	33
DNA Warrior	56
Dugger	64
Dungeon Master	45
Goldrunner II	59
Hacker	45
Hollywood Poker Pro	54
Human Killing Machine	45
IK+	37
Journey to the Centre of the Earth	66
Kenny Daiglish Soccer Manager	46
Prison	53
Prospector in the Mazes of Xor	66
Roadblasters	43
RoboCop	55
R-Type	35
Run the Gauntlet	49
Scorpion	44
Titan	36
Vigilante	59
Voyager	32
Wanderer	65
War in Middle Earth	37
Willow	64

Zany Golf	35
-----------	----

#### AMSTRAD CPC

Airborne Ranger	39
Barbarian II	46
Chicago 30s	62
Human Killing Machine	45
Obliterator	59
SDI	43
Supertrux 5	8
Tiger Road	43
Titan	6
Victory Road	53
Vindicators	44
Wanderer	65

#### ATARI ST

Backgammon	55
Balance of Power	38
Ballistix	50
Bismark	59
Borodino	61
Chase	61
Cosmic Pirate	59
Cybernoid 2	49
The Deep	33
Dragonscape	66
Face Off	65
Go Moku	66
Human Killing Machine	45
Journey to the Centre of the Earth	66

Jug	62
Orbiter	62
Prison	53
Roadblasters	43
Run the Gauntlet	49
Thunderwing	64
Typhoon Thompson	34
Victory Road	53
Vindicators	44
Voyager	32
War in Middle Earth	37
Wanderer	65
Willow	64

#### COMMODORE 64/128

Action Service	35
Blasteroids	55
DNA Warrior	56
F-14 Tomcat	62
Human Killing Machine	45
Last Duel	35
Run the Gauntlet	49
SDI	43
Supertrux	58
Wanderer	65
Warlock's Quest	53
Who Framed Roger Rabbit	60

#### PC

Battlehawks 1942	60
Daley Thompson's Olympic Challenge	37

Jetfighter	43
Knight Games	39
War in Middle Earth	37

#### SEGA

Altered Beast	49
California Games	53
Time Soldiers	65
Vigilante	59
Y's	36

#### SPECTRUM

Captain Blood	37
Carrier Command	39
Chicago 30s	62
DNA Warrior	56
The Deep	33
Eliminator	55
Obliterator	59
Real Ghostbusters	56
Renegade 3: The Final Chapter	38
SDI	43
Skate or Die	64
Stormlord	40
Superman	45
Supertrux	58
Tank Attack	58
Vigilante	59
Wanderer	65

PRESS  
ANY  
KEY



Solid 3-D Tank Duel

# VOYAGER

Ocean

**A**round the eternally beautiful ringed planet Saturn spin ten moons. Seemingly uninhabited, these worlds are in fact the home of the Roxiz empire which is preparing its conquest of the blue planet Earth.

Eventually deep space probes pick up signs of activity on the moons and relay a warning back home. With next to no defensive capability desperate Earth commanders decide to take the war to the Roxiz.

The cargo starship Storm is despatched to the first of the ten moons, a solitary future tank on board with psychopath Luke Snayles at the controls. One tank against an entire invasion force? Whatever the odds may be, Earth has no choice — attack or die.

Landing on the surface of the first moon Mimas Luke takes the tank around the barren world. The Roxiz have been busy, it seems, building strange structures and radar installations — only a couple of seconds sightseeing is possible before the first enemy tank spots the intruder and the ruckus begin.

The ultimate goal in *Voyager* is to reach the tenth moon Phoebe before the Roxiz are ready to attack. The short term goal however is the total destruction of all 80 enemy tanks, hover fighters and attack vehicles on each moon.

Each moon has its own mixture of enemy vehicles. The first few moons are patrolled by weakly armoured light tanks, mine-laying hover craft and other minor nuisance foes. Soon ever stronger and stranger enemies join in the fray. Walkers, double gun tanks, cousins of the *Starglider* craft, hover gunners, squashers, mystery craft and other cannon fodder gradually appear on each new moon.

The on board laser cannon is nearly always enough to destroy most tanks but when the heat is on an atomic smart bomb is quick and lethally efficient. Try keeping some in reserve for the later moons — you'll need them.

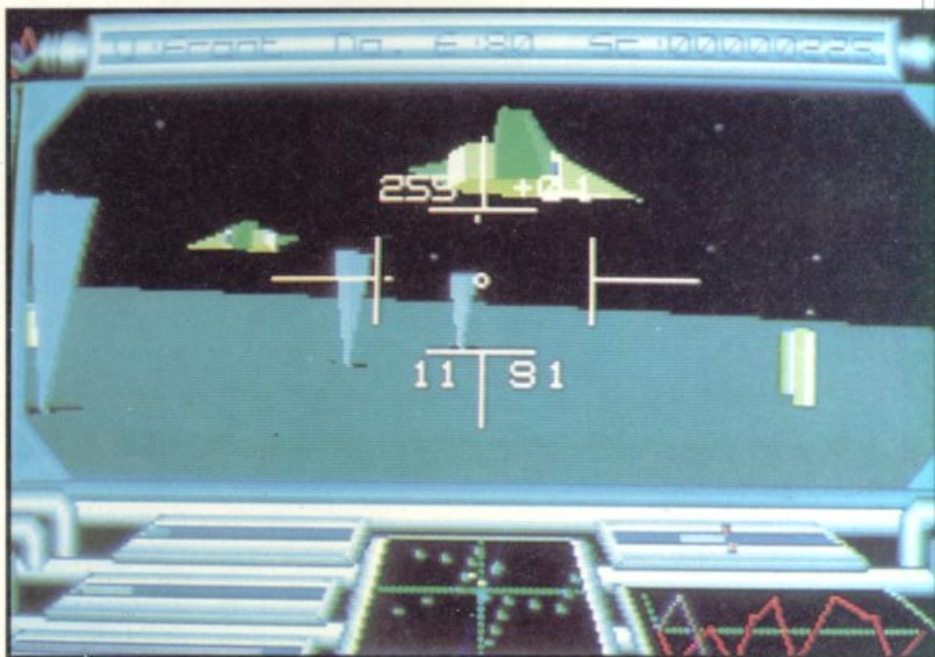
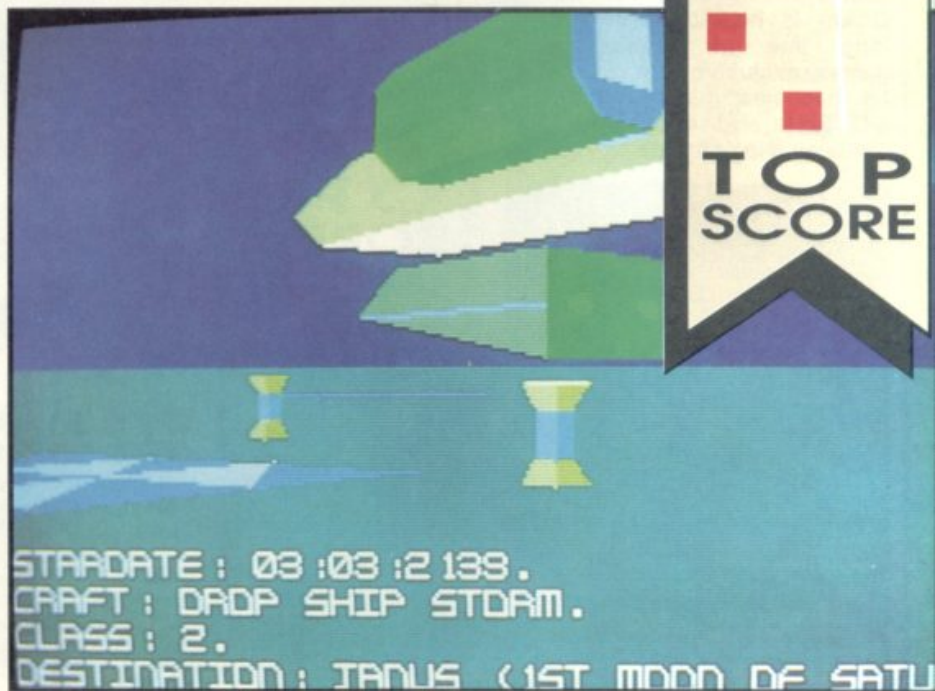
The radar used to hunt down tanks can also be used to locate equipment pods which give forth a variety of offensive and defensive tank add-ons — cameras, atomic bombs, radar jamming pyramids, decoys and multiples provide a variety of offensive/defensive capabilities. A pod containing a skimmer can also be found to transform the tank into an aircraft on the later moons.

Not all extras are readily available on the first moon — you have to progress further to find many of them.

When all tanks are destroyed the warp gate to the next moon opens for a limited time, fly safely through to the other side to continue the battle and force the

Roxiz to retreat.

Much more of an arcade game than *Starglider 2* ever was, *Voyager* boosts the idea of a humble solid 3-D Battlezone beyond all recognition. Tank combat is improved ten-fold with the addition of extra weapons requiring tactical and strategic use.





A difficult game to fathom

# THE DEEP

US Gold

**N**othing to do with the movie based on Peter Benchley's novel, killer whales, sea snakes, jelly fish and Jacqueline Bisset in a wet T-shirt don't even get a look in. The game is, however, a conversion of the coin-op of the same name from obscure arcade manufacturers, Woodplace.

Enemies in *The Deep* come in disappointingly conventional form — a variety of submarines. Nevertheless, they're more than a little dangerous, and should be stopped before they invade the good ol' US of A, or something equally monstrous.

The game shows a cross-section of the sea, its rocky floor at the bottom of the screen. Near the top, you guide a ship on the surface and release depth charges from it to

destroy subs. Some release pods; collect one and a helicopter is summoned which drops an add-on device. Homing missiles, submersible pods, extra speed, smart bomb and increased depth charge power are available.

The game is formed from three short scrolling levels. At the end of each, a submersible pod is guided to collect a token from the sea bed. When three have been collected, an enemy mothership threatens.

In stage two, a ship slowly approaches. You have a short time to stop it with a projectile whose launch angle is determined by the fire button.

A peaceful convoy must be defended in the third stage: missiles are launched from the sea bed towards it and, in Missile Command amnner, you use a cursor to halt them in flight.

The weak coin-op consisted of just long scrolling stages with a mothership at the end of each. Though in the conversion US Gold have added some new features and stages, the game remains an unexciting rehash of old ideas.

The concept may indeed be as playable as it is dated but out-and-out carnage has never looked so good. The 3-D environment brings new life to the ideas of tank blasting action and with it comes a whole new depth with different weapons to use. The introductory sequence sets the scene with the Storm dropping the tank onto the surface.

You against a massive enemy force and the fate of Earth hanging in the balance — prime material for a great blast and *Voyager* is it.

Call it outdated if you will, but *Voyager*, with its solid 3-D graphics brings new life to tank blasting action on the 16-bit machines — all Amiga screens

£24.99

**AMIGA**  
**92%**

The Jonathon Dunn title track enhances an already scene-setting soundtrack, the graphics moving with similar fluidity but all the better with a slight increase in speed and stronger sound effects.

£19.99

**ATARI ST**  
**91%**

Solid 3-D is rapidly becoming a natural for the ST, the tanks move speedily and with very smooth animation. The tanks are detailed enough with several building blocks per graphic, and they change dramatically with each moon.

## OTHER FORMATS

A PC version is planned for June, priced £19.99 and should run slightly faster and look much the same (the graphics pending use of EGA and VGA, the speed dependent on the machine in use).



£24.99

**AMIGA**  
**38%**

Faster than the ST version so a little more playable, there's still not much to the game. The sound is obviously better, but an endless sonar bleep and unchanging explosion effects can

£19.99

**ATARI ST**  
**38%**

Graphics are a little lacking in detail and sprite movement could have been smoother. The use of bands to give an illusion of watery depths is weak to say the least. Scrolling is a bit jerky, and like ship movement, is rather slow. The sound effects are sparse.

The graphics differ, as you would expect, between versions (Atari ST above), but essentially the gameplay hasn't been updated since some of the earliest 1984 Spectrum fare

£8.99

 cass  
 £12.99 disk

**SPECTRUM**  
**41%**

The stretch of sea depicted on the Spectrum is extremely polluted — it's pitch black! Your ship is also black, which makes the game ugly to begin with. The sea bed scrolls adequately but the subs lack detail and there's some ugly attribute clash.

## OTHER FORMATS

Commodore 64 (£9.99 cass, £14.99 disk) versions are out now, with PC versions coming soon (£19.99).

PRESS ANY KEY



Aquatic sport and mayhem in deepest space

# TYPHOON THOMPSON

## in SEARCH FOR THE SEA CHILD

Broderbund/Domark

**M**any readers may be too young to remember an old, old classic game from Broderbund's original software range. *Choplifter* put you at the controls of a crudely designed helicopter sprite which was used to rescue men while blasting enemies. Simple, but great fun. Now the creator of *Choplifter*, Dan Gorlin, releases his latest work in the UK, hopefully the first in a long line of adventures for reluctant hero Typhoon Thompson.

A planet whose surface is covered entirely in water, Aguar lies in the Omega sector of space. Long ago a human civilisation milled around its aquatic highways and byways, but Aguar is now devoid of all humans — except, perhaps, one...

In February 2124 Flight 396 plunged into the barren tropical waters of Aguar. Three search parties have explored its currents and, to the best of their ability, its vast depths, in the slim chance of rescuing survivors. All three parties became victims themselves of the curious little creatures known to humans as sea sprites.

A faint signal still radiates from the sea world, however, a signal indicating that a human child still lives. It is suspected that the child has been adopted by the sea sprites and one last rescue mission is to be undertaken, by one very special man — Typhoon Thompson!

As you join his adventures, he is forcibly thrown from the safety of a flying saucer by a galactic cop, to land with a bump at the controls of his Jet-Sled. In the game, you control the hovering aquatic vehicle and its weaponry.

Your first destination is the outpost of the spirit guardians, your only outside help. They give the sled additional weapons to supplement the standard laser cannon and tell you which magical artefact is the aim for each of the first four levels. These special objects are essential if the child is to be saved.

The main objective is to capture all the sea sprites living in islands grouped together to form a village. A twinkling light indicates that an island is occupied. If blasted, one or more (depending on the level) of their flyers appear. If they in turn are shot, a sprite is released, falling into the sea, ready for collection.

The ditched sprite has other ideas and begins to swim away for all its worth. Typhoon can, if he's quick, zoom in to pick it out of the sea and pop it in his sack. Dawdle too long though and the sprite turns into a fish swimming and leaping back to the safety of its island.

Once all sprites are in the sack, just go to

the Treasury Dome in the center of the watery village. Here a wonderfully animated but very angry sea sprite gives Typhoon an artefact in exchange for the captured sprites.

Once Typhoon gets back to the Guardians with the artefact the ghostly figures give our hero a new weapon, an extra life and a command to find the next of the four artefacts.

With each new level the number of sprites to collect increases dramatically and the flyers become even deadlier — some can destroy one of Typhoon's three jet-

sleds while others are more vicious and kill Typhoon himself. Death or loss of a dinghy means going back to the Guardians for a new one (which is taken out of Typhoon's reserve stock). The shield is gone for good if Typhoon runs out of jet-sleds or lives.

After recovering all four artefacts it's a simple matter of rescuing the child from the sea sprites...simple?

In essence *Typhoon Thompson* is straightforward with not much depth (no pun intended). Some of the most playable games are like this, and *Typhoon Thompson* is one of the most entertaining and playable games around at the moment. The jet-sled is a tricky vehicle to ride but takes only a little practice to master.

The infectiously addictive and pleasantly simple gameplay overcomes game's lack of



**Typhoon Thompson may like to think himself a tough guy, but when it comes to balloons, well...**



The Games machine

STAR PLAYER



## VERSION UPDATES

### AMIGA

#### Baal

PSYCLAPSE £19.95

Atari ST 81% — TGM015

After the quality of *Baal* on the ST, Psyclipse steer a rocky course with this conversion. The replacing of the excellent ST sampled tune with a jolly but inappropriate 'house' track is acceptable, but the Amiga's colours aren't used and the game's overall appearance is dull. Poor presentation has led to a much lesser game all round.

**TGM update 65%**

### COMMODORE 64/128

#### Action Service

COBRAHSOFT/INFOGRAMES

£9.95 cass, £14.95 disk

Atari ST 33% — TGM013, PC 29% — TGM014

Watch out soldiers! Each successive version of this awful game is worse than the last. Having endured ST and PC versions, we're now presented with the blocky, poorly animated Commodore 64 game. Occasional simple effects are the only sounds and control response is no better than on the 16-bit versions. Let's hope this is the last of this intolerably dull product.

**TGM update 24%**

### AMIGA

#### Zany Golf

ELECTRONIC ARTS £24.95

Atari ST 83%, PC 82% — TGM017



The Amiga version of this Star Player wacky ball 'n' hole game has the same clear, colourful graphic style as the ST. The sound's been improved with some original quality voices adding humour to the tunes, while gameplay is unchanged, giving Amiga owners plenty of competitive, addictive and zany fun.

**TGM update 84%**

### COMMODORE 64/128

#### Last Duel

US GOLD £9.99 cass, £14.99 disk

Spectrum 63%, Amstrad 55%, Atari ST 65%, Amiga 70% — TGM016

The scrolling on Last Duel is slow and a little juddery, the backgrounds are simple and blocky and sometimes offensive to the eye. The sprites are adequate but the effect of the three-wheeled vehicle jumping is pathetic, and the two-player element adds little to this, the weakest of all the versions.

**TGM update rating 43%**



Incurably and inerradically cute, *Typhoon Thompson* is the kind of game which just makes you wish you had bought an ST — Amiga owners will have to wait

scope. Even if you do rescue the child a momentous task in itself, the very large temptation to try again just doesn't go away. Technically brilliant and brilliantly simple, funny and very clever, it's a classic game.

#### OTHER FORMATS

No word yet on any other versions. An Amiga game would be easy enough to produce and 8-bit conversions should be easily possible.



£19.99

*Typhoon* himself smacks of distinctly Loderunner influences and has his own charm and persona. David Bunnett's literally amazing animation injects a superb sense of humour into the tiny characters. Watch the Treasury Sea Sprite when he emerges to meet *Typhoon* to see what we mean. Graphically, sonically and in presentation *Typhoon Thompson* is so slick it's almost unreal. A 'just-one-more-go' game par excellence.

The ultimate space shoot

## R-TYPE

Electric Dreams ■ Amiga £24.99

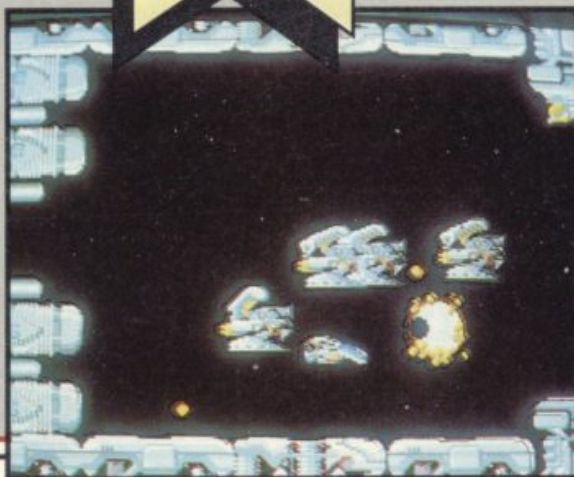
Atari ST 82%, Spectrum 90% — TGM015

This is the ultimate home computer conversion of Irem's biggest hit so far. *R-Type* turns out very, very close indeed to its arcade origins and lacks nothing of the coin-op's presentation, gory graphics and playability. Arcade addicts may find the squat screen does marginally limit manoeuvring space, but the game's all the more challenging as a result of it. If fault can be found (and you'd be hard to pushed) then maybe the sound could have been better; as the tunes stand they're good but they don't push the Amiga. This is a superior and very slick blast-'em-up.

**TGM update rating 89%**

The Games  
machine  
STAR  
UPDATE

From arcades to PC Engine, 8-bit to 16-bit, *R-Type* succeeds, but never better than on the Amiga





Minding your R's, P's and G's

# Y's

Sega

**U**p until now role-playing games haven't worked on the Sega. *Miracle Warriors* was a weak mixture of simple game ideas and Golvellius wasn't applicable with its strong arcade overtones. *Y's* brings out the true classical elements of role-playing.

The hero of the hour, Aron Christian, finds himself stranded in a strange land following a shipwreck. The nearby town of Minea is the starting place for Aron's adventures and it's here that the adventurer learns of the six magic books of *Y's*, books of incredible power which, if all are found, could be used for catastrophically evil purposes.

Tales are rife around the village of an evil sorcerer called Dekt who's searching for the books. No-one wants to take him on and it looks like curtains for the land and its people unless someone can come to their aid — Aron.

From Minea Aron can set out to explore the land, but courage and a thousand gold



pieces just won't do to survive the perils of the wilderness and beyond. Around Minea traders buy and sell many an object: armour, weapons, food and miscellaneous items are all available to those with money.

Scant clues, red herrings and advice can be obtained from the locals in the pub or alternatively people wandering the streets.

Eventually Aron meets Sara the Seer and it's from here that the adventure really begins — Aron ventures out into the wilderness and the surrounding lands containing villages, a temple, a mine and

other sites rich in adventure.

Somewhere out in the dark land lies the first three books of *Y's*, the other three are a little harder to obtain. Dekt has got them and the way only to get them is to enter his Tower of the Doomed. No role-playing game would be worth its salt without the spice of combat. Aron can arm himself with swords and other weapons but even the enemy just outside Minea are tough nuts and best avoided. Later on secret powers and new weapons help in the task if he lives long enough.

Like *Miracle Warriors*, *Y's* also has a vital save/load function to back up posi-

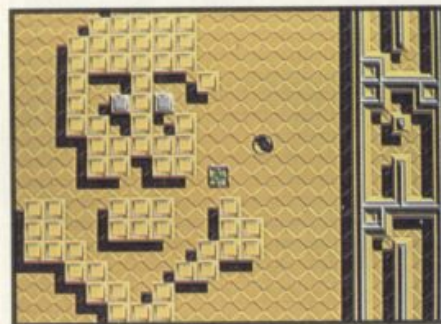
A horizontal break-out

# TITAN

Titus

**A** Titan warrior has entered an alien complex — his aim: to destroy the energy cells which occupy the many chambers from which the complex is composed. To do this, he has a high-velocity ball which he throws, bouncing it off walls and destroying the rectangular cells.

Sounds familiar? Yes, *Titan* is a variation on the ancient *Break-Out* theme, but with the important and major difference that the playing area scrolls. The bat (the warrior) can be moved in the eight main compass directions and the maze-like chamber/level



scrolls to keep it centre screen. The ball's direction is influenced by the bat's stroke and speed by the fire button. As well as obvious features such as blocks requiring multiple hits, later in the game aliens, solidifying blocks, one-way and ball-only gates are introduced, making the whole thing a lot more difficult.

The larger levels and more flexible play that a scrolling *Break-Out* allows seem like a good idea at first, but the faults *Titan* gains from this outweigh the good points. The ball bounces around at high speed, leaving you chasing around after it like a madman. The bat's too small, and when you manage to hit the ball it reflects in a random direction — or at least, more often than not, a direction you don't want. And the backgrounds are a further distraction when quickly changing heading.

**8-bit and 16-bit Titans differ with the Amstrad's vertical screen format (left) and the Amiga's landscape (above). But with the latter's colour scheme, you'll need to keep one hand on your joystick and another on your stomach if you're going to get anywhere**



£24.99

Nice presentation — rippling water reflecting high scores, stone pillars and metallically shaded lettering — continues in some of the graphic features, but a bright colour scheme and fast play means there is always a danger of vomiting over your monitor. Samples of tom-toms and similar percussive instruments are strewn throughout, and the aural highlight is a classical singer warbling an ascending scale while the teleport is used.



£9.99

cass

£14.99 disk

The screen size has been altered to a tall rectangle, a feat that would be more useful to the usual *Break-Out*/Arkanoid clone. The bas-relief graphics are pleasant if simple, but the garish colour schemes combined with fast direction changes spoil the overall visual effect. To its credit, the scrolling is very smooth and the gameplay is amusing for a while.

## OTHER FORMATS

Commodore (£9.99, £14.99), Atari ST (£19.99) and PC (£24.99) are imminent, with a Spectrum version (£8.99) available in May.





Coming into its own: one hot RPG for the Sega — the Y's have it!

tions. The battery storage is quick and efficient to use and a necessity if Aron is to be in with a chance of completing what is a truly deep and demanding RPG.

The Sega is really coming into its own with games like Y's. An obvious cross-console comparison would be with the Zelda games on the Nintendo and against them Y's compares admirably — in many respects the character detail and all-round presentation make it the better game visually, although the puzzles aren't quite so involved or devious.



£24.95

The characters are small, squat and endearingly cute as they move around an extremely smooth-scrolling playing area. On entering buildings you're greeted by excellent close-ups of people enhancing the already rich atmosphere. Elements like this assure a success for Y's as one of the top-rank RPGs around.

A better quality of war altogether

# WAR IN MIDDLE EARTH

Melbourne House ■ Atari ST £19.99  
PC £19.99, Amiga £19.99

Spectrum 65%, Amstrad CPC 65%, Commodore 64 62% — TGM017

While the 8-bit versions of War in Middle Earth failed to impress, the 16-bit conversions are a different cauldron of hobbits altogether. It has been enhanced considerably — find treasures and recruit armies in this much more involving game. Sauron's armies are all but invincible, so the best you can hope for is to stem the tide long enough for the ring bearer to complete his quest. No two games are the same. Even when you've completed War in Middle Earth there is still plenty to do such as refining your strategies and locating all the hidden objects. There's little difference between the three 16-bit versions reviewed here other than sound and some minor graphical differences, but the game plays just as well on all formats.

**TGM update: PC 88%**  
**Atari ST 88%**  
**Amiga 89%**



War in Middle Earth didn't fare too well on the Spectrum, traditionally Hobbit land, but on the 16-bit machines it turns out very well

## SPECTRUM

### Captain Blood

INFOGRAMES £9.95 cass,

£14.95 disk

Atari ST 74% — TGM007

The Alien-esque H.R. Giger-inspired organic spacecraft console doesn't lose too much in the translation to monochrome and, although grainy, the 3-D canyon sequences are effective. Hyperspace and planet-destruction graphics sequences are disappointingly crude, but Jarre's Zoolook music is enjoyable enough and so's the overall gameplay. Unfortunately, Captain Blood is showing its age now.

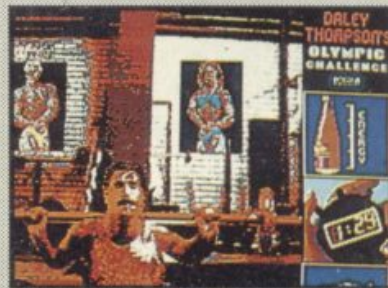
**TGM update rating 68%**

## PC

### Daley Thompson's Olympic Challenge

OCEAN £24.95

Spectrum 72%, Commodore 64 73%, Amstrad 63%, Amiga 65% — TGM013, Atari ST 64% — TGM014



The PC mimics the other 16-bit versions, in using digitised Daleys and high overhead views in some events. With the relatively restricted palette of EGA though, black, green, red and grey make an unusually unattractive Thompson. This is too late to cash in on the Olympic spirit, and worse than US Gold/Epyx' The Games: Summer Edition.

**TGM update rating 59%**

## AMIGA

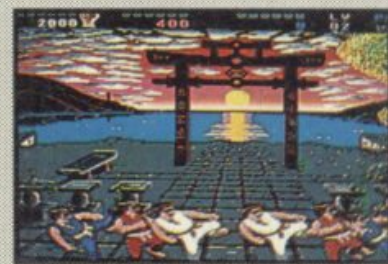
### IK Plus

SYSTEM 3 £24.99

Atari ST 88% — TGM014

TGM first looked at Arthur Maclean's fast and furious beat-'em-up as part of our martial arts action issue. The Amiga game plays the same as on the ST: the only differences are the slightly more attractive sunset effect and some enhanced music. Gratuitous pixel violence is especially good fun in IK Plus — a must for Amiga-owning fans of the genre.

**TGM update rating 88%**





Blood and bruises in the future

# RENEGADE 3

## THE FINAL CHAPTER

Imagine

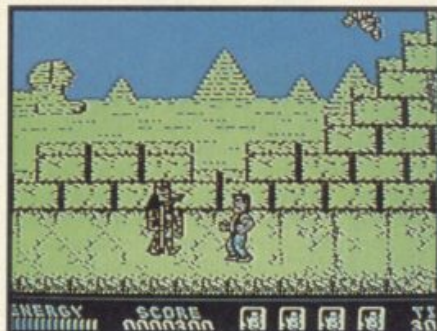
**W**ith his girl kidnapped not long ago, his brother murdered by Mr Big and now his girl kidnapped yet again, it's all proved too much for Renegade...now he seeks TOTAL vengeance.

But this rescue attempt isn't quite so easy. Renegade's girl has been spirited away by foes with a nice line in time travel. It just so happens that the Renegade has also discovered the secret and off he goes through the temporal void chasing his opponents back and forth. The kidnapers have made him real mad and they're going to pay for it in blood and bruises!

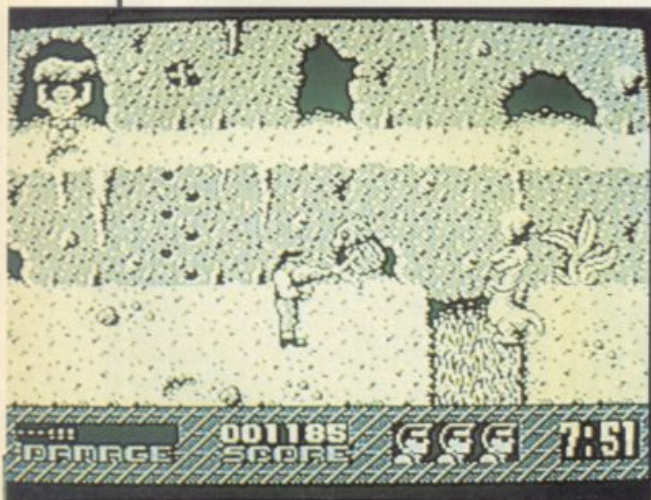
Renegade moves ever right-wards nutting, kicking, crippling and maiming the opponents hoping to reach the next stage. Though if he dwardles he could get trapped in a time zone forever — and that's a mighty long time to spend thumb twiddling.

The search starts one million years back when dinosaurs ruled Earth. Cavemen, dinosaurs and egg-dropping pteradactyls assail the macho hero as he wanders casu-

Target Renegade was good but the second sequel is so much more fun — gratuitous pixel violence is always a satisfying pastime, and Renegade 3 just goes to prove it.



**The unholy mayhem continues with Imagine's third — and most enjoyable — Renegade: Commodore 64 above, Spectrum below left**



ally through the level. The fighting comes to a head at level's end where we learn Renegade's beloved's been spirited to ancient Egypt. The fight and fists action continues through to Ye Olde England with Knights on hobby horses, jesters and dragons flapping around castle ramparts.

Following the trip around King Arthur's abode, its back to the future and beyond to space stations where robots try to fry our merry hero.

Renegade 3 keeps with tradition, which may disappoint fans looking for several new ideas. The omission of a two-player option could have been a mistake, but would invariably have made the game far too easy — as it is it plays at just the right level.

The eagle versus the bear

# BALANCE

Mindscape

**I**f there's one game destined for immortality in the battlefield of strategy games it's *Balance of Power*. Subjected to many a request, plea and ultimatum, Chris Crawford has now produced a sequel, or rather an 'independent extension' of the existing program.

A simulation of geo-politics in the nuclear age, *Balance of Power* has you sitting in the ultimate hot seat in either the Kremlin or the White House. The goal: to take your nation through eight years of political rule without triggering World War III and at the same time maintaining and improving upon a strong political, economic and military presence worldwide.

Chris Crawford hasn't made the 1990 edition significantly different in execution. Instead he's added a multi-polar level of play whereby the other countries now control their destinies. This increases the all-round game complexity to frighteningly high levels of complexity (the Nightmare level is nothing in comparison with this monster!). If it all gets too much four advisors are on hand at any time to provide

SPECTRUM  
84%

£8.99  
cass £14.99 disk

Judging by past experience Spectrum owners have little cause to worry about with high resolution screens throughout with bags of detail although monochrome in appearance. The atmosphere of each period is brought to life with some great 128K tunes (the Egyptian piece is especially authentic sounding).

C64/128  
79%

£9.99  
cass  
£14.99 disk

Not quite as detailed graphics running around but colour is used well and the music is catchy. It doesn't quite matching the Spectrum version for playability, and the overly-precise collision detection can be nuisance.

### OTHER FORMATS

An Amstrad version should be out now at £9.99 and £14.99, with ST and Amiga versions (£19.99 and £24.99) released in June.

### CARRIER ON STANDBY

Spectrum owners will just have to grit their teeth until *Carrier Command*'s release date is announced, because Realtime are improving the game yet further following some suggestions from our sister magazine CRASH. Whenever it appears *Carrier Command* will be well worth the wait.





# E OF POWER - 1990



their views on sensitive situations.

There can be no question about the depth and challenge of *Balance of Power* — the 1990 Edition is more of the same and is THE definitive strategy game with no exceptions. Cynics however, might say the 1990 Edition is too much of the same.

£24.99

ATARI ST  
89%

Both ST and Amiga versions suffer from a lengthy delay while the computer works out all 80 countries' actions and as nuclear wars are very easy to initiate the save function is nearly always in use each turn. Graphically and sonically, the ST version is exactly the same as the Amiga.

£24.99

AMIGA  
89%

Balance of Power isn't a game to show what both 16-bit machines can do when it comes to presentation. The use of colour is strictly functional and the no sound effects rule is odd at first but entirely logical. If you enjoy strategy there's nothing else which comes close. This is the ultimate strategy game.

Breaking the Spectrum barrier yet again

## CARRIER COMMAND

Rainbird 128K Spectrum £14.95 cass, £15.95 disk



Atari ST 98% — TGM007, Amiga 97% — TGM011

It pushed the ST let alone the Spectrum, but the Realtime team haven't wasted their time. Andy Onions hasn't just converted the game, he's improved on the original 16-bit versions in a healthy number of areas. Ever more advanced programming techniques have brought the game up to ST standards in speed although the graphics are obviously not as smooth flowing.

Unbelievably the sound effects work better than the 16-bit counterparts and lessons have been learnt. Similarly, Dave Lowe's superb musical piece really shows what can be done with the 128K's sound chip.

The carrier's lasers have been toned down making the game considerably harder, even the gameplay has undergone slight tweaking in places which improves playability and the game's fluid running no end. And there's the time acceleration option which ST and Amiga owners were crying out for. Well defined, neatly shaded solid 3-D objects, faultless presentation and gameplay which betters its 16-bit counterparts makes *Carrier Command* as much of a breakthrough on the Spectrum as it was on the ST — if not more. Brilliant.

**TGM update 96%**



## VERSION UPDATES

AMSTRAD CPC

**Airborne Ranger**

MICROPROSE £9.95 cass,

£14.95 disk

Commodore 64 82% — TGM003,

Spectrum 73%, PC 78% — TGM014



This is much the same as the Spectrum version although the four colours in Mode 1 are rather garishly implemented and the sound is limited to standard CPC spot effects. The strategic element is in keeping with MicroProse's previous games and assures considerable depth of gameplay, but the overall presentation has taken quite a battering.

**TGM update rating 60%**

IBM PC

**Knight Games**

MASTERTRONIC £9.99

First on the Commodore 64 over two years ago, and still a novel sports game, *Knight Games* enters the relatively competition-free PC arena. EGA and other colour modes create a pleasing authentic looking game despite the odd knight animation. Out of the eight events on offer all but two take the form of one-to-one combat, repetition follows and it's left to the crossbow and archery events to provide anything more than short term appeal.

**TGM update rating 50%**

AMIGA

**Afterburner**

ACTIVISION £24.99

Atari ST 47%, Commodore 64 29%, Spectrum 83% — TGM015, Amstrad CPC 68% — TGM017

Barely acceptable on the ST, the Amiga version looks much the same although the sampled music kicks the game off to a good start. The jet banks faster than on the ST but still rolls awkwardly. The worst thing about *Afterburner* is that neither the speed or graphic quality of the coin-op is captured in the conversion, and without either the game doesn't come over too well at all.

**TGM update 50%**





Raffaele Cecco does it again, and again, and again...

# STORMLORD

Hewson

**R**affaele Cecco's latest game has been long and eagerly awaited by 8-bit owners. Raf's most famous work is *Cybernoid*, but his credits also include *Copout*, *Solomon's Key*, *Equinox* and *Exolon*.

Classed as something of a sequel to *Exolon*, *Stormlord* takes place in the dark regions of a mystical medieval time rather than the spacestations of the unknown future. The Realm of the Mighty Stormlord went about its business peacefully and diligently, and for many years its people were happy with their humble lives.

The Stormlord had ensured protection from outside forces...until now.

The Queen of Evil has infiltrated the Realm, and captured many magical fairies who helped protect the land. Now, its defences in tatters, the Realm has been overrun by all forms of nasty creatures — the minions of the Queen of Evil. Stormlord's people are in a desperate state, unable to defend themselves from the violent, greedy attacks of the Queen's demonic beasts.

Naturally, as the leader of both the community as a whole and the peace-keepers who watch over it, it is Stormlord's job to rid the land of demons, before it's too late. The fairies must be freed from their cages and any beasts encountered slain, so that peace can once more be the land's guiding influence.

Stormlord is controlled by running and jumping along a horizontally scrolling landscape, composed mostly of platforms. Dragons, bees, acid rain, eggs which release giant insects, pawns and other beasts attempt to damage him, but he has an everlasting supply of swords and incendiary devices with which to preserve his

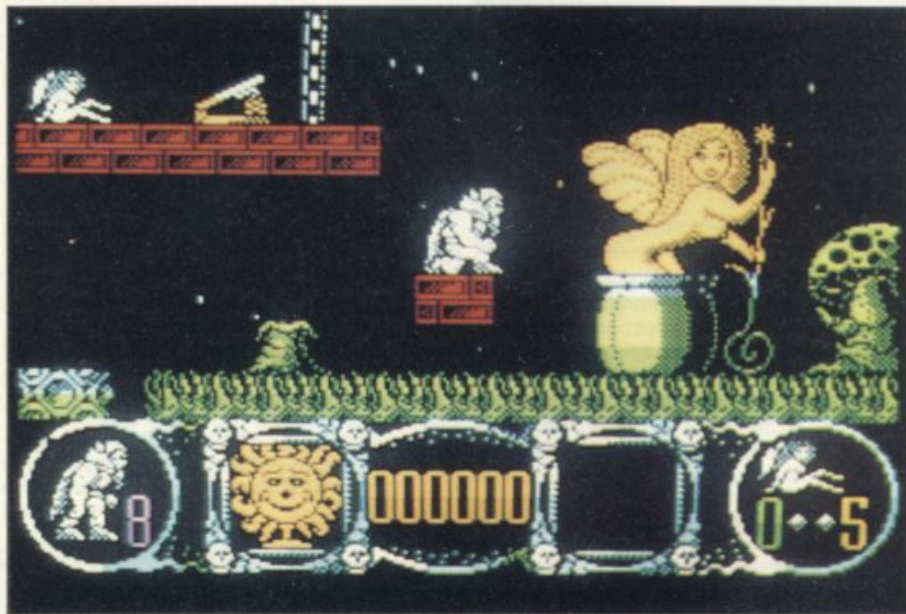
eight lives.

To avoid a long slog there are springboards to catapult him high into the air and take him rapidly from one location to another — hopefully a place where a fairy can be rescued. Objects such as honey-pots, keys and umbrellas help access to

like the actual levels, this is done against a time limit.

Well, Mr Cecco has done it again. There's nothing new or particularly special about *Stormlord*, yet is highly playable from the minute you pick up the joystick. It's by no means an easy game, either. Considerable practice is needed before the second level can be reached, and even then, the first level can still prove to be a problem.

Simple gameplay hides behind glossy presentation, but really this proves that the more straightforward the play, the more addictive the game. Although often frustratingly difficult, *Stormlord* has you going back time and time again to collect just

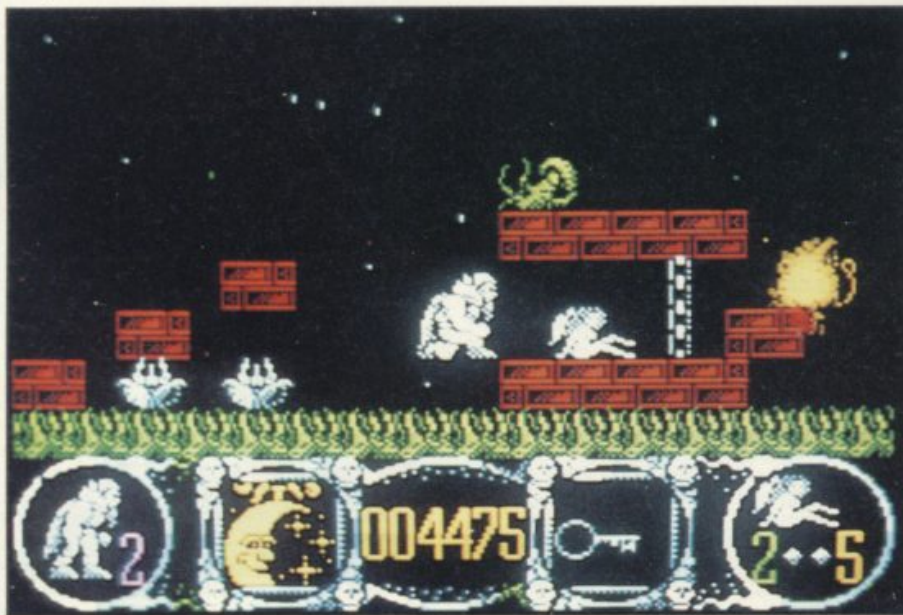


Gaming elements maketh the man: Raff Cecco's long association with the Spectrum pays dividends again in exciting *Stormlord*

otherwise hard to reach areas.

There's a bonus round in between levels too, where Stormlord blows kisses (small heart shapes) at a number of dancing fairies and in return they drop tears which can be collected for points. Unfortunately,

those two or three more fairies that will complete the level and help restore freedom to The Realm.



SPECTRUM  
86%

£7.99

cass

£14.99 disk

The backgrounds are well defined and cleverly shaded, and scroll smoothly as the brilliantly drawn Stormlord stomps along. The varied and amusing enemies are equally cleverly animated; well done Hugh Binns for some great graphics. The quality effects (including an amusing wolf-whistle when Stormlord lands on a statue), lively jingles and good, lively music round it all off nicely.

## OTHER FORMATS

Commodore 64 and Amstrad CPC versions (both £9.99 cass, £14.99 disk) should be bounding off springboards as you read this. ST and Amiga version release dates are unknown as yet, but both are likely to be £19.99.



FOR THE FIRST TIME, THIS IS FOR REAL...

It is daybreak. You join the other pilots in the squadron crewroom to discuss objectives for the day ahead. Tactics, combat manoeuvres; all are captured completely by F-16 COMBAT PILOT. During your pre-flight briefing you instruct the ground crew on weapon loading and plan your attack...

The threat of imminent destruction and the stress of high-g combat you take in your stride. Your training perfected, you are now master in all five roles of the F-16, from air-to-air interception to interdiction strike.

# F-16 COMBAT PILOT



Atari ST screen

**BLACK  
BOX**

But now – Operation Conquest – the conflict you hoped would never happen. Aircraft, ground forces and the entire strategic infrastructure is under threat.

You haven't faced anything like this before... ever!

ORDER YOUR F-16 COMBAT PILOT NOW.

Simply phone (0276) 684959 quoting VISA or ACCESS credit card number, name and address.



Digital Integration Limited,  
Watchmoor Trade Centre,  
Watchmoor Road, Camberley,  
Surrey GU15 3AJ (0276) 684959.



# ROCK STAR



Could you manage this  
Rock Star?



CodeMasters Software Company Ltd. PO Box 6, LEAMINGTON SPA CV33 0SH

## CINTRONICS LTD STRATEGY

### ADVENTURES & SIMULATIONS

#### AMIGA SOFTWARE

BLACK JACK ACADEMY £11.95  
BRIDGE 5.0 £24.95  
CRAPS ACADEMY £11.95  
FIRE BRIGADE (1 meg) £29.95  
FOOTBALL DIRECTOR II £13.95  
FOOTBALL MANAGER II £11.95  
JOAN OF ARC £16.95  
KAMPFGRUPPE £19.95  
K DALGLEISH SOCCER £13.95  
LEISURE SUIT LARRY I £11.95  
PHANTASIE III £17.95  
PORTS OF CALL £29.95  
QUESTRON II £17.95  
REACH FOR THE STARS £17.95  
REBEL CHARGE CHICKAMAUGA £22.95  
SPACE QUEST I £12.95  
SPACE QUEST II £16.95  
ULTIMA III £16.95  
ULTIMA IV £16.95  
UMS £16.95  
ATARI ST  
QUESTRON II £17.95  
ROADWAR EUROPA £17.95  
STELLAR CRUSADE £24.95  
WARGAME CONSTR SET £17.95

#### COMMODORE 64/128 DISCS

BATTLE GROUP £19.95  
BATTLE OF ANTIETAM £19.95  
BRIDGE 5.0 £19.95  
CARRIERS AT WAR £14.95  
EARTH ORBIT STATIONS £11.95  
EUROPA ABLAZE £14.95  
GEOPOLITIQUE 1990 £11.95  
GETTYSBURG £19.95  
KAMPFGRUPPE £19.95  
MACARTHUR'S WAR £14.95  
OPERATION MARKETGARDEN £22.95  
PANZER STRIKE £22.95  
PATTON VS ROMMEL £11.95  
PHANTASIE III £13.95  
POOL OF RADIANCE £16.95  
QUESTRON II £13.95  
REBEL CHARGE CHICKAMAUGA £19.95  
ROMMEL £14.95  
RUSSIA £14.95  
TYPHOON OF STEEL £16.95  
WARGAME CONSTR SET £13.95  
WARSHIP £19.95

Clue books: £6.95 each: KINGS QUEST I, II or III, LEISURE SUIT LARRY I, SPACE QUEST I or SPACE QUEST II.

£7.95 each: BARDS TALE I, II or III, MANIC MANSION, MIGHT & MAGIC, WASTELAND, DUNGEON MASTER, DEATHLORD, FAERY TALE, MARS SAGA, POOL OF RADIANCE, ZAK MC KRACKEN or MASTERS COLLECTION (Subbattle Simulator, Legend of Black Silver, LA Crackdown and Space Station Oblivion).

£8.95 each: ULTIMA IV or V HINT BOOK.

£19.95 each: QUEST FOR CLUES (solutions to 50 games, including Phantasie 3, Tass Times and Ultima IV).

Mail order only. All programs are on disc only.

Please make cheques and postal orders payable to CINTRONICS LTD.

All prices include postage and packing in UK. Overseas rates:

Europe add £2 per item. Outside Europe add £6 per item (Air Mail).

CINTRONICS LTD, RICHARD HOUSE, 30-32 MORTIMER ST, LONDON WIN 7RA

24  
HOUR

# COMPUTER REPAIRS and SPARES

## SINCLAIR QUALITY APPROVED REPAIR CENTRE

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



Commodores  
Repaired



Spectrums  
Repaired

BEST SERVICE - BEST PRICES!

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

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. We can also supply you with power supplies & membranes.

We will repair your computer while you wait and help you with any of your technical problems. Commodore computers repaired for only £35.00.

Please note we give you a 100% low fixed price of £19.95 which includes return post and packing. VAT not a between price like some other Repair Companies offer. We don't ask you to send a cheque in for the maximum amount and shock you with repair bills £30 upwards. Don't forget we are Amstrad approved 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.

**VideoVault Ltd.**

Old Kingsmoor School, Railway Street, Hadfield, Hyde, Cheshire SK14 8AA  
Tel: 04574 66555/67761/69499 Main Office: enquiries and orders only

Manchester telephone 061-236 0376 While you wait centre only.

We regret the Manchester Branch cannot take mail orders, please use main branch number



### TEN ★ REPAIR SERVICE

- While you wait repairs £22.50 48K Spectrum £25.00 Spectrum +2
- All computers fully overhauled and fully tested before return.
- Fully insured for the return journey.
- Fixed low price of 19.95 including post, packing, parts, labour. Spectrum +2 repairs only £25.00 fully inclusive.
- Discounts for schools and colleges.
- Six top games worth £39.00 free with every Spectrum repair. Now includes FREE memory/keyboard test.
- We also repair Commodore 64's, VIC 20, Commodore 16 + 4, Spectrum + 2 and + 3.
- The most up to date test equipment developed by us to locate faults within your computer.
- Rubber keyboard repair (replacement membrane only) just £10.00 including p + p.
- 3 month written guarantee on all repairs.

### FREE OVERHAUL WITH EVERY REPAIR WE DO:-

We correct colour, sound, keyboard, check the loading and saving chip, even put new feet on the base if required. Check for full memory, check all sockets including ear/mike and replace where needed. All for an inclusive price of £19.95 which includes VAT, parts & labour, return post, packing & insurance. No hidden extras whatsoever.

(should a computer be classed as unrepairable due to tampering we may be able to offer a replacement circuit board at additional charge.)

**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 2500 items including software for all computers, joysticks, spare parts, business software, books, plus many more. Just send 3x18p stamps for your free copy. Over 20 pages full of top quality products delivered to your door by return post.



6 GREAT FREE GAMES  
PLUS BONUS  
FREE TESTER ON EACH  
TAPE TO TEST YOUR  
KEYBOARD, MEMORY TEST  
£39.00



Over San Francisco by day and night

# JETFIGHTER

Velocity

**J**etfighter is actually the Amiga simulation *Interceptor* on the PC done by original programmer Bob Dinnerman.

In command of a jetfighter, you're itching to get up there in the wild blue yonder. Why then are you sitting waiting on the deck of the carrier Constellation just outside San Francisco Harbour?

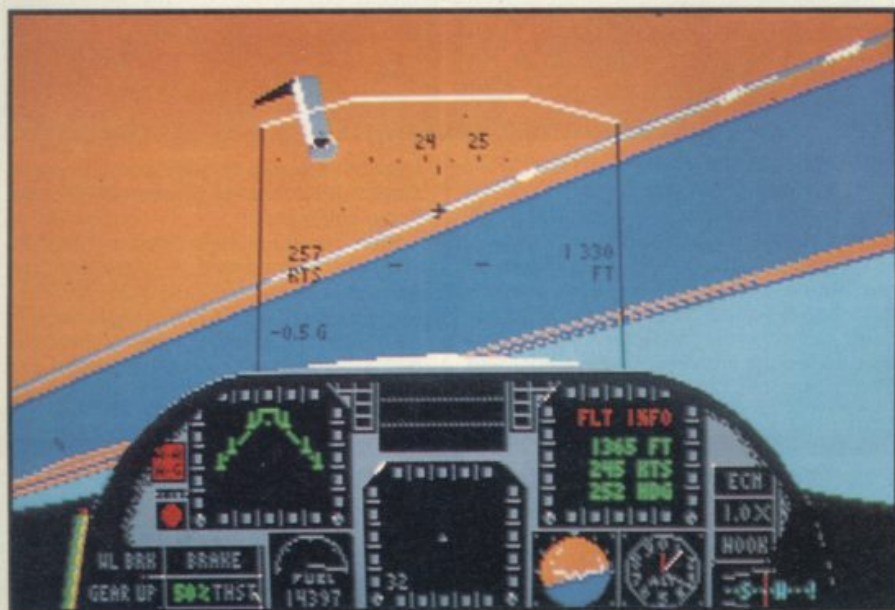
Orders, your commander said, MiGs are flying around just off the coast and there could be trouble. With the situation likely to flare up in a matter of minutes you're on standby, waiting to take to the air and defend the good ol' United States.

Expanding on the *Interceptor* theme, *Jetfighter* allows for control of not only an F-16 Falcon and F-18 Hornet but an F-14 Tomcat as well, complete with its swing-wing capability. An ILS system has also been added along with more missions and air-to-ground weapons.



Amiga *Interceptor* on the PC

Simulation fans who have seen *Interceptor* will recognise just how close it is to *Jetfighter*, although there are several extras in terms of missions and overall gameplay. Although *Jetfighter* doesn't quite come into F-19 Stealth Fighter's league — even though it's faster — through the



From the title screen each area of flight and jet combat can be fine-tuned. Independent missions can also be undertaken but to qualify for these four successful carrier landings must be accomplished — two of them at night.

Once qualified you can then undertake the various missions — ranging from intercepting rogue aircraft to escort duties and even attacking with unguided bombs.

## INTERCEPT SPEED

The tougher requirements for qualification are heightened by the speed at which the PC game moves. The faster the PC, the tougher it all gets. Owners of 286- and 386-equipped PCs watch out — this game is fast!

inevitable sacrificing of graphical detail, with an incredible 32 missions there's a wealth of depth and the combination of simulation and action works very well indeed.

£39.95

PC  
81%

If *Jetfighter* had been available before *F-19 Stealth Fighter*, it might have had more impact. The planes have the detail and the speed is there but without more areas to fly around the realism can only be pushed so far. San Francisco can get awfully boring after awhile. Another drawback is the price, which might be okay in the States, but is a bit steep for the UK market.

## VERSION UPDATES

### AMIGA ■ ATARI ST Roadblasters

US GOLD £19.99  
Commodore 64 47% — TGM010

The all-important driving effect works well on the 16-bits, but better on ST (pictured below) where road movements are fluid and objects and vehicles move past quickly enough to be satisfying. On the Amiga the minus is a restricted number of roadside objects



which negates the illusion of speed. Added to that the graphics are pretty basic to say the least. This is not the definitive race-and-razz game we were all expecting but an acceptable offering for fans of the coin-op.

**TGM update: Amiga 60%  
Atari ST 72%**

### AMSTRAD CPC Tiger Road

US GOLD £9.99 cass, £14.99 disk  
Amiga 70%, Commodore 64 66%, Spectrum 43% — TGM017

Amstrad games nearly always have the best of both worlds with a wealth of colours and the playability of Spectrum conversions — a pity in this case as the Spectrum version fell flat on its face. If you accept the blocky graphics and at times messy use of colour there's some vestige of a good axe romp within, although it may not look it.

**TGM update 62%**

### AMSTRAD CPC ■ COMMODORE 64/128 SPECTRUM SDI

ACTIVISION all £9.99 cass, £14.99 disk (not Spectrum)  
Atari ST 58% — TGM014

Sega's middling coin-op may have already come across relatively intact on the ST but on the Z80 machines the heart of the game is taken out entirely with no background graphics to speak of in the offensive stages and no dual-player option (two players take part alternately). The Amstrad game suffers very badly with less colour than the Spectrum version.

The Commodore version fares a lot better, with neat backdrops helping to boost gameplay. Without the coin-op's gloss the similarity of each level brings very repetitive play with it, especially on the Amstrad and Spectrum.

**TGM update ratings:  
Amstrad CPC 29%  
Commodore 64/128 56%  
Spectrum 37%**



Tanks a lot, Tengen

# VINDICATORS

Tengen

**S**pinning through the quietness of space near Galaxy TR15 lie 14 space stations. The vast and ever-so-evil Tengen Empire owns the lot and from them comes a rather large and very nasty invasion force.

Sensing the potential threat, Earth sends a tank-carrying mothership to the area loaded to the brim with weaponry. The mission? What else but mass destruction!

Once onboard the first station the SR-88 attack tanks get down to business. Unfortunately, it seems the enemy isn't in the mood for making deals — to put no fine a point on it they're out for blood.

Vanquishing the Tengen Empire and its alien commander is the ultimate goal but to do this the control centres in each of the space stations have to be vapourised.

Each station is crammed with deadly tanks, gun turrets and hoverships all increasing in power, speed and effectiveness with each new level.

The security may be tight inside but the enemy are still rather careless, having left spare fuel pods around and Battle Stars to pick up. The former keep the tank going, the latter's used for tank customisation at the end of level. Using Battle Stars as currency more powerful weapons, shields and tank add-ons can be bought. Special weapons can also be bought for use against tougher opponents.

Trundling along vindicating all who dare



challenge is the way to victory. To progress the key to the next floor of the station should be found. The final floor contains the control centre. Just get the keys, destroy the control centre and get out of there before it all goes up — easier said than done.

It's amazing how dramatic a transformation a coin-op conversion can undertake. The arcade machine was a surprising dis-

appointment with its fairly standard gameplay, but this type of game is ideal for the home computers.

With its dual-player option, weapon-upgrading strategies, 14 stations and three skill levels there's enough of a challenge here to keep you playing for literally ages. Highly addictive, highly playable, highly enjoyable — simply a superb conversion from Tengen.

The Games machine

STAR PLAYER

A sting in the tail

# SCORPION

Digital Magic Software

**T**he emerging Cheshire based software house Digital Magic Software are likely to stay largely unknown if the plot for this shoot-'em-up is anything to go by. A princess (this time of the planet Scorpia) has been captured and held at the end of five monster-filled levels. You know what to do.

Time does not apply in Scorpia, and the backdrops are pretty weird and wacky. Firing energy-bolts from your fingertips as you run and jump along, power can be built up by picking up weapon icons. You need to because the huge end-of-level guardians take some beating.

Five levels don't make a huge game these days, but Scorpion's are of considerable size, making each one a unique challenge. Difficulty is also increased by the

sometimes reluctant control response, awkward positioning of platforms and overly tough and evasive adversaries. Ultimately, frustration must dictate a limited lifespan for this product.



**Wacky, colourful screens disguise the sting in the tale — bad collision detection which helps create fiddly and frustrating gameplay**

£24.95

AMIGA  
62%

Smooth scrolling is the game's greatest attribute; definition and animation is quite sloppy (the Scorpion warrior looks like he's carrying a cowpat), with only a few graphical highlights. Sound is a selection of unremarkable and occasionally irritating samples. It all adds up to 'almost but not quite'.





£19.99

ATARI ST  
**88%**

Not the most aspiring of coin-ops, *Vindicators* has nevertheless come over incredibly well as a computer game. Smooth scrolling in a large playing area, digitised explosions and some ace sound effects make *Vindicators* not just a superb conversion but a real fun game to play. Tanks a lot Tengen!

#### OTHER FORMATS

Commodore 64 (£9.99 cass, £12.99 disk) and Amiga (£19.99) versions will be available soon. A similarly priced PC version is also planned.

A brilliant debut coin-op conversion from Tengen guaranteed to at-track-t even the discerning arcade crowd and make them put money into games rather than slots. Both screens from Atari ST

£9.99  
cass  
£14.99 disk

AMSTRAD  
**89%**

As fast, if not faster, than ST and coin-op versions, it has a slightly larger playing area. The graphics and presentation are great, and the scrolling is the smoothest yet seen. The fact that it compares so well with the arcade machine is proof of Consult's talents and also the Amstrad's much underrated capabilities.

Plumb the labyrinthine levels of the awesome

# DUNGEON MASTER

FTL Games/Mirrorsoft ■ Amiga £24.99 — 1Mb only

Atari ST 94% — TGM005

Probably the ultimate in computerised role-playing game reaches fat Amigas. Bad news if you don't have 1 meg of RAM because you won't be able to play it! An A500 version is planned for the Summer but until then owners of bog standard Amigas will just have to dream... Graphically there's no change but the game and its incredible atmosphere is enhanced dramatically through superlative use of the Amiga's stereo system. Distant footsteps promising unknown horrors get the old ticker beating double-time, the tension rising with each new step and the very shadows themselves become potential monsters.

FTL have gone all out to provide nearly everything to do with classic fantasy RPG all in one game. They've easily surpassed themselves, but it's unbelievable just how good a job they've actually done and how well it all works.

There's something in the game for everyone, with action, adventure, fiendish puzzles and great depth. *Dungeon Master* oozes atmosphere and shouldn't be missed by any self-respecting RPG fan.

**TGM update 94%**



## VERSION UPDATES

### Human Killing Machine

US GOLD 16-bit £14.99,  
8-bit £9.99 cass, £14.99 disk  
Spectrum 74% — TGM017

The *Street Fighter* trend continues with *H.K.M.* but Tiertex have made little progress in creating new gameplay, changing no more than the graphics. The backdrops are different but little improvement over the previous game — the ST version having slightly better definition than the Amiga game, although across all versions the characters suffer from a chronic lack of animation.



While the Amiga game offers a better challenge with very hard opponents to defeat, on the ST and Commodore the challenge is negligible once the best of the limited moves is learnt (on the Commodore the flying kick, on the ST the crouching punch or kick). On the Amstrad there's a better defined level of playability than in the C64 and 16-bit version and if it wasn't for the putrid colour scheme used it could have been up there with the Spectrum version.

**TGM update ratings: Amiga 30%  
Amstrad 63%, Atari ST 31%  
Commodore 64/128 26%**

#### AMIGA

### Hacker

MASTERTRONIC £9.99

A come-down for the Amiga, *Hacker* turns out as nothing more than a slightly refined Commodore version. A smoother illusion of movement around the tunnels is apparent and some of the peripheral screens are attractively done. Despite its underlying similarity to the 64 game in graphic style and basic sound effects, *Hacker* is an intriguing puzzle-exploration game and stands the test of time well.

**TGM update rating 55%**

#### SPECTRUM

### Superman

TYNESOFT £7.95 cass, £14.95 disk  
Commodore 64 38%, Atari ST 43% — TGM016

Superman's familiar red and blue costume is exchanged for cyan and black in the Spectrum game in a 3-D Space Harrier-style landscape which passes slowly and jerkily. Character movement is also slow, as is the control response — which means you have to fire before the enemy is actually in your sights. This is one licence that definitely isn't super-powered.

**TGM update 34%**



Haven't we seen too many footy management sims?

# KENNY DALGLISH SOCCER MANAGER

Cognito

**K**enny Dalglish is strangely missing from the icon menu screens from which the game is run with mouse and pointer. The main menu, like the others, has six large icons. The leagues' team and player names can be altered, and saved/loaded along with all current division positions. Book Case determines the level of detail of the data involved.

A boardroom option presents six faces which can give information on various aspects of the player's allotted club's fortunes: the chairman, accountant, physio, coach, bank manager and a talent scout all give brief reports in areas relevant to their interests.

League Table can be a cause of grief starting, as the team does, near the bottom of the fourth division, but the situation can hopefully be eased with the honing of the team. The skills of the current squad are assessed under First 11 — for each

player, their name, position, ability (expressed as a percentage), games played and goals scored in their season and career, and age. Players of low ability can be dropped from the squad or from the club entirely.

The Cup gives a few facts about the next match, which in practice mainly consists of a clock ticking away the minutes at an accelerated speed. Occasionally, the match is graphically depicted to show an incident such as a shot at goal.



Attractive graphics hide a desultory football management sim

As far as a celebrity licence goes, this is similar in execution to *Peter Beardsley's International Soccer* (Grandslam) — Mr Dalglish's face is spread around the packaging (as Beardsley's was) but he's otherwise missing. Surely he could have appeared within the game, commenting or advising via speech-bubbles?

We've seen this sort of game many times before and there aren't any new features to excite, while match interludes are pointless. Sorry Cognito, but *Tracksuit Manager* still reigns supreme.

## UPDATE STOP PRESS!

AMSTRAD CPC

**Barbarian II**

PALACE ■ £9.99 cass, £14.99 disk

Commodore 64/128 94% — TGM009, Atari ST 82% — TGM017

Haya! Whack! Thwack! Choose to play either the barbarian or Princess Mariana and slash your way through the Wastelands, the Caverns, and the dungeons, before arriving at the Inner Sanctum of Drax. All the classic pixelated monsters of the 16-bit versions are here, with well defined Saurian beasts, Neanderthal men, apes, mutant chickens, stingers, giant

grubs and all the rest putting in a very acceptable appearance.

This is a well implemented version of the game of near-classic proportions. More attractive than the Spectrum version with a rich use of colour and solid looking graphics, the sound might be a little disappointing but that's par for the course on the CPC. This is a must-buy for Amstrad owners.

**TGM update 78%**



AMIGA  
**64%**

£19.95

The various icons are big, bold and colourful, as is the stadium background. Nothing is particularly well drawn, although the boardroom inhabitants have character and their Filofax-style organisers provide a nice touch. A soundtrack of some description might have helped dull gameplay.

## OTHER FORMATS

An Atari ST version (£19.95) is available as this issue reaches you. Commodore 64 and Amstrad CPC (£9.95 cass, £12.95 disk) as well as Spectrum (£7.95 cass, 14.95 disk) versions will all be released shortly.



# ROCK STAR



Could you manage this  
Rock Star ?



CodeMasters Software Company Ltd., PO Box 6, LEAMINGTON SPA, CV33 0SH

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 2, Brook House, Torrington Place, London WC1E 7HN

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

# Your Mama Don't Dance



**The New Single**

From

**POISON**

From The Album

*Open Up and Say... Ahh!*

For your 'FREE POISON PHOTO' Offer  
Write to POISON Photo Offer,  
Freepost 13, London WE1 2LP





## 520ST-FM SUPER PACK



The Atari Super Pack is ideal for you if you want to get off to a flying start with the best in entertainment software. The Pack includes a 520ST-FM with 1Mb RAM, a built-in 1Mb disk drive, over £450 of top games and a joystick. If you buy the Super Pack at Silica Shop, we will add our own ST Starter Kit (worth over £200), Free Of Charge. Return the coupon for details.

**£399**  
INCLUDING VAT

With SM124 mono monitor: £498 INC VAT

With SC1224 colour monitor: £698 INC VAT

### 1Mb DISK DRIVE £450 OF SOFTWARE ARCADE GAMES

Arkanoid II	Imagine	£19.95
Beyond The Ice Palace	Elite	£19.95
Black Lamp	Firebird	£19.95
Buggy Boy	Elite	£19.95
Chopper X	Mastertronic	£9.99
Ikari Warriors	Elite	£14.95
Marble Madness	Electronic Arts	£24.95
Quadralien	Logotron	£19.95
Ranarama	Hewson Consultants	£19.95
Return To Genesis	Firebird	£19.95
Roadwars	Melbourne House	£19.95
Starquake	Mandarin	£19.95
Test Drive	Electronic Arts	£24.95
Thrust	Firebird	£9.95
Thundercats	Elite	£19.95
Wizball	Ocean	£19.95
Xenon	Melbourne House	£19.95
Zynaps	Hewson Consultants	£19.95

### SPORTS SIMULATIONS

Eddie Edwards Super Ski	Elite	£19.95
Seconds Out	Tynesoft	£19.95
Summer Olympiad '88	Tynesoft	£19.95

### PRODUCTIVITY SOFTWARE

Organiser	Triangle Publishing	£49.95
-----------	---------------------	--------

### JOYSTICK

Atari CX40 Joystick	Atari Corp	£4.99
---------------------	------------	-------

FREE ATARI BUNDLE VALUE: £458.97



## ST COMPUTERS

The range of Atari ST computers offers something for everyone. From the games enthusiast who wants the challenge of the very best in arcade action, to the businessman who wants to make financial forecasts or faultless presentations. The ST offers high quality graphics, sound and speed for the gamer, whilst providing a fast, user friendly and affordable solution to business. The ST is now firmly established in the home environment and boasts a wealth of users in education, local government, television, and a variety of different businesses. Software for the range stretches to cover applications as diverse as ENTERTAINMENT, ACCOUNTS, ART, COMMUNICATIONS, COMPUTER AIDED DESIGN, DATABASES, DESKTOP PUBLISHING, EDUCATION, MUSIC, PROGRAMMING, SPREADSHEETS, WORD PROCESSING and more. For a full list of the software available, as well as details of the ST range, complete and return the coupon below.

All prices correct at the time of going to press. E&C.

## 520ST-FM EXPLORER PACK WITH BUILT-IN 1Mb DISK DRIVE



The value for money offered by the Atari ST range is reflected in the Explorer Pack featuring the 520ST-FM computer with 512K RAM. The 520ST-FM computer now comes with a built-in 1 Mb double sided disk drive as well as a free mouse controller and a built-in TV modulator. The new 520ST-FM Explorer Pack includes the 520ST-FM computer, the arcade game Ranarama, a tutorial program and some useful desktop accessories. In addition, if you buy the Explorer Pack from Silica, we will give you the Silica ST Starter Kit worth over £200, FREE OF CHARGE. Return the coupon for details of our Starter Kit and of the full ST range.

**£260**  
+ VAT = **£299**  
ONLY £2.51 PER WEEK  
RETURN COUPON FOR DETAILS

+ SM124 mono monitor: £398 INC VAT

+ SC1224 colour monitor: £598 INC VAT

## 1040ST-FM PROFESSIONAL PACK

### NOW WITH TV MODULATOR

For the serious home user and the small business, we are pleased to announce a new package based around the 1040ST-FM. The 1040ST-FM has 1Mbyte RAM and a 1Mbyte built-in disk drive. In addition, the 1040ST-FM now comes with a TV modulator built-in. (The previously available 1040ST-F was designed for use with a monitor only and did not come with a modulator.) This modulator allows the 1040ST-F to be plugged directly into any domestic TV set, and comes complete with a lead to allow you to do so. The new 'Professional Pack' from Silica includes the new 1040ST-FM with modulator plus four high quality software packages including a spreadsheet, database, word processor and programming language. This 'Professional Pack' software will enable you to get straight down to business with your new computer. In addition to this software (worth £384.84), if you buy the Professional Pack from Silica Shop, you will also receive the Silica ST Starter Kit (worth over £200), Free Of Charge. Return the coupon for further information.



ATARI 1040ST-FM	(Computer)	£499.99
VIP PROFESSIONAL	(Spreadsheet)	£149.95
MICROSOFT WRITE	(Word Processor)	£149.95
SUPERBASE PERSONAL	(Database)	£59.95
BASIC DISK & MANUAL	(Language)	£24.98

NORMAL RRP: £884.82

LESS DISCOUNT: -£385.82

PROFESSIONAL PACK PRICE: £499.00

**£499**  
INCLUDING VAT

With SM124 mono monitor: £598 INC VAT

With SC1224 colour monitor: £798 INC VAT

## 2Mb & 4Mb MEGA ST

The MEGA ST computers are styled as a lightweight keyboard with a separate CPU, connected by a coiled telephone style cable. There are two versions of the MEGA ST, one with 2Mbytes of RAM and the other with 4Mbytes. Each version has a 1Mbyte double sided disk drive built-in to the CPU unit. The MEGA STs do not come with modulator built-in and must therefore be used with a monitor. With every MEGA ST purchased, we will add the 'Professional Pack' software (worth £384.83) detailed above, plus the Silica ST Starter Kit (worth over £200) both Free Of Charge. Return the coupon for further details.

### 2Mb MEGA ST

**£899** INC VAT

+ mono monitor = £998  
+ colour monitor = £1198

### 4Mb MEGA ST

**£1199** INC VAT

+ mono monitor = £1298  
+ colour monitor = £1498



## DTP PageStream £149 +VAT = £171.35

Desktop Publishing (DTP) is one of the fastest growing applications for personal computers. We are pleased to announce a powerful low cost package for the Atari ST called PageStream. PageStream costs only £149 (+VAT-£171.35), and because it works with an Atari 1040ST and a Silica SP-150AI printer, you can be up and running with a complete system for less than £1000. Some of the features of PageStream are listed to the right. If you would like further information on this program, complete and return the coupon below, ticking the DTP box in the corner.

- \* TEXT-FLOW AROUND GRAPHICS
- \* ROTATION OF TEXT & GRAPHICS
- \* SLANT OR TWIST ANY OBJECT
- \* POSTSCRIPT COMPATIBLE
- \* TAG FUNCTION
- \* AUTO/MANUAL KERNING & HYPHENATION
- \* GROUPING OF OBJECTS

## DO YOU OWN AN ATARI ST?

If you already own an Atari ST computer and would like to be registered on our mailing list as an ST user, let us know. We will be pleased to send you copies of our price lists and newsletters FREE OF CHARGE as they become available. Complete the coupon and return it to our Sidcup branch and begin experiencing a specialist ST service that is second to none.

### SILICA SHOP:

**SIDCUP (& Mail Order) 01-309 1111**

1-4 The Mews, Hatherley Road, Sidcup, Kent, DA14 4DX

OPEN: MON-SAT 9am - 5.30pm LATE NIGHT: FRIDAY 9am - 7pm

**LONDON 01-580 4000**

52 Tottenham Court Road, London, W1P 0BA

OPEN: MON-SAT 9.30am - 6.00pm LATE NIGHT: NONE

**LONDON 01-629 1234 ext 3914**

Selfridges (1st floor), Oxford Street, London, W1A 1AB

OPEN: MON-SAT 9am - 6.00pm LATE NIGHT: THURSDAY 9am - 8pm

## FREE SILICA STARTER KIT WORTH OVER £200

WITH EVERY ST - RETURN COUPON FOR DETAILS  
ALL PRICES QUOTED INCLUDE FREE UK DELIVERY

To: Silica Shop Ltd, GAMCH. 05.89 1-4 The Mews, Hatherley Road, Sidcup, Kent, DA14 4DX  
**PLEASE SEND FREE LITERATURE ON THE ATARI ST**

Mr/Mrs/Ms: ..... Initials: ..... Surname: .....

Address: .....

.....

.....

Postcode: .....

Do you already own a computer

If so, which one do you own? .....

DTP ☐



Werebeasts dwell

# ALTERED BEAST

Sega

**T**he Sega Mega Drive shows off its superb coin-op conversion capabilities with *Altered Beast* (see TGM017 Report), but until it hits the UK we'll have to make do with the good old 8-bit version.

In this game your on-screen alter ego is a reanimated corpse. Resurrected by a powerful godlike being whose daughter has been captured by an evil mage, this beefy zombie has been put together to rescue her.

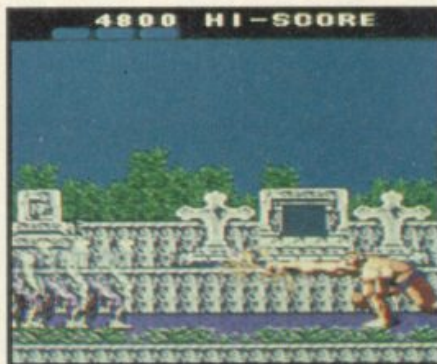
The job's not an easy one because the mage has used his powers to create a variety of nefarious beasts — unicorns, boars, flying reptiles, head-hugging amphibians, giant rattle-snakes and other zombies.

A well-aimed blow from fists or feet deals with all these monsters, and one particularly worth maiming is the albino wolf. This two-headed canine releases a spirit ball which, when picked up, turns you into a highly developed zombie. This power can be further increased by collecting a second ball, which transforms you into a were-beast.

Flame-engulfing powers are required for the truly nasty end-of-level monster, who is in fact the mage in altered form.

*Altered Beast* in the arcades and on the Mega Drive is a most enjoyable jaunt, particularly in two-player mode. With only a single-player option available on the Sega, playability is instantly reduced. The scrolling and walking is slow, transforming

the pace of what was originally a hectic game. A middling conversion of a nice coin-op.



£24.99

SEGA  
43%

The hero, in all his forms, is very nicely defined and coloured but poor animation spoils the effect. Other sprites are less effective and the mediocre backdrops scroll slowly and jerkily. Plain music fails to generate any tension and the few samples are not that convincing.

## VERSION UPDATES

AMIGA ■ ATARI ST  
COMMODORE 64/128

### Run the Gauntlet

OCEAN Amiga £24.99, ST £19.99, 8-bit £9.99 cass, £14.99 disk  
Spectrum 88% — TGM017

Commodore first. If it wasn't for an annoying multiloop Ocean could have cleaned up. Sprites galore move realistically with good definition, if lacking detail. The spray from boats and jet-bikes adds that extra bit of authenticity to the action. The land sequences work well too, simplicity of control method serving as the key to its success.

The 16-bits get the chance to show off with digitised pictures in between levels and sampled music to keep the game pace up and running. Had the gameplay been less 8-bit orientated, *Run the Gauntlet* may have offered quite a bit more in the way of depth. Attention to detail isn't very enhanced over the Commodore version — crisper sound effects and the odd better sample on the Amiga than the ST are mere formalities rather than significant improvements.

The lack of a dual-player option is something of a setback but *Run the Gauntlet* is still a great sports sim.

**TGM update: Amiga 82%**

**Atari ST 80%**

**Commodore 64/128 78%**

AMIGA

### A Question of Sport

ELITE SYSTEMS £24.99

Spectrum 38%, Commodore 64 40%, Atari ST 42% — TGM015

The mixture of hi-res digitised portraits and colourful screen borders is identical to that on the ST, and unfortunately so is the music. For multiple choice sports questions vaguely linked to fit the TV programme, *A Question Of Sport* is distinctly overpriced.

**TGM update 37%**

Hewson's hit action game goes 16-bit

# CYBERNOID 2

Hewson ■ AMIGA £19.99, Atari ST £19.99

Spectrum 85%, Commodore 64 87% — TGM012,  
Amstrad CPC 86% — TGM013

Those *Cybernoid 2* ships have been unleashed yet again — this time on the 16-bits. Tony Cooper has kept the ideas of the original 16-bit *Cybernoid* but gone to town on the presentation, action, challenge and alien-wasting carnage.

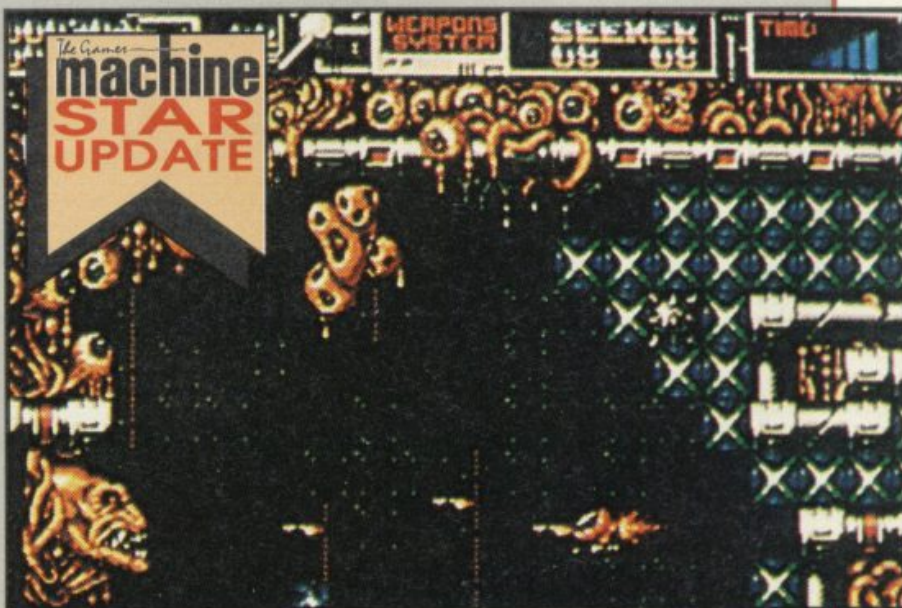
The nightmarish graphics feature blinking eyes, red-eyed skulls and other horrors. Progression is fuelled by ever devious traps and the action just gets more chaotic with each level. New features include acid drips and new levels though gameplay remains the same.

As a game, on the Amiga and ST, *Cybernoid 2* revolves more around all-action blasting than the puzzle/action cross-breed of the 8-bits, and both versions look great and play superbly.

**TGM update: Amiga 88%**

**Atari ST 86%**

**Marauding hasn't looked so good for a long time — Cybernoid 2 on the Amiga**





A whole new ball game from Psyclapse

# BALLISTIX

Psyclapse

**P**sygnosis and their label Psyclapse got off to a good start with the brilliant arcade blaster *Menace*, followed by the similarly trigger-happy *Baal*, but slipped with *Captain Fizz Meets the Blaster-Trons* (reviewed last month). Now they enter the much-exploited genre of future sports simulation, and, thankfully, they've dispensed with any ideas of a pretentious and pointless plot.

The game takes place on a vertically scrolling pitch approximately two-and-a-half screens in length and the aim is simply to score a set number of goals (between one and five) before your opponent does. This is accomplished by hitting a puck with a supply of metal balls, aimed directly by an arrow, which enjoys the freedom of the playing area.

As well as determining the target number of goals and control system, the options screen can also be used to alter ball speed between one and eight, the number of balls available, auto repeat (the rate at which balls are fired if the fire button is held down) between zero and nine, ball lifespan (how long a ball is allowed to stay on the pitch before it's put back in the player's supply) between one and nine; and games to win, between one and nine, for two-player games.

Silver and gold/black arrows or cursors compete against one another in a two-player game, while in a single-handed game, the pitch tilts toward the player's goal, making gravity the enemy.

Progress is helped or hindered by pitch features which are introduced through the levels. Arrows accelerate the puck in the indicated direction, pits are revealed which, like acid puddles, mean the puck must be relaunched into the arena. Contours, hyper-space tunnels and bumpers affect the puck's path. Icons to be picked up can spread 16 balls all over the pitch, create a temporary barrier in front of a goal, spell out the word

RICOCHET for bonus points, affect players' controls and so forth.

People have been known to instantly cry 'Speedball rip-off!' when they see this game, but apart from sharing vertical scrolling they're very different from one another.

The crosshair control method is tricky but adds something to the game when you're properly accustomed to the easier arrow mode. This is not without its problems, though; because the arrow always points to the ball, when the puck is near your own goal it can be easy to knock it in yourself.

Criticisms aside, *Ballistix* is a fast, fun game, particularly with two players, with a wide variety of pitches (50 one-player, 80 two-player, the starting pitch selected in multiples of five) and a range of variable attributes — and of course, icons to pick up.



ATARI ST  
84%

£19.95

Apart from different cursor designs, this is visually indistinguishable from the Amiga game, although there is slightly ostentatious presentation in the form of spinning 3-D joysticks and STs on the credit screens.

Back on top: Psyclapse hit the mark again with a hugely enjoyable 'future sport' game for the Atari ST (top and below) and Amiga (below left)



STAR  
PLAYER



AMIGA  
84%

£19.95

A high-res picture unfolds impressively to introduce the game, which has quite disappointing graphics. The bas-relief pitch tiles (which vary in colour from pitch to pitch) are adequate, and have some interesting character graphics, but the arena graphics which surround it are almost scruffy. A pleasant array of samples back the fast, smooth-scrolling play nicely.

## OTHER FORMATS

A Commodore 64 (and possibly PC) version is in the pipeline. Watch out for further details.



# PERSONAL NIGHTMARE



There's something very strange going on. It's as if you are living through your worst nightmare and unable to wake up. Won't anyone let you in on the terrible secret that haunts your waking moments.

*Personal Nightmare* is the new brain child of **HORROR SOFT**. A new kind of icon-driven, animated game that has been written using the new especially developed Agos language.

*Personal Nightmare* is highly original using all the features of the 16-bit micro. The superb, fully animated graphics, backed by incredible sound effects come together with a highly sophisticated user interface to give total involvement of a new dimension.

*Personal Nightmare* will introduce you to numerous characters including:

The Landlord of the Dog and Duck  
Jimmy Blandford and his attractive wife Susan  
Alice Greenwood

The local village policeman  
and a host of other inhabitants who will share in your *Personal Nightmare*.

Available on AMIGA, ST & PC



Unit 3, Addison Industrial Estate, Blaydon,  
Tyne & Wear NE21 4TE. Tel (091) 414 4611





# CHUCKIE EGG II

RELEASED DUE TO PUBLIC DEMAND  
GUARANTEED SALMONELLA FREE

LOOK OUT  
FOR MORE  
RELEASES

(Choccy Egg)

If you have played the classic computer game Chuckie Egg you hardly need an introduction to this "cracking" sequel, which takes us from the hen house to the chocolate Easter egg.

This eggcellent game is guaranteed to be salmonella free on your Amiga, ST or PC machines. It will give hours of entertainment and no matter how many times you unwrap the disc and sample the goodies it will neither make you fat nor rot your teeth!

**CHUCKIE EGG II**

Available on Atari ST/Amiga/Spectrum/Commodore/Amstrad soon on PC

**CHUCKIE EGG**

Available on Atari ST/Amiga/Spectrum/Commodore/Amstrad /Atari/MSX/Dragon/BBC/Electron soon on PC.

£19.95  
including  
p&p



Screen shots from Amiga Version



Screen shots from Amiga Version

Review of Chuckie Egg  
by Computer Games Week

Gameplay 90%, Grafix 85%,  
Overall 89%

**P'n'C**

Pick & Choose

**P'n'C**

Pick & Choose

Cheques & P.O. to: Pick & Choose (F.G.) Ltd, 45 Bury New Road,  
Manchester M8 8FG Tel. 061 831 7922

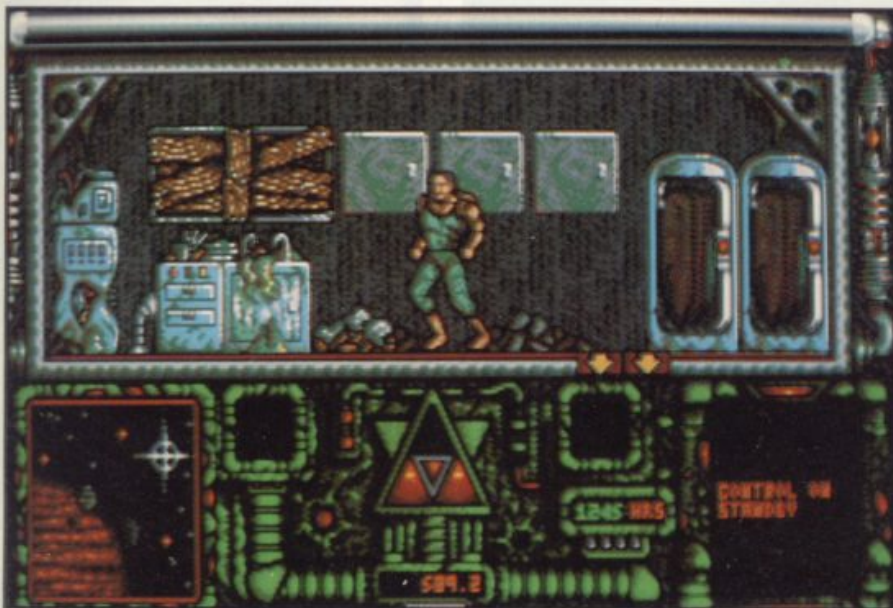


Jailbird gets first release

# PRISON

Krisalis

**I**his first release from new software house Krisalis proves that sometimes life just isn't fair. This has been the case in the past, is still true now, and will be true in the 22nd century — the time that *Prison* is set. Jag Edwards is the put-upon hero of the tale. In a vile and corrupt world, he was one of the rare beacons in dark times, working undercover to uphold the crumbling law. A drugs bust was his last mission; a raid upon a bakery used as a cover for a narcotics ring.



Jag observed them for weeks before he was given the word. In a fiery battle, he eliminated the gang... only to be later captured. He had been set up, and was brought up before a Star-Judge, charged with the murder of ten bakers.

He was condemned to life imprisonment on Altrax, a lonely world, once a mining planet, now inhabited by gangs of various creatures. All have one thing in common — they have all committed violent crimes. And they don't mind getting more blood on their hands if it gets them something to make their life stranded on Altrax easier.

There is but one way to escape Altrax, and that's only a rumour. A pleasure ship had blundered into the planet's atmosphere, and its escape pod may have survived unscathed.

As you step into Jag's boots, he has begun the hunt for components that may be needed to repair the pod and other objects necessary for survival. A sideways viewpoint of Jag and the surrounding area is given, but marked doorways can be entered to follow paths at 90 degrees, the viewing angle then changes to retain the profile.

The playing area is supplemented by a number of displays, the most important of which is the menu window allowing commands other than those given by joystick

control. Results of its use are displayed in the message 'tube', and lives, energy, objects carried etc are given elsewhere.

Aliens met are generally dealt with by fists and feet, but stooges are a different matter. If bribed, stooges can give useful information and objects...if you're lucky.

If Krisalis and programming team Teque are intending to make an impact with their first joint project they will be disappointed. The gameplay has been seen before: using objects to give access to new parts of the game, aliens hindering progress (though in this case they're easy to eliminate) and masses of similar looking screens so that it's quite easy to get lost.

*Prison* is little more than a standard arcade adventure in a tired format so that no amount of fancy graphics and sound can help generate anything but very limited interest.

**Familiar, strong Teque graphic style on the ST, but a weaker game**

£19.95

ATARI ST  
**66%**

The Teque graphic style is strong here, with browns, greens and greys blending to make clear, effective and eerie backgrounds. The upper half of the Jag sprite is well defined but his legs are ill-proportioned and curiously flexible as Mr Edwards is mechanically animated. The samples are weak — both in definition quality and in sound source.

£19.95

AMIGA  
**68%**

Looks very similar to the ST, except that the colours are paler and the definition is a little different. The samples and music are of a better quality and add some atmosphere.

## VERSION UPDATES

AMSTRAD CPC

ATARI ST

**Victory Road**

IMAGINE 8-bit £9.95 cass, £14.95 disk, ST £19.95

In the space equivalent of *Ikari Warriors* and the third in the series, one or two warriors rampage along



Victory Road armed with space age weapons frying hordes of ETs. ST owners may find the action slow at times but the larger number of aliens keeps the pressure on. Things are a lot better on the Amstrad (pictured above) with smaller but equally detailed, colourful graphics and a bigger playing area to match, in turn the gameplay improves although the ideas behind it are unoriginal.

**TGM update:**

**Amstrad CPC 70%**

**Atari ST 55%**

COMMODORE 64

**Warlock's Quest**

INFOGRAMS £9.95 cass, £14.95 disk

Atari ST 70% — TGM007

Very much a natural for the Commodore, this teleport-and-ladders graphic adventure has undergone a strange mutation on the Commodore and now boasts unnecessary multiloop at selected points in each stage. The division of the screen into above and below ground sections is novel, but suffers with small sprites (which were less of a problem on the colourful ST version) and a dearth of animation or character detail. Warlock's Quest looks tired and plays tired.

**TGM update rating 43%**

SEGA

**California Games**

£24.99

Fifth in the Epyx Games series, *California Games* is the coolest, most rad collection of events Epyx have gathered together. Events are as on previous format versions: free-style skateboarding on the half-pipe, footbag — or keeping a small leather ball in the air, surfing, roller-skating, frisbee throwing, and BMX racing. In the translation to the Sega joystick, little has been lost. The graphics are very good indeed. Backgrounds are as lively as the colourful, well defined sprites and the various participating teenage characters are realistically animated. Definitely one for the collection.

**TGM update 78%**



Getting 'em off in style means more than five card stud

# HOLLYWOOD POKER PRO

Feline Software

**Sexist  
Review  
Special**


AMIGA

72%

£19.99

As if all the full screen piccies weren't enough there's even a pervy magnifying glass feature which lets you scrutinise the female form in true dirty raincoat style. What a classic product this is. Great cards, amazing visuals, politically dubious and guaranteed to offend just about everyone. Enjoy it while you can.

**W** orrrrrrrrr! Cor blimey, we ain't had this much fun since ogling at Sam Fox's digitised pics in *Strip Poker* and getting steamed up over Maria Whitaker's Christmas Box. Spectrum owners and strip poker go back a long way — but not with this kind of digitised graphic!

In fact strip poker games are almost as common as sports sims, but this one is really the best — with knee-tremblingly arousing graphics and a mean game of cards to leather boot. No touched-up graphics here, it's all touch-upable solid nubile flesh — and you don't have to suffer the interminable giggling of the Teenage Queen either. And to top it off there's a great, pulsating soundtrack too.

It's all familiar stuff — choose one of four ready-an'-willing girlies, click-on the cards you want to keep or chuck away, bet, raise, and hopefully get a right royal flush.

The only problem with *Hollywood Poker Pro* is the feeling you get that the computer's cheating. Bad play or not, there are a suspiciously high number of duff hands dealt on anything but the introductory clothing levels and, correspondingly, an awful number of good hands going to your opponent. This just ain't good cards, because the tendency to be continuously dealt low numbers repeats itself to a point beyond simple chance.

Well, maybe that's sour grapes as a result of sheer frustration, but there are

ways to get to the bottom of things. One technique is to always bet safely and throw anything else away immediately. Oh — and never risk raising thinking your opponent is bluffing — these girls mean business!



They may have been rather a joke in the past, but Feline's *Hollywood Poker Pro* is a strip poker game with a difference — the cards ain't half bad! Not to mention the steamy graphics, which of course we won't..



Bored game from Atari

# BACKGAMMON

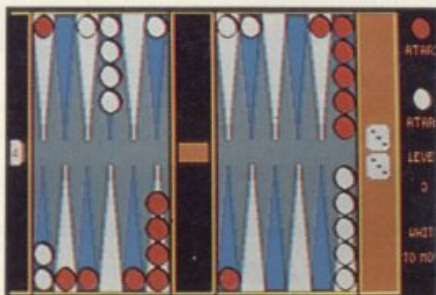
Atari

**L**atest in the Atari Mindgames range is the computer rendition of the classic board game. Unlike Chess — or even Go Moku, Backgammon is one of the more esoteric games in that very few people seem to know how to play it!

Whilst some people might buy this product to learn how to play the game, the majority will already know how it's played. For these, the age-old question must be addressed: how is the computer version better than the board game?

One advantage of course is that you don't need anyone else to play with — a dubious benefit maybe, as many other board game conversions testify. The graphics are plain and simple, the mouse clicking on counters adequate, the roll of the dice slow. Of sound there's nothing, but then Backgammon has never exactly been an orgy of aural pleasure.

Good to brush up your gaming ability maybe, but ultimately there's more fun to be had on the real board.



£19.95

ATARI ST  
53%

The standard options are here, such as ten levels of play, action replay facility, and take back and restore the last move, making Backgammon an adequate but dull implementation.

Clean up Old Detroit in style

# ROBOCOP

Ocean Amiga £24.95 ST £19.95

Commodore 64 77%, Spectrum 81% — TGM015

Ocean should really congratulate themselves, for what was excellent on 8-bit formats has undergone a remarkable metamorphosis to be reborn with samples, digitised pictures, superb presentation and all the other extras that boost it far beyond being just a very good entertainment.

With a perfect blend of the gameplay from the 8-bit and arcade versions, RoboCop is incredible for what it offers. The levels may be relatively short but the attackers keep on coming. The best is left till last with a well animated ED-209, the criminal's truck and others at level's end. The shooting gallery, hostage scenes and the photo-fit sub sections (the latter using scrambled digitised pictures) all contribute so much to the gameplay and atmosphere. The ST matches the Amiga in the scrolling department boasting six levels packed with graphic variety. The Amiga game comes out better on all counts with the inevitable advantages of smoother graphic definition and superior sound effects, but the gameplay remains the same on both machines.



This game is simply brilliant.  
**TGM update: Amiga 90%**  
**Atari ST 90%**



The Games  
machine  
STAR  
UPDATE

## VERSION UPDATES

SPECTRUM

### Eliminator

Hewson £7.99 cass, disk £12.99  
Atari ST 92% — TGM011

The atmospheric baseline and effects of the ST version are accurately reproduced along with the swift and effective 3-D 'road', albeit in monochrome. Aliens move smoothly and their missiles are easy to see, but the simplicity of movement options puts a question mark against the game's longterm playability.

**TGM update rating 79%**



AMIGA

### Batman

OCEAN £24.95

Spectrum 76%, Commodore 64 71% — TGM015, Atari ST 72% — TGM016

The Dark Knight returns to 16-bit. Graphic definition is identical to that on the ST but colours are subtler. The Batman music remix uses some nice sounds and with a few sampled sound effects, the soundtrack is very effective. This is the best presented version yet of this comic licence.

**TGM update rating 74%**



COMMODORE 64/128

### Blasteroids

IMAGEWORKS £9.99 cass,  
£14.99 disk

Amiga 71%, Atari ST 70%, Spectrum 61% — TGM017

Although lacking quite a bit in new ideas, Blasteroids is immensely satisfying to play — doubly so in two-player mode. The simplicity and immediate playability of the game is its saving grace and makes up for graphics which are functional rather than aesthetically pleasing. If you feel up to playing Asteroids all over again, or adore the coin-op, Blasteroids could very well be worth your while.

**TGM update 65%**

PRESS  
ANY  
KEY



The man whose head exploded

# DNA WARRIOR

Artronic

**P**rofessor Szymanski is a brilliant but power-crazed man. A Nobel Prize in genetics was not enough for him, and in an incredible experiment he injected DNA and a growth accelerator into his brain, thinking this would increase his memory potential and intelligence quotient tremendously. Now he is on the brink of death.

Szymanski is in a coma and his brain is expanding to dangerous proportions. A growth inhibitor cannot reach the affected area — his natural defences have mutated too far — so a miniaturised one-man submarine must be piloted to the spot. So far so Azimov and Steven Spielberg et al...

The Professor has a number of artificial limbs and organs, so the various sprites which attack the would-be body voyager include both biological and mechanical mutants. Your ship's rather tame laser cannon and slightly cumbersome handling can be exchanged for better add-on systems by collecting plasma spheres.

In the crowded world of shoot-'em-ups, *DNA Warrior's* originality lies in its horizontal two-way scrolling and selectable exit levels which allow a choice of route to the brain. This isn't much use if the game is essentially lacking in guts, and unfortunately, it is.

## THE ADD-ONS

**One sphere:** extra manoeuvrability  
**Two spheres:** rapid fire cannons  
**Three spheres:** vertical cannons  
**Four spheres:** multiples  
**Five spheres:** absorption shielding  
**Six spheres:** 'starburst'  
**Seven spheres:** energy replenished

C64/128

62%

£9.99

cass

£14.99 disk

Bright graphics are neatly defined but short of detail, while funky music makes up for weak sound effects. It's all quite competently done but games like this have been seen endless times on the Commodore — and several at budget price.

## OTHER FORMATS

An Atari ST version will be released shortly.

SPECTRUM  
51%

£9.99

cass

The definition of this version is weak and unthrilling, and the problems are compounded by the game's slow pace. The sub floats around as if in treacle rather than bodily fluids (yehkk!). The beep sounds effects are simple even for the Spectrum

AMIGA

49%

£19.99

The sub is surprisingly large and makes evasive action a chore on occasions. The Amiga's capabilities are decidedly underused, with definition at best adequate and at worst infantile and shades of the same two colours used throughout a level.

Who ya gonna call this time?

# THE REAL GHOSTBUSTERS

Activision

**T**he cartoon gained the 'Real' prefix because it's supposedly based upon real people. And they're a strange bunch, too. The leader, Peter Venkman, is a bit of a slob and a fool, but enthusiastic idealist Ray Stantz makes up for this with his extensive scientific knowledge. In the particular field of electronics, Egon Spengler is a genius — but he's also a complete nerd.

Winston Zeddemore is the most down-to-earth of the 'Busters but is also the overly kind soul who got Slimer — a greedy green ghost — onto the team. The secretary, Janine Melnitz, tries to keep order amongst this wacky bunch. A build-up of psychic and paranormal energy has resulted in an outbreak of ghostly manifestations throughout New York. The terrorised public need the kind of specialised help that only Ray, Winston, Peter, and Slimer can give them.

One or two players guide the Ghostbusters upwards through ten multi-directional push-scrolling levels, armed with both guns and proton beams. Shooting turns creatures encountered into ghosts, which can then be gathered into the Ghostbusters' back-packs with judicious use of the limited-charge proton beam.

Some creatures or obstacles give bonus-

es: increased beam energy, increased shot power, aura power (temporary shield), or Slimer. At the end of each level a particularly nasty abomination (or worse, a number of them) has to be neutralised. In return, the key to the next level is given. It's interesting to see which weird monsters occupy the next level, particularly as some are so imaginatively designed. The home computer versions are sure to be — and deserve to be — more successful than the obscure 1987 Data East coin-op on which this vertically scrolling shoot-'em-up is based.

Activision gave us the best-selling computer of all time (they claim) in the original *Ghostbusters*, but on the Spectrum, at least, this newer version is much better received critically

SPECTRUM  
86%

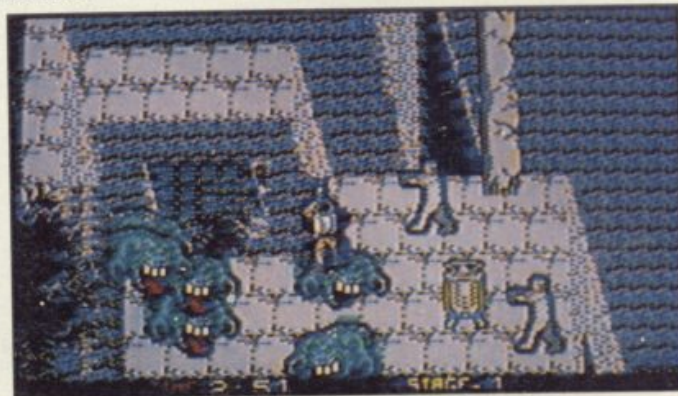
£9.99

cass only

The main sprite is outlined thickly and unattractively in black. On the other hand, some of the creatures are very well defined and animated, and use colour cleverly — almost as near to cartoon graphics as you can get on the Spectrum.

## OTHER FORMATS

Amiga (£24.99), Atari ST (£19.99), Amstrad CPC and Commodore 64 (both £9.99 cass, £14.99 disk) should all be available by the time you read this review.





WORLDWIDE SOFTWARE  
1 BRIDGE STREET  
GALASHIELS  
TD1 1SW

CREDIT CARD ORDER  
TELEPHONE LINE

NORTH  
SCOTLAND  
N. IRELAND

0896 57004

**SPECIAL OFFER**  
C64/128 DATASETTE UNIT  
ONLY £18.50

**SPECIAL OFFER**  
OCEANIC  
DISK DRIVE FOR C64/128  
ONLY £112.00

**ALL ORDERS ARE  
COMPUTER CONTROLLED  
TO ENSURE FAST  
DESPATCH ON ALL STOCK  
ITEMS**



# WORLDWIDE SOFTWARE

WORLDWIDE SOFTWARE  
106A CHILWELL ROAD  
BEESTON  
NOTTINGHAM  
NG9 1ES

CREDIT CARD ORDER  
TELEPHONE LINE

SOUTH  
MIDLANDS  
WALES

0602 252113

**SPECIAL OFFER**  
C64/128 DATASETTE UNIT  
ONLY £18.50

**SPECIAL OFFER**  
OCEANIC +  
DISK DRIVE FOR C64/128  
ONLY £112.00

**ALL ORDERS ARE  
COMPUTER CONTROLLED  
TO ENSURE FAST  
DESPATCH ON ALL STOCK  
ITEMS**

CREDIT CARD ACCOUNTS CHARGED ONLY ON DISPATCH  
OVERSEAS EXPRESS SERVICE NOW AVAILABLE OVERSEAS EXPRESS SERVICE NOW AVAILABLE

OVERSEAS OVERSEAS OVERSEAS OVERSEAS OVERSEAS OVERSEAS

OVERSEAS CUSTOMERS CAN NOW CONTACT OUR EXPORT DEPARTMENT AT:

WORLDWIDE SOFTWARE, 106A CHILWELL ROAD, BEESTON, NOTTINGHAM NG9 1ES, ENGLAND  
OVERSEAS TELEPHONE ONLY NOTTINGHAM 225368

EUROPE SHIPPING COSTS ARE:  
£1.50 PER CASS/DISK FOR NORMAL AIR MAIL. £2.50 PER CASS/DISK FOR EXPRESS AIR MAIL

OUTSIDE EUROPE SHIPPING COSTS ARE:  
£2.00 PER CASS/DISK FOR NORMAL AIR MAIL. £3.00 PER CASS/DISK FOR EXPRESS AIR MAIL

## WORLDWIDE SUPER SPECIAL OFFERS

COMPILATIONS	COMPILATIONS	COMPILATIONS	COMPILATIONS	COMPILATIONS	COMPILATIONS	COMPILATIONS	COMPILATIONS
C64 FISTS 'N' THROTTLES CASS DISK 9.25 11.50		C64 GAMESET & MATCH II CASS DISK 9.25 13.50		C64 OCEAN COMPILATION CASS DISK 11.20 13.50		C64 FRANK BRUNOS BIG BOX CASS DISK 9.25 11.99	C64 GIANTS COMPILATION CASS DISK 9.99 11.20
ST BARGAINS ST BARGAINS ST BARGAINS ST BARGAINS ST BARGAINS ST BARGAINS ST BARGAINS ST BARGAINS							
ST FALCON 15.50 SPEEDBALL 16.45 LOMBARD RAC RALLY 16.45		ST JOAN OF ARC 14.35 DRAGON NINJA 13.50 COLOSSUS CHESS X 16.45		ST PACMANIA 13.25 PURPLE SATURN DAY 17.95 BISMARCK 16.45		ST ELITE 16.45 FLYING SHARK 13.50 HEROES OF LANCE 17.95	ST HOSTAGES 16.45 KENNEDY APPROACH 16.45 SUPERMAN 16.45
AMIGA BARGAINS AMIGA BARGAINS AMIGA BARGAINS AMIGA BARGAINS AMIGA BARGAINS AMIGA BARGAINS AMIGA BARGAINS AMIGA BARGAINS							
AMIGA FALCON 20.95 CARRIER COMMAND 16.45 ELITE 16.45		AMIGA FISH 16.64 HELTHERSKELTER 11.20 HOSTAGES 16.45		AMIGA LOMBARD RAC RALLY 16.45 OPERATION WOLF 16.45 PACMANIA 13.25		AMIGA PURPLE SATIN DAY 17.95 DREAM ZONE 16.45 SUPERMAN 16.45	AMIGA TV SPORTS FOOTBALL 21.95 UNIV MILITARY SIM 16.45 BAAL 14.95

FAST DELIVERY OF ALL STOCK ITEMS BY 1st CLASS MAIL IN UK.

CREDIT CARD ORDERS ACCEPTED BY PHONE OR MAIL

CREDIT CARD ACCOUNTS DEBITED ONLY ON DESPATCH

CREDIT CARD ORDER TELEPHONE  
0896 57004

CREDIT CARD ORDER TELEPHONE  
0602 252113

## WORLDWIDE SUPER SPECIAL OFFERS ON SOFTWARE

### WORLDWIDE SUPER SPECIAL OFFERS

AMIGA SOFTWARE	AMIGA SOFTWARE	IBM/PC SOFTWARE	JOYSTICKS	DISKS AND BOXES
3D POOL 14.35	MENACE 13.25	3D POOL 14.95	COMP PRO 5000 EXTRA 14.95	10 x 3.5" BLANK DS/DD DISK 9.95
1943 BATTLE MIDWAY 17.95	MINI GOLF 13.25	2000 LEAGUES UNDER SEA 14.95	CRUISER 8.99	50 DISK STORAGE BOX 8.95
4 x 4 OFF ROAD RACING 17.95	MOTOR MASSACRE 14.35	4 x 4 OFF ROAD RACING 14.95	RAM DELTA 7.99	80 DISK STORAGE BOX 9.95
AFTERBURNER 14.95	OPERATION NEPTUNE 17.95	AIRBORNE RACER 19.95	CHEETAH 125+ 6.95	
ALIEN LEGION 17.95	NAVCOM 6 16.45	BATTLEHAWKS 1942 19.95	CHEETAH MACH 1 10.95	
BARBARIAN II 17.95	NIGHT RAIDER 14.35	CALIFORNIA GAMES 19.95	SPEEDKING 10.95	
BATMAN 14.35	PACLAND 14.95	CAPTAIN BLOOD 19.95	COMP PRO 5000 11.99	GAMES WINTER EDITION 14.95
BATTLEHAWKS 1942 19.95	PHANTOM FIGHTER 17.95	COLOSSUS BRIDGE 14.95	COMP PRO 5000 CLEAR 12.95	GUERILLA WAR 13.25
BLACK TIGER 17.95	PIONEER PLAGUE 16.45	DEFCON 5 19.95		INCRED SHRINK. SPHERE 13.25
BLASTEROIDS 17.95	POPULOUS 19.99	DOUBLE DRAGON 19.95		INGRIDS BACK 14.95
BUTCHER HILL 14.35	POOLS OF RADIANCE 17.95	DREAM ZONE 19.95		INT. KARATE+ 28.95
CALIFORNIA GAMES 17.95	QUESTRON II 17.95	ELITE 19.95		JET 28.95
CAPTAIN BLOOD 16.45	R-TYPE 17.95	F16 COMBAT PILOT 19.95	3D POOL 14.35	K. DALGLEISH MANAGER 14.95
COLOSSUS CHESS X 16.95	RENEGADE 3 19.99	F16 FALCON C.G.A. 28.95	1943 BATTLE MIDWAY 14.35	LAST DUEL 14.95
COSMIC PIRATE 14.95	ROBOCOP 16.45	F16 FALCON E.G.A. 35.95	AFTERBURNER 17.95	LEADERBOARD BIRDIE 14.35
CRAZY CARS II 16.45	ROCKET RANGER 21.95	FLIGHT SIM II 38.95	AIRBORNE RANGER 16.45	LED STORM 14.35
CUSTODIAN 14.95	SAVAGE 13.25	FLIGHT SIM SCENERY DISK 14.95	ALIEN LEGION 17.95	LEISURESUIT LARRY 13.25
DARK FUSION 14.95	SEX VIXEN OUTER SPACE 17.95	FOOTBALL MANAGER II 14.95	ANDES ATTACK 7.25	MANHUNTER NEW YORK 22.95
D. THOMPSON OLYMP CHALL 16.45	SHOOT EM UP CONST SET 16.45	FUSION 17.95	BAAL 14.95	MENACE 13.25
DENARIS 14.95	SILENT SERVICE 17.95	GALACTIC CONQUEROR 14.95	BARBARIAN II 13.25	MICROPROSE SOCCER 17.95
DOUBLE DRAGON 16.45	SPACE HARRIER 17.95	GUNSHIP 28.95	BATMAN 13.25	MINI GOLF 13.25
DRAGON NINJA 16.45	SPEEDBALL 16.45	HEROES OF THE LANCE 19.95	BATTLEHAWKS 1942 19.95	MOTOR MASSACRE 14.35
DRAGON SCAPE 14.95	STARGLIDER II 16.45	INGRIDS BACK 14.95	BILLIARDS 14.95	NIGHT HUNTER 16.45
DREAMLAND 17.95	TITAN 17.95	JET 32.95	BISMARCK 17.95	NIGHT RAIDER 14.35
F.O.F.T. 24.95	TRACKSUIT MANAGER 13.25	JOAN OF ARC 14.95	BLASTEROIDS 14.95	OPERATION NEPTUNE 17.95
FLIGHT SIM II 28.95	ULTIMATE GOLF 14.35	LANCELOT 14.95	BUTCHER HILL 14.35	OPERATION WOLF 13.25
FOOTBALL DIRECTOR II 13.25	VICTORY ROAD 16.45	LED STORM 14.95	CALIFORNIA GAMES 17.95	ORBITER 17.95
FOOTBALL MAN EXP KIT 9.99	WANTED 14.35	LEISURESUIT LARRY 24.95	CHAOS STRIKES BACK 11.20	POWERDROME 17.95
GALDREGONS DOMAIN 13.25	WAR IN MIDDLE EARTH 17.95	MICROPROSE SOCCER 19.95	COSMIC PIRATE 13.25	PRESIDENT IS MISSING 16.45
GAMES WINTER EDITION 14.95	WEC LE MANS 16.45	OPERATION NEPTUNE 19.95	CRAZY CARS II 14.95	R-TYPE 17.95
GARY LINEKER HOT SHOT 14.95	WEIRD DREAMS 16.45	PIRATES 19.95	CUSTODIAN 14.95	RAMBO 3 13.25
GUERILLA WAR 16.45	ZAK MCKRACKEN 17.95	POOLS OF RADIANCE 19.95	DARK FUSION 14.95	RENEGADE 3 14.95
HEROES OF THE LANCE 17.95	VIGILANTE 11.99	PRESIDENT IS MISSING 19.95	DELUXE SCRABBLE 13.25	ROADBLASTERS 14.99
INCRED. SHRINK. SPHERE 17.95		PURPLE SATURN DAY 19.95	DOUBLE DRAGON 13.25	ROBOCOP 13.25
INT. KARATE+ 17.95		SILENT SERVICE 19.95	DRAGON NINJA 13.25	S.T.O.S. 22.95
INTERCEPTOR 17.95		SPEEDBALL 19.95	DRAGON SCAPE 14.95	SAVAGE 13.25
J.O.A.N. 17.95		STELLA CRUSADE 28.95	DREAM ZONE 16.45	SATIRE 40/STRK FRCR HARRIER 16.45
K. DALGLEISH MANAGER 14.95		TITAN 19.95	DUNGEON MASTER 14.35	STARGLIDER II 16.45
LAST DUEL 14.95		UMS SCENERY DISK 1 or 2 9.99	ELIMINATOR 14.35	TECHNO COP 14.35
LEADERBOARD BIRDIE 17.95		VIGILANTE 11.99	F.O.F.T. 24.95	THE DEEP 14.35
LED STORM 14.35		W.C. LEADERBOARD GOLF 19.95	F16 COMBAT PILOT 16.45	THE KRISTAL 21.95
LEGEND OF THE SWORD 16.45		WEIRD DREAMS 19.95	FLIGHT SIM II 28.95	THUNDERBLADE 14.35
LEISURESUIT LARRY 13.25		ZAK MCKRACKEN 19.95	FOOTBALL DIRECTOR II 13.25	TIGER ROAD 17.95
			G. LINEKRS HOT SHOT 14.95	ULTIMA IV 14.35
			GALDREGONS DOMAIN 14.35	ULTIMATE GOLF 16.45
				UMS 9.99
				UMS SCENERY DISK 1 or 2 9.99
				VICTORY ROAD 13.25
				VIGILANTE 11.99
				WANTED 14.35
				WAR IN MIDDLE EARTH 21.95
				WEC LE MANS 13.25
				WEIRD DREAMS 16.45
				ZAK MCKRACKEN 17.95

Please make cheques or postal orders payable to WORLDWIDE SOFTWARE.

Prices are correct at time of going to press. E & O.E.

All prices include postage and packing in the U.K.

Advised prices are for mail and telephone orders only.



Thundering, Yorkie-eating action

# SUPERTRUX

Elite Systems

**M**ost lorry drivers simply transport goods and scare the hell out of motorists in the fast lane, but your average Supertrux driver is made of stronger stuff. These boys don't want to drive — they want to race! The biggest and best truck race is the Supertrux Trophy, a trans-Europe event taking drivers from London to Athens, via many famous cities on the way.

All participating trucks have automatic gears, so it's simply a case of accelerating, decelerating and steering. This doesn't mean the race is easy — just staying on the course is a higher priority than taking the lead. But twisting roads with unexpected dips and slopes, and other vicious truck drivers are only part of the problem. The organisers of the Supertrux Trophy race are obviously incompetent, as the route they have chosen is strewn liberally with roadworks. All in all it's going to take some mean driving to complete

each stage within the testing time limit. Simulating a race between 30-ton trucks

could hardly be called as easy task, but Elite have decided to produce a relatively simple *Out Run* variant, with truck sprites thrown in as vehicles. On all formats the perspective of curves and slopes is fairly effective and the route through Europe is variable. Not only can you choose the city you head for, but also in mid-stage you have to choose between two types of road — slippery or bumpy, for example.

£9.99

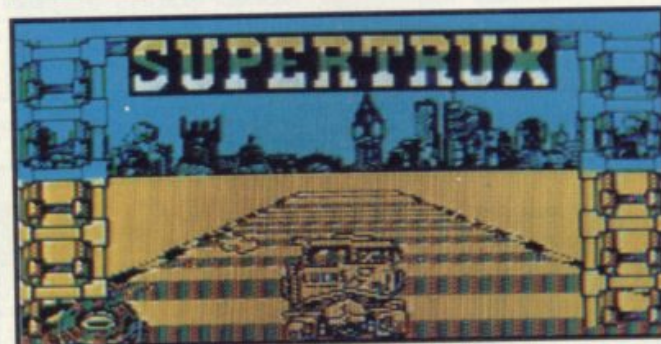
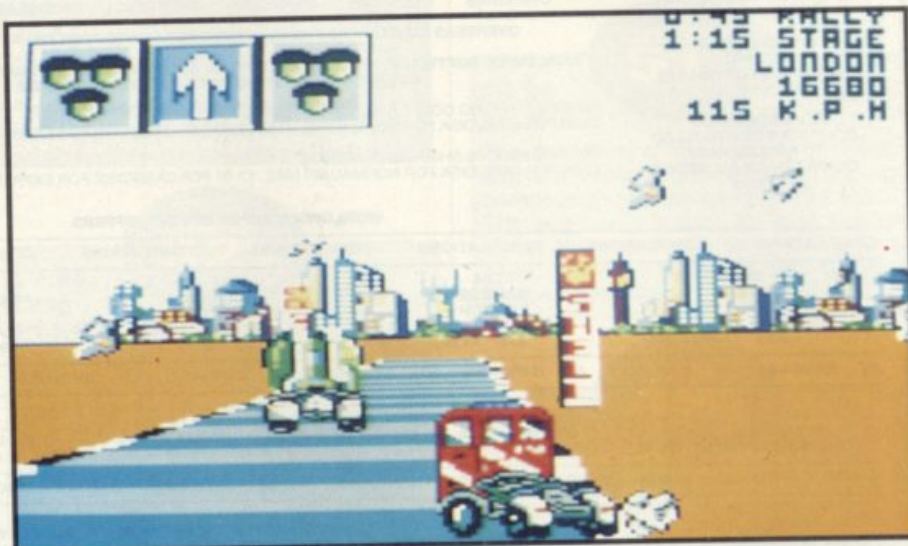
cass

£14.99 disk

The perspective of the road is fine but roadside features approach jerkily. The graphics use the common gaudy Amstrad colours, and the soundtrack uses the common annoying Amstrad effects. Nevertheless, this is a playable CPC racer.

CPC

62%



An *Out Run* with lorries seems like a hefty task, but capitalising on their 'hidden valley' technique, Elite have come up with a lively enough game for all three popular 8-bit formats (Amstrad CPC above, Spectrum left and top right)

When diplomacy fails...

## TANK ATTACK

CDS Software

**C**DS — now primarily retailers — go back to the earliest days of Spectrum gaming, and they aren't unfamiliar with the concept of combining computers and board games — Brian Clough previously signed up with them to make his *Football Fortune* — *Tank Attack* is one such.

The scenario involves four countries bordering one another. Armania, Kazaldis, Sarapan and Calderon maintain an uneasy peace, but this is about to end abruptly. Mechanised forces are crossing the borders and the shooting is about to start.

Depending on the number of players involved, two countries can form an alliance against the other two, or all four countries can war against one other. Each has its

own division of tanks (light, medium and main battle tank) and armoured cars (light and medium).



More board than computer game

Offensive tactics aren't all, the headquarters of each country must be defended, since the objective is to reach the enemy's HQ and remove it from the war. Each country also has a repair depot to remove the dents from tanks damaged in battle together with a rebuilding yard for no-hope cases.

The computer plays the role of game moderator providing details of battles, weather conditions (which affect movement), troop morale and activities in the form of the newspaper War News. All variables which play a part in the game are determined by the computer, including the amount of movement possible per turn and the results of combat.

Terrain plays its inevitable part, restricting tank movement in certain regions, and confrontation takes place using line-of-sight rules, the outcome depending on target range, strength and other variables.

Like *Football Fortune*, *Tank Attack* is primarily a board game, the computer is only used as a moderator and the emphasis is thoroughly on boardplay. The 2-4 player rule backs up the hexagon-based board game, and so its appeal may not be immediate.



£9.99  
cass  
£11.99 disk

C64/128  
**61%**

The truck sprite is blocky, the track bland and featureless, and the horizon barren, but the screen update is quite good. The hills effect is worst on the Commodore, but has the amusing additional feature of road cones flying through the air when you run into them. Both the music and effects are basic.



£7.99  
cass  
£12.99 disk

SPECTRUM  
**67%**

For some reason, the road doesn't reach the horizon and the stripes on it move illogically, but the screen update is good once the truck gets up speed. The effect of going up and down slopes works well with its growing and shrinking lower border. Quite similar in look to Imagine's WEC Le Mans, the Spectrum version is the most playable so far.

#### OTHER FORMATS

There's a chance that 16-bit versions will be produced, but not until this time next year.

The mechanics of play are easy to grasp but there's no real reason why the game should be so simple...an attempt at appealing to both mainstream computer owners and board game enthusiasts perhaps?

£12.99  
cass  
£14.99 disk

SPECTRUM  
**75%**

The computer is used for nothing more than the simple purpose of refereeing the game, but presentation is first class and very user-friendly with animation sequences and detailed graphic accounts of conflicts as they occur. In this respect Tank Attack is a better game than most previous marriages of computer and board game, and offers a whole new set of ideas for strategy gamers.



#### ATARI ST Cosmic Pirate

OUTLAW £19.99  
Amiga 82% — TGM017

This version of the spacetruck-hijacking blaster is a strange fish compared to the Amiga original. The asteroids surrounding the hyperspace beacons are animated (albeit unspectacularly in four frames) and the galactic sector map scrolls diagonally, flashing with colour before you make selection. However, the in-game scrolling is in pronounced update steps, so that against the grid of a simulator the spaceship appears to move backwards. And in all games alien movement could be a lot smoother.

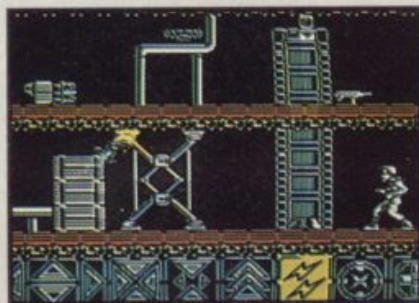
Otherwise reasonable definition falls down on the jerky and blocky spacetrucks, while the ST's restricted colour capabilities mean missions are mainly in shades of the same colour. The soundtrack imitates the Amiga's well, but on the whole ST *Cosmic Pirate* falls short of the high quality original.

**TGM update 76%**

#### AMSTRAD CPC ■ SPECTRUM Obliterator

PSYGNOSIS £9.99 cass, £14.99 disk  
Atari ST 65%, Amiga 70% — TGM007

As was the case with Psygnosis's *Barbarian*, *Obliterator*'s appeal lay with the quality of graphics and sound on the 16-bit originals.



**Tougher controls make Spectrum Drak harder to manipulate**

Drak is blocky on the Amstrad, animated badly and slowly, against backgrounds of a bright and jagged appearance. On the Spectrum, the hero walks strangely but smoothly, and despite some clash, the graphic detail is adequate. The Amstrad music and effects are annoyingly crude, but although the Spectrum's music is monotonous, its sound effects are very good.

The real problem with 8-bit *Obliterator* lies in its control system. Because the icons are cycled through using up/down, this slows the speed at which you can react — and it's also easy to accidentally change a selected icon. This is a large but ultimately unthrilling 8-bit game.

**TGM update:**  
**Amstrad CPC 56%**  
**Spectrum 61%**

## VERSION UPDATES

#### AMIGA Goldrunner II

MICRODEAL £19.99  
Atari ST 65% — TGM008

Ultra-fast, horizontal scrolling reworked variation on *Defender*, the Amiga *Goldrunner II* has been a long coming. Other than a pleasant tune there's little in the final product to suggest any improvement over the ST game. Indeed the scrolling — the main selling point — comes out worse, crawling along if too many characters are on screen. An above average game if only for different gameplay and the good quality of backdrops.

**TGM Update 58%**

#### ATARI ST Bismarck

PSS £19.99

This recreation of a World War II naval battle was good in its day but, frankly, it should have stayed on 8-bit. The arcade sequences which are meant to cut across the strategy/arcade divide fail on all counts, with jerky animation and dismal graphics, and the simplistic strategy is poorly implemented. A weak translation of a creaky idea.

**TGM update 33%**

#### AMIGA ■ SEGA ■ SPECTRUM Vigilante

US GOLD 8-bit £8.99 cass, £12.99  
cass, 16-bit £14.99, Sega £24.95  
PC Engine 75% — TGM017

Spectrum *Vigilante* comes across extremely well. The graphics may be missing some finishing touches but the gameplay's all there. Attacks come hard and fast — often too fast.

The Sega game almost matches the PC Engine conversion, its graphic artists have gone to town on the backdrops with good looking sprites to match. Pricy, but as much fun to play as the others.

The *Vigilante* character has been shrunk on the Amiga to keep the playing area in proportion, resulting in some graphic detail loss. But gameplay stands up well in that the *Vigilante* has a better chance of rescuing Madonna. On the minus side, the limited number of moves *Vigilante* can make narrow the game's scope, but then the arcade version wasn't too hot on gameplay either. Still, *Vigilante* is bread and butter for the 8- and 16-bits and proves immediately playable and strongly challenging.

**TGM update: Amiga 78%**  
**Sega 80%, Spectrum 79%**



**Amiga: shrunken but vicious...**



# SOFTWARE SNAX

■ We at THE GAMES MACHINE know you want the best in games reviews. TGM is the very best source of multi-format reading your money can buy, but in the constant search for ever better ways of presenting reviews, we don't rest on our laurels! That's why in this issue we've changed several things.

**Software Snax** is the section for short reviews. Space has run out on us! So many great titles are being released every month on all the various formats that we have had to create this new section to give us room to fit even more reviews into the allocated space.

But just because they're short doesn't necessarily mean we think they are rubbish. Oh no. Check out **Battlehawks 1942** right next door. **Software Snax** is where you will find those games which fell in between our schedules (which means they might be just a touch late) or those that came in so late we couldn't fit them in the main review section (which means they're incredibly early!).

Here too are the better releases which are intended to cover most popular formats, but the first machine release is well ahead of the others. When this happens and something is really good — watch out for a **Star Update** in later issues!

## WHO FRAMED ROGER RABBIT

Mediagenic ■ Commodore 64/128 £xx.xx

Action! Danger! Excitement! Well that's what it says on the box. Great shame then that the computer version of the fabulous movie is an example of the well known adage 'film licences do not necessarily a great game make'.

*Roger Rabbit* follows three sequences from the film: Benny the Cab, The Ink And Paint Club and The Gag Factory. First off, you guide Toon car Benny along a horizontally scrolling road, avoiding pits and other vehicles. The Ink Club sees Roger racing around tables picking up objects (if you've seen the movie you'll know what happens



Great presentation, Roger, but too easy even for a Toon to play

when he drinks liquor!), and in the final section Roger picks up gags and uses them to slow down pursuing weasels.

The graphics are crude and blocky and

The rewrite of history goes on

## BATTLEHAWKS 1942

US Gold/Lucasfilm ■ PC £24.99

Apologies for being a bit late with this one, we were really hoping to go to town with all three 16-bit versions, but the ST and Amiga games (both at £24.99) are still awaited...

Lucasfilm, creators of the legendary Fractal-based games and providers of naval war simulators have reached for the skies with *Battlehawks 1942* to recreate the dogfights and attacks on carriers between Japanese and American forces which made wartime history.

Rather than follow MicroProse with their one-sided battles, Lucasfilm's program allows for planes of either side to be flown.

Four historic conflicts have been computerised, including the Battle of Midway in which three Japanese carriers were sunk in ten minutes. The missions have been faithfully recreated as a starting point for you to rewrite history.

Depending on which out of 32 missions is chosen, a dive bomber, torpedo bomber or fighter may be flown, each with their own attack.

Rookies had best gain flight experience through the all-missions training option. Those with more confidence can go straight into active service, and levels of fuel, ammunition, plane strength and enemy skill can be altered prior to the battle.

While the game aims to be a combat simulator it's a relatively simple game in terms of flight controls and actual flying. *Battlehawks* has a replay camera option whereby battles are replayed showing your plane from a spotter plane as it goes into the attack.

The enemy isn't restricted to fighter planes (be they Japanese Zeros or American Wildcats). The carriers are armed to the teeth and willingly throw AA shells at

you and the others in your squadron. Suffer too many hits and there's not a lot left to do but bail out.

Some planes you may choose have a rear gunner and things become doubly difficult at this stage as you keep one eye on the correct course to a target and the other on the rear guns to fend off fighters. At only 70 feet above the water, shooting at Zeros, dodging flak and trying to avoid hitting the water you've really got to be on the ball.

With *Battlehawks 1942*, Lucasfilm have produced a potentially excellent combat simulation. The action is accompanied by some extremely neat graphical touches — flak bursts all around, planes belch smoke when hit, others explode and dive into the sea, ships go down amongst massive explosions and plumes of smoke. It all





the game's speed is inappropriately slow or fast in the wrong places. A glossy package includes a 'gag factory catalogue' and a full-colour poster. A lovely presentation let down by a feeble game — sorry Roger.

**TGM rating 42%**

## CHASE

Virgin Mastertronic ■ ST £9.99  
AMIGA £9.99

Zapp, Kapow, splurrang — *The Empire Strikes* back meets *Starstrike* in this Mastertronic 16-bit budget offering.

It's a four-level, vector graphics space shoot-'em-up, in which you guide a spaceship through asteroid fields, bewteen tall towers and along tunnels made up from moving squares before zipping along an obstacle-strewn corridor as in the famous *Star Wars* Deathstar sequence.

The reason for engaging in all this heart-fibrillating excitement is to pursue a frustratingly elusive blue ship which does its best to prevent you (the iron-willed pilot accord-

ing to the inlay blurb) from blasting it into so many pixels.

Mouse control on both formats is very responsive, the graphics are fast and smooth and the sound — particularly the Amiga's rich, booming explosions — is very satisfying.

Graphically there's very little to tell the two versions apart, but the Amiga game is

much tougher to play, making it more frustrating of the two.

There's no denying that this is a real old mishmash of famous games, but in the still-high-cost 16-bit market at its budget price it ain't half bad.

**TGM rating: Atari ST 68%  
Amiga 63%**

**Mishmash: a mixture of more famous games than you can count on one hand, *Chase* still remains a reviewers' favourite blast at its low 16-bit price**



helps recreate the tension and exhilaration of air combat over the Pacific.

But it isn't perfect: the aircraft graphics are small, indistinct and slow moving (especially on the lower end PCs) but move realistically enough. Despite periphery screens which use EGA well, the game itself looks essentially like a Commodore 64 game — something Lucasfilm have yet to rectify — and sound effects are very much PC (enough said).

And the atmosphere is let down to a degree by the omission of take off and

landing sequences. Attacks against land targets would have been good as well. Without these demands the game's limitations begin to emerge, and as such *Battlehawks 1942* falls just short of being a comprehensive combat simulator.

**TGM rating 75%**



## BORODINO

Atari ■ Atari ST £19.95

First in Atari's Battlescapes series, *Borodino* involves the would-be wargamer in a computer simulation of the bloody and protracted conflict which took place in 1812.

Napoleon's invasion of Russia ended in a disastrous retreat from Moscow. One of the key factors which led up to this was the failure to win more than a moral victory when his 131,000 men met 120,000 Russian troops at the small town of Borodino, some 70 miles west of Moscow.

You can play either Napoleon (surely any healthy megalomaniac's dream) or Prince Kutusov leading the Russian defence, playing against either a computer or a human opponent. The battle terrain is shown in 3-D perspective, and by clicking on troops and other ground features you are informed as to their status.

*Borodino* employs a unique battle command structure which involves typing instructions directly into the program, such as 'look west from Borodino' or 'Ney order one infantry division and your cavalry to move to Utitsa'. Be especially careful when

entering commands — if they're too vague you could end up sending an entire army into the jaws of death!

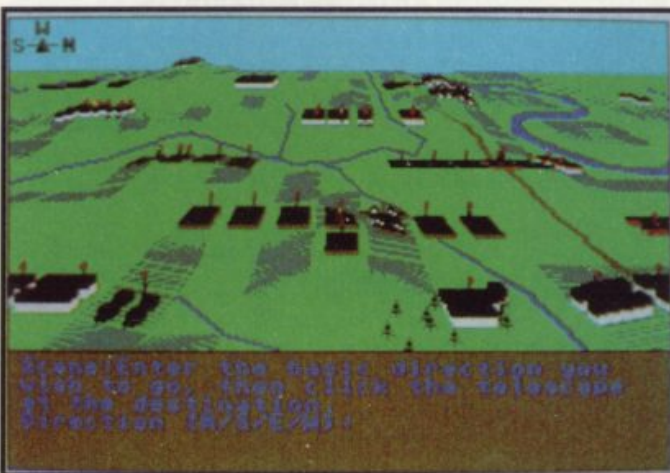
Corps can be given orders to stop giving or taking support from another division, battle reports can be obtained and defensive or attack lines set up.

Historical orders can be followed or dispensed with, highlighting the educational value of this program for scholars of the 'what if' school of play. Additionally, graphics can be saved in *Neochrome* format for later use, and by saving the game data every move it's possible to convert *Borodino* into a play by mail game.

For die hard wargamers, *Borodino* makes an attractive program. Graphically it's nothing special, but then neither was *Universal Military Simulator*, and it must be said that the latter is a much more flexible program. But if you really want to be Napoleon, *Borodino* could just be your Waterloo.

■ Watch out for *Armada*, *Trafalgar* and other titles in this series, and TGM's special feature of wargames in the near future.

**TGM rating 57%**



**Battle for Borodino — in a sense the turning point of Napoleon's Russian campaign. *Universal Military Simulator* it ain't, but *Borodino* might please your average arm-chair dictator**

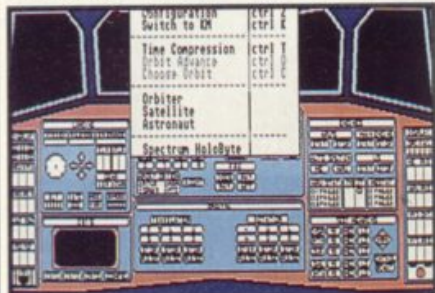
PRESS ANY KEY



# ORBITER

Mirrorsoft/Spectrum Holobyte  
Atari ST £24.99

Space, the final frontier and the setting for a round-the-earth trip in the Space Shuttle Orbiter. It may be from the makers of *Falcon* but this 1986 product is from the early days of the ST both in presentation and ideas.



Repetitive and often tedious detail is *Orbiter's* trade mark

From launch through satellite deployment, recovery and landing, *Orbiter* recreates in repetitive and often tedious detail the technical side of commanding a space

shuttle. Indeed, so much emphasis has been placed on simulating the controlling of the craft's systems that the flight simulator element is non-existent. The largely monochrome graphics hark back to the Mac original — and they should have stayed there.

This might be a unique program but it really is designed for hardcore simulation fanatics only.

**TGM rating 47%**

# JUG

Microdeal ■ ST £19.99

Is the planet Spiraesus dying? Yes it is — eaten away from its very core by mutants. And it's your job to make 'em spit out the pips. Flick-screen caverns — divided into zones and sectors — are traversed in a JUG titanium exo-skeleton (going cheap through *Exchange* and *Mart* this month), which can be updated by picking up different weapons. Fuel decreases when in flight, but capsules can be collected to replenish it, and teleportation booths take you rapidly from one screen to another.

The flip-screen mazes and metallic



Going for the JUGular — plenty of dodging, but keep an eye on your fuel level

adversaries instantly remind of *Cybernoid*, but the game is in fact simpler than Hewson's classic: more of a simple exploration shoot-'em-up, with fewer weapons.

The sheen on the mutants looks effective, especially in combination with the animalistic definition and amusing animation on some. Equally good is the metallic effect on the mildly impressive weapons transformation sequence. Plain bas-relief backgrounds are highlighted by well-drawn skeletal monster corpses.

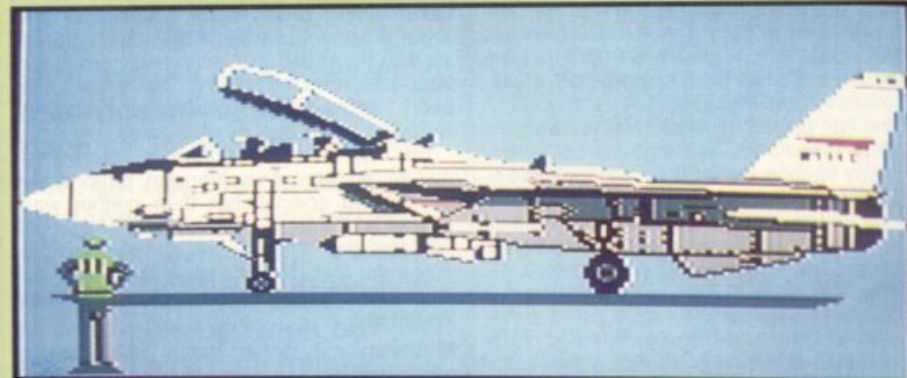
*JUG* offers a few hours of fun but it's nothing to get excited about.

**TGM rating 66%**

Toward Top Gun

# F-14 TOMCAT

Activision ■ Commodore 64 £14.99 disk only



AWG-9 RADAR ANTENNA  
TACAN ANTENNA  
IFF ANTENNA  
AN-ALQ-100 ANTENNA  
RADAR INTRCPT OFF.  
OIL COOLER INTAKE  
AIM-9 SIDEWINDER  
AIM-54 PHOENIX

AIM-120 AMRAAM  
M61A1 VULCAN CANNON  
PLANE CAPTAIN  
SAFETY OFFICER  
FLIGHT DECK OFFICER  
WEAPONS CREW  
REFUELER CREW  
CATAPULT CREW

From flight training to active service on the Nimitz and then onto the Top Gun School, *F-14 Tomcat* charts the progress of would-be Tom Cruises — and after all, who wouldn't be?

*F-14 Tomcat* follows the MicroProse lead with detailed peripheral screens but differs in keeping in-game presentation to a minimum. The enemy jets move awkwardly and while fast-paced gameplay is present, there's little attention to detail. A green ground or blue sea and blue sky is all there is to see for much of the time.

It is highly unlikely that MicroProse will lose any sleep over *F-14 Tomcat*. The flight complexity and authenticity have been toned down considerably to allow the arcade element to creep in. In shunning the more detailed aspects of a simulation comes a lack of depth, but the immediate appeal and playability are retained.

If you want pure *Top Gun* action with a moderate amount of depth of play then you can't go far wrong with this.

**TGM rating 73%**

# CHICAGO 30s

US Gold ■ Spectrum £8.99 cass, £12.99 disk

Amstrad CPC £9.99 cass, £14.99 disk

It's the Thirties. A lone undercover agent driving a sedan armed with a machine gun enters the windy city to close down Al Capone's business. From the port to the city's outskirts and centre, and eventually the liquor warehouse, the good guy is up against Al's mob whose members pop up from manholes or ride black sedans throwing fire bombs.

Smooth parallax horizontal scrolling always looks good on the Spectrum, although the partially monochrome screen masks bullets and traps. Likewise weak sound effects do the game no favours.

Amstrad colour (below) is abundant and luckily the slightly rougher scrolling, failing of many an Amstrad game, is unnoticeable once play gets going. Like the Spectrum game, limited animation causes gangsters to glide along strangely at times.

Like Toposoft's previous *Mad Mix*, *Chicago 30s* is a surprisingly simplistic game based on dated ideas. We've seen it many times before and this latest offering adds nothing to the ranks.

**TGM rating: Amstrad CPC 39%  
Spectrum 42%**





# FREE! TENSTAR PACK WORTH OVER £229!



FREE! - AMEGAS - by Players



FREE! - INSANITY FIGHT - by Microdeal



FREE! - ART OF CHESS - by SPA



FREE! - MERCENARY COMP - by Novagen



FREE! - BARBARIAN, ULT WARRIOR - by Palace



FREE! - TERRORPODS - by Psygnosis



FREE! - BUGGY BOY - by Elite



FREE! - THUNDERCATS - by Elite



FREE! - IKARI WARRIORS - by Elite



FREE! - WIZBALL - by Ocean

# Commodore AMIGA



ONLY **£3.34** PER WEEK  
RETURN COUPON FOR DETAILS

# £346.95

+VAT= **£399**  
INCLUDES FREE UK DELIVERY

The Amiga 500 is one of a new breed of technologically advanced computers, which are now emerging as the new standard for home computing, based around the new Motorola 68000 chip. The A500 has 512K RAM and a 1Mbyte double sided disk drive built-in. It can be connected directly to a wide range of monitors, or to a domestic TV set through a TV modulator. Designed with the user in mind, the A500 features a user friendly WIMP environment and comes supplied with a free mouse. And, when you buy your Amiga from Silica Shop, the UK's No1 Amiga specialists, you will experience an after sales service that is second to none, including a technical support helpline and free newsletters and price lists. Return the coupon below for our current information pack, which will give details of the Silica service and the very latest Silica Amiga offers. E&OE

## WHY SILICA SHOP?

Before you decide when to buy your new Commodore Amiga computer, we suggest you consider very carefully WHERE you buy it. There are MANY companies who can offer you a computer, a few peripherals and the top ten selling titles. There are FEWER companies who can offer a wide range of products for your computer as well as expert advice and help when you need it. There is ONLY ONE company who can provide the largest range of Amiga related products in the UK, a full time Amiga specialist technical helpline and in-depth after sales support, including free newsletters and brochures delivered to your door for as long as you require after you purchase your computer. That one company is Silica Shop. We have been established in the home computer field for ten years and can now claim to meet our customers requirements with an accuracy and understanding which is second to none. Here are just some of the things we can offer you.

**THE FULL STOCK RANGE:** The largest range of Amiga related peripherals, accessories, books and software in the UK.

**AFTER SALES SUPPORT:** The staff at Silica Shop are dedicated to help you to get the best from your Amiga.

**FREE NEWSLETTERS:** Mailed direct to your home as soon as we print them, featuring offers and latest releases.

**FREE OVERNIGHT DELIVERY:** On all hardware orders shipped to Silica Shop customers within the UK mainland.

**PRICE MATCH PROMISE:** We will normally match our competitors offers on a 'same product same price' basis.

**FREE TECHNICAL HELPLINE:** Full time team of Amiga technical experts to help you with your technical queries.

But don't just take our word for it. Complete and return the coupon below for our latest Amiga literature and begin to experience the Silica Shop specialist Amiga service.

## PHOTON PAINT PACK

A500 Computer	£399.99
TV Modulator	£24.99
Photon Paint	£69.95
TenStar Pack	£229.50
<b>TOTAL RRP:</b>	<b>£724.43</b>
<b>LESS DISCOUNT:</b>	<b>£325.43</b>
<b>PACK PRICE INC VAT:</b>	<b>£399</b>

## 1084S MONITOR PACK

A500 Computer	£399.99
1084S Colour Monitor	£299.99
Photon Paint	£69.95
TenStar Pack	£229.50
<b>TOTAL RRP:</b>	<b>£999.43</b>
<b>LESS DISCOUNT:</b>	<b>£350.43</b>
<b>PACK PRICE INC VAT:</b>	<b>£649</b>

## FREE FROM SILICA

When you buy the Amiga 500 from Silica Shop, you will not only get a high power, value for money computer, we will also give you some spectacular free gifts. First of all, we are now including a TV modulator with every A500 stand alone keyboard, so you can plug your Amiga straight into your TV at home (the modulator is not included with the A500+A1084S pack as it is not required for use with monitors). Secondly, we have added a free copy of Photon Paint, an advanced graphics package with an RRP of £69.95. Last (and by no means least!), so that you can be up and running straight away, we are giving away the sensational TENSTAR GAMES PACK with every A500 purchased at Silica Shop. This pack features ten top Amiga titles which have a combined RRP of nearly £230! Return the coupon for details.

## FREE TENSTAR PACK

When you buy your Amiga 500 from Silica Shop, we want to make sure you get the best deal possible. That is why we are giving away the TENSTAR GAMES PACK worth nearly £230, absolutely FREE with every A500 purchased from us. The TenStar Games Pack includes ten titles for the A500, each individually packaged in its own casing with instructions.	
<b>Amegas</b>	<b>£14.95</b>
<b>Art Of Chess</b>	<b>£24.95</b>
<b>Barbarian, Ult Warrior</b>	<b>£19.95</b>
<b>Buggy Boy</b>	<b>£24.95</b>
<b>Ikari Warriors</b>	<b>£24.95</b>
<b>Insanity Fight</b>	<b>£24.95</b>
<b>Mercenary Comp</b>	<b>£19.95</b>
<b>Terrorpods</b>	<b>£24.95</b>
<b>Thundercats</b>	<b>£24.95</b>
<b>Wizball</b>	<b>£24.95</b>
<b>TOTAL RRP:</b>	<b>£229.50 INC VAT</b>

## DO YOU OWN AN AMIGA?

If you already own an Amiga computer and would like to be registered on our mailing list as an Amiga user, let us know. We will be pleased to send you copies of our price lists and newsletters FREE OF CHARGE as they become available. Complete the coupon and return it to our Sidcup branch and begin experiencing a specialist Amiga service that is second to none.

### SILICA SHOP:

<b>SIDCUP (&amp; Mail Order)</b>	<b>01-309 1111</b>
1-4 The Mews, Hatherley Road, Sidcup, Kent, DA14 4DX	
OPEN: MON-SAT 9am - 5.30pm	LATE NIGHT: FRIDAY 9am - 7pm
<b>LONDON</b>	<b>01-580 4000</b>
52 Tottenham Court Road, London, W1P 0BA	
OPEN: MON-SAT 9.30am - 6.00pm	LATE NIGHT: NONE
<b>LONDON</b>	<b>01-629 1234 ext 3914</b>
Selfridges (1st floor), Oxford Street, London, W1A 1AB	
OPEN: MON-SAT 9am - 6.00pm	LATE NIGHT: THURSDAY 9am - 8pm

To: Silica Shop Ltd, GAMCHC5891-4 The Mews, Hatherley Road, Sidcup, Kent DA14 4DX.  
**PLEASE SEND ME FREE LITERATURE ON THE AMIGA**

Mr/Mrs/Ms: Initials: Surname:

Address:

Do you already own a computer  
If so, which one do you own?

Postcode:



## DUGGER

Linel ■ Amiga £19.95

Like Linel's first game featuring Herbie Stone (*Crack* — a *Break Out* variant), *Dugger* is a reworking of the old arcade game *Dig-Dug*.

Nasty creatures Crunchy and Frugal dwell underground and Herbie, a caveman, must blow them up with his pump. The dangerous beasts can also be eliminated by



Linel dig up old ideas for Herbie Stone's second adventure

dropping hefty boulders on their heads.

By far the best part of the game is the introductory sequence, where three cave-men carve out 'CRACK' in a rock face and have to be sent back to correct their mistake. The amusing cartoon graphics are also used in the necessarily smaller game sprites, which are bold and neatly animated. The earthy backgrounds are nicely shaded and the game is backed by a pleasant tune and fitting effects.

Being a reworking of such an old game, *Dugger* has very simple gameplay, and limited long term appeal as a result.

**TGM rating 41%**

## WILLOW

Mindscape ■ Amiga, Atari ST £24.99

George Lucas's latest — but certainly not greatest — cinematic creation moves to the computer. Telling the tale of a quest to save a child, Elora Danan, from the evil Queen Bavmorda, the game is split into seven parts, six of which can be practised before risking your eight lives. The Dungeons, Ice Caves and Woods are 3-D mazes, the latter giving you the opportunity to freeze enemies with magic acorns.

Despite its different stages, *Willow* in both 16-bit versions is nothing to rave about. Each stage is difficult (frequently



Pretty pictures apart, 25 minutes loading near-impossible stages will soon have you weeping

Ice cold and jammin

## SKATE OR DIE

Electronic Arts ■ Spectrum £8.95 cass, £14.95 disk

If you enjoyed the half-pipe freestyle event in Epyx's *California Games*, *Skate Or Die* is for you, because it's devoted to that most rad of transports — the skateboard.

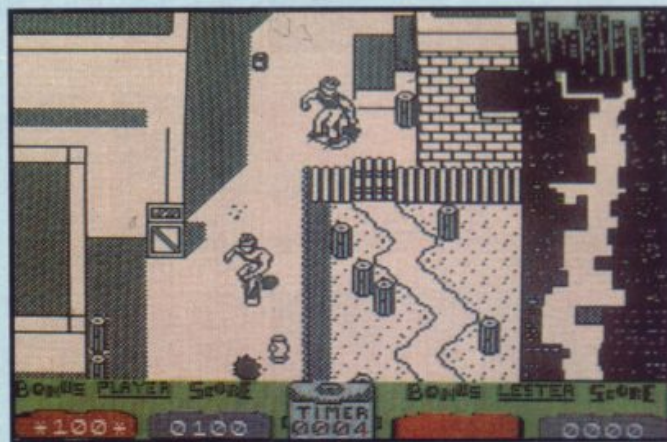
Event one is similar to the *Games* one but with more moves available. High Jump also takes place on the half-pipe ramp but altitude is the aim. There's a swift journey through a park in the Downhill, and an equally fast but perhaps dangerous one in the Downhill Jam two-man race. The rivalry gets stronger in Pool Joust, where the two skaters roll around an empty swimming pool and attempt to knock each other over with a 'boffing stick' (oar or paddle).

Released a long time ago on the Commodore 64, it's almost as enjoyable now on the Spectrum. While the High Jump's too simple and Pool Joust too tricky and boring, the remaining three events are great fun, particularly with friends.

Most screens and their elements are black on white, and though things sometimes become a jumble of pixels, the visual elements work reasonably. Sprite movement and scrolling, where used, is adequately done. A fun package of events that's well worth a look.

**TGM rating 76%**

Though the rotation method of steering is hard to use at first, you won't need to be threatened into playing *Skate Or Die* on the Spectrum because it's as jolly as it was on some time ago on the Commodore 64



very difficult) and what's worse, boring, so there's little incentive to persevere. The ST sprites are badly coloured, drawn and animated, backgrounds are plain, and the digitised pictures have random red and blue pixels spread over them.

Control response is slow and sound is limited to basic beeps. Things are worse still for 520 owners because the game takes a long, long time to load in parts and if — as is often the case — you die quickly, it's very frustrating having to load every-

thing back again.

The Amiga game is depressingly similar to the ST's. The loading time is no faster and, other than the clearer digitised pictures, graphics are equally poor, and the music's a grating single-channel tune.

Loading troubles or not, *Willow* simply isn't worth the bother.

**TGM rating: Amiga 17%**

**Atari ST 21%**

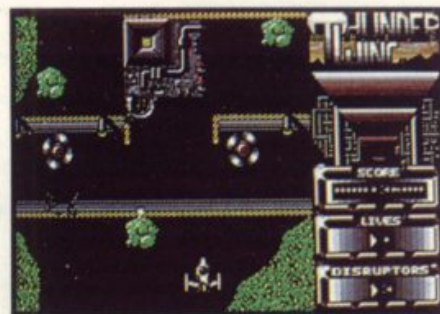
## THUNDERWING

Cascade ■ Atari ST £19.95

To win in the 16-bit arcade stakes these days, you need a game with loads of playability, sufficiently novel features, or at least very clever implementation. Unfortunately, it's not the case here with this all too familiar vertically scrolling shoot-'em-up.

Armed with lasers and ship-encircling force fields, you face wave upon wave of alien tanks and defence craft. The plot and simple gameplay could be forgiven if the graphics and presentation made up for it — but *Thunderwing* fails completely because they don't.

Primitive graphics, a very middle-of-the-road tune and colour clash combine to pro-



Certainly no ACE, *Thunderwing's* a bit of a yawn

duce a simply horrendous result.

**TGM rating 28%**



## WANDERER

Elite Systems ■ Amiga £19.99  
Amstrad CPC £9.99 cass, £14.99 disk,  
Commodore 64 £9.99 cass, £11.99 disk  
Spectrum £8.99 cass, £12.99 disk  
Atari ST £19.99

Tired of the overlord Vadd's rule, the down-trodden Confederation of Ten Planets rebel. The Confederation hires a mercenary, the Wanderer, to take on and defeat both Vadd and his space army. Like all mercenaries, the Wanderer's got to work for his Megs but isn't this a job like any other?

To confuse us all and make the reviewing process a little more difficult the 8-bit and 16-bit versions differ in their plots. The ultimate objective in both is to reach Vadd and defeat him and his minions.

The common method of play to both is to take cards between each of the ten planets engaging in a giant game of space poker, each planet having its own 'hand'. By improving each planet's hand the Wanderer is rewarded with Megs (8-bits) or Cats (16-bits). Once 8000 worth have been collected



Originally conceived early last year requiring bi-coloured 3-D glasses to play it, *Wanderer* now relies on a more standard 3-D effect, as seen here in the Amstrad version

or a 'four of a kind hand' is made (8-bits only) the doorway to Vadd opens up and the final conflict begins...

As well as the poker playing planets, space pirates are out in force throughout the solar system. By destroying pirates the Wanderer's combat ability goes up, with ability increases comes the option to enter black holes and collect Variable Disrupter

Units (8-bits) or Jokers (16-bits).

VDUs and Jokers dramatically increase card 'hands' when used and in turn not only accelerates the Wanderer's profits but takes him ever nearer towards opening the portal to Vadd.

A truly odd game, *Wanderer* relies heavily on the generally average 3-D effect to keep the gameplay going. The surreal game

within is little more than a mixture of very simple space combat scenes and a weird variation on Poker.

Across all formats the game is the same with little use made of respective machines' capabilities. The Commodore version suffers sluggish speed and limited colours in use. The 16-bit renditions look just like smoother, faster-moving 8-bit versions despite a good 3-D effect. Only the CPC and Spectrum versions come off any better making the best job they can of a limited idea.

**TGM rating: Amstrad CPC 48%**

**Spectrum 45%**

**Atari ST 38%**

**Comodore 64 33%**

Forwards and backwards to the past

## TIME SOLDIERS

Sega/SNK ■ £24.95 cartridge

Based on the successful SNK coin-op, we're very firmly in *Ikari Warriors* territory with the action spanning six time zones. The soldiers, Yohan and Ben (who makes

up these names?) hop into a time tunnel and spin back and forth through time searching for their mates in the primitive era, ancient Rome, medieval Japan, World War II and Future World. When the D-Scanner locates a trapped warrior the Time Soldiers need to fight the way through to the era's big boss and kill him in order to rescue their comrade.

Soldiers, guardians and other foes particular to each era give the Time Soldiers an excuse for maximum possible use of all weapons to hand. Power-ups, speed-ups and extra weapons can be picked — essential to kill the bigger Boss

opponents.

Unshamedly cashing in on the *Ikari Warriors* and *Secret Command* type of game, *Time Soldiers* is a little different with



its time travel concept providing variety in both graphics and gameplay. Shockingly unoriginal but still a relatively unexploited idea on the Sega, *Time Soldiers* works especially well as a two-player blast. Two continue-players per Time Soldier are a welcome bonus as well.

The game follows the Sega trend with a twee tune and the now standard Sega flicker throwing in its two-penny-worth. Variety is a common factor throughout each level with plenty to see, some visually impressive time zone bosses and a difficulty level set just about right.

**TGM rating 78%**

Shockingly unoriginal but spectacularly exciting for two players

## FACE OFF

Anco ■ Atari ST £14.95

One team game rarely converted to computer is ice hockey. In Anco's attempt, the game can be customised before the match begins. The length of each quarter, participating teams, the colour of their uniforms, skill level, and type of competition (single match, league or cup) can be changed before the face off.

Control is restricted to running, hitting the puck, hitting other people (!) and barging opponents. The bane of team games is the computer selection of a player who isn't nearest the ball/puck, leaving you with ground to make up. Though this isn't the case with *Face Off*, it's still a problem keeping up with the puck as the fat binary hockey players crawl along at a tedious pace — and terrible scrolling only slows the game further.

Though broad and brightly designed, the sprites are very nicely animated as they skate realistically around the rink. Unfortunately there's some flicker and hockey players sometimes spin aimlessly. Poor vertical scrolling is made worse by a gaudy collage supposed to represent the spectators.

**TGM rating 43%**



Puck Off! Not an insult — just the original name for this slow-playing ice hockey game

PRESS ANY KEY



# JOURNEY TO THE CENTRE OF THE EARTH

Rainbow Arts ■ Atari ST £19.99  
Amiga £19.99

Ever heard of Sneffels? No, well it's in Iceland and it's where your journey to the centre of the Earth starts. If this seems impetuous of you, worry not for your health and progress is marked on a special screen where you may use medical supplies, redistribute rations and analyse fossils at your current layer to help choose the next move toward the Earth's core. Text and graphic screens are interspersed with arcade sequences, where you avoid falling rocks and stampeding mammoths, collect falling water and hit pterodactyls.



It's okay — but not necessarily worth travelling to the centre of the earth for

The game comes from the *Joan of Arc* programmers, and its influences can be seen throughout, but unfortunately there's very little to it. Strategy is little more than ration juggling and the arcade sequences are generally over-simple left/right dodging games with some awkward control response.

Backgrounds, the neatly defined options screens and well digitised cavern scenes are the same on both versions (though they're perhaps a little clearer on the Amiga), but are overlaid with poorly designed and animated sprites in the arcade stages. Sampled footsteps, screams and mammoth roars provide reasonable backing. This is a disappointingly uncomplicated game after the superbly involving *Joan Of Arc*.

TGM rating: Atari ST 54%  
Amiga 55%

# DRAGONSCAPE

Software Horizons ■ Atari ST £19.95

Here's another bog-standard shoot-'em-up, only in this case you're riding a dragon on a mission to deliver objects. Dragonscape's implementation is not first rate. Only about



'Dooon't drop it!' cries a Northern voice if you wrongly deposit an artefact

half of the screen area is used for the over-head scrolling and that, although quite speedy, is also quite jerky. The dragon's definition and animation is neat, and back-

grounds are pleasant enough, although most opponents are crudely designed. Simple effects and music aren't particularly assisted by generally indistinct speech. There could be more interesting things to do with 20 quid than play with this program.

TGM rating 59%

# GO-MOKU/RENJU

Atari Mindgames ■ Atari ST (unpriced)

Ancient and honourable Oriental board game appear on ST. But the superior man buy the board instead.

*Go-Moku* is very simple: on a large grid, each player places either black or white stones, one each turn. The first player to get five of their stones in a row wins.

*Renju* is much the same, but here lots of restrictions are placed on the black player, to take away his supposed advantage of having first go.

The possibilities are vast enough to make *Go-Moku/Renju* insanely addictive and enjoyable — in many ways more subtle than chess — and the computer adversary is useful. But you can buy a suitable board in Hamley's of London for £3.75...

TGM rating 64%

X on X off with yet more Xor

# PROSPECTOR IN THE MAZES OF XOR

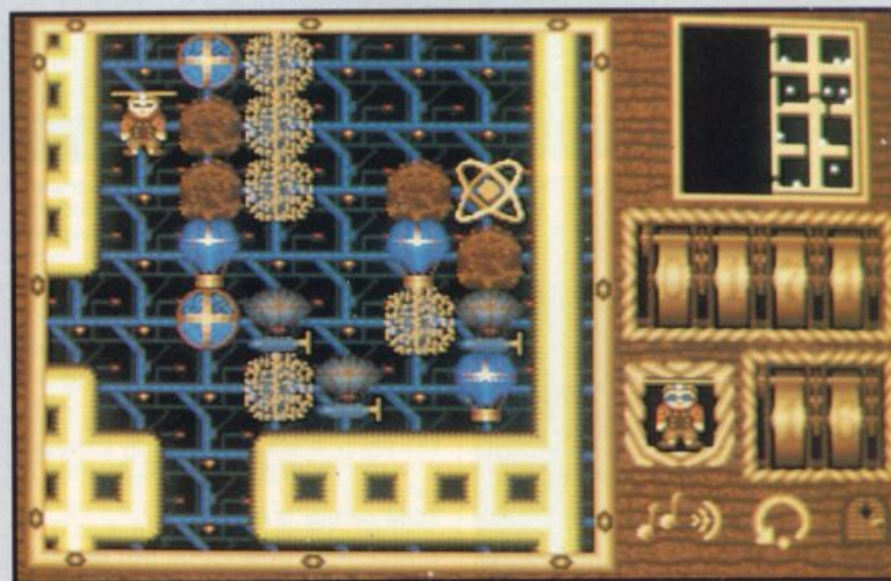
Logotron ■ Amiga £24.95

This is an unoriginal but satisfying follow-up to the puzzle game *Xor*. Excited by the prospect of hidden treasure and equipped with jet-pacs, Herb the hero and Pip the reptile enter the mazes of Xor in search of their fortune.

But the multi-way scrolling mazes are sealed off from one another and the only way out of each is to collect enough balloons. Zeppelins, rocks, rolling spheres and decoy balloons upset the process of balloon gathering, and on top of this the maze must be collected within two thousand moves.

The Amiga is used well, each maze scrolling smoothly and sporting different attractive graphics with good solid music to prospect to.

TGM rating 75%





# The Games machine

## SHOPPING

### KONIX NAVIGATOR

Brand new ergonomically designed hand-held joystick with Fire button positioned directly beneath the trigger finger for super-fast reactions. Unbreakable solid steel shaft. **OFFER 14.99, T235H**



### EUROMAX MICRO-HANDLER

An array of features to get those trigger fingers twitching: extra-sensitive micro-switch action stick, two integrated paddles, continuously adjustable autofire, extra large fire buttons and a solid metal casing with rubber suction cups for added grip. Comes complete with an extra long cord for ultimate ease of play. Be a winner with the Micro-Handler! **OFFER 19.95, T300H**



### EUROMAX PROFESSIONAL GRIP

**OFFER 13.95, T240H**



### DYNAMICS COMPETITION PRO 5000 (clear)

The designer joystick with see-through body. **OFFER 14.00, T244H**



### POWERPLAY CRUISER STREAM-LINE ALL BLACK

With dual lead for Spectrum 48K/128K/Plus and Plus 2 & 3. **OFFER 12.99, T450H**

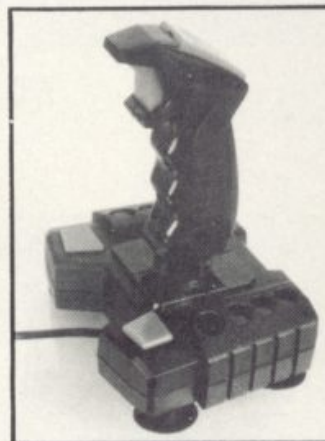
### KONIX MEGABLASTER

Precision moulded control knob with steel shaft for complete reliability. Dual fire buttons for left or right hand use. Heavy duty leaf switches provide directional control with long lasting operation. Includes suckers for table top fixing. **OFFER 6.99, T236H**



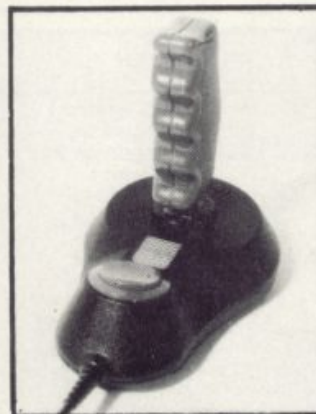
### EUROMAX COBRA

Brand new design with 8 microswitches. 3 Auto fire buttons and single normal fire button provide trigger readiness at all times! With suction feet and extra long cord. **OFFER 11.95, T301H**



### EUROMAX ELITE GRIP

**OFFER 10.95, T238H**



### POWERPLAY CRUISER RED/WHITE/BLUE

This excellent joystick features microswitch directional control and fire action. A unique variable tension control allows the user to adjust the return force to extra sensitive, normal and firm. **OFFER 9.99, T245H**



### KONIX SPEEDKING

The joystick that actually fits your hand, with a fire button angled for your trigger finger to ensure accurate high-speed action. Solid steel breakproof shaft with neat clicking sound. **OFFER 10.99, T246H**



### EUROMAX PROFESSIONAL STANDARD

High durability, rapid response and ultra sensitive movement accuracy from this advanced ergonomic design. **OFFER 15.95, T239H**

### EUROMAX PROFESSIONAL AUTO-FIRE

**OFFER 18.95, T241H**

### EUROMAX ELITE STANDARD

Short travel micro switch action in ergonomic and highly durable designed body. **OFFER 9.95, T237H**

### EUROMAX WIZCARD

**OFFER 3.95, T242H**

### DYNAMICS COMPETITION PRO EXTRA

Features rapid fire, unique slow motion and see-through body. **OFFER 15.00, T500H**

### DYNAMICS COMPETITION PRO 5000 (normal)

Features arcade quality microswitches, dual fire buttons, robust steel shaft and rubber return for smooth control and longer life. **OFFER 13.50, T243H**

### 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, T251H**

### POWERPLAY CRYSTAL STANDARD

Designed by Peter Lawton Harris of Zip Stik and Super Professional fame. Clear with red fire buttons and pistol grip handle. **OFFER 14.99, T452H**

### POWERPLAY CRUISER CLEAR AUTO FIRE

Simply by holding down either of the fire buttons engages Auto Fire. **OFFER 12.99, T451H**

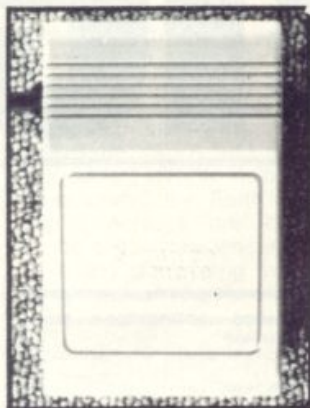
### POWERPLAY TURBO CRYSTAL

Provides fast Auto Fire action. **OFFER 16.99, T453H**



**MICRO-MATE PSU**

The alternative C64, C64c and Vic20 power supply. Micro-mate will replace your dicky original CBM unit and provide reliable power to your computer. It won't overheat, has a failsafe cut-out against over-current (ie. output short-circuiting) and over-temperature (just to be on the safe side), and includes a twelve month unconditional warranty. ALL units are individually tested  
**OFFER 19.95, T249H**

**LOAD-IT**

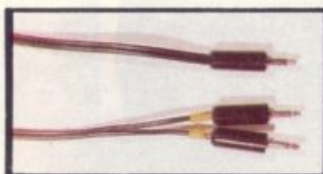
Eliminates tape loading problems on your C64. Achieves 100% loading success even on the most obstinate tapes. It provides permanent head alignment adjustment with the help of an LED array for optimum signal indication. Guaranteed for one year.  
**OFFER 39.99, T250H**

**TGM BINDER**

Stop your favourite mags from disappearing. Enshrine them in this lovely brown leather look binder with gold embossed logos.  
**OFFER 4.50, T252H**

**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, T247H**



# AMIGA GOODIES

**AMIGA A501 512K RAM EXPANSION UPGRADE + CLOCK CARD**  
 Internal Ram upgrade to 1024K RAM  
**OFFER 129.99, T253H**

**AMIGA A520 MODULATOR**  
 Use your Amiga with a domestic TV set or composite video monitor.  
**OFFER 24.99, T254H**

**DIGIVIEW 3.0 WITH A500 ADAPTOR**  
 Captures image via your video camera  
**OFFER 149.95, T255H**

**AMIGA DIGIDROID**  
 A motorized filter wheel that automates colour digitizing with Digiview  
**OFFER 52.95, T256H**

**AMIGA COPYSTAND FOR DIGIVIEW**  
 A 2' stand for digitizing objects  
**OFFER 59.95, T257H**

**AMIGA RENDALE GENLOCK**  
 A lowcost genlock enabling the user to merge computer graphics with live video and record the results on VCR  
**OFFER 249.99, T258H**

**EASLY DRAWING A4 GRAPHICS TABLET FOR A500**  
 Deluxe Paint 1 & 2 compatible, incl Easy! paint prog and general background driver  
**OFFER 299.00, T259H**

**CHERRY A3 DIGITISING TABLET**  
 Works with Amiga, Atari ST and PC and comes complete with drawing stylus and four button puck  
**OFFER 499.95, T260H**

**XEROX 4020 COLOUR INK JET PRINTER**  
 Prints seven individual colours or more than 4000 shades. In enhanced mode it prints a page in four minutes. Integrates colour graphics with black text using five resident fonts at 80cps draft and 40 cps letter quality.  
**OFFER 1222.00, T261H**

**XEROX 4020 STARTER PACK**  
 Includes paper roll holder, 8 cartridges ink, paper and maintenance fluid  
**OFFER 99.99, T262H**

**XEROX CUT SHEET FEEDER**  
 for use with Xerox 4020 printer  
**OFFER 215.00, T263H**

**PROFESSIONAL PAGE**  
 Word processing, desktop publishing, colour separation and CAD. Postscript compatible output  
**OFFER 199.95, T264H**

**MERCY DASH CALENDAR**  
 Yes, the virgin like Saint of the industry has finally made it to stardom! She's mad, she's bad and she appears on twelve months of this mono Robin Evans masterpiece of a calendar.  
**OFFER 4.95, T455H**

# HOT NEW RELEASES

CODE	TITLE	LABEL	SPE	CBM	CPC	ST	AMI	PC
T18001	A Question of Sport disk	Elite Systems					19.99	
T18002	Action Service cass	Infogrames		7.95				
T18003	Action Service disk	Infogrames		11.95				
T18004	Afterburner disk	Activision					19.99	
T18005	Airborne Ranger cass	Microprose			7.95			
T18006	Airborne Ranger disk	Microprose			11.95			
T18007	Baal disk	Psychapse					15.95	
T18008	Balance of Power - 1990 Edition disk	Mindscape				19.99	19.99	
T18009	Ballistix disk	Psychapse				15.95	15.95	
T18010	Batman disk	Ocean					19.95	
T18011	Battlehawks disk	US Gold/Lucas						19.99
T18012	Bismarck disk	PSS				15.99		
T18013	Blasteroids cass	Imageworks		7.99				
T18014	Blasteroids disk	Imageworks		11.99				
T18015	Borodino disk	Atari				15.95		
T18016	Captain Blood cass	Infogrames	7.95					
T18017	Captain Blood disk	Infogrames	11.95					
T18018	Carrier Command 128K cass	Rainbird	11.95					
T18019	Carrier Command disk	Rainbird	12.95					
T18020	Chase disk	Virgin Mastertronic				9.99	9.99	
T18021	Chicago 30's cass	US Gold	7.24		7.99			
T18022	Chicago 30's disk	US Gold	10.44		11.99			
T18023	D Thompson's Olymp. Challenge disk	Ocean						19.95
T18024	Dragonscape disk	Software Horizons				19.95		
T18025	Dugger disk	Virgin Mastertronic				9.99	9.99	
T18026	Eliminator cass	Hewson	6.44					
T18027	Eliminator disk	Hewson	10.44					
T18028	Face Off disk	Anco				11.95		
T18029	Goldrunner II disk	Microdeal				15.99		
T18030	Hacker disk	Mastertronic					9.99	
T18031	Hollywood Poker Pro disk	Feline Software					15.99	
T18032	Human Killing Machine cass	US Gold		7.99	7.99			
T18033	Human Killing Machine disk	US Gold		11.99	11.99	11.99	11.99	
T18034	IK Plus disk	System 3					19.99	
T18035	Jetfighter disk	Velocity						32.95
T18036	Journey to Centre of Earth disk	Rainbow Arts				15.99	15.99	
T18037	Jug disk	Microdeal				15.99		
T18038	Knight Games disk	Mastertronic						9.99



# HOT NEW RELEASES

CODE	TITLE	LABEL	SPE	CBM	CPC	ST	AMI	PC
T18039	Last Duel cass	US Gold		7.99				
T18040	Last Duel disk	US Gold		11.99				
T18041	Mickey Mouse disk	Gremlin Graphics					15.99	
T18042	Obliterator cass	Psygnosis	7.99		7.99			
T18043	Obliterator disk	Psygnosis	11.99		11.99			
T18044	Orbiter disk	Mirrorsoft				19.99		
T18045	Prison disk	Krisalis				15.95	15.95	
T18046	Prospector in the mazes of Xor disk	Logotron					19.95	
T18047	Renegade 3 cass	Imagine	7.24	7.99				
T18048	Renegade 3 disk	Imagine	11.99	11.99				
T18049	Roadblasters disk	US Gold				15.99	15.99	
T18050	Run the Gauntlet cass	Ocean		7.99				
T18051	Run the Gauntlet disk	Ocean		11.99		15.99	19.99	
T18052	Scorpion disk	Digital Magic Software					19.95	
T18053	SDI cass	Activision	7.99	7.99	7.99			
T18054	SDI disk	Activision		11.99	11.99			
T18055	Skate or Die cass	Electronic Arts	7.20					
T18056	Skate or Die disk	Electronic Arts	11.95					
T18057	Superman cass	Tynesoft	6.40					
T18058	Superman disk	Tynesoft	11.95					
T18059	Supertrux cass	Elite	6.44	7.99	7.99			
T18060	Supertrux disk	Elite	10.44	9.99	11.99			
T18061	Tank Attack cass	CDS Software	10.44					
T18062	Tank Attack disk	CDS Software	11.99					
T18063	Thunderwing disk	Cascade				15.95		
T18064	Tiger Road cass	US Gold			7.99			
T18065	Tiger Road disk	US Gold			11.99			
T18066	Titan cass	Titus			7.99			
T18067	Titan disk	Titus			11.99		19.99	
T18068	Victory Road cass	Imagine			7.95			
T18069	Victory Road disk	Imagine			11.95	15.95		
T18070	Vigilante cass	US Gold	7.24					
T18071	Vigilante disk	US Gold	10.44				11.99	
T18072	Vindicators cass	Tengen			7.99			
T18073	Vindicators disk	Tengen			11.99	15.99		
T18074	Voyager disk	Ocean				15.99	19.99	
T18075	Wanderer cass		7.24	7.99	7.99			
T18076	Wanderer disk		10.44	9.99	11.99	15.99	15.99	
T18077	War in Middle Earth disk	Melbourne House				15.99	15.99	15.99
T18078	Warlock's Quest cass	Infogrames		7.95				
T18079	Warlock's Quest disk	Infogrames		11.95				
T18080	Willow disk	Mindscape					19.99	
T18081	Zany Golf disk	Electronic Arts					19.95	

## THE MEGA CHOICE:

APART FROM OUR HIGHLY RECOMMENDED GAMES LIST, YOU CAN ORDER ANY GAME RELEASED BY THE MAJOR SOFTWARE HOUSES TO DATE ON CASSETTE, CARTRIDGE OR DISK.

OUR OFFER PRICES ARE VALID FOR ANY FULL-PRICED GAMES AND INCLUDE FIRST CLASS POSTAGE AND PACKING - NO OTHER EXTRA CHARGES.

LOOK UP THE PRICE OF EACH GAME IN THE OFFER TABLE, ENTER THE OFFER PRICES ON THE ORDER COUPON, THEN ADD THEM UP. ORDERS FOR TITLES WHICH ARE NO LONGER IN DISTRIBUTION WILL BE RETURNED. YOU WILL BE REGULARLY NOTIFIED OF ANY DELAYS CAUSED BY LATE RELEASES.

## DELIVERY:

NOT ALL LISTED PRODUCTS WILL HAVE BEEN RELEASED AT PRESS TIME.

GOODS WILL BE DESPATCHED AS SOON AS POSSIBLE. CUSTOMERS WILL BE INFORMED OF ANY LONG DELAYS.

## HOW TO ORDER:

WRITE REQUIRED GAME(S) ON ORDER LIST, INCLUDING MEDIA TYPE, COMPUTER AND ORDER CODE (WHERE LISTED).

IF OFFER PRICE NOT INDICATED, CHECK IN AD OR REVIEW FOR CORRECT RECOMMENDED RETAIL PRICE (RRP).

LOOK UP SPECIAL OFFER PRICE AND WRITE ON ORDER FORM. ADD UP TOTAL AND ENCLOSE CHEQUE OR POSTAL ORDER OR ALTERNATIVELY USE ACCESS/VISA FACILITY (DON'T FORGET TO INDICATE EXPIRY DATE!).

REMEMBER: GAMES ORDERS REQUIRE ORDER CODE OR MEDIA TYPE AND COMPUTER, GARMENT ORDERS ORDER CODE OR GARMENT SIZE, HARDWARE ORDERS ORDER CODE. INCOMPLETE ORDER FORMS WILL BE RETURNED.

PLEASE RING (0884) 5620 IF IN DOUBT!

PRICES VALID FOR UK/EIRE/ EUROPE ONLY. FOR OVERSEAS ORDERS PLEASE ADD £2.00 PER ITEM FOR AIR MAIL DELIVERY

## BUDGET RANGE

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!

JUST FILL IN THE NAME AND PUBLISHER OF THE FOUR GAMES REQUIRED AND THE PAYMENT TOTAL OF £5.97/£8.97 (DON'T USE THE OFFER PRICE TABLE)

## SOFTWARE OFFER PRICE TABLE

4.99	<b>3.99</b>	1.00	12.99	<b>10.44</b>	2.55
5.95	<b>4.74</b>	1.20	14.95	<b>11.95</b>	3.00
7.95	<b>6.40</b>	1.55	14.99	<b>11.99</b>	3.00
7.99	<b>6.44</b>	1.55	19.95	<b>15.95</b>	4.00
8.95	<b>7.20</b>	1.75	19.99	<b>15.99</b>	4.00
8.99	<b>7.24</b>	1.75	23.00	<b>18.40</b>	4.60
9.95	<b>7.95</b>	2.00	24.95	<b>19.95</b>	5.00
9.99	<b>7.99</b>	2.00	28.95	<b>23.15</b>	5.80
11.99	<b>9.99</b>	2.00	29.95	<b>23.95</b>	6.00
12.95	<b>10.40</b>	2.55	34.95	<b>27.95</b>	7.00







I want to subscribe to 12 issues of TGM and receive the free gift.  
If I've already got a TGM subscription, and it is running out soon I extend it for a further twelve issues – and get a free gift.  
If I am a current subscriber, but do not wish to extend my subscription, I can still get the CRL goodie for £5.95 (HYPERDOME £9.95) – a special subscribers discount price.

If I am a current subscriber, but do not wish to extend my subscription, I can still get the CRL goodie for £5.95 (HYPERDOME £9.95) – a special subscribers discount price.

--	--	--	--	--	--	--	--

Please  
No:

--	--

If you wish your sub to commence with Issue 19, we must receive your coupon no later than 26th April 1989.

Please allow 28 days for your free gift.

SES\*BACKISSUES\*BACKISSUES\*BACKISSUES  
SES\*BACKISSUES\*BACKISSUES\*BACKISSUES  
SES\*BACKISSUES\*BACKISSUES\*BACKISSUES



TX:017 April 1989

**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 – Complex Comix: comic strip licences

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17			

**BACK ISSUES £1.45**  
(Inclusive P&P)

**OVERSEAS PLEASE ADD £0.80  
TO ABOVE PRICES**

**SPECIAL QUANTITY DISCOUNT:**  
Order **FOUR** issues and pay for  
**THREE.**

[illegible]

ORDER TOTAL

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 £

Please charge my account No.

[illegible]

Expiry Date

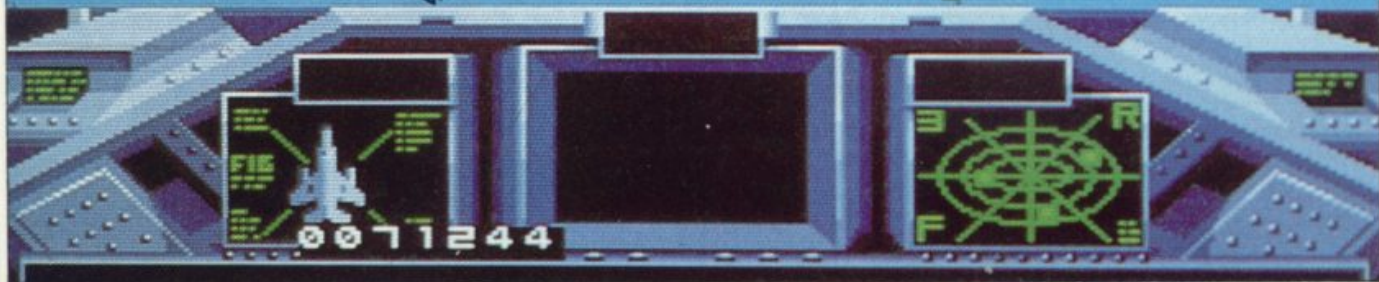
Signature \_\_\_\_\_



SEND THIS FORM TO:  
**TGM SHOPPING, PO BOX 20,  
LUDLOW, SHROPSHIRE SY8 1DB**



# THE SHAPE OF GAMES TO COME



How do you bring a **game** to **life**? Jez San's Argonaut team are using the latest techniques of 3-D **illusion** for their state-of-the-art flight sim *F-117A Aggressor*.

In this month's instalment of the Argonaut story, 3-D graphics designer and animator **Daniel Emmett** shows how the screens can get up and go.

**O**ne of the most important features a game must have is variety. Of course, it's not possible to write an infinitely variable computer game, because the machines have limits, the program has limits and even the programmers have limits (well, nearly). But it's still possible to have an enormous amount of variety in there if the game is well-produced.

In a 3-D game, if you have only a few simple shapes, the player soon gets used to them – and eventually gets bored. So you need as many different shapes as possible. The original *Starglider* had about 27 different objects, but for the first product I worked on at Argonaut – *Starglider 2* – I designed just over 100 objects, about 30% of them animated in various ways. At the time I thought that was a lot. Not so! It was decided that *F-117A Aggressor* was to be even more complex.

The basic shape list for *Aggressor* consists of approximately 150 shapes. But whereas a *Starglider 2* shape would consist of perhaps 20-25 points, a fighter aircraft in *Aggressor* can have anything from about 40 to 70 points. For example, the Lockheed SR-71 Blackbird (a very fast reconnaissance plane) has 74 points!

That's considered quite a lot, since the more points a shape has the more processing time it requires in the game – and the harder it is to design. But the bonus is that it looks better, making it worthwhile – if the program is fast enough to cope with it.

Looks aren't everything, but they're

very important, especially in a simulation where the objects *must* look like their real-life counterparts. That's the advantage you enjoy when designing a fictional object: the 'real' version of the object *is* what you design, because it's the original and only version.

A *Starglider 2* Walker is the real Walker in all its detail, but an F-16 from *Aggressor* can only be a model of a real F-16. That's why you must use more points to get something that looks real; it's not really your choice.

But how do solid 3-D shapes work? Well, the basic idea is to define an object as a set of flat surfaces or faces, which are contained inside a boundary formed by a given list of points. These points are defined by their 3-D coordinates to give them a real position in space.

Any coordinate system could be used, but we use good old x,y and z (Cartesian coordinates), because it's the simplest to manipulate – and for me it's by far the most sensible system. Imagine trying to design an F-14 Tomcat (remember *Top Gun*?) and animate its wings, all in spherical polar coordinates... no thank you!

## 3-D universe

Let's take a simple example: a cube. This would have eight points, numbered 0-7, each having the coordinates of one of the eight corners. And there would be six faces (0-5), each face being defined by a list of the four points that bound it – ie its four corners.

When you perform various

View from the cockpit: that helicopter is just one of some 150 detailed shapes in *Aggressor*

**"Looks aren't everything, but they're very important – especially in a simulation"**

mathematical operations on the point coordinates, the object can be placed at an arbitrary position and orientation in space. In simple English, this means you can put it anywhere you like and have it facing in any direction.

And once you set up your own little universe, populated by a host of these 3-D objects, you can mathematically calculate what you'd see if you were sitting at a particular position looking, say, *thataway*, and project a two-dimensional view onto the screen. This view is then updated in real time as the objects move about and your viewing position changes.

That's fine for simple objects. But what happens if an object has to be animated? Say I want to design a birdlike shape with wings that flap, so it actually looks like it's flying.

The object has to be defined as a series of frames, each one slightly different from the last, so when the frames are displayed in the required sequence in real time one gets the impression of a smooth flapping motion. It's quite similar to making a cartoon.

The big problem with 3-D graphics is the processing time consumed by all the maths; and of course it all has to be done in real time, while the game is being played. The more objects you have to deal with and the more complex they are (with more points and faces), the greater the time taken by all the calculations, and so the slower the game will run.

If the game is too slow, it's unplayable. Animated shapes look particularly bad if they're displayed so slowly that the individual frames are distinguishable, instead of a smooth continuous motion – it completely ruins the effect. No one would go to see *Who Framed Roger Rabbit* if it only ran at two frames per second, so why

**"The big problem with 3-D graphics is the processing time – if the game is too slow, it's unplayable"**



should they play computer games that are jerky and slow?

There are three ways of making a 3-D program run faster: have simpler shapes, have fewer shapes visible at any one time (lower population density), or optimise the processing and shape data.

But the first two would result in a less interesting game, so the best solution is to turbocharge everything, making all routines and data as lean and as mean as possible and employing various techniques and sneaky tricks, mostly developed by people here at Argonaut.

That's the theory. But like everyone in the 3-D business, I have my own personal way of designing shapes...

## Making it work

First I decide what the shape is going to be, what it will look like and what it will do when animated. For most shapes in *Aggressor* this is easy, since they're based on real objects. For a fictional shape I come up with a mental picture, maybe making a few simple sketches.

Then I draw a series of different projections of the object on graph paper, on which I plot the points and faces from which the object is constructed. This is where the bulk of the work lies – the object has to be an accurate representation of the real thing, but I don't want to use an unnecessarily large number of points and faces, for the reasons mentioned earlier.

And all the faces must be flat for the shape to work, which is often a pain – otherwise the maths can't cope. Bugs such as this, or using incorrect ordering of points when defining a face – or, worse, nonexistent points – give you some weird and wonderful effects, though the Shape Editor (see below) can detect and eliminate such errors.

For realism, objects such as planes and ships are designed to scale, based on careful measurements using plans of the real object. Once the blueprints are finished I can read off the coordinates of each point, and the points contained in each face – and breathe a sigh of relief.

I then enter the data into my Shape Editor. This is a rather large program I've written (on an ST) to help design and debug shapes. It's specially designed for the way I work, and the object's points, faces and so on are entered as a series of numbers. (I don't actually produce the first design onscreen. I may be a bit old-fashioned, but I still find it easier to use paper!)

The Shape Editor can then display and edit the object in a number of ways, and perform various operations and analyses on the data. For example, it can tell me whether or not the faces are actually flat and, if not, exactly how unflat they are. It performs virtually every function I could possibly need (that's the advantage of writing your own software tools, isn't it?) and if I think of a new feature, I just update the editor to include it.

If I'm designing an animated shape, I need data for each frame of animation. If the animation is simple, say something moving in a straight line, I just work out the data by hand or on paper. If the motion is more complex – flapping, walking or whatever – what



Graphics man Daniel Emmett (standing at back): 'It's satisfying to see a shape flying about in its own little world.' Seated, left to right, are Argonaut programmers Peter Warnes and Richard Clucas; standing in the foreground, Jez San.

I do is a miniproject in itself. (I had several days of fun on *Starglider 2* simulating walking, eventually coming up with a program that could simulate virtually any two-legged walking/running motion by varying any of 12 or so variables.)

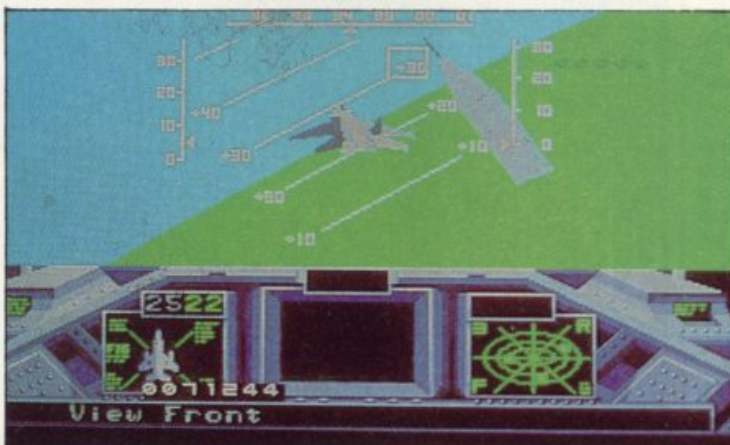
I then use the computer to generate the required animation frames using the formulae. The Shape Editor can display the frames either individually or in an animated sequence (forwards, backwards or whatever), and I can analyse and edit any of the frames.

Once I'm happy with a shape, all that's left is to get it into the game. *Aggressor* uses its own carefully-developed format for storing data (for the speed reasons mentioned earlier), so I just convert the data from the for-

mat used by my Shape Editor to the *Aggressor* format.

This is usually done in batches of several shapes, using a simple converter that takes 'Danny-format data' in at one end and gives 'Aggressor-format data' at the other. This data can then be added to the SHAPES file in *Aggressor*, and becomes part of the game.

And that's how all the shapes in *Aggressor* are produced. Some take just a few minutes to do, and some of the really complex ones can take several days. But it's certainly fun, and it's satisfying to see the final version of a shape in *Aggressor* flying about (or walking or swimming...) in its own little world.



Step out of yourself for a moment: in *Aggressor*, you can see your own plane from a third-person perspective. That's what the VIEW FRONT on the instrument panel signifies – though the instrument panel can be removed from the screen at the touch of a key.

And the plain green landscape will be much improved in the final version. While developing *Aggressor*, Argonaut are keeping it simple so it doesn't waste processing time – that way the frame rate (ie speed) of the aircraft shapes can be impressively maximised.

Eventually, *Aggressor* may even include optional Zarch/Virus-style contoured landscapes with features like volcanoes.

## THE NAME OF THE GAME

Just call it *Aggressor*

Argonaut's fighter sim, codenamed X in the first three instalments of the TGM diary, can now be revealed as *F-117A Aggressor* – and graphically it's 'going to be a lot more interesting' than the half-finished screens shown here, programmer Alister Perrott told TGM.

The basic gameplay seems standard flight-sim stuff: 'every time you play, you'll get a mission, choose your armaments, and go out and solve that mission,' says Perrott. But it's 3-D realism that will set *Aggressor* apart from the run-of-the-runway.

Perrott explains: 'The view can be from inside the cockpit, or from outside the plane. At the moment it's possible to see the landscape from the point of view of any object.' And in next month's TGM, Argonaut programmers will describe the experience of playing *Aggressor*.

'It should be out for Christmas, hopefully,' says Perrott. But publishers Electronic Arts have been seeking an earlier release date, hoping that Argonaut's nine-man team can meet their end-of-May deadline for the complex programming task.

Developed on the Amiga, *Aggressor* will appear there first, and then on the ST.

PC and Mac *Aggressors* will follow, but 8-bit conversions seem unlikely.



# ROBIN HOGG'S PLAYING TIPS

## ■ YOUR GUIDE TO BETTER GAMING ■

### ■ ZAK MCKRACKEN AND THE ALIEN MINDBENDERS All formats

This month's Star Tips, from **Mike Bareham** of Basildon, form the first instalment of our complete *Zak McKracken* solution. Watch next month's TGM for more tips on how to beat the Alien Mindbenders...

Pick up the fish bowl, open the dresser door and pick up the phone bill. Now go to the desk and open the desk drawer. Take the kazoo and close the desk drawer. Use the fish bowl with the lamp. Take the wallpaper which is on the right wall, and use it on the plastic card which is under the desk. Open the door and go into the next room.

Pick up both seat cushions, and pick up the remote control which is hidden beneath one of the cushions. Use the power cord, which is next to the TV, with the power outlet. You can now use the remote control to switch on the TV. You can watch TV for as long as you like, but it won't help you complete the game.

Switch off the TV by using the remote control. Pick up the butter knife and open the cabinet. Now take the crayons and use the yellow crayon with the torn wallpaper. Walk to the fridge and open it. Pick up the egg and close the fridge door.

Return to the bedroom and pick up the rug corner; use the butter knife on the floorboards. This will bend the butter knife. Now go back into the living room and go out of the front door.

Walk to the bakery and push the doorbell three times. The baker will now throw a stale loaf at you - pick this up. Go to 14th Avenue. Open the door to Lou's loans shop and go in. Walk to the Sell window and sell the bent butter knife.

Now buy the wet suit, toolkit, golf club, hat, nose glasses and guitar. Leave the shop. Walk to the hair salon and open the toolkit. Use the wire-cutters on the bobby-pin sign.

Walk back to 13th Avenue. Put on the nose glasses and the hat, and open the phone company door. Go in and give the phone bill to the representative. Go out the door.

Now return to your house and use the stale bread in the sink. Turn on the switch and turn it off again. Use the monkey wrench on the pipe beneath the sink. Pick up the breadcrumbs and go out of the front door. Walk to the bus and use the kazoo. When the bus door opens, use the

cashcard in the cashcard reader.

Give the cashcard to the devotee and get on the plane. Once on the plane, walk to the toilet and open the door. Go in and pick up the toilet paper. Use it on the sink. Now push the call button and walk out.

Walk to the microwave oven, open it and put the egg inside. Close the microwave and turn it on. Walk to the first seat and pick up the cushion. A lighter will drop to the floor; pick this up. Now search through all the compartments above the seat till you find the oxygen tank. Pick this up and wait for the plane to land.

Walk to the automatic doors. Pick up the tree branch and give the peanuts to the two-headed squirrel in the hole. Use the tree branch on the loose dirt. Walk to the cave entrance.

Now click on the WHAT IS command, and move the cursor around the screen till you find the abandoned birds' nest. Walk up to it and use the golf club on the birds' nest so you can pick it up. Use the WHAT IS command again to find the fire pit. Use the nest with the fire pit, then use the tree branch with the fire pit and finally use the lighter on the fire pit.

Now walk to the strange markings and



use the yellow crayon on them. A door will open; go through this. Use the remote control and pick up the blue crystal. Now go straight back to the airport. Use the reservations terminal and buy a ticket to San Francisco.

Go to the plane. Walk through the automatic doors and go to 14th Avenue. Go to the door with the drop slot in it, and use the blue crystal in the drop slot. Wait. When the door opens listen to what Annie has to say.

You can now use the command SWITCH, which allows you to control three other characters - Annie, Melissa and Leslie - as well as Zak.

Go out the door and walk back to 13th Avenue. Walk to the bus. Now switch to Annie. Pick up the blotter, and then pick up the plastic card which is hidden beneath the blotter. Walk out the door and go to the bus. Switch to Zak and use the kazoo.

When the door opens, use the cashcard in the card reader. Switch to Annie and use the cashcard in the card reader again. Now use the reservations terminal and buy a ticket to London. Go to the plane. Walk through the automatic doors.

Switch to Zak and use the reservations terminal to buy a ticket to Miami. Walk to





the plane. Give the book to the bum, and he'll give you a bottle of whisky as well as returning the book. Use the reservations terminal and buy a ticket to Cairo. Walk to the plane. Use the reservations terminal to buy a ticket to Katmandu. Walk to the plane.

Walk outside. Now walk to the guard and give the book to him. The guard will open the door for you; go through it. Walk to the guru and listen to what he has to say. Go back outside. Walk to the bale of hay and use the lighter on the bale. Now go left to the jail and pick up the flag pole. Walk back to the yak, and use the cashcard on the licence plate.

Use the reservations terminal and buy

a ticket to Kinshasa. Walk to the plane. Walk outside. Now walk through the jungle till you come out of it. Walk to the shaman's hut and go inside. Give the shaman the golf club. The shaman will now lead you outside – then he and two other natives will dance around a fire.

When they stop, they'll bob up and down. You must make a note of the order in which they do this – you'll need it later in the game.

Now go back through the jungle to the airport. Use the reservations terminal and buy a ticket to Cairo. Walk to the plane.

Use the reservations terminal and buy a ticket to London. Walk to the plane.

Use the reservations terminal and buy

a ticket to San Francisco. Walk to the plane.

Use the reservations terminal and buy a ticket to Lima. Walk to the plane, then walk outside.

Walk through the jungle till you've worked your way through it. Now use the breadcrumbs on the bird feeder. Then use the blue crystal on the bird. You can now control the movements of the bird.

Fly right till you find a huge carving. Fly to its left eye and pick up the scroll. Now make your way back to Zak and give the scroll to him. Switch to Zak and make your way back to the airport... and that's where you'll have to remain till next month.

## ■ SWORD OF SODAN

Amiga

The surprise success of Discovery's *Sword Of Sodan* has created hundreds of frustrated players – but fret no longer, because here's **Daniel Vernon** of Doncaster with some handy hints.

# DOMAIN EVENT

## ■ BAAL: maps of the three domains

Kevin Griffiths of Wolverhampton produced these detailed maps for *Psychapse's Baal*, showing the coordinates of all the rocket pads.

Rocket pad

Rocket fuel

Parts of the war machine



Start

Finish

Force-field generator

S  
F  
1

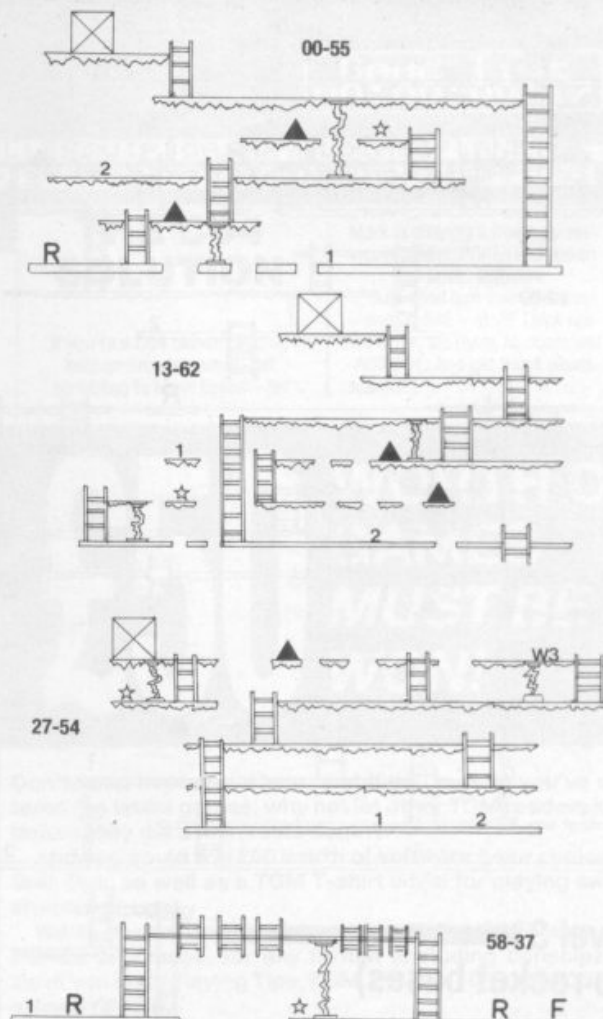
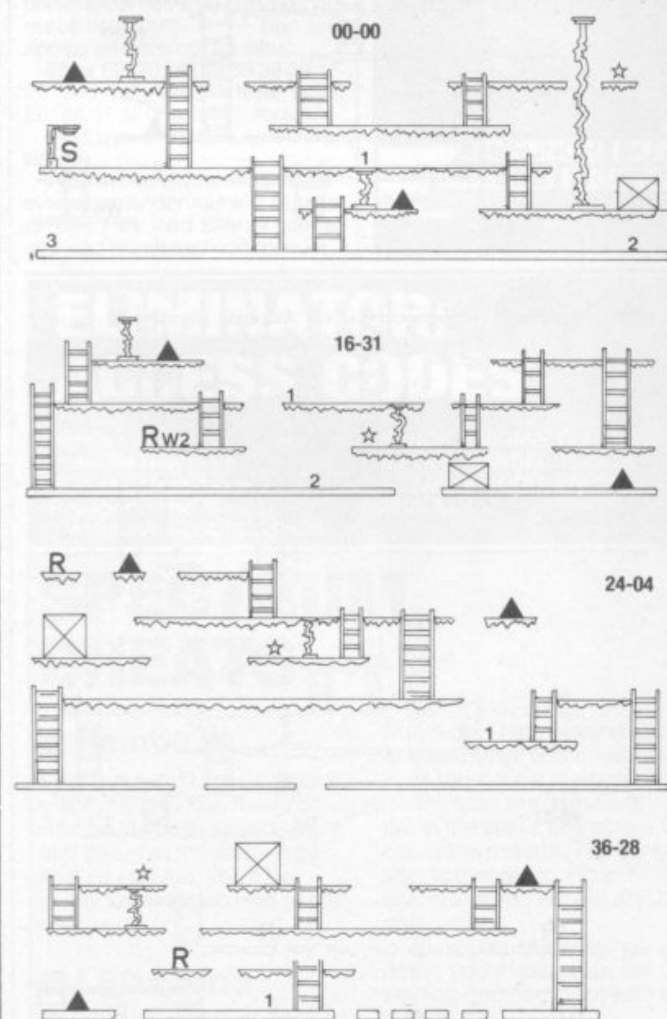
Weapon cartridge 2

Weapon cartridge 3

Refuelling point

W2  
W3  
R

### Level 1





### In general

Save potions for later levels (5 upwards), and try and to keep as many as possible for the last level – where you'll really need them. There's no time limit so don't rush to complete a level, unless you have the power shield activated and want to use it on the next level.

### Level 1

As soon as the level begins jump forwards until you hear the guard telling you to halt, then begin attacking. Jump as close to the guard as you can to avoid being stabbed.

### Level 2

When you're between the single and double spikes attack the guard. Instead of following him, back off a little and then jump forwards and hit him when he approaches.

### Level 3

If the first two men are too far away to be hit with a kneeling strike, just change to an overhead blow. The men will then come a little closer, allowing you to hit them with the kneeling strike.

Attack the giant with the overhead blow. But never jump into

him, because his club will drain your energy.

### Level 4

To kill the fat guys, just kneel and stab. The dull sprites will continue to jump into your sword till they die!

### Level 5

When attacking the zombies, always kneel down – this will prevent you from being injured by their arms and the substance they spit at you.

### Level 6

Use the power shield – this will

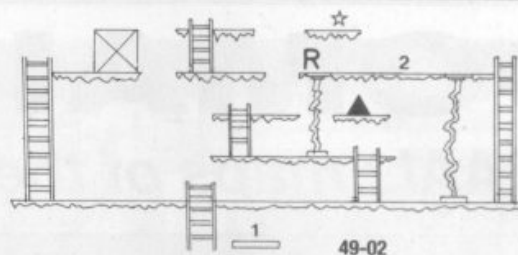
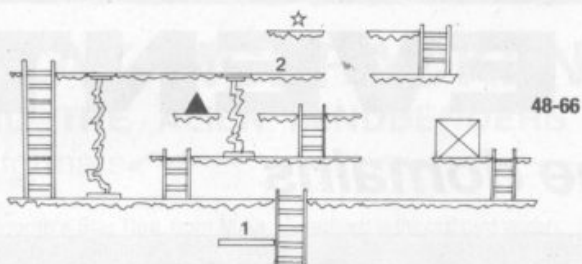
stop you from falling into the traps. Jump towards the man and continue to hit him. If he runs away, follow him.

### Level 7

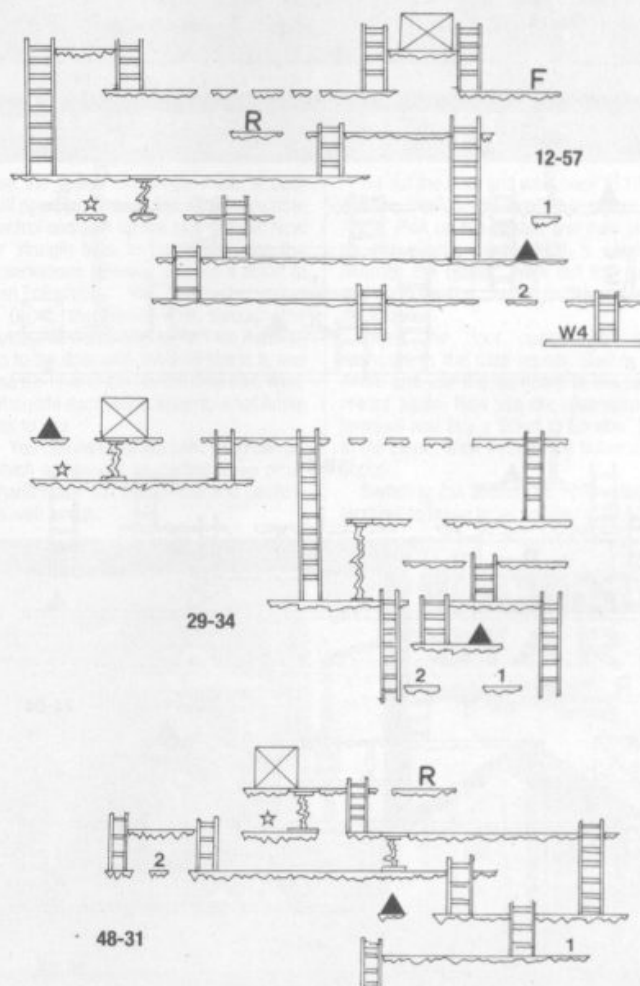
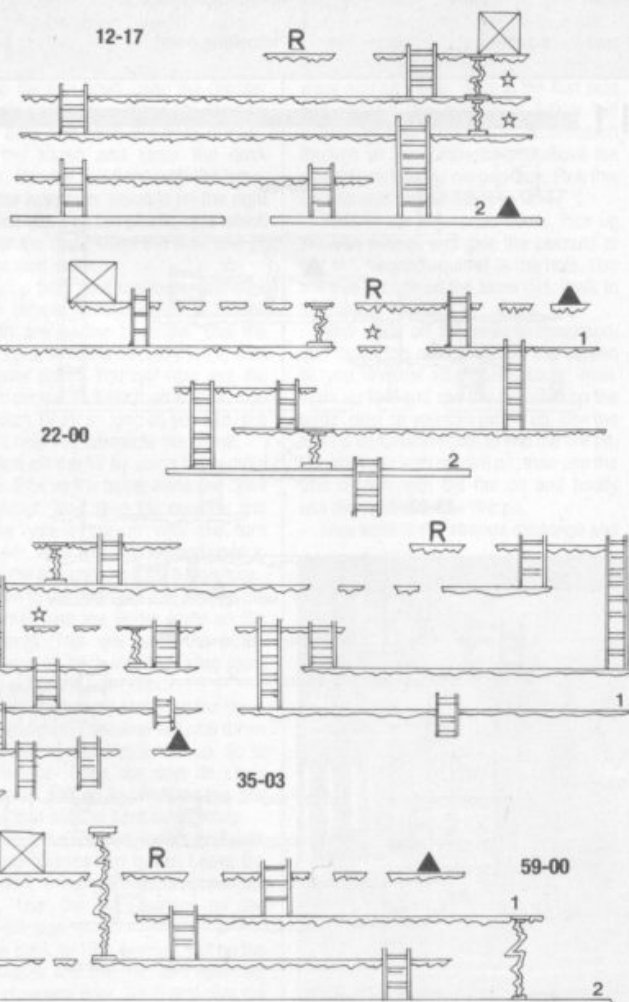
Walk forwards till you're in line with the body on the wall. You can kill the flying creatures with an overhead blow. Use a magic zapper to kill the man at the end of the level.

### Level 8

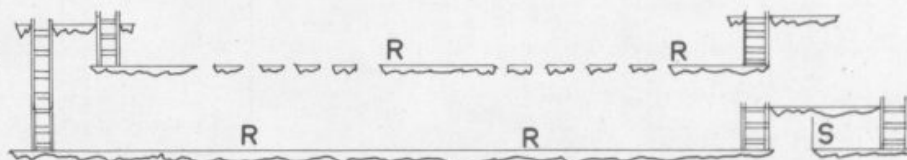
Be prepared to jump the fire that rushes along the floor. And the level gets more difficult when walls start to cave in. However, if you



## Level 2



## Level 3 (no rocket bases)





keep looking at the top of the screen you'll get an early warning when a wall is about to collapse.

The fire will stop when the steel spikes appear. These are more deadly than the fire, and you'll lose a whole life if you get impaled. So concentrate more on avoiding the spikes than the walls.

When you reach the blocks section, walk to the edge of the lava pool and wait till the first block is almost at the edge. Then jump forwards onto it.

When you've jumped onto the third block, time your next jump very carefully because parts of the floor will crumble away if you jump too early. When you finally reach the stone skull, kick it in the teeth

to make it slide backwards and reveal the exit.

#### Level 9

Kill the two pairs of creatures with the overhead blow. Jump past the caterpillar-like creature when its head is as far down as possible. Now walk past the potion and a bird will follow you.

Walk back to the creature and the bird will eat it. Once the bird has finished eating, walk forwards till the water starts to rise. When the water is below the bird's mouth, you should begin to jump.

Continue jumping till the water is above the bird's mouth. The wall will now disappear, allowing you to continue forwards again.

You can increase your hit

strength by hitting the grey creatures on top of the wall. When they fly over you, use the overhead blow to kill them.

Hit the bits of fire with your sword to prevent them from injuring yourself. And when the wall disappears, walk forwards to finish the level.

#### Level 10

As soon as you appear on this level use the magic zapper. Then activate a power shield and jump towards the man. Hit him once to kill him, then jump to the right to complete the level.

Complete this level as quickly as possible – because you'll need the power shield on the next level.

#### Level 11

Jump towards the big creature and continue hitting it till it disappears – the power shield should last long enough for you to do this.

When the wizard appears, don't panic – you can actually jump over his energy bolts.

To kill Zoras, you'll need two magic zappers and a power shield. When he fires lots of blue energy bolts at you, activate both the magic zappers and the power shield.

Walk towards him and start to hit him. If you've used both magic zappers, you'll only have to hit him two or three times to kill him. Now walk to the right to see the end sequence.

## ELITE

PC

Thanks to David Cheung of Crewe, any PC Elite player can get 99999.9 credits instantly. You'll need the DEBUG and ATTRIB commands (ATTRIB is only in DOS versions 3.0 and higher).

Type PROMPT EPEG and press the RETURN key; the current directory name will now be displayed to the left of the cursor.

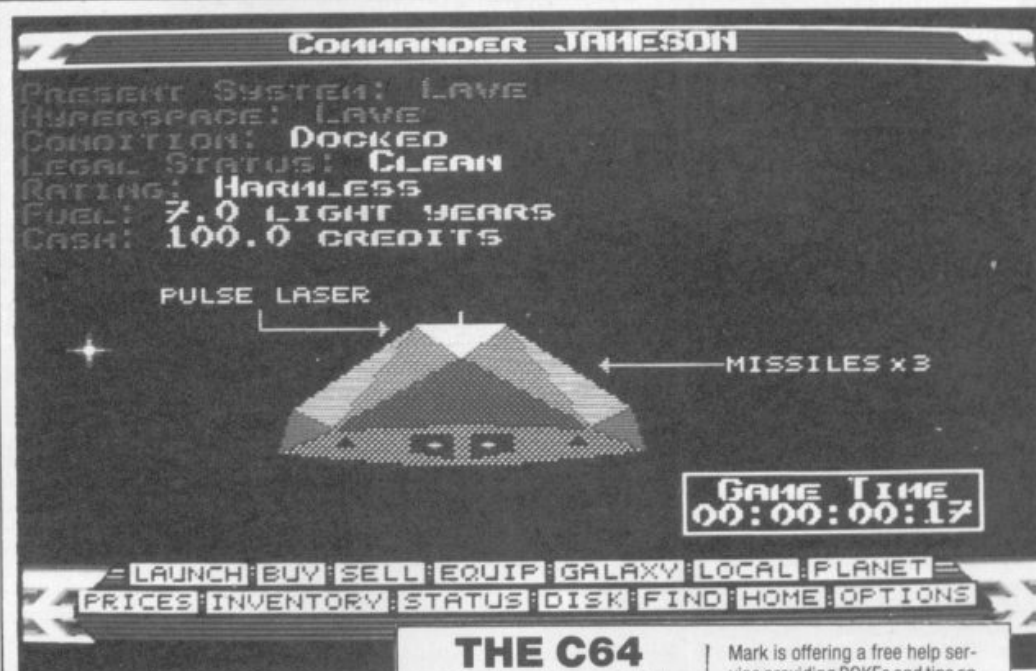
Now type PATH:A: (make sure your disk is in drive A), and hit RETURN.

Type DEBUG followed by the commander name you're using (eg DEBUG DAVID.CDR). A '-' sign will appear as a prompt for input.

Enter E0120, 39 39 39 39 1F 29 and hit RETURN. Now enter E0188, 3F 42 0F and RETURN again.

Then type W, RETURN, type Q and RETURN.

Type ATTRIB DAVID.CDR (or whatever commander name it is), and RETURN. Now load Elite as normal and load the altered commander.



## ELIMINATOR: ACCESS CODES

Here are all 13 level-access codes for Hewson's *Eliminator*, from Shay Rapaport in Israel:

AMEOBA, BLOOP, CHEEKI,

DOINOK, ENIGMA, FLIPME, GEEGEE, HANDEL, ICICLE, JAMMIN, KIKONG, LAPDOG, MIKADO.

## SPECTRUM CHEATS

### Rambo III

Paul Busow of Liverpool has a quick cheat to skip levels on *Rambo III*. Press SYMBOL SHIFT and QWERT at the same time and, hey presto, you'll be immediately transferred to the next level.

### LED Storm

Thanks to David Cathlidge of

Stoke-on-Trent, anyone can amass a large score without even touching a joystick.

Just start the game and press the BREAK key before the countdown starts. The border should turn green. Press BREAK again, and you should quit the game.

When you start playing again, you'll appear on the starting grid complete with a large score.

## THE C64 SOLUTION

If you're a C64 owner needing help on arcade games, get scribbling to Mark Essen – for

Mark is offering a free help service providing POKEs and tips on the latest software.

Just send him your problems – and an SAE – at 26 Thick Hollins Drive, Meltham, Huddersfield HD7 3DL. And get those aliens scared!!!

# £50

## WORTH OF GAMES MUST BE WON!

Don't keep secrets – share 'em! If you reckon you've mastered the latest games, why not let other TGM readers know before they die a miserable death?

And you could win £50 worth of software (your choice) for Star Tips, as well as a TGM T-shirt (ideal for playing sweaty shoot-'em-ups).

We're always on the look-out for EXCLUSIVE hints, tips, POKEs and maps, for any format (including consoles), so send 'em in to: Playing Tips, TGM, PO Box 10, Ludlow, Shropshire SY8 1DB.



# This glorious empire

## SPACE 1889

Roleplaying rules, 216pp hardback  
Games Designers Workshop £17.95

**I**t's 1889. Queen Victoria has been on the throne for 52 years, and Great Britain is at its mightiest. Thanks to the miracles of Victorian science, British warships rule not just the waves but the skies as well. Dare you brave the hazards of interplanetary travel in the wooden, steam-powered ships of the ether, risk encounters with hostile Martians in the search for groves of marvellous 'liftwood', dodge dinosaurs in the swamps of Venus and explore exciting new frontiers of the solar system? If so – read on!

*Space 1889* is the long-awaited new release from Games Designers' Workshop, US creators of the popular *MegaTraveller*, *2300AD* and *Twilight 2000*. Unique in concept, the game allows players to adventure in a setting that could have come straight from the imagination of Jules Verne or HG Wells – an alternate Victorian era where scientific advances, notably the wonderful Ether Flying invented by Thomas Edison, have opened up whole new worlds of exploration and conquest.

With steam-driven space battleships powered by ingenious solar boilers, the various colonial powers of Earth have spread their conquests as far as Mars and Venus. However, the new human settlers on the two worlds don't have things all their own way – the warlike Martian Sky Lords and the hostile Venusian flora, fauna and climate are all constant menaces. And there are more familiar threats too, as the nations of Earth carry their traditional rivalries into space and compete for a share of the rich of the solar system.

The highly original alternative reality is a truly magnificent setting for an roleplaying adventure. Players take on the roles of explorers, detectives, inventors, interplanetary diplomats or members of Her Majesty's armed forces in quest of fame and fortune. The rule system used is a new and very simple one, laying emphasis firmly on fast and furious action rather than a high level of detail. The basic details of a players character are specified in terms of six attributes – strength, agility, endurance, intellect, charisma and social level – each rated on a scale of 1 to 6. In addition, a character will possess ratings in several more specialised skills. Starting skill ratings for a character are aquired in two ways. All characters possess certain skills automatically, with an initial score derived from the corresponding Attribute value. So a character with a high strength

score will be good at Fisticuffs (which cover all unarmed combat – not just boxing), whereas a high intellect score gives a character good observation. In addition, each player choses a career for their character, which brings with it further skill levels. There are a range of typical Victorian occupations to select from – such as Detective, Cavalry Officer, Inventor and even Anarchist. Finally, a few more skill levels can be purchased using a simple points system. All that remains is to choose a name for the new adventurer and you're ready for play. The whole character generation process need only take five minutes, and there are handy pull out reference tables to speed things up further.

The remainder of the rules system is equally simple and straightforward. Use of skills is determined on a 'difficulty number' basis, where a player roles a number of dice equal to the relevant skill system must beat a target score set by the referee to succeed – whereas for an untrained human to ride a Skril – the vicious flying mounts of the Martians, is an impossible riding skill – difficulty number 20. The combat resolution system is quick and easy too, being based more around fast moving action than detailed calculation and tactics. Rules are provided for heavy weapons (artillery and the like) and aerial battles as well as man-to-man combat.

The game clearly isn't intended for hack 'n' slash play, since personal combat tends to be very one sided – the protagonist with the best weapon skill will usually win out very quickly, and wounds are quite serious with a single good hit knocking down most opponents.

The simplicity of the basic mechanics leaves the vast majority of the rulebook free for background material. There is a chapter on the Victorian age, providing a brief summary of the society, politics and people of the era. Twenty pages are devoted to the range of equipment players may come

across, from simple tools such as knives, gadgets like cameras, lab equipment and the new-fangled 'telephonic instrument', transport equipment from bicycles to Martian war kites and weapons of all sorts. The 'travel and navigation' chapter includes a whole range of hazards for players to face, from bush fever to Martian windstorms. The Moon, Mars and Venus each have a chapter devoted to them, with the Martian chapter being the most extensive, featuring the four different Martian races such as the Canal Martians with their advanced but stagnating civilisation, and the barbaric High Martians (so named for their flying ability, not their culture!), and providing several suggestions for adventures.

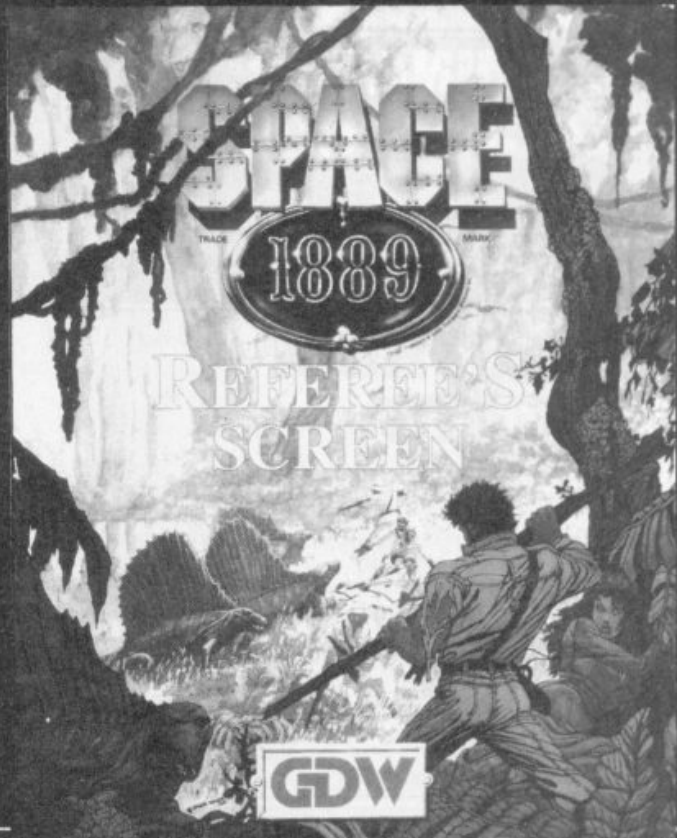
A particularly entertaining chapter deals with science and invention. Player characters who are inventors by trade may conduct research to try and develop new gadgets of varying degrees of usefulness, which often provide natural opportunities for adventure. And of course the referee may confront players with Mad scientist inventors too. Many possible inventions are detailed, such as Freeze Rays, helicopters, gravity control and of course Synthetic Life.

Many add-ons and adventure supplements for the *Space 1889* system are scheduled for release in the coming months, the only one

available as yet being a 'Referee's Screen' pack. This contains all the important referee tables from the rulebook, a 16 page booklet containing a few additions to the basic rules and more reference information on combat, travel and encounters; and two 'Stikkits' – high-tech paperclips to attach notes on to the screen during play. Hardly any of the material is new – the pack simply serves as an additional reference section for the basic rulebook. This is certainly a useful play aid, but it offers very poor value at £6.95.

Also available is *Sky Galleons of Mars*, the boardgame of ship-to-ship combat above the red planet, which allows two players to fight out battles between fleets of the Martian warlords and the aerial gunboats of the Royal Navy.

Overall, *Space 1889* has a lot to recommend it. The rules are simple and suited to fast action and lighthearted roleplaying at about the same level as West End's *Star Wars*. The presentation of the rulebook is, sadly, pretty poor being printed on low grade paper with just a handful of glossy colour pages and no index. Very large type is used throughout, so the total amount of material included is less than the 216 pages would suggest. However, this is one very entertaining package and after a play you'll soon be wanting to return to the Crown Colony of Sytis on Mars!

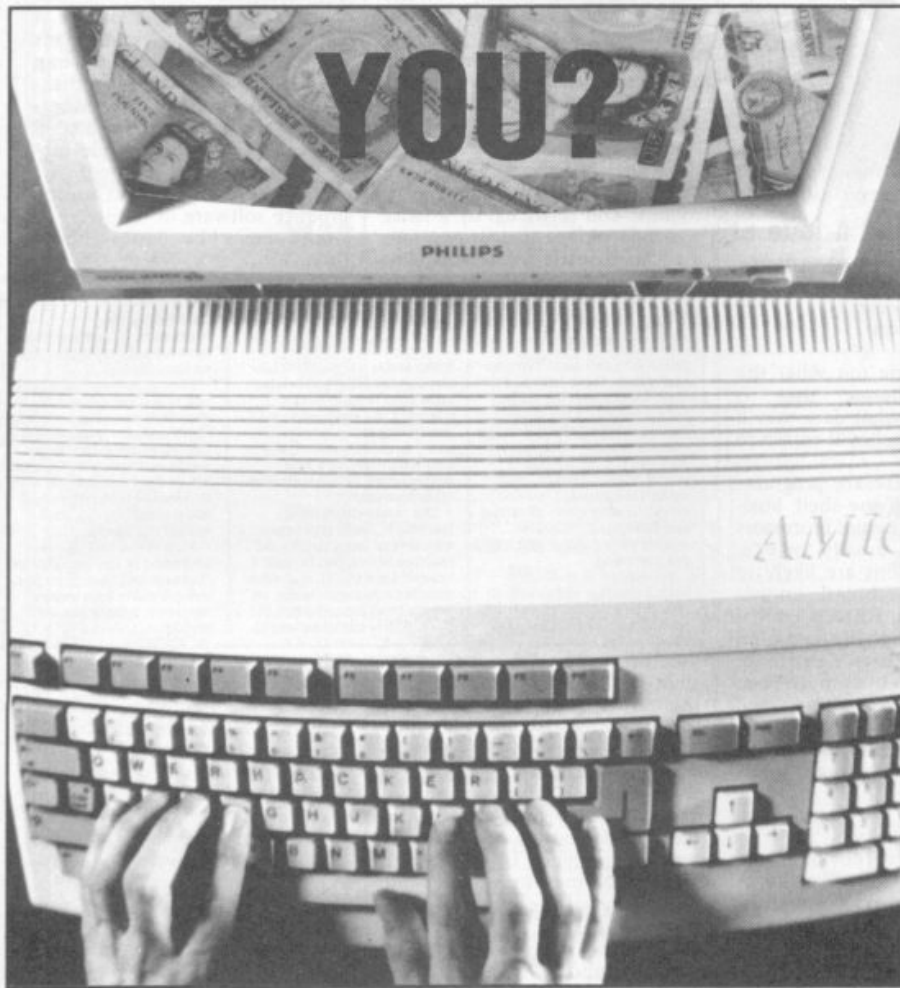




# BACK

COMPUTING—

## What's in it for



A career with computers promises bright lights and big money — if you've got the brains, they'll make it worth your while. And games programming is only the tip of a massive iceberg of opportunity, as TGM reveals in this month's complete guide to jobs, training and your future in your hands.

● Page 80

### WHAT'S INSIDE

Careers in computing page 80  
Toolbox PLUS books page 83  
Comms: BBs special page 88  
Repair services page 90-92  
Information Desk page 94

Readerpage page 96  
Classifieds page 98  
Controversy page 102  
Mel's Trivia Quiz page 104  
Competition results page 104

### Too many broken hearts

That's what this month's top letter-writer has — he's angry about hyped-up software houses wasting the incredible potential of the 16-bits. Will it happen to the Konix Multi-System too? See what he thinks, and then read our opinion.

● Page 96

W  
Y  
T  
M  
S

TGM018

**MSX**

**CANCELLED  
DUE TO  
LACK OF  
SUPPORT!**

What turned the compatible dream into a nightmare? This month's Controversy column unearths the REAL reasons behind MSX's failure.... and reveals how it's slowly coming back to Britain.

● Page 102

INDUSTRY: WE WANT YOUR PRODUCT NEWS! CALL BACK BYTES  
EDITORIAL Robin Candy ■ ADVERTISING Lee Watkins ■ 0584 5851



# CAREERS DOING IT FOR MONEY

**Gizza job, guv! There's loadsamoney and a lode of opportunity waiting to be tapped by programmers, engineers and journalists.**

If you ever sat up all night struggling with the mysteries of Sinclair BASIC, marvelled at the finished slickness of an Amiga-drawn painting, or tried to recreate Pet Shop Boys with an ST, chances are you've toyed with the thought of doing this forever... for real.

But the going is tough in the games world – no more than a few thousand make their living from it, thousands more want in, and there's so much competition it's difficult to make a decent living in what many consider the most desirable area: programming.

Yet thousands of opportunities exist in other areas of computing, from programming to repair to journalism. And, just as most computers are found in businesses, many programming jobs are there too – working for companies big enough to afford their own mainframe installations with teams of computer staff. Government and big public bodies, like the police, are major employers too.

Of course, this may tie you to working on a particular kind of program all the time – banks and insurance companies, for instance, will mostly want software to cope with the fine details and massive volume of their financial deals. But the advantage of that is that you can quickly gain expertise in a particular area, and move ahead quickly.

For what most of these employers want is business knowledge as much as computer knowledge. Large installations (that's the jargon) tend to use very high-level languages – things like dBase – which aren't particularly difficult to understand, so the actual act of programming is simple.

It's quite different from games programming, where mastering assembler or machine code is a herculean task in itself. The real challenge of business computing

comes in figuring out what the non-computer-literate user is going to want: what data they'll put in, and what they'll expect to get out.

Of course, there are programmers writing off-the-shelf business packages like word processors or spreadsheets, usually for PCs, and these positions are likely to require more technical knowledge. For a start, RAM is limited on PCs (even when it's measured in Mb), and it takes all the tricks of the trade to cram in as much code as possible for a high-powered program; by contrast, as far as program code is concerned, mainframe memory is virtually unlimited.

## So much for theory

How'd you start? An obvious route might be to take a university or poly course in computer studies, but this really isn't necessary unless you're planning to be a high-powered academic computing type.

If you do want to go to uni/poly, probably the ideal course is a joint degree in computer studies and business studies. 50-odd different universities and about 30 polys provide computer training, so there's all the choice you could want; and some courses are specialised. For instance, the universities of Bath, Birmingham, London (Imperial College) and York all offer software engineering (jargon for programming) degrees.

A-level computer studies won't do any harm, but maths is probably the only essential.

Otherwise, jump straight into the industry. This can be done either through a short course, or by joining a large company's training scheme. Courses are sometimes run by local education authorities (LEAs) and sometimes by expensive private colleges; if

you can find one in your area, an LEA course is probably just as good and a helluva lot cheaper.

Over a few months, you'd learn the principles of computer systems, perhaps a little about hardware, and one or two languages: most likely COBOL (Common Business-Oriented Language), now little-used but still oft-taught, and one other. The difficult but powerful C language is the flavour of the month right now, so if you find a course that teaches C, grab it.

Corporate training schemes will give much the same education as a short course, but usually with the promise of a job at the end if you do well enough. This gets your foot on the bottom rung of the ladder, but of course there's more competition...

## Rich rewards

Because computing is a relatively new industry, it hasn't become codified and restricted by a strict pecking order the way, say, medicine and the law have. Ability is what counts, and if you've got it

Germany, Belgium and the Netherlands are favourite destinations.

Jobs are available all over Britain – wherever there's business, in fact – so you don't have to be subjected to London. Working conditions are generally easygoing; colleagues are young. And an increasing number of companies are now allowing programmers to work at home some of the time, communicating with head office by modem.

## So you don't want to be a programmer

The computer world, like any major industry, has thousands of hangers-on – well, perhaps that's an unkind phrase. But just as an army has regiments of map-makers, radio operators, cooks and bottle-washers behind every force in the field, so there are ample supporting roles in computing. And though these people don't directly produce software or hardware, it would never be done without them.

Such positions include systems

## Telling IT like it is

Those who can do: those who can't teach: those who can't write about the subject.

Everyone uses the aphorism putting down teachers and journo's when it's helpful, yet both careers can be ideal if you're interested in IT (information technology) but don't fancy the nitty-gritty of coding and debugging. Of course, neither pays quite as much as programming.

For several years there's been a shortage of teachers in all science subjects, though this situation may be corrected as

fewer and fewer students take arts degrees. Nearly all teachers these days need to have a degree in the appropriate subject (which takes three years) and a qualification in education (one year), or a BED degree which blends both (and takes four years).

The career structure of teaching is pretty regimented, with several years 'in the field' required before you become a head of department, and more experience essential to rise to deputy head, head teacher, etc. But it differs school by school.

## Hacking hacks

Journalists, by contrast, rarely have formal training (except on local papers).

As with programming, once you're in it's ability and experience that count. There are dozens of computer publications in Britain, ranging from major weeklies to specialised monthlies, and not many people who understand both computing and journalism, so a good worker can rise fast.

Most of the best jobs are advertised in *The Guardian* on Mondays and Saturdays. The starting salary for a trainee reporter is usually around £6,000.

you can soon hold down a responsible position. Recent advertisements in *Computing*, one of the main locations for job ads, show what the leaders of the pack can expect:

■ Up to £21,000 as an analyst programmer (slightly above a simple churning-out of code) with a year's experience of COBOL on DEC VAX machines and some knowledge of the financial business.

■ Glasgow's city government are offering up to £17,658 for analyst programmers with – again – just a year's experience of COBOL or RPG (a much-used language).

■ British Aerospace are offering up to £17,000 for systems analysts with at least two years' experience of IBM mainframes.

Of course, these are the plum posts, and only the best will get them. But even for beginners, the general shortage of computing staff means pay is good. The National Curriculum Council in York were recently offering £7,641 for a 20-year-old to help run the administrative side of their installation – effectively a beginner's, or near-beginner's, post.

Computing is a flexible career, too. Experienced programmers and analysts can get posts on the Continent quite easily, because Britain's computing community is more sophisticated than most of Europe's (except France's): West

administrators, who keep a large installation running by making sure all the hardware, software and users are in order. (It's the systems administrator who steps in heroically when one of those massive network-infecting viruses is discovered.)

Technical authors write the manuals for software and hardware; depending on the product, you might be asked to make a complicated program understandable by idiots, or thoroughly cover all aspects of a hardware system for the benefit of repairmen.

Computer repair is a big business in itself, but like hardware design it's really an area of electronics, and you'd train for it the same way.

■ Further information: there's no one body dealing with computer training and work, so the best bets are those old standbys – a careers teacher or public library.

Jobs are advertised in the industry's press (notably *Computing*, *Computer Weekly*, *Datalink* and *Computer Talk*, which should be available in large libraries but aren't at newsagents), and in *The Guardian* on Thursdays and Saturdays. Alternatively, try writing straight to a potential employer – any large company or institution – and you may be lucky.



**NIGEL MANSELL'S  
GRAND PRIX  
ST & AMIGA 4.99**



# ROCK STAR



Could you manage this  
Rock Star ?



CodeMasters Software Company Ltd., PO Box 6, LEAMINGTON SPA, CV33 0SH

## K. B. W. SOFTWARE

AT LEAST 20% OFF ALL SOFTWARE AND HARDWARE  
ALL MAJOR FORMATS CATERED FOR

\* FREE PEN WITH FIRST 200 ORDERS \*

	ATARIST	AMIGA
AFTERBURNER	14.99	16.99
BATMAN	14.99	14.99
CAPTAIN BLOOD	16.99	16.99
CUSTODIAN	14.99	14.99
GALACTIC CONQUEROR	14.99	16.99
HEROES OF THE LANCE	16.99	16.99
INCREDIBLE SHRINKING SPHERE	14.99	16.99
LAST DUEL	14.99	14.99
LED STORM	14.99	14.99
OPERATION WOLF	14.99	16.99
PHANTOM FIGHTER	14.99	14.99
PURPLE SATURN DAY	16.99	16.99
R-TYPE	14.99	16.99
RAMBO 3	14.99	14.99
ROBOCOP	14.99	16.99
TECHNOCOP	16.99	16.99
TRIVIAL PURSUITS	14.99	14.99
T.V. SPORTS FOOTBALL	20.50	20.50
WEC LE MANS	14.99	16.99
XENON	14.99	16.99

\* EXTRA 5% DISCOUNT ON ORDERS OVER £20 \*

MOST OTHER TITLES AVAILABLE EFFICIENT AND FRIENDLY  
SERVICE IN CASE OF DELAY WE LET YOU KNOW.

PAYMENT BY CHEQUE OR P.O. ONLY TO:-



K. B. W. SOFTWARE  
18, BRYNHAFRD TERRACE  
CASCADE, HENGOED, MID-GLAM  
TELEPHONE HENGOED (0222) 838205



TOOlibox  
Products and news to make life bearable

PC \* C64 \* APPLE II

## Produce your own Epyx

Epyx don't just program games – they've got their own Designer Series of software, which includes *Print Magic* and *The Home Video Producer*.

*Print Magic* is similar to Electronic Arts's *Deluxe Print* – it's a card/memo/invitation designer which includes a number of printer drivers.

The package also has a library of graphics and typefaces to suit most occasions from parties to school-work. And if you can't find a suitable image, just use the built-in art utility to design your own.

*Print Magic* is available for the PC and Apple II (both £24.99).



MERRY  
CHRISTMAS

LET'S  
CELEBRATE



Thank You

Print Master: for the good-looking letterhead



# Video titling

The Home Video Producer is aimed at amateur video makers who want to add title pages and simple animations to their productions.

The program includes all the essential commands for constructing your own 'film' sequences, using a library of graphics included in the package. And it's very easy to use.

But there are some serious drawbacks: the graphics are not of a particularly good, and there's no provision for designing your own.

All in all, *The Home Video Producer* is best suited for designing title screens with scrolling messages – nice for adding that extra touch to home videos, but of little use to the professional.

It's available for the C64 and PC (both £19.95).

**Epyx:** Units 2/3, Holford Way, Holford, Birmingham B6 7AX ☎ (021) 356-3388.

## AMIGA

# Hard drivin'

Thanks for the memory! Commodore are finally releasing an add-on hard disk for the Amiga, giving you 20Mb of storage – the equivalent of over 22 floppies – built into the computer. It's suitable for memory-intensive applications like animated graphics and music.

Called the Commodore A590, it plugs into the back of any Amiga and works like a second floppy drive – no changes to the operating system are necessary.

Commodore sources have also indicated to TGM that an Amiga with built-in hard disk is likely. This seems plausible in the light of Commodore's efforts to sell the high-end Amiga A2000 to businesses, most of which will be used to hard-disk PCs.

Apart from being more convenient, the advantage of a hard disk is that it's quicker to access than floppies.

Prices have yet to be finalised, but expect to pay in the region of £500-£600.

## Commodore Business

**Machines:** *The Switchback*, Gardner Road, Maidenhead, Berkshire SL6 7XA ☎ (0628) 770088.

## AMIGA \* PC \* YAMAHA C1

# Avoid those deadly synths

Editing sounds on a synthesizer is a notoriously laborious process. And when you consider that any sound may have more than 50 parameters that can be altered, working on a small LCD screen can be a pain.



Now you see it, now you don't: replace the tiny synth screen with a Sound Quest editor

The obvious answer is to hook your synth up to a computer, and use a sound editor program to create and store new sounds. Libraries of sounds can be kept on disk and sent to the synthesizer when needed.

Among the leading sound editors are the *Sound Quest* range for PC, Amiga and Yamaha C1 – and Computer Music Systems are now distributing them.

Instruments supported include the DX, CZ, M1, K1 and MT-32 range of synthesizers and tone modules. As well as editing existing sounds, *Sound Quest* editors generate random sounds which users can then edit to suit their personal preferences.

All parameters are shown on screen at the same time, and sound envelopes are represented by simple line graphs to make editing easier.

Prices for the *Sound Quest* range start at £79.99.

**Computer Music Systems:** 6 Manor Road, Teddington, Middlesex TW11 8BG ☎ (01) 977-4546.

## C64 \* CPC \* PCW \* ST

# DTP update

8-bit DTP is still in the running, thanks to Database Software – they've bought the manufacturing rights to AMS's back catalogue of software for the C64, CPC and PCW, as well as the ST. The deal includes 11 packages, seven of which are DTP programs.

*Stop Press* is available in two versions, either with or without mouse, for the PCW (£49.99, £89.99 with mouse), C64 (£39.99, £69.99 with mouse) and CPC (£49.99, £79.99 with mouse). Also available for the CPC is another DTP package, *Extra! Extra!*, priced £24.99.

The remaining packages are *MAX* for the CPC (£19.99), *Desktop* and mouse for the PCW (£79.99), *ART* and mouse for the CPC (£69.99), and the popular *Flair Paint* for the ST (£34.99).

AMS (Advanced Memory Systems) are best known for their mice, and last year released *DTP Solution*, hailed as a major advance in cheap DTP (TGM008).

**Database Software:** Europa House, Adlington Park, Adlington, Macclesfield SK10 4NP ☎ (0625) 878888.

## SPECTRUM \* C64 \* CPC \* BBC

# This sporting life

8-bit owners can jockey for a better position with new software from Boxoft – when you enter the form and starting-price forecasts from a newspaper, *Boxform* and *Handicap Winner* will quickly analyse the race and pinpoint the horses which represent the best value for money.

And *Football Boxform* analyses the form of all 218 clubs in the English leagues, the Scottish league and the four minor leagues. The program then displays the odds for home wins, away wins and draws. The computer also stores details of past form, which

can be updated by entering the latest results.

Each program costs £11.95 for Spectrum, CPC, C64 or BBC B.

Also available for the Spectrum only is *Punter's Partner* (£4.95), which calculates the winnings from various types of bet.

**Boxoft:** 65 Allans Meadow, Neston, South Wirral L64 9SQ ☎ (051) 336-2668.

## PC

# Personnel services

The servant problem is enormous – but at least businesses can keep track of their servants (sorry, employees) with *Artronic's Time Master*, the second title in the Master Series of business software

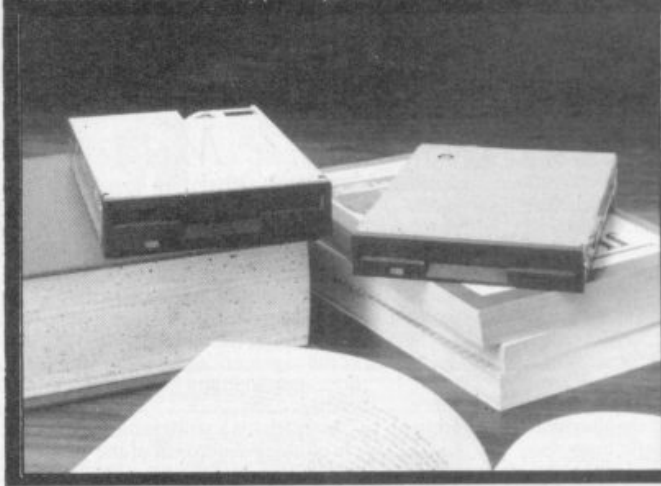
## PC

# The little and large drive

Fat no longer means happy for disk-drive/printer manufacturer Citizen – they're set to release a new range of 'the world's smallest' 3.5-inch disk drives. Two models, the UODC and UODD, were launched at Cebit, the Hannover computer show, in March.

Both are 19.5mm thick by 101.6mm wide by 130.0mm long and can read disks of up to 1Mb storage capacity; the UODC having a slightly faster track access time. Prices are still to be announced.

**Citizen:** Wellington House, 4/10 Cowley Road, Uxbridge, Middlesex UB8 2XW ☎ (0895) 72621.



PRESS ANY KEY



for the PC.

The package provides a number of services to the employer, including staff files, client files, time sheets, work in progress, work charged to date, and disbursement codes.

Quote Master, the previous Master Series package, produces price lists and quotations for jobs.

Both packages cost £49.95.

**Artronic:** 1-3 Haywa Crescent, Harrogate, North Yorkshire HG1 5BG ☎ (0423) 525325.

## ARCHIMEDES

### 3-D anims

This month's TGM graphics special may be dominated by Amiga animation packages, but Archimedes owners aren't left standing still – thanks to Clares Micro Supplies and their 3-D animation package *Render Bender* (£79.95).

The program allows the user to design screens using 3-D objects. It's then a simple matter of joining the screens together to complete your animation.

*Render Bender* also uses advanced ray-tracing algorithms for a realistic effect. Ray-tracing is

a novel way of producing stunning reflections and shadows true to the laws of optics: the software takes into account all the relevant light sources before the exact shade of each pixel is determined.

**Clares Micro Supplies:** 98 Middlewich Road, Rudheath, Northwich, Cheshire CW9 7OA ☎ (0606) 48511.

## PC

### DTP bundle with Aries PCs

Watford Electronics have struck a deal to bundle AMS's DTP package *Finesse* with their range of Aries PC-compatibles.

Reviewed in Back Bytes TGM013 *Finesse* is a full WYSIWYG ('what you see is what you get'), GEM-based DTP package.

Also included in the bundle is *Multwriter2*, a word-processing package featuring a spelling corrector and mail-merge, a serial mouse and driver, MS-DOS version 3.3, and the *PC Organiser* software providing a pop-up diary and notebook. The entire bundle is worth about £300, say Watford.



Putting publishing on more desktops: bosses of Logitech UK (Nick Pearson, right) and Watford Electronics (Nazir

Jessa, left) sign for a super PC deal. See item headed DTP Bundle With Aries PCs.

# Reading matter

## The Media Lab Welcome to the future world

Ever wondered how you put a whole town on videodisk? Or create a hypertext soap opera? Or stop the computer shouting when you've got a hangover? These are the kind of things they're researching today at the Media Lab, a centre for technology experiments at the famous Massachusetts Institute of Technology (MIT).

And this 285-page in-depth look by noted American computer journalist Stewart Brand (*Whole Earth Software Catalog*, Rolling Stone) perfectly reflects the spirit of the Media Lab. Subtitled *Inventing The Future At MIT*, it's written in an eager, we-have-the-technology spirit, by a man who was obviously very impressed by the place. (Brand spent six months working there.)

But sometimes it would be nice to give the philosophy of technology a rest, and know a bit more about the machinery behind the futuristic marvels.

Brand gives enough teasers of

that, both in the text and the 24 pages of colour photos; imagine a computer handling 500,000 onscreen polygons, or the ultimate parallel-processing box – the Connection Machine, with 65,536 processors!

And what's really remarkable about the Media Lab is that even though these things may never become common – or at least not in our lifetimes – they actually exist right now, in the Media Lab. It makes you want to visit Massachusetts.

*The Media Lab:* Penguin paperback £7.99, ISBN 0-14-009701-5. Any bookseller should be able to order it.

**Barnaby Page**

## Blue Magic In the beginning was the PC

Probably the best of the recent books about IBM's endless corridors of power, *Blue Magic* makes a refreshing change from the tales of management squabbling which dominate so many big-business stories.

Instead, it's a straightforward, chronological account of the development of the PC – and it

throws up some amazing surprises. For instance, when IBM introduced that standard-setting machine in August 1981, they never expected it to sell big; within months, it had proved six times as popular as the doomsayers had forecast!

There's also a detailed look at the disastrous PCjr project of 1983, a failed attempt to produce a cheap home PC – it's only very recently those have successfully appeared from Amstrad, Atari and Commodore.

Authors James Chposky and Ted Leonsis are both experienced American computer writers, but (perhaps because IBM is such a megapowerful force on the American scene) they often take an annoying 'gee-whiz, weren't those inventors wonderful' attitude.

The book is sometimes sloppily written, too, repeating itself and veering from one topic to another (from component purchasing to the grim details of keyboard design...) like it's out of control. It's probably a case of information overload; these authors know a lot of minutiae from PC history, but can't quite figure how to fit it together.

*Blue Magic* is let down by these style problems, and by an occasionally poor index (no mention of the new OS/2 operating system, though it's in the text!).

But it's a fascinating insight into the early days of micros, not only the PC. And for anyone interested in how computers come into life, it deserves a place alongside Tracy Kidder's *The Soul Of A New Machine* and Ian Adamson and Richard Kennedy's *Sinclair And The Sunrise Technology*.

*Blue Magic: The People, The Power*

And *The Politics Behind The IBM Personal Computer*, Grafton Books hardback £14.95, ISBN 0-246-13445-3. Any good bookseller should be able to order it.

## Obituary: The Bug

It's a sad day for the computer industry. *The Bug* fanzine, which has been published periodically for the last five years, is about to disappear.

For, after 37 issues, the editorial team – Jaron Lewis, Jeffrey Davy and Kelsey Lewis – have decided to call it a day.

Jaron and Jeffrey will be starting at university in the autumn, while Kelsey is moving away from London. And with the editorial team dispersed around the country, it will no longer be feasible to produce the fanzine. But their work will likely continue to appear in other magazines – perhaps including TGM.

*The Bug* provided news, reviews and playing tips for the Spectrum CPC, PC and Amiga, but it was most well-known for its strong attitudes against software sexism and racism.

The final issue will be a commemorative edition packed with features, reviews and tips – there's even the possibility of a cover-mounted cassette game. Priced 55p, it goes on sale at the end of July.

**Bug Publications:** 28 Leaside Avenue, Muswell Hill, London N10 3BU. Several phone lines; check issue for details.



# 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**

**£82.95**

**AMIGA VERSION ONLY**

**£79.95**

including VAT and delivery

## ATARI

All our ST prices include: mouse etc. plus 5 disks of software including wordprocessor, utilities, graphics, game and demos. Phone us now for a quote on any combination of hardware.

### 520 STFM SUPER PACK

Includes 520 STFM with 1MEG drive, over £450 worth of software, joystick, mouse, User Guide and 5 disks of Public Domain Software. Software included is:

Marble Madness	Test Drive	Chopper X
Beyond Ice Palace	Buggy Boy	Ranarania
Thundercats	Quadrail	Starquake
Summer Olympiad	Xenon	Genesis
Arkanoïd II	Wizball	Black Lamp
Eddie Edwards Ski	Seconds Out	Thrust
Ikari Warriors	Zynaps	Organiser Business S/ware

*All this For Only* **£329.00**  
Inc VAT & delivery

520 STFM with 1MEG internal drive fitted	£269.00
1040 STFM latest model, with built-in TV modulator	£399.00
1040 STFM model as above with 'Microsoft Write' & 'VIP Professional'	£419.00
1040 STFM including joystick, 21 games with business software as supplied with above described '520STFM Super Pack'	£419.00
1040 STFM inc. 'super pack' extras as above, 'MS-Write' & 'VIP Pro.'	£459.00

Buy a monochrome monitor with any 1040 from above for £110.00 extra

Mega ST1 with mono monitor, 'MS-Write' & 'VIP Pro.'	£599.00
Mega ST2 with mono monitor, 'MS-Write' & 'VIP Pro.'	£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
SM124/5 mono monitor	£119.00
SC1224 colour monitor	£279.00
Mega-File 30Mb hard disk	£539.00
System AT40 40Mb hard disk, super low price at	£469.00
Vidi-ST, popular 16-tone video frame grabber inc. digitising software	£ 95.00
Philips 15" FST Teletext TV/monitor model 1185, full rem/ctrl, c/w cable	£269.00
Philips CM8833 14" colour monitor c/w ST or Amiga lead	£229.00
Philips CM8852 as above, higher resolution	£299.00

### SPECIAL OFFER AMIGA PACK

Our new special offer pack includes the following:

★ Amiga 500 computer	★ Grid Start
★ TV Modulator	★ Demolition
★ Mouse & Mouse mat	★ XR 35
★ Joystick	★ Atax
★ Photon Paint	★ Las Vegas
★ Karate Kid II	★ plus 5 disks of public domain s/ware
★ Goldrunner	

**all this for only £399.00!**

The total retail value of extras supplied is £270.45.

**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 headphone output connectors, 40 tuner presets, external aerial connector and loop aerial. Supplied with cable (please state computer type when ordering).

**SPECIAL OFFER!**  
**£269.00**  
includes VAT and computer connection lead

## DISECTOR<sup>ST</sup> ULTIMATE ATARI ST DISK UTILITIES

- ◆ **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

**VERSION 5**  
NOW AVAILABLE!

## PRINTERS

All prices include VAT, delivery and cable

## star

We use and recommend Star printers since they offer an unbeatable combination of features, print quality, reliability and value. Make the sensible decision - get it right with a Star printer at our special all in. prices.

Star LC10 best-selling 144/36cps 9pin, 4 NLQ fonts, inc.2 extra ribbons free	£199.00
Star LC10 7-colour version of above printer, inc.2 extra black ribbons	£249.00
Star NX-15 budget wide carriage 9pin printer	£329.00
Star LC24-10 feature-packed 10" multifont 24 pin printer	£339.00
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 9pin, 10" carriage	£189.00
Amstrad LC3500 10" 24pin with both serial and parallel interfaces	£329.00
Panasonic KXP1081 reliable budget 10" printer 120/24 cps	£169.00
Panasonic KXP1180 new, exciting high spec. multifont 9pin 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 24pin wide carriage printer	£399.00

Sheet feeders available for most of the above printers - 'phone for details

### 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



**Watford Electronics:** 250 High Street, Watford WD1 2AN ☎ (0923) 37774.

## PRINTERS

### Ink (reddable)

It's time for another roundup of the latest life-enhancing printer goodies from MGA Softcat.

First off are a line of products designed for use with the Star LC-10 printer. £19.95 will buy you a heat-transfer ribbon for printing patterns onto cloth; these ribbons are available for both the mono and colour models of the LC-10.

A motorised ribbon-reinker is available for single-colour (£68.50) and colour models

(£108.50). And new single-colour ribbons can be bought in many, including blue, green, purple, red and brown, for £12.95 each.

For other makes of printers, motorised reinkers vary from £82.00 to £139.95, depending on the printer.

The reinking unit is very easy to operate. Just attach the worn-out ribbon to the reinker, fill the inkwells and set the unit in motion. It only takes approximately four minutes to reink a ribbon.

#### Wow, man

Don't despair if you see dinosaurs in trainers walking off a printer – those mushrooms on toast were okay.

For anything goes when you buy Computer Sensations printer stationery from MGA Softcat. Each sheet includes a whimsical border design – it may be bears

going camping, jolly snowmen or a flower design. Splash out £12.95 for a shrink-wrapped pack of 100 sheets of microperforated, continuous-feed computer paper.

**MGA Softcat:** Pear Tree, Apple-dore, Kent TN26 2AR ☎ (0233) 83561.

## PC

*ArtMaster*, a PC graphics editor for creating and altering *NewsMaster* and *PrintMaster* clip-art graphics, has been rereleased at £19.95.

It includes such drawing facilities as individual pixel editing, mirror-imaging and cut-and-paste.

And though *NewsMaster* clip-art graphics are limited in size, *ArtMaster* allows you to work on graphics enlarged to three times their final size, thus allowing more detail.

**MGA Softcat:** Pear Tree, Apple-dore, Kent TN26 2AR ☎ (0233) 83561.

## ST

### Turn on, tune in, trip out

ST owners can now connect their computers up to a hi-fi for really stunning sound, buying the necessary lead from Robson Electronics.

The £7.95 lead plugs into the monitor socket on the back of the ST, so it can only be used when the screen display is on a TV. On hi-fi, it connects with the line input phono sockets.

**Robson Electronics:** Newcastle House, High Spenn, Rowlands Gill, Tyne and Wear NE39 2BL ☎ (0207) 543053.

## AMIGA

### Virus killer for 50p

In response to TGM016's article on viruses, reader Charles Elliot of Surrey is offering a virus killer (*VirusX 3.1*), which he says

will wipe out all known Amiga viruses for 50p and a blank disk.

He also points out that many viruses have a 'back door' which will remove them from memory.

The SCA virus can be deleted from RAM by holding down the left AMIGA key during a reboot.

And the Byte Bandit Revenge virus can be disabled by holding down the left mouse button and

the FIRE button on a joystick, again during a reboot. The joystick must be in port 2.

The Byte Bandit virus can also be 'cured'. When it strikes, the TV or monitor will seem to go dead; so simply hold down the bottom five keys (left ALT, left AMIGA, the space bar, right AMIGA and right ALT), and you can carry on as normal.

But note that this does

NOT remove the virus from memory!

■ *VirusX 3.1* is available from Charles Elliot, 41 Pennington Drive, Weybridge, Surrey.

We have no reason to doubt Elliot's honesty, but we'd still advise you not to use his program on any important virus-carrying disk till you've tested it on a less important one.

## ONLY POOLS AND HORSES

Programs from experts with experience in the field

### BOXFORM and HANDICAP WINNER

Two programs for the price of one. Easy to use and they never go out of date. All you need is a few minutes with a daily paper. **HANDICAP WINNER** shows the **VALUE FOR MONEY** bets in handicaps, the most difficult of all races to assess. Already this year (to mid March) the program has given winners at 11/1, 2 at 9/1, 3 at 8/1, 15/2, at 7/1, 5 at 13/2, 5 at 6/1, 11 at 11/2, 7 at 5/1, 7 at 9/2 and over 100 more at shorter odds.

**BOXFORM** weighs up a race by considering the many facets of form. Although several factors are built in, the user can easily add to, delete or modify them to produce a program a tailor-made for the individual.

Why pay inflated prices? **BOXOFF** **CLEVER** and get the **BEST**  
Tape £11.95, CMD 64/128, AMSTRAD CPC's, SPECTRUMS, B.B.C. B.  
Disc £12.95 for CMD & BBC, £14.95 for CPC & SPEC +3

BOXOFF, 65 Allans Meadow  
Neston, South Wirral. L64 9SQ  
phone 051-336-2668



### DUKES MAIL ORDER

### COMPUTER GAMES AND ACCESSORIES

SEND FOR OUR FREE CATALOGUE

### THOUSANDS OF GAMES AND ACCESSORIES

FOR ALL MAKES OF COMPUTERS

SEND TO: DUKES MARKETING (MAIL ORDER)

25 MARKET STREET

BRIDGEND

MID GLAMORGAN

SOUTH WALES

### ALL ORDERS SENT 1st CLASS

### ORDERS DESPATCHED WITHIN 24 HOURS (0536) 84095

## EXPEDITE TRADING

MAIL ORDER SUPPLIERS OF SOFTWARE, COMPUTERS AND PERIPHERALS

Basic Amiga Pack – Free modulator, DPaint  
Our Price £350.00

Pack A – Basic Pack plus Strike Force Harrier,  
Garrison 1 + 2, Skychase, Bermuda  
Project, Fernandez Must Die, Power  
Struggle, Tetris R.R.P. £578.99  
Our Price £375.00

Pack B – Basic Pack plus Championship Basketball,  
Championship Baseball, Championship  
Football, Summer Olympiad, Winter  
Olympiad, Football Manager 2  
Our Price £375.00

Pack C – Basic Pack plus Photon Paint, Strike Force  
Harrier, Garrison 1 + 2, Skychase, Bermuda  
Project, Fernandez Must Die, Power  
Struggle, Tetris. Our Price £375.00

Pack D – Free Modulator, Who Framed Roger Rabbit,  
Nebulus, Star Ray, Spritz, 500 AIR MILES  
Our Price £435.00

Atari 520ST-M Basic Pack, 1Mb Drive, Mouse, 1st Word  
Spell-It, Basic Source Book & Tutorial, 5 Public Domain  
Disks. Our Price £260.00

Atari 520ST-M Basic Pack Plus 12" Hi-Res Mono  
Monitor. Our Price £345.00

Atari 520ST-FM Summer Pack – 1Mb Drive, 22 Games  
worth over £400.00. Our Price £345.00

8Bit Software	C64	Spec 48	16Bit Software	Amiga	St
Emlyn Hughes Int. Soc.	8.50	7.95	Super Hang On	15.85	15.85
Dragon Ninja	8.50	7.95	Barbarian 2 Palace	15.85	15.85
Pacland	8.50	7.95	Ballistix	15.85	15.85
Eliminator	8.50	7.95	K. Dalglish S. Boss	15.85	15.85
War in Middle Earth	8.50	8.50	Zak Makracken	23.85	23.85
Dark Fusion	8.50	6.95	Roy of Rovers	15.85	15.85
Purple Saturn Day	8.50	8.50	Dark Fusion	15.85	15.85
Blasteroids	8.50	8.50	Blasteroids	18.85	18.85
G. Linkers Hotshots	8.50	6.95	Balance of Power	18.85	18.85
Butcher Hill	8.50	6.95	Lords of Rising Sun	23.85	

FOR TITLES NOT LISTED SUBTRACT DISCOUNT FROM RRP

RRP	DISCOUNT	RRP	DISCOUNT
£35-£25	£6.00	£20-£16	£3.50
£25-£21	£5.00	£16-£11	£2.50
£21-£20	£4.00	£11-£10	£1.50

We supply software for Amiga, Atari ST, CBM 64, Sega, Spectrum, IBM PC, and all other popular computers. For complete range of software phone or send a S.A.E. stating computer.

How to order: Send us your name and address with order stating title and computer. Please make cheque/P.O. payable to Expedite Trading. VAT and postage inc. Overseas add £1.50 postage.

EXPEDITE TRADING, UNIT G, 41 Union Street, Kettering, Northants NN16 8JR  
GET IT RIGHT USE EXPEDITE



# 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

## HARDWARE

Amiga A500 + Mod	1/2 Meg + Dragons Lair	£499.00
Amiga A500 + Mod	1/2 Meg	£479.00
Amiga A500 + Mod		£369.00
Amiga 1/2 Meg Expansion + Cumana 1 Meg Drive		£237.50
Cumana 1 Meg Drive		£149.00
Amiga 1/2 Meg Expansion		£149.00
CBM 64 Hollywood Pack + software joystick etc		£149.00
Sega Master System		£79.00

## SOFTWARE CITY SPECIALS

SPECTRUM	COMMODORE	AMSTRAD
Magnetron	Magnetron	Rasputin
Mystery on the Nile	Speeding	Mystery Nile
Earthlight	Ranarama	Kinetik
Riddlers Den	Pesky painter	Hive
Toy Bizarre	Chain Reaction	Deep Strike
Fat Worm	Sigma 7	Flunky
Thanatos	Jack the Nipper 2	Star Raiders
Deactivators	Heartland	Chain Reaction
Sigma 7	Scary Monsters	Guadalcanal
Flunky	Deepstrike	TEN TITLES FOR
TEN TITLES FOR	TEN TITLES FOR	TEN TITLES FOR
£5.50	£5.50	£5.50

\*\*\*\*\*  
\*\* £5.50 \*\* SUPREME CHALLENGE \*\* £5.50 \*\*  
SPECTRUM COMMODORE AMSTRAD CASSETTE  
Elite, Starglider, Sentinel, Ace 2 & Tetris  
\*\*\*\*\*  
\*\* £5.50 \*\* Ten Computer Hits Vol 5 \*\* £5.50 \*\*  
SPECTRUM COMMODORE AMSTRAD CASSETTE  
Dark Sceptre, Mega Apocalypse, Trax, Ninja Hamster,  
Frightmare, Tarzan, Magnetron, Mystery on the Nile, Catch  
23 & Druid 2  
\*\*\*\*\*

## SIXTEEN BIT SPECIALS

Atax	Amiga 4.99
Splitting Image	Amiga 9.99
Quadrangle	Amiga 4.99
Stargoose	Amiga 4.99
International Soccer	Amiga 4.99
Hellbent	Amiga 4.99
Stargoose	Amiga 4.99
Backlash	Amiga 4.99
Better Dead than Alien	
Three Stooges	Amiga 4.99
King of Chicago	Amiga 9.99
Outrun	Amiga 9.99
Final Assault	Amiga 9.99
Sideways	Amiga 9.99
Leaderboard Birdie	Amiga 9.99
Wizard Warz	Amiga 9.99
Marble Madness	Amiga 9.99

## AMSTRAD DISC

Bard's Tale	£9.99
Bubbler	£2.99
Cleaver and Smart	£2.99
Chuck Yeager's A.F.T.	£9.99
Flunky	£2.99
Indiana Jones	£2.99
Nigel Mansell	£2.99
Red Led	£2.99
Shackled	£2.99
The Archers	£2.99
Through the Trap Door	£2.99
Pulsator	£2.99
Spy v Spy (Artic Antics)	£2.99
Slaine	£2.99
Terror of the Deep	£2.99
Saracen	£2.99
Tour de Force	£2.99
Afterburner	£2.99

## BLANK MEDIA

3 in disks: £2.90 each, £25.00/  
10, £57.50/25  
3 1/2 in disks: £1.00 each,  
£9.00/10, £21.25/25  
5 in disks: £0.50 each, £4.99/  
10, £9.99/25

## INTERFACES

Freeze Frame	£27.50
Expert Cartridge	£27.50
Ram Turbo Interface	£12.99
Single Port Interface	£6.99
Dual Port Interface	£7.99
+2 Joystick Lead	£2.99
ST or Amiga 4 Player	£5.95
Multiface One	£39.95
Multiface Two	£44.99

## EIGHT BIT SELLERS

SP	CO	AMS
Skate or Die	£6.99	£6.99
Bards Tale	£6.99	£6.99
Chuck Yeager's A.F.T.	N/A	£6.99
Nigel Mansell	£6.99	N/A
Grand Prix Circuit	N/A	£6.99
Afterburner	£6.99	£6.99
Airborne Ranger	£6.99	£9.99
Armalyte	N/A	£6.99
Barbarian 2	£4.99	£6.99
Batman	£6.99	£6.99
Captain Blood	£6.99	£6.99
Command Performance	£8.99	£8.99
D.N.A. Warrior	£6.50	N/A
Double Dragon	£6.99	£6.99
Dragon Ninja	£6.50	£6.50
Exploding Fist +	£5.50	N/A
Fists n Throats	£8.99	£8.99
Football Director	£6.99	£6.99
Football Manager 2	£6.50	£6.50
Four Soccer Sim	£6.50	£6.50
Pacmania	£6.99	£6.99
R-type	£6.99	£6.99
Risk	N/A	£8.99
Robocop	£6.99	£6.99
Silent Service	£6.50	£6.50
Thunderblade	£6.99	£6.99
Taito Coin Ops	£8.99	£8.99
Tracksuit Manager	N/A	£6.50
We are the Champions	£6.99	£6.99
Wec-Le-Mans	£6.99	£6.99
Heroes of the Lance	£6.99	£6.99
Operation Wolf	£6.99	£6.99
War in Middle Earth	£6.50	£6.50
Return of the Jedi	£6.99	£6.99
Professional Soccer Sim	£6.50	N/A
Gary Linekers Hotshots	£6.50	£6.50
Arcade Muscle	£8.99	£8.99
Rock Star	£6.50	N/A
Human Killing Machine	£6.25	N/A
Dynamic Duo	£5.99	£6.25

## SIXTEEN BIT SELLERS

ST	AMIGA	Denaris	N/A	£13.50
Realm of the Trolls	£13.50	Willow	N/A	£16.99
Super Hang On	£13.50	TV Sports Football	N/A	£19.99
Human Killing Machine	£9.99	I Ludecrus	£13.50	£13.50
Last Trooper	£6.99	Federation of Free		
Balistic	£13.50	Traders (new version)	£19.99	N/A
Operation Wolf	£13.50	Falcon	£16.99	£19.99
Sword of Sodan	N/A	Dungeon Master	£16.99	£16.99
War in Middle Earth	£13.50	Int Karate +	£13.50	£16.99
Zak McKracken	£16.99	Speedball	£16.99	£16.99
Slipstream	N/A	Lombard RAC Rally	£19.99	N/A
F16 Combat Pilot	£16.99	S.T.O.S.	£13.50	£13.50
DNA Warrior	£13.50	Double Dragon	£13.50	£16.99
Scorpion	N/A	Dragnon Ninja	£13.50	£13.50
Carrier Command	£16.99	Eliminator	£16.99	£16.99
Hostages	£16.99	Elite	£16.99	£16.99
Joan of Arc	£13.50	Flight Sim 2	£29.99	£29.99
Galdregon's Domain	£13.50	Gauntlet 2	£13.50	£13.50
Hybris	N/A	Heroes of the Lance	£16.99	£16.99

## SPECTRUM CASSETTE

Blood Brothers	£1.99	Intensity	£1.99
Cybernoid	£1.99	Mystery of the Nile	£1.99
Hercules	£1.99	Bubbler	£1.99
Marauder	£1.99	Edge Classics 1 (Brian	
North Star	£1.99	Bloodaxe Bobby Bearing	
Roy of the Rovers	£1.99	Starbike, Paytraxx, & That's	
Skate Crazy	£1.99	the Spirit	£2.99
Gary Lineker Superskills		Impact	£1.99
Supersports	£1.99	Meanstreak	£1.99
Venom Strikes Back	£1.99	Samurai Trilogy	£1.99
Alternative World Games		Xcel	£1.99
Bombjack 2/Ghosts and Gob-		Mag Max	£1.99
lins	£2.99	Thanatos	£1.99
Dark Sceptre	£1.99	180	£2.99
Blackmap	£1.99	A View to a Kill	£1.99
Crosswise	£1.99	ATV Sim	£2.99
Enlightenment (Druid 2)		Ace 1 or 2	£2.99
Heartland	£1.99	Ace of Aces	£2.99
Magnetron	£1.99	Airwolf	£1.99
6 Pak Vol 2	£2.99	Alien 8	£1.99
Deactivators	£1.99	Aliens	£1.99
Fat Worm	£1.99	American Football	£2.99
Martianoids	£1.99	Anriad	£1.99
Riddlers Den	£1.99	Arcade Classics	£1.99
Sigma 7	£1.99	Bak to Skool	£1.99
Star Games 2 (Eidolon, Cybe-		Back to the Future	£1.99
run, Highway Encounter,		Battlecars	£2.99
Averger etc)	£2.99	Battle Valley	£2.99
Toy Bizarre	£1.99	Battleships	£1.99
Supersprint	£1.99	Beach Head	£2.99
Spectrum 4 (Jungle Trouble,		Beach Head 2	£2.99
Harrier Attack, Scuba Dive &		Big Foot	£2.99
Fat Worm)	£1.99	Biggles	£1.99
Zenji	£1.99	Black Beard	£2.99
I of the Mask	£1.99	BMX Sim 1 or 2	£2.99
Gutz	£1.99	Bombjack	£1.99
Phantom Club	£1.99	Boulderdash 1 or 2	£2.99
Bubble Bobble	£1.99	Bruce Lee	£1.99
Earthlight	£1.99	Brute Hard Guy	£1.99
Flying Shark	£1.99	Cauldron 1 or 2	£1.99
		Colour of Magic	£1.99
		Commando	£2.99
		Contact Sam Cruise	£2.99

## JOYSTICKS

Cheetah Mach One	£9.99
Ram Delta	£9.95
Cheetah 125	£8.90
Quickshot Turbo	£9.99
Cruiser Blue	£9.50
Zipstick Auto	£14.99
Zipstick Non Auto	£12.99
Atari Economy	£4.50
Cheetah Challenger	£4.50
Crystal Turbo	£14.99
Navigator	£13.99

## COMMODORE DISC

Five Star Games 3 (Trap Door,	
Uridum+, Tau Ceti, Firelord, Way	
of the Exploding Fist, Aliens, Strike	
Force Harrier)	£4.99
Edge Classic 1 (Bobby Bearing,	
Brian Bloodaxe, Quo Vadis, Wizard	
dry & Firequest)	£4.99
Archon Collection	£9.99
Apollo 18	£9.99
Athena	£2.99
Beer Bell Burt	£2.99
Bards Tale 1 or 2 or 3	£11.99
Chessmaster 2000	£9.99
Alternative World Games	£2.99
Marauder	£2.99
North Star	£2.99
Skate Crazy	£2.99
Supersports	£2.99
Carriers at War	£12.99
Chuck Yeager's A.F.T.	£11.99
Death Wish 3	£2.99
Bangkok Knights	£2.99
Eye	£2.99
Gunboat	£2.99
Int Karate	£2.99
Instant Music	£9.99
Mars Saga	£9.99
Track and Field	£2.99
Legend of Kage	£2.99

## COMMODORE CASSETTE

Ace 1 or 2	£2.99
Ace of Aces	£2.99
Airwolf	£1.99
Aliens	£1.99
American Football	£2.99
Anriad	£1.99
Arcade Classics	£1.99
Bak to Skool	£1.99
Back to the Future	£1.99
Battle Valley	£2.99
Battleships	£1.99
Beach Head	£1.99
Beach Head 2	£2.99
Big Foot	£2.99
Biggles	£1.99
Black Beard	£2.99
BMX Sim 1 or 2	£2.99
Bombjack	£1.99
Boulderdash 1 or 2	£2.99
Bruce Lee	£1.99
Cauldron 1 or 2	£1.99
Colour of Magic	£1.99
Commando	£2.99
Dan Dare	£1.99
Dizzy	£2.99
Dizzy Dice	£1.99
Dracoon	£2.99
Eagles Nest	£1.99
Endzone	£1.99
Euro Five a Side Soccer	£1.99
Fighter Pilot	£1.99
Football Manager	£2.99
Footballer of the Year	£2.99
Fruit Machine Sim	£2.99
Graham Gooch	£1.99
Ghostbusters	£1.99
Gauntlet	£2.99
Grand Prix Sim	£2.99
Grand Prix Tennis	£2.99
Grid Iron	£1.99
Grand Master Games	£1.99
Impossible Mission	£1.99
Joe Blade 1 or 2	£1.99
Int Karate	£2.99
Int Rugby	£2.99
Int Speedway	£1.99
Jockey Wilson's Darts	£1.99
Kixstart 2	£1.99
Kane 2	£1.99
Metrocross	£2.99
Mooncresta	£1.99
Motorbike Madness	£1.99
On the Bench	£1.99
Pro Snooker	£2.99
Rygar	£2.99
Sport OK Kings	£2.99
Thrust 2	£1.99
Trap Door 1 or 2	£1.99
Trax	£2.99
Uridum	£2.99
Way of the Exploding Fist	£1.99
Way of the Tiger	£2.99
Werewolf of London	£1.99
Who Dares Wins 2	£1.99
World Games	£2.99
Zybox	£2.99
Yogi Bear	£1.99
Orion	£2.99
Ball Blasta	£2.99
Mini Office	£2.99
Golf Master	£2.99
Leaderboard	£2.99
Supercycle	£2.99
Trantor	£2.99
Action Force	£2.99
Dan Dare 2	£2.99
Speed Zone	£2.99
Tomcat	£1.99
3-D Glooper	£0.99
720	£2.99
Alternative World Games	£2.99
Burgerchase	£0.99
Black Lamp	£1.99
Bombjack 2	£2.99
Buck Rogers	£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



# COMMS ■■■■■

# TREADING THE

# BOARDS

All the world's a stage on bulletin boards, where hackers, gossips and sentimental lovers form a cast of thousands.

Zog reports on the systems that let you chat by modem.

It was late, late enough for British Telecom to lower phone charges for the night. It was late enough even for the 'All lines from London are engaged - please try later' cassette to be removed, steaming from overuse, and cooled in a bath of ice cream. Nothing much was happening with the network, so BT engineers reconnected the loose ends of the system for the night and went home out of boredom. Around a darkened England, small furry mammals squeaked and owls hooted. Meanwhile, indoors, modems whistled at each other and scampered through bulletin boards...

Scattered across the country, small bulletin boards (or BBs) can be found in the oddest of places. They can be run from a small room in the centre of Birmingham or a barn in the middle of the country. The only things they have in common is that they're run by dedicated part-timers, and they're usually free.

A BB is just what it sounds - an electronic blackboard, on which electronic passers-by can read, and leave, information. All they need is a computer, a modem and a phone line.

And even for running a BB, the basic setup is quite simple. You need a micro, preferably with a hard disk; a phone line; and an autoanswer modem for the line. You also need some sort of BB software. This can be as simple as a home-written program which allows users to store a message or read any of the last 256, say - but if you want to get clever, BB software can consist effectively of full databases, with thousands of messages, and message chains leading from each interesting message to its replies in the chain.

Whether you're in charge of the BB or a plain old user, simple commands will let you search for subjects you're interested in, or look for messages by certain people, or on a certain date. The messages are grouped into several separate

'boards', each for a different subject. The program will store your position on each board, so the next time you log in you can read on from where you left off.

BBs are all run, usually for love rather than money, by the sysop (system operator). The person wearing the sysop hat has to check that the system is working, and regularly read all the messages in case someone tries to leave a rude one. Yes, they can even read those private ones between Fluffy Cuddles and Bunnikins (you know the sort), but then if someone wants to log into a BB as Bunnikins they have to expect a laugh.

## Sysops: numbers or free men?

Sysops, the people who run bulletin boards, seem like generous folk. They splash out on a phone line or two, or they give up their only phone line for a few hours every evening to allow people to call in.

But why do these kindly people, who've unflinchingly donated space from their hard disks, do it?

Well, some just do it because it's possible. They write the database and the comms software as an exercise, and since it doesn't cost much to run, they keep it going.

Many of them use the same equipment during the day for work, and switch over to a BB at night.

Incoming calls are all free anyway, and sysops working with computers may make a few useful contacts that help them in their day jobs.

Sysops and users with sysop privileges get to keep an eye on the whole system, because it seems there's always someone somewhere who delights in electronic graffiti. Fortunately, it's dead easy to wipe the offending message off the disk!

### Free software

If you can store messages on a BB, of course you can store program code too. So someone can load up a new program or utility, and then when you log in you can download the software onto your computer, save it to disk, and keep it.

Of course, it may not quite work properly, but the stuff is free apart from the phone call, and if it's source code rather than an .EXE file you can always tweak it to your own satisfaction.

So BBs tend to be associated with public-domain software, and spreading information freely around. Some are specialist - for example, CBBS in London is mostly Speccy stuff - but many are more wide-ranging.

Of course, all this information floating around has its limitations too. Operators of BBs generally try to be responsible, but rely on their users to police the system, since they themselves obviously can't manage be online 24 hours a day.

Apart from the annoyance of morons leaving messages full of rude words, people have been known to leave 'utilities' which are not all they seem. Several unscrupulous characters have used the free-software facilities of BBs to upload viruses onto unsuspecting punters.

So be cautious - take steps to protect your own system. Be especially cautious of people advertising 'virus killers' on BBs (or anywhere else where there is no way of tracing the supplier). As has been noted before now, one of the best ways to hide a crook is to disguise him as a policeman!

Using the BB just to exchange messages with Bunnikins is totally safe, of course, so have fun. Maybe you'll even find other strange rabbitlike personae out there...

■ Zog is TGM's comms columnist. His real name is Fluffy Wet-Ears Bunnibaby.

## BB CONTACTS

Here are the modem numbers of some popular BBs, and the baud rates required to reach 'em. All are open 24 hours a day.

A little while on one BB may produce information on other boards that are closer to you and thus cheaper to call. BBs can be quite friendly to you, if you are to them!

**Academics** (021) 705-9677  
Birmingham; 300, 12/75 baud

**Bob's Bizarre**  
(0394) 279644  
Felixstowe; 300-2400 baud

**Ivory Tower**  
(0245) 415321  
Chelmsford; 300, 12/75 baud

**Lap of the Gods**  
(01) 994-9119  
London; 300, 12/75 baud

**Lazer Tower**  
(0272) 783733  
Bristol; 300-2400 baud

**London Underground**  
(01) 863-0198  
London

**Mektronic**  
(061) 733-7739  
Manchester; 300-2400 baud

## GREAT COMMS JOKES

■ What do you call Polly's privates? Parity bits!

■ What did the modem say to the dentist? Stop bit you're hurting me!

■ Why did the data cross the cable? Because it was baud!

■ What do modem manufacturers do in the summer? Make Hayes while the sun shines!

■ Where do comms experts leave messages for each other? A bulletin board! (That's not funny - Ed)





# Computer Adventure World



WE STOCK OVER 3000 TITLES AT OUR RETAIL STORE & SPECIALISE IN ST, IBM, AMIGA, AND C64 DISC FOR ....

## ADVENTURES-FANTASY-WARGAMES-STRATEGY

### LATEST ADVENTURE, RPG & FANTASY GAMES: MANY ARE IMPORTS FROM USA:

GENGHIS KHAN ... EXCELLENT STRATEGY, RPG & WARGAME - HIGHLY DETAILED LARGE GRAPHIC MULTI LEVEL GAME OF CONQUEST: GREAT 'ATMOSPHERE': FOR 1 TO 4 PLAYERS: FROM KOE CORP. OF JAPAN .. IBM .. £49-50  
 PALADIN ..... INTRO/ INTERMEDIATE LEVEL FANTASY RPG : ASSEMBLE A PARTY OF 9 TO COMPLETE 10 QUESTS OR DESIGN YOUR OWN : HIGHLY TACTICAL COMBAT : NICELY 'ADDICTIVE' GAME . IBM, ST, AM .. £34-00  
 BREACH ..... SCI-FI RPG & WARGAME : COMMAND A SQUAD OF 20 SPACE MARINES WITH MULTIPLE EQUIPMENT & ARMAMENT OPTIONS: 10 SCENARIOS OR DESIGN YOUR OWN: TACTICAL COMBAT . IBM, ST, AM .. £34-00  
 SCENARIO DISCS .. AVAILABLE FOR BOTH 'BREACH' & 'PALADIN'- 16 READY MADE SCENARIOS EACH IBM, ST, AM .. £19-00  
 WIZARDRY ..... CLASSIC 'DUNGEONS' GRAPHIC RPG SERIES: PARTY OF 6: HIGHLY DETAILED AND EXTENSIVE MAPPING REQUIRED: PARTS I & II AVAILABLE FOR C64 - WITH I TO V ON IBM AND APPLE : EACH AT ..... £39-50  
 WAR IN MIDDLE EARTH .. TOLKIN'S MASTERPIECE BROUGHT TO LIFE ON COMPUTER: C64 .. £18-50 : IBM, ST, AM .. £18-50  
 POOLS OF RADIANCE .. FANTASY RPG FROM SSI/TSR SET IN THE 'FORGOTTEN REALMS': TERRAIN, DUNGEONS & COMBAT SHOWN IN 3D WITH OFFICIAL DETAILED 'HINT BOOK' : C64 .. £25-00 : IBM, ST & AMIGA ..... £28-50  
 FEDERATION OF FREE TRADERS .. INTERACTIVE SCI-FI STRATEGY GAME: SPACE PIRACY AT ITS BEST .. ST & AM ... £26-00  
 DEATHLORD .... LARGE GRAPHIC FANTASY 'SAMURAI' RPG WITH LAND & DUNGEONS TO MAP & EXPLORE .. C64 .. £14-50  
 KING'S QUEST IV .. LATEST FROM SIERRA: THEIR BIGGEST & BEST YET 3D GRAPHIC ADVENTURE: IBM .. £35 : ST .. £26-00  
 TIMES OF LORE .. FROM 'ORIGINS': LARGE GRAPHIC FANTASY RPG-SINGLE CHARACTER: C64 .. £14-40 : IBM, ST, AM .. £21-50  
 DEMONS WINTER ... LARGE FANTASY 'PARTY OF 6' RPG QUEST DEFEAT THE DEMON 'MALIFON': C64 .. £18-50 : ST .. £21-50  
 THE COLONY .... REAL TIME 3D GRAPHIC SCI-FI ADVENTURE MYSTERY: WITH INTELLIGENT ALIEN RACE ... IBM ... £37-50  
 SCAVENGERS .. POST HOLOCAUST SCI-FI GRAPHIC RPG : 20 CHARACTERS, LOADS OF ALIENS-MUTANTS AND COMPUTER RANDOMLY GENERATES AN INFINITE NUMBER OF WORLDS TO 'SCAVENGE': IBM ONLY SO FAR .. £34-00  
 WASTELAND .. POST NUCLEAR DEVASTATION RPG-MAGIC REPLACED BY MODERN WEAPONRY: C64 .. £16-50: IBM £24-50  
 STELLAR CRUSADE ... SCI-FI STRATEGY GAME OF EXPLORATION, ECONOMIC POWER AND MILITARY CONQUEST: LOTS OF NICE DETAIL: INCLUDES PRODN. & DESIGN YOUR OWN STARSHIPS: FROM SSI: FOR ST & IBM £29-95

### LATEST STRATEGY / WARGAMES PROGRAMMES: INCLUDING USA IMPORTS:

GRAND FLEET ... COMPUTER MODERATED BOARD WARGAME FROM 'SIMULATIONS CANADA': SURFACE NAVAL COMBAT IN WORLD WAR I : FROM 'DREADNOUGHTS TO DESTROYERS' : MANY SCENARIOS FOR ST & IBM .. £35-00  
 NORTHERN FLEET .. AS ABOVE FROM 'SIM CAN' BUT MODERN NAVAL AND SET IN THE NTH. ATLANTIC . ST/IBM .. £35-00  
 BATTLES OF NAPOLEON .. FROM SSI : INCLUDES 4 SCENARIOS 'WATERLOO TO BORODINO' & A COMPLETE DESIGN YOUR OWN 'KIT': 7 TERRAIN TYPES, 5 ELEVATIONS @ 100 YARDS PER 'HEX': CREATE OR AMEND THE ARMIES INCLUDING MORALE, WEAPONRY, LEADERSHIP: VERY IMPRESSIVE: C64 NOW .. £21-50  
 BORODINO ..... HIGHLY REALISTIC SIMULATION INCLUDING EXCELLENT PERSPECTIVE BATTLEFIELD VIEWS : BUILT-IN DELAY FACTORS & POSSIBILITY OF COMMANDERS 'USING THEIR OWN INITIATIVE: ST ONLY NOW £26-00  
 CHICAMAUGHA .. DETAILED SIMULATION OF THE US CIVIL WAR BATTLE FROM SSI: C64 .. £21-50 & NOW AMIGA .. £26-00  
 FIRE BRIGADE .. FROM 'PANTHER GAMES', AUSTRALIA: STUNNING REPRESENTATION OF ARMORED CONFRONTATION ON THE EASTERN FRONT AT SMOLENSK IN WWII: DETAILED & EXCELLENT GRAPHICS: IBM & AMIGA £37-50  
 EMPIRE ... 'ABSTRACT' STRATEGIC LEVEL GAME OF GLOBAL CONFLICT: INDIVIDUAL ARMIES, AIR WINGS, BATTLESHIPS, CARRIERS, CRUISERS, DESTROYERS, SUBS : LARGE MAP: INCLUDES 'PRODUCTION': ST, AMIGA & IBM .. £24-50

### DETAILED SPORTS SIMULATIONS - INCLUDES US IMPORTS:

PURE STATS (US) FOOTBALL .. DETAILED 'SERIOUS' GRAPHIC SIMULATION: MANY 'PLAYS': SPLIT SCREEN .. C64 .. £29  
 JOHN ELWAY'S QUARTERBACK .. GRAPHIC 'ARCADE STYLE' GAME - FAST & EASY TO PLAY ON THE IBM & C64 .... £28-50  
 HAFNER'S 3 IN 1 FOOTBALL .. DETAILED STATS BASED SIMULATION: TEXT REPORTS/NO GRAPHICS: ST, IBM C64 .. £32-50  
 SUPERBOWL SUNDAY .... FROM AVALON HILL : COMPREHENSIVE GRAPHIC SIM. - ONE OF THE BEST: IBM & C64 .. £29-50  
 SUPERBOWL SUNDAY TEAMS DISC ... FOR THE 1987 SEASON - ALL THE PLAYERS READY FOR THE ABOVE: EACH .. £20-00  
 NFL ... OFFICIALLY LICENSED & HIGHLY DETAILED SIMULATION - VERY 'LARGE IN SCOPE' - THE BEST? FOR IBM .. £69-00  
 GONE FISHIN' ... 3D GRAPHIC BASS FISHING GAME-SOMETHING DIFFERENT AND LOTS OF NICE DETAIL: ST & AM .. £32-50  
 TV SPORTS FOOTBALL .. CINEMAWARE'S 1ST. SPORTS SIM. & EXCELLENT: SAMPLED SOUND: LEAGUE PLAY: AM ... £26-00  
 MSFL PRO LEAGUE FOOTBALL ..... DETAILED GRAPHIC US FOOTBALL SIMULATION WITH 42 'SUPER TEAMS', SCOUTING & ANIMATED REFEREE, 'WEATHER', SLOW & FAST GAMEPLAY: VERY GOOD . IBM .. £37-50  
 J. NICKLAUS GOLF ... 8 CLASSIC COURSES PLUS 2 DESIGNED BY THE 'MASTER HIMSELF': VERY GOOD: IBM & C64 ... £39-50  
 FINAL 4 COLLEGE BASKETBALL .. STATS BASED SIMULATION FROM HAFNER - MANY TEAMS - IBM, ST & C64 ..... £32-50  
 HEADCOACH (US) ... HIGHLY DETAILED GRAPHIC FOOTBALL SIMULATION-DESIGN YOUR OWN PLAYS: AMIGA ..... £37-50  
 HEADCOACH VER. III ... FROM UK: MINIMAL GRAPHICS BUT COMPREHENSIVE SIMULATION & LEAGUE: ST, IBM ..... £24-50

THIS REPRESENTS A SMALL SELECTION OF OUR GAMES AND EXCLUDES MANY FLIGHT SIMULATIONS:

### LATEST 'OFFICIAL' HINT BOOKS - MAINLY IMPORTED FROM THE USA:

ULTIMA V .. £8-95 OR III/IV AT .. £7-95 : DUNGEONMASTER .. £8-95 : POOLS OF RADIANCE .. £7-95 : POLICE QUEST .. £6-95  
 KINGS QUEST I, II OR III .. £6-95 : BARDS TALE I, II OR III .. £6-95 : SPACE QUEST I OR II .. £7-95 : MIGHT & MAGIC .. £10-50  
 MARS SAGA .. £8-95 : LEISURE SUIT LARRY I .. £8-95 : SENTINEL WORLD I .. £8-95 : 'QUEST FOR CLUES' 50 HINTS ... £19-75

### SEND LARGE SAE FOR FREE DESCRIPTIVE CATALOG & DISCOUNT VOUCHER

PAYMENT: VISA-MASTERCARD/ACCESS-UK CHEQUE OR POSTAL ORDER-EUROCHEQUE-REGISTERED CASH  
 POSTAGE: IN UK IS FREE-PER GAME EUROPE £2 & ELSEWHERE £4: SENT 1ST. CLASS RECORDED/AIR MAIL.



# Computer Adventure World

Bank Buildings, 1A Charing Cross, Birkenhead L41 6EJ  
 Telephone: 051-666 1132





# GUIDE TO INDEPENDENT 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.

## COMPANY A1 Computer Services.

**ADDRESS** 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; full disk-drive service for £25. **PRICES** Mostly £25-£30, but C128 is £42.50.

**WARRANTY** Three months.

## COMPANY BCL (Best Computers Ltd).

**ADDRESS** 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.

**ADDITIONAL INFORMATION** Free estimates. Galaxy Audio Visual also sell micros.

## COMPANY Cambridge Micro Surgery.

**ADDRESS** 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.

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

## COMPANY The Computer Factory.

**ADDRESS** 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.

**ADDITIONAL INFORMATION** Free estimates.

## COMPANY Hindley Electronics.

**ADDRESS** 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.

**ADDITIONAL INFORMATION** Average two-day turnaround – well quicker than the average.

## COMPANY HS Computer Services.

**ADDRESS** 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.

## COMPANY Ladbroke Computing International.

**ADDRESS** 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.

## COMPANY Microtech Computer Services.

**ADDRESS** 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.

## COMPANY MP Electronics.

**ADDRESS** 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.

**ADDITIONAL 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.

## COMPANY Ortec Micro Computers.

**ADDRESS** 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.

## COMPANY PM Engineering.

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

**COMPUTERS REPAIRED** All home computers.

**PERIPHERALS REPAIRED**

Printers, monitors and disk drives.

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

**WARRANTY** Three months.

## COMPANY RA Electronics.

**ADDRESS** 133 London Road South, Lowestoft, Suffolk, NR33 0AX ☎ (0502) 566289.

**COMPUTERS REPAIRED** All Spectrums.

**PERIPHERALS REPAIRED** Phone.

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

**ADDITIONAL INFORMATION** RA Electronics also sell components.

## COMPANY Roebuck Designs.

**ADDRESS** 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.

## COMPANY Swindon ITEC.

**ADDRESS** 6 Oppenheimer Centre, Greenbridge Road, Swindon SN3 3JD ☎ (0793) 611808.

**COMPUTERS REPAIRED** Spectrum, C64/128, BBC B and Master series, CPC.

**PERIPHERALS REPAIRED** 5.25-inch disk drives, monitors, cassette-deck alignment.

**PRICES** Spectrum from £18, others from £25 (but small repairs may be cheaper).

**WARRANTY** Three months.

**ADDITIONAL INFORMATION** Most repairs should be done within seven working days.

## COMPANY Telegames.

**ADDRESS** 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.



## ORTEC MICRO COMPUTERS

Spectrum, Atari, Commodore and others.  
Prompt and Personal Service by qualified engineers.  
FREE Estimates

**061-301-2210**

Melba Street  
Higher Openshaw  
Manchester  
M11 1FL

## HINDLEY ELECTRONICS COMPUTER REPAIRS

### STANDARD CHARGES

(Inc. VAT and fully insured return postage)

COMMODORE 64 £25.00 COMMODORE 64C £29.00 COMMODORE 128 £32.00  
COMMODORE +4 £25.00 COMMODORE VIC 20 £18.00 AMIGA 500 £35.00  
1541 DISK DRIVE £32.50 (Other drives repaired ring for details)  
SPECTRUM 48K £18.00 SPECTRUM +2 £25.00 AMSTRAD CPC464 £25.00  
ACORN ELECTRON £23.00

3 MONTHS 'NO QUIBBLE' WARRANTY ON ALL REPAIRS

### SPARES - SPARES - SPARES

Low Prices e.g. Spectrum 48k Membrane £4.50 Spectrum + £7.99 Low prices

### COMPUTER ICS and GENERAL COMPONENTS

#### WHY PAY MORE

(SEND LARGE SAE FOR FULL LISTS)

### HINDLEY ELECTRONICS

DEPT AA 97 MARKET STREET HINDLEY WIGAN WN2 3AA. Tel (0942) 522743

Computer repairs: Callers requiring same day service please ring before calling and add 10% to standard charge. Standard charges do not include repairs to external items e.g. power units, tape recorders, tape recorders, joysticks, etc. A surcharge may be levied for machines that have severe damage e.g. fire, flood, tamper.

## COMPUTER SUPPLIES

### POWER PACKS

SPECTRUM 48K/128/+2 £9.95  
COMMODORE 64 £19.95  
ELECTRON £12.95  
COMMODORE 16 £12.95  
COMMODORE PLUS 4 £24.95

### SPARES

SPECTRUM MEMBRANE £9.95  
SPECTRUM ULA £12.95

### LEADS/INTERFACES

+2/+3 JOYSTICK ADAPTER £4.95  
+3 CASSETTE LEAD £4.95  
KEMPSTON INTERFACE £7.95  
64 RESET CARTRIDGE £4.95

### OTHERS

OCEANIC DRIVE £129.99  
ALPHACOM PAPER (5 ROLLS) £9.95  
ZX PRINTER PAPER (5) £12.95

AZIMUTH ALIGNMENT KIT £9.95  
(PLEASE STATE WHICH MACHINE)  
DUSTCOVER (STATE MICRO) £3.25

### BLANK MEDIA

3 1/2" DSDD (10) £9.95  
5 1/4" DSDD (10) £29.95  
M/DRIVE CARTR (10) £9.95

### DATA RECORDERS

C64 DATASETTE £19.95  
SPECTRUM DATAREC £19.95

### JOYSTICKS

KONIX NAVIGATOR £9.95  
KONIX SPEED KING £8.95  
KONIX MEGABLASTER £5.95  
QUICKSHOT 2 TURBO £9.95

### LIGHT PENS/MICE

NEOUS MOUSE £29.95  
SPECTRUM LIGHT PEN £19.95  
64 LIGHT PEN £19.95

ALL PRICES INCLUDE VAT & P&P. DELIVERY WITHIN 14 DAYS. SEND CHQ/PO TO

**OMNIDALE LTD. (GM)**

23 CURZON STREET, DERBY, DE1 2ES. TEL. 0332 291219

**VSE**  
Technical Services

High Quality Repairs  
Low Inclusive Prices  
The Logical Choice!

### REPAIRS

Amstrad CPC464 £21.90  
Amstrad CPC6128 £24.90  
Commodore C64 £19.90  
Spectrum 48K/Plus £12.90

### UPGRADES

Spectrum 16K-48K £19.90

All repairs guaranteed 4 months, prices quoted apply to any single fault\* and are inclusive of parts, labour and VAT. Free return carriage for UK mail order customers. We also repair Amstrad PCWs, Commodore C128/VIC20, and the full Sinclair Spectrum range. Please phone for prices.

\*Excluding cabinet damage, replacement of CPC/C64 keyboard assembly, or CPC disk drive (free estimate given).

VSE Technical Services (Dept 105), Unit 6, 8 Nursery Road, London SW9 8BP. Tel. 01 737 0234

## COMPUTER REPAIRS

Fixed Super Low Prices!

Inclusive of parts, labour and VAT



FIRST AID  
FOR  
TECHNOLOGY

1 WEEK TURNROUND

### \* SPECIAL OFFERS \*

SPECTRUM	£14 + Free Game	C16	£18
SPECTRUM 128	£18	VIC 20, C+4	£22
C64	£22 + Free Game	1541 DISK DRIVE	£36
C128	£29	1531 TAPE DECK	£19
C64 PSU For Sale	£20	MPS 801	£38

Please enclose payment with item - 3 month warranty on repair  
Please enclose advert with repair

### W.T.S ELECTRONICS (GM)

Studio Master House, Chaulend Lane, Luton, Beds. LU4 8EZ. Tel: 0582 491 949

All rights reserved

## TELEGAMES

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

'NEW  
GAMES  
NOW  
IN STOCK'



Intellivision

Nintendo

CBS COLECO  
VISION

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)

## HARDWARE AND DISKS AT TRADE PRICES

### Disks

10 x 3.5" DS/DD	£9
25 x 3.5" DS/DD	£20
50 x 3.5" DS/DD	£38
100 x 3.5" DS/DD	£74
250 x 3.5" DS/DD	£180
500 x 3.5" DS/DD	£345
1,000 x 3.5" DS/DD	£675
100 Capacity 3.5" Disk box	£7.50

'Our Disks Are Cheap But They Are Top Quality - Fully Guaranteed'

All prices INC VAT & next day delivery cheques and postal orders to.

## HARDWARE DISTRIBUTION

1st Floor, 19 Division Street, Sheffield S14GE  
Tel: 0742 726485



SAXTON COMPUTERS LTD

## ELECTRONIC & COMPUTER SERVICE

1000 UXBRIDGE ROAD,  
HAYES,  
MIDDLESEX UB4 0RL  
TEL: 01-573 2100



Tel: 01-573 2100



Stockists of Home/Business Computers,  
Business/Leisure Software  
Spares and accessories for Audio, Video, Hi-Fi  
Computers and other equipment  
Service centre for Amstrad, Commodore, Spectrum and  
other makes of home computers, audio, video and Hi-Fi  
We also cater for electronics students and hobbyists  
1000 Uxbridge Road, Hayes, Middlesex. UB4 0RL  
Telephone: 01-573 2100



**ADDITIONAL 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.

**COMPANY** Verran Micro-Maintenance.

**ADDRESS** 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.

**ADDITIONAL INFORMATION** Established six years. Approved by Amstrad.

**COMPANY** Video Vault.

**ADDRESS** 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.

**ADDITIONAL INFORMATION** While-you-wait service in Manchester.

**COMPANY** Wight Computing Home Micros.

**ADDRESS** 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.

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

**COMPANY** WTS Electronics.

**ADDRESS** Studio Master House, Chaul End Lane, Luton, Bedfordshire

LU4 8EZ ☎ (0582) 491949.

**COMPUTERS REPAIRED**

Spectrum, Commodore, BBC, others.

**PERIPHERALS REPAIRED**

Phone.

**PRICES** £14-£45; fixed price for each machine.

**WARRANTY** Three months.

**ADDITIONAL INFORMATION** WTS Electronics promise to complete the repair within one week from the day they receive the machine.

**COMPANY** Wynter Electronics.

**ADDRESS** 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.

**ADDITIONAL INFORMATION** Repair done in one week.

**COMPANY** Electronic & Computer Services.

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

**COMPUTERS REPAIRED** The full range of home computers - 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.

**ADDITIONAL 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.



## It's a poor man's world

Worried about repairs costing more than you bargained for? Achieve transcendental peace of mind with VSE Technical Services - the South London company charge a standard price for each machine, which covers everything except very major repairs like keyboard or disk-drive

replacement.

Spectrums range from £12.90 to £17.90 (depending on model); C64 is £19.90, C128 £24.90; CPCs range from £21.90 to £24.90; and all PCWs are £31.90.

Parts, labour, VAT and return postage within the UK are all included - and there's an unusually long

four-month warranty.

This is the place to go if you're the owner of a sick Opus Discovery, too, for partner Ian Vaudrey is official repairperson for the Sinclair Discovery Club.

VSE Technical Services: Unit 6, 8 Nursery Road, London SW9 8BP ☎ (01) 738-7707.

**Attention repair firms:** If you would like a mention in the Back Bytes Repair page, 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).



# LOOK NO FURTHER

You have found Britain's one and only supplier of high quality learning software

Subjects now available include.....

French, German, Spanish, Italian, Welsh, English, General Knowledge, Arithmetic, Spelling, Geography, History, Science, First Aid, Natural History, Sport, England, Scotland and many others.

Kosmos are specialist producers of Educational Software designed to help you and your children *enjoy learning* from your computer. Our programs even allow you to add your own lesson material.

Write or telephone for.....

a **FREE 20-page CATALOGUE** of our Educational and Leisure software and details of how to claim your Kosmos T-Shirt.



Kosmos Software Limited  
FREEPOST (No stamp needed)  
DUNSTABLE, Bedfordshire, LU5 6BR  
Telephone 05255 3942 or 5406

## SAMDALE COMPUTERS LTD

'Better Than The Best of The Rest'



Credit Card Hotline 0621-742617



\*Free Delivery in UK \*Orders Despatched in 24 hrs\*

\*Some titles which are now releases may take more 24 hrs\*

## THE LATEST SOFTWARE FOR

ATARI

IBM PC

MSX

SEGA

AMIGA

AT NEW LOW PRICES!

.....AND NOW THE AMAZING  
PC ENGINE WITH CD-ROM PLAYER....

Also now in stock the incredible  
MAXX FLIGHT CONTROL YOKE £79.95

RING 0621-742617 NOW!

FOR YOUR FREE PRICE LISTS

OR SEND US A LETTER OR POSTCARD STATING  
YOUR NAME, ADDRESS & MACHINE TYPE

1a Austral Way, Highfield Rise  
Althorne, Essex CM3 6DN

## PREMIER MAIL ORDER

FORMERLY TRYBRIDGE SOFTWARE

Please send cheque/PO/Access/Visa No. and expiry date to: Premier Mail Order Ltd, 8 Buckwings Square, Burnt Mills, Basildon, Essex SS13 1BJ. Please state make and model of computer when ordering. P & P inc. on orders over £5.00 U.K. orders under £5.00 add 50p per item. Europe add £1.00 per item. Elsewhere add £2.00 per item. THESE OFFERS ARE MAIL ORDER ONLY.

TITLE	SPECTRUM CASS DISC	CBM 64 CASS DISC	AMSTRAD CASS DISC	TITLE	ATARI ST	AMIGA
ACE	2.99	2.99	4.99	2.99	ADV RUGBY SIM	11.99 11.99
ACE 2	2.99	2.99	4.99	2.99	ADV SKI SIM	11.99 11.99
ACE OF ACES	2.99	2.99	2.99		AFTERBURNER	13.99 16.99
AFTERBURNER	6.99	10.99	6.99	10.99	AIRBALL	11.99 11.99
AIRBOURNE RANGER	9.99	6.99	13.99		AIRBOURNE RANGER	14.99
ARKANOID 2 REVENGE	5.50	9.99	9.99	5.50	ARCIPALAGOS	15.99 15.99
BARBARIAN PSYGNOSIS	6.99	6.99	6.99		ARKANOID REV OF DOH	11.99 14.99
BARBARIAN 2 PALACE	6.99	6.99	9.99	6.99	BAL OF POWER 1990	14.99 14.99
BARDSTALE 1	6.99	7.45	10.99	7.45	BALLISTIX	11.99 11.99
BATMAN CAPED CRUSADER	5.99	9.99	6.25	9.99	BARBARIN PAL	11.99 11.99
BLACK TIGER	6.99	7.45	9.99	7.45	BARBARIAN 2 PAL	11.99 11.99
BLASTEROIDS	6.50	9.99	6.50	9.99	BARDSTALE 2	19.99 17.99
CAPTAIN BLOOD	6.99	6.99	9.99	6.99	BATMAN CAPED CRUSADER	11.99 14.99
CHUCK YEAGER	8.99	12.99	7.50	10.99	BATTLEHAWKS 1942	16.99 16.99
COMMAND PERFORMANCE	6.50	6.50	6.50		BLASTEROIDS	11.99 14.99
CRAZY CARS 2	5.99	8.99	6.99	9.99	BOMBULZ	11.99 14.99
DARK FUSION	6.99	9.99	6.99	9.99	CAPONE	17.99 19.99
DOUBLE DRAGON	6.50	9.99	6.99	9.99	CAPTAIN BLOOD	15.99 16.99
DRAGON NINJA	6.50	9.99	6.99	9.99	COLLOSSUS CHESX K	11.99 14.99
ELIMINATOR	6.50	7.45	7.45		COSMIC PIRATE	11.99 14.99
EMILYN HUGHES FOOTBALL	6.99	9.99	6.99	9.99	CRAZY CARS 2	11.99 14.99
EMPIRE STRIKES BACK	2.99	6.99	9.99	9.99	DARIUS 89	16.99
FIRETRAP	8.50	9.99	8.45	9.99	DENAVIS	11.99 11.99
FISTS & THROTTLES	6.50	6.45	6.45		DOUBLE DRAGON	11.99 11.99
FOOTBALL DIRECTOR	9.99	12.99	9.99	12.99	DRAGON NINJA	11.99 14.99
F16 COMBAT	2.99	4.99	2.99	6.99	DRAGONSLAIR	20.99
FOOTBALL MANAGER	6.99	9.99	6.99	9.99	DUNGEON MASTER	14.99 14.99
FOOTBALL MANAGER 2	5.50	7.99	5.50	7.99	EMMANUELLE	11.99 11.99
FOOT MAN 2 EXP KIT	7.99	9.99	7.99	9.99	F16 COMBAT PILOT	14.99 10.99
FUN SCHOOL 2 (UNDER 6)	7.99	9.99	7.99	9.99	FALCON F16	29.99
FUN SCHOOL 2 (6 TO 8)	7.99	9.99	7.99	9.99	FANTAVISION	17.99 19.99
FUN SCHOOL (OVER 8)	7.99	9.99	7.99	9.99	FERRARI FORMULA 1	26.99 26.99
GAME SET & MATCH 2	8.99	11.99	8.99	11.99	FLIGHT SIM 2	13.99 13.99
GARFIELD	6.00	6.50	6.50		FLYING SHARK	13.99 13.99
GAUNTLET	2.99	2.99	2.99		FOOTBALL DIRECTOR 2	14.99
GRAND PRIX SIM 2	2.99	2.99	2.99		FOOTBALL MANAGER 2	11.99 11.99
GUNSHIP	6.99	9.99	9.99	13.99	FOOT MAN EXP KIT	8.99 8.99
HEADCOACH	2.99	2.99	2.99		FUN SCHOOL 2 (UNDER 6)	15.99 15.99
HK MACHINE	6.99	10.99	7.50	10.99	FUN SCHOOL 2 (OVER 8)	15.99 15.99
INC SHRINKING SPHERE	6.99	12.99	9.99	12.99	FUSION	17.99 17.99
INGRIDS BACK	10.50	12.99	10.45	12.99	GALOREGONS DOMAIN	11.99 11.99
KARATE ACE	6.50	12.99	6.99	12.99	GARFIELD	11.99 14.99
KONAMI COLLECTION	2.99	2.99	2.99		GARFIELD WINTER	11.99 14.99
KRAKOUT	9.99	11.99	9.99	11.99	HOSTAGES N GOBLINS	11.99 14.99
LANCELOT	6.99	10.99	7.45	10.99	GRAND PRIX SIM 2	14.99 14.99
LAST DUEL	8.99	8.99	8.99	10.99	GUNSHIP	11.99 11.99
LAST NINJA 2	10.99	13.99	10.99	13.99	HELLFIRE ATTACK	9.99 9.99
L BOARD PAR 3	2.99	2.99	2.99		H K MACHINE	14.99 14.99
L BOARD PAR 4	2.99	2.99	2.99		HOSTAGES	14.99 14.99
MASK 2	2.99	2.99	2.99		HOT FOOTBALL	18.99 18.99
METAPLEX	2.99	2.99	2.99		INC SHRINKING SPHERE	13.99
METRO CROSS	2.99	2.99	2.99		INTERCEPTOR	13.99 16.99
MICROSOCCER	11.99	13.99	9.99	13.99	INT KARATE +	26.99 26.99
MINI OFFICE 2	6.99	10.99	6.99	10.99	JET	17.99 17.99
MINI PUTT	5.99	10.99	7.45	10.99	KRISTAL	11.99 11.99
MUNCHER (T WRECKS)	5.99	9.99	7.45	10.99	LANCELOT	13.99 16.99
NETHERWORLD	6.99	6.99	12.99		LEADERBOARD BIRDIE	14.99 14.99
NECROMANCER	6.99	6.99	6.99	9.99	LOMBARD RALLY	11.99 11.99
OBLITERATOR	6.99	9.99	6.99	9.99	LORDS OF RISING SUN	11.99 14.99
OPERATION HORMUZ	5.50	9.99	5.99	9.99	MANHATTAN DEALER	9.99 9.99
OPERATION WOLF	5.99	7.50	10.99	7.45	MICROPROSE SOCCER	11.99 11.99
OUTRIN	5.99	6.25	9.99	6.25	NIGHT HUNTER	13.99
PACMANIA	5.99	6.25	9.99	5.99	OPERATION HORMUZ	11.99 11.99
PETER BEARDSLEYS	5.99	6.99	9.99	6.25	OPERATION NEPTUNE	14.99 14.99
PHOBIA	6.99	6.99	6.99	9.99	OPERATION WOLF	11.99 14.99
PRO SOCCER (CRL)	6.50	8.99	6.99	9.99	OUTRIN	13.99 13.99
PRO SOCCER SIM	6.50	9.99	6.50	9.99	OUTRIN EUROPA	9.99 9.99
PURPLE SATURN DAY	5.50	6.00	6.50		PACMANIA	11.99 11.99
RAFFLES	5.99	9.99	6.50	9.99	PAPERBOY	11.99 14.99
RAMBO 3	4.99	6.99	6.99	6.99	PHOBIA	14.99
REAL GHOSTBUSTERS	5.99	6.50	6.50		POLICE QUEST	16.99
RED HEAT	5.99	6.50	6.50		POLLOUS	16.99 16.99
RENEGADE 3	6.99	9.99	6.99	9.99	POWERDRIVE	17.99 17.99
RETURN OF JEDI	5.99	9.99	6.50	9.99	PRO SOCCER SIM	11.99 11.99
ROBOCOP	5.99	9.99	6.50	9.99	PURPLE SATURN DAY	14.99 14.99
ROCKET RANGER	5.99	12.99			RAIDER	11.99
ROCK STAR	6.99	6.99	6.99	10.99	RAMBO 3	11.99 14.99
R TYPE	5.99	6.50	9.99	6.50	RENEGADE 3	11.99 14.99
RUN THE GAUNTLET	2.99	2.99	2.99		ROBOCOP	19.99 19.99
RYGAR	4.99	5.99	9.99	5.99	ROCKET RANGER	13.99 16.99
SAMURAI WARRIOR	10.99	14.99			R TYPE	14.99 14.99
SHOOT EM UP CON KIT	6.99	6.99	9.99	9.99	RUNNING MAN	11.99 14.99
SILENT SERVICE	6.99	10.50	7.50	10.99	RUN THE GAUNTLET	11.99 11.99
SKATEBALL	2.99	2.99	2.99		S DAVIES WORLD SNOOKER	14.99 14.99
SPACE ACE	2.99	2.99	2.99		SHOOT EM UP CON KIT	14.99 14.99
SPY V SPY ARCTIC	6.99	9.99	9.99	13.99	SPEEDBALL	13.99 16.99
STEALTH FIGHTER	6.50	6.99	9.99		STEALTH FIGHTER	11.99 14.99
STRIP POKER 2	2.99	2.99	2.99		STORMTROOPER	9.99 9.99
SUPER CYCLE	5.99	9.99	6.99	9.99	STRIP POKER 2	7.99 7.99
SUPER DRAGON SLAYER	5.99	9.99	6.99	9.99	DATA DISCS -	7.99 7.99
SUPERMAN	6.50	11.99	8.99	11.99	BEV & DAWN	7.99 7.99
SUPREME CHALLENGE	5.50	5.99	9.99	5.99	LEE & ROY	7.99 7.99
TATTOO COIN OPS	5.50	5.99	9.99	5.99	RACHEL & KIM	7.99 7.99
TARGET RENEGADE	6.50	6.99	6.99		SUZANNE & BIANCA	7.99 7.99
TERRAPODS	6.99	10.50			SUPER HANGON	13.99 16.99
TEST DRIVE	8.50	8.99	8.99		SWORD OF SODAN	16.99
THE IN CROWD	6.99	9.99	7.50	10.99	TALESPIR	17.99 17.99
THUNDERBLADE	6.99	9.99	7.50	10.99	TEST DRIVE	13.99 16.99
TIGER ROAD	6.99	9.99	6.99	9.99	THUNDERBLADE	11.99 11.99
TIMES OF LORE	9.99	9.99	9.99	9.99	TIME & MAGIK	14.99 14.99
TIME & MAGIK	6.50	6.50	6.50		TITAN	14.99 14.99
TITAN	6.99	9.99	6.99	9.99	TRACKSUIT MANAGER	11.99 11.99
TOTAL ECLIPSE	6.50	6.99	9.99	6.99	TRANSOR	19.99 19.99
TRACKSUIT MANAGER	2.99	2.99	2.99		TRIAD	14.99 14.99
TRANTRON	9.99	9.99	11.99	12.99	TV SPORTS FOOTBALL	11.99 11.99
TRIV PURSUIT	2.99	2.99	2.99		VINDICATORS (DOMARK)	11.99 11.99
TWIN TURBO V8	5.99	9.99	6.50	9.99	VIXEN	14.99 14.99
UNTOUCHABLES	6.50	9.99	6.50	9.99	WAR IN MIDDLE EARTH	11.99 14.99
VINDICATORS (DOMARK)	5.99	8.99	6.99	9.99	WEC LE MANS	13.99 16.99
WANDERER	6.99	9.99	6.99	9.99	ZANY GOLF	11.99 14.99
WAR IN MIDDLE EARTH	6.50	12.99	6.99	12.99		
WE ARE THE CHAMPIONS	5.45	9.99	6.50	9.99		
WEC LE MANS	2.99	2.99	2.99			
WORLD GAMES	6.99	9.99	6.99	9.99		
XENON	10.95					
ZAK McKRACKEN						



# INFORMATION DESK

There's more to music than meets the ear, as one reader trying to set up a low-cost ST studio has discovered. The Back Bytes experts recommend best buys – and tackle yet more Amiga questions.

## Cheap solution to ST sequencing

1) I own an Atari 520STFM, and I'm considering buying a Yamaha PSS 480 synthesizer and connecting it to my ST via MIDI. What would be the best sequencing software to buy, bearing in mind I've only got a budget of approximately £60?

2) Once I've written my music, could I record it on tape on my hi-fi?

3) Should I include either the Replay version 4 sampler or Pro Sound Designer in my set-up?

Andrew Murphy, Hull

1) There are two packages in your price range: Dr T's MRS version 1.1 (£49.95) and Hybrid Arts's Easy Track (£59.95).

MRS is described as an 8-track sequencer for first-time users, and features most basic sequencing commands. It's also upwardly compatible with Dr T's sophisticated KCS sequencer.

However, TGM music writer Graham Wayne recommends the Hybrid Arts package – with 20 tracks, it's a good introduction to sequencing software.

MRS is available from NCX, ☎ (01) 258-3454. And you can order Easy Track from Syndromic Music, ☎ (01) 883-1335.

2) Yes! Provided you've got the correct connection leads from the PSS 480's output port to the hi-fi's input port, you shouldn't have any problems taping your music.

3) No! Neither Replay version 4 sampler nor Pro Sound Designer is of any use to you. As the ST isn't multitasking, it can't run the sampler software and the sequencer at the same time. If you really wanted to use either Replay or Pro Sound Designer in your set-up, you'd need a second ST linked to the first via MIDI.

## On the right track to a PC Engine

I've recently read in TGM all about the new PC Engine. Could you please tell me where I can get hold of one and how much it will cost?

M Hurcombe, Lichfield

The PC Engine is at last officially available in the UK – a firm called Micromedia are buying them in from Japan and selling them here for £224. Micromedia are also negotiating a deal with the Engine's manufacturers, NEC, which could see the console in the shops within two months.

**Micromedia:** The Moor Hall, Ludlow, Shropshire SY8 3EG  
☎ (0691) 655979.

## C64 goes public

Is it possible to get public-domain software for the C64 on disk? If so, where from?

Matthew Taylor, Balcombe

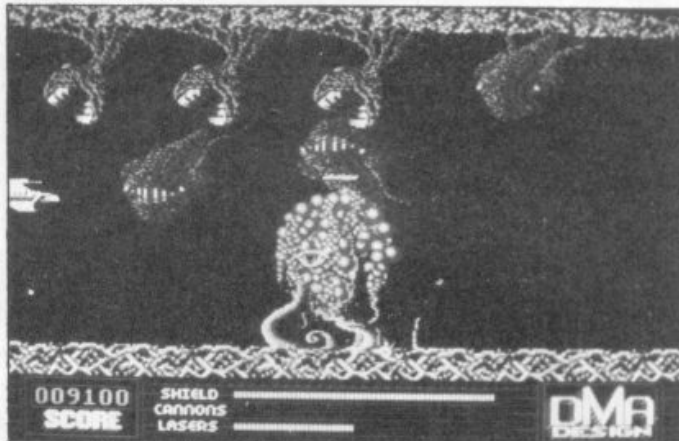
Kingsway Computers supply public-domain (PD) software and shareware for a variety of computers including the C64/128, Amiga and ST. Software for the C64/128 costs £2.95 per 5.25-inch disk.

For a full catalogue send an SAE, specifying which machine you're interested in, to Kingsway Computers, 140 Rushdale Road, Sheffield S8 9QE or ☎ (0742) 588429.

## CPC Psychapse

Could you please tell me whether there are any plans for Amstrad CPC conversions of Psychapse's Baal and Menace?

Kevin Buttivant, Cheam



Menace: will the classic go CPC?

There are no immediate plans to put either of these excellent games on the CPC, but Psygnosis – who publish the Psychapse label – say there is the possibility of conversions appearing later in the year. Keep an eye on the previews.

# Amiga anxieties

## The last resort

I've recently bought a second-hand Amiga A500 and a friend of mine has lent me Commodore's disk The Very

First to help me learn how to use Workbench properly. However, I'm finding it very slow and tedious to use.



The Very First: introductory irritation



What would you recommend?  
Michael Morse, Berkshire

*The Very First?* More like the very worst if you ask TGM. We've found the program infuriatingly slow and rather patronising at times. Our tip is to read the *Workbench* manual and persevere!

## Driven crazy

I own an Amiga A500 which I bought to design graphics. However, several of the art packages I own involve a lot of disk-swapping, which can be very frustrating when you're trying to locate a saved brush quickly. Where can I get hold of a second drive without breaking the bank?

Robert Jobs, Liverpool

Evesham Micros stock external 3.5-inch drives compatible with both the Amiga and the ST, for £89.95.

**Evesham Micros:** 63 Bridge Street, Evesham, Worcestershire WR11 4SF ☎ (0386) 765500.

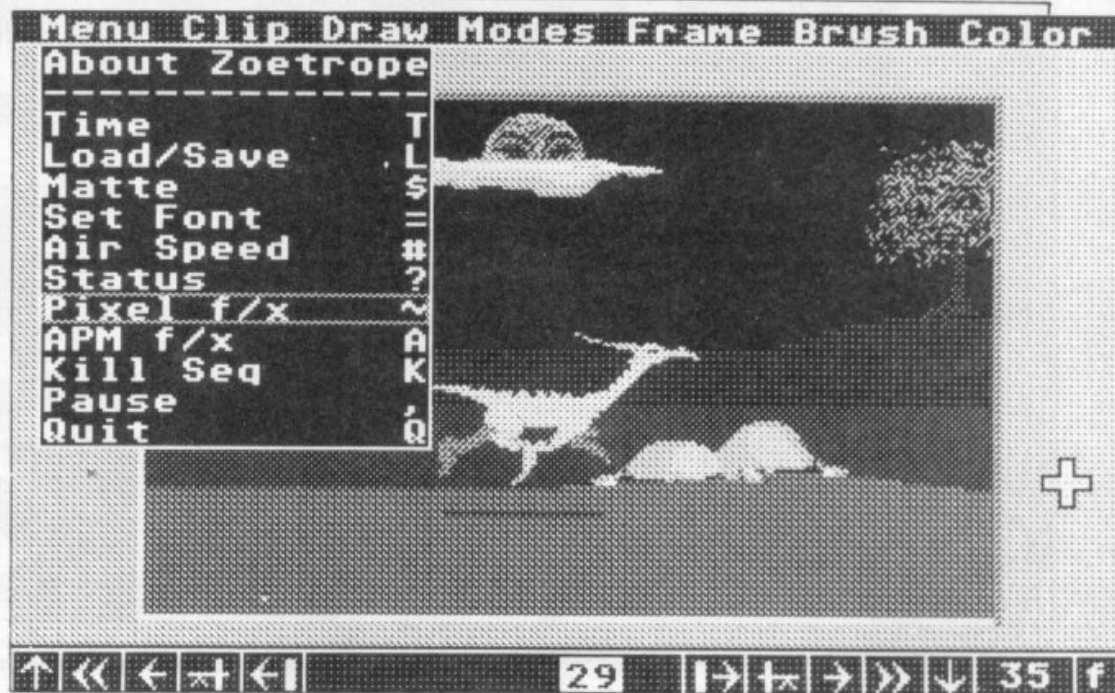
## Wozzese megger bites then John?

1) Can an Amiga A500 with a 0.5Mb expansion board run software marked 'Requires 1Mb'?

2) What are the differences between an Amiga A500 with a 0.5Mb expansion board and an Amiga A2000?

3) Are there any known problems with the 0.5Mb expansion board?

4) Does the Super ST exist?  
Angela Gale, Morecambe



Antic animation action: a Zoetrope screen

1) Yes.

2) In terms of software compatibility there are no differences between an Amiga A500 with RAM expansion and an Amiga A2000. The A2000 is aimed primarily at business users, and includes more expansion ports and a detachable keyboard. It's also available with a hard disk.

3) At TGM we use an Amiga A500 with a RAM expansion board, and so far we haven't experienced any problems.

4) Atari have recently acknowledged the existence of a Super ST,

but don't expect anything for a while yet.

## Cartoon capers

*Could you please tell me of any program on the Amiga that allows you to create animation and save it so it runs independently? This would be ideal for creating public-domain demos.*  
Grant Robson, Bridge of Weir

Antic's *Zoetrope* is ideal for creating your own animation sequences. The package includes all the necessary art tools to draw your graphics, along with comprehen-

sive animation commands. For more details see this month's review.

**Awed by animation?**  
Bewildered by benchmarks? Concerned about composite video? Disenchanted with disk drives? Send all your computing questions to Information Desk, TGM, PO Box 10, Ludlow, Shropshire SY8 1DB.

We try to answer every inquiry, but sorry – no personal replies, even with an SAE. (Well, if you send an SAE, you will get a reply – but it'll take a long time to clean up.)

# A-OK ST WP

*I have bought an ST largely for word processing as well as games, and I'm sure there's a better program than 1st Word out there somewhere. Can you recommend one?*

Lee Montgomery, Stevenage

Looking at ST word processors, you'll probably be bemused by the sheer number of products available – and the vast range of prices. But, as with any software, it's important to decide clearly exactly what you want to do.

Many people use word processors for little more than writing letters, and if this is your position *1st Word* really should be sufficient.

However, if you're going to undertake more complex work, like report-writing, we recommend *Arnor's Protext* version 4. It works on all STs, and its comprehensive features make it tremendous value for money.

*Protext* comes on three disks: the

main program disk, the dictionary/help disk, and the printer drivers/tutorial disk. After making backup copies (don't forget it!), the easiest way to get going is to read through the quick-start guide, load *Protext* and run through one of the tutorial files.

The range of functions soon becomes clear, and with full WYSIWYG ('what you see is what you get', ie screen display is the same as printout), text manipulation by way of cut-and-paste, underlining and the usual word-processing features, preparing impressive documents soon becomes a doddle.

*Protext* will let you have files of any size (up to the capacity of your disk). You can have two separate documents loaded into memory and instantly switch between them (useful if you're trying to cross-reference two complicated documents, say). And you can edit

files created by other word processors – you've probably already got loads of files in *1st Word* format lying around.

You have full find-and-replace facilities, and can even go back to a word earlier in the file if you forgot to replace it (an unusual but useful feature).

The spelling-checker operates from a 70,000 word dictionary (which you can add to) and you can even spell-check while typing.

## And there's more...

For anyone mailing personalised duplicate letters, *Protext* provides comprehensive mail-merge facilities.

Typewriter mode allows you to type directly onto the page. And crossword enthusiasts can even use *Protext* facilities for finding words in its own dictionary, including anagrams.

But what immediately sets *Protext* apart from its rivals is that it bypasses *GEM*. With no pull-down menus and no mousing around, its speed puts it in the big league. Once you've learned the key functions you're away.

Don't worry if you're prejudiced against a particular key – *Protext* allows you to set any function to any key.

A configuration program allows you to customise *Protext* to your own printer and screen-layout requirements (nearly all printers are supported, including laser), and if you've got a colour monitor you can even change the colour of both ink and paper (though not the border – a minor irritation).

On the minus side, though *Protext* is easy to get into at first, it can be tough to get to grips with the more sophisticated functions.

The manual is forbidding at first sight, and it's difficult to locate exactly what you're after, given the number of modules in the binder. So don't expect it all to fall into your lap before you've spent some time getting to know the system.

At its price *Protext* is without doubt the best word processor available for the ST, but make sure you really need all those functions before parting with the hard stuff.

**Arnor:** 611 Lincoln Road, Peterborough PE1 3HA ☎ (0733) 68909.



# READERPAGE

**"With any luck, software companies won't let the Konix console go to waste like the Amiga and ST"**

Prizewinning reader Matthew Randall fears we may be disappointed – and adds a tip for arcade owners



## The way of all silicon

Dear TGM

After reading your brilliant article on the Konix console, one thought sprang to mind. This seems exactly what most magazines did when the Amiga and ST came on the market. The trouble seems to be that you buy all this new, up-to-date technology, but half of what you pay for is never used.

It's all very well having your possible 25 channels of sound, 4,096 colours and a blitter if companies never use them.

Take a classic example – *Out Run*. They said US Gold used all their money on the licence and had very little left over for development. The game was terrible, but it still sold.

There are only a handful of writers bothered to make their games worthy of the computers they're written for; with any luck, software companies won't let the Konix console go to waste like the Amiga and ST have.

Another article I liked was the section on the ATEI show. I've played *Stryder*, *Shadow Warriors* and *Hard Drivin'*, which are well worth the money. One problem I have is trying to find that little bit of extra change to beat the continue time, which in some cases is a fate worse than death (played *Shadow Warriors* yet?).

But someone has already solved that sort of problem: with the Phonecard you use on those nice green telephone boxes. Why can't the same be applied to arcade machines, next to the coin slot? Then all you'd have to do would be take your 100-unit arcade card, instead of a pocketful of change.

**Matthew Randall, Hounslow**

*What you say about unused potential is true. But, say, 20% of a Konix Multi-System's potential is better than 20% of a ZX81's potential!*

*A coin-op card would certainly benefit players, but the arcade owners might find that they lost some money because no-one would go back to the beginning when they missed a continue. On the other hand, it would probably encourage people to play more . . . which you can afford now.*

## Violence rules, or I'll kick your head in

Dear TGM

I have just read the article Are You Shooting Comfortably? in TGM015, about software violence. I think software violence is a good thing, as it allows me and my friends to take out our anger on something that is not real.

Often I come from school, having been annoyed all day, and I load in a violent game. Killing people who are not real (*Operation Wolf*) or watching spaceships that don't exist explode into tiny pieces (*Star Wars*) is very satisfying, and will usually calm me down.

Before all this, though, I used to take my anger out on real objects (usually biro or cassette cases).

Films work this way, too. When people watch violent films (such as the excellent *Die Hard*), all their annoyance can be taken out on the



Konix Multi-System: will the power be wasted? See Star Letter.

characters in the film. This, again, saves real people or objects being hurt or damaged. Stories that link films with real violence (such as Michael Ryan and *Rambo*) are nonsense.

Anyway, *Rambo* is a good wholesome American, who only kills commies. I have never seen him kill innocent civilians.

**Michael Hughes, Heanor, Derbyshire**

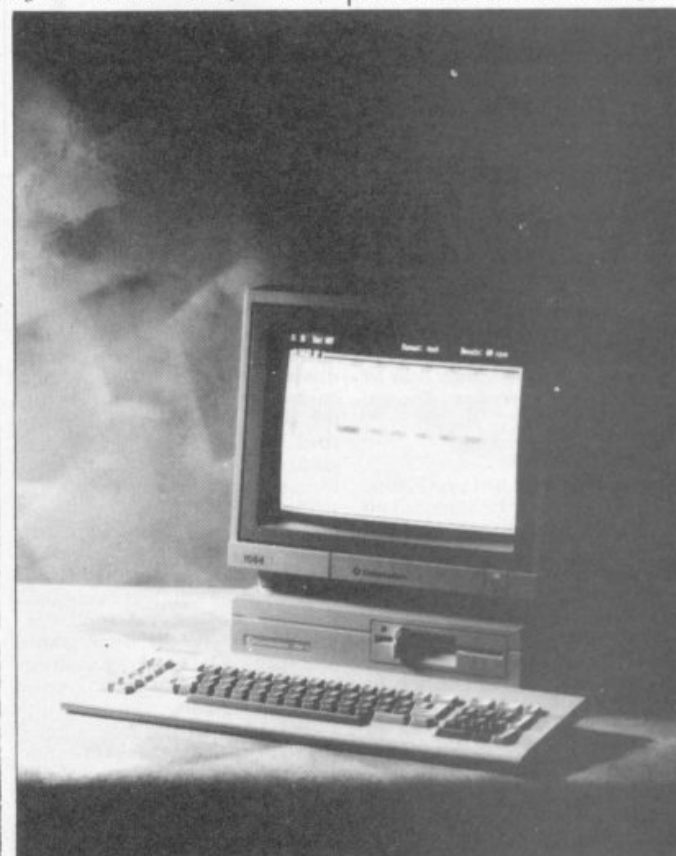
*It seems your irritations are pretty slight, because surely REAL*

*annoyance can never be wiped away just by playing a game.*

## PC plea

Dear TGM

Why are home PCs not more popular in Britain? Americans see them as the perfect home computer, with their sophisticated hardware and wide choice of software. Despite the weird-looking Sinclair Professional PC letting the



Cheap Commodore PC: the next games machine? See letter headed PC Plea.



side down, there are many excellent, affordable PCs around. Software is rapidly expanding, and cheaper computers are becoming available (eg the Commodore PC1).

My prediction for '89 is the success of PCs as games machines.

**Neil McFlid, Edinburgh**

*Right and wrong. A top-of-the-range PC certainly beats the ST and Amiga in any area (except sound), but then it can easily cost £2,000.*

## Um, yes...

Dear TGM

Us consumers are surrounded by total confusion. Quite a few people will miss out on buying the PC Engine or Konix Multi-System in case Acme or someone brings out a new console which has been kept a secret for the past two centuries and comes complete with built-in microwave and inflatable full-size F-19 stealth fighter with onboard hydraulic chair which houses a commode!

**Arthur Adams, Luton**

*Acme Consoles of Wigan were rather concerned when they heard we'd received this letter, as news of their Lusitania console (based on the recently-discovered sketches of Leonardo da Vinci, 1452-1519) has been a closely-guarded secret till now.*

*Seriously, though, we appreciate the difficulty - but if you look at the history of home computing, it tends to run in cycles. A load of 8-bit machines appear and flourish for a while; then technology jumps, and a load of 16-bitners appear.*

*So we'd say it's a safe bet that once the current glut of console launches is over, there'll be a quiet period. After all, the competitive market can only take so many products! Don't worry about Acme.*

## ZX life

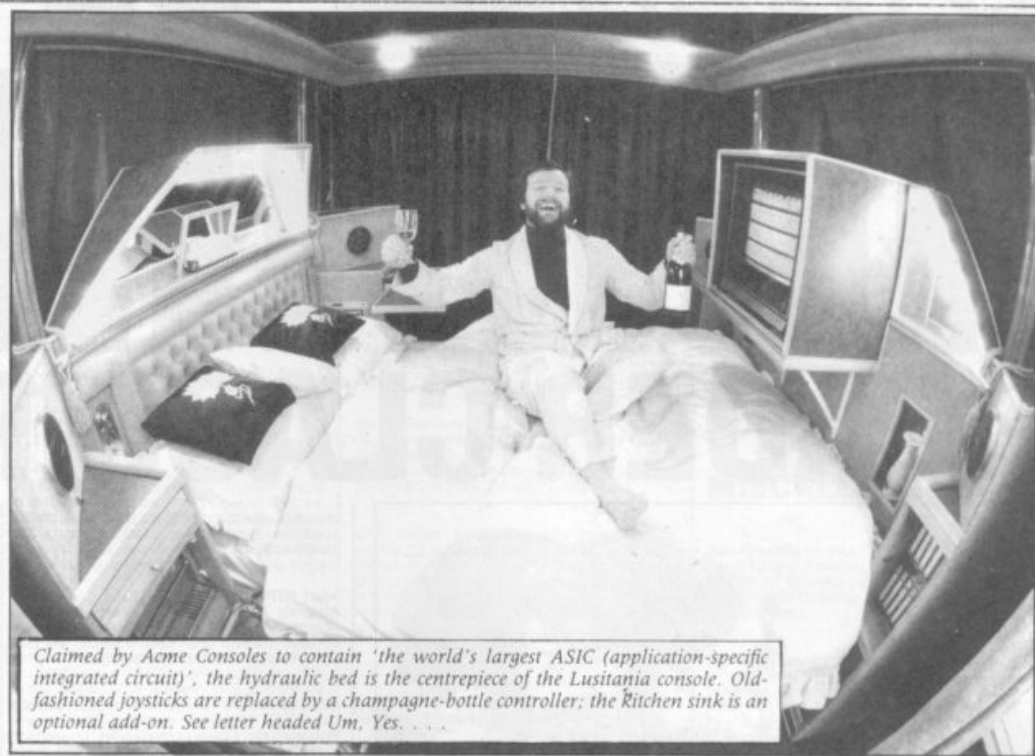
Dear TGM

With regard to Paul Stanley's letter (The Good Old Days, TGM016), he says 'releases on the ZX81 were always eagerly anticipated, as almost invariably they broke new ground in computing'. He then goes on to say 'what is really missing is the originality of the early days'.

Of course the early computer games were original - they could hardly fail to be, as nothing had gone before them!

Paul Stanley also says that too many games today are no more than mindless shoot-'em-ups, but it was exactly this type of game which formed the bulk of early releases (Space Invaders, Asteroids, Galaga, Defender, Scramble... the list goes on).

I, too, remember 'the good old days', and must admit that I did enjoy playing with my Atari VCS2600; but at the age of eight you're not exactly discerning. The



*Claimed by Acme Consoles to contain 'the world's largest ASIC (application-specific integrated circuit)', the hydraulic bed is the centrepiece of the Lusitania console. Old-fashioned joysticks are replaced by a champagne-bottle controller; the Ritchen sink is an optional add-on. See letter headed Um, Yes...*

idea that games were once far more fun to play seems to stem from feelings of nostalgia (the 'they don't make 'em like they used to' syndrome).

Now I am the privileged owner of an Amiga, and games like *Rocket Ranger* convince me that 'the good old days' weren't all that they're cracked up to be.

**Jonathan Higginson, Sydney, Australia**

Dear TGM

If I had owned a ZX81 I'd keep quiet about it. I cannot understand anyone trying to say that *Jet Set Willy* or *Space Invaders* on their ZX81 or Spectrum has more playability than *Starglider 2*, *FOFT* or even a pretty average shoot-'em-up like *Cosmic Pirate* on the 16-bits.

Now look back to the first two years of the Spectrum and C64, the prehistoric era when *Hungry Horace* and *Gulp Man* roamed the earth. If the ST and Amiga can come up with games like *Carrier Command* now, just think what they'll be like in a couple of years' time.

**Sam Flanagan, Horncastle, Lincolnshire**

*It seems futile to argue whether yesterday was better than today; surely the point is to find what's best today.*

*As posh papers say, 'this correspondence is now closed'. Till the next letter arrives, that is...*

## Revenge of the killer viruses

Dear TGM

Your feature on computer viruses (Back Bytes, TGM016) was interesting and informative, but don't the crackers of games know what they're doing to themselves? They are putting themselves out of

business (if it can be called that)!

I have about 15 pirate disks for my Amiga, and till recently I never worried about viruses, but last week my best original, *Operation Wolf*, mysteriously failed to load. I took it to my Amiga-whiz friend, who typed in a few CLI commands and told me I had got the LSD virus.

My £25 game was ruined, all because I slid the write-protect tab off so it would save my high scores. So now I rarely get a pirate game for fear of another virus attack. You should be pleased with viruses being antipiracy.

**Gregory Wheeler, Portsmouth**

*Using pirated software always carries this risk, and of course there's no guarantee to fall back on. It serves you right!*

*We repeat TGM016's warning: the best way to avoid Amiga viruses is to always turn the computer off between using different pieces of software.*

## Inside story

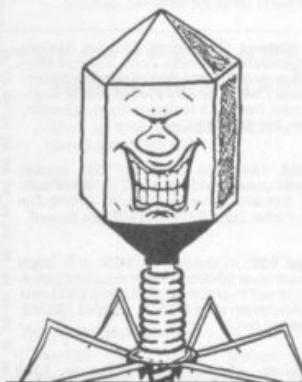
Dear TGM

Thanks for producing a generally excellent mag. You may consider it strange to receive a letter from someone in my predicament. Amigas not often being a common fitting in the cells. (Even if they were, there aren't any power supplies.)

However, your mag is excellent in keeping me up-to-date in the computer world, especially in market trends and popularity of machines. To receive the latest copy of TGM is typically the highlight of my month.

**CS Cooper, HM Young Offenders Institution, Portland, Dorset**

*Thanks for your letter - and your comments about TGM (not printed here for space reasons), which gave us some ideas.*



# £50

## WORTH OF GAMES 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. We're receiving so many letters that it may take a while for yours to get printed, so keep your shirt on (except in the shower, that is).



# The Games Machine

## READER CLASSIFIEDS



### PIRATES STAY AT SEA!

TGM will not knowingly place adverts for pirated software. In an effort to control the problem, we will not place any ad which doesn't include a full name and address. Box numbers and code names are unacceptable. Thank you for your cooperation.

### WANTED

**Wanted Now!** Atari STFM in good condition, just computer mouse and basic software, will pay around £200. Tel: (0473) 715335 or write to Neil Dawson, 10 Dover Road, Ipswich, Suffolk IP3 6JQ. Consider all offers, please help!

### FOR SALE

**Amiga 1000** bargain £200! 512K, detachable keyboard, sits under your monitor. Contact Brian, 25 Shaw Drive, Sandford, Wareham, Dorset BH20 7BS or phone 092 95 54246.

**Sega System**, three joysticks, two games £50. Various games inc. Double Dragon, Thunder Blade, Shinobi, After Burner £9 each. Light Gun £20 or sell complete with 17 games £170. Phone Stacey 0691 652328 after 4pm.

**Nintendo** with Mike Tyson's Punchat, Super Mario Bros £100 ono. Also Spectrum +2, £200 of software, joystick, excellent condition £110 or £200 for both. Tel: Llangennech 820536.

**Atari 520 STFM** for sale, excellent condition with £400 pounds of software, still boxed. Sell for £200 ono. Phone 051 526 4636.

**CBM64** with 1541C disk drive and datacassette, one joystick and loads of games including Outrun, Gunship, Starglider. All in mint condition for £275. Phone Bagshot 75543 (Surrey) evenings.

**Sega** games system, nine games including After Burner, Penguin Land, Kenseiden, Out-

run, Wonder Boy, Secret Command, boxed, excellent condition, worth £260, yours for £75. Tel: (01) 541 5326 (Kingston).

**Sega glasses**, Gun games, Quartet, Basketball, Kenseiden, Fantasy Zone, Rescue Mission, Gangster Town, Missile Defence, Shooting Gallery, Wonder Boy 2, Alex Kidd 2. Contact: John Podd, 43 Raeburn Road, Ipswich, Suffolk. Tel: 0473 720368.

**CBM64**, 1541 disk drive, MPS801 printer, cassette unit, cartridges and £1000's of software. Sell altogether for £400.00. Phone Tue to Thur after 7pm (0274) 667408 ask for Jeff.

**Amiga 500**, modulator, joystick and latest software (over £600 of it!) all in excellent condition and worth around £1000. Only £600 ono. Contact Simon after 5.30pm on 0842 753222. Bargain at price.

**Spectrum +3**, Multiface 3, mouse, £250 worth of games inc. Operation Wolf and Robocop, cassette leads, 4 blank disks, cost £700. Offers phone 3883331 (091). Also Dragon gear, printer, Shugart-compatible drive. Ideal birthday present.

**Atari STFM 520**, SC1224 colour monitor, 1 meg external drive, two joysticks, over 80 games, push button copier £650.00. Phone 0272 3466 after 4.30 or write to Nigel, 23 Chapel Hill, Backwell, Nr. Bristol BS19 3PR.

**Amiga A500** with RAM pack, modulator and Dragons Lair, boxed, very good condition £400. No Offers. Contact: 7 Goostry Road, Bolehall, Tamworth, Staffs. B77 3NA or tel:(0827) 69789.

**Atari 520 STFM** for sale, mouse, leads, manu-

als, language disk, 1 year old, boxed, excellent condition, a bargain at £199. Phone 0923 (Watford) 39454.

**Atari STFM**, mouse, over £500 pounds of software inc. Falcon, Op. Wolf, Dungeon Master. All leads, boxed, year old, excellent condition. Worth over £850 pounds, sell for £350, ring 01 552 1037 ask for Grant.

**128K Spectrum +2**, interface, three joysticks, over £350 of games including Afterburner, Robocop etc. Loads of magazines, unwanted Xmas present. Fully guaranteed, bargain only £160.00. Telephone: 0787 75544.

**C64 software for sale**, Worth over £400, sell for £160. Includes Starglider, Last Ninja, Platoon etc. Contact: M.Pegg, 70 Malletts Close, Stony Stratford, Milton Keynes

**Attention Spectrum +2**, excellent condition, £300 worth of software includes Outrun, Gauntlet, Super Hang On, Matchday 2, Sinclair interface, all for £200 or nearest offer. Tel: 01 656 8082 after 6pm.

**Nintendo and Sega** for sale. Nintendo includes 2 games and the Sega has 3 games. All for the price of only £120. Tel: Scott on (0827) 69406. Can deliver if in England.

**Atari ST games**. All are originals and boxed, Joan of Arc, Hacker 2, Star Ray, Metross, Star Wars, Puffys Saga, Clever and Smart, Paint works, Music Studio, R-Type. £10 each or the lot for £90. Peacehaven 584518.

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

**Massive Amstrad setup**, 6128, col. monitor, £800 worth of software, Multiface 2, DMP2000, Speech, 2 lightpens, 1 Rom, Drum Machine, Tape Player, Stereo sound, AMX mouse, Stop Press, joystick, Worth new over £1700, perfect condition, sell for £600. Ludlow 0584 3840.

**Archimedes 310**, printer, colour monitor and software. Ace condition, all for £1100 ono. Ring Bristol 0272 652759 ask for Mark. Buyer collects.

**Amiga 500** with £150 worth of software (originals) plus some public domain software for sale at £330 ono. Phone 652759 after 5.00pm. In Bristol (0272). Buyer collects. Ask for Paul.

**Amstrad 6128**, colour monitor, tape deck, printer, joystick, CPM and utils, over sixty games plus image system, GAC and F15 £350 ono. Tel:(0752) 786738. All items still boxed, vgc.

**Atari 520STFM**, 1MB internal drive upgrade, fast Basic cartridge, Procopy, Disector, 1st Word utilities, 18 boxed good games including Falcon and Dungeon Master. Excellent condition £400, no offers. Phone 025672 3372 from 8.30pm to 9.30pm. True Bargain!

**Spectrum +2**, disk drive, joystick, books, games worth £500. Spectrum, afro + latin

kits. Worth over £850, will sell for £350 ono. Phone: (01) 863 5978.

**CBM64**, cassette deck boxed, £450 of original software e.g. Operation Wolf, Afterburner, 3 Quickshot II Turbos, 1 Quickshot IX, loads of ZZAP 64's. Worth £750, sell for £275 ono. Phone Olly (0733) 241293 after 6pm. Stilton.

**LOOK HERE** CBM64C for sale in perfect condition + games. Phone 01 940 2644, 258 Kew Road, Richmond, Surrey.

**Atari 520 STFM**, boxed, perfect condition with disks £250. Original ST software £5-£10 including Falcon, IK+, Operation Wolf, Starglider 2 and more! (worth £500) or computer + all software for £330. Tel: (061) 330 0571 (Manchester).

**SPECTRUM +3** with Multiface 3 and over £1300 of games on disk and tape. Also double cassette deck with graphic equaliser, £400 the lot. Tel: Newcastle/Burnopfield 70719 after 4pm and ask for Michael.

**ATARI ST**, mouse/mat, manuals, TV modulator, 50 blank disks and lots of games including Operation Wolf, Thunderblade, Int.Soccer, Out Run and loads more. Worth well over £1000. Offers around £400. Phone 0256 29661.

**Amstrad CPC464**, £400 games, DMP 2160 printer, DD-1 Disk Drive, colour monitor. Sell for £450. Tel: Northampton 411758 or swap for Amiga A500 plus games, TV modulator and mouse.

**Amiga A500** with ten games including Op-Wolf, IK+, TV Sports Football, Elite, Double Dragon. Phone Jason on 01 635 9437 between 6-10pm Monday to Friday and anytime on Sundays. All for £300.

**Amstrad CPC6128**, colour monitor, joystick, Multiface 2, magazines, 100 original games latest software desk, desk top publishing, word processor. Worth £1800, sell for £600. Please contact Andy on (061) 998 8481 anytime. Greenwood Road, 127 Benchill, Wythenshane, Manchester M22 7BD.

**Commodore 64**, games worth £100, datasette, joystick and Music Maker for £140 ono. Spectrum light-pen and games worth over £110, will sell for £70 ono, programming books and binders worth over £65, sell for £35 ono. Phone Andrew on 0322 28550.

**Atari 520 STFM**, excellent condition, one meg disk drive, 22 games, eleven disks of business software and utils., joystick, Basic reference book. Worth over £700, sell for £350 ono. Phone Lapford (03635) 200 after 7pm.

**Nintendo**, plus many games including Punch Out, Legend of Zelda, Metroid, Super Mario Bros and four others. All worth £314 including Konix joystick. A bargain at only £190. Call Harrogate (0423) 330042. Any offers welcome.

**ST games £300 worth** including Double Dragon, Operation Wolf, Victory Road, Colossus Chess X, plus more £100 ono. All boxed and with booklets, all nearly new (1-3 weeks old). For details write to Binh, 3 Queens Drive, Abbots Langley, Watford, Herts. WD5 0NQ. Be very quick.



Atari 520ST, plus Atari colour monitor and

**Atari 1040 STFM**, 0.5 meg internal drive, 1 meg RAM, modulator, A/B boot switch, 10 months guarantee left, 30 games, Degas Elite, 1st Word plus and lots of other utilities, 30 mags. All worth £800, sell for £380! Phone Chris after 6pm on (011) 948 0319.

**ST USER** would like world wide contacts to exchange hints, tips, etc. Hardware, software,

**Save time and money.** don't bother placing adverts, send £2.50 for long list of Atari Amiga contacts, state which. Send to Paul, 16 Chiltern Appr., Canvey Island, Essex SS8 9SJ. 100% reply. Send now. dont delay!

- The maximum is 35 words
- The service is not open to trade/commercial advertisers
- Small ads will be printed in the first available issue
- The editor reserves the right to refuse ads which do not comply with normal decent practice, or which could be interpreted as encouraging software piracy.

Write your advertisement here, one word per box, and include name, address and phone number if you want them printed.

[illegible]



# A PRINTER FOR YOUR COMPUTER

*Available for* Commodore 64, Atari ST, Amiga, Z88, Psion, Amstrad 464, IBM or Compatible, BBC Model B and Spectrum.

*for only*

**£99.95**

INCLUDING  
VAT & P+P

**HUSHPRINTER**  
*by the* Videovault

★ **FAST** – Bidirectional text printing at a quick 80 characters per second.

★ **QUIET** – less than 56dB noise (in case you need to hear a pin drop).

★ **VERSATILE** – Under control from you computer print line can be set for double size characters at 40 per line or half size characters at 160 per line, linespacing can be programmed to 4.5, 6 or 9 line to the inch.

★ Standard unit less than three pounds in weight including 100ft of paper roll.

★ **ECONOMICAL** – Uses low cost thermal paper, sharp tear bar permits economy tear off paper lengths – use only what you need no ribbons to run out or replace.

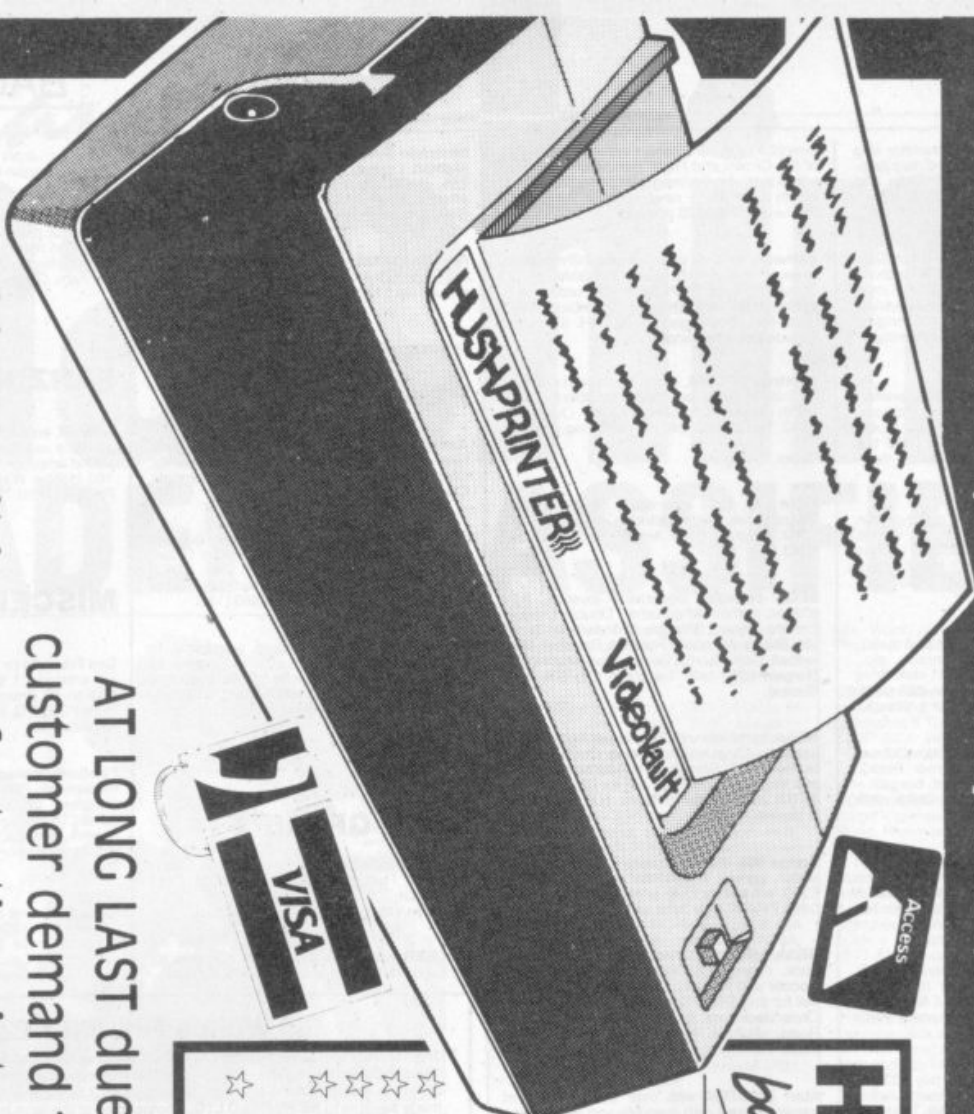
★ **RELIABLE** – A full 12 months warranty.

★ Manual controls – power on/off, linefeed.

★ Print modes text – bidirectional, graphics – unidirectional.

★ Print characteristics – alphanumeric, 80 characters per line, 40 characters per line in Expanded Mode, 160 characters per line in Condensed Mode. Graphic – dot addressable, 4800 dots per square inch (60 vertical by 80 horizontal)

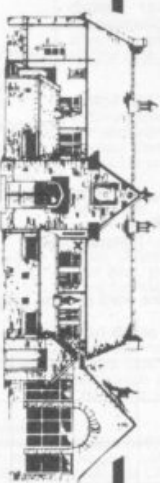
★ Self test build in standard, activated by holding down linefeed switch with power off and then turning power on.



AT LONG LAST due to customer demand the Videovault have a fantastic printer at an amazing low price, of only **£99.95** INCLUDING VAT & P+P

Send your order today with cheque, postal order, Access/Visa to:-  
**Videovault Ltd**, Old Kingsmoor School, Railway Street, Hatfield, Cheshire SK14 8AA.  
or Telephone: 04574 66555/67761/69499 Fax No.: 04574 68946.

TRADE ENQ.  
ONLY -  
CONTACT  
LIGHTNING  
BUSINESS TO  
BUSINESS ON  
01-965 9292  
(TRADE ONLY)



**Videovault**  
LIMITED

Old Kingsmoor School, Railway Street, Hatfield, Cheshire SK14 8AA.  
Tel: 04574 66555/67761/69499 Fax No.: 04574 68946.  
Head Office and Access & Visa orders, queries.



**1st Floor, 19-21 Division Street, Sheffield S14GE**  
**Tel: 0742 757070**

Video Games & Cartridges For –

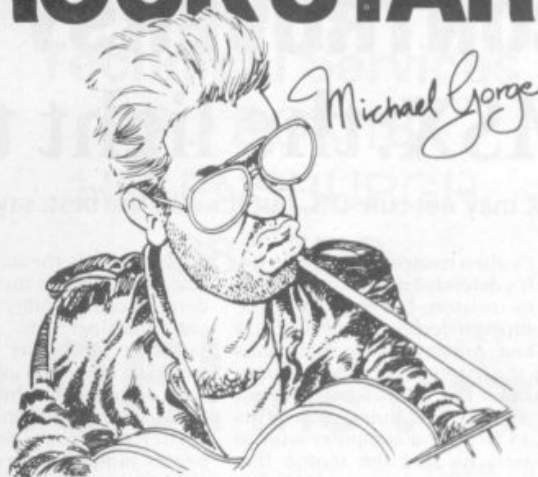
**SEGA® Nintendo**



JUST ARRIVED FROM JAPAN, THE NEW SENSATION  
IN COMPUTER GAMING, THE PC ENGINE,  
NINTENDO, SEGA, NEW DESIGN JOYSTICKS FOR  
ALL MACHINES. PLENTY OF EXCITING NEW GAMES  
ARE NOW IN STOCK.

**13 MANSFIELD ROAD  
NOTTINGHAM NG1 3FH  
TEL: 0602 475151**

# ROCK STAR



## Could you manage this Rock Star?



CodeAster, Software Company Ltd. PO Box 6, LEAMINGTON SPA, CV33 0JH

**24 Hr FAST  
DISPATCH**  
SUBJECT TO AVAILABILITY

# BEST BYTE

**ALL ORDERS SENT  
BY  
FIRST CLASS POST**

ATARIST	RRP	OUR	ATARIST	RRP	OUR	ATARIST	RRP	OUR	AMIGA	RRP	OUR	AMIGA	RRP	OUR
5 Star Compilation	24.95	14.90	Driller	24.95	14.90	Mini Office Pro Comms	24.95	15.90	Advanced Ski Sim	19.99	12.50	Hostages	24.95	15.50
Advanced Rugby Sim	19.99	12.50	Dungeon Master	24.95	12.90	Mini Office Pro Spread	24.95	15.90	Afterburner	24.99	16.15	Human Killing Machine	14.99	10.75
Afterburner	19.99	13.50	Elite	24.95	16.15	Nebulus	19.99	15.35	Balance of Power 1990	24.99	16.15	IK+	24.99	16.15
Baal	19.95	12.50	Emmanuel	19.99	13.50	Operation Neptune	24.95	14.90	Ballistic	19.95	12.50	Incred. Shrink. Sphere	24.99	16.15
Balance of Power 1990	24.99	16.15	F16 Combat Pilot	24.95	14.90	Operation Wolf	19.95	12.90	Batman	24.95	16.15	International Soccer	19.95	12.50
Ballistic	19.95	12.50	Falcon	24.99	16.15	Orbiter	24.95	14.90	Baal	19.95	12.50	Joan of Arc	24.99	17.50
Barbarian II	19.99	12.50	F.O.F.T (Out Now)	29.99	21.25	Pacland	19.95	12.50	Blastroids	24.99	16.15	Kennedy Approach	24.95	15.50
Batman	19.95	12.90	Fish!	24.95	14.90	Pac Mania	19.95	12.50	Captain Blood	24.95	15.50	Last Duel	14.99	10.75
Blastroids	19.99	12.90	Flying Shark	19.95	12.50	Premier Collection	29.99	19.50	Captain Fizz	14.95	9.90	Lombard RAC Rally	24.95	15.50
Captain Blood	24.95	14.90	Football Director 2	19.99	12.50	President is Missing	24.95	14.90	Carrier Command	24.95	15.50	Lords of Rising Sun	29.99	19.50
Carrier Command	24.95	14.90	Football Manager 2	19.99	12.50	Purple Saturn Day	24.95	14.90	Chukie Egg	19.95	12.50	Manhattan Dealers	24.99	15.50
Chrono Quest	29.95	17.90	Galactic Conqueror	19.99	12.50	Question of Sport	19.99	12.50	Cosmic Pirate	19.99	12.50	Menace	19.95	12.50
Chukie Egg	19.95	12.50	Galdgeons Domain	19.99	12.50	R-Type	19.99	13.50	Crazy Cars II	24.99	15.50	Operation Neptune	24.95	15.50
Corruption	24.95	14.90	Games Winter Ed.	19.99	15.35	Real Ghostbuster	19.99	12.90	Denaris	19.99	13.95	Operation Wolf	24.95	16.15
Crazy Cars II	19.99	12.50	Gold Rush	24.99	16.15	Return of Jedi	19.95	12.50	Double Dragon	19.99	12.90	Outrun	19.99	13.95
DT Olympic Challenge	19.95	12.50	Hero's of the Lance	24.99	19.15	Robocop	19.95	12.90	Dragons Lair 1MB only	44.95	33.25	Pacland	19.95	12.50
Double Dragon	19.99	12.90	Hits Disk Volume 2	24.95	16.15	Rocket Ranger	24.99	16.15	Dragon Ninja	24.95	16.15	Pac Mania	19.95	12.50
Dragon Ninja	19.95	12.90	Hostages	24.95	14.90	S. Davis World Snooker	19.99	12.50	Dragonscape	19.95	12.50	Pioneer Plague	24.99	15.50
Dragonscape	19.95	12.50	Human Killing Machine	14.99	10.75	S. D. I.	19.99	13.50	Dungeon Master 1MB only	24.99	16.15	Purple Saturn Day	24.95	15.50
			IK+	19.99	12.90	Sidewinder	9.99	6.90	Elite (out now)	24.95	15.50	R-Type	24.99	16.15
			Incred. Shrink. Sphere	19.99	13.50	K.D. Soccer Manager	19.95	12.50	Emmanuel	19.99	12.90	Real Ghostbusters	24.99	16.15
			Joan of Arc	19.99	15.35	Speedball	24.99	16.15	Falcon	29.99	19.50	Return of Jedi	19.99	12.50
			Kennedy Approach	24.95	14.90	Spitting Image	19.95	12.50	Fish	24.95	15.50	Robocop	24.95	16.15
			Kings Quest IV	29.99	19.50	STAC	39.95	25.90	Football Director 2	19.99	12.50	Rocket Ranger	29.95	19.50
			Last Duel	14.99	10.75	S.T.O.S. Compiler	19.95	12.90	Football Manager 2	19.99	12.50	Roger Rabbit	24.99	15.50
			Leaderboard Birdie	19.99	15.35	S.T.O.S. Maestro	24.95	15.90	Galdgeons Domain	19.99	12.50	Shoot 'em up Cons. Kit	24.99	15.90
			G. Lineker's Hotshot	19.99	13.95	Star Ray	19.95	12.50	Gauntlet II	19.99	13.95	K. D. Soccer Manager	19.95	12.50
			Lombard RAC Rally	24.99	14.90	Starglider 2	24.95	14.90	Heroes of the Lance	24.99	17.50	S. Davis World Snooker	19.99	12.50
			Manhattan Dealers	19.99	12.50	STOS	29.95	19.90	Hits Disk Vol 2	24.95	16.15	Space Harrier	24.99	16.15

3.5" DSDD DISKS

UNBRANDED 135TPI

£9.95 BOX OF TEN

PLEASE SEND ME THE FOLLOWING ITEMS

MICRO	ITEM	AMOUNT
TOTAL		

BEST BYTE ORDER FORM

TGM MAY

[illegible]

Name.....

Address .....

Method of Payment: (Please tick)      PO      Cheque

To order send this form with Cheque/PO payable to 'Best Byte' Mail Order only

Overseas orders add £1.50 per item, outside Europe add £3.00 per item for Air Mail.

**BEST BYTE (DEPT TGM16)**, 2 QUARRY GARDENS, TONBRIDGE, KENT TN9 2SG



# CONTROVERSY

## MSX: the light that failed?

MSX may not rule OK, but it's still the best, says TGM reader Craig Bell

It's often treated as just a big joke. It's defended nearly to the death by its users, but mocked by the superior-feeling owners of STs and Amigas. These arguments fill up the letters pages of half a dozen magazines, but the machine doesn't have a single UK publication of its own. In fact, for a computer with so few users it's like the mouse that roared; the dispute over MSX has raged since its birth six years ago.

Is it the perfect micro, let down by the foolishness of software houses and the public, or was the establishment of an international MSX standard an unrealistic ambition, the biggest mistake we ever made?

The MSX story really began with the efforts of one man: Kazuhiko 'Kay' Nishi, the so-called 'Mr MSX'. In Japan, Nishi and a few friends ran a small publication called *ASCII*, and though he was still at university he incorporated a company with the same name. The following year he visited Microsoft, developers of an important BASIC, in Seattle and realised how far behind the West Japan was in computer hardware and software – it was then, of course.

After Nishi decided to import American software to Japan, another trip to Microsoft's west coast headquarters in 1978 saw the formation of *ASCII Microsoft*; his company later had exclusive rights to sell Microsoft products in the Far East. Nishi was still only in his early twenties.

Meanwhile, the American arm of Microsoft grew from what was, in the late Seventies, a relatively small company to a very large and profitable firm – what with designing the MS-DOS operating system, and eventually GW-BASIC, for the IBM PC in the early Eighties, how could they possibly lose?

The first spark of life for MSX started back in 1982, and came from two American businessmen, Harry Fox and Alex Weiss. They decided to set up a microcomputer company called Spectravideo, and since they were working from a base in Hong Kong they chose to have the machines' hardware specification done there.

But they needed a BASIC, so who did they turn to? Microsoft, of course, and after several months of correspondence they finally received a reply telling them they should contact *ASCII*, who were handling the American firm's Far Eastern affairs.

This led to the involvement of Kay Nishi, and after several negotiations *ASCII Microsoft* agreed to do Spectravideo's BASIC.

By winter 1982/83 the machines were finished; the names of Spectravideo's computers were the SVI 328 and 728. But sales did not do as well as hoped.

Nishi obviously understood the potential of the Spectravideo range,

but he also saw the state of the micro-computer market: there was no standard, no compatibility between different machines. He predicted that Japanese electronics manufacturers would be interested in creating a standard, so he approached firms such as Sony, Toshiba and Panasonic in 1982.

They, and about a dozen other companies, jumped at the chance – and in 1983 Nishi announced the MSX standard.

### Heroic failure

Well, that's roughly how MSX started, but since then we've seen things come and go. MSX at one time had three UK dedicated publications on the newsstands, but in mid-1986 we saw the demise of the last MSX publication, *MSX Computing*, thanks to a lack of advertising.

But of course this was after Sony, Toshiba and companions pulled out of the UK MSX market.

Many believe the so-called failure of MSX was due to its technical specification. But this argument can easily be dismissed, because at that time the Spectrum was flourishing, and Amstrad had just released their new CPC range; MSX was a far better machine than any other 8-bit computer then, and still is.

There were other reasons for MSX's poor sales, not least the price of the original machines – would you buy a disk drive that cost more than a computer? (Sony's MSX disk drive retailed at £345, while their MSX Hit-Bit machine cost £300.)

But all said and done, no-one in particular is to blame for what happened to MSX.

In late 1985 the MSX-II was

launched in Japan, but by that time MSX was far behind the Spectrum, C64 and CPC. The manufacturers must have realised even then that the MSX did not have much of a chance against these machines, and the up-and-coming 16-bit micros – otherwise they would have launched the MSX-II in the UK.

Till last year, you couldn't have bought an MSX-II in Britain. This changed when a few MSX retailers started selling them, and now quite a few are in use. There aren't enough to bring any support from software houses, but Konami do supply a few titles here and there. (Incidentally, if you've never seen an MSX-II game you may be quite shocked when you do; the graphics are up to the standard of the ST, if not better, though it's a 'humble' 8-bit.)

The latest positive news for the MSX user is the announcement that an advanced MSX-II, the MSX-II+, is to be officially released in Europe (TGM016). Its specifications include 19,268 colours (no, it's not a typo), a maximum bitmapped screen resolution of 512x424 (this was previously only available for the MSX-II with a special adaptor, but now comes as standard), Yamaha six-channel FM sound chip, MSX BASIC 3.0, and a Z80B CPU running at 6MHz.

As to this machine being officially released in the UK, well, that's a different matter – but again, we should see some MSX retailers stocking them. An MSX-II+ with digitiser is expected to cost £520-£550 in Holland, but I doubt this necessarily represents a true UK price.

Let's just hope that a few people – software houses, retailers, magazines – see the light.

■ If you're a struggling MSX user, all alone with no-one to turn to for help, write to Craig Bell c/o TGM – he'll be more than glad to give help and assistance. Please send an SAE. Don't phone, because he doesn't work at the office!

For information on MSX software, contact the Konami Software Club: 17 Bowden Hill, Newton Abbot, Devon TQ12 1BH ☎ (0626) 68611.

**"MSX is a far better machine than any other 8-bit computer – and the graphics are up to ST standard"**

*Micro martyrdom: MSX users believed they were right, but they often got burned by the system's poor support*



PHOTO FROM THE NAME OF THE ROSE/NEUE CONSTANTIN FILM PRODUKTION/RANK





## Technical Services

PO BOX 18  
HELENSBURGH  
G84 7DQ

WITH PAL TV CONVERTER

# NOW ONLY £159.95! inc VAT

(+ £5.00 P&P)

MENTION TECHNICAL SERVICES guarantee that if we are out of stock of PC ENGINES when your cheque or postal order arrives:

1. No cheques will be cashed before the goods are available
2. You will be informed of any delays immediately by first class post
3. A software voucher giving £10 off your next purchase will be available  
eg. VICTORY RUN or WONDERBOY for £14.95 ..... or SPACE HARRIER for £19.95

### CURRENT SOFTWARE TITLES AVAILABLE

1. Shanghai	£24.95
2. Wonderboy	£24.95
3. Drunken Master	£24.95
4. Victory Run	£24.95
5. Chan & Chan	£24.95
6. World Stadium	£24.95
7. R-Type I	£24.95
8. R-Type II	£24.95
9. Galaga '88	£24.95
10. Nectaris	£27.95

### (New titles arriving next month)

11. World Court Tennis	£24.99
12. Alien Crush	£24.95
13. The Legendary Axe	£24.95
14. Space Harrier	£29.95
15. Dragon Spirit	£24.95
16. Fantasy Zone	£24.95
17. Vigilante	£29.95
18. Son Son II	£24.95
19. Baseball Namcot	£24.95

(+ £1.50 P&P/Software Order)

### CD ROM UNITS

We are currently negotiating the price of the CD ROM unit and should be able to offer this for £299 inc. VAT. This item will be on a first come first serve basis, so if you wish to order one, then let us know.

We will also have a range of joysticks and other peripherals in the near future. All the usual peripherals for the PC ENGINE are available now.

16-Bit Sega available from next month.

Cheques and postal orders/S.A.E. for details to:

### Technical Services

PO BOX 18  
HELENSBURGH  
G84 7DQ

MENTION TECHNICAL SERVICES have a huge range of NINTENDO products which are available now. Please send a S.A.E. for details.





# UNCLE MEL'S TRIVIA QUIZ

- 1) Spot the odd one out: the Hungarian embassy, *FOOT*, eggs.
- 2) True or false? Digital audio tape (DAT) cassettes run faster than analogue cassettes.
- 3) What result can you get by using a radio microphone with a camcorder?
- 4) Within ten years, when did the computer first appear in a science-fiction film?
- 5) What do the following acronyms stand for? a) LAN, b) *SEUCK*, c) GURPS, d) RISC.
- 6) What is most effective in cleaning the pins of a dot-matrix printer? a) A paperclip, b) 100%-proof vodka, c) gerbil excrement.
- 7) What have *Barbarian*, *Rocket Ranger* and *Vixen* got in common?
- 8) What is the DEC (Digital Equipment Corp.) equivalent of ASCII code B ACK?
- 9) True or false? Bug Byte, First Media, Mattel, Olivetti, Toshiba and Activision are all listed in the phone book with the Satanic number 666.
- 10) In the movie *Alien*, who was Mother?
- 11) The lyrics 'get a pocket computer, try to do what you used to do' appeared in *Picture This*. Who performed it?
- 12) What did Martin Caidin's novel *Cyborg* inspire in 1973?
- 13) In which computer game do Tina Turnoff, Mince, Rick Ghastley and String appear?
- 14) What's the difference between Clive Sinclair and his bride-to-be Bernadette Tynan?
- 15) What's the difference between a fighting cock and most business software?
- 16) Who said 'science without religion is lame, religion without science is blind'?
- 17) Which games are in these condemned foods: TRYPE, PO LOO FART WINE, DEEP BALLS?
- 18) Which computer game links Jack Nicholson and Cesar Romero?
- 19) Is Ring Pursuit a) the queue to marry Prince Edward, b) illegal in Alabama, c) a cosmic slalom?
- 20) When was the CD-ROM first dreamed of: 1945, 1965 or 1985?



Diabolical: Activision's Rod Cousens. See question 9.



Feeling the Amstrad effect: pop star Blondie. See question 11.

## ANSWERS

- 1) None, they've all got bugs.
- 2) False - they run almost six times more slowly, at 8.15mm per second.
- 3) Six months in jail or a £2,000 fine - it's illegal!
- 4) 1915, in *The Black Box*.
- 5) a) local-area network, b) Shoot-'Em-Up Construction Kit, c) Generic Universal Roleplaying System, d) reduced instruction set computing.
- 6) Hic...
- 7) They've all been banned in West Germany.
- 8) 66.6.
- 9) True - the little devils!
- 10) The spaceship's onboard computer.
- 11) Blondie.
- 12) Six Million Dollar Man.
- 13) Rock Star Ale My Hamster (Code Masters).
- 14) One's half a sage, the other's half his age.
- 15) One clucks defiance, the other farts the clients.
- 16) Albert Einstein, 1950.
- 17) R-Type, Operation Wolf, Speedball.
- 18) Batman - both actors play the Joker.
- 19) c) The first event in *Purple Saturn Day* (Ere Informatique).
- 20) 1945, by Vannevar Bush.

## FUTURISTIC ELECTRONIC ARTS COMPETITION

Winner receives a book and game signed by the author and programmers, plus four videos. He is **G. Molloy** of Wallasey L44 4EJ. Ten runners-up receive signed copies of the book and game. They are Mikko Laari, KOKKOLA Finland; Phil Davidson, Edinburgh EH8 9RN; Jordan Hansen, København Denmark; Gavin Smith, Reading RG5 3LT; Marcello Bor-tolino, London N16 5BG; Garry Lees, Whitley BAY NE26 3NS; Jan Hein de Vrooc, Biaricum

Holland; David Coverley, Redcar TS11 6DE; Fiona Bissett, London N14 5PT; Julian Blake, St Leonards-On-Sea TN38 8DB.

## TOTALLY DAZZLED BY INCENTIVE COMP

The winner receives a trip for two to see a total eclipse in Finland, 1990. One reader from TGM, ZZAP and CRASH to go. The ZZAP winner is **John Macleod** of Ross-Shire IV40 8HE. The TGM winner is yet to be drawn.



# Cheetah STAR PROBE

THE  
**EMPIRE**  
STRIKES  
BACK



DIRECTLY  
COMPATIBLE  
with Sinclair  
+2, +3

- Eight highly sensitive light touch **MICROSWITCHES**
- Unique ergonomically designed control handle
- Built in **AUTO FIRE** • Indestructible **METAL SHAFT**
- +2, +3 Selector Connector • Four fire buttons • 12 month warranty • Automatic Centering
- High impact robust body • Heavy duty base with strong stabilising suction cups
- Eight directional control • On table or in hand operation • Compatible with ZX Spectrum 16k, 48k, 128k (Interface sold separately), +2, +3, Commodore 64, Vic 20, C64, Plus 4 (adaptor sold separately), Amstrad, Atari, etc.

ONLY  
**£14.95**

## THE NEW ROYAL EDITION



Cheetah  
**CHALLENGER**

ONLY **£4.95**

- Two ultra sensitive fire buttons
- Ergonomically designed control handle • 12 month warranty • Automatic centering • High impact robust body • Heavy duty base with strong stabilising suction cups • Eight directional control • On table or in hand operation • Compatible with ZX Spectrum 16k, 48k, 128k, (interface sold separately) Commodore 64, Vic 20, Amstrad, Atari, etc.

DELUXE

## A Right Royal Joystick



Cheetah **MACHI**  
MICROSWITCH JOYSTICK

- AUTO FIRE
- METAL SHAFT
- 12 MONTH WARRANTY

ONLY....  
**£10.95**

- Deluxe, robust construction • Comfortable rugged hand-grip, 8 directional control with automatic centering • Heavy duty base with strong stabilising suction cups • Highly sensitive light touch **MICRO SWITCH** fire buttons • Ergonomically designed control handle with indestructible **METAL SHAFT** • Built in **AUTO FIRE** function.

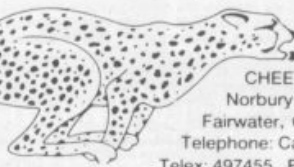
Machi Joystick compatible with: • Sinclair ZX Spectrum 16K, 48K, 128K (Interface sold separately), +2, +3 • Amstrad Computers • Commodore 64 and Vic 20 Computers • Commodore C16 & plus 4 Computers (adaptor sold separately) • Atari 2600 & Atari 5200 Video Game Systems • Atari Home Computers etc.

All specifications and prices subject to change without notice

Prices include VAT, postage & packing.  
Delivery normally 14 days.  
Export orders at no extra cost.  
Dealer enquiries welcome.



Cheetah  
Marketing



## THE TOP PEOPLES CHOICE



125+  
The

Explosive Joystick

- Compatible with ZX Spectrum, 16k, 48k, 128k (Interface sold separately), +2, +3, Commodore 64, Vic 20, C16, Plus 4 (adaptor sold separately), Amstrad, Atari, etc.
- Four extremely sensitive fire buttons
- Uniquely styles hand grip
- Auto fire switch • 12 months warranty
- +2 Selector Connector

ONLY  
**£8.95**

DIRECTLY  
COMPATIBLE  
with Sinclair  
+2, +3

Cheetah products available from branches of **Argos** **Dixons** **Harveys**

**LAGERS** **WHSMITH**

High St. Stores and all good computer shops or direct from Cheetah.

CHEETAH MARKETING LTD  
Norbury House, Norbury Road,  
Fairwater, Cardiff CF5 3AS.  
Telephone: Cardiff (0222) 555525  
Telex: 497455 Fax: (0222) 555527



# The Games machine

## NEXT MONTH

TGM019,  
JUNE 1989  
ON SALE

MAY 18

■ **CONSOLES** — the great debate starts here, in next month's issue! Are they all they're cracked up to be? The hardware says yes, but are you supported by the software? Is there enough? You don't want to buy a machine and then find there aren't enough games to make it worthwhile, or their cost is so high you can't afford many. TGM provides you with the definitive run-down on the console game stakes and shows the way forward.

■ TGM goes coin-op crazy with arcade action giants Capcom — we'll be bringing you the low down on the hot shots Strider, Ghost And Ghouls, Forgotten Worlds and some exclusive news! ■ The Prize works! The Playing Tips change Robins, go CANDY and get bigger than ever! ■ Jez San reveals the exciting gameplay in F-117a Aggressor ■ Plus: Coin-ops, more Gallery Art and Back-Bytes.

IT'S  
ANOTHER  
**!WHOPPER!**  
More than  
**100**  
**GAMES**  
Reviewed!

**EDITORIAL AND HEAD OFFICE** 47 Gravel Hill, Ludlow, Shropshire SY8 1QS (0584) 5851/2/3 **Editor:** Roger Kean **Features Editor:** Barnaby Page  
**Staff Writers:** Robin Hogg, Warren Lapworth, Robin Candy **Editorial Assistants:** Viv Vickress, Caroline Blake **Photography:** Cameron Pound, Michael Parkinson (Assistant) **Contributors:** Mel Croucher, Don Hughes Marshal M Rosenthal (USA), John Woods **PRODUCTION DEPARTMENT** 1/2 King Street, Ludlow, Shropshire SY8 1AQ (0584) 5851/2/3 **Production Manager:** Jonathan Rignall **Senior Designer:** Wayne Allen **Reprographics Supervisor:** Matthew Uffindell **Design Assistants:** Yvonne Priest, Melvyn Fisher **Production team:** Robert Millichamp, Robert Hamilton, Tim Morris, Jenny Reddard  
**ADVERTISING AND ADMINISTRATION DEPARTMENTS** **Editorial Director:** Roger Kean **Publisher:** Geoff Grimes **Group Advertisement Director:** Roger Bennett **Advertisement Manager:** Neil Dyson **Advertisement Sales Executives:** Sarah Chapman, Lee Watkins **Assistant:** Jackie Morris (0584) 4603 or 5852 **Group Promotions Executive:** Richard Eddy **Mail order:** Carol Kinsey **Subscriptions:** PO Box 20, Ludlow, Shropshire SY8 1DB Typeset by The Tortoise Shell Press, Ludlow and on our Apple Macintosh II running Quark Xpress 2.0. 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.  
TGM Magazines Ltd 1989 A Newsfield Publication ISSN 0954-8092

Cover design and illustration by Oliver Frey



# KICK OFF



**BLISTERING PACE  
PIXEL PERFECT PASSING  
SUPERB TACTICAL PLAY**

A Soccer Simulator which  
is not only accurate and  
realistic but is also  
great fun to  
play

Whatever your style of play may be, be it playing the Long Ball or playing the Sweeper, your players will be in position to receive the passes, control the midfield and tackle an advancing striker. Each player on the field is an individual with a unique combination of four attributes - Pace, Accuracy, Stamina and Aggression. Watch out for the Brazilians at the International level, they are dynamite.

\* Full size multi-directional scrolling pitch with scanner showing all the players on the field.

\* Option to practice and learn ball control, take corners and practice penalties.

\* 5 Skill levels, International to Sunday League. The levels of both teams set separately. The ultimate challenge is the defeat of the star studded team of Internationals by the Sunday League of no hoppers. A super human test of skill and concentration.

\* One or two players option. \* 4 distinct tactics.

\* League competition for 1 to 8 players. Load and Save League facilities.

\* Simple controls to dribble, shoot, pass, chip or head the ball or do a sliding tackle.

\* Amazing ball simulation takes account of the ground and air friction. Direction changing breeze at the higher skill levels

\* 9 types of Corner kicks, Penalties, Yellow and Red cards and a host of other features like players getting tired by the end of the game, time wasting, injury time, etc.



**PLAYING IT IS EASY**

**MASTERING IT WILL TAKE TIME - A LOT OF TIME**



AMIGA



AMIGA



ATARI ST



## AVAILABLE ON

AMIGA	£19.95
ATARI ST	£19.95
CBM 64 Cassette	£9.95
CBM 64 Disk	£14.95
IBM PC Comp.	£24.95

**ANCO**

ANCO SOFTWARE LTD., UNIT 10, BURNHAM TRADING ESTATE, LAWSON ROAD,  
DARTFORD, KENT. Mail Order by Cheque, Postal Order, ACCESS or VISA.  
Telephone No.: 0322 92513/92518. FAX No.: 0322 93422.



THE WORLD'S No. 1 ARCADE GAME

# OPERATION WOLF



## ocean

**OPERATION**  
**WOLF**

**THE ARCADE SENSATION OF THE YEAR** – Six levels of thrilling coin-op action are brought to life on your home micro. Without fast and accurate shooting skills you will never complete your mission which takes you through steaming jungles and enemy strongholds as you

Licensed from © Taito Corp. 1988



attempt to liberate the prisoners and secure a safe getaway. With all the original arcade play features – magazine reloads, energy bottles, hidden supplies, rocket grenades and much, much more.

SPECTRUM  
**£8.95**  
COMMODORE  
**£9.95**  
AMSTRAD

Ocean Software Limited · 6 Central Street · Manchester · M2 5NS · Telephone 061 832 6633 · Telex 669977 OCEANS G