JUNE 1993 £3.95

3½" disks with this copy
Also available with 5¼" disks

PC review

THE COMPLETE GUIDE TO PC ENTERTAINMENT

SENSIBLE SOCCER

The 7th Guest

Missing disk?
Consult your newsagent

IS THE CD GAMES REVOLUTION HERE?

Four CD-ROM drives, plus The 7th Guest MUST BE WON! Plus full review inside

PICTURE THIS

Get into graphics with our guide to value for money paint packages

STRIKE COMMANDER REVIEWED

Plus Zool, Ultima VII pt 2, Dogfight, Buzz Aldrin, and many more

Missing disk?
Consult your newsagent



LOOK!
FREE DISK LABELS

PC review
The 7th Guest
ISSUE 20 JUNE 1993

ROLE PLAY FOR PC

The Legend of Darkmoon continues

The famous role model for all AD&D® role-playing fantasies, the dreaded Temple Darkmoon is back.

More sinister, terrifying and haunting than ever. It will slowly weave into your sub-conscious and refuse to let go.



Through a clearing in the shadowy forest, a trio of towers rise menacingly into the night sky. You are on the threshold of terror, one wrong move and it's curtains. Finito.



The exciting sequel to Eye of the Beholder is here. Bigger. Better. And so realistic you'll keep looking over your shoulder.

The improved "point 'n' click" interface lets you come face-to-face with the most gruesome characters and complex clues.



In fact, you'll only want to stop playing this State-of-the-Art adventure game for one reason. To pinch yourself and prove you're not in the middle of a nightmare.

Available on: PC (EGA, VGA/ MCGA (256 Colour). 640k RAM and Hard disk required. Supports AdLib™, Soundblaster™ and compatibles). Amiga version coming soon.

ADVANCED DUNGEONS & DRAGONS, AD&D and the TSR logo are trademarks owned by TSR, Inc., Lake Geneva, WI, USA and used under license from Strategic Simulations, Inc.,Sunnyvale, CA, USA. ©1991, 1992 TSR, Inc. ©1991, 1992 Strategic Simulations, Inc. All rights reserved.

LAUGHS FOR PC

Side-splitting pirate adventure

Just when you thought it was le end for LeChuck, he's back.

The legend states that "when LeChuck wants you dead, you're dead"- grim news for his old adversary, young Guybrush Threepwood.





But fear not. Big Whoop holds the key to great power. All is not lost.

In this stunning graphic sequel, young Guybrush's adventures will have you rolling in hysterics. Beware, you'll laugh so hard, milk will flow from your nose.

Behind every pirate is a really gnarly chair and in front of Guybrush is a saga so savage it'll put hairs on your chest.



With 256 colours (PC version), variable difficulty modes, interactive reggae music and "point 'n' click" interface, you'll be transported to Monkey Island in a flash.

So, brace yourself, the fun starts here. Who knows when it will stop?

Available on: Amiga (32 colours) and PC (VGA/ MCGA. Requires 640k Ram AT or compatible. Supports AdLib™, Roland™, Soundblaster™ and SoundMaster™II sound cards. Hard drive required.

TM & © 1991 LucasArts Entertainment Company. Lucasfilm Games is a trademark of Lucasfilm Ltd. Monkey Island 2 - Le Chuck's Revenge is a trademark of LucasArts Entertainment Company. All rights reserved.

U.S GOLD®

A serious PC experience

U.S Gold Ltd., Units 2/3, Holford Way, Holford, Birmingham B6 7AX, England. Tel: 021 625 3366

SPORT FOR PC

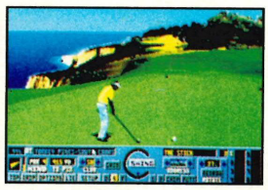
Play a round All year round

It's raining cats and dogs outside, but it's a beautiful crisp Spring day on the Torrey Pines Golf Course.

You approach the tee, driver in hand. Gazing down the fairway, you notice every feature of this classic Pacific Ocean Links course.



The Challenge of Golf takes you to a new level of realism. You can almost smell the grass, feel the silky putting surfaces and take in the fresh sea air. At times, you'll want to replace the divots, until you remember it's only a game.





But WOW, what a game!

And now, the 256 colour 3D graphics can be enjoyed on another six championship courses: Bountiful Municipal, Firestone CC South, Bayhill, Pinehurst, Barton Creek and Hyatt Dorado.



So, put on your sun visor and practice your swing. You're next on the tee.

Available on:
PC (VGA or MCGA, 640k and Hard disk required. Supports: AdLib™, Soundblaster™. MSound™ sound cards)
Amiga version coming soon.

©Access Software, Inc. 1991
All rights reserved.

ACCESS™

FLIGHT FOR PC

A Simulation to take your breath away

Hard on the tail of Jetfighter I, the mind-blowing combat sequel is airborne.

Jetfighter II: Advanced Tactical Fighter shoots Top Gun down in flames.



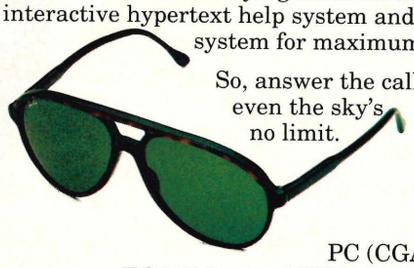
Strap yourself in as the most advanced and powerful 3D technology takes to the skies, with you as pilot whatever the time of day or night.

Revolutionary animation lets you see parachutes opening in the wind, radar chaff blooming behind your jet and feel the landing gear deploy and retract.



Dogfights take on a different dimension with real time artificial intelligence. Includes F/A-18 Hornet, F-16 Falcon and F-14 Tomcat.

Features instant flying mode for beginners, interactive hypertext help system and tunable joystick system for maximum response.



So, answer the call of the wild. Now, even the sky's no limit.

Available on:
PC (CGA/Tandy (4 Colour), EGA (16 colour) VGA (256 Colour). 640k RAM required. Supports AdLib™ and Soundblaster™ sound cards. Hard drive recommended.

© 1991 Velocity.
All rights reserved.

VELOCITY

U.S. GOLD®

A serious PC experience

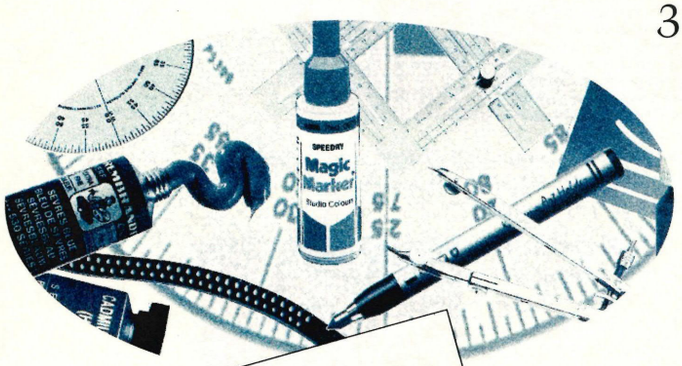
SCREENSHOTS ARE ONLY INTENDED TO BE ILLUSTRATIVE OF THE GAMEPLAY AND NOT THE SCREEN GRAPHICS WHICH MAY VARY CONSIDERABLY BETWEEN DIFFERENT FORMATS IN QUALITY AND APPEARANCE AND ARE SUBJECT TO THE COMPUTER'S SPECIFICATIONS

PC review

JUNE 1993 ISSUE 20

Printed in the UK






REVIEW

Zool

The much-hyped ninja from the Nth dimension is here—and he's aiming to prove, yet again, that the PC can handle arcade games as well as any other home computer

FEATURES

24 **Competition**
Win a copy of The 7th Guest! Win a CD-ROM drive to play it on!

26 **Guide to graphics packages**
If you're interested in drawing or painting on the PC, you can buy a graphics program for under £100. John Bennett tests a selection of reasonably priced packages and explains the jargon involved.

34 **MicroProse branches out**
The company famous for its flight simulations has recently been diversifying into sports games, adventures and strategy games, using its own in-house programmers in the UK. Dean Evans reports.

38 **Double your hard disk?**
Programs such as Stacker and SuperStor appear to give you twice the capacity on your hard disk. Mike James explains how these programs work and how to circumvent some of the pitfalls.



110 **Upgrading your PC**
Part of the essential weaponry for today's PC owner is indisputably a mouse. And, as you might expect, some mice are more equal than others. Plus, a comprehensive buyers' guide.

contents



8 **COVER DISK**

Sensible Soccer, one of the most talked-about, most purely enjoyable games for other computers last year, is going to be out on the PC real soon now, and we have a 'who scores, wins' taster on the cover disk this month. Plus, for 3.5" disk owners, a preview of MicroProse's atmospheric Return of the Phantom. And everyone can enjoy Contax, a PC version of Go.

Turn straight to page 8 for full details on installing and using your cover disks.



THIS MONTH'S REVIEWS

Strike Commander Origin	44
The 7th Guest Virgin Games	50
Buzz Aldrin Interplay	56
Ultima VII: Part 2 Origin	60
Nigel Mansell Gremlin	64
Magic Candle 3 Mindcraft	66
Unlimited Adventures SSI	68
Zool Gremlin	70
Xenobots Electronic Arts	72
Dogfight MicroProse	76
Tony La Russa's Baseball 2 SSI	80
Spaceward Ho! New World	82
Space Hulk Electronic Arts	84
World Class Rugby Domark	86

GAMES

20 **Coming Soon**
A summer special this month: with a bumper crop of PC releases in the pipeline, we bring you a Coming Soon extravaganza.

43 **Reviews**
See the panel, left, for details.

92 **Shareware**
Sam Mackenzie looks at the latest releases, and a clutch of shareware versions of Tetris.

96 **QED**
Hints, tips and cheats for Ultima Underworld, KGB, Sherlock Holmes, Alone in the Dark, and many more.

130 **Classic Game of the Month**
Chris Crawford takes the hot seat this month.

TORNADO

Imagine the thrill...



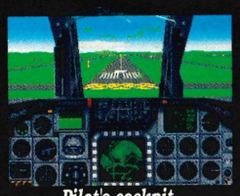


Now experience it...

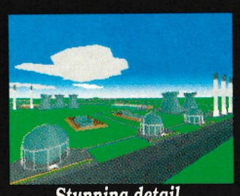
200 ft. 600 kts. You lead a formation of six Tornados deep into enemy territory. Terrain following system on. Mission planned to the last detail. Split second timing for a synchronised attack with pin-point accuracy.

Discover what real Tornado pilots mean by a "target-rich environment". Go it alone or take the squadron - the choice is yours. Tornado. Unbeatable.

- From simulator training to multi-mission campaigns
- Unsurpassed real world detail
- Laser-guided bombs, JP233, Alarm, and more!
- Unequalled authenticity
- Night flying & low visibility
- 2 player head-to-head



Pilot's cockpit



Stunning detail



Navigator's cockpit



Sophisticated mission planning



Awesome missions

IBM PC - £44.99

Amiga - £34.99

Atari ST/STE - £34.99

PC Screen Shots

Digital Integration

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

BARCLAYCARD VISA Access

PC review

contents

JUNE 1993 ISSUE 20

REGULARS

14 **News**
486 chips become ever more plentiful ... LucasArts' first CD-ROM only game ... Westpoint Creative gets musical ... and a full round-up of all that's happening in leisure PCs.

118 **Q&A**
Resident agony uncle Mike James is on hand to help with all your PC problems.

118 **Letters**
Your views on PCs and PC games.



123 **Back issues**
Is your PC Review collection incomplete? Order your back num bers here.

126 **Subscribe to PC Review**
Take advantage of our excellent MicroProse offer and receive 12 issues of PC Review, delivered direct to your door.

Last month's cover should have been credited to Lee Grabber (X-Wing model), and Phil Crean (photography). Apologies, guys.

ISSUE 20 *June 1993*

EMAP Images, Priory Court,
30-32 Farringdon Lane, London EC1R 3AU
Tel: (071) 972 6700 Fax: (071) 972 6710
E-mail: pcreview@CIX.compulink.co.uk
Subscriptions and back issues: (0858) 410510

EDITORIAL
Editor Christina Erskine
Deputy editor John Bennett
Production editor Paula Shields
Staff writers Dean Evans, Cal Jones
Contributors Steve Boxer, Ciarán Brennan, Gordon Houghton, Mike James, Wayne Legg, Sam Mackenzie, Robin Matthews, Peter Worlock
Special thanks this issue Simon Byron, David Upchurch

DESIGN
Art editors Mark Edwards, Becky Willis
Additional design Sara Pruce
In-house scanning Sara Pruce
Photography Rob Monk, Rex Features
Illustration Stephen Lillie

ADVERTISING
Group advertisement manager Nigel Taylor
Advertising sales executive Melanie Costin
Advertising production Tina Gynn

MANAGEMENT
Publishing director Mike Frey
Publisher's assistant Sasha Creasey
Marketing director Marcus Rich
Product manager Sarah Ewing
Marketing assistant Fiona Malloch
Managing director Terry Pratt

PC REVIEW EUROPE
France Jean-Michel Blottière
Germany Tom Schmidt
Spain Oscar del Moral
Italy Riccardo Albini

Page output and colour origination by Team, 105-109 Oxford Street, W1, Colour Systems, 90-92 Pentonville Road, London N1, Printed by Passmore International, 17-21 Hovefields Avenue, Burnt Mills Industrial Estate, Basildon, Essex. Distributed by BBC Frontline.

© EMAP Images 1993. No part of this magazine may be reproduced, stored in a retrieval system or transmitted in any form (either electronic or mechanical) without the express written consent of the publisher.

PC Review does its best to ensure that the information carried in the magazine is accurate, but cannot be held responsible for any errors which occur.

SUBSCRIPTION RATES
12 issues United Kingdom £40.00
12 issues Europe (airmail) £48.00
12 issues Rest of the World (airmail) £58.00

Contributors

Deputy editor John Bennett, left, used for work for our sister publication PC User, and was a regular contributor to What Personal Computer, but has now seen the light and decided that the entertainment market is the place to be. A keen PC games player and graphics specialist, John sifted through the hundreds of art programs on offer to produce the guide to graphics packages on page 26.



Cal Jones is an experienced role-playing and adventure games enthusiast, with seven years of computer gaming behind her. Prior to taking up a job as staff writer on PC Review, Cal was a regular reviewer for the Adventure and Strategy Club.

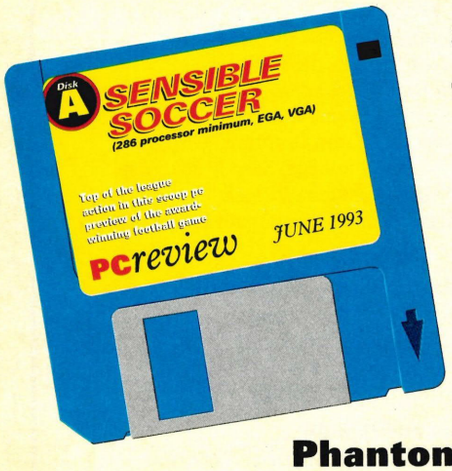


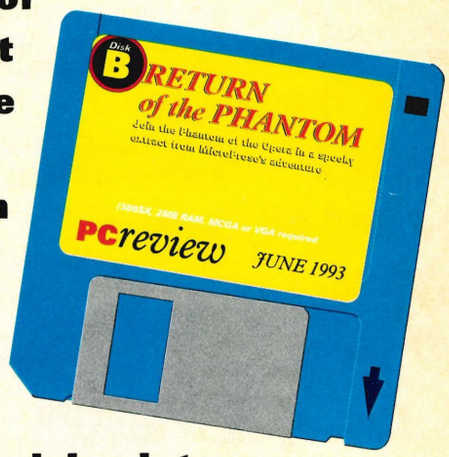
Dean Evans, staff writer, has owned and played games on just about every computer format going, but settled for the PC as the leisure machine of the future as early as 1988, particularly for its prowess at simulations and strategy games.



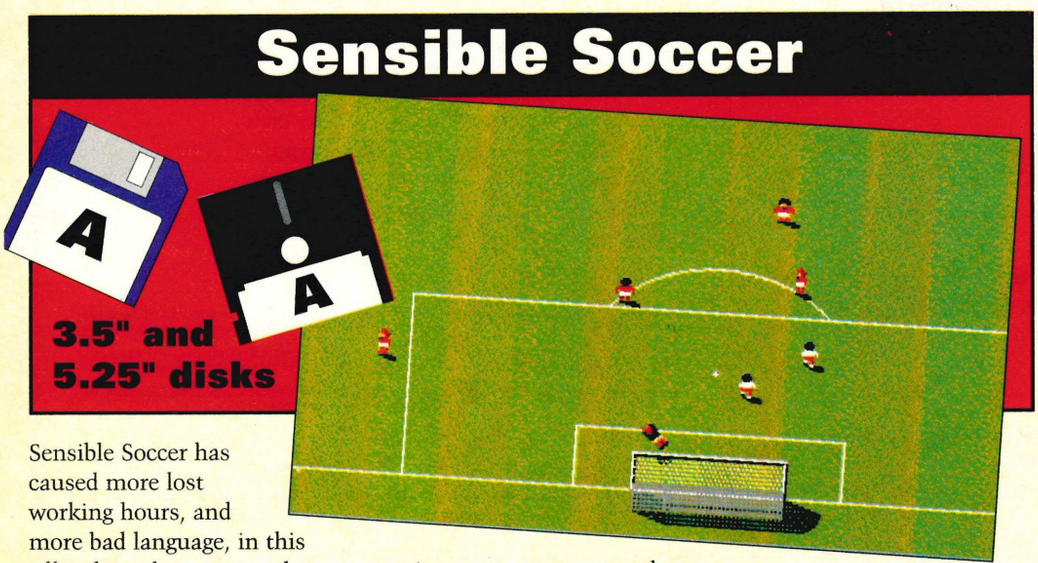
Cover disks

Opera, sport, and a variation on the ancient Chinese game of Go. Put the boot in with a fully playable demo of Sensible Soccer, probably the best football game ever to arrive on the PC, or take a more thoughtful approach with Contax. Users with 3.5" drives get a spot of culture, with a playable demo of MicroProse's graphic adventure, Return of the Phantom. And 5.25" inch users also get to delve into Cavern, 32 levels of Boulderdash-style shareware.





Sensible Soccer



Sensible Soccer has caused more lost working hours, and more bad language, in this office than almost any other game we've seen. It's coming out on the PC for the first time next month, and we've got an exclusive demo for you to play. Sensi, as it's known, is best played with a joystick, although you can easily play with the cursor keys.

The demo match is a one-player game between Manchester United and Leeds. You always play Leeds, like it or lump it, and for those of you who aren't into football — that's the team in the white. The game demo runs until one side or other scores a goal, and then it drops you back to the DOS prompt before you can play again.

Hopefully, since it's football, there can't be too much that needs to be explained ...

How to play

Log on to the directory in which you installed the game. Then it's a good idea to type

Setup [Enter]

to set the control device (keyboard or joystick) and the graphics mode — either EGA or VGA. Next, all you need to do is type

Soc [Enter]

How to quit

Hit F2 to quit the demo.

Hardware required

At least a 286-based PC with either EGA or VGA graphics, hard disk and 640K of memory. The demo has no sound support.

Control

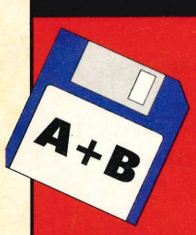
Move the players nearest the ball by using either a joystick, the number keys surrounding the '5' on your PC keypad, or the cursor keys. Use the Shift key or joystick fire button to kick the ball or tackle.

The goalkeeper is automatically controlled by the computer, other than to kick the ball back out.

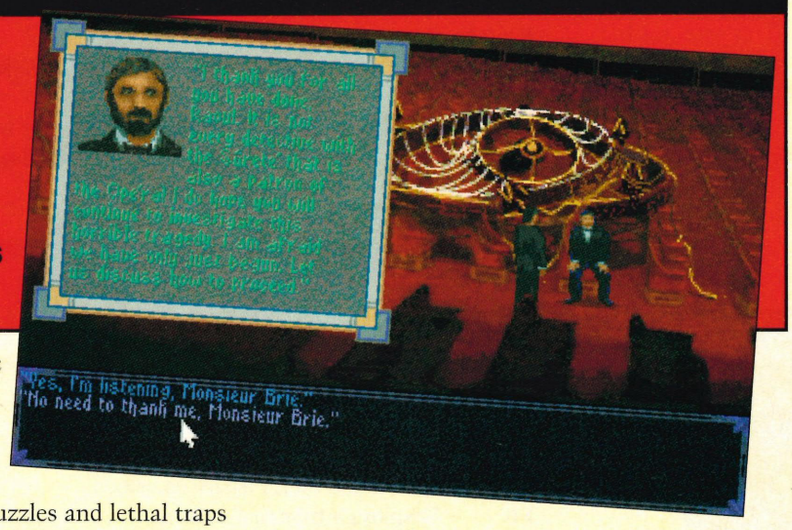
For a short pass, tap the fire button quickly, while facing the direction you want the ball to go. A longer hit on the fire button will make the player shoot the ball.

Sensible Soccer uses 'aftertouch' to control the ball in flight. So, if you kick the ball forwards, pulling back on the joystick, or hitting a cursor key in the opposite direction from the way you are shooting, controls how high in the air the ball will go. Likewise, moving the joystick sideways (or the left and right cursor keys) after kicking the ball will cause the shot or pass to bend in that direction.

Return of the Phantom



3.5" disks only



Microprose's graphic adventure, Return of the Phantom, is set in Paris in 1881. It involves solving all sorts of puzzles and lethal traps before you confront the Phantom himself, in a bid to rescue your girlfriend.

This demo allows you to move around some of the early rooms in the first location, talk to one of the characters, and get a feel for the sights, sounds and controls of the full game.

You need to install Phantom from
BOTH floppy disks
to the same directory on your hard disk to run this demo. It won't work if you only install half the demo, or if you install the two halves of the game to different directories.

How to start

Log on to the directory in which you installed Return of the Phantom and type
Phantom [Enter]
You can also either type
Phantom game [Enter]
to run just the interactive demo, or type
Phantom demo [Enter]
to run the opening animated sequence as a continuous loop.

How to quit

Pressing Esc at any time returns the user to Dos, unles you're in the continuous animated intro, in which case you must re-boot the PC.

Control

The character in Phantom is controlled with either the mouse or the keyboard using the cursor keys. With the mouse, simply point the cursor at the place you want the character to go to, click with the left mouse button, and off he goes. Use the right mouse button to look at objects.

With the keyboard, use the numeric keypad to move around, and the Ins and Del keys in place of the left and right mouse buttons.

As you move the cursor around, names of any important objects, or movement directions, such as "Walk to seats", etc, that you are pointing at will appear on the screen.

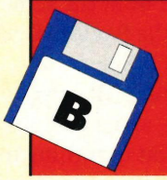
The menu bar at the bottom of the screen includes your inventory of any objects you've picked up, althought this doesn't come into play in the demo. At the far left of the menu bar are the action commands for the character. Click on the command, then on what you want the command to apply to.

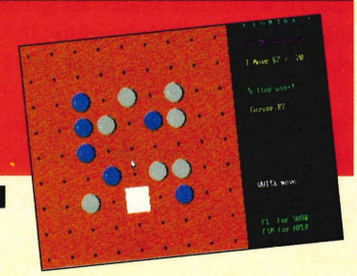


Hardware required

Any 386SX PC with an MCGA or VGA display. 2Mb of Ram, and DOS 5.0 or later are also needed. A mouse and sound board are recommended, and the demo supports both Adlib and Sound Blaster. To change the sound options, type
Install [Enter]
and highlight **Reconfigure** in the dialogue box to chose your sound option.

Contax





3.5" and 5.25" disks

Contax is a shareware game based on the ancient strategy game, Go.

How to start

Log on to the directory in which you have installed Contax, and type
Contax19 [Enter]
You will be prompted to chose the graphics type you use — either CGA, EGA or VGA. Following this, a shareware information screen is displayed. Once you've digested this information, press the spacebar twice to get to the opening screen.

How to play

You take turns with the computer to place stones on the board. The first player to get five stones in a row, wins the game. You can only move to empty squares adjacent to both white and black pieces. You can change the grid patterns, board size or even play to lose! Hit F10 for help, at any time during the game.

Controls

Use the numeric keypad to move the cursor, and enter to place your stone. If you have a mouse, you can select the place to put your stone by

Installing your cover disk: details on page 10

clicking the left button. The right mouse button accesses the menus, including an option to show all the moves available to you.

How to quit
To quit press Esc.

Hardware required
Any PC with CGA, EGA, or VGA. A mouse is preferable.



5.25" disks only

Carern is another shareware game from the same author as Contax. It's a complete platform game in the Boulder Dash style. You're a geologist, mining for crystals on Triton.

Your contract calls for you to mine 10 crystals on each of 32 levels. You are provided with a spacesuit, and a gun. But don't stay to long on any level as the crystals have a habit of turning into deadly fungi.

Hardware required
Any PC from 8086 upwards, VGA, DOS 3.01 or better and 512K Ram

How to start
There's no need to install Cavern to your hard disk. Simply type
Cavern [Enter]
at the floppy disk prompt (A: or B:) and the game will load. So *don't* use the PCR command to call up a menu after inserting the cover disk.

How to quit the game
Hit the 'M' key, and use the cursor keys to scroll up to the Quit option.

Controls

Cursor right or X	Move right	Cursor down or ?	Move down
Cursor left or Z	Move left	Cursor up or @	Move up
Right shift	Fire pistol		

Other options

M	Selects the menu (space to select).
F1	Displays a map of the level. (Use the cursor keys to scroll and Space to return to the game)
Esc	Displays a graphic help screen of game
Save	Saves the current state of play
Rest	Restarts the current level/game
Oops	In case 'M' was pressed by mistake (doubles as Pause).

If you complete all 32 levels, the game restarts with your score intact but the radar map screen and the F1 map screen will be inoperative

Full registration details can be found on the Cavern.txt readme file.

Faulty disk?

PC Review's cover disks are checked and validated, but if you have reason to believe yours is faulty, pop the disk(s) in a jiffy bag with a self-addressed envelope and postage to the value of 28p (55p from overseas) for return of the new disk and the form below (filled in), and send the package to the following address:

PC Wise
Dowlais Top Business Park
Dowlais
Merthyr Tydfil
Mid-Glamorgan
Cymru
CF48 2YY

Please DO NOT send the disk back to PC Review — we don't hold stocks of spare disks.

Name:.....

Address:.....

.....

.....

The disk on my copy of PC Review was damaged. Please send me a replacement — I enclose return postage to the value of 28p (55p if overseas) and the original disk

How to use the cover disk

1. Put the cover disk in any disk drive and log on to that drive. For instance, if you have put it into drive A: type:
   A: [Enter]
2. Now type
   PCR [Enter]
to load the installation program.
3. There may be a menu asking you to select which language you wish to have the installation messages displayed in. To make your selection use the mouse or cursor keys to move the highlight bar and then click the left mouse button or press the Enter key.
4. A list of programs on the disk will now be displayed. To select the program you wish to install or run, use the mouse or cursor keys to move the highlight bar and then press and release the left mouse button or the Enter key.
5. If the program is of a type that runs directly it will do so now before returning you to the menu and step 4.
6. If the program has to be installed to another disk you will now have to tell the program where you want it to be installed.
7. The program will suggest a drive and directory to install the program to. If you are happy with the suggested location, press the enter key and installation will begin.
8. If you would like the program to be installed to a different drive and/or directory, backspace over the suggested pathname and enter another one.

You cannot install the program on the cover disk itself.
9. If there is insufficient space on the disk you have specified, or if the directory you have specified cannot be created, the program will inform you of this and give you the opportunity to enter an alternative location.
10. All being well, the program will now be decompressed and installed at the specified location. You will see a series of messages on the screen as this happens.
11. Once the program has been successfully installed you will see a message reminding you of where it was installed to and telling you which command starts the program. Press a key to return to step 4.
12. When you have installed or played all the programs that you wish to, press Esc to exit to DOS.

Important note for users without a hard disk.

1. Providing that the programs will fit, you can install them on to another floppy disk.
2. If you have a twin drive system you should leave the cover disk in one drive and install each program to a blank formatted disk in the second drive.
3. If you only have a single disk drive, you can install the programs to a blank, formatted disk using the same drive. You should specify drive B: when asked for an install path. DOS will now prompt you when you need to swap the disks. When it asks you to insert the disk for drive B: you should insert the blank disk. When it asks you to insert the disk for drive A: you should put the cover disk back in. You will have to swap disks several times during the installation process.
4. On some occasions you may be asked to insert a system disk. In this case you should insert a system disk instead of the cover disk, and then swap them again when prompted to do so.

Important note for users with mono, LCD or plasma displays

1. The installation program should automatically detect whether you have a mono or colour display and run in the appropriate mode.
2. If you have a grey scale LCD or plasma display you may prefer to run the program in mono rather than colour. You can do this by starting the program with the command:

PCR M [Enter]

3. If you have a non-standard colour display which the program fails to detect you can force it to run in colour mode by starting it with the command:

PCR C [Enter]

Helpline

If you have difficulty in getting your disk to operate, please telephone our helpline number below before returning the disk.

Disk Helpline: (0685) 350505

The helpline operates between 10.30 am and 12.30 pm weekdays.

Please note

PC Review's cover disks are rigorously checked at each stage of production for all known viruses and duplicated under strict quality control.

However, cover disks are used at the reader's own risk. PC Review can accept no responsibility for damage to either data or hardware caused by use of our cover disks.

We also make every effort to ensure that the contents of our cover disks are exactly as advertised. If, however, circumstances should dictate that we are unable to supply the stated programs we will endeavour to provide alternative software.

PC Review, its distributors and retailers will not be held responsible for any unnotified change to the contents of the disks

SERIOUS SOFTWARE

ECU

AT SENSIBLE PRICES

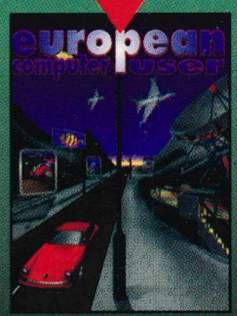
A small selection from the vast range of titles we stock.
Phone for a complete price list.

TITLE	PRICE
3D CONS 2	32.99
A-TRAIN	26.50
ACES OVER EUROPE	30.99
ALONE IN THE DARK	29.99
ATP	25.99
AV8B HARRIER ASSAULT	26.50
B17 FLYING FORTRESS	29.99
BATTLECHESS 4000	23.99
BETRAYAL AT KRONDOR	30.99
BITMAP BROS VOL 1	19.99
CAMPAIGN	26.50
CAR + DRIVER	27.99
CASTLES 2	23.99
CHESSMASTER 3000	23.99
CIVILIZATION	26.50
COMMANCHE MAX O'KILL	30.99
COMPLETE CHESS SYSTEM	23.99
DARKLANDS	25.99
DARKSEED	26.50
DAVID LEADBETTERS GOLF	29.99
DOGFIGHT	30.99
DUNE 2	24.50
DUNGEON MASTER	23.99
EMPIRE DELUXE	30.99
EYE OF THE BEHOLDER 2	23.99
EYE OF THE BEHOLDER 3	27.99
F15 STRIKE EAGLE 3	29.99
FALCON 3 MISSION DISK	16.99
FALCON 3.0	29.99
FLASHBACK	27.99
FORMULA ONE GRAND PR	29.99
FREDDY PHARKAS	27.99
FRONT PAGE SPORTS FOOTBALL	27.99
GREAT NAVAL BATTLES	26.50
GUNSHIP 2000	26.50
GUNSHIP 2000 MISSION DISK	16.99
HISTORY LINE 1914 - 18	27.99
HUMANS	15.99
INDY JONES FATE ATLANTIS	25.50
INT RUGBY CHALLENGE	19.99
JIMMY WHITES SNOOKER	23.99
JORDAN IN FLIGHT	27.99
KINGS QUEST VI	29.99
LAURA BOW	27.99
LEATHER GODDESSES 2	19.99
LEMMINGS 2	27.99
LEMMINGS DOUBLE PACK	26.50
LINKS PRO 386	29.99
LINKS 386 COURSES	17.99

TITLE	PRICE
LOST FILES OF SHERLOCK	26.50
LOST TREASURES INFOCOM	29.99
LOST TREASURES INFOCOM 2	23.99
MAGIC POCKETS	19.99
MONKEY ISLAND 2	24.50
MS-DOS 6.0	55.00
NODDY'S PLAYTIME	19.99
POPULOUS/PROMISED LANDS	11.99
POPULOUS 2	27.99
PREMIER MANAGER	23.99
PRINCE OF PERSIA	10.99
QUEST FOR GLORY 3	27.99
RAILROAD TYCOON	23.99
REACH FOR THE SKIES	23.99
RED BARON	26.99
RED BARON MISSION DISK	16.99
RINGWORLD	27.99
RISKY WOODS	19.99
ROBOCOP 3	19.99
ROBOSPORTS	17.99
ROME AD 92	23.99
SCRABBLE DELUXE	19.99

TITLE	PRICE
SECRET WEAPONS LUFTWAFFE	26.50
SENSIBLE SOCCER	23.99
SHADOW OF THE COMET	34.99
SHADOWORLDS	23.99
SHADOW PRESIDENT	30.99
SIEGE	19.99
SILENT SERVICE 2	23.99
SIM CITY DELUXE	24.50
SIM CITY FOR WINDOWS	29.99
SIM LIFE	27.99
SLEEPWALKER	20.99
SPACE CRUSADE	20.99
SPACE QUEST V	27.99
SPECIAL FORCES	14.99
SPELLJAMMER	24.50
STAR TREK 25TH ANNIV	23.99
STREETFIGHTER 2	19.99
STRIKE COMMANDER	34.99
STRIKE COMMANDER SPEECH PACK	14.99
STRIKE FLEET	9.99
STUNT ISLAND	34.99
SUPER CAULDRON	13.99
SUPERSKI 2	6.99
SUPER TETRIS	15.99
SWAP	5.99
TASK FORCE 1942	29.99
TEST DRIVE 2	10.99
THE GREATEST	24.99
THEIR FINEST HOUR	19.99
THE INCREDIBLE MACHINE	27.99
THE LEGACY	30.99
THE PERFECT GENERAL	24.50
TORNADO	30.99
TRANSARCTICA	18.99
ULTIMA VII	26.50
ULTIMA VII SERPENT ISLE	31.99
ULTIMA UNDERWORLD 2	27.99
ULTIMA UNDERWORLD	26.50
UNLIMITED ADVENTURES	25.99
VEIL OF DARKNESS	23.99
V FOR VICTORY 2	23.99
VIKINGS	23.99
WAR IN THE GULF	23.99
WING COMMANDER DELUXE	30.99
WING COMMANDER 2	26.50
WIZ KID	19.99
XENOBOTS	27.99
X-WING	31.99
ZOOL	23.99

FOR YOUR FREE COMPLIMENTARY COPY OF OUR BRILLIANT ECU MAGAZINE CALL US TODAY



PHONE HOTLINE: 0480 498889

FAX HOTLINE: 0480 496379

All items are subject to availability. Prices can be subject to change. E & O E.
Post and packing: UK = 75p per item 2nd Class; £1.50 per item 1st Class; £1.80 per item 1st Class Recorded.
EEC post = £2.75 per item; non-EEC = £3.75 per item;
Express Air Mail = £4.75 per item.
Some titles may not be released at time of going to press. Please telephone for availability and a full copy of our terms and conditions.

VISA MasterCard

NAME
ADDRESS

POSTCODE PHONE
ITEM PRICE
ITEM PRICE
ITEM PRICE
POSTAGE
TOTAL

Visa/Mastercard/Switch Number:

Switch issue No: Card Expiry Date:

SIGNATURE:

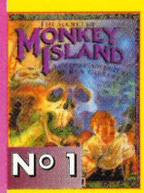
☐ TICK THIS BOX IF YOU DO NOT WISH TO BE ENTERED ONTO THE ECU DATABASE

Make cheques payable to:
European Computer User
& send to :
Units A2/A3 Edison Rd,
St Ives,
Huntingdon, CAMBS PE17 4LF

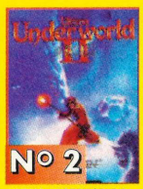
PC REVIEW JUNE 93

PC COMPATIBLE SOFTWARE FROM ONLY £3.99

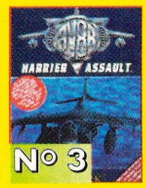
SPECIAL RESERVE TOP TEN PC GAMES OF FEBRUARY/MARCH 1993



MONKEY ISLAND
13.99



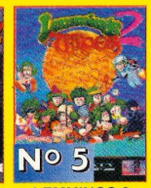
ULTIMA UNDERWORLD 2
25.99



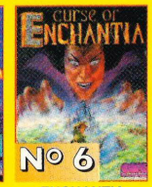
AV8B
25.99



FORMULA 1 GP
27.99



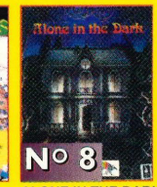
LEMMINGS 2
25.99



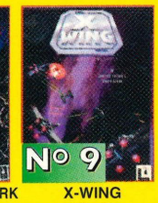
ENCHANTIA
13.99



LEMMINGS
15.49



ALONE IN THE DARK
27.99



X-WING
29.49



RAILROAD TYCOON
14.49



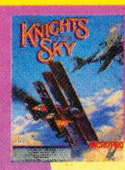
ELITE
11.99



F15 STRIKE 2
13.99



F19 STEALTH
16.99



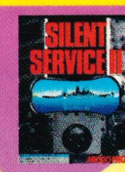
KNIGHTS OF THE SKY
14.49



B17
16.99



ELITE PLUS
14.49



SILENT SEVICE 2
13.49



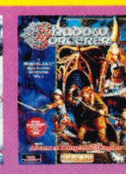
HOOK
12.99



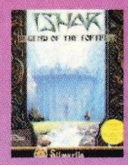
JACK NICKLAUS
6.99



KICK OFF 2
12.99



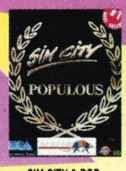
SHADOW SORCERER
5.99



ISHAR E/V
10.99



CHAMP MGR
13.99



SIM CITY & POP
19.99



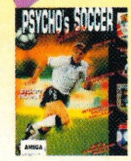
EYE OF THE BEHOLDER 2
24.99



BLUES BROTHERS
10.99



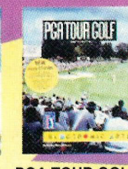
AIR/SEA SUPREMCY
15.99



STUART PEARCE'S
13.49



SHUTTLE E/V
17.49



PGA TOUR GOLF
16.99



NODDY'S PLAYTIME
21.99



BATTLE ISLE
16.49

PC SOFTWARE 5.25" 3.5"

	5.25"	3.5"
4TH 'N' INCHES (US FOOTBALL) C/E/V		JD7412 ...9.99
688 ATTACK SUB E/V		JD7415 ...10.99
A-TRAIN E/V		JD6440 ...25.99
A.T.A.C. V	JF6388 ...29.99	JD6387 ...28.99
A320 AIR-BUS V	JF6237 ...26.99	JD6236 ...26.99
ACES OF THE PACIFIC V	JF6327 ...26.99	JD6326 ...26.99
ADVANTAGE TENNIS E/V	DUAL ...19.99	JD6202 ...19.99
AIR BUCKS E/V	JF6358 ...22.99	JD6357 ...22.99
AIR FORCE COMMANDER V		JD7338 ...20.99
AIR SEA SUPREMACY (GUNSHIP, SILENT SERVICE, P47, F15 STRIKE EAGLE, CARRIER COMMAND)		JD6169 ...15.99
ALONE IN THE DARK H/D V 256 COL	JF7131 ...27.99	JD7130 ...27.99
AMAZON - GUARDIANS OF EDEN V 256 COL		JD7197 ...28.99
AMBERSTAR E/V		JD7434 ...23.49
ANOTHER WORLD V		JD7350 ...19.99
ARMOUR-GEDDON V		JD7343 ...22.49
ASHES OF EMPIRE E/V		JD7293 ...26.49
AV8B HARRIER ASSAULT E/V		JD7124 ...25.99
B.A.T E	JF6457 ...6.99	JD6456 ...6.99
B17 FLYING FORTRESS V		JD6383 ...16.99
BATTLE ISLE H/D E/V	JF6166 ...16.49	JD6165 ...16.49
BATTLEHAWKS 1942 C/E/V	DUAL ...10.99	JD7231 ...10.99
BATTLETOADS E/V		JD7400 ...16.99
BIRDS OF PREY V		JD5746 ...26.99
BLUES BROTHERS	JF6125 ...10.99	JD6124 ...10.99
BUZZ ALDRIN INTO SPACE V		JD7091 ...24.99
CAESAR E/V		JD6515 ...20.99
CAPTIVE H/D V		JD7016 ...14.99
CAPTIVE 2 - LIBERATION H/D V		JD7398 ...22.49
CAR & DRIVER V		JD7095 ...25.49
CHAMPIONSHIP MANAGER	JF6261 ...11.99	JD6260 ...13.99
CHAMPIONSHIP MANAGER 1992/93 C/E/V		JD7424 ...19.49
CHESSMASTER 3000	DUAL ...24.99	JD6156 ...24.99
CIVILIZATION		JD6179 ...26.99
COMBAT CLASSICS (F15 STRIKE EAGLE 2, 688 ATTACK SUB, TEAM YANKEE) E/V		JD7296 ...22.99
COOL WORLD E/V	JF7048 ...19.99	
CORRUPTION (M/SCROLLS)	JF5047 ...4.99	JD5046 ...4.99
CREEPERS V		JD7342 ...22.49
CURSE OF ENCHANTIA V		JD6511 ...13.99
D-GENERATION V	DUAL ...22.99	JD6316 ...22.99
DARKLANDS V 256 COL		JD6379 ...32.99
DARKMERE V	JF7059 ...17.99	JD7058 ...17.99
DAVID LEADBETTER'S (MICROPROSE) 3D GOLF V (2 MEG RAM, DOS 5 & 386 REQUIRED)	JF5999 ...28.99	JD5998 ...28.99
DOGFIGHT V 256 COL (386 OR HIGHER)		JD7425 ...27.99
DUNE 2 V		JD7359 ...23.49
DUNGEON MASTER E/V	JF5015 ...22.99	JD5014 ...22.99
DYNA BLASTERS		JD6324 ...22.99
ELITE		JD5037 ...11.99
ELITE PLUS E/V	JF5639 ...25.99	JD5638 ...14.49
EPIC E/V	JF5396 ...22.99	JD5395 ...22.99
ETERNAM E/V		JD6452 ...22.99
EYE OF THE BEHOLDER (SSI) C/E/V		JD5456 ...21.49
EYE OF THE BEHOLDER 2 V 256 COL		JD6196 ...24.99
F117A NIGHTHAWK V		JD5837 ...26.99
F15 STRIKE EAGLE 2	JF5913 ...13.99	JD5912 ...13.99
F15 STRIKE EAGLE 3 V	JF7076 ...27.99	JD7075 ...27.99
F16 FALCON V 3.0 E/V (DOS 5 REQUIRED)	JF5392 ...32.99	JD5391 ...32.99
F19 STEALTH FIGHTER M/C/E/V	JF5082 ...16.99	JD5081 ...16.99
FA PREMIER LEAGUE FOOTBALL (ACTION) E/V		JD7311 ...19.99
FABLES & FIENDS-LEGEND OF KYRANDIA V		JD6525 ...23.99
FANTASTIC WORLDS (REALMS, PIRATES, POPULOUS, WONDERLAND) E/V	JF7032 ...24.99	JD7031 ...24.99
FAST LANE E/V (FERRARI F1, STUNT CAR RACER, HARD DRIVIN', VETTE, HIGHWAY PATROL)	JF6455 ...16.99	
FIRE AND ICE V		JD7399 ...19.99
FIRST SAMURAI E/V	JF7186 ...19.99	JD7185 ...19.99
FLIGHT SIMULATOR 4 M/C/E/V		JD5257 ...35.99
FORMULA 1 GRAND PRIX V	JF7138 ...27.99	JD7137 ...27.99
FUTURE WARS C/E/V		JD7227 ...9.99
GATEWAY E/V	JF6494 ...21.99	JD6493 ...21.99
GOBLIINS 2 E/V		JD7235 ...20.99
GODS H/D V	JF5643 ...22.99	JD5642 ...22.99
GOLDEN AXE	JF5336 ...9.49	JD5335 ...9.49
GRAND PRIX UNLIMITED V	JF6492 ...22.99	JD6491 ...22.99
GREAT NAVAL BATTLES H/D 256 COL	JF7210 ...25.49	JD7209 ...25.49
GUILD OF THIEVES (M/SCROLLS) C, E		JD7172 ...9.99
GUNSHIP 2000 E/V		JD5683 ...26.99
HARRIER JUMP JET V		JD7077 ...28.99
HEIMDALL V	JF7169 ...17.49	JD7168 ...17.49
HEROES OF THE 357TH V		JD6445 ...23.99
HEROQUEST E/V		JD7368 ...9.99
HILLSFAR C/E/V	DUAL ...7.99	JD6501 ...7.99
HISTORYLINE 1914-18 V		JD7380 ...25.49
HOOK E/V	JF6268 ...12.99	JD6267 ...12.99
HOT HATCHES V		JD7314 ...19.99
HUMANS V	JF6371 ...18.49	JD6370 ...18.49
HUMANS DATA DISK V		JD7340 ...12.99
HYPERSPEED V 256 COL	JF6247 ...19.99	
INDIANA JONES 2 ADVENTURE (FATE OF ATLANTIS) V 256 COL	JF6095 ...24.99	JD6094 ...24.99
INTERNATION RUGBY CHALLENGE E/V		JD7120 ...17.99
INTERNATIONAL SPORTS CHALLENGE E/V	JF6221 ...22.99	JD6220 ...22.99
ISHAR - LEGEND OF THE FORTRESS E/V	JF6410 ...10.99	JD6409 ...10.99
ISHAR 2 V		JD7396 ...18.99
JACK NICKLAUS GOLF C/E	JF5170 ...3.99	JD5169 ...6.99
JET V2.1 (FLIGHT SIM') C/E (SUBLOGIC)	JF5558 ...2.99	
JIMMY WHITES SNOOKER V	JF5846 ...23.99	JD5845 ...23.99
JINXTER (M/SCROLLS)	JF5022 ...4.99	JD5021 ...4.99
JOE MONTANA FOOTBALL	JF6337 ...9.99	
KGB E/V	JF6522 ...23.99	JD6521 ...23.99
KICK OFF 2 E/V		JD5285 ...12.99
KNIGHTS OF THE SKY E/V		JD5519 ...14.49
LASER SQUAD (ENHANCED) V	JF6518 ...20.99	JD6517 ...20.99
LEATHER GODDESSES OF PHOBOS 2		JD7024 ...28.99
LEGEND E/V	DUAL ...14.99	JD6319 ...14.99
LEGENDS OF VALOUR V		JD7213 ...25.49
LEISURE SUIT LARRY 1, 2 & 3 E (TRIPLE PACK)		JD6330 ...32.99
LEMMINGS E/V	DUAL ...15.49	JD5493 ...15.49
LEMMINGS DATA DISK - OH NO!	DUAL ...12.99	JD5972 ...12.99
LEMMINGS 2 E/V	JF7108 ...25.99	JD7107 ...25.99
LETHAL WEAPON E/V		JD7043 ...19.99
LINKS (GOLF) (NORM) V		JD5621 ...27.99
LINKS (GOLF) H/D V	JF5622 ...27.99	
LINKS 386 PRO V		JD6535 ...29.99
LURE OF THE TEMPTRESS		JD6401 ...23.99
M1 TANK PLATOON C/V		JD6256 ...14.49
MAGIC WORLDS (STORM MASTER, DRAGONS BREATH, CRYSTALS OF ARBOREA) E/V		JD7177 ...17.99
MANCHESTER UNITED C/E/V		JD7279 ...9.99
MARIO ANDRETTI'S RACING CHALLENGE	JF5651 ...19.99	JD5650 ...19.99
MAXIMUM OVERKILL V (2 MEG REQUIRED)		JD7215 ...28.99
McDONALDS LAND E/V		JD7159 ...17.99
MEGA LO MANIA E/V		JD7187 ...22.99
MICROSOFT GOLF E/V (WINDOWS)		JD7113 ...32.99
MIDWINTER C/E/V		JD7291 ...9.99
MIG 29 E/V		JD7421 ...10.99
MIGHT & MAGIC 2	JF6209 ...7.99	JD6208 ...8.99
MIGHT & MAGIC 4 - CLOUD OF XEEN	JF7218 ...30.99	JD7217 ...30.99
MONOPOLY C/V		JD7462 ...20.99
MURDER E	JF5373 ...3.99	
NICKY BOOM E/V		JD7300 ...16.99
NIGEL MANSELL'S WORLD CHAMPIONSHIP E/V		JD7155 ...21.99
OBITUS (WITH T-SHIRT) C/E/V	JF6425 ...9.99	JD6424 ...9.99
OMAR SHARIF'S BRIDGE E/V		JD7382 ...25.49
OPERATION STEALTH		JD7469 ...11.49
PATRIOT E/V		JD7089 ...22.99
PERFECT GENERAL DATA DISK E/V	JF7191 ...13.99	JD7190 ...13.99
PERFECT GENERAL E/V	JF6472 ...25.99	JD6471 ...25.99
PGA TOUR GOLF + COURSES E/V		JD5340 ...16.99
PINBALL DREAMS V		JD7436 ...24.99
PITFIGHTER		JD5927 ...18.99
POPULOUS & PROMISED LANDS E/V		JD7409 ...10.99
POPULOUS & SIM CITY C/E/V	JF5134 ...19.99	JD5133 ...19.99
POPULOUS 2 V		JD7099 ...24.99
POWERMONGER	JF5355 ...23.49	JD5354 ...23.49
PREMIER MANAGER C/E/V		JD7287 ...18.99
PRINCE OF PERSIA		JD5562 ...9.99
QUEST & GLORY (BLOODWYCH, MIDWINTER, CADAVER, BAT)	JF6341 ...16.99	JD6340 ...16.99
QUEST & GLORY 3 (SIERRA) V		JD7341 ...25.49
RAGNAROK V	JF7036 ...25.99	JD7035 ...25.99
RAILROAD TYCOON	JF5291 ...14.49	JD5290 ...14.49
RAMPART E/V		JD6444 ...22.99
REACH FOR THE SKIES V		JD7163 ...23.99
RED BARON H/D V 256 COL	DUAL ...26.99	JD5669 ...26.99
REX NEBULAR V	JF7074 ...28.99	JD7073 ...28.99
RICK DANGEROUS C/E/V	DUAL ...8.99	JD7243 ...8.99
ROBOCOP 3 C/V	JF6145 ...19.99	JD6144 ...19.99
ROGER RABBIT (WITH SOUND SOURCE DEVICE) V 256 COL (DISNEY)		JD6347 ...35.99
ROGER RABBIT IN HARE RAISING HAVOC V 256 COL (DISNEY)	JF6309 ...19.99	JD6308 ...19.99
SABRE TEAM E/V	JF7063 ...20.99	JD7062 ...20.99
SCRABBLE (US GOLD)		JD5067 ...20.49
SECRET OF MONKEY ISLAND		JD5450 ...13.99
SECRET OF MONKEY ISLAND 2 V	JF6091 ...24.99	JD6090 ...24.99
SHADOW OF THE COMET V 256 COL	JF7133 ...28.49	JD7132 ...28.49
SHADOW SORCERER E/V	DUAL ...5.99	JD5818 ...5.99
SHADOWORLDS E/V	JF7072 ...20.99	JD7071 ...20.99
SHUTTLE E/V		JD6105 ...17.49
SILENT SERVICE 2 V 256 COL		JD5296 ...13.49
SIM CITY & POPULOUS C/E/V	JF5202 ...19.99	JD5201 ...19.99
SIM CITY DELUXE (SIM CITY, FUTURE CITIES,TERRAIN EDITOR) E/V		JD7391 ...22.99
SIM LIFE E/V		JD7323 ...26.99
SLEEPWALKER E/V		JD7308 ...22.99
SPACE CRUSADE E/V	JF7148 ...18.99	JD7147 ...18.99
SPACE HULK V		JD7405 ...22.99
SPACE QUEST 4 E/V 256 COL		JD5674 ...27.99
SPACE QUEST 5 V 256 COL		JD7429 ...24.99
SPORTS MASTERS (PGA GOLF, INDY 500, ADVANTAGE TENNIS, EUROPEAN CHAMPIONSHIP'S 1992) V		JD7332 ...22.99
STAR CONTROL 2 E/V		JD7195 ...25.99
STAR TREK (INTERPLAY) E/V	JF6017 ...23.99	JD6016 ...23.99
STORM MASTER C/E/V		JD6254 ...9.99
STREETFIGHTER 2 E/V	JF7146 ...19.99	JD7145 ...19.99
STRIKE COMMANDER H/D V 256 COL (4 MB RAM REQ'D)	JF5995 ...30.99	JD5994 ...30.99
STRIKE COMMANDER L/D V 256 COL (4 MB RAM REQ'D)	JF5993 ...30.99	JD5992 ...30.99
STRIKE COMMANDER SPEECH ACCESSORY H/D		JD7401 ...13.99
STUART PEARCE'S SOCCER SELECTION'S (KICK OFF 2, MICROPROSE SOCCER, MANCHESTER UNITED, INTERNATIONAL SOCCER) E/V		JD6460 ...13.49
STUNT ISLAND V 256 COL	JF7135 ...28.99	JD7134 ...28.99
SUMMER CHALLENGE E/V		JD7193 ...21.99
SUPER TETRIS E/V		JD6385 ...22.99
SUPREMACY	JF5359 ...14.99	
TASK FORCE 1942 V (2 MB RAM REQ'D)	JF7080 ...28.49	JD7079 ...28.49
THE ADVENTURES (SUPREMACY, F14 TOMCAT, CORPORATION) V		JD7388 ...16.99
THE COMPLETE CHESS SYSTEM E/V		JD7381 ...22.99
THE IMMORTAL E/V		JD7418 ...9.99
THE LEGACY V 256 COL	JF7202 ...28.99	JD7201 ...28.99
THE LOST FILES OF SHERLOCK HOLMES V	JF7082 ...24.99	JD7081 ...24.99
THE LOST TREASURES OF INFOCOM 1 (20 CLASSIC INFOCOM TEXT ADVENTURES)	DUAL ...28.99	JD7019 ...28.99
THE LOST TREASURES OF INFOCOM 2 (11 CLASSIC INFOCOM TEXT ADVENTURES)	DUAL ...23.99	JD7022 ...23.99
THE MANAGER	JF6274 ...19.99	JD6273 ...19.99
TIMEQUEST E/V		JD5835 ...23.99
TRANSARTICA E/V		JD7356 ...18.99
TRIVIAL PURSUIT DELUXE E/V	JF7127 ...19.99	JD7126 ...19.99
ULTIMA 7 E/V	JF5991 ...25.99	JD5990 ...25.99
ULTIMA 7 PART 2 - THE SERPENT ISLE V 256 COL		JD7402 ...28.99
ULTIMA TRILOGY 2 V (ULTIMA 4, 5, 6)	JF6344 ...26.99	JD6343 ...26.99
ULTIMA UNDERWORLD 2 V 256 COL (2 MB RAM REQ'D)		JD7393 ...25.99
ULTIMA UNDERWORLD V 256 COL (2 MB RAM REQ'D)	JF6313 ...25.99	JD6312 ...25.99
ULTRABOTS V 256 COL		JD7101 ...19.99
VAL HALLER V		JD7383 ...22.99
WING CMNDR 2 H/D SPEECH ACCESSORY		JD6036 ...13.99
WING COMMANDER 1 + MISSIONS V (DELUXE)		JD6342 ...29.99
WING COMMANDER 2 H/D V		JD5780 ...26.99
WIZARDRY 6 - BANE OF THE COSMIC FORGE C/E/V		JD6397 ...24.99
WIZARDRY 7 - CRUSADERS OF THE DARK SAVANT E/V		JD7206 ...29.49
X-WING V 256 COL (386 MINIMUM)		JD7357 ...29.49
ZAK MCKRACKEN C/E/V		JD7223 ...9.99
ZOOL V	DUAL ...21.49	JD7369 ...21.49

EDUCATIONAL

ADI ENGLISH (11-12 YRS) C/E/V	DUAL ...16.99	JD6663 ...16.99
ADI ENGLISH (12-13 YRS) C/E/V	DUAL ...16.99	JD6667 ...16.99
ADI ENGLISH (13-14 YRS) C/E/V	DUAL ...16.99	JD9107 ...16.99
ADI FRENCH (11-12 YRS) C/E/V	DUAL ...16.99	JD9095 ...16.99
ADI FRENCH (12-13 YRS) C/E/V	DUAL ...16.99	JD9099 ...16.99
ADI FRENCH (13-14 YRS) C/E/V	DUAL ...16.99	JD9111 ...16.99
ADI JUNIOR COUNTING (4-5 YRS) C/E/V		JD9170 ...14.49
ADI JUNIOR COUNTING (6-7 YRS) C/E/V		JD9172 ...14.49
ADI JUNIOR READING (4-5 YRS) C/E/V		JD9166 ...14.49
ADI JUNIOR READING (6-7 YRS) C/E/V		JD9168 ...14.49
ALVIN'S PUZZLES (6-8 YRS) E/V		JD9186 ...13.99
FUN SCHOOL 2 (2-6) C/E		JD5121 ...9.99
FUN SCHOOL 2 (6-8) C/E		JD5125 ...9.99
FUN SCHOOL 2 (8+) C/E	JF5130 ...9.99	JD5129 ...9.99
FUN SCHOOL 3 (5-7 YRS) C/E/V	JF5307 ...16.99	JD5306 ...16.99
FUN SCHOOL 3 (7+ YRS) C/E/V	JF5311 ...16.99	
FUN SCHOOL 4 (2-5 YRS) C/E/V		JD6547 ...16.99
FUN SCHOOL 4 (5-7 YRS) C/E/V		JD6551 ...16.99
FUN SCHOOL 4 (7+ YRS) C/E/V	JF6556 ...16.99	JD6555 ...16.99
FUN SCHOOL SPECIAL		JD9031 ...16.99
MERLIN'S MATHS (7-11 YRS) C/E/V		JD9071 ...16.99
FUN SCHOOL SPECIAL - PAINT 'N CREATE EDUCATIONAL ART (5+ YRS) C/E		JD9017 ...16.99
FUN SCHOOL SPECIAL - SPELLING FAIR (7-13 YRS) C/E/V		JD9057 ...16.99
MAVIS BEACON 2 TYPING TUTOR C/E/V	DUAL ...24.99	JD6558 ...24.99
MEGA MATHS (A' LEVEL COURSE) C/E/V		JD9188 ...17.49
MICRO ENGLISH (8 YRS TO GCSE. CONFORMS TO NATIONAL CURRICULUM) C/E/V	JF9027 ...17.49	JD9026 ...17.99
MICRO FRENCH (BEGINNER TO GCSE. CONFORMS TO NATIONAL CURRICULUM) C/E/V	JF9035 ...17.49	JD9034 ...17.49
MICRO GERMAN (BEGINNER TO GCSE AND BUSINESS LEVEL. CONFORMS TO NATIONAL CURRICULUM) C/E/V	JF9039 ...17.49	JD9038 ...17.49
MICRO MATHS (11 YRS TO GCSE. CONFORMS TO NATIONAL CURRICULUM) C/E/V	JF9031 ...17.49	JD9030 ...17.49
MICRO SCIENCE (8 YRS TO GCSE. CONFORMS TO NATIONAL CURRICULUM) C/E/V		JD9151 ...17.49
NODDY'S PLAYTIME (EDUCATIONAL PROGRAM FOR CHILDREN AGED 3+) E/V	DUAL ...20.99	JD9116 ...20.99
SHOPPING BASKET (6-8 YRS) V		JD9177 ...13.99
SNOOPY'S GAME CLUB C/E/V		JD9154 ...18.49
WHICH? WHERE? WHAT? (4-8 YRS) V		JD9183 ...13.99

UTILITY

3D CONSTRUCTION KIT 2 E/V	JF9012 ...32.99	JD9011 ...32.99
BOOM BOX INTERACTIVE MUSIC PROGRAM (REQUIRES SOUND CARD)		JD9047 ...39.99
KID PIX		JD6711 ...23.99
MICROSOFT WORKS		JD9202 117.99
MINI OFFICE PERSONAL		JD9201 ...25.99
MS-DOS 6 UPGRADE (MICROSOFT)		JD9141 ...57.49
PAINT POT 2 (4-10 YRS) V		JD9180 ...13.99

WE'RE GIVING AWAY OVER

£10,000

WORTH OF PRIZES IN EVERY ISSUE OF NRG! MAKE SURE YOUR A WINNER WITH SPECIAL RESERVE!

DON'T DELAY, JOIN US TODAY!

C = CGA (Colour Graphics Adaptor), E = EGA (Enhanced Graphics Adaptor), V = VGA (Video Graphics Array). M = Mono, HD = High Density Disks.
Order by credit card on 0279 600204 • Save even more money by using the XS Coupons at the back of NRG.
Please note there is a 50p surcharge on software items ordered by phone.

SPECIAL RESERVE • SPECIAL RESERVE • SPECIAL RESERVE • SPECIAL RESERVE • SPECIAL RESERVE

PC PERIPHERALS

JOYSTICKS



CH FLIGHT STICK
ANALOGUE JOYSTICK (15 PIN)
GG6683 37.99



FREEWHEEL STEERING WHEEL (ANALOGUE 15-PIN) FOR PC. SUITS MOST DRIVING GAMES
GG9006
34.99



GRAVIS ANALOGUE JOYSTICK FOR PC (15 PIN)
GG6582
29.99



QUICKSHOT 123 WARRIOR 5 PC ANALOGUE JOYSTICK (15 PIN)
GG5274
12.99



QUICKSHOT 146 INTRUDER 5 PC ANALOGUE JOYSTICK (15 PIN)
GG6645
22.99



SQUIK SERIAL MOUSE FOR IBM PC (INCLUDES DRIVER SOFTWARE)
GG5963
17.99

NAKSHA MOUSE FOR PC WITH DELUXE PAINT 2 .....GG6560 ...39.99

GAMES & GRAPHICS CARDS

DYNAMICS DIGITAL GAMES CARD FOR PC (9 PIN) WITH TWIN JOYSTICK PORTS. (SUITS ALL STANDARD AMIGA OR ATARI ST JOYSTICKS).....GG5239 ...21.49

QUICKSHOT 163 SMART GAMES CARD FOR PC 386/486 MODELS. 2 X 15 PIN JOYSTICK PORTS, AUTOMATIC CLOCK SPEED DETECTION AND SELECTION, HOT KEY PROGRAM FOR CLOCK SPEED TUNING, SOFTWARE SELECTABLE....GG9199 .....9.99

VGA GRAPHICS CARD FOR PC .....GG5782 ...34.99

QUICKSHOT 113S PC ANALOGUE JOYSTICK (15 PIN) AND TWIN PORT GAME CARD .....GG9200 ...16.99

SOUND BOARDS

FREE Membership

QUICKSHOT PC STARTER PACK WITH SOUND BLASTER 11 VOICE MUSIC/ DIGITISED VOICE/MIDI SOUND BOARD WITH INBUILT ANALOGUE (15 PIN) JOYSTICK PORT, QS123 WARRIOR 5 JOYSTICK AND MATCHING IVORY COLOUR SPEAKERS.
GG9197
89.99



FREE Membership

ADLIB GOLD 1000 SOUND BOARD (3.5 DISK ONLY) COMPATIBLE WITH 286, 386, 486 & PS/2 MODELS 25 & 30. INCLUDES VOICE PAD RECORDING & PLAY BACK PROGRAM, ADLIB GOLD WINDOWS, MUSIC CLIP LIBRARY & JUKE BOX GOLD
GG9080

FREE Membership

SOUND BLASTER PRO PLUS SOUND BOARD FOR PC, INCLUDES CD-ROM INTERFACE, MIDI INTERFACE, DIGITAL & ANALOGUE MIXER, AMPLIFIER AND SOFTWARE
GG6563
159.99



FREE Membership

SOUND BLASTER V.2 MUSIC/ VOICE/MIDI SOUND BOARD FOR PC WITH INBUILT ANALOGUE (15 PIN) JOYSTICK PORT. INCLUDES LEMMINGS & INDIANAPOLIS 500.
UK'S BEST SELLING SOUND BOARD. GG5631
79.99



SOUND SOURCE BOX FOR MOST PC DISNEY SOFTWARE (GENERATES SOUND EFFECTS, PLUGS INTO PRINTER PORT)
GG6629
27.99

MISCELLANEOUS



SCREENBEAT STEREO SPEAKERS FOR AMIGA OR IBM PC. REQUIRES 4AA BATTERIES OR MAINS ADAPTOR. DESIGNED SPECIFICALLY FOR COMPUTERS, INCLUDING MOUNTINGS FOR ATTACHMENT TO MONITOR.
GG6593 .....18.99



MAINS ADAPTOR FOR SCREENBEAT SPEAKERS
GG6638 .....7.99

MAXIM STEREO SPEAKERS FOR PC SOUND CARDS OR WALKMAN/DISCMAN (REQUIRE BATTERIES) .....GG5943 ...9.99

3.5" DISK HEAD CLEANER .....GG5428 ...4.49

CLEANING KIT FOR COMPUTERS (INCLUDES VACUUM) .....GG6542...19.99

CD ROM DRIVES

TECNOPLUS PHILIPS CM50 CD ROM DRIVE FOR PC



FREE Membership

WITH WORLD ATLAS, CHESSMASTER 2000, LIFE & DEATH, BRUCE LEE, BLACK HOLE, GIN KING, THESAURUS, DICTIONARY, SPELL CHECKER, 20TH CENTURY HISTORY AND CONCISE WRITING GG6543
209.99

PHILIPS CDD461 CD ROM DRIVE FOR PC



FREE Membership

WITH AUDIO CD FUNCTIONS INDEPENDANT OF THE PC GG6565
269.99

CD ROM TITLES

360 COMPILATION (BLUE MAX, DAS BOOT, MEGAFORTRESS)	JL9046	37.99
7TH GUEST VGA 256 COL (GRAPHIC HORROR MYSTERY)	JL9155	55.99
BEAUTY AND THE BEAST	JL6723	31.99
BRITANNICA FAMILY CHOICE (COMPILATION OF 15 EDUCATIONAL TITLES FROM EARLY LEARNING TO MILLIONAIRE 2 (STOCK MARKET) AND REVOLUTION '76 (POLITICS))	JL6566	31.99
CALIFORNIA & HAWAII GOLF GUIDE	JL9196	26.99
CHESS MASTER 3000 MULTIMEDIA	JL6672	28.99
DESERT STORM WITH COALITION COMMAND (EDUCATIONAL INTERACTIVE WAR GAME)	JL9163	39.99
ECO QUEST	JL9189	29.99
JAZZ (A LOOK BACK IN TIME AT JAZZ THROUGH THE YEARS OF 1923-1991, INCLUDES A LOOK AT THE TOP JAZZ ARTISTS AND THEIR LIFE HISTORY, HOW JAZZ DEVELOPED, FULL MOTION VIDEO AND CD QUALITY SOUND)	JL9158	60.99
KINGS QUEST 5	JL6570	29.99
LEGEND OF KYRANDIA VGA 256 COL	JL9156	29.99
LEISURE SUIT LARRY 1	JL9190	29.99
MAGNETIC SCROLLS COMPILATION (FISH, CORRUPTION AND GUILD OF THIEVES)	JL6628	25.99
PETER AND THE WOLF (EDUCATIONAL ADVENTURE)	JL9157	31.99
SHERLOCK HOLMES MULTIMEDIA	JL6592	37.99
SOFTWARE JUKEBOX (GAMES COMPILATION)	JL9164	31.99
THE KGB & CIA WORLD FACT BOOK	JL9162	31.99
ULTIMA UNDERWORLD AND WING COMMANDER 2 WITH SPEECH VGA 256 COL	JL9053	32.99
WILD PLACES	JL9160	26.99
WILLY BEAMISH	JL9173	29.99
WING COMMANDER 2 DELUXE CD	JL9052	32.99
WONDERLAND (M/SCROLLS)	JL6624	23.99
WORLD VIEW	JL9161	26.99

PLEASE NOTE THERE IS A 50p SURCHARGE ON ALL SOFTWARE ITEMS ORDERED BY PHONE.

ALL HARDWARE ITEMS INCLUDE VAT & POSTAGE IS FREE TO UK MAINLAND !

DISKS

VERBATIM
3.5" DSDD DISK WITH LABEL
10 Pack £7.99
GG9137
27.99 FOR 50
GG5535

PACK OF 20 3.5" VERBATIM HIGH DENSITY DISKS WITH LABELS
GG9118
16.99

3.5" VERBATIM HIGH DENSITY DISK (1.4 MB) GG5264 .....99p each

10 PACK GOLDSTAR 5.25" DSDD DISKS (96 TPI, 720K).....GG5265
2.99

10 PACK GOLDSTAR 5.25" HIGH DENSITY DISKS (1.2 MB) .....GG5266 .....3.99

PACK OF10 TDK 3.5" MF-2DD DISKS (DSDD).....GG9085 .....8.99

PACK OF10 TDK 3.5" MF-2HD DISKS (HIGH DENSITY) .....GG9086 ...13.99

DISK BOXES

BANX DISK BOX 3.5" (120) STACKABLE GG9144 .....13.99

BANX DISK BOX 3.5" (80) STACKABLE GG6591 .....12.49



DELUXE DISK BOX 3.5" (80), LOCKABLE, DIVIDERS
GG5752
9.99



FLIPBOX DISK BOX 3.5" (20 CAPACITY)
GG9145
7.99

DISK BOX 3.5" (10 CAPACITY) .....GG5187 .....1.99

DISK BOX 3.5" (120) LOCKABLE, DIVIDERS GG5323 .....9.99

PRINTER MISCELLANEOUS



CANON NICAD BATTERY PACK FOR BJ-10EX PRINTER
GG9125 39.99



CANON AUTO CUT SHEET FEEDER FOR BJ-10EX PRINTER
GG9126
54.99

DUST COVER FOR 80 COLUMN PRINTER (CLEAR PVC).....GG5313 ...4.99

RIBBON FOR STAR LC24-20 PRINTER .....GG6681 ...7.99

RIBBON (COLOUR) FOR STAR LC200 PRINTER.....GG6680...12.99

RIBBON FOR STAR LC200 PRINTER .....GG6679 ...8.99

PRINTER DRIVER KIT FOR IBM PC DOS APPLICATIONS .....GG9153...14.99

A SELECTION OF GOOD QUALITY PRINTERS FOR PC

CITIZEN SWIFT 9 PRINTER



FREE Membership & Printer Lead

WITH COLOUR KIT 9 PIN, 80 COLUMN, 192CPS/48NLQ, 3NLQ/1 DRAFT FONT, 2 YEAR WARRANTY. A 9 PIN PRINTER WITH COLOUR FACILITY AND FULL PAPER HANDLING FUNCTIONS.
GG5607
169.99

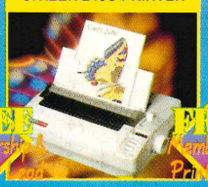
CITIZEN 120D PRINTER



FREE Membership & Printer Lead

9 PIN, 80 COLUMN, 144 CPS/25NLQ, 2NLQ/1 DRAFT FONT, 2 YEAR WARRANTY. HIGH QUALITY BLACK AND WHITE PRINTER.
GG6541
129.99

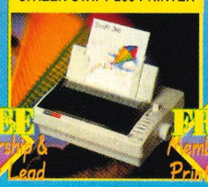
CITIZEN 240C PRINTER



FREE Membership & Printer Lead

WITH COLOUR KIT, 24 PIN, 80 COLUMN, 240CPS/80LQ, 9LQ/1 DRAFT FONT, 2 YEAR WARRANTY. ADVANCED VERSION OF 24E WITH AUTOSET FEATURE AND LCD CONTROL PANEL
GG9020
259.99

CITIZEN SWIFT 200 PRINTER



FREE Membership & Printer Lead

WITH COLOUR KIT 24 PIN, 80 COLUMN, 216CPS/72LQ 6 LQ/1 DRAFT FONT, AUTO SET FACILITY, INPUT DATA BUFFER, AUTO PAPER LOADING, ENVELOPE PRINTING, 2 YEAR WARRANTY.
GG9073
214.99

CANON BJ-10EX PRINTER



BUBBLE JET PRINTER 64 NOZZLE, 80 COLUMN, 83LQ CPS 2LQ/1 DRAFT FONT, 1 YEAR WARRANTY. A SMALL, PORTABLE PRINTER, VERY QUIET IN OPERATION YET GIVING OUTSTANDING PRINT QUALITY.
GG6632
214.99

RIBBONS / PRINTER LEAD

RIBBON (COLOUR) FOR CITIZEN SWIFT 9, 24, 200, 224 OR 240C PRINTER .....GG5637.....14.99

RIBBON FOR CITIZEN SWIFT 9 OR 120D+ PRINTER .....GG6041 .....6.99

RIBBON FOR CITIZEN SWIFT 24, 224 OR 240 PRINTER .....GG6042 .....6.99

PRINTER LEAD (PARALLEL) FOR AMIGA, ATARI ST OR IBM PC .....GG5147 .....7.99

INK CARTRIDGE FOR BJ-10EX PRINTER
GG6637 .....19.99



DARK WORLD
AN AWE-INSPIRING FANTASY ROLE-PLAYING BOARD GAME. YOU CAN BE A BARBARIAN, DWARF, KNIGHT OR RANGER TRYING TO DEFEAT THE LORD OF FOUNDATION AND MASTER OF FEAR. FOR 2 TO 5 PLAYERS AGED 10 TO ADULT
27.99



SONY D33AN DISCMAN
WITH HIGH QUALITY EARPHONES, 20 TRACK PROGRAM MEMORY, MEGA BASS SOUND SYSTEM, SHUFFLE PLAY, INTRO SCAN, LCD DISPLAY, 8 TIMES OVERSAMPLING AND AUTOMATIC MUSIC SENSOR.
99.99

CALL NOW FOR YOUR FREE 12 PAGE COLOUR CATALGOUE CONTAINING ALL THIS AND MORE!
0279 600204

Special Reserve Games Club

0279 600204

The Biggest and Best computer games club in the world. Probably.

Join now from £4.99 (UK) and get all this:

NRG – CLUB MAGAZINE
48 page colour bi-monthly magazine

Latest News and Reviews
NRG keeps you up-to-date on games and hardware

Over £30 worth of coupons
in each issue of NRG to save even more money!

Save £££'s on games
hundreds of special offers every month

WIN £10,000 worth of prizes every month!
Easy to enter competitions in every issue of NRG

Advance Order System
Order early. New games sent day of arrival

Credit Card Orders
Phone lines open to 8pm Mon-Fri & to 5pm Sat & Sun

FREE postage to the UK
All prices include VAT & there's no obligation to buy

We only supply members but you can order as you join.

Membership Fees:	UK	EC	WORLD
6 months	£4.99	£6.00	£7.00
1 Year	£7.99	£10.00	£12.00
2 Years & FREE NRG binder	£14.99	£20.00	£24.00

ALL FREE MEMBERSHIPS OFFERED WITH HARDWARE ARE FOR 6 MONTHS

We sell games and accessories, all at amazing prices, for Megadrive, Master System, Game Gear, Super NES, Gameboy, NES, Lynx, Amiga, Atari ST , IBM PC, CD ROM, PLUS SONY and Board Games!

Over 150,000 people have joined Special Reserve, so don't delay, join today!

You can phone in your order or use this coupon

Inter-Mediates Ltd. Registered Office: 2 South Block, The Maltings, Sawbridgeworth, Herts CM21 9PG. Inevitably, some games may not yet be released. Please phone Sales on 0279 600204 for latest release dates and stock availability. We reserve the right to change prices and offers without prior notification. E.& O.E.

WE ONLY SUPPLY MEMBERS BUT YOU CAN ORDER AS YOU JOIN. THERE IS A SURCHARGE OF 50p PER GAME ON TELEPHONED ORDERS. (PLEASE PRINT IN BLOCK CAPITALS) **ASK**

Name_____

Address_____

_____

_____ Postcode _____

Phone _____ Machine_____

Enter membership number (if applicable) or New Membership Fee

item

item

item

item

item

ALL PRICES INCLUDE UK POSTAGE & VAT £

Cheque/P.O./Access/Mastercard/Switch/Visa Switch Issue No_____

Credit card expiry date_____ Signature_____

Cheques payable to: **SPECIAL RESERVE**
P.O. BOX 847, HARLOW, CM21 9PH

Overseas Orders Surcharge (EC or World): Software orders please add £2.00 per item. Non-software items please add 25%. Hardware items supplied to UK mainland only. *Overseas orders must be paid by credit card.*

TAL RESERVE • SPECIAL RESERVE • SPECIAL RESERVE • SPECIAL RESER

AMD chips in after legal battle

The possibility that the 486 processor standard may become even more accessible to the masses became stronger than ever last month, when a Californian court ruled that Advanced Micro Devices (AMD) could begin to manufacture and sell its very own versions of the state of the art PC chip.

Up until this point, the right to manufacture the 486 had remained the exclusive property of Intel, the company which had originally developed it. The court's ruling was seen as something of a surprise, as it overturned a previous jury's decision which had enforced Intel's monopoly.

AMD, which had been developing its own version of the 486 (which would have to have been significantly different to Intel's, in order to avoid breaching copyright), immediately declared that it no saw "no legal barrier" to selling the standard 486 – and, perhaps more significantly, to cloning Intel's more powerful Pentium (the recently launched '586').

However, despite the fact that the court's decision will have an impact on PC sales, demand for the 486 still exceeds supply, and many experts believe that its effects may be relatively insignificant (AMD only has the capacity to produce one million 486s this year, as opposed to Intel's six million).

Where the ruling may have its greatest impact, is that it will open the door for other companies to continue to produce 486 chips and machines, even when Intel begins to concentrate on the more advanced Pentium later this year.

IN BRIEF...

Impact Alarms of Oldham has launched a circuit board and software combination designed to protect PCs from both theft and unauthorised use. The system requires the user to run a custom program on booting up and shutting down, otherwise an ear piercing alarm is activated – no doubt to the great amusement of everybody else in your home or office. The package is known as the Mericot 181 Computer Alarm, and is available priced at £60 (plus VAT) from Impact Alarms on (061) 665 2826.

Not content with producing one of the greatest games of all time, the chaps from Psygnosis have joined together with Nick Coler and Ian Richardson (the musical giants behind KLF) to produce Lemmings – The Record. Available now on the Synthetic label, Lemmings – The Record is apparently only the first of many such collaborations due to come from the Liverpool publisher.

Licence-specialist Ocean has picked up the rights to what's likely to be the biggest movie tie-in of 1993 ... Steven Spielberg's Jurassic Park. The film, which is based on the Michael Crichton book of the same name, is set in a futuristic theme park populated by bio-engineered dinosaurs – and is reputed to feature some of the most life-like special effects ever to grace the silver screen. You'll be able to judge for yourself when the film opens on July 17th – game fans, however, will have to wait until early October for their own version.

Europress Software has formed a specialist development team to concentrate on CD-ROM products. The team, which is headed up by Mark Cooper, will specialise in producing educational programs, a field where Europress already claims an 80 per cent market share.

The European Leisure Software Publishers Association (ELSPA) has enlisted the help of MP Emma Nicholson in its fight against software piracy. "If British companies are going to continue to lead the world in interactive entertainment product, then the government has to play its part by protecting them with laws which can be understood by the police and upheld by the courts," says ELSPA's Roger Bennett.

Those interested in the developing field of virtual reality may be interested to hear of a new 32-page handbook on that very subject, produced by VR specialist developer Dimension International. The guide includes details on what system to buy, applications and a glossary of VR terminology and is available now, priced at £5. For further information, contact Dimension on (0734) 810077.

Flight sim buffs who wish to know a little more on their favourite subject can now be the proud possessors of an all-new fanzine dedicated to the subject. The Computer Flight Sim Journal features reviews of new programs, tips on how to get the best out of old ones, and a number of articles on related topics such as great aces and historic aircraft. The only drawback is that the Journal is produced in Australia, but if this doesn't seem like too much of a problem, contact the editorial team on (03) 578 0010 for subscription details.

Following the release of International Rugby Challenge, Domark has decided to publish all of its forthcoming sports games on a new label – Champions of Sport. The rugby offering (which is reviewed in this month's issue) will be followed by an updated version of Championship Manager, Pro Golf and Formula One Champions.

UK dream begins

Cyberdreams, the software publisher behind the nightmarish graphic adventure Dark Seed, has finally set up its long-promised European base and simultaneously announced its next release, CyberRace.

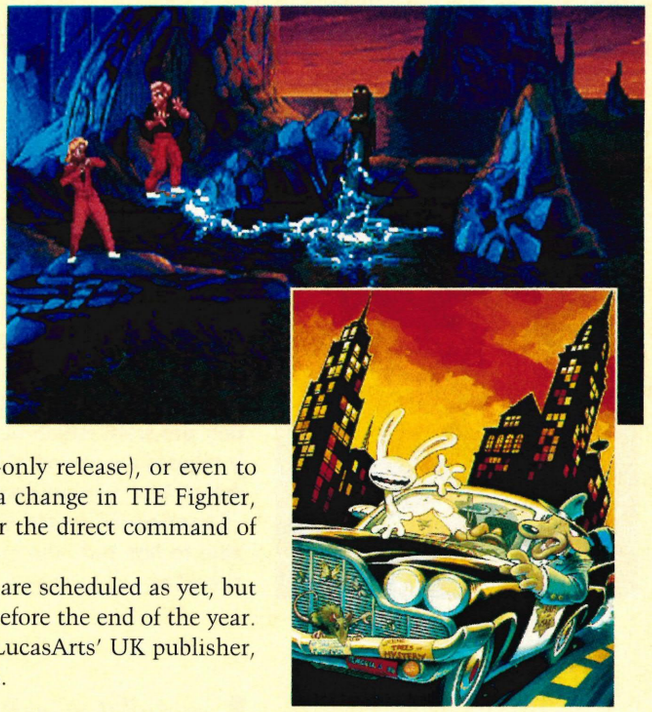
Designed by Hollywood movie designer Syd Mead (of Blade Runner fame), CyberRace is a 3D combat and racing game which features ray-traced vehicles and digitised actors in its make-up. The game is due for release next month, and, like Dark Seed before it, will feature an innovative packaging style.

Cyberdreams' new European base has been set up in London and is to be headed up by Mark Scriven, who joins the firm after a spell with the now-defunct Mirrorsoft and, prior to that, who was the first advertising manager on PC Review's forerunner, PC Leisure.

For more details on CyberRace and other Cyberdreams product, contact the publisher on (071) 328 3267.



Lucas unveils famous five



LucasArts Entertainment Company, the software arm of Star Wars director George Lucas' entertainment empire, is to unveil its most extensive summer and autumn line-up to date at next month's Consumer Electronics Show in Chicago.

In all, the company plans to release five new titles over the coming months, including three graphic adventures and two Star Wars-inspired flight simulations to follow on from the success of X-Wing. The adventure line-up consists of The Dig – which is currently being developed by Brian "Loom" Moriarty and an as-yet-to-be-announced film director – Day of the Tentacle, Maniac Mansion 2 (the long-overdue sequel to the Lucas company's first adventure) and a comic book tie-in, Sam and Max Hit the Road.

Starfighter pilots will be able to take the skills earned in X-Wing and apply them directly to Rebel Assault, a 15-level arcade action blaster (which is notable as it will be LucasArts' first ever CD-only release), or even to test out their dark side for a change in TIE Fighter, which will place them under the direct command of Darth Vader himself.

No European release dates are scheduled as yet, but all five titles should appear before the end of the year. For further details, contact LucasArts' UK publisher, US Gold, on (021) 625 3366.

Mindscape turns TV star

Mindscape has linked up with specialist TV producer Broadsword to develop a series of interactive broadcast television games.

Although neither company has as yet revealed full details of the project, it is believed that the games will work along similar lines to TV 'phone games', where contestants send instructions via telephone to affect what happens on screen.

Tim Child, managing director of Broadsword (the company behind such games-related TV shows as Cyberzone, Timebusters and Knightmare) believes that this new venture can dramatically increase the quality of these games.

"Many programmes have introduced interactive phone gaming," he says, "but with a few exceptions the games themselves have been rather disappointing, both in technical quality and play value." More details will become available after the joint venture is officially launched at a TV industry convention in Cannes, but Mindscape's boss Geoff Heath did reveal that the games chosen for the TV experiment could also be produced as standalone computer games.

Elonex cuts and heads north

Elonex has emerged from a relatively quiet few months with a flurry of announcements, including across the board price cuts, a new range and its intention to begin manufacturing in Scotland.

Following a recent blip in the price graph, when sterling's performance against the dollar sent prices back in the wrong direction, the company has once again returned to its old ways by revealing that all of its prices are to drop by between six and 10 per cent (bringing the 'entry level' 425X down from £995 to £935).

Commenting on the news, financial director Michael Spiro says: "The recent past has seen small price rises as the pound weakened. Now that it has recovered somewhat, and our costs are lower on several key components too, it follows that Elonex products should come down in price.

Following the signing of an agreement with newly-formed manufacturer, Cordata, many of the PCs sold under this new price structure will be manufactured in Scotland, as the new firm is to open a 40,000 square foot manufacturing plant at Cumbernauld. Cordata is to invest £5.5 million in the new plant, which will employ 175 people when fully operational.

Finally, Elonex has teamed up with software giant Microsoft to compile two new bundles – the Entry-Level Solutions Range and the Power Solutions Range. Both ranges come complete with pre-loaded MS-DOS 6.0, Windows 3.1 and other Microsoft applications software (including Works for Windows, Word for Windows 2.0, Excel 4.0 and Access 1.0, depending on the configuration).

For full details on any of the above, contact Elonex on (081) 452 4444.



More than your job's worth?

Now that the recession is officially 'over', many PC users are now probably feeling confident enough to once again begin planning their careers (instead of spending each day in fear of the dreaded P45).

Coincidentally, Surrey-based software distributor KIMS has just released the latest version of its CareerBuilder 2 package – intelligently entitled CareerBuilder 2.4a.

Like its predecessor (see News, Issue 16), version 2.4a is based on the US best-selling book, Build Your Own Rainbow, and encourages the user to think laterally about his or her employment.

The package comes in two separate versions – corporate and personal – with the personal version reputedly ideal for those who need to "review their options following a break from the job market" – just the thing now that all of those made redundant during the recession are about to get their jobs back.

Designed to be used by up to three people, the personal version costs £30 (exclusive of VAT) and is available now from KIMS, call (0483) 283406.

Quickshot shows its cards



Joystick-specialist Quickshot has increased its PC-specific range with the release of a 386 and 486 specific game card and an all-new game card and joystick bundle.

The Smart Game Card (or, for numbers freaks, the QS-163) comes complete with two joystick ports and an 'intelligent' calibration program which automatically adjusts the speed of the card to match that of your computer.

Experienced users will also be able to fine tune the card's clock speed at any stage – even during play – by use of a built-in 'hot key' facility.

However, no matter how 'intelligent' the software, no game card is of any use without a joystick, so Quickshot has also released the QS-163 with a matching controller (self-centring with autofire) in the irresistibly-named QS-1135 PC Pack.

The Smart Game Card is priced at £9.99, while the combined package comes in at a penny short of £26. For details of availability, contact Quickshot on (081) 365 1993.

Revell's kit off to CD

Scale model kit specialist Revell is to bring its chosen field right up to date with the introduction of a series of CD-ROM-based kit building and manipulation programs.

The idea is that, rather than glueing plastic components together to form an unrecognisable mess, model enthusiasts will now be able to construct the car, plane or boat of their dreams in digital form.

What's more, the new format will allow the enthusiast to actually try out his or her creation in lifelike situations once the construction is complete – for example, a hot street car can be tested out on the streets (but watch out for that digitised speed cop!).

The first title to appear is Motor Stars, which features a range of exotic cars including the Bugatti EB110, the Porsche 911 'slant nose', the BMW Nazca M12 and the Lamborghini LP500S. Future titles, which will be available before Christmas, will include American Street Cars and High Tech Aircraft.

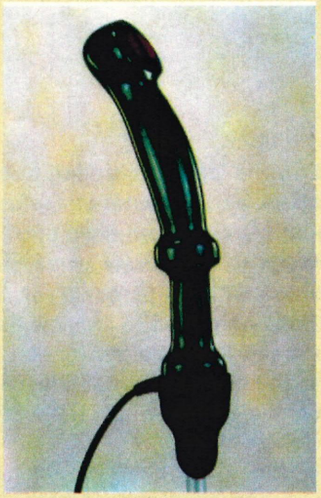
"These releases add an exciting high-tech dimension to model building and will revolutionise the way consumers build models in the future," says Revell's international marketing manager Paul Ballantyne. "It extends the fantasy of building and racing the car of your dreams in a super-charged game which keeps its players on the edge of their seats."

Revell's CD-ROM kits will be compatible with any PC which meets the MPC standard. For more details, contact Revell on (081) 207 1552.

Up, up, and away

Strange as it may seem, this unusual looking beast is actually Logic 3's latest joystick, the Free Flight.

Designed by a pair of pilots, with flight simulation programs in mind, the free-standing stick makes use of a series of patented optical switches to generate a feeling as close as possible to that of actually flying a real aircraft – and believe it or not, it doesn't require batteries. The Free Flight is available now, priced at £39.99.



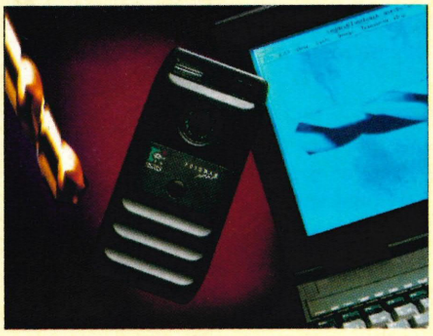
Logitech's FotoMan Plus PC camera

Peripheral specialist Logi (UK) has launched a new version of its PC-based FotoMan digital camera, boasting several significant improvements over the original.

The advances include improved picture resolution, faster communication speed with the computer, automatic flash control and longer battery life.

The camera, which requires no cable, film or interface card, can store up to 32 pictures in its RAM, and can download greyscale images of a 120dpi resolution directly to the PC via the serial port.

There are drawbacks though. For a start, FotoMan Plus requires a 386 PC (or better) with at least 2Mb of RAM, and – perhaps more importantly – will set its user back a hefty £599 (plus VAT). Those of you who are still interested can contact Logi on (0344) 891452.



Electronic Arts gets Street-wise

Following its successful tie-ins with the likes of Michael Jordan and John Madden, Electronic Arts has secured the services of another all-American hero – Big Bird.

The yellow-feathered dimwit is to join several of his Sesame Street colleagues in a series of semi-educational packages on the Californian firm's newly-launched EA Kids label.

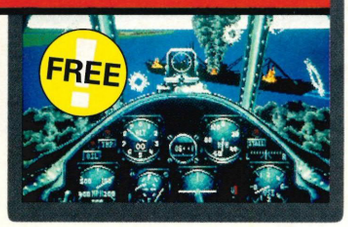
This development has come about through a link-up between EA and the company behind Sesame Street, the Children's Television Workshop, and will result in a number of separate products featuring the characters on both floppy disk and CD.

An excited Stewart Bonn, senior vice president of EA's CD development team, says, "CTW practically invented the idea of educating children through entertainment – and all of the products in this new Sesame Street line will reflect this philosophy."

Big Bird was unavailable for comment, but you can contact his new colleagues by calling Electronic Arts on (0753) 549442.

Play Hard; Play Safe Save Big!

Aces of the Pacific



Front Page Sports Football





only **£79.95** ex-V.A.T.

Get 2 FREE games when you buy the special QEMM-386 Game Paq *—while stocks last*

Manifest Memory Analyser



In the Sky with Aces of the Pacific.

Aces of the Pacific:
"The benchmark of the '90s for flight simulators"
—Simulation Magazine

Experience the emotion of airborne combat with the men and machines of World War II. Attack carriers, air bases and fight the enemy's finest flyers. Includes 25 accurately recreated WWII fighters and bombers; legendary enemy (and friendly!) aces to battle; and all the heart-pounding excitement of carrier landings. Choose from an array of missions, or enlist for the entire war! You can even fly for either side.

On the Gridiron with Front Page Sports Football.

This amazingly realistic simulation puts you in the middle of the most complete American football gaming package ever. Play against a friend or against the computer. View instant replays. You get a full 47-man roster including injured reserve, up to 28 teams per league, up to 1,400 players per league, 200+ stock plays, 300+ stat categories and choice of exhibition or a full season's play.

Front Page Sports Football:
"...graphics are superb...the game mechanics are top rate"
—PC Format

both games SOUNDBLASTER compatible

Easy memory with Manifest.

The acclaimed Quarterdeck Manifest will reveal all of your computer's secrets—instantly! It's the best guide you could ever have. Manifest gives you hints on how to use all your memory to its very optimum, how the memory is being addressed, how interrupts are used—and all this is possible without taking the lid off!

Playing it Safe with Quarterdeck's QEMM-386.

QEMM-386: giving your games the maximum memory—*Automatically*. No wonder that QEMM-386 is specified by more game publishers than any other memory manager.

Not only will QEMM-386 help your games to run faster, it will also give DOS room to breathe again. QEMM will stop your mouse (and other memory-hungry software drivers) eating into your precious workspace area; you could find yourself with over 620K* free! So whether your 386 or 486 computer has 1 megabyte or more, runs Windows or DOS, the world's number one memory manager releases more memory so that your programs can run without constraint. * DOS v.5 or later

PC WEEK ANALYST'S CHOICE · PC MAGAZINE EDITORS' CHOICE · THE PC/COMPUTING 200 BEST PC PRODUCTS CATEGORY WINNER · INFO WORLD PRODUCT OF THE YEAR · W 100 · LOTUS · WordPerfect Reader's Choice · PC WORLD BEST BUY · 1991 BYTE AWARDS OF EXCELLENCE · 1991 BYTE POURNELLE'S USER'S CHOICE AWARD · 1992 BYTE READERS' CHOICE AWARD

CALL TODAY ON (0245) 496699 FOR YOUR NEAREST DEALER

Yes! I want to get in on all the fun!

Qty	Product	Each	Totals
	QEMM-386 Game Paq	£79.95	
	Shipping and handling		£10.00
		VAT @ 17.5%*	
		TOTAL	

Payment Method: ❑ Amex ❑ Eurocard UK-PCR
❑ Visa ❑ MasterCard ❑ Access Expires ___/___ ❑ Cheque
Card # |_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|
VAT # _____
Name _____
Address _____
_____ Post Code _____

** If you are registered for V.A.T.:* please complete the V.A.T. section of this form and DO NOT include V.A.T. in your payment calculations.

Or mail this coupon to:
QEMM Games Offer,
P.O. Box 770,
7600 AT Almelo, Holland

Quarterdeck UK

Widford Hall, Widford Hall Lane, Chelmsford, Essex CM2 8TD. Voice (0245) 496699 Fax (0245) 495284 All software fully-featured & supplied on 31/2" disks. Games not individually boxed.
For technical support, voice contact (071) 973-0663 or fax on (071) 973-0664. E&OE. All trademarks are the property of their respective owners.© 1993 Quarterdeck Office Systems.

Westpoint makes music

Westpoint Creative has underlined the PC's continuing emergence as a professional-quality music generator with the announcement of a new range of music creation and manipulation utilities from Washington-based specialist Midisoft.

The range includes Midisoft Recording Session for Windows, Midisoft Studio for Windows, Music Mentor with Recording Session, The World of Music Sampler and the Multimedia Music Library, each of which is aimed at a different user.

Music Mentor and Recording Session are perhaps the most applicable to home use, being a complete interactive introduction to the history of music and easy-to-use Windows-based sequencer.

In addition to taking on the new software range, Westpoint has also announced changes to its Sound Blaster line-up, with both the standard and 'Pro' cards now available in deluxe editions, featuring extra software (including Lemmings and Indy 500).

For more details on all of Westpoint's sound range, call (0743) 248590.



Kuma adds to its book lists

MS-DOS literature specialist, Kuma, increases its already extensive library this month with the launch of three new titles, Arts & Letters Apprentice Illustrated, NC100 Magic and The Commercial Games Programmers Guide, 2nd Edition.

The former is a guide to Computer Support Corporation's Windows-based graphics and presentation package, while the latter needs little introduction.

NC100 Magic, however, deserves some explanation, being a written guide to the Amstrad Notepad computer which is supposed to be easy enough to use in five minutes (or you get your money back).

Kuma claims that the book lists many hidden features not included in the original manual, and also includes a series of easy to understand examples designed to take the user through the intricacies of such functions as mail merging and even programming.

The three books are priced between £9.95 and £16.95 and are available now, either from your local bookshop or by calling Kuma on (0734) 844335.

Alone at the top

The prestigious awards ceremony which took place at the recent European Computer Trade Show (ECTS) demonstrated the PC's continuing emergence as a state of the art games machine, as a number of MS-DOS games beat off their Sega and Nintendo rivals to take top slots.

Despite the Nintendo beat 'em up Street Fighter II winning the Overall Game of the Year award, PC games took most of the other major prizes, including Best Sound, which went to The Secret of Monkey Island 2 and Best Graphics, which was awarded to Alone in the Dark.

In fact, the ceremony developed into something of a personal triumph for Infogrames' innovative 3D adventure, as Alone in the Dark also went on to take the Most Original Game gong, along with a number of regional 'Best Game' awards from different European countries.





TV text finds PC window

All the latest news from the global village can now be beamed directly into your computer, thanks to a new software and peripheral package from London-based Optimum Technology.

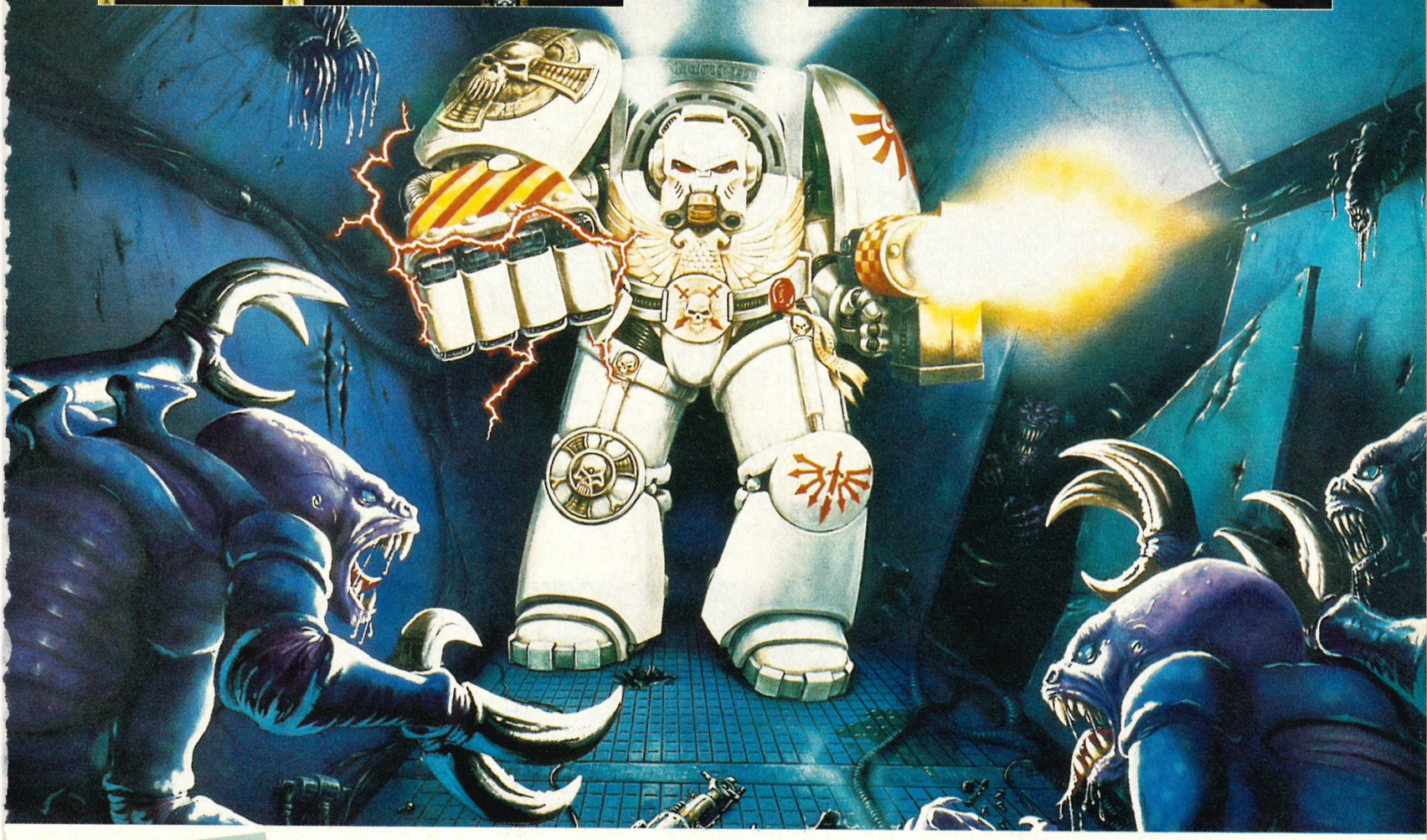
Taking into account that current affairs, City news, travel information, TV guides, sports details and much more is available to Teletext users every day, Optimum has developed a hardware add-on and Windows-based software suite which allows PC users to download this information into their machines and to manipulate it, either via the program itself or through any standard word processor.

The receiving equipment comes in two varieties – internal and external, priced at £195 and £295 respectively, while the Windows software package will set you back a further £95 (DOS software is included with both hardware packages).

All prices quoted are exclusive of VAT. For more information, contact Optimum on (081) 203 0220.

IN "SPACE HULK™" *EVERYONE* WILL HEAR YOU SCREAM!







An immense derelict spacecraft drifts through the void.

Within its dark labyrinthine depths, terror waits in the form of thousands upon thousands of Genestealers™. Lightning fast, six-armed, insectoid beasts from hell.

At your command are a select few Imperial Space Marines® who shall know no fear.

Suddenly the screen explodes and a Genestealer screeches towards you in frighteningly fast 3D action, to the accompaniment of an ear-splitting blast from your Assault Cannon™.

Control the cold tremor of terror that will be running through your every vein, and meticulously plan each move as if it were your last.

GAMES WORKSHOP®

WARHAMMER 40,000

ELECTRONIC ARTS®

Warhammer 40,000, Space Marine and Games Workshop are registered trademarks of Games Workshop Ltd. Space Hulk, Genestealer and Assault Cannon are trademarks of Games Workshop Ltd. All artwork © Games Workshop Ltd. Used under license.

For further information, ask your retailer or call Electronic Arts on 0753 672116.
Electronic Arts, 90 Heron Drive, Langley, Berks, SL3 8XP.

Coming Soon ...

The Summer of '93

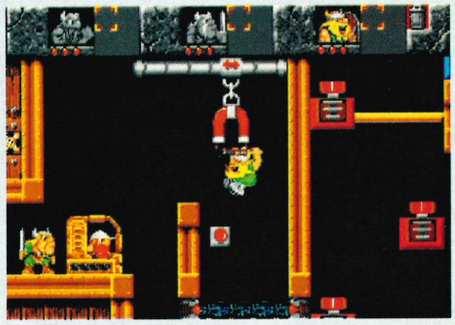
Just as we were getting ready for a relaxing summer, it looks like we'll have more new games than we know what to do with over the next three months. Graphic adventures in particular are appearing by the bucket-load, along with strategy games. Note that the release dates given are the publishers' estimates – notoriously prone to slippage.



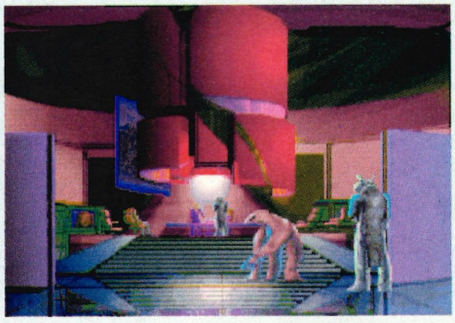
Pirates! Gold (MicroProse)
Out in late July
Time to live a life of piracy on the high seas of the Carribean. In this graphic adventure you will navigate across the sea, duel with noblemen and indulge in the odd bit of smuggling. With VGA/SVGA graphics this looks impressive with a capital I.



Rags to Riches (Interplay)
Out in September
A financial strategy game of post-yuppie double-dealing, insider trading, buying gold, and selling pork bellies. And if you can't tell the difference between blue chip and egg 'n chips, then the game will let you hire the staff to do it for you.



The Lost Vikings (Interplay)
Out in late July
It was just another day of Nordic seafaring when three Vikings are sucked into the bowels of an alien spaceship. Only you can help them find their way home. Tons of levels, great music and puzzles galore in this 256-colour VGA platform extravaganza.



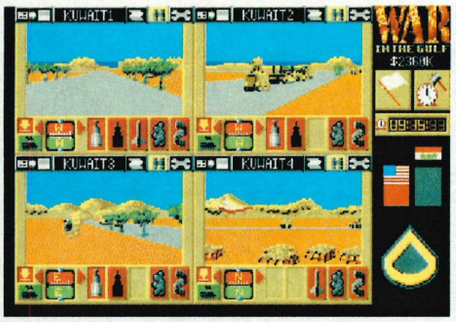
Cyber Racer (Cyberdreams)
Out in late July
3D action, combat and narrative in a futuristic race scenario, which showcases the work of Bladerunner and Tron designer Syd Mead. Looks great, and includes customisable ray-traced vehicles, digitised actors and speech, as two worlds battle it out on a huge fractal-generated canyon racetrack.



The Lovers' Guide CD-ROM (Supervision)
Out in July
It had to happen ... Supervision is bringing out a CD-ROM version of the sex best-seller. Certain sections of the guide are digitised and the Lovers Guide is certain to become the most comprehensive guide to sex you can have on a home computer. You could always read it in bed on a laptop??!



Return of the Phantom (MicroProse)
Out in June
See this issue's cover demo for MicroProse's latest graphic adventure, which uses the same playing engine as Rex Nebular. Set in Paris in the 19th century, you must avoid fiendish traps and puzzles before confronting the Phantom himself to rescue your girlfriend.



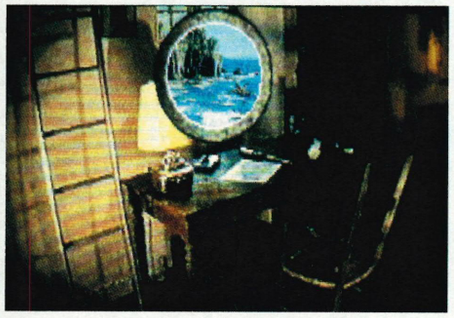
War in the Gulf (Empire)
Out any time now
The latest in the Team Yankee/Pacific Islands series, War in the Gulf takes you forward a few years to 1995, rather than back to Saddam circa 1991, puts you in charge of four groups of fighting vehicles facing invading Iraqi forces in Kuwait. To-achieve overall success will take over 15 separate tank battles across four hundred square miles of oilfield and desert.



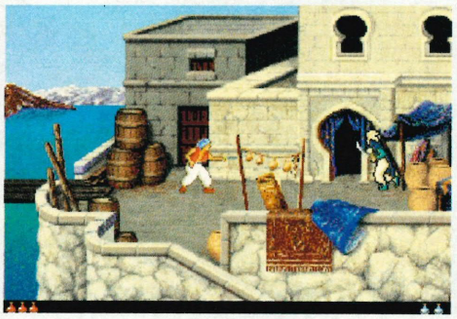
Maelstrom (Empire)
Out any time now
An inter-planetary war game from Syd Mead which features 'Cellular Automata' and a large helping of unpredictability. In other words, the characters have personalities, motivation and moods, a wealth of hi-tech weaponry (which is as likely as not to fail), and you have a one-man mission to reconnoitre the planet Harmony. What more could you want?



Protostar (Tsunami/Accolade)
Due out in late June
Vengence is the name of the game in Tsunami's sci-fi epic, which also boasts of sinister plots, betrayal, grand conflicts, multiple interweaving storylines and other theatricality. The general idea seems to be to incorporate graphic adventure, role playing, trading strategy, simulation *and* arcade action all in the one game. Sounds great, in theory...



Lost in Time (Coktel Vision)
Out late July
A graphic adventure that mixes full motion digitised graphics (including close-ups) with your everyday adventure interface. This looks stunning and promises to be huge. There is a chance that its sheer size may force it to be split into two parts.



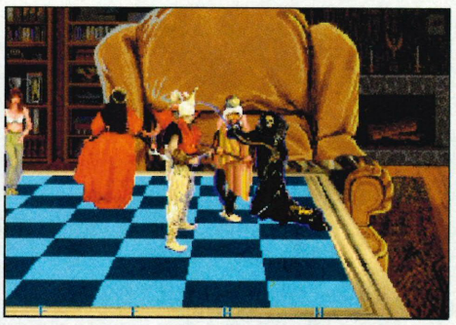
Prince of Persia 2 (EA/Broderbund)
Out late July
Jordan Mechner's 1989 classic arcade adventure gets a second outing. The character still climbs, jumps and hacks his way-onwards and upwards, but the best way to see whether it can add to the fun of the original is to try next issue's cover demo.



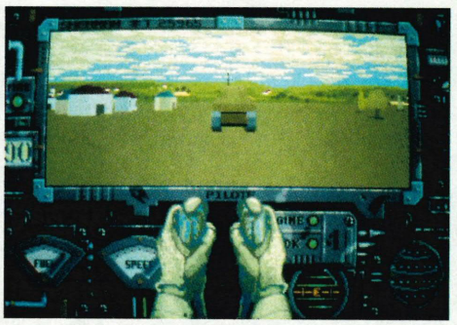
Fist (Supervision)
Out in July
Billed as a multi-media fantasy role-playing game, Fist is the digital incarnation of the Steve Jackson game that made its debut on the telephone lines a couple of years ago. This game will be unique in that it will be an 'audio' adventure role-playing game.



Flashback (Delphine/US Gold)
Out any time now
From the developers of Another World, Flashback is described as a ground-breaking SF adventure combining rotoscoped graphics with polygon-based cinema-style scenes. Awaking on an alien planet with no memories of his identity, Conrad Hart must foil an alien plot to destroy the Earth.



Chess Maniac 5 Billion and 1 (MicroProse)
Out any time now
Instead of boring old chess, MicroProse offers you the chance to play with belly dancers, jesters, wizards, etc, on a rotatable 3D chess board. Like Battlechess, pieces are taken in humourous animated sequences but rendered in glorious full motion video. It nearly makes chess interesting?



D-Day (US Gold/Futura)
Out in July
D-Day allows you to re-enact Operation Overlord, when the massed sea, land and air forces of the allies were used in the assault of the Normandy beaches. Combining strategy and simulation, D-Day should keep many a war gamer happy for weeks and months.

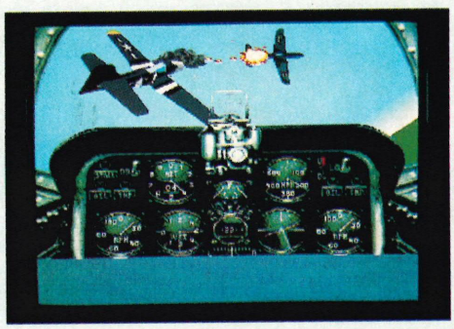
Coming Soon ...

The Summer Of '93



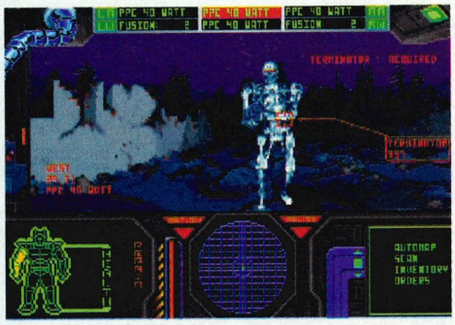
Eye of the Beholder III (US Gold/SSI)
Out any time now

The final instalment of the classic AD&D series, but from a different programming team this time round. Fans of the previous adventure will still be able to import their favourite characters (if they survived) from EOTB II, and this version aims to be a whole lot bigger than the last, with more cinematic links and extra music.



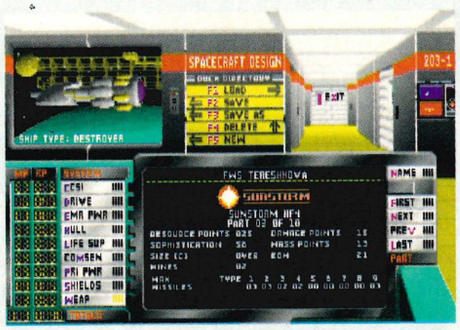
Aces over Europe (Sierra)
Out in early June

Following hard on the heels of Aces of the Pacific, AoE recreates the men, the machines and the aerial combat in Europe in WW2. Put on your flying goggles, and take part in the invasion of Normandy and the Battle of the Bulge, attack rocket sites and make bombing runs. Chocks away Ginger and TTFN.



Terminator 2029 (US Gold)
Out any time now

Taking the offensive against the computer-led destruction from Skynet, you're wearing the very latest in Terminator body-armour fashions. T2029 promises unlimited carnage, and certainly looks like it'll fare better than other titles we've seen in the past connected with Arnie's finest hour. See the review in our July issue.



Rules of Engagement (Impressions)
Out any time now

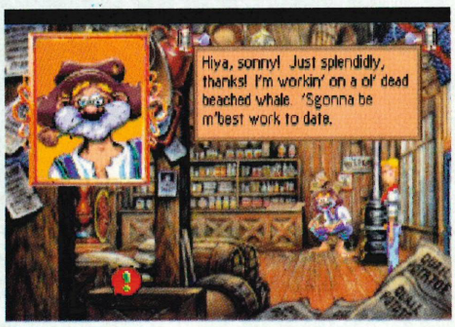
It's that real-time strategic space combat time of day again. The aim of the game — isn't it always — is to engage enemy starship fleets, and build and design your own weapons of destruction.

You can even send in your own mug shot to be incorporated in a 'personalised' copy of the game.



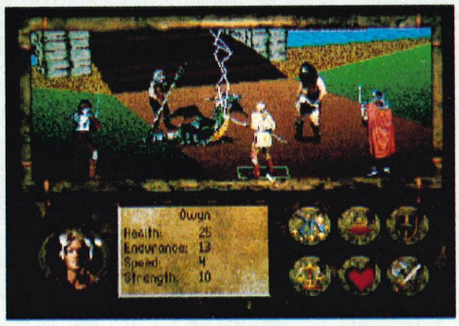
Airbucks 1.2 (Impressions)
Out any time now

One for budding tycoons everywhere, this is a major upgrade of the airline management and strategy game. New features include 256-colour graphics, more animations, digitised sound and an improved economic and financial model. See what it's like to conduct your own dirty tricks campaign against another airline.



Freddie Pharkus: The Frontier Pharmacist (Sierra) Out in early June

Al Lowe, designer of Leisure Suit Larry, has returned with the most hilarious Western adventure to date, he says. Freddy is the man with a gun in days when men were men and sheep were frightened. Freddy must hunt down an unknown villain and save the town from ruin.



Betrayal at Krondor (Sierra)
Out in early June

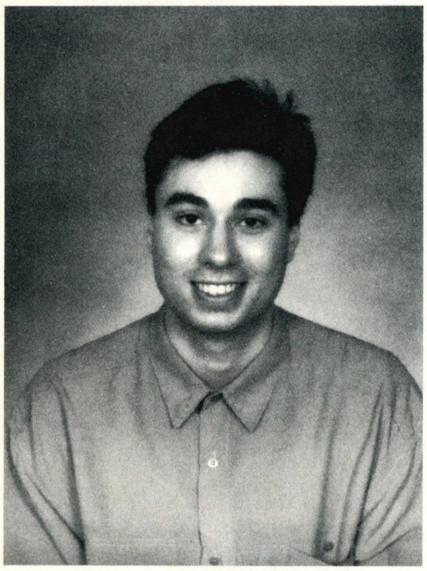
Nine missions in as many chapters form the basis of this RPG constructed around the fantasy world of Raymond E Feist's Riftwar Saga. You must guide your party of three meeting the objectives of your missions, fighting horrible enemies and championing the cause of good. Hurrah!



Simon the Sorcerer (Adventure Soft)
Out in September

Cute, cute, and truly, unbelievably cute. A fairy-tale graphic adventure in the Monkey Island tradition. Looks stunning, with great characterisation, and Terry Pratchett fans will find that the walking chest looks familiar. So if you fancy a bit of magic, look out for this one.

Chris Roberts



Chris Roberts is director of new technologies for Origin, and his credits include the ground-breaking Wing Commander series. On a rare visit to Europe, Chris spoke to John Bennett about what he's got in store for us next

Q Which was more important to you in Strike Commander, gameplay or realism?

A What we set out to do was make the most realistic flight sim around, but not to sacrifice any of the fun. If anything had to go between gameplay and accuracy, accuracy lost out every time.

I wanted that Top Gun feeling, when you're close behind somebody, twisting and turning, dogfighting, you know. Most jet fighter simulation combat is out of visual range. That's not what's fun about dogfighting, it's all about getting up close. We've set it up so you use guns more than anything else. As a dogfighter, Strike Commander is as much fun as a WW2 flight sim, but with all the glamour of jets.

Q Why did Strike Commander take so long?

A It was a lot of work, involving a lot of people, and there were technical hitches. We didn't really know much about 3D technology when we started, and we wanted a system to use as the basis for projects after Strike Commander.

We had working prototypes of the technology two years ago. Getting that to run together smoothly took another year. Then we started doing the game itself, a huge task, before pulling it all together. Trying to simulate flying an F16, our team pretty much came to the opinion that reality sucks. If you're doing a space game, then you can just make it up, because no-one knows what's right. With an F16, thousands of people know exactly what it does so you've got to do it right.

Q Did you make any last minute changes?

A No. We stopped screwing with the technology in February 1992. There were a few things we thought about, but I'd have been crucified if I'd said "OK, we'll put a nicer sky in our game because they have one in F15 III", or whatever.

Q Are you glad to see the back of it?

A Yes, but if I had to go back, I wouldn't change anything about it. Very early on, we tried to include too much. We had camera replays, six different planes and lots of other things. We cut a lot over two years ago because it was getting ridiculous. Putting in camera replays takes a lot of effort, and I'd rather spend that time doing something else for the game.

Q Is Strike Commander a natural step forward from Wing Commander?

A Wing Commander always felt like it wanted to go down on to planets. But I need a really powerful 3D engine to do this, and I didn't want to do Wing Commander 3 straight away. Strike Commander was something of of a test bed for this technology.

I also wanted to do something different. So I took a lot of my ideas from Wing Commander, but there's more strategy in Strike, and I think players will get more involved in it than in Wing Commander.

Q You work on one or two projects a year for Origin. Will we see a Wing Commander 3?

A Yes. It's going to be much darker than Wing Commander 2 — sort of grungy — and bigger. That's one of the reasons I want to have this polygonal technology, because you get a sense of scale you can't get with the bitmap stuff. And there will be much more detail than something like X-Wing, which is pretty primitive 3D.

You'll get to choose what missions you do, and it'll be more interactive than either Strike Commander or Wing 2. You also control your personality: this determines the behaviour of other characters. At the start of the game there are several ways you can pick up commissions, but towards the end you end up on a suicide run into the Kilrathi homeworld, diving down a big trench.

Q How far along is Wing Commander 3?

A The story, script and design are down, but we haven't started any coding yet. After Wing 3, We may take the universe further, but that'll be the last of the Kilrathi. You get sick of it after a while.

Q And will you do a follow up to Strike Commander?

A Yes, probably, and you're definitely going to be able to play different planes in future. We're talking about doing a helicopter game so you are going slow enough to really appreciate the detail.

Faster PCs mean more detailed shapes, with a faster frame rate, but that's about it.The biggest problem at the moment is VGA car speed, but if someone gives us the hardware, we know what to do with it.



WIN

The 7th Gu

plus a CD-ROM drive

So, the age of genuine CD-ROM games with spectacular graphics, sound and speech, is almost upon with the release of The 7th Guest from Virgin Games. Reviewed in this very issue, The 7th Guest is the result of three years development, and breaks new ground in multimedia entertainment, with over 30 minutes of full-motion video, dialogue spoken by professional actors, a full soundtracks and advanced full-frame animation.

There's just one small problem, isn't there? Since The 7th Guest is available only on CD-ROM — and likely to stay that way — then you're going to have precious little chance of trying out The 7th Guest without a CD-ROM drive.

This is where PC Review has come to the rescue. We've teamed up with Virgin Games and leading CD-ROM supplier Westpoint Creative to offer you the chance of winning a rather special, and highly exclusive, CD-ROM pack in this exciting competition.

The prizes

Westpoint Creative is a leading supplier of CD-ROM drives, and specialises in putting together easy to use bundles and upgrade kits so that PC owners can make use of CD-ROM technology without spending a fortune.

On offer here is the Sound Blaster Multimedia Upgrade Kit, which comprises a Panasonic CD-ROM drive, Sound Blaster Pro sound card, and Pro Digital speakers. Winners will also get a copy of The 7th Guest.

The Panasonic CD-ROM drive fits internally into a 5.25" disk slot, and connects directly to the Sound Blaster Pro card. It exceeds the MPC specifications for speed and data transfer rate, and comes complete with a single session Photo CD driver — for use with Kodak Photo CDs. You can also play audio CDs through the drive. The kit is designed to be easily assembled at home — you will simply need to open the casing in order to fit the Sound Blaster Pro and the CD-ROM drive. All cabling, manuals and instructions are included in the package.

An equivalent Multimedia Upgrade Kit normally costs over £500 in the shops, and The 7th Guest is a further £69.99.

However, thanks to Virgin Games and Westpoint Creative, we have four kit plus 7th Guest to give away to the winners of this competition. What's more, we've made it ridiculously easy to enter.

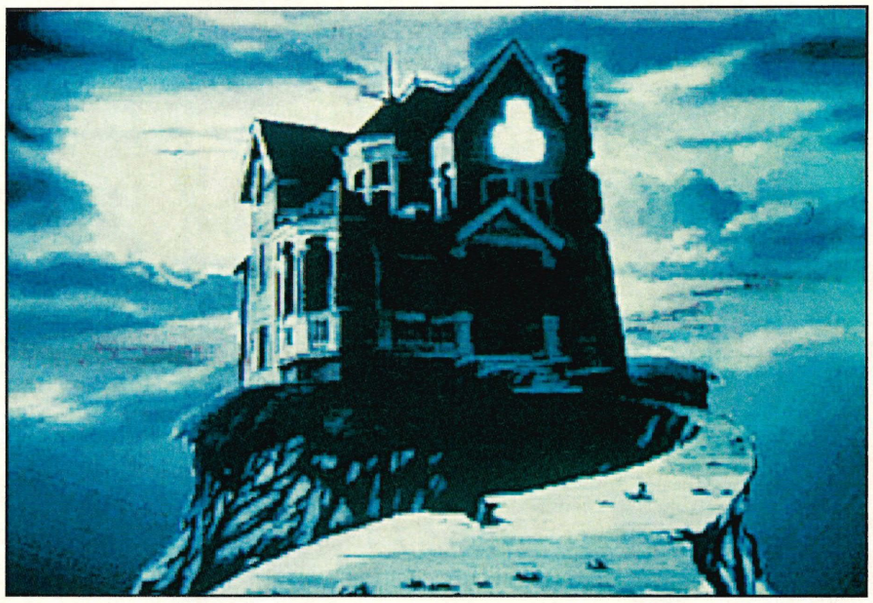
How to enter

The 7th Guest is set in a deserted mansion with a grisly secret and chilling reputation among the locals. Developer Trilobyte has made full use of the potential of multimedia to create a spine-tingling atmosphere in a game which should be played with the lights off — if you're brave enough to try it!

For this competition, then, we've continued 7th Guest's theme of mystery, horror and suspense, with some not-too-difficult questions on some pretty chilling big-screen movies of the past few years.

Simply write the answers on the form provided, stick the form on the back of a postcard or sealed envelope, and send your entry to

7th Guest competition
PC Review
Priory Court
30-32 Farringdon Lane
London EC1R 3AU



est

Your entry must arrive by June 15th, 1993 in order to be put in the draw for the prizes.

The questions

1. Which actor played Freddy in the Nightmare on Elm Street series?
2. Apart from Ripley, who else on the ship survived the first Alien film?
3. Name one of the two actors who appeared in both the original version of Cape Fear and Martin Scorsese's version.

Please note: the Sound Blaster Multimedia Upgrade Kit can be fitted to a 386SX, 2Mb RAM PC with VGA graphics (these are minimum specifications) and you will need a spare 5.25" drive slot in the machine to fit the CD-ROM drive to. The 7th Guest requires a minimum of a 386DX PC, 2Mb RAM and SVGA graphics to run.

Rules

- No entries received after the closing date will be considered.
- Only ONE entry per person, please.
- No employees, or their relatives, or associates of Virgin Games, Westpoint Creative, EMAP Images, or any companies involved in ownership or management of the location of the days out are eligible to enter the competition.
- The editor's decision in all these matters is unequivocably final, and all normal competition rules apply.

7th GUEST COMPETITION

The answers are:

1. .....

2. .....

3. .....

Name .....

Address .....

.....

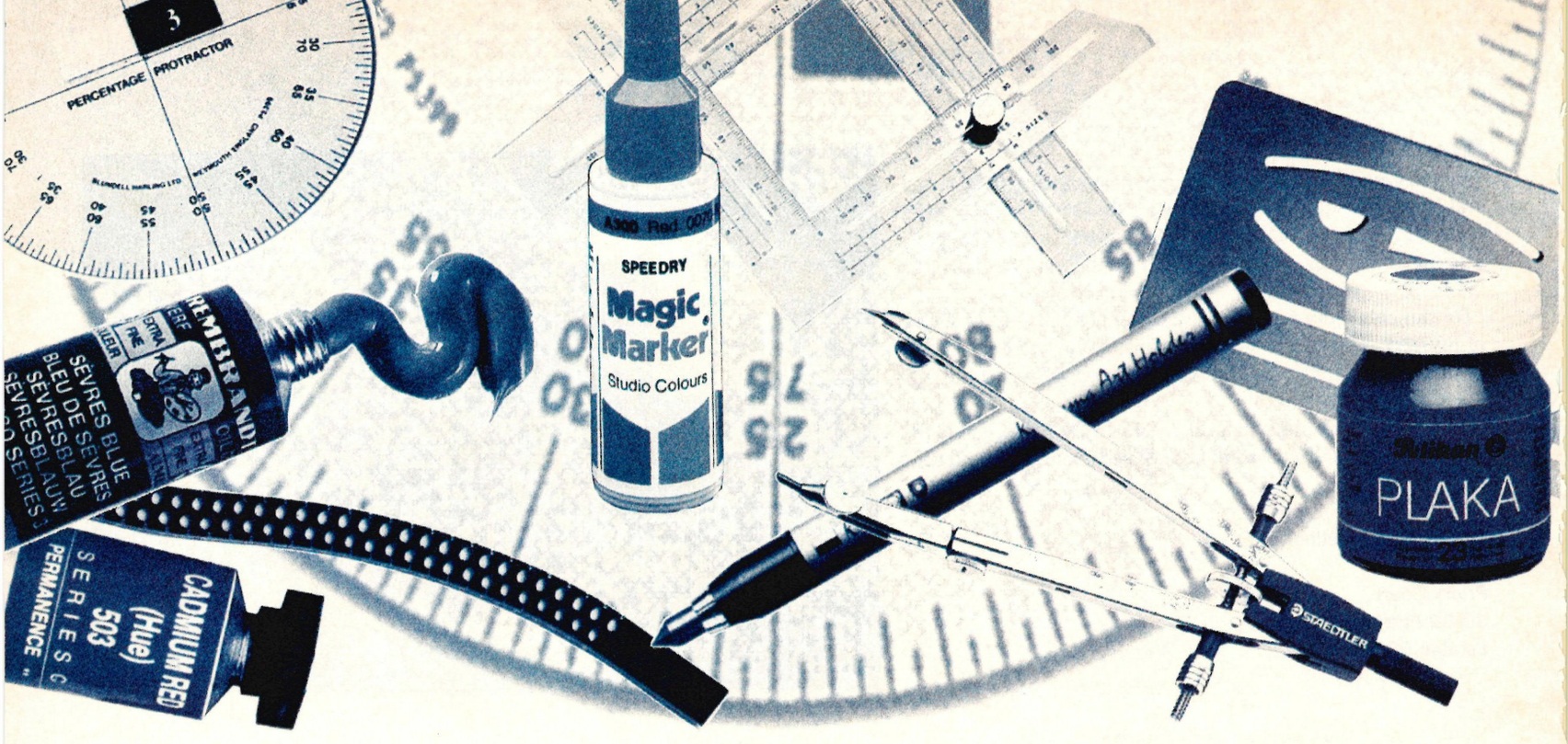
.....

.....

☐ Tick this box if you do NOT wish to receive any further information from companies associated with this competition.

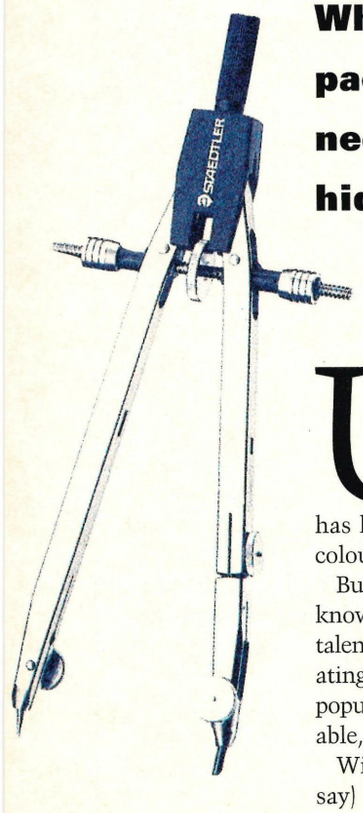
Closing date: June 15, 1993

PC Review June 1993



Picture this

PC graphics software in all its glory



What makes a good graphics package, and how much do you need to spend to unlock those hidden creative talents? John Bennett looks at the latest illustration software

Until recently, you could count the number of decent PC graphics packages on the fingers of one hand. Now there's a mass of competing packages of all different sorts, prices have tumbled and features are constantly improving. This has largely come about through improvements in PC speed, colour capabilities, displays and graphical user interfaces.

But with so many new packages arriving daily, it's difficult to know which ones will help you make best use of your creative talents. This article looks at the various types of software for creating and working with illustrations; concentrating on the more popular, reasonably-priced drawing and painting packages available, and some that are are a bit off the beaten track.

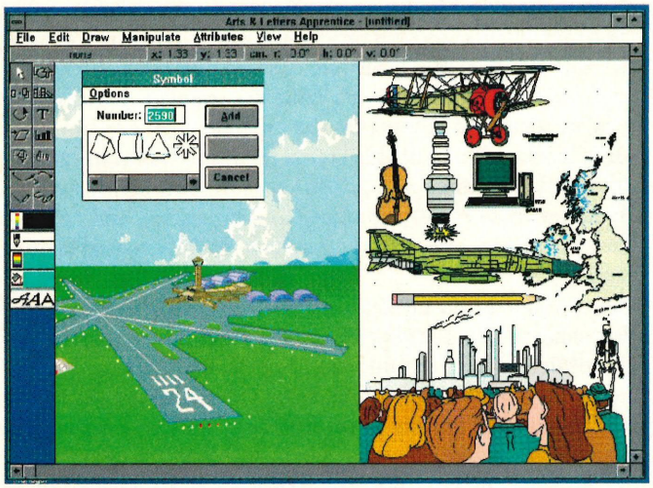
With graphics software, computers have (for once, you might say) got a genuine advantage over doing the job by hand; the ability to correct mistakes, to magnify, undo, redo and tweak an image into shape puts a stop to endless screwed-up drawings in the wastepaper basket. It's a luxury that soon becomes habit-forming. Last year I was doing some sketching, and I remember looking blankly at an unfamiliar 2B pencil.

As well as the ability to correct your mistakes instantly, a good graphics applications also gives you canned routines — special effects which would be impossibly expensive, difficult or time-consuming to do by hand. As a rule, the more expensive the package, the more accurate and unusual the effects you get. There's no need to be an artistic genius, either. Clip art and ready-made shapes can be edited and customised, making it relatively simple for even the most unpractised artist to create something pleasing to the eye.

However, there is one rather large cloud on the horizon: the the mouse is hardly a natural substitute for a brush, chalk or pen in terms of accuracy and sensitivity. Unfortunately, it's pretty much all there is unless you can afford an expensive graphics tablet.

Painting or drawing — which to choose?

Illustration software comes in two main types, which can loosely be called 'painting' and 'drawing'. Paint packages work by allocating a colour to each pixel in the image, called a 'bitmap'. They are popular for creating simple images because the mouse is used naturally, like a brush, to fill in areas with colour. They are also used with photographic images, (you'll often find them



Arts & Letters Apprentice is a lot of fun to use, and the first-rate clip art gives you an ideal helping hand with putting an image together. You can see the Symbol dialogue box, which is where I'm about to drag out that ready-made cone shape.

bundled with scanners) and the better packages are capable of some stunning photographic trickery.

From the moment you apply a brush to the image, whatever you paint becomes part of the overall image, which is essentially a single layer of differently coloured pixels. So if you want to redo something later, you can paint over the bit you don't like, but the chances are you'll also paint over other parts as well. For this reason, it's important to check that you can use all of the program's tools at any magnification, because editing a bitmap can be a very fiddly business.

The quality of a 'painted' image depends entirely on its resolution, which is quite simply the number of dots per inch. The higher the resolution, the smoother the curves and the sharper the lines become, but the larger the file size becomes and the slower it is to work with.

Some of the cheapest and simplest packages — like Windows Paintbrush, for example — are only capable of working in a single resolution at a time, which is decided by the screen display you use.

The difference between the cheap and expensive painting packages (which can be as much as £800 a throw) is the degree of sophistication allowed for selecting areas of an image, the ability to work with different resolutions, extra filters and special effects, and better colour enhancement features. The latter are really only worth paying for if you are going to print professionally, though.

Drawing packages, unlike their painting counterparts, aren't intended to give a photo-realistic finish. They work with lines rather than pixels. The basic technique is a little harder to get to grips with than painting and has a flatter, more geometric look, but it's ideal for many types of illustration because it's so easy to edit precisely.

This is because everything that's drawn on the page is made up of 'vectors' with (mathematically) defined start and finish points. Since these are treated as separate objects, each one can be moved, reshaped or deleted independently of the others. This is done using handles attached to corner points, curves, and so on.

What's more, the resolution of the image doesn't matter in the way it does with a paint package — in practice all you have to worry about is the resolution of you printer. There are plenty of good drawing packages at under £150, that come with drawing tools that are easy to learn, and a selection of *useful* clip-art. Ideally, the package should be very visual, so that when you rotate something, for example, you should be able to do this by dragging, not by wading through endless dialogue boxes.

At the lower end of the price scale, special effects are nice to have, but they're less important than intuitive drawing. Paying more will get you greater precision, much more in the way of special effects, better text handling and colour control. You also get a package that's much harder to learn, and screams out for more expensive hardware.

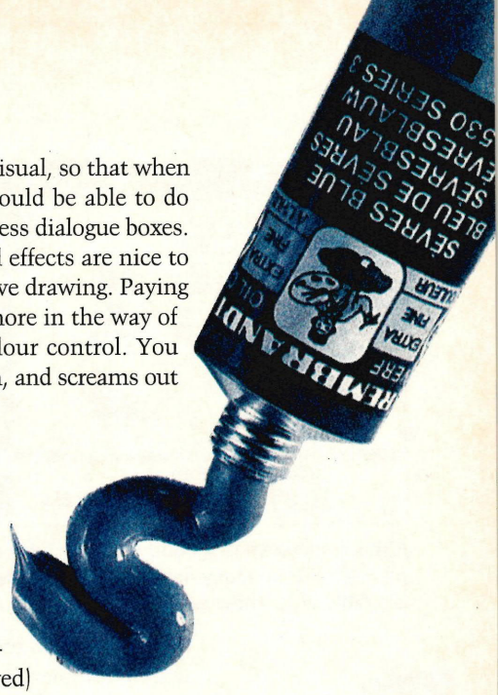


Image Master
AmBrit Software (£39.95)

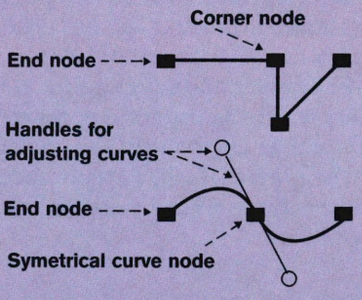
Image Master is a DOS-based animation package, boasting some of the most limited tools it's possible to have, and still get recognisable colour on a PC screen.

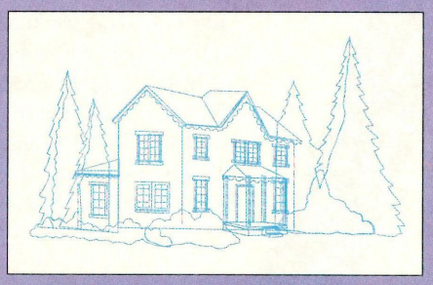
The way it works is that you draw backgrounds, pickingcolours from a (badly behaved) 256-colour palette. You then draw each frame for an animation, and set them running, with up to 40 main animations on screen at once, as well as sub-sequences.

The drawing tools are simple in the extreme; a pen, an airbrush (well, sort of), and line, box and circle options. Simple painting tools is one thing, since they're enough to get the job done, but the image area you have to work with is tiny, and the pixel size you're working at makes it feel like a Windows icon editor.

The animation options are also basic, but not to the same extent, and there's a separate background editor. The Haze tool adds an anti-aliased effect — smoothing between different colours. But the biggest disappointment is that you can't bring in pictures you've created and saved in another package. The animation of frames is very straightforward and a lot of fun, so it would have been nice to be able to bring in better quality

ILLUSTRATION SOFTWARE



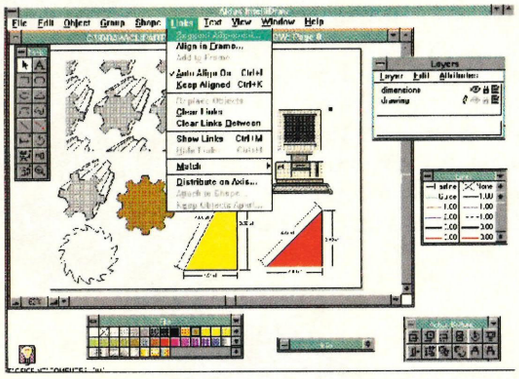


Drawing software treats everything as an object. Every shape can be edited — changed, stretched and reshaped — by dragging the correct handle(s) attached to its outline.

Even a relatively simple drawing, like this house, is entirely made up of lines, and looks quite complicated to do when it's shown in outline like this.



Here you can see that the butterfly is made up of little squares of colour (pixels) as the image is magnified. The more dots per inch, the smoother the picture.



Aldus Intellidraw is an odd package all round. It's packed with so many new and unusual ideas that it's difficult to know where to start.

images than the package's tools allow you to create yourself.

It's a good idea that the animation side includes a variable-delay switch to take into account the vastly differing speed of PCs these days. This way, if you suddenly become the proud owner of a 66MHz 486, your animations won't be breaking the speed limit.

Image Master is very much a beginners' package. It's limited graphically, not that easy to use, and I think most people will quickly reach the limits of what can be done with it, and move on. Then again, there's very little, if anything, that can compete with it at under £40, so it's not a bad starting point if you fancy trying your hand at animation.

Arts and Letters Apprentice
Roderick Manhattan (£145)

Arts and Letters Apprentice 3.1 is a fairly standard Windows drawing package, that just happens to have one of the best quality selections of editable clip art around. It's not that the images are necessarily more complex, they're just well-drawn, plentiful, and the range of subjects covered is more relevant to a wider range of users than most.

Otherwise, it's all pretty much of a muchness. Apprentice is pleasant to draw with, it's reasonably slick, has some good effects, and one or two nice and unusual touches.

The best of these is the Symbol icon. This is where you get rectangles, circles and lots of other useful shapes and symbols, rather than cluttering the screen with icons for each one. All you have to do is click on the icon, scroll along and drag out the shape you want.

Apprentice also has a useful built-in charting feature, so you can put together jazzy pie charts or bar graphs, colour them up and add a bit of decorative clip art to finish. Compared to a specialist charting package, it's bound to be very basic, but none of Apprentice's immediate rivals can offer the same facility.

On the negative side, the drawing and selection tools are slightly more fiddly than they need to be, certainly compared to rivals like GST Designworks and Windows Draw. The text handling is the biggest irritation, however, as the program suffers from extremely slow screen redrawing of text blocks (and complex drawings), even on fast PCs.

Deluxe Paint 2
Electronic Arts (£99)

A bit of a games industry favourite, this one. You're quite likely to find DPaint's .LBM format popping up as the background graphics in many a PC game.

DPaint is quite unusual in that while many of the more powerful paint packages have gone the image-editing route (ie, concentrating on manipulating photographic images and fancy effects), DPaint is very much a creative *painting* program. It has surprisingly sophisticated features considering its price, including perspective, animation, symetrical painting, a cracking stencil feature for shielding colours, good zoom views, and precise brush and tool controls. And some of these features, while not unique to DPaint, are applied in such a different way from the norm that they are capable of very original results.

Because of this idiosyncratic approach, having any experience with other painting software can be a distinct disadvantage to start with, particularly if it's Windows software. I've now got so many ingrained habits that the program seemed quite confusing at first. Much of this stems from the way that DPaint links brushes (anything, within reason, can be a brush in DPaint) with selected techniques and functions, and couples that with the use of both mouse buttons for alternating feature effects.

Once you get into DPaint's way of working, it does become a lot easier to use. Understanding the more advanced features still requires a bit of careful reading of the manual because the interface isn't that intuitive and, being DOS software, you don't have the instant access to on-line help that you get with a Windows package.

DPaint has the big advantage that it supports a wide range of display types (from CGA up to SVGA) and any number of resolution and colour combinations. Unfortunately, at some of the higher resolutions some fairly critical tools and functions — like the fill tool, for example — aren't available, and

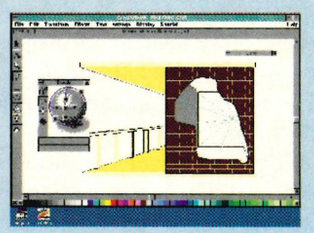
Integrated graphics bundles

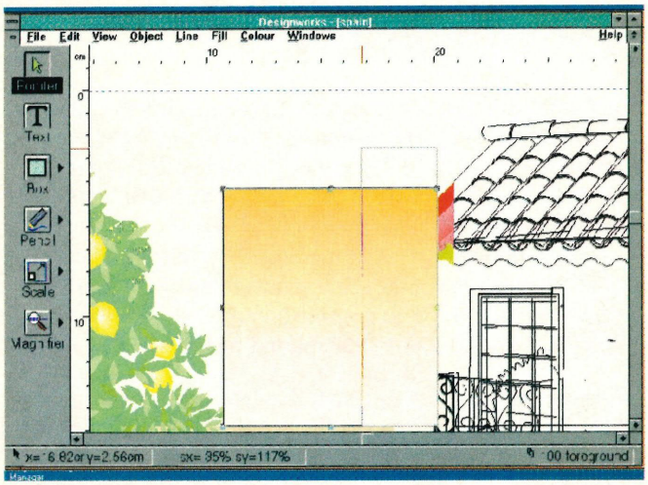
Corel Draw has been the best-selling Windows PC drawing package for several years. The latest version went completely overboard by including slide-show, painting, file organisation, autotracing and charting applications along with a standard drawing package, huge numbers of fonts and clip art to boot. Overnight it went from being plain Corel Draw to The Corel Graphics Toolkit (Corel Draw 3.0). This should, so the theory goes, cover practically every graphics eventuality in one go.

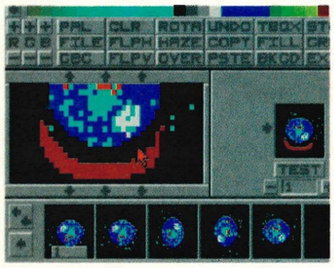
Corel Draw's drawing capabilities have been improved, and a number of innovations to improve ease of use, such as roll-up palettes, have been added. As a whole, it's undeniably great value and still relatively easy to learn, given its level of sophistication. Its overall weaknesses are the amount of hard disk space it consumes, slow text handling and screen redrawing in Corel Draw, and lack of scanner support in the paint application.

Micrografx has a similar suite called Graphics Works, which will appeal to more casual graphics users. Again there are drawing, painting, charting and slid-show applications and a lorry-load of fonts and clip art. There's also a flow charting module, and Twain scanning is supported. The applications are a doddle to learn if you're familiar with Windows and although the drawing and charting applications can't compete with Corel's equivalents in sophistication, the package is cheerful, good value for money and very easy to use.

The Publisher's Treasure Chest from Roderick Manhattan is similar to Graphics Works, but opts for a tidy DTP package, Microsoft Publisher, along with Arts and Letters Apprentice 3.1 (see review) and Halo Desktop Imager. Although it doesn't have the breadth of applications the others offer, the practical combination of drawing, clip art, DTP and image editing is very attractive at £145.







GST Designworks manages to provide a good balance of powerful tools, and ease of use for inexperienced artists.

Image Master is a DOS-based animator, allowing up to 40 animations on a static screen. Each frame is stored at the bottom of the screen.

problems can arise trying to work with images with different colour palettes.

As well as supporting a range of displays, the program isalso very quick to use, even on lower specification PCs, andmarvelously smooth to paint with. But there's a catch here aswell, in that with higher resolutions and larger files, there are often problems with not having enough memory to complete anoperation, which soon becomes very frustrating. The manual is very clear on this, but it can mean a fair bit of tinkering with memory settings.

Even so, at this price range, DPaint is one of the best painting choices around. It's easy to use at a basic level, supportive of less capable PCs and video cards, and has enough features that you won't get bored or outpace it too quickly.

GST Designworks 4
GST Software (£149)

Designworks is the Windows drawing partner of the popular Timeworks DTP program. A first glance at Designworks can be an immediate turn-off, as it's got one of the most unattractive interfaces I've ever seen on a Windows application.

But that first impression is more than a little deceptive. Designworks is fast and precise to draw with, still very easy to pick up, and has more sophisticated features than most of its sub-£150 drawing rivals. These include coverting text to outlines, 50 levels of undo, 200 named layers and locking objects in place (to avoid moving them by mistake).

Designworks has two features which are particularly rare for its price bracket. Firstly, it includes a built-in autotrace. This allows you to trace a picture, as the name suggests, created in a paint application. The end result is a line-based version of the image, which can be edited with the normal drawing tools. The fact that it's there is a plus, the fact that it's not up to handling much more than very simple shapes is a definite minus.

Secondly, and most surprisingly, colour images created in Designworks can be professionally printed, should the need arise since both CMYK and Pantone colour output are supported (see Glossary on page 30), along with spot and separated Postscript.

Besides the interface, there are other niggles, like the lack of movable guides and average text handling. More importantly, if you want to work from clip art, Designworks is worth steering clear of, since it has below average clip art in terms of both quality and quantity.

As a straight drawing program, though, it's probably a better long-term buy, because the strong drawing tools and extra features make it a neat halfway-house between the fun drawing tools and the professional programs.



Aldus IntelliDraw
Aldus UK (£149)

IntelliDraw is very difficult to pigeon-hole. Mostly it's a drawing package. But, it's also an animation package and a sort of layman's CAD (computer-aided design) tool.

The reason for this is some clever lateral thinking about how people use images in practical circumstances; IntelliDraw is designed to cope with a 'what if..?' approach to drawing.

For example, suppose you come up with a design for an office. But then you find you need to fit more desks into less floorspace, and something else needs to be a bit wider. Rather scrapping the entire picture and going back to square one, it should be possible to adjust the drawing process to take into account changes of plan.

So, Intellidraw includes tools for symmetrical drawing, dimension lines with changing measurements, master objects and clones for quick editing, and 'connectigons' for maintaining links in a complex shape — something like a spiral staircase, for example — so it can be edited as a whole. It also has a good quota of more standard drawing tools, passable clip art, and a basic animation facility.

Aldus has been brave enough to try a different approach to a graphics package, but unfortunately it doesn't quite carry it off. By trying to be too many different things at once, Intellidraw actually makes many simple tasks harder than they need be. And getting to grips with the 'intelligent' drawing aspect for a particular job takes far too long. The interface is cluttered, colour support is basic, and to cap it all, Intellidraw performs slowly even on powerful machines.

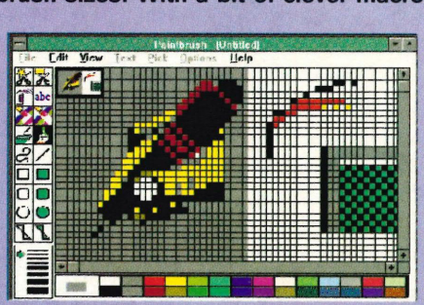
Windows Paintbrush

There's life in the old dog yet

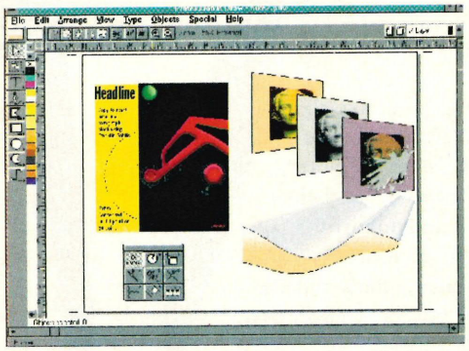
Windows Paintbrush, which comes with Microsoft Windows 3, is a perfectly competent basic painting tool, with spray cans and fills, simple effects like rotate and shear, and different brush sizes. With a bit of clever macro work, you can even program it to run a slide-show demo for you.

True enough, it's getting a bit long in the tooth and has developed a dislike of some of the higher resolution screens around nowadays. It's biggest failing is the lack of decent zoom views, and the ability to use tools when you zoom in.

Even so, it's worth checking before you buy a new paint package that it's got significantly more to offer than Paintbrush already gives you.



Paintbrush may be small, but it's perfectly formed, and still quite capable of good basic results.



Professional Draw 1.0 is extremely powerful, and has lots of original and unusual features. It's also very complicated for beginners.

That may sound damning, but the idea behind IntelliDraw is sound, and future releases promise to be very interesting.

Professional Draw 1.0 Gold Disk (£95)

Under normal circumstances, Pro Draw wouldn't have found its way into this review. It's a relatively new Windows drawing package that easily competes with the established top-end designers' drawing applications in features, precision and performance. Compared to the other packages here, it's incredibly complex. But at £95 it's also under a third of the price of any equivalent performer, which is why we felt that it couldn't be left out.

Pro Draw fairly blatantly copies some of the best elements and techniques from lots of other established packages (like Corel's Envelope Editing and Illustrator's node editing tools, for example).

There are plenty of original features as well. These include colour balancing, posterisation and grey-scale conversion (which are normally associated with paint packages), dynamic connection lines, an innovative approach to existing effects like 3D extrusion and gradient fills, great use of palettes, good colour support and the best clip art library manager around.

A word of warning; Pro Draw isn't for the faint-hearted. It's a professional-level design program, and the sheer weight of features and refinements for precision illustration make it difficult to master, even if you have some drawing software experience. It's also more demanding of your hardware, needing a fast 386DX and 4Mb of RAM to perform well. I'd only recommend it to people who were both quite confident and serious about their drawing.

That said, it would still be my first choice over rivals six or seven times more expensive. It's equally at home with creative or technical illustration, packs in pretty much every drawing tool under the sun, has a great interface and is a very slick performer all round.

Before you buy ...

● What hardware do you have? To get any worthwhile fun out of a graphics packages, you need to have at least a 286 and VGA. Some, like Deluxe Paint and Neopaint also offer earlier display modes like EGA and CGA, but it's worth checking carefully before buying.

Plenty of storage space is also important because graphics files take up a lot of room, and, of course, a mouse is one thing you can't be without, whether you go for a Windows or a DOS-based program.

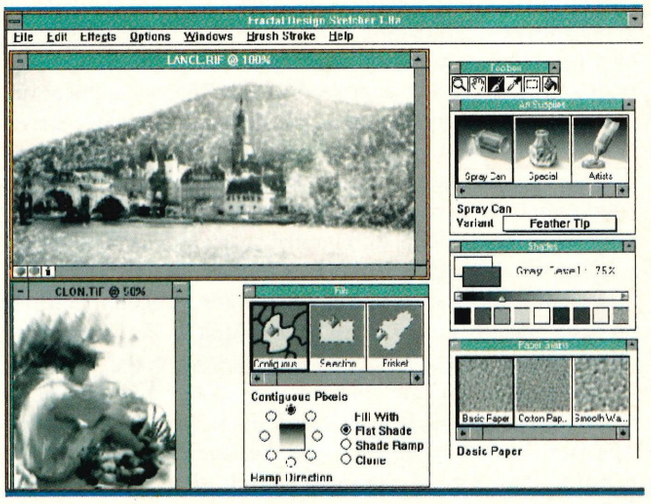
● What do you want to do? If it involves a specific effect like graduated colours or 3D, it's better to pay for that than have to come up with a make-do solution. But there's no point paying for something overly complicated unless you have to.

● Do you have the time and experience to master the package? Be wary of the more expensive packages in this respect.

● Do you want to print your images? If you do, and it's to a laser or inkjet printer then there's not much to worry about. Graphics print quality on a dot-matrix printer will be low, so there's no point spending too much. And if you're going to use a profesional printer at any stage, you need a package that supports separated (CMYK) output for colour, which usually means paying through the nose.

Fractal Design Sketcher Letraset (£99)

Fractal Design Sketcher is the grey-scale — and consequently cheaper — Windows version of a unique piece of painting software called Fractal Design Painter. What it tries to do is give you brushes and painting styles that are as close to their real equivalents as possible on a computer.



Fractal Design Sketcher is amazing, If you have the hardware and the patience. The art supplies palette near the top right has the brushes, chalks, etc, are found: it's even possible to apply a paper 'texture' to a picture using the palette at the bottom right.

Glossary

Bezier curves	**Line-editing standard for vector drawing**
Bitmap	**A recording of colour values for each pixel**
BMP, PCX, GIF, TIF	**Paint file formats**
Channel editing	**Work on individual RGB or CMYK channels**
Cloning	**Like cut and paste with a brush**
CMYK	**UK printing standard composed of four films; cyan, magenta, yellow and black**
Compound masking	**Create a cutout so a background shows through**
Convert to curves	**Turning text into a graphic for reshaping**
Envelope editing	**Reshape objects dramatically by dragging**
Extrusion	**Creating a 3D effect**
Gradient fills	**Blends from one colour to another**
JPEG	**Compressed file format**
Magic wand	**Masking pixels within a colour range**
Masking	**Selecting an area to apply a paint effect to**
Pantone	**Colour matching system**
Realtime duplicate	**See changes on a copy at normal size while working at high magnification**
RGB	**Red, green and blue colour model used by PCs**
Text to path	**Run text along a path or around a shape**
Transparency	**Wash colours and images over each other**
Vector	**Mathematically defined object**

The Most Realistic Football Management Simulation Ever! ...

Championship MANAGER™ 93

...Now Completely Updated with this Season's Stats.

Domark's Championship Manager is recognised by football fans everywhere as the most realistic football simulation ever!

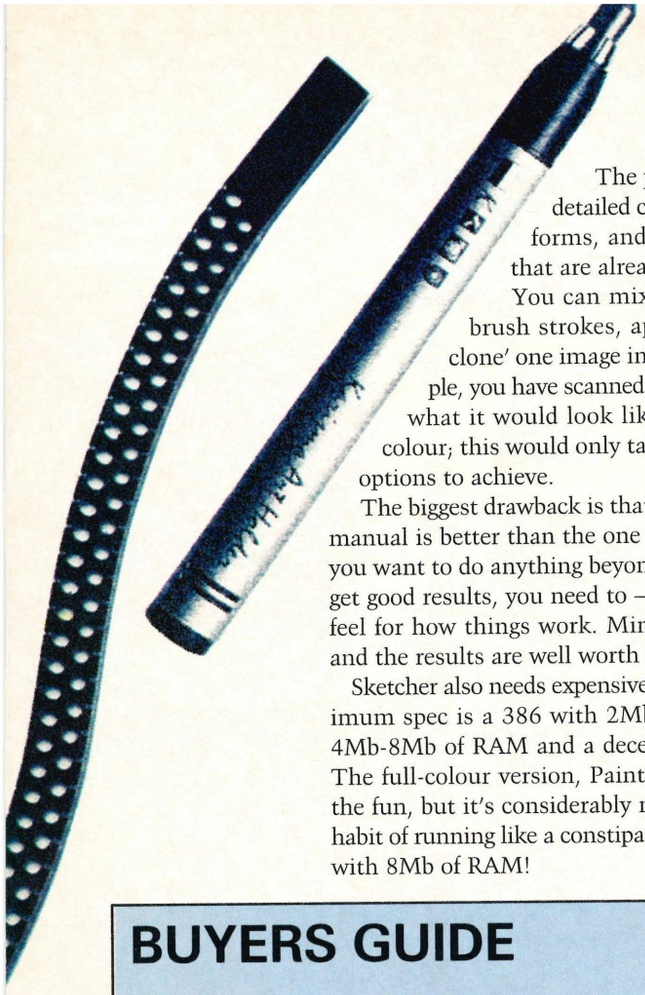
Now this *new* 1993 edition includes all the latest league and tournament structures, player statistics plus over 50 new features including ...

- *Manager history*
- *International transfers and overseas players*
- *Double the in-match information*
- *Salaries and win bonuses*
- *Injury time*
- *Reserve squads*
- *Supporters player of the year*

Championship Manager '93 the only football management simulation to be written *by* football fans *for* football fans.

Software, Artwork, Instructions and Packaging © 1993 Domark Group Ltd.
Design and Programming: Paul & Oliver Collyer
Graphics: The Kremlin. Sound: Alistair Brimble. Produced by Kris Hall.
Published by Domark Software Ltd., 51-57 Lacy Road, Putney London SW15 1PR.

DOMARK®
Champions of Sport

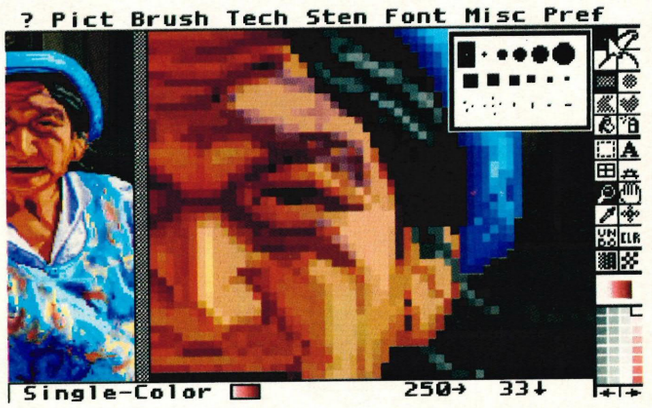


The program gives you considerable detailed control over the way a brush performs, and how it interacts with colours that are already on the page.

You can mix with water, record your own brush strokes, apply paper textures and 'auto-clone' one image into another style. Say, for example, you have scanned in a photograph and want to see what it would look like as a pencil sketch or water-colour; this would only take five mouse clicks on various options to achieve.

The biggest drawback is that it's quite difficult to learn. The manual is better than the one that comes with Painter, but if you want to do anything beyond the default settings — and to get good results, you need to — it'll take a lot of time to get a feel for how things work. Mind you, this is also part of fun, and the results are well worth the effort.

Sketcher also needs expensive hardware to run well. The minimum spec is a 386 with 2Mb of RAM. But, a 486 PC with 4Mb-8Mb of RAM and a decent video card is more realistic. The full-colour version, Painter, adds an extra dimension to the fun, but it's considerably more expensive and has a nasty habit of running like a constipated tortoise on a 50MHz 486DX with 8Mb of RAM!



Deluxe Paint 2 is a favourite of the games industry, and a real pleasure to paint with.

If you enjoy drawing or painting of the 'arty' sort as much as the computerised graphics style, then Fractal Design Sketcher could be a real eye-opener. Thoroughly recommended if you have the hardware to run it.

Finishing touches

If you intend to spend over or around £150 and already run Windows, the integrated graphics bundles are your best bet, because of their outstanding value for money. It's likely Corel Draw 4.0 will be out shortly at around this price range, and that would probably be my pick of the bunch. Unless you know exactly what you want to do, and can buy a single package for the job, these integrated packages cover most eventualities.

Otherwise, the first thing to do is to decide whether you want a drawing package or a painting package and how sophisticated you need it to be. As a rule of thumb, I'd suggest that the cheap painting packages are more fun to start with, while the equivalent drawing packages have more practical uses, particularly when used with clip-art.

If you want something a little more advanced than the really simple painting stuff, I'd recommend both Deluxe Paint 2, and also a great piece of shareware called Neopaint (see Shareware, May issue) that costs only £5 unregistered. Neopaint 2 should be available shortly, as well. Fractal Design Sketcher is a lot of fun, although quite specialised, and there are several other packages well worth a look, such as Micrografx PhotoMagic and CA-Image.

On the drawing side, Arts & Letters Apprentice compensates for a few niggles with a top class clip art selection, but Pro Draw is the pick of the bunch, if you can take the time to learn it.

Before you part with your cash, it's also worth checking out the extras you can get by choosing the right software. These come in the form of clip art, utilities and fonts. For example, Micrografx Designer comes with over 180 fonts, and Adobe Illustrator comes with ATM, Separator, Type Align and Streamline utilities.

These are both drawing packages. Paint packages don't offer so much in the way of fonts because their text handling is limited. Clip art is also a problem, because bitmap images take up disproportionate amounts of disk space. However, some packages (like ZSoft PhotoFinish) take advantage of the JPEG file format, which allows them to include hundreds of photographic clip art images without overloading your hard disk.

While the most important thing has to be finding a suitable drawing or painting package, the right choice could also set you up so you never need to buy a font, graphics utility or clip art collection again.

BUYERS GUIDE

PRODUCT	PRICE	SUPPLIER	TEL
Adobe Illustrator	£565	Adobe	(081) 547-1727
Adobe Photoshop	£725	Adobe	(081) 547-1727
Aldus Freehand	£395	Aldus UK	(031) 220-4747
Aldus IntelliDraw	£149	Aldus UK	(031) 220-4747
Aldus PhotoStyler	£595	Aldus UK	(031) 220-4747
Art & Letters Editor	£395	Roderick Manhattan	(071) 978-1727
Arts & Letters Apprentice	£145	Roderick Manhattan	(071) 978-1727
CA-Cricket Draw	£225	Computer Associates	(0753) 577733
CA-Image	£279	Computer Associates	(0753) 577733
CA-Paint	£299	Computer Associates	(0753) 577733
Corel Draw 3.0	£375	Ctrl Alt Deli	(0908) 662759
Deluxe Paint 2	£99.99	Electronic Arts	(0753) 549442
Fractal Design Painter	£325	Letraset	(071) 928-7551
Fractal Design Sketcher	£99	Letraset	(071)928-7551
Graphics Works	£295	Micrografx	(0483) 747526
GST Designworks	£149	GST Software	(0480) 496789
Halo Desktop Imager	£149	Roderick Manhattan	(071) 978-1727
Harvard Draw	£415	SPC	(0344) 867100
Image Master	£39.95	Ambrit	(0206) 768422
Micrografix Designer	£395	Micrografx	(0483) 747526
Picture Publisher	£299	Ctrl Alt Deli	(0908) 662759
Pixfoto	£800	Accent Computing	(0444) 870444
Professional Draw	£95	Gold Disk	(071) 498 3275
Publisher's Treasure Chest	£199	Roderick Manhattan	(071)978-1727
Right Paint	£80	Mindscape	(0444) 246333
Windows Draw	£99	Micrografx	(0483)747526
WinRix	£395	Clecom	(021) 471 4199
ZSoft PhotoFinish	£99	Xitan	(0703) 899113
ZSoft Publisher's Paintbrush	£345	Xitan	(0703) 899113

Sensible SOCCER



INCLUDES...

- WORLD CUP QUALIFIERS
- NEW NATIONS
- RED & YELLOW CARDS
- SUSPENSIONS
- BACK PASS RULE

"Every other football game is redundant as of now. Just buy it and see."
The One 93%

"A really good, solid football game ... the best Amiga game ever."
Amiga Power 93%

NOW FOR IBM PC & COMPATIBLES

European Champions

- 100 EUROPEAN TEAMS ★
- DESIGN YOUR OWN CUP TOURNAMENT ★
- 1 & 2 PLAYER ACTION ★
- DIVING HEADERS, SLIDING TACKLES ★
- SLICK, FAST, INTELLIGENT PASSING ★
- SAVE UP TO 8 REPLAYS AS HIGHLIGHTS ★



- ★ FULL OF REAL CROWD SOUNDS
- ★ EUROPEAN CHAMPIONSHIP COMPETITION
- ★ AMAZINGLY DETAILED KITS
- ★ SUBS BENCH WITH MANAGER
- ★ TACTICAL ADVICE ON OPPOSITE TEAM
- ★ NAMED SCORERS

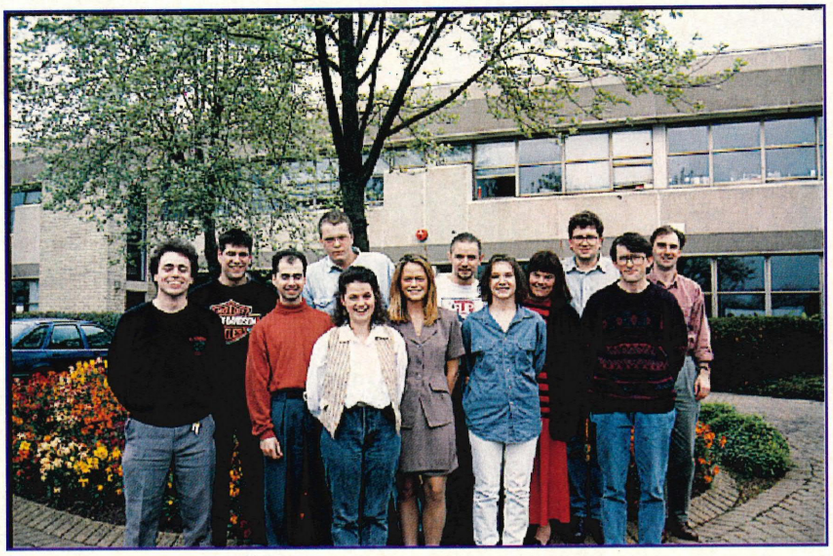
Sensible SOFTWARE

C1, Metropolitan Wharf, Wapping Wall, London E1 9SS © 1992 Sensible Software. Published by Renegade

MicroProse:

More than just F-numbers

The planes, trains and automobiles specialist has been branching out of late, particularly now that the UK division is developing many titles in-house. Dean Evans visited MicroProse to bring back this special report



MicroProse's in-house game designers outside the very corporate-looking new European HQ in Chipping Sodbury.

Legend has it that MicroProse the company actually came about as the result of a bet. Visiting a US computer exhibition, Bill Stealey wagered that his mate Sid Meier couldn't write a flight simulation in three weeks. Meier accepted the challenge, and although it took him rather longer than three weeks, the result was Hellcat Ace — and MicroProse. That was 10 years ago. Since then, the three-person basement operation to a global leisure software publisher with offices in America, Britain and Japan.

MicroProse was the second American company, after Electronic Arts, to set up a base in the UK in order to become an independent developer in its own right (rather than simply distributing the products shipped over from head office).

Since setting up in Tetbury, Gloucestershire, in 1984, MicroProse UK has become a major software producer in its own right: publishing titles from independent developers, such as Geoff Crammond's Formula One Grand Prix, and Maelstrom's Midwinter and Flames of Freedom, and building up its own in-house coding operation and art and sound facilities.

As a fledgeling company, MicroProse earned its early reputation through its simulation software, with such titles as Silent Service II, F-15 Strike Eagle and M1 Tank Platoon. This preoccupation with all things camouflage green was down to its co-founder and president Bill Stealey, whose Air Force experience became the inspiration for many of the company's flight sims.

These days things are slowly changing, but MicroProse is careful not to abandon its line of simulation software. It's making in-roads into other gaming genres, like sports sims, war games and graphic adventures, while still planning additions to its military catalogue. The newest addition to the sim stable is Dogfight (reviewed in this issue) and there's talk of perhaps a fourth outing for the old money-maker, the F-15.

In the UK, MicroProse is based at four separate locations; Tetbury, Chipping Sodbury, Leeds and Manchester. Chipping Sodbury is currently home to the graphic artists, designers, composers and sound effects people, and will become the European HQ proper in the next couple of months. When MicroProse aquired Vektor Grafix (programmers of Bomber and B17), it was absorbed into the company to form MicroProse Leeds, and the Manchester office is likewise a programming operation.

Game development at MicroProse is a lengthy process, with some projects being programmed entirely in-house, such as Fields of Glory, and others being split among the different UK offices. Some others are taken on by independent software developers, Argonaut Software, for example, was contracted to produce ATAC last year.

In the US, games projects are led by a producer/games designer, whose role is to oversee all aspects of storyboarding, design, programming, special effects, testing and packaging. In the UK, the producer's task is to monitor development of a number of projects, making sure that all the component parts (graphics, sound, etc) get finished and come together on time. The producers have an extensive games knowledge and far from being observers, are also creatively involved in the game design process to the extent that they can often override individual artists and programmers.

Frequently, MicroProse will combine its in-house resources with other people outside the company as effectively happened with The Legacy (reviewed Issue 19). Having designed the game concept in-house, MicroProse sought Ken Gordon of Magnetic Scrolls to develop the game's graphics and windows interface (Magnetic Scrolls, remember, produced the very distinctive 'windowed' interface in Wonderland), while Nick Cook was approached to do the artwork. Now that this partnership has been formed, it can be made available again to the in-house game designer, and could possibly lead to further cooperation and a sequel to The Legacy.

Using a game's 'engine' — the nuts and bolts of the program which determine the look of a game, or the style of commands and how they are implemented — is a common practice. At MicroProse US, the interface designed for Rex Nebular has already been used again for Return of the Phantom and Dragonsphere (see below).

More often than not, a game tends to get developed in separate bits and pieces. With Starlord (one of the upcoming releases) much of the actual programming is being done in Leeds, while the artwork and animated sequences are being added in Chipping Sodbury. In addition, the strategy section and the 3D combat engine are being developed separately. When the two main program sections are finally merged together, the composers will put together the music, someone else will do the sound effects and these will be added to the game at the stage when (hopefully) everything works. The whole game may be three of four separate parts that are only bolted together in the last few months.

This is definitely the way things are working with several of MicroProse's forthcoming autumn releases. The company seems to have two release 'highs' a year: one in June and one in September. You can read about the products due for June in this month's expanded Coming Soon section on page 20, while here, we have a few early details on games planned for release in September and beyond.

Starlord

In digital deep space, while huge circulation battles have been raging between Wing Commanders, Epic fighters and X-Wings, MicroProse has been quietly developing its own space game, which it hopes will make it big in the growing interstellar domination department.

Starlord is being described as a strategic space game of truly epic proportions. A Starlord is the head of a ruling family and the lord of a particular planet, looking after its politics, trade and general wellbeing. Now it seems that by nature Starlords are a greedy bunch hellbent on improving their lot and increasing their family's power. Thus the stage is being set for a dramatic galaxy-wide power struggle with you as just one insignificant Starlord amongst 1,000 equally power hungry opponents.

Instead of the limited timescale of, say, Wing Commander, Starlord promises to unfold its story over a much longer period of time. Your ultimate objective (and you can take as much time over it as you like) is to move up the power ladder from being your average run-of-the-mill Starlord to Emperor of the known galaxy and everywhere else. Along the way you also have to install a hierarchy of people behind you (members of your family and people who are loyal to you) who you have conquered or forged alliances with. It is a game that boasts strategic conquest, vast realtime 3D space combats and a fair bit of political backstabbing.





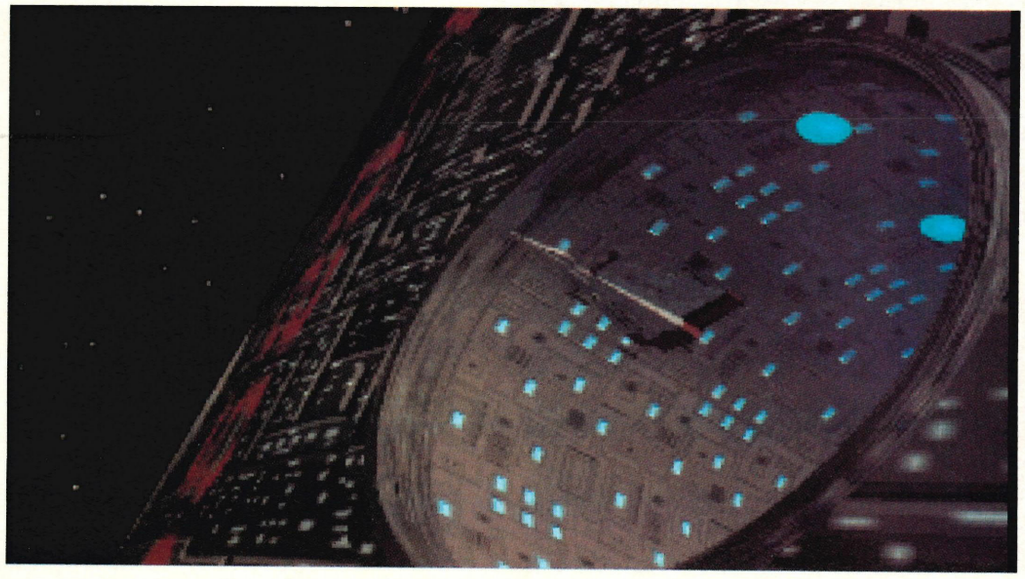
Bill Stealey has been the guiding light behind MicroProse since he co-founded the company with Sid Meier almost 10 years ago. A veteran of the US Air force, many of MicroProse's most successful simulations, including F15 Strike Eagle, Gunship 2000 and F19 Stealth Fighter, were developed as a result of his military background. "No environment is more challenging or teaches as much about decision-making as the military", he said. "But all this is meaningless if the games aren't fun. That's the big goal."

As a Starlord, you will begin the game with nothing bar the resources of your own planet, a small space fleet and a few thousand megacredits. In order to strengthen your influence and resources, you need either to make alliances with neighbouring planets or force them into vassalage. While your influence and fleet strength is small, negotiating will make more sense than hasty warfare. But when you become more powerful, battles will be won simply by steamrollering your opponent (in glorious 3D of course) with the combined might of your space armada.

The structure of the game is split between the strategic task of conquest and resource management and the 3D combat sequences. Travelling to other planets is achieved by our old friend, the hyperspatial corridor, and upon arrival at your destination, the planet appears slowly rotating in all its 3D splendour.

Stars have their own particular resources, ranging from food to raw materials. For example, if a planet has a supply of mercenaries and you feel that they would bring a useful extra edge to your strength, you will be able either to negotiate with the planet's Starlord or politely destroy his world and steal them. If you are victorious, the planet and its resources are then added to your own strength, of course.

The hierarchical structure in the game is very important. There are kings, dukes, earls, lords and so on; the higher the rank the greater their resources and military might. So before you tackle the might of a duke, it's wise to have the clout of a number of Starlords in your arsenal. In these huge engagements it's rumoured that you can sweep into battles with the combined force of your hierarchy behind you. The battles will be resolved in large-scale 3D combat sequences. The ships (and there will be lots of them) will be the light-sourced polygon variety, currently looking very Elite-like, but ever so slightly more colour-



ful. The fleet can be armed with a variety of different weaponry and ships will be fitted with the latest in scanners, tactical displays and all the normal widgets that you'd expect to find in your average futuristic attack interceptor.

Starlord is being programmed by Mike Singleton and Maelstrom, whose previous releases range from Lords of Midnight on the old ZX Spectrum, to the Midwinter duo, and the recent Ashes of Empire.

Starlord has its origins in Singleton's play-by-mail game of the same name. Here, as in the upcoming computer incarnation, players get to do pretty much the same thing, but spread over a series of game turns through the post. This allows maybe up to 1,000 players to be involved as individual Starlords each fighting and jockeying for a better position in the imperial hierarchy.

Starlord is still at an early stage, with Singleton doing all the programming and production in Leeds and MicroProse doing all the artwork elsewhere. The game is currently in two parts with two sets of programmers concentrating on getting the strategy routines and the 3D combat engine up to scratch. The two will be merged together at a later stage of development and MicroProse hopes to have Starlord completed for a September release.

Sub War 2050

Remember the Abyss, Leviathan and even Deep Star Six? No? Well, in the late 80s, cinema was awash with underwater adventures, involving either space aliens or communist viruses and undead zombie fish-monsters. Sub War 2050 will be another of MicroProse's big autumn releases and bears an uncanny resemblance to the style of one, if not all, of the above.

In the year 2050, the planet is effectively run by huge global corporations, organisations so large that they influence politics, trade and economics. Mineral resources have become increasingly scarce and the corporations have switched to mining underwater, where supplies are relatively untouched.



The game makes the player a top submarine pilot who will be commissioned by the corporations to do various jobs. Between them, these corporations will fight their own corner of an underwater mining rights war, sending their representatives to hamper, disrupt and generally muck up the others mining operations.

Sub War can loosely be described as an underwater flight sim, although it's more than just that. Most of the action takes place down on the seabed, where the player moves over an undulating gouraud-shaded landscape. The water here is deep, dark and cold. Up above, a superimposed grid represents a thermal layer of warmer water. Layers such as these can hide/deflect sonar and other detection systems, leaving you undetected if you stay close to the bottom. So, if you're being tracked, or an enemy is firing a weapon at you that uses sonar as a targeting device, you can just dive under the warm water and lose both him and the target lock. In theory, anyway.

Like Starlord, Sub War 2050 also has a strong strategic element. As a sub pilot you will operate from a mothership where you can choose both your sub and its weapons systems (torpedoes, rockets, mines, decoy drones, etc) for each particular mission. MicroProse hopes that up to 60 missions will be available to the budding undersea pilot ranging from search and destroy sorties to convoy protection and general reconnaissance duties. It is also possible that some sort of campaign option will be included in the game, though this was still undecided.

Sub War 2050 is far from being just F-15 underwater. Like modern space sims you will have a wingman and like a flight sim you'll get all the obligatory external views. The game also promises a variety of vehicles from super-fast cruisers to slow, heavy motherships which carry the mining vehicles and the smaller, faster subs. The visuals look very impressive; searchlights pierce the undersea gloom, air bubbles rise from the subs, animated whales swim through the canyons and the thermal grid even moves with ebb and flow of the waves on the surface.

Like Starlord the artwork for the game is being done in-house, while the game itself is programmed externally by Dave Powell. Sub War 2050 also has a preliminary release date for some time in September.

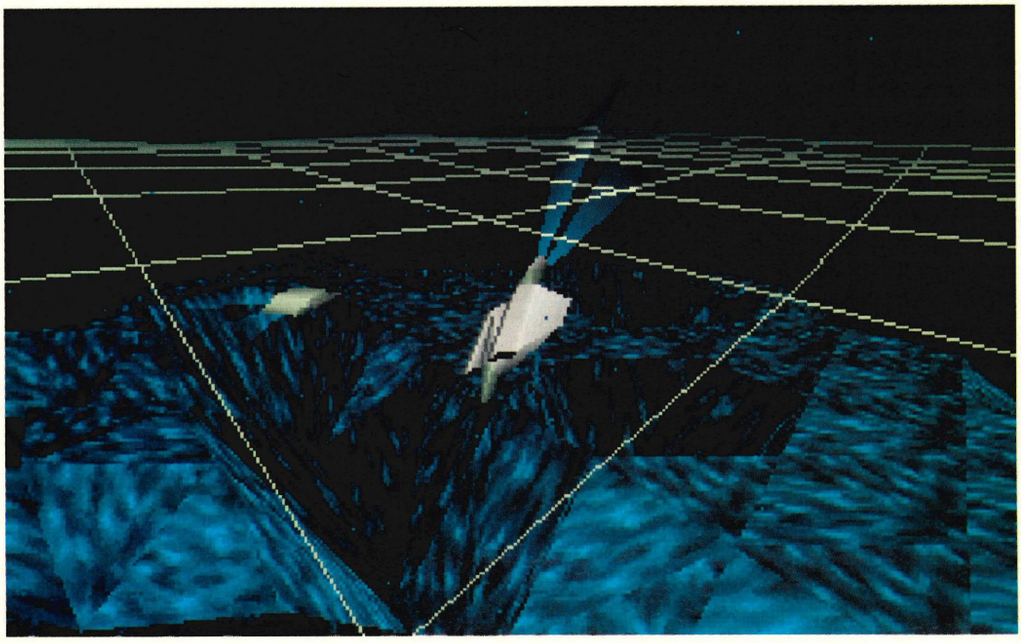
Dragonsphere

Dragonsphere has a very similar look and feel to the other new MicroProse release, Return of the Phantom (see this month's cover disk) — unsurpsingly, since it's being programmed by the MicroProse Graphic Adventure Group, the team which gave you Rex Nebular and The Cosmic Gender Bender.



The US-based GAG is a separate development team within MicroProse, specifically formed to develop graphic adventures and rapidly gaining its own reputation in this field, quite an achievement when you consider that it's competing with the likes of Sierra and LucasArts. So now, having tackled science fiction and a Parisian opera house mystery, it has moved on to high fantasy with wizards, fireballs and pointy hats in rather generous abundance.

In the animated opening sequence (the only part currently available to view), three adventurers riding green lizards the size of small horses, trap an evil wizard in a castle when he loses an



Top: an animated shot of some of the mining vehicles you can expect to see in Sub War 2050. Above: the evil wizard's castle complete with novelty waterfall.
Left: above the Gouraud-shaded seascape, a sub rises up through the thermal layer into warmer water.

aerial battle of magicks with your good self. A huge energy shield forms a dome over the castle and from his new prison the evil wizard (in pseudo-mediaeval English) promises to exact a terrible revenge upon you for confining him there.

Dragonsphere is being developed wholly in the US and is still at a very early stage of production. However, it promises to have the same high standards of point-and-click adventuring as its two forebears and if you like hobbitty spellcasting sorts of games you just might want to check this when it hits the shelves in November.

MicroProse American Football

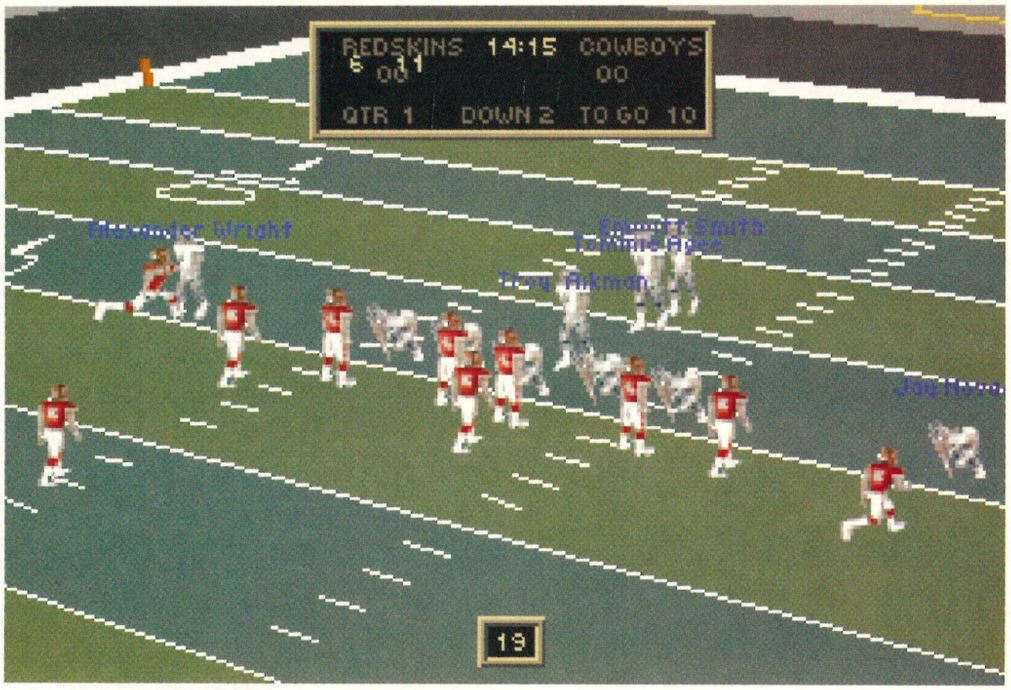
Continuing its commitment to other game genres, MicroProse has an American Football simulation currently in development. This, too, is at a very early stage and it's unclear whether the game will be linked to a top coaching name like other gridiron sims which have used the likes of Joe Montana, Tom Landry, Mike Ditka and John Madden.

MicroProse American Football will contain all the features that football veterans will be familiar with from other recent gridiron simulations. When it's released in September, MPAF should include both the current teams and all the correct player names. So if you're a Redskins fan and you want to try your hand at being Mark Rypien in a real-time pass rush, then your dream can come true. Not only can you be your favourite quarterback, but you can view yourself from different angles, call the plays, design your own plays, change the stats of your players, replay your touchdown passes and so on.

Of course MPAF is being developed over in the US. MicroProse Soccer was developed here after all. It makes a lot of sense to have a development team who actually know the rules.

This is just an small indication of work in progress at the moment and scheduled for release in the autumn.

However, as September is a long time away, console yourself with the prospect of Return of the Phantom, Pirates Gold and Fields of Glory. Meantime, just suit up and get that trusty F-15 back out of the hangar.



BULLFROG'S DARK AND MINDLESS FUTURE.

SYNDICATE

COMING THIS SUMMER
FROM BULLFROG PRODUCTIONS LTD

For more information contact Electronic Arts Tel: (0753) 549442

The perils and pitfalls of disk compression



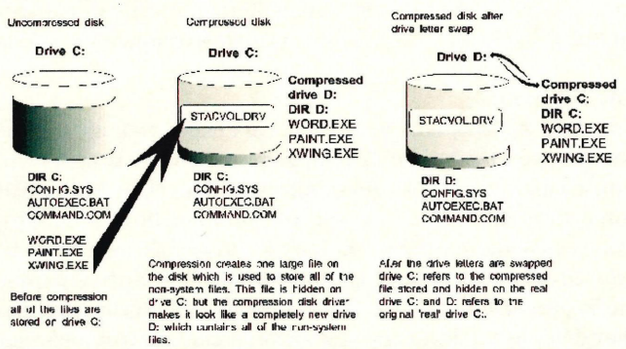
How would you like to double the size of your hard disk? Programs such as Stacker and SuperStor offer to do this without any hardware modifications and at a reasonable price. Mike James offers some advice and explanation to anyone who is thinking of using a disk compression utility

If you want to compress the contents of a whole disk yourself, then there is nothing stopping you. You could use a program like Pkzip, which is shareware, to compress each file on a disk into one huge compressed file. If you did this and deleted the original files the result would take up only half the space. Of course before you could use any of the files in the resulting 'zipped' file they would have to be unzipped and all this constant zipping and unzipping might get a bit boring ...

Many PCs are today sold with a disk compression utility, such as Stacker or SuperStor, while MS-DOS 6 comes with its own compression program, Double Space. You can also buy the first two off the shelf. All of them will create a huge single file on your hard disk, which contains all your original files, but in compressed form, and typically taking up about half the space that the uncompressed files would.

What has really made this type of disk compression possible is the increase in speed of the average PC. Given that you have a fast enough processor there is no reason why a file shouldn't be compressed on its way to the disk and decompressed as it is read back. MS-DOS reads and writes a disk using a special piece of software called a disk driver. The idea was that if someone replaced the standard disk driver with one that did compression/decompression on the data as it passed through – who would be any the wiser? All the user should notice is a reduction in the space that data takes up.

This is a nice theory, but in practice it is a bit messier. It isn't possible, unfortunately, just to write a compression driver for an entire disk. The reason is quite simply that when a machine is first switched on, MS-DOS has to be loaded and at this stage there are no disk drivers in place. If the



Each file on the disk is compressed by coding repeated patterns of data so that they take up less space. For example, if you have a text file with 999 blanks followed by the letter A, then this takes 1000 bytes of disk storage. If this is stored as "999*blank 1*A" then the resulting file only takes up six bytes or even less. This simple example is enough to tell you everything that you need to know about file compression:

- **The amount of compression achieved will vary according to the content of the file**
- **It takes time to compress a file**
- **The file has to be uncompressed before use and this to takes time**
- **Different compression techniques will give different amount of compression but may take longer to do the job**

It should also be said that there is a limit to how much a file can be compressed, no matter what method you use. This should, I hope, put paid to the crazy ideas that some people get about using compression to double the disk space and then using it again to quadruple it. Compression gets rid of repeated patterns and once they are all gone you can't carry on compressing!

entire disk is compressed it would be quite impossible to boot from the drive because the MS-DOS and all its device drivers would be compressed – and there would be nothing at all to do the decompression.

Stacker, SuperStor and Double Space don't upset the normal workings of the hard disk that the machine starts up from – the boot disk – which is usually drive C:. What they do when you ask for a disk to be compressed is that they create a single huge file – in the case of Stacker it's called Stacvol.dsk, SuperStor calls it Spartss and MS-DOS 6 calls it Dblspace. The only files that are left uncompressed, and exactly as they were, are the operating system and its associated files. If you were to do a Dir command on a drive that had been compressed this far you would see a small collection of uncompressed files Io.sys, Config.sys and so on and the single huge compressed file containing all the other files that used to be in the directory.

Now the machine can boot perfectly normally because all the operating system files are just as they always were. But during the boot-up procedure the compressed disk driver is loaded and this makes the single large compressed file on drive C: look like an additional disk drive, ie, D:. When you read and write drive D: you are actually reading and writing data to the compressed *file* on drive C:. You need to get used to the idea that your new compressed disk drive is, in fact, a single compressed file on the original uncompressed drive.

The final touch, which I personally think is confusing, is that because we are all weak brained and can't cope with using a new drive D: after spending so much time using the old drive C:, that the drive letters are switched. Yes that's exactly right: after the switch when you use the compressed drive C: you are in fact reading and writing to the compressed file on your original drive C:. When you use the uncompressed drive D: this is also your old friend drive C: This shouldn't be too surprising – after all you only had one disk drive before compression and you still only have one after compression!

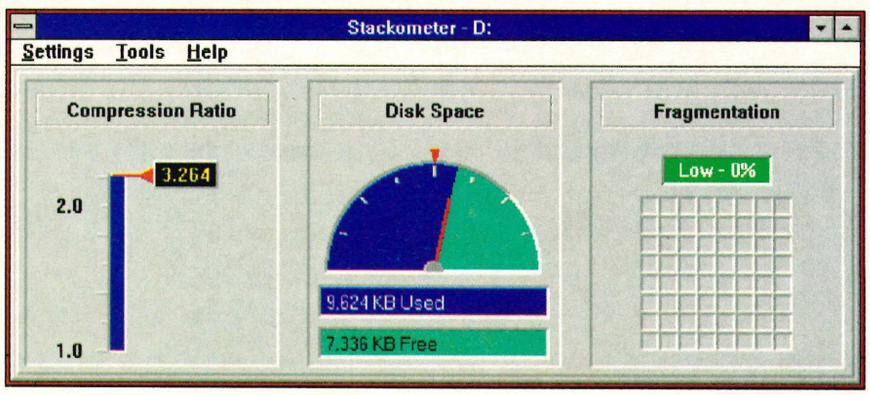
What threatens to be more confusing is the fact that the uncompressed drive D: is the whole of your original drive. You don't see the compressed file simply because it is a hidden system file. If you use a directory viewer that shows hidden system files then you will indeed see the compressed file and it is incredibly important that you don't get so confused that you try to delete it! Just keep in mind that this one file holds all of the data on your disk, apart from the few uncompressed items that are necessary to get the system going!

One last point, and then you will know everything you need to know about disk compression. When the compressed file is created, it is made large enough to hold the existing data and any new data that you want to store in it. That is, the size of the compressed file is the size of the compressed disk drive that you appear to have. I say "appear to have", because it is a habit of all disk compression programs to display estimates of disk space that take into account the likely compression achieved. For example, if you were to create a Stacker compressed file – a Stacker Volume – of 1Mb in size then this would be reported as a 2Mb compressed drive. The reason is that with an estimated 2:1 compression ratio you can pack 2Mb of uncompressed data into it. It's sort of fair, but sort of cheating at the same time!

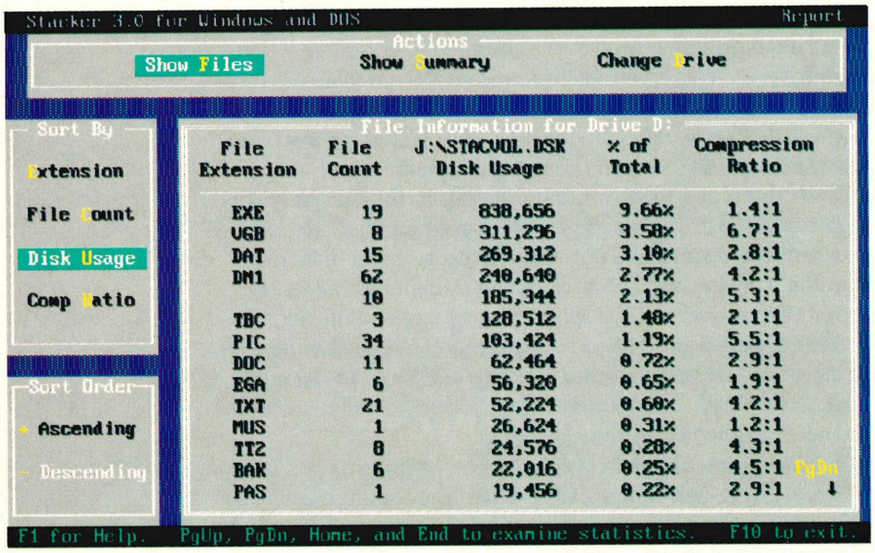
Now you have the whole story – what could possibly go wrong? The answer is quite a lot. The first thing to say is that if a program is perfectly 'well behaved' and always asks MS-DOS to supply it with data or to write data to disk everything should work perfectly. The trouble starts whenever a program attempts to deal with the disk directly and bypasses MS-DOS. The list of programs that are badly behaved is quite a long one so you will have to get used to the fact that many things will not work with a compressed drive. Living with this situation isn't too difficult and certainly doesn't negate the advantages of a compressed drive – especially if you prepare everything beforehand.

The most obvious category of programs that will not work with a compressed drive are those that are specifically designed as disk utilities. After all, a disk utility is expecting to find a real disk hiding behind a drive letter, not a file stored on another drive pretending to be a complete drive on its own! In general don't bother trying to use disk checkers, defragmeters, optimisers, virus protection, password protection, etc, programs – they just will not work and could even destroy data.

In many cases specific alternatives are provided that work with the compressed drive. For example, Stacker comes with a disk optimiser that will work with a compressed drive.



Stackometer – how to control your compressed disks



Above: Stacker drive statistics – you can tell how much good compression is doing your drive!

Sometimes the compression utility is specially modified so that it will work with programs that attempt to address the drive directly. In most cases you should check with the manual (failing that, the technical help line) to discover if a disk utility can be used with a compressed drive – usually the answer will be no.

Apart from disk utilities, there aren't many programs that access a disk directly without the help of the disk driver. You can be fairly sure that all Window applications will work fine with a compressed drive and nearly all MS-DOS applications – with the notable exception of games! The reason is simply that recent games tend to need every ounce of performance the system can give and this often means that they break the rules. In particular, a few resort to reading from the disk directly to load graphics faster. Clearly, if a disk is compressed this will not work and the system will crash. Some programs make use of direct disk reads to enforce copy protection schemes – again, these will not work with a compressed drive. Finally, some implement their own form of compression and if this involves a direct disk read then they will not work either. For example, many of the very latest titles from LucasArts – Indiana Jones and the Fate of Atlantis, Monkey Island II – will not work. But games from all sorts of places will also fail – Comanche Maximum Overkill from NovaLogic and Aces of the Pacific from Sierra, to name but two more. It is difficult to compile a list because manufacturers seem loath to admit that there might be anything odd about their software, and. sometimes the fact that a game will not run on a compressed drive isn't listed on the box, the reason, in many cases, being that the manufacturer simply doesn't know! Games from US firms in particular seem to be completely unaware that disk compression exists!

Suppliers:

Stacker 3.0, £99, Stac UK, (0734) 776484

SuperStor Pro, £74, Elite Software Products Ltd, (0675) 464488

The solution!

I'm sorry to disappoint you – there isn't really a solution of the sort that you might like. If a program won't work from a compressed drive there isn't anything you can do about it – except run it from an uncompressed drive. In other words, the solution is to make sure that you have a sufficiently large uncompressed drive left over. The problem here is that many users are so overwhelmed by the idea of doubling their disk drive that they don't like to leave any of it uncompressed – with the result that when something doesn't work there is a major problem.

The panel below shows how the compression process works with Stacker v3.

For SuperStor the equivalent procedure is:

1) at the DOS prompt type SSUTIL
2) select Disk Tuneup, Consolidate from the menu and wait while the file is packed.
3) select Shrink Disk from the menu and enter the new size for the compressed drive.

For MS-DOS 6 the procedure is:

1) run Defrag to optimise the disk
2) run Dblspace and select Change Size from the menu and enter the new size for the compressed drive.

The compressed file can only be reduced down to the amount needed to store the data it contains – in other words, it is the free space in the compressed file that you are converting into free space on the uncompressed drive. You will be offered a maximum and minimum value for the new drive size.

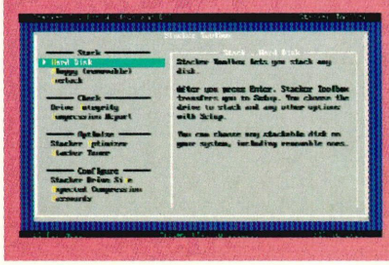
Once you have a large enough uncompressed drive you simply install the incompatible software to it, usually D:, rather than to the compressed C:. That's all there is to it. A crude but simple and effective solution to the incompatibility problem.

Is compression worth it? Not if you want a completely trouble free life – in which case, go out and buy a bigger drive. As long as you are happy about using the compressed and uncompressed drives sensibly then it's not too difficult and personally I think it's a worthwhile gain. Is it likely to get better? With MS-DOS 6 containing built-in compression manufacturers should at least have a standard to work to so the situation should get better. If this proves to be the case you can always increase the size of your compressed drive again!

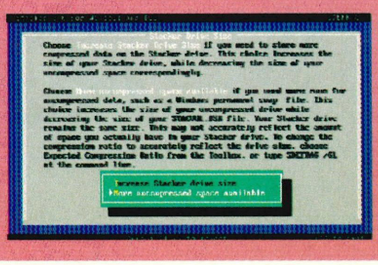
Compressing your files

Given that the compressed drive is just a file on the original drive you should see that the solution is to simply reduce the size of this file. The problem is that each of the compression utilities differ in how easy this is.
For example, if you are using Stacker Version 3 the procedure is as follows:

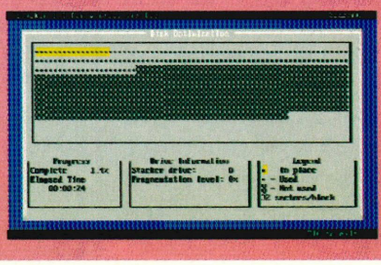
1) at the DOS prompt type STAC to run the Stacker tools. Choose Stacker Drive Size.



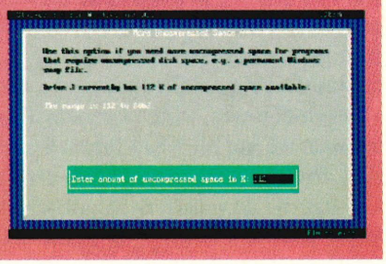
2) Select the drive you want to reduce and then choose More Uncompressed space available.



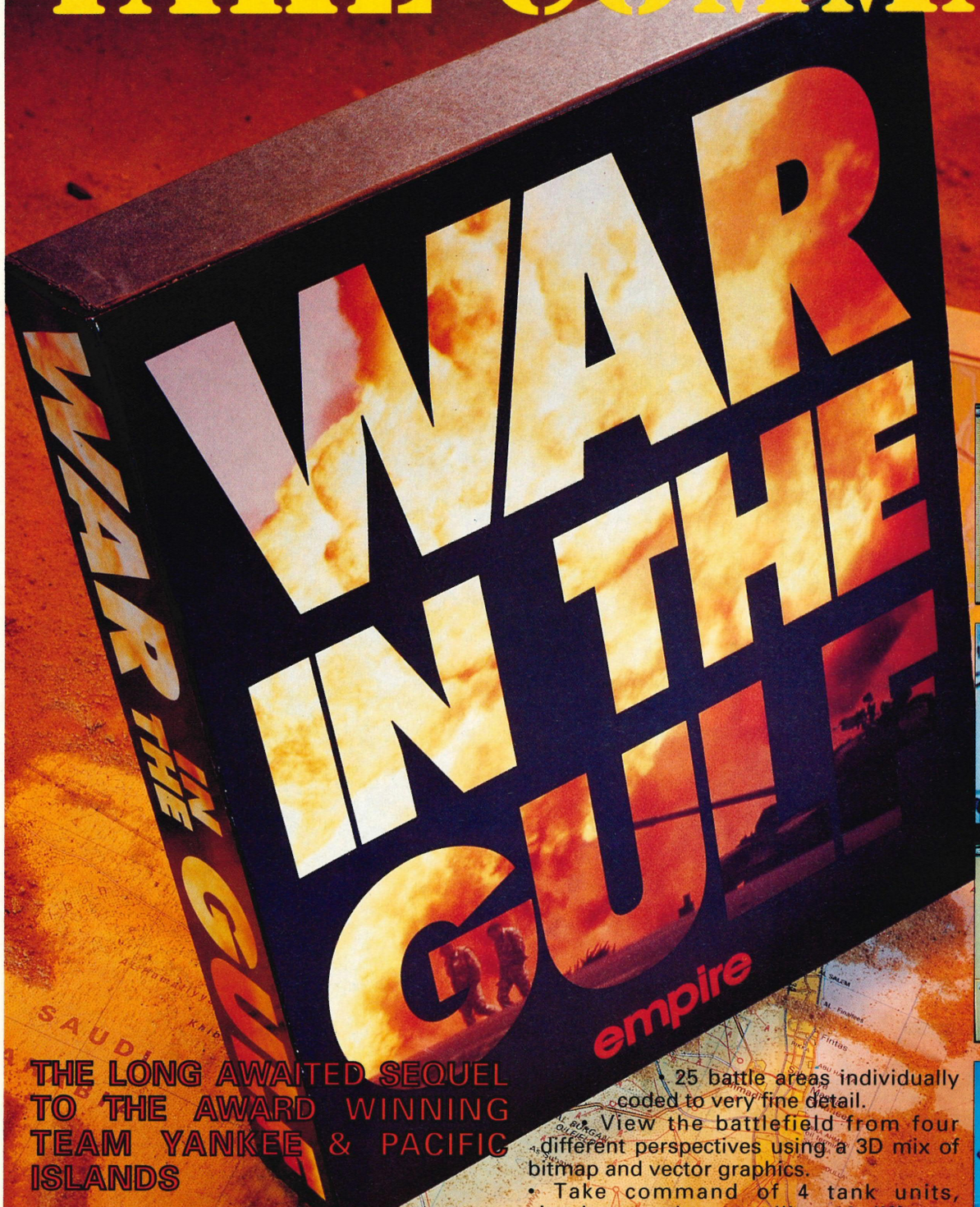
3) Wait while the disk is optimised. Warning: this may take a while.



4) Type in the new size for the uncompressed drive.

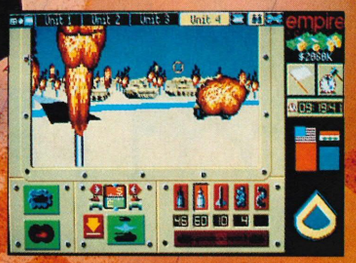


TAKE COMMAND













THE LONG AWAITED SEQUEL TO THE AWARD WINNING TEAM YANKEE & PACIFIC ISLANDS

1995...The Iraqi Republican Guard have overrun the oilfields of Northern Kuwait. War in the Gulf follows the fortunes of a crack unit of M1 tanks as the action unfolds.

- 25 battle areas individually coded to very fine detail.
- View the battlefield from four different perspectives using a 3D mix of bitmap and vector graphics.
- Take command of 4 tank units, simultaneously controlling 16 different vehicles through the unique split screen control system.
- Call upon the latest military technology including; laser-range finders, Infra-red imaging, TOW, HEAT and SABOT missiles.
- Liberate Kuwaiti villages, capture oilwells and disrupt desert supply lines.
- Lay minefields and order up artillery barrages.

REALISTIC...GRIPPING...

THE ULTIMATE BATTLEFIELD SIMULATION

AVAILABLE FOR IBM PC, AMIGA & ATARI ST

Empire Software, The Spires, 677 High Road, North Finchley, London N12 0DA. Telephone: 081-343 9143

Empire Software is a registered trademark of Entertainment International (UK) Ltd.

empire SOFTWARE

there's only one good enough to be called...



PREMIER MANAGER

Depending on the success or failure of your management skills, your team will either find itself leaping up the Divisions on route to the top or languishing with the Part Timers!

⚽ One to four player option ⚽ Match highlights with six game speeds ⚽ Manager & club histories ⚽ Complete results service ⚽ Weekly fax data on match reports transfer news & player information ⚽ 5 full divisions ⚽ Cup competitions ⚽ Comprehensive transfer market ⚽ Complete interaction with other team managers ⚽ Full player training with up to five dedicated coaching staff.

"The answer to a dedicated football fans prayers" (Amiga Format)

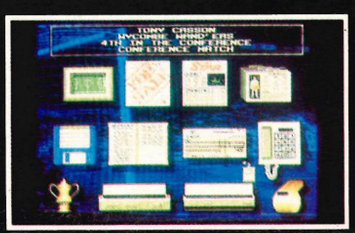
"A contender for the best soccer management game on the Amiga" (Amiga Power)

"Convincingly boots other football management games into touch" **(Amiga Action 90%)**

The most comprehensive and sophisticated football strategy game ever.

GREMLIN®









Screen shots from Amiga Format

Available from your local stockist or direct from Gremlin Graphics Software Ltd.

Gremlin Graphics Software Ltd., Carver House, 2-4 Carver Street, Sheffield S1 4FS. © 1992 Gremlin Graphics Software Ltd. Tel: (0742) 753423.

reviews

Our comprehensive reviews service starts here. Over the next 50 pages, you'll find the latest PC games fully evaluated, with clear comparisons made to similar games on the market. We also try to make it easy for you to see whether a game is suitable for your machine and your tastes, so read on to see how to get the most out of them

ARCADE GAMES
Zool *Gremlin* 70
Space Hulk *Electronic Arts* 84

ADVENTURES
The 7th Guest *Virgin Games* 50

FLIGHT SIMULATIONS
Strike Commander *Origin* 44
Dogfight *MicroProse* 76

STRATEGY GAMES
Buzz Aldrin's Race into Space *Interplay* 56
Xenobots *NovaLogic/Electronic Arts* 72
Spaceward Ho! *New World Computing* 82

ROLE-PLAYING GAMES
Ultima VII: Part 2 *Origin* 60
Magic Candle 3 *Mindcraft/Electronic Arts* 66
Unlimited Adventures *SSI/US Gold* 68

SIMULATIONS
Nigel Mansell's World Championship *Gremlin* 64
Tony LaRussa Baseball II *SSI/US Gold* 80
World Class Rugby *Domark* 86

SHAREWARE 92

Specifications

PCs come in so many different flavours and configurations that finding out whether a PC-compatible game really is going to work with your set-up can be a minefield. Each review carries a detailed TechSpec column, explaining what features are supported by the game in an easy-to-read, at-a-glance panel.

The graphics, soundboards and control sections tell you which popular devices are supported by the game in question.

Under disk requirements, you'll find out whether a game needs to be installed on to hard disk in order to play it, and how much space it takes up if installed to hard disk. We also note if the game comes on high density disks.

The performance section isn't quite so clear cut. Publishers often state a set of minimum hardware requirements on the box, but these can be very minimal indeed. Our optimum performance level is a subjective rating, and gives you not the publisher's base specification required, but rather the minimum we think the game needs in order to run comfortably. Game X may run on a 286, but at a snail's pace, or it may run OK on a 16MHz 286 but be unacceptably slow at 8MHz. This is where we let you know.

After the optimum speed rating, we note the minmum RAM required to run the game, and finally, how much of your base 640K RAM must be available for the game to load properly.

Alternatively

We believe games should be placed in context. You may like the sound of game Y but suspect it might be too technical, or difficult to control. We'll tell you about alternative games of a similar style, subject matter, or interface, which might be more to your taste (or warn you off those which are inferior to the game being reviewed, however superficially similar).

Two Minutes

This is the closest you'll get to seeing the game in action. We take a series of manoeuvres from the game and explain clearly the gameplay required to get through the screens. You may find some helpful game hints in this section!

Rating system

We give a single mark out of 10 to indicate what we think of the quality of the game. As a rough guideline, the ratings break down thus:

10

0-2	Dreadful
3-4	Deficient
5	Average
6-7	Good
8-9	Excellent
10	Staggeringly perfect

Ratings are not the sole preserve of the author of the review, but are discussed and thrashed out by everyone at PC Review who knows the game in question.

We also practice 'contemporaneous marking' – which means that games are rated to other current games.

The reason for this is that, while PC programming expertise is improving all the time, and Monkey Island VI will doubtless be miles better than Monkey Island II, that doesn't mean it will have to get 16 out of 10 when reviewed. If it looks excellent compared to everything else around at the time, it'll still be worthy of its eight or nine.

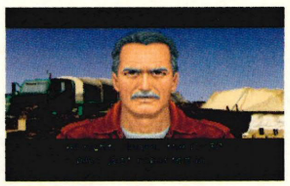
Shareware

The shareware reviews section is an independently-written column on the best and most interesting of the latest shareware and public domain releases. Here you'll also find the Shareware Finder Service. If you have a particular software need for your PC, but don't know if such a program exists, try us. We may well be able to pin down a cost-effective shareware program to do the job for you.



Title	**Strike Commander**
Publisher	**Origin**
Contact	**(0753) 549442**
Price	**£49.99**

One of the joys of Strike Commander is the constant variety between the missions: you never know if you're going to have to take off for hell's kitchen, or, as in this case, you're going to indulge in little more than a spot of aerial babysitting.



Most missions begin with a briefing from squadron leader Stern, who informs you of your objectives, which of the Wildcats (if any) will be flying with you and any dangers which you're likely to meet.

Strike Commander

Origin comes down to Earth (almost) to tell a tale of action and adventure in its latest flight and fight soap opera

True art demands great suffering – and while the Origin team obviously suffered for their art during the development of Strike Commander, I can now honestly say that I'm right up there with them.

Not that their latest offering is in any way painful to play (quite the opposite in fact), but installing this cinematic flight simulation was without doubt the most frustrating experience which this reviewer has had in a relatively long acquaintance with PC games.



Arming your warbird is carried out by the now familiar method of dragging the desired weapons onto your aircraft's 'hardpoints'.

But then, it's my own fault really. When I finally bit the bullet last year and ditched my old dependable word processor in favour of a flashy 486 multi-coloured dream machine, I did have to make a few enforced economies – the most important of which was in the size of hard disk.

Of course, with hindsight it's easy enough to say that a 50Mb hard disk was never going to be big enough, but how was I to know that within 12 months my relatively modest platter was to be invaded by a single game which would demand almost all of its space?

So, despite the fact that I have (in theory at least) all of the hardware required to run this digital nightmare – Super VGA, 4Mb of RAM and so on – actually installing Strike Commander turned out to be a real nightmare.

In the end I had to lose Windows, my word processor and just about every other utility from my PC's hard drive – and, worst of all, my dream machine is now booting from a floppy disk.

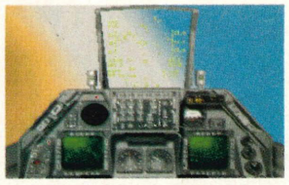
However, it's a good indication of the quality of the game in question that I'm willing to put up with this situation and work for as long as possible on a borrowed (and very clunky) laptop, so that one day I may be able to complete it.



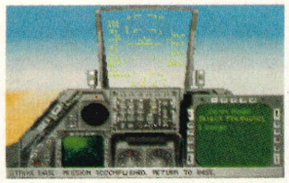
Pre-flight checklist taken care of, fuelled up, tooled up and ready for yet another rush of adrenaline, you kick in your afterburners and sit back as your F-16 moves off down the runway.



Unfold the mission map on your knees to remind yourself just exactly why you're up here – that's right, a transport support mission. This should be quiet enough, with any luck..



Where did those MiGs come from? Looks as though this mission isn't going to be quite as easy as all that. Never mind, it could provide the first tick against your name on the kill board back at base.



With that slight diversion out of the way, it's probably best to have a quick chat with the rest of the party to make sure that everyone's safe and sound before heading back to base.



It may have been a bit hairy out there, but it all seems worthwhile when you stand back and wallow in that warm glow as your first kill is marked on your fuselage. Another day ... another million dollars.

Why didn't I get that bigger hard drive? Those of you who've kept up with Chris "Wing Commander" Roberts and his work over the last three years will not be surprised by the ambitious scale of his latest project.

After all, he introduced the 386-preferable Wing Commander at a time when the 286 was just about becoming a viable option in the home, and has subsequently strived to remain one step ahead of the hardware manufacturers at every turn.

Of course, this means that many people who would like to sample his wares are frustrated by mechanical limitations, but Roberts obviously believes that this is a small price to pay for pushing back the boundaries of PC gaming.

Besides, with the imminent arrival of Intel's new Pentium chip, and the recent announcement that AMD is to become the first 'third party' manufacturer to produce a 486 chip of its own, it may not be too long before the vast majority of PC gamers will once again be taking the upgrade path – and when they do, Strike Commander will be right there waiting for them.

Just like the two Wing Commander games which preceded it, Strike Commander is a combination of 'flight and fight' action and a dialogue-based 'interactive movie' where the player is once again asked to assume the character of a cool clean hero and take on the forces of darkness and corruption.

This most obvious difference this time around is that the inky blackness of deep space has been abandoned in favour of a more contemporary setting (well, almost contemporary – the game begins in 2011) and more recognisable military hardware.

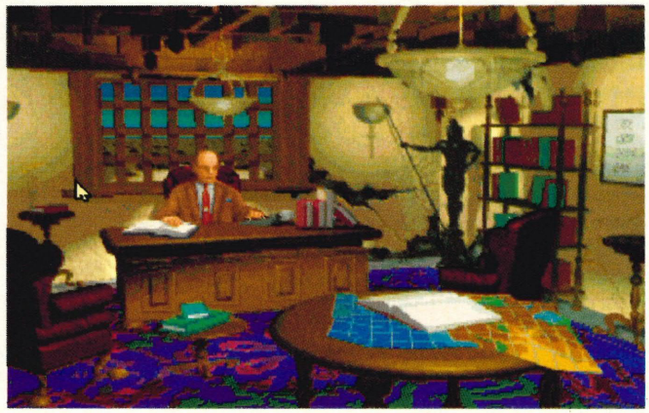
The guts of the story is that the old order is crumbling – the Eastern bloc has vanished, the United States are falling apart and law and order is fast becoming a thing of the past.

In the midst of this emerging anarchy, the world's airlanes are now patrolled by countless squadrons of mercenary fighter pilots, on hand to carry out work of any nature ... as long as the price is right.

Just about everyone is willing to pay – governments, defence agencies, industrialists, dictators – and as long as they're willing to accept the risks, the rewards offered to the daring pilot can be beyond even the wildest imagination.

You, of course, are no ordinary daring pilot. As well as being a genuine flying prodigy, you're also noble, strong-jawed and handsome – an ideal candidate, in fact, to take over the leadership of the legendary Turkey-based mercenary squadron, the Wildcats, when their venerable leader James Stern eventually hangs up his flying jacket.

As you've probably guessed, the plot is a little short on originality and slightly overloaded with Top Gun-style clichés.



In Virgil's office you can chat to the unpleasant squadron administrator if you wish. However, there are more attractive alternatives, including examining the ledger, reading the 'kill board' or, best of all, leaving.

That said, there's no harm in using a few tried and tested elements in an action story, and if you're the sort who "feels the need, the need for speed", then you probably won't notice anyhow.

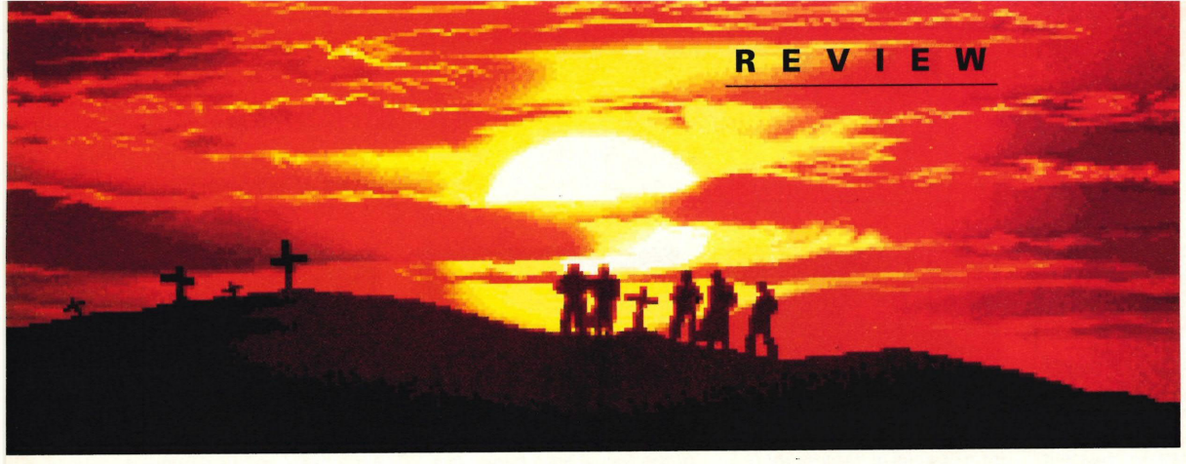
Despite its sporting the usual lack of political correctness expected from computer games, Strike Commander remains likeable (although it is a bit sad that the hero has to be white, blue-eyed and male – why could the developers not have involved an element of 'design your own character' as employed in another recent Origin release, Ultima VII Part II?) and manages to generate a real atmosphere.

And, whether you take it seriously or find it all terribly comical, even the "way to go, Tex!" dialogue is usually entertaining. Also, it does tend to add a little spice to the game's combat element. What's more, to begin with at least, the





The level of graphic detail is adjustable from the bare minimum (right) to the complete set-up (left). Almost every element on the ground can be switched on or off, but the most remarkable transition occurs when the angular vectored landscape is replaced by the far more impressive Gouraud shading.



Of course, the longer you fly the shorter the odds become, and the history books suggest that you will probably end up here – in an unmarked grave mourned by no-one but your fellow pilots. Actually, this burial scene represents one of the game's most hilariously clichéd moments – but hey, stop sniggering and pass the Kleenex.

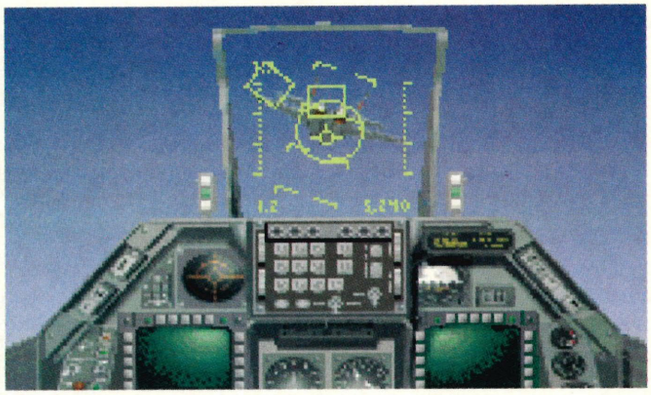
plot moves along at a comfortable pace whether you achieve any personal success or not.

The developers have obviously taken into account that most players are likely to be relatively clueless during the earlier missions and have compensated by making them slightly easier than the norm. In addition, your fellow pilots are usually adept enough to sort the enemy out on their own while you're still finding your feet.

However, this can lead to the slightly ludicrous situation where you may be four or five missions into the plot without a single kill to your name and your colleagues still refer to you as the greatest pilot since Chuck Yeager.

Be warned though, things do eventually change around, and if you haven't begun to make your mark on the squadron's 'kill board' within a relatively short period, your fellow pilots' conversation begins to become less reverential and a note of sarcasm begins to creep in.

Of course, the option to bypass these inter-mission conversations and revelations is there for those who want it, but simply to ignore the plot and move from mission to mission really defeats the object of the game and reduces it to being just another flight simulator – and besides, corny as the story is, give it a chance and you'll probably find yourself just as engrossed in the exploits of the various Wildcats (and of course their arch rivals, the Jackals) as I still am.



However, whether you view Strike Commander's storyline as a throwaway piece of sub-Hollywood nonsense or a pulsating action story grippingly told, ultimately it's little more than window dressing – the package will undoubtedly succeed or fail on its performance as a flight simulator.

Being the first of their type, the Wing Commander games had a relatively easy passage when they first appeared. And even now, although they've now been joined by the likes of LucasArts' X-Wing, they remain the standard by which others are judged.

However, Strike Commander can expect no such privileges, as flight and fight packages are ten a penny, and many of them (notably some MicroProse programs and Spectrum HoloByte's Falcon 3.0) already stretch the boundaries of programming expertise close to their limits.

This new-found competition has also been joined by a whole host of other Gouraud-shaded affairs which have hit the streets since Roberts and company first announced their intentions to produce Strike Commander more than two years ago (Gouraud shading is the graphic technique which game developers use to 'fill in' vector graphic landscapes in contemporary 3D environments).

Roberts makes a scathing reference to these 'copycat' games in his contribution to the Strike Commander manual (in the same piece, 'Strike Commander – a Game Designer's Apocalypse', he also details some of the trials endured by the team during the game's prolonged development), but whether he likes their appearance or not, this reference only serves to underline the fact that his own game doesn't exist in isolation and must now be judged by the standard of the competition.

He needn't worry unduly though. Strike Commander is as good an action-based flight simulator as you could hope to find

Meet the Wildcats ...

Hard but fair, the Wildcats are not only the most effective mercenary squadron in the world, they're also the fairest and (coincidentally) the best looking. Here's a brief rundown of wildest cats in the who like nothing better than a good old fashioned dogfight ...



Of course, there's you ...



Gwen 'Phoenix' Forrester
A former USAF chopper pilot, the Phoenix left her military career in ashes when her difficult personality earned her an 'honourable discharge'. This bad attitude rarely surfaces in her mercenary work, though.



Janet 'Vixen' Page
Beautiful and extremely deadly, Janet Page doesn't seem to share her fellow Wildcats' strong moral convictions. Earned a reputation for extreme fearlessness during her early days in Quebec.

on the market at present. OK, so it may not have the same level of technical accuracy as, say, an F-117A or a Falcon, but on the plus side it does offer a lot more instantly accessible action than either of those – and quite a few things besides.

And as for comparisons with its direct rivals, there are none: Strike Commander streaks ahead of the likes of Maximum Overkill, and what's more it should remain on top for some time to come.

Despite all of this praise, Strike Commander remains slightly short of perfect. Two areas in particular could have done with a little more attention: the training mode and the manual.

The problem with the former is that the training regime isn't strictly enough defined – the player's introduction to his craft is split into two simple disciplines, ground attack and dogfighting, and a 'freeform' environment is offered for each.

Most PC owners with previous flight simulation experience (and that means most PC owners) should be able to pick up the dogfighting strategies quickly enough and will therefore hardly miss the opportunity for comprehensive practice, but the ground attack disciplines are much more complex and really deserved more attention at this stage.

Effectively, this probably means that most users will have to use the game's first few ground attack missions as pseudo training runs and may have to attempt them quite a few times before eventually progressing, which is something of a pity because this tends to slow the story's progress somewhat.

The problem with the manual is a little more fundamental, but would have been far easier to overcome.

Alternatively...



Harrier Assault AV8B
Domark, £44.99
Rated 9, Issue 15
This could well be the most realistic flight you've ever experienced on a PC, but be warned, once you've tried it, you may be less enthusiastic about going back to other flight sims. Your task is to head a force of US marines and liberate the colony of East Timor recently invaded by a right-wing faction of the Indonesian army, so the game involves tactical planning at command level as well as direct action at a pilot level. A winner.



Wing Commander 2
Origin, £39.99
Rated 7, Issue 1
Initially criticised for being too much like its predecessor, WC2 eventually found a place in the hearts of many more gamers as the 386 chip became more and more prevalent.

Chris Roberts and his team were rightly praised for the huge, complex and believable world which they managed to build around what now looks like a relatively simple game engine and plot, enhanced, of course, by the cinematic sequences between missions.



Left: whenever the Wildcats travel from their Turkish base, the hangar is briefly abandoned in favour of the more rudimentary attractions of a mobile headquarters. All of your favourite home comforts are here, load and save game facilities, the squadron's ledger, the kill board and, of course, sleeping beauty – doesn't she ever get up?



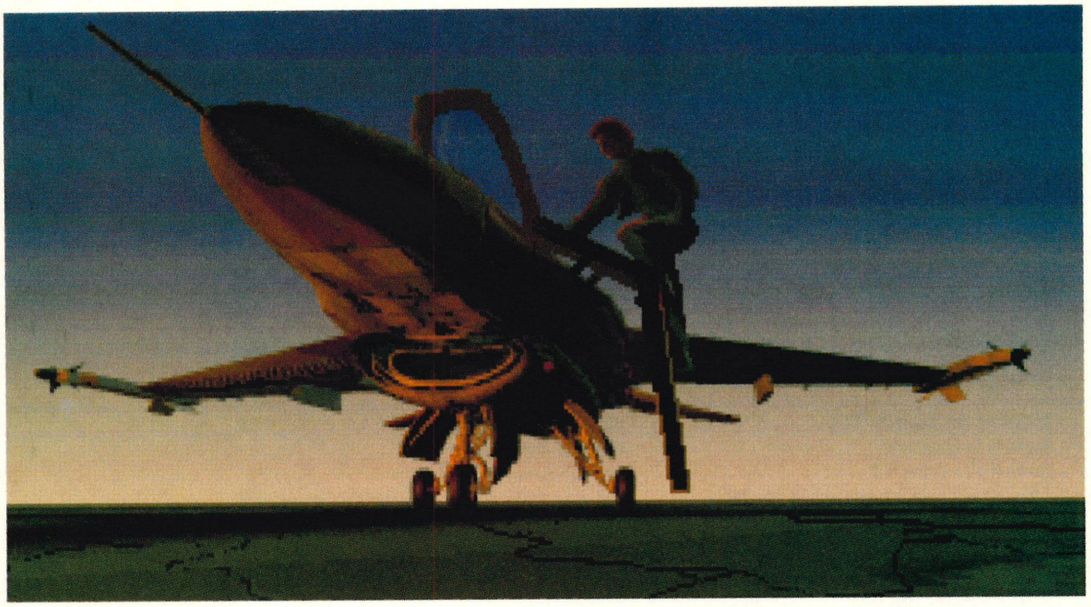
Miguel 'Zorro' Schraeder
Ex-bullfighter Miguel is not only the team's mechanic, he's also one of the Wildcats' most adept marksmen. A self-confessed 'political junkie', Miguel is blessed with eagle eyes and nerves of steel.



Virgil Beetlebaum
The squadron's desk jockey, Virgil, keeps one eye on the ledger and the other ... also on the ledger. Fat and bald, he could never be a handsome, heroic pilot like you.



James 'Hawk' Stern
Stern has taken his considerable US Air Force experience, leadership abilities and exaggerated sense of fair play and applied them to making the Wildcats the most feared and respected mercenary squadron in the world.



You can't help but feel a small glow of pride as your kills are painted on the side of your trusty bird.

It seems that the Origin team has missed the point of exactly what a manual is for, and rather than produce a straightforward technical volume covering the program's functions and controls, they have instead opted to go for entertainment – losing a great deal of clarity in the process.

Instead of a manual proper, the disks are accompanied by a fake trade magazine for the airborne mercenary, 'Sudden Death'. This, in itself is very professionally produced and entertainingly written ... but it doesn't help a great deal when you're suddenly set upon by a bunch of angry enemies.

There is a technical section at the rear of the manual, but even here the information is confusingly laid out and difficult to follow.

A more straightforward key guide would probably be of more help more when the going gets tough (as it always does) – and the entertaining stuff could have remained, and been just as effective, if it had been contained in a separate volume.

These, however, are relatively insignificant complaints. The program as a whole is expertly executed and, for something of this scope and imagination, is remarkably free of bugs and glitches.

Strike Commander is notable for many reasons, but perhaps the most startling is that it has actually managed to live up to the hype which preceded its launch.

Chris Roberts and his team have not only aimed high, but they've also managed to hit most of their targets and have succeeded in producing a game which is just as enjoyable as it is technically accomplished.

The only pity, of course, is that it may be some time before everyone can enjoy it. There are probably quite a few owners of fast 386 PCs out there who believe that their machine is capable of handling this beast, and technically they're correct. If you have a 386 running at 33MHz or 40MHz, actually flying is fine, but loading missions will still take a long time. Otherwise, without the power of a 486 chip (and a fast one at that), you're condemning yourself to long disk accesses and constantly jerky screen updates.

Of course in a few years time, powerful PCs will probably be more commonplace, and by that time every Tom, Dick and Harry will be churning out Gouraud-shaded flight simulations – but who knows what Roberts and company will be attempting to pull off by then?

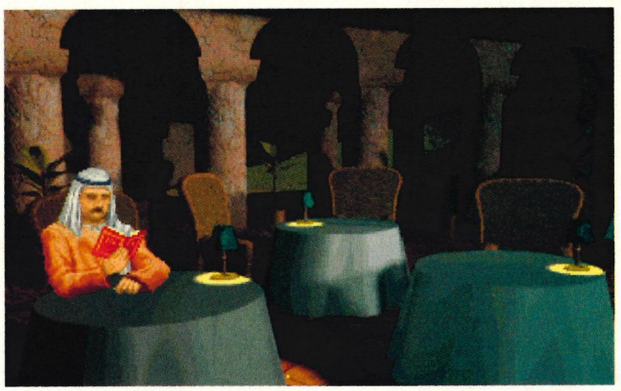
Whatever it is, let's hope that it comes on a nice shiny compact disc, because I for one certainly don't want to go through those hard drive installation traumas all over again.

■ Ciarán Brennan

PCreview **8**

Techspec ***You need a fast 386 (33MHz or 40MHz) or 486 to get Strike to play smoothly (a 386DX of some description is the bare minimum).***

Disk requirements						
	High density	✓				
	Hard disk only	✓				
	Space taken on hard disk	***35Mb***				
Graphic modes						
	CGA	✗	***EGA***	✗	***Tandy***	✗
	VGA	✓	***SVGA***	✓		
Soundboards						
	Ad Lib	✓	***Roland***	✓	***Sound Blaster***	✓
Control						
	Joystick	✓	***Keyboard***	✓	***Mouse***	✓
Performance						
	Optimum speed	***33Mhz***				
	Minimum memory	***4Mb***				
	Free RAM required	***590K***				



Selim's bar, situated just a short jeep ride from the Wildcats' base, is not only the best place for a little R&R, it's also a hang-out for all manner of unsavoury characters – and consequently a good place to make contacts and pick up new missions.

Strike Commander Speech Pack

If you've gone through the trauma of freeing up 37Mb of precious hard disk space, hopefully another 7Mb will seem like a breeze. Electronic Arts are also releasing a speech pack for Strike Commander. It works with Sound Blaster, Pro Audio Spectrum and1 00 per cent compatible sound cards.

The speech add-on gives you the majority of the in-flight chat, important messages and commands, which is particularly useful during combat, and gives the game a bit of extra atmosphere — particularly the screams of the enemy pilots, or your own wing men, as they go down in flames. You also get speech for some, but by no means all, of the more important cinematic sequences and main characters.

The quality of the digitised speech on a Sound Blaster card is quite passable, but there's not really enough of it to justify the price. 48£19.99 is a lot to pay for something that gives you not a lot more than 'Aaaaagh. I'm outta control ...''

EXPERIENCE THE EXCITING WORLD OF SPORT!

SPORTS masters



4 ALL TIME GREATS TEAM UP IN THIS SUPERB VALUE SPORTS COLLECTION

AVAILABLE FOR IBM & COMPATIBLES & COMMODORE AMIGA ALL MODELS.

empire SOFTWARE

Sports Masters © 1992 Empire Software

The Indy and Indianapolis are registered trademarks of Indianapolis Motor Speedway Corp. Used with permission. TPS, Tournament Players Club and The Players Championship are registered trademarks of PGA Tour Inc. Software © 1990 by Sterling Silver Software and Electronic Arts. Package design © 1990 Electronic Arts. Advantage Tennis © Infogrames 1992. European Championship 1992 © 1992, 1989 Tecmo Ltd, Japan.
Empire Software, 4/6 Stannetts, Laindon North Trade Centre, Basildon, Essex SS15 6DJ. Tel: 0268 541212 Fax: 0268 541125.

Three of the most exceptional Space Simulations ever!



- **Megatraveller 1**

"There can't be a more prestigious role-playing system than Megatraveller 1".

PC Plus

- **Elite Plus**

"Quite simply the most original gameplay since the birth of computer entertainment. An all time classic".

PC Format

- **Wing Commander**

"This is more than ever an essential addition to any self-respecting PC gamer's collection".

PC Review

The Complete Space Experience for IBM PC and Amiga

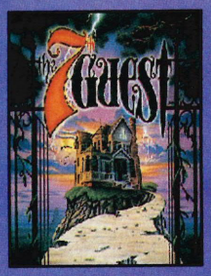
*Elite on Amiga versions

ELECTRONIC ARTS

MICROPROSE ORIGIN™ empire SOFTWARE

Empire Software, The Spires, 677 High Road, North Finchley, London N12 0DA.
Telephone: 081-343 9143

Empire Software is a registered trademark of Entertainment International (UK) Ltd.



Title	The 7th Guest
Publisher	Virgin
Contact	(081) 960 2255
Price	£69.99

In the Stauf mansion you are an active and mysterious entity known only as Ego. You don't why you are there, you don't know what to do – you don't even know who you are. Maybe it's time to find out ...



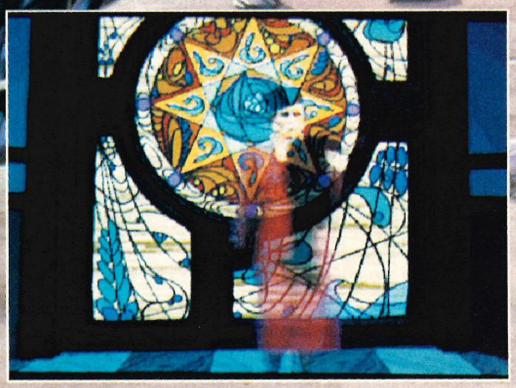
This is where your quest for identity begins. Being an eager sort of entity, you head straight for the stairs. Prepare to be dazzled: the 3D movement as you ascend is unlike anything you will have seen before in a PC game.

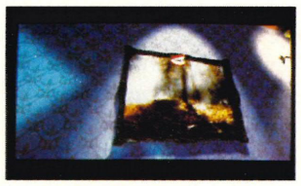
The start of the CD games revolution?

While CD games are still relatively rare, almost everyone predicts that they will multiply dramatically over the next few years. Compact discs are cheap to produce (around 50p each), can hold over 1,000 times more data than a 720K floppy disk, and give programmers an opportunity to incorporate masses of digitised graphics, orchestral scores and crystal clear effects in their games. Until now however, most CD releases have been upgraded versions of existing disk-based games, with a few fancy effects and extra graphics thrown in.

The 7th Guest, Trilobyte's first interactive drama, aims to change all that. Apart from digitised music and sound effects, it uses over 30 minutes of full-motion video. Full-motion video involves filming real actors with real voices and digitising the footage frame by frame, providing the kind of realism which makes even the most sophisticated sprites look shabby.

It sounds amazing, but there is a problem: your hardware. Over half of the game's manual (16 pages) outlines suitable hardware and potential problems. The basic point is this: if you haven't got at least a 386SX with 2Mb of RAM and a CD-ROM drive capable of transferring data at 150K per second, forget it. However, if you want to get the best from The 7th Guest, you'll need the best equipment – and that means a 486DX, 4Mb of RAM and a CD-ROM drive with a 300K per second data transfer rate and less than 300 millisecond access time. Don't worry too much about SVGA compatibility – Guest directly supports 98% of all known cards. In general though, you should check that your system really is up to scratch before you buy, because without its revolutionary technology The 7th Guest is a pretty average game, though in heavy disguise.





At the top of the stairs you see a picture. The icon has changed to a set of chattering teeth – which means that if you click on the mouse button you'll witness a supernatural event. Are you brave enough? Of course you are ...



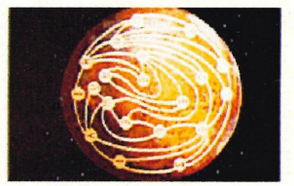
Well, maybe you're not. Scared out of your mind by the picture, you look right and see a couple of ghosts heading your way. Aargh! Perhaps you should begin your quest downstairs after all. If you can stop quivering.



It's a good idea to check on the map if you're not sure where you've been or where you should be going next. Shaded areas show where you can go or where you've been; unshaded areas need a little more brain work to get to.



This is the library – a useful place. That book on the table contains graded clues for the puzzles you'll face (and isn't it about time you solved one?), but if you explore a little further in, you find a telescope.



Click on the telescope and the screen moves around to the eyepiece. Through this you see this mysterious red planet covered in odd lines and letters. Forget it for now: Go to the dining room and solve the cake puzzle ...

The 7th Guest

Three years in the making, The 7th Guest has long been threatening to revolutionise CD gaming technology. Now it's finally here, it looks great and sounds wonderful — but how does it play?

Guess who's coming to dinner

More about that later. First, you'll probably want to know what the game is all about. I won't spoil things by telling you too much about the plot, since most of it is revealed during your explorations and the eight minute animated introduction sequence. This is no ordinary introduction either: a story book comes to life before your eyes, a bunch of unnervingly realistic ghosts throw in a few details about what's going on and you're left standing in the hallway. Once you've seen the intro once, you can save the game so that you don't have to watch it over and over again.

There are some general details you should know, however. The action takes place in a haunted house known as the Stauf mansion, in a small town called Harley. Henry Stauf was a toy-maker and puzzle fanatic, who disappeared when the children of Harley began to suffer agonising deaths due to a mysterious virus. A couple of months after his disappearance, he invited six guests to a party in his hilltop residence – and none of the guests was ever seen again. You are gullible enough to try and find out what happened.

It appears that the mansion was built using materials from the Twilight Zone. Stauf himself may or may not be barking mad, but his home is the kind of place where time travels backwards, ghosts spend their time bemoaning their earthly existence, and people who are good kissers turn out to have cloven hooves and a couple of curly horns on their forehead. There's an awful lot going on of which Baden-Powell and your local vicar would disapprove – and basically your aim is to discover how everybody met their grisly end. It's a murder mystery with lots of neat twists.

So much for the story – what's the game all about? Simply this: the mansion is divided up into 23 rooms, and each room contains a puzzle which Stauf, twisted character that he is, has specially created for you. To complete the game, you have to explore the house and solve each of the puzzles. You can't reach all of the rooms or puzzles right from the start: finding solutions to the initial problems opens doors to the later ones.

Getting to grips with the game itself is easy because of the control system. This reminds me most of Millennium's Daughter of Serpents (see Alternatively panel), because you have an uninterrupted view of the action without a panel of icons or text to clutter up the screen. There are seven basic icons in the game (nine if you count the direction icons separately), but they don't appear until the situation demands it.

The graphical effects are usually impressive and often stunning, particularly when it comes to use of light and shade. A bright stained glass window with see-through ghosts? No problem.

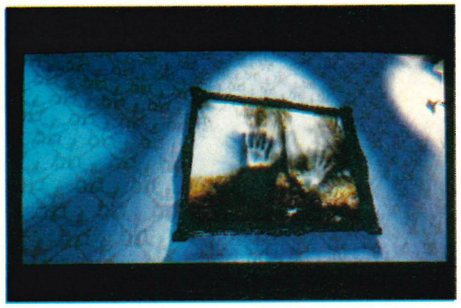


Stauf mansion has an impressive collection of neatly animated spirits, including this shady group. Unlike many other games, if you look closely you can see right through them.

The most prevalent icon is a brilliantly animated skeletal hand, which can move you left, right or forwards, and wags a finger if you can't do anything in your current location. Others include a drama mask (which activates or repeats full-motion video scenes), a throbbing brain (signifying a puzzle to solve), a rolling eye (used to actually solve puzzles), chattering teeth (indicating the presence of a supernatural event), and a pyramid (accesses the save/map/restart/quit menu). These icons achieve a new level in design and animation, although there aren't really enough of them to create as interactive an experience as I would have liked.



In the library, look through the telescope for a taste of The 7th Guest's style of logic and word puzzles.



The animations are nothing short of first class, and impressive to watch even if they don't add much to the plot. Here, a ghostly pair of hands pushes through the portrait.

Wherever you go, Ego

Your character is known as Ego – basically, yourself. You are accompanied throughout the game by your own 'inner' voice which makes plenty of useful and some not-so-useful comments. Stauf himself also chips in with the odd bit of advice, but it's not always wise to follow it.

The puzzles are reasonably varied, but not always difficult. I found the telescope problem and the heart valve maze ridiculously simple, but most of the others are more challenging. Some fall into the category of those nightmarish mathematics problems you used to get at school. I won't be giving much away if I tell you, for example, that one involves dividing a cake into an equal number of portions, ensuring that every portion contains an equal number of special cake decorations. Other puzzles include variations on word-games, mazes, spatial and logic problems. They aren't immediately visible when you enter a room – you find them on rugs, bedspreads, floors, chess boards, and so on.

Each puzzle is introduced by your inner voice when you first encounter it and reintroduced when you go back to it, which can be annoying – I couldn't find any way to skip these presentation sequences so I just had to sit through them. If you think 23 puzzles isn't many for a £70 game, I'd agree with you; if you also think that you won't enjoy the kind of logic, spatial manipulation and word problems I've described, avoid The 7th Guest like you'd avoid a haunted house on Hallowe'en.

Once you've finished the game (and Virgin estimate a basic 25 hours' worth of 'total interactive experience'), a nice touch is that you are allowed to wander around the house freely and play all the puzzles again. Whether or not you would actually want to is a different matter. Familiarity with the solutions means that you won't return immediately you finish, though it could be fairly enjoyable to return a few months later. Even if you don't fancy this idea, you have an impressive, if expensive, interactive demo on your hands.

Don't worry about being too dim to solve anything, either. There is help at hand if you do get stuck on one of Stauf's devious games in the form of a clue book found in the library. When you first encounter a puzzle you don't know anything about it – not even its rules. The clue book gives you three levels of hint: the first time you consult it you're told the rules, the second visit offers a broad hint (though some of these are not as subtle as they might be), and the third automatically solves the problem without showing you how it's done. This is a good feature, because it doesn't spoil the game, but allows you to make some progress when you're not able to find a solution straightaway. However, as a general rule, if you want to extract the most value out of an already highly-priced game, don't consult the clue book.

The satisfaction of solving a problem is only one reward: you're also treated to a video sequence which pushes the plot along. The game contains a full hour's worth of these sequences and you don't necessarily have to play a puzzle to enjoy them. Many occur as you enter or re-enter a room, or as you are wandering around the corridors. All of them provide some help in unravelling the mystery *chez* Stauf.

Exploration is made enjoyable by these video snippets. I don't think you'll find them blood-curdling unless you're playing on your own after midnight and you get frightened by your own shadow, but they are superbly done – and unlike anything you will have ever seen before on a PC.

However, the way the screen 'moves' when you explore isn't always sensible. For example, in the hallway if you want to walk to the library from the stained glass window you just point and click – but the game takes a roundabout route via the bottom of the stairs and another door, rather than heading straight for the destination. This is a bizarre feature which, if you were being kind, you could say adds to The 7th Guest's disorienting atmosphere.



The 7th Guest opens with a sumptious eight minute introduction. The distinctive haunted house scene, above, complete with thunder and lightning, establishes the creepy atmosphere for what's to come.

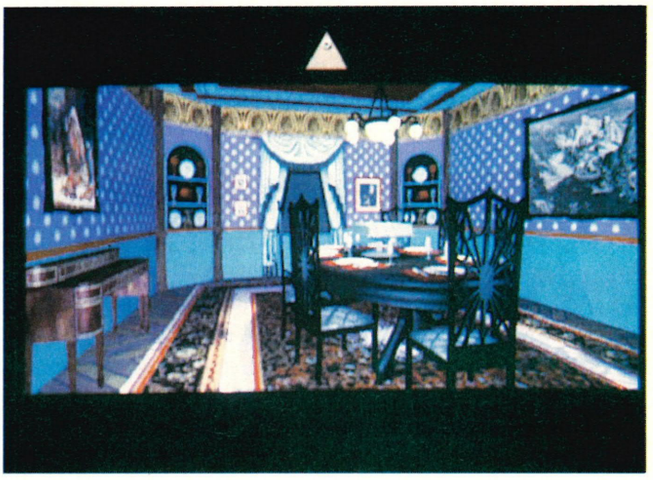
Techspec ***The 7th Guest is a hardware minefield. The minimum requirements include a 386DX (486SX running at 20MHz or faster recommended), 2Mb of RAM (4Mb recommended) and a 16-bit SVGA card with 512K memory (1Mb recommended). You'll also need a hard disk, DOS 5.0 or higher, a mouse and a sound card with FM and PCM sound support (General MIDI device recommended). On the CD-ROM drive front, you need MSCDEX V2.2 or better, and a drive with a minimum 150K per second data transfer rate (300K recommended for smooth animations, with less than 300 millisecond access time). If you think you can get away with less than this, think again: anything slower than the minimum transfer rate will give you broken speech, unacceptably slow animation and sluggish CD accessing times.***

Disk requirements					
	High density			***n/a***	
	Hard disk only			***✓***	
	Space taken on hard disk			***10Mb***	
Graphic modes					
	CGA	***✗***	***EGA***	***✗***	***Tandy*** ***✗***
	VGA	***✗***	***SVGA***	***✓***	
Soundboards					
	Ad Lib	***✓***	***Roland***	***✓***	***Sound Blaster*** ***✓***
Control					
	Joystick	***✗***	***Keyboard***	***✗***	***Mouse*** ***✓***
Performance					
	Optimum speed			***33MHz***	
	Minimum memory			***2Mb***	
	Free RAM required			***570K***	

There's also a map to help you find your way around and keep track of the puzzles you've solved, though it's not the most detailed floor plan ever designed. For one thing, it doesn't show you where you are, and for another, it doesn't reveal secret passages once you've discovered them. On the other hand, it is quite pretty.

Atmospheric effects

The same could be said of the graphics as a whole – except that 'pretty' is quite an understatement. It's impossible to appreciate the quality of background and character animations without actually seeing them, but take a look at the screen shots and then try to imagine them moving effortlessly in 3D. Apart from the amount of detail in the backgrounds (including a true, moving reflection in a mirror, patterned rugs and wallpaper, and furniture which looks like it's come from a film set), eight professional actors and over a dozen extras were used to create the film sequences.



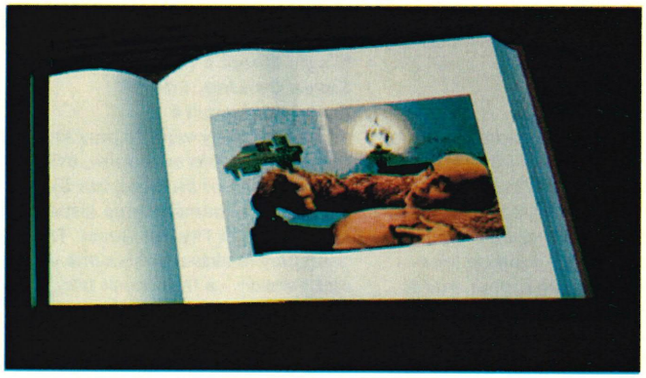
In the dining room, you'll need to solve a fairly complex logic puzzle involving the cake, set on the table, centre.

However, it's not all great news. For one thing, the action isn't full-screen – at a generous estimate the window only makes use of about two-thirds of the screen. A more lasting problem lies with the digitised film clips themselves: in some areas ghosts manifest themselves repeatedly – if you walk around the corridors on the second floor, you'll see what I mean – and this breaks the flow of the game.

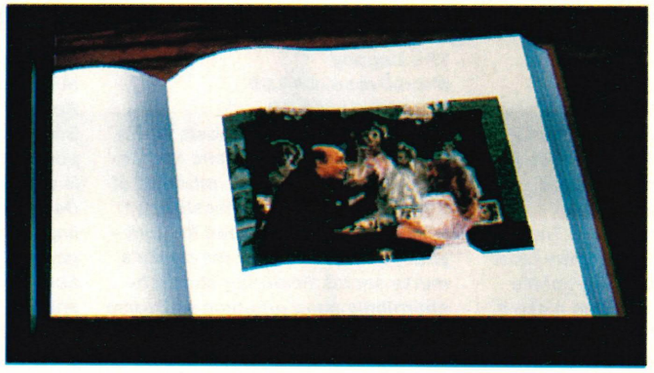
More seriously, as an interactive movie The 7th Guest isn't all that interactive. The plot is a little sequential, relying on you solving certain puzzles before allowing you to progress. This wouldn't be so bad if you could do plenty of other things during your travels – but you can't. Your main actions are limited to exploring, playing puzzles and witnessing supernatural events. It's the quality of the graphics and film clips which keeps you hooked rather than the amount of interaction and freedom of movement.

The music and sound effects are more than a match for the quality of the graphics. Guest includes 30 minutes of CD-quality digital sound track, 76 incidental tunes and 36 minutes of crystal clear speech. In addition, you can play the second of the two compact discs in a normal CD player. It contains 15 tracks which are all professionally done, though whether or not you'll actually like the music is a matter of personal taste. Personally, I was impressed: if you listen to the tracks while you're playing it adds that little bit extra to your enjoyment.

What this all adds up to is a game with unparallelled atmosphere and realism: sometimes it's as if you are actually watching a movie. The 7th Guest is packed with lots of special visual and aural effects the like of which you won't have encountered on a PC before: wait until you see the skeleton playing the



The intro then moves on to the story book, which tells how Stauf's toymaking came to a tragic end. The characters from the pages of the book come to life before your eyes, with speech and animated characters detailing some rather nasty events.



As the tale progresses, there are further digitised scenes using actors, detailing how a mystery virus began taking the lives of children in the village. It's a superb way of setting the scene, although you don't have to watch the intro every time you play.

... and here is the cake puzzle (from previous page). You need to divide the square so that a certain number of objects are in each sector.

organ! There is a case to be made for having fewer graphic and musical treats and more substantial interaction – and a whole lot more game – but Guest is the first release of its kind, and on that level alone is worth looking at.

A high price to pay?

It's virtually impossible to separate the gameplay from its innovative technology during play – but if you were to force a separation, the technology would easily rate a nine whereas the interaction and puzzle elements would scrape only a five. This is, of course, to compare it to the mass of disk-based games around, which may seem churlish when you take into account the giant technological leap forward that we have here, but on the other hand, what else is there to refer it to? Anyway, compared to what has gone before, The 7th Guest's technical achievements are truly stunning, but there are plenty more interesting and involving games around.

There are plenty of reasons why you shouldn't buy this game. The potentially prohibitive price tag will probably be your first objection. With the cost of manufacturing CDs down to as little as 50p, and even taking into consideration distributors' and retailers' cuts, you're still paying a substantial amount for the programming and development time, which, OK, was pretty considerable.

Purely judging The 7th Guest as a game, I would have liked more control over movement and more opportunity to interact with the surroundings. Too often I got the feeling that I was being pushed from one clue to the next – there are too many closed doors for the beginner. Even when you do find open doors, the routine of puzzle/solution/revelation does become repetitive.

I've also got reservations on the hardware side. It can't be stressed enough that unless you've got the maximum recommended specifications – particularly, a fast data transfer rate from the CD-ROM drive to the PC – you won't be getting as much value as you should be. If your system is up to it, you're in for a visual and aural treat; if not, you'll be shelling out £70 for what could be a frustrating experience.

PCreview 7



Now, the reasons why you should consider buying The 7th Guest, and these are just as plentiful. The most compelling is that this is a totally new gaming experience. The plot is full of surprises and is beautifully written, the acting's fine (if you allow for some tongue-in-cheek melodrama), and the atmosphere is second-to-none.

If you want amazing graphics and sound and a truly innovative product – which just lacks a substantial, involving game to support it – take a look. You spend an equal amount of time wandering around passively watching scene after amazing scene of plot development as you do actually solving problems – and if that sounds like the kind of experience you're looking for, try it.

If, on the other hand, you're not blindly impressed by groundbreaking technology and think the basic gameplay is the most important element, think twice before you buy. Personally, I feel that the arguments for the outstanding graphics and sound are too strong to ignore, and The 7th Guest is a whole new PC experience. This demonstration of technological splendour is an integral part of the game, an impressive display of power only a little weakened by the comparatively poor puzzle-solving elements.

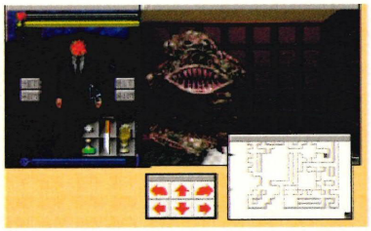
Still, I'd rather someone else paid out £70 and allowed me to play with their copy.

■ Gordon Houghton

Alternatively...



Alone in the Dark
Infogrames, £44.99
Rated 9, Issue 14
There are no CD releases closely comparable with The 7th Guest, but there is a rich crop of haunted house games around at the moment. Although Alone in The Dark requires a 486 to get the most from it, the excellent 3D graphics and strong occult storyline make it well worthwhile. It's an adventure game with strong arcade overtones, mixing a variety of unusual viewpoints with superb animation. It's compelling.



The Legacy
MicroProse, £44.99
Rated 8, Issue 19
Also in the ghouls 'n' ghosts line is this offering from Magnetic Scrolls. Its plot casts you as the inheritor of a weird New England mansion, where all kinds of undead foe lurk – your job is to discover the house's murky secret. Featuring stomach-churningly good graphics and some decent sound effects, the game also has the bonus of movable and rescaleable windows. An unusual, interesting variant on the first-person 3D RPG theme.



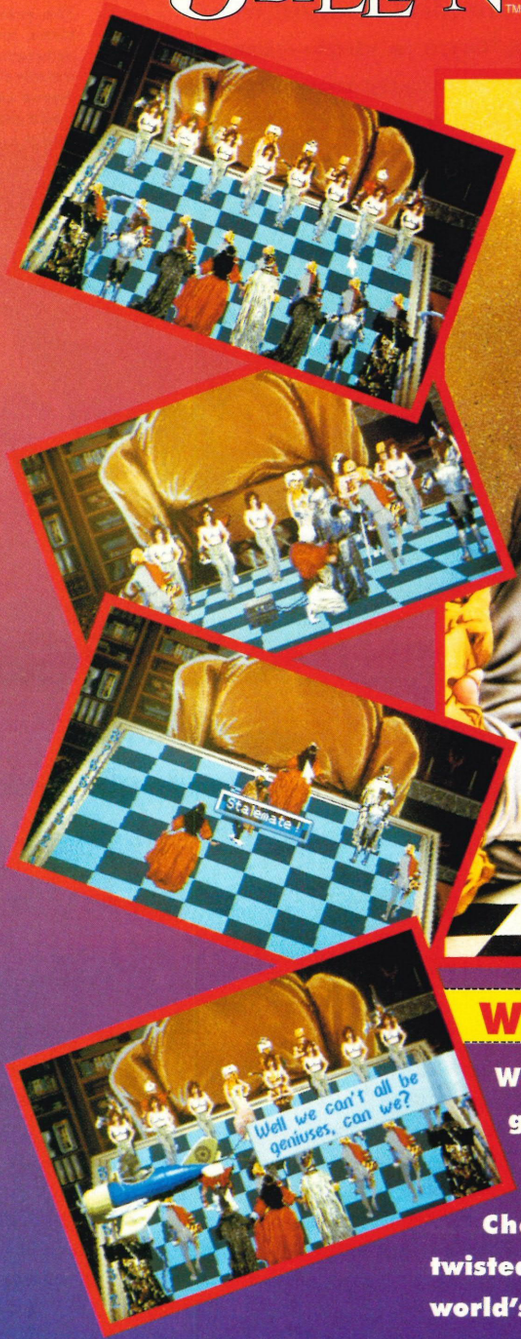
Daughter of Serpents
Millennium, £39.99
Rated 7, Issue 18
Boasting an extremely easy-to-use point-and-click control interface that is very similar to The 7th Guest's, Daughter of Serpents is yet another impressively horrific computer game. It consists of multiple locations and a changing cursor which enables you to manipulate objects without having to access a separate bank of icons. You really are going to need a 386 and a 100% Microsoft-compatible mouse to get the most from the action, though.



King's Quest V (CD-ROM version)
Sierra On-Line, £44.99
Rated 8, Issue 14
If you genuinely want to play another CD-ROM graphic adventure, this is certainly one of the best, but by no means in the same league visually and aurally as The 7th Guest. The gameplay is virtually the same as the disk version – a traditional fairy tale aimed squarely at a family audience. The trimmings include full speech from 50 actors, and digitised music (though it's not CD-generated). Ultimately enjoyable but not astounding.

NATIONAL LAMPOON'S CHESS MANIAC 5 BILLION and 1™

Great minds invented chess - Warped minds invented Chess Maniac!





WARNING - IMMATURE CONTENT

What happens when the studied seriousness of the grand game meets up with National Lampoon's notorious brand of bizarre humour?

Chess Maniac 5 Billion and 1! The perfect blend of twisted jokes and computer hacking combine to make the world's first humourous chess game.

- **Ten levels of real chess from beginner to advanced**
- **Disgusting digitized sounds and sizzling video animation**
- **60 outlandish ways for one piece to take another!**
- **A manual so funny you might even read it!**

Spectrum HoloByte®

The Most Outrageous Chess Game Ever Made!

CHESS MANIAC 5 BILLION AND 1. AVAILABLE FOR IBM PC COMPATIBLES.
MicroProse Ltd. Unit 1 Hampton Road Industrial Estate, Tetbury, Glos GL8 8LD. Tel: 0666 504 399



Title	**Buzz Aldrin's Race Into Space**
Publisher	**Interplay/Electronic Arts**
Contact	**(0753) 549442**
Price	**£44.99**

The race is on. You've just been appointed Director of the newly-formed US space agency, and it's your job to get American satellites (and people) into space. Time is vital — the USSR is already building the first Sputnik.



The action takes place in turns, and before every turn a network news presenter details important events. These can be anything from basic astronaut injuries to major cuts in your budget.

Buzz Aldrin's Race Into Space

Another board game — albeit a relatively obscure one — makes its debut on the PC. This one has the added attraction of input from the astronaut Buzz Aldrin

On 20 July 1969, Edwin 'Buzz' Aldrin became the second man to walk on the moon. He was part of the Apollo 11 team which also included Neil Armstrong and Mike Collins: the mission lasted eight days, and brought back over 20kg of lunar rock.

Fritz Bonner, the games designer responsible for Buzz Aldrin's Race Into Space (BARIS), spent seven years training to be an astronaut. Disillusioned by budget cuts, he left the US Air Force Academy and, after several years, decided to design a board game based on the golden years of space exploration. The result — called Lift Off! — eventually spawned this computer version. Buzz Aldrin's contribution to the project isn't simply cosmetic: Bonner claims that Aldrin provided time, artwork and invaluable information about what the astronauts went through.

"So what?" you might ask. Simply this: the one thing that's immediately obvious about BARIS is the enthusiasm of its designers. The attention to detail, depth of research, weighty documentation — and the fact that you're taking part in something that actually happened — all prove infectious. It might not always look or play like the latest advance in gaming technology, but it's hard to ignore the compulsion to reshape historical events.

Space target

The game begins in spring 1957 and allows you to direct the American or Soviet space programs until 1977. The action is turn-based and the objective is simple: to be the first country to successfully complete a manned lunar landing and return to Earth wins.

The preliminaries allow you to choose the US or Soviet side, play one or two-



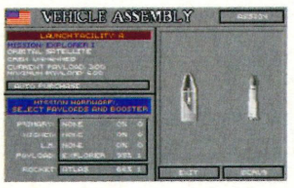
The two space ports, Baikonour (USSR) and Cape Canaveral (US), include launch pads, astronaut training centres, admin buildings, a museum, and a research and development centre.



Before launching a rocket into space, you have to buy it and research it. Your budget is limited, and neither the hardware nor the research come cheap. Sometimes you risk safety to stay ahead.



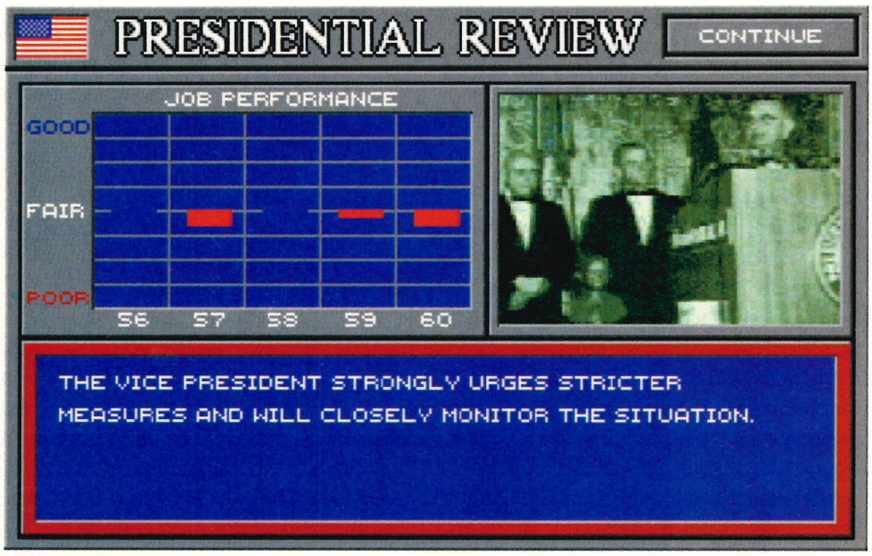
Once you're satisfied with the safety of your equipment, it's time to plan a mission. Don't try to fly before you can walk: an unmanned orbital or sub-orbital flight is a wise and relatively risk-free first choice.



Now it's time to assemble your rocket. This vehicle assembly building allows you to combine satellites and rockets for future missions. If you're not happy, you can always scrap the launch.



The tension builds up as your first venture into space begins. Digitised footage lets you witness the countdown ... the rocket lifting slowly away ... the orbit ... the re-entry. Now try it again — with astronauts.



Ultimately, you're answerable to your country's leader. If you spend too much, don't launch enough prestigious missions or simply progress too slowly, you could be out on your ear.

player mode, create your own group of astronauts, toggle music, sound and video footage on/off, select one of nine difficulty levels, use your own name, and select which type of game you wish to play — basic or historical. Choosing a historical scenario makes American hardware more reliable, but more expensive than its Soviet equivalent.

The choices for both the US and Soviet sides are virtually the same: the differences lie in the actual technology involved, the budget funding, the attitude of bureaucrats — and in some visual and aural effects. Each side has control over research and development, administration (including planning future missions and purchasing hardware), astronaut recruitment and training, vehicle assembly, launching, your budget and over 50 missions.

As director of the space project, you have access to intelligence reports, astronaut records, and a whole bank of information in the Space Museum. You are also, unfortunately, subject to presidential review — and if your prestige is too low, you get the boot.

As you can see, it's pretty detailed stuff and it can be bewildering at first. However, there are two things which help you out. The first is an excellent manual which comprehensively details all of the controls and provides tactical advice, prestige points charts, milestone hurdles, a brief hardware guide — and even a suggested checklist for every turn.

The second is a thick historical manual which not only provides an accurate and atmospheric background to the action but also contains some useful observations about hardware. While the game itself isn't slavishly faithful to history, it does stick close enough to the facts and conditions of the time to be almost indistinguishable.

The first thing that any player will probably want to do is get a rocket into space. The principles that apply to this are the same for any launch: you need money to buy the hardware, money and time to research it until it's safe enough to launch, and enough money (eventually) to train and use astronauts. There are over 30 kinds of space hardware to choose from, divided into satellites, rockets, capsules and miscellaneous (items such as boosters and EVA suits). Time spent researching technology isn't wasted: a strong safety record makes future hardware advances easier to achieve, and success rewards you with prestige points. The more prestige you have, the less likely you are to be sacked.

Once you've bought the hardware, you have to assemble it in the Vehicle Assembly Building (VAB) and plan a mission. Missions can be either manned or unmanned, and range from simple sub-Earth orbit expeditions to the moon landing itself. Since the whole game is a 'race' into space, you also have the option of taking risks by launching rockets earlier than safety demands — it's up to you.

The right stuff

BARIS's excitement and tension are almost wholly confined to the moments when the rockets are in flight. This is partly because of the random factors in the game: if you save your position just before a launch and continually reload, you can get several different outcomes, ranging from a wild success to the death of an astronaut. It can be too tempting to use this method to make progress, particularly when your record with the President isn't too good.

The graphics during a mission also generate excitement: every time you launch a rocket you're treated to a slightly dis-



The Soviet spaceport, Baikonour, differs in appearance from Cape Canaveral and contains a radically different collection of hardware. The bureaucrats aren't too friendly, either.



jointed but impressive sequence of video stills, featuring digitised footage of real events. It doesn't sound like much, but it helps involve you in the game's atmosphere — almost a part of history in the making. These sequences are reinforced with digitised sound effects.

The rest of the game's graphics and sound are adequately functional, without ever scaling great technical heights. This is true of the game as a whole: despite its large hard disk space requirements (17Mb), there's very little apart from the video footage that enhances the presentation. For example, I would have liked more information on the astronauts, and greater control over their training.

Complexity is an issue which crops up continually during play. In some areas the variety is extremely good. So, there are 20 different ways of landing on the moon, there are constant, random restraints on your actions (such as budget cuts, injured astronauts, launch pad accidents, and so on), and the wide range of menus you are able to consult is impressive. In addition, the deeper you get into the game, the more complex it becomes, and the importance of your decisions increases accordingly.

On the other hand, you do eventually get a little tired of seeing the same video sequences over and over again, your strategic approach is dictated by the need to constantly impress (by testing and launching rockets successfully, for example), and you can't help feeling that the two decades you have to land on the moon aren't quite meaty enough to make you want to play again once you've won.

This last point is probably the most important. I would have liked to have played beyond the scope of the board game. The game is what it is, of course — but its strong strategic elements could certainly justify a data disk with new missions and hardware beyond 1977, or even an independent European space program. As it stands (and for the price) it needs that extra variety of another, different long-term goal.



The wrong stuff?

Buzz Aldrin's Race Into Space might not look like much, but appearances are deceptive. There are plenty of factors you have to watch to maintain success, and the wealth of data is initially overwhelming. There are also lots of little touches — such as the newscasts which precede every turn, the nuances of training and producing astronauts, random accidents, a cemetery for heroes killed in the course of their duty, and the wide number of missions — all of which contribute to the overall quality of the action.

There are minor faults, too, such as the two-player option which doesn't really work on a practical level, because you have to look away from the screen if it's the other player's turn. Also, the game's tone is biased against the USSR, which seems pointless if you're being offered the chance to control either side's space program. Whenever I played the Soviet side, I didn't want to be reminded, even occasionally, what a miserable country it was. It was tongue-in-cheek, of course, but it's also annoying after a while.

Techspec ***Speed isn't a vital consideration, so if you've got a 286 running at 12MHz you'll have no major problems — apart from the initial hour-long installation. Seven floppy disks provide the code, expanding to 17Mb on a hard disk; save files start at around 20K but get larger the further you progress. Apart from the sound cards listed below, Thunderboard and ProAudio Spectrum are also supported; both SoundBlaster and ProAudio Spectrum give you digitised sound as well as music. Keys perform most functions as well as a mouse.***

Disk requirements

High density	✓
Hard disk only	✓
Space taken on hard disk	17Mb

Graphic modes

CGA	✗	EGA	✗	Tandy	✗
VGA	✓	SVGA	✗		

Soundboards

Ad Lib	✓	Roland	✓	Sound Blaster	✓

Control

Joystick	✗	Keyboard	✓	Mouse	✓

Performance

Optimum speed	16MHz
Minimum memory	640K
Free RAM required	570K

On the other hand, it's good to see a board game achieving its true potential for once. Most are either too close in appearance to the original (Space Crusade the latest example, last month), or they lose the key element of playing with a friend which gives so many board games an extra edge, or they simply fail to make good use of the new medium. Buzz Aldrin has made good use of the PC to create an enjoyable turn-based strategy game.

Its only lasting faults are that it doesn't break much new ground technically, the two-player mode isn't very practical and it's ultimately repetitive. Those problems apart, it kept me glued to the screen for days — and if you've any interest in the history of space exploration, it should do the same for you.

■ Gordon Houghton

Alternatively...



Shuttle
Virgin, £49.99
Rated 8, Issue 5
There are no games which provide an exact match for Buzz Aldrin's Race Into Space, but Shuttle comes nearest in style. It's a true 'simulator', offering a myriad of realistic controls, a detailed training and reference manual, and missions which include a space walk and launching and fixing the Hubble Telescope. The graphics (CGA/EGA/16-colour VGA) are beginning to look old-fashioned, but the depth of the gameplay is excellent.

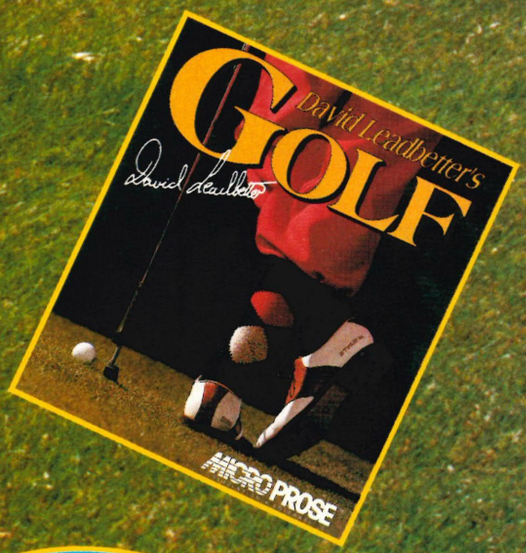


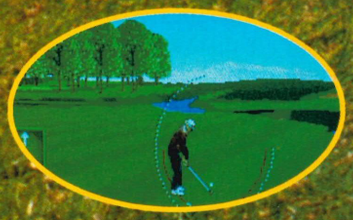
Chuck Yeager's Advanced Flight Trainer V2.0
Electronic Arts, £34.99
Chuck Yeager was the first man to break the sound barrier, in the experimental X-1. This flight trainer captures some of the exhilarating spirit of the test pilot era preceding the space race, and allows you to try out more modern aircraft such as the F117-A and the Shuttle. It's marred by a poor game structure, and in trying to be comprehensive it tends to be a jack of all trades. Interesting, but ultimately flawed — and you may struggle to find a copy these days.

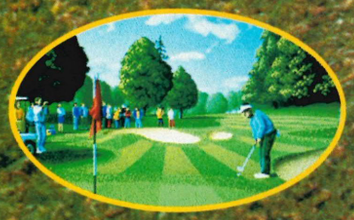
WORDS ON A VACUUM

If you want to know more about the hardware and personalities of the space race, you could do worse than read the 150-page historical manual included in the Buzz Aldrin package. If this doesn't satisfy you, there are plenty of others books around to fuel your interest. Tom Wolfe's The Right Stuff (ISBN 0-552-99367-0) is a superb, journalistic account of the early years of the American space program; and James A Michener's Space (ISBN 0-552-12283-1) is a powerful novel which parallels the real events without ever embracing them fully. However, for a thoroughly comprehensive and factual compendium of rockets and other space hardware from 360BC to the present, the Cambridge Encyclopaedia of Space (ISBN 0-521-36426-4) is hard to beat.

Like Nothing on Earth













For winning sports sims, go MicroProse. On the greens and race tracks, MicroProse grabs gold, relegating competitors to the ranks of also-rans and non-starters!

Take golf. Tested against Links 386 Pro, PGA Tour for Windows and Jack Nicklaus Signature Edition, David Leadbetter's Golf took a clear lead. None came close to its lifelike 3D graphics, shot recording facility, handicap system, video playback mode and multi-camera tracking options, according to PC Format in November '92.

Likewise in Grand Prix racing. When Oliver Gavin competed at Spa in Belgium recently, he was the only driver who had never driven the track. The night before he borrowed a computer and MicroProse Formula One Grand Prix. He learnt all about the circuit and next day he won the race! No other computer racing game simulates so accurately.

The only thing that compares is sport itself. Get the world's finest sports sims from MicroProse.

MICROPROSE®

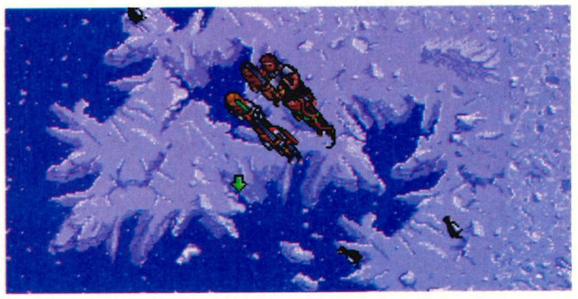
Seriously Fun Software

For IBM PC Compatibles, Commodore Amiga and Atari ST.
MicroProse Ltd. Unit 1 Hampton Road Industrial Estate.
Tetbury. Glos. GL8 8LD. UK. Tel 0666 504 399.



Title	**Ultima VII — Part Two: Serpent Isle**
Publisher	**Origin**
Contact	**(0753) 549442**
Price	**£44.99**

It's thermal undies time as you venture into the frozen wastes. The penguins look cute and cuddly and they taste pretty good too. After all, there isn't much to eat up here.



Ultima VII — Part Two

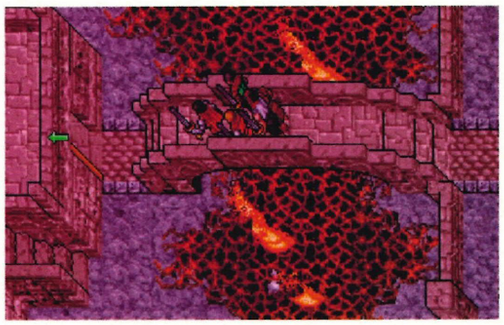
Sex, violence and exploding cats all contribute to the ongoing story of everyday Ultima folk

If you've played Ultima games before, you know that as soon as the Avatar turns up, there's going to be trouble. And we're not talking your everyday gripes and whinges, oh no. We're talking trouble with a capital T. Evil beings trying to take over the world. Plagues. Chaotic storms. Kidnappings.

Naturally, since you are the Avatar, fearless warrior and paragon of virtue, you'll take it all in your stride. OK, so you might get roasted alive, struck by lightning or nibbled to death by killer bunnies. So what? As Britannia's greatest hero, the most important thing is to keep a stiff upper lip.

Created by Richard Garriott, the Ultima series has been around since way back in the early 80s and, with eight adventures, two spin-offs set in other worlds, and the two Underworld games, is the longest-running games saga yet.

Most of the adventures take place in the fictional land of Britannia, where Garriott's alter ego, Lord British, rules and you, as the Avatar, routinely save the day. In Ultima VII, you thwarted the global-domination plans of a malign entity called the Guardian. Now he's back again, and this time he's conducting his vendetta from the mythical Serpent Isle.



Right: the underground city of Furnace is just one of the interesting places you'll visit. It's a bit warm here so don't forget to pack the ice box and the beers.

Below: he's back, he's mean and he still hasn't plucked up the courage to visit the dentist. It can only be the Guardian.



Not Ultima VIII, then?

As Serpent Isle is the eighth Ultima adventure, it seems a bit odd that it has been titled Ultima VII part two and not Ultima VIII. It is, after all, a full-blown game and not just an add-on to Ultima VII: The Black Gate. Well, there are two reasons for this.

Firstly, while each of the previous episodes has used a more advanced game engine than the one that preceded it, Serpent Isle employs the same system as Black Gate. The action is viewed from above, so that you look down on your characters and direct them around the landscape using your mouse.

Clicking on yourself (the Avatar) brings up your inventory, whilst clicking on other characters initiates a conversation. You can also open drawers, chests and doors by clicking on the, provided that they aren't locked. I wouldn't say it's that intuitive a system, but it's easy enough to use once you get the hang of it.

A few minor enhancements have been made as well: the inventory screens have been improved and character portraits are bigger, but this is essentially Ultima VII with go-faster stripes rather than a brand new model.

Secondly, Serpent Isle is very much a sequel to Black Gate, which left almost as many loose ends as the last episode of Twin Peaks. Serpent Isle seeks to tidy them up. It isn't necessary to have played Black Gate to enjoy Serpent Isle, but you will need to read the manual to understand all the historical references contained within the game.

The game begins with a brief but impressive introduction showing how the Avatar and three companions arrive on Serpent Isle. And what a friendly place it is! No sooner do you set foot on land than you're hit by lightning. Not just any old lightning, either. This stuff has the power to teleport you somewhere inconvenient, swap your vital possessions for useless

junk or, if you're really unlucky, turn you into a pumpkin.

Consequently, although you started the game laden down with magical artefacts and with your three best friends in tow, you soon find yourself on your own, armed with nought but a fir cone and a hairbrush and wearing a lady's fur hat. If you've deduced from this that the first part of the adventure might involve finding your companions and lost possessions, then you're correct.

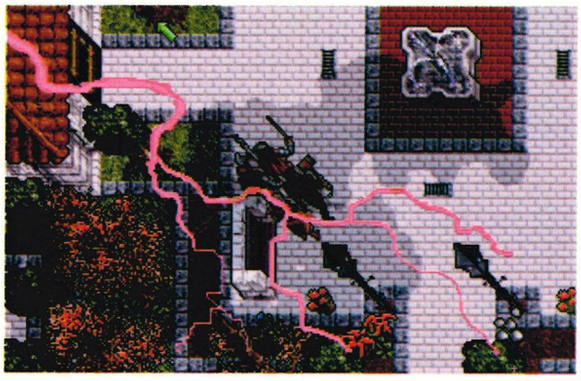
Those of you who have played Ultima VII will find some familiar faces in Serpent Isle. Your trusty companions, Iolo, Dupre and Shamino have all come along for the ride again, whilst Batlin, the Guardian's right hand man, once again fills the baddie role. There are, however, plenty of fresh characters to get to know and the Serpent Isle world is entirely new.

As with its predecessor, it's a huge game with a great many locations and numerous sub-plots. It certainly doesn't lack depth: I became so involved with it that I missed out on a lot of sleep and several meals. It's a bit like reading a book that you don't want to put down. The storyline is very entertaining and there are plenty of surprises, so the temptation is to keep playing for 'just another 10 minutes'.

Of course, one person's War and Peace is another man's fly swat, and this is not a game that would greatly appeal to action freaks. If you're into shooting things or flying around in supersonic jets, Serpent Isle will seem a little slow. There's a lot of trudging around to do, not to mention conducting many long, boring conversations with the locals, so it will hardly get the adrenaline flowing.

In terms of difficulty, Serpent Isle is quite a bit trickier than Black Gate. Black Gate started quite gently with a stroll round town, searching for clues to a murder. In Serpent Isle you are dropped straight in at the deep end, and have to navigate your way through a tricky dungeon complete with puzzles, secret doors and vicious beasts. Although I managed to get through Ultima VII without resorting to any help, Serpent Isle is a different

Serpent Isle



Fawn, City of Beauty, was also the main fishing port until the storms arrived. With its pristine white pavements and not a cod's head in sight, you certainly wouldn't mistake it for Hull.

Technical Hitches

With games becoming increasingly hungry for disk space (and at 25Mb, Serpent Isle is no exception), a disk compression utility might seem an attractive proposition for those who can't afford a bigger hard disk. However, not all games will run properly on a compressed drive and unfortunately Serpent Isle falls into that category.

The problem in this case is not the compression itself, but the fact that such a utility can use up to 45K of conventional memory. Since Serpent Isle needs 573K to run with sound, the memory used by the disk compression utility and other drivers may not leave enough memory free to run the game.

Normally it's possible to get round this problem by loading the compression utility and mouse driver into upper memory using Emm386.exe, a dual purpose device which is not only an expanded memory manager but also allows access to the upper memory blocks. This would free enough conventional memory to run the game. The trouble is, Serpent Isle requires extended rather than expanded memory and Origin uses its own extended memory manager, Voodoo.exe, which is incompatible with Emm386. Without Emm386, the compression utility and mouse driver cannot be loaded high and will have to sit in conventional memory. As a result, even if there is enough memory to run the game, there will probably not be enough for sound effects, which is a shame since sound adds considerably to the atmosphere.

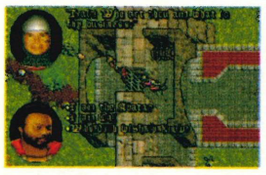
As a user of MS-DOS 6.0's Double Space utility, I managed to get Serpent Isle running with sound by reducing the compressed area of my disk and loading the game onto the uncompressed area. I then made a boot disk which didn't include Double Space and booted from this disk whenever I wanted to play Serpent Isle. This will be of little help if you can't free 25Mb of uncompressed space, in which case you will have to play in silence or not at all. If in doubt, contact the manufacturer of your compression utility and also the Origin helpline (0753) 549442.

Two Minutes *of snakes in the grass*

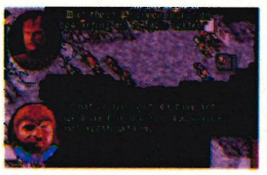
You're sea-sick, you're lost, and you're a long way from the nearest pub. Trying to find your feet in a strange land is certainly no picnic.



After a crossing to rival the Portsmouth-St Malo ferry, you've finally arrived on Serpent Isle. Since your ship has run aground,



You arrive Monitor, City of Courage. This cheerful guard directs you to the leader, Marsten, who is attending a funeral in the



Marsten can be found in the crypts, along with your second companion, Dupre. But where is your third friend, Iolo? Perhaps

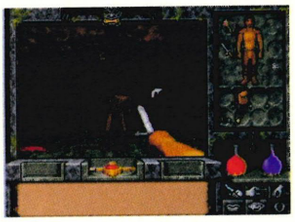


Seems Iolo has been mistaken for a wizard and is now languishing in gaol. Time to see the treasurer, Spektor, a shifty character

Alternatively...



Magic Candle III
Mindcraft/Electronic Arts, £34.99
Rated 7, Issue 20
Reviewed this issue, Magic Candle III is less flashy than Serpent Isle but, since it takes up only 5Mb disk space, might be more appropriate for those with less powerful machines. Perhaps less atmospheric than the Ultima games, it is nonetheless very playable and offers excellent value for money.



Ultima Underworld 2
Origin/Electronic Arts, £39.99
Rated 8, Issue 18
For those who prefer their role-playing in 3D, this is easily one of the best examples of the genre. Second in the Underworld series, the game is set a year after Ultima VII and gives you another chance to foil the Guardian. Great graphics and sound combined with an exciting plot.

kettle of fish. Some of the quests are fairly straightforward, but quite often progress relies heavily on saying the right thing to the right person at the right time. The game is certainly enjoyable but you will need patience to complete it.

One thing that Serpent Isle doesn't lack is polish. There's a lot of attention to detail and a fair bit of humour, although some of the jokes might elude those who haven't played Black Gate.

The graphics are colourful and attractive, and the soundtrack adds greatly to the atmosphere. Veterans of Ultima VII will recognise many of the tunes, although some of these have been rearranged. When you play these on the jukebox at the Sleeping Bull Inn, members of your party will make little jokey remarks, such as, "Not Sea Shanty! Cease!" or "Too slow. Let's have a real tune."

Such comments add life to the characters, but can be extremely funny when they happen out of context. One woman decided to open her windows in the middle of a thunderstorm because it was "too nice a day", whilst Shamino suddenly announced that he was hungry in a room full of dismembered bodies. Atmosphere the game has in abundance, but realism is not one of its strong points.

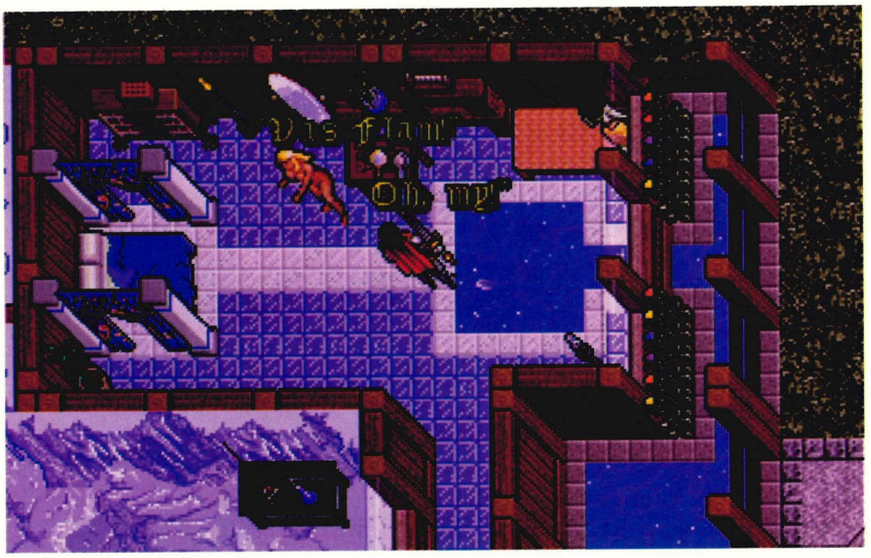
The principal advantage that Serpent Isle has over Black Gate is that it is mercifully lacking in bugs. Black Gate had more bugs than the Brazilian rainforest, but I am glad to say that that doesn't appear to be the case with the sequel; after many hours of play, I still haven't come across any problems.

My only real criticism of Serpent Isle is that the speed of the scrolling is somewhat inconsistent and jerky. One minute it can be moving at a reasonable rate; the next it slows right down. The game didn't exactly race along on my 20MHz 486, so *do* think twice before buying if you own one of the slower 386s.

I was also disappointed in the packaging of the game. The flimsy box was almost flat by the time I received it and looked very poor in comparison to the sturdy Ultima VII box I bought last year. The traditional dish-cloth map has also gone, replaced by a rather ordinary paper one. This might seem like splitting hairs, but buying decisions are often influenced by packaging and the Serpent Isle box does not reflect the quality of its product.

In all though, I found Serpent Isle to be well thought out and appealing. While it doesn't offer anything new it should please Ultima fans, and, indeed, anyone looking for an entertaining role-playing game.

■ Cal Jones



Frigidazzi must be the most inappropriately named character in the game. An encounter with her is unlikely to leave you with your virtues in tact.



Double-click on your character and you bring up his inventory. Items of clothing can be placed directly on the figure whilst clicking on your pack will reveal its contents. Another click on the heart icon brings up the statistics screen.

Techspec ***Requires 523K minimum to run and 573K for sound effects and speech. Takes up 25Mb hard disk space but is not designed to work with disk compression (see sidebar). Uses MS-DOS 3.3 or higher and needs 256 colour VGA. Mice must be 100% Microsoft compatible. Play is possible but difficult with a keyboard, so use a mouse if you can.***

Disk requirements						
	High density				✓	
	Hard disk only				✓	
	Space taken on hard disk				***25Mb***	
Graphic modes						
	CGA	✗	***EGA***	✗	***Tandy***	✗
	VGA	✓	***SVGA***	✗		
Soundboards						
	Ad Lib	✓	***Roland***	✓	***Sound Blaster***	✓
Control						
	Joystick	✗	***Keyboard***	✓	***Mouse***	✓
Performance						
	Optimum speed				***20Mhz (486)***	
	Minimum memory				***640K + 1Mb***	
	Free RAM required				***523K***	

PCreview **7**

LANDS OF LORE

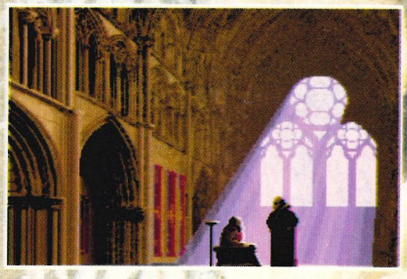
THE THRONE OF CHAOS

Legend has it that a Fantasy Role Playing Adventure like no other will come to pass. It will set new standards with its sheer scale. Its elaborate art, animation, discerning use of speech, and special effects will be talked about for years to come.

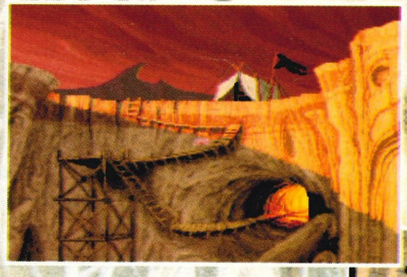




Now the legend is reality...



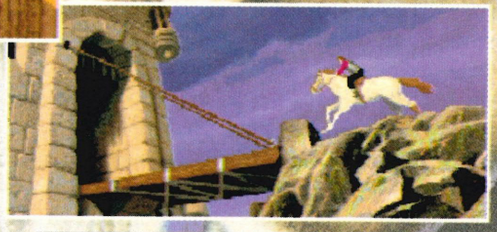
Lands of Lore: The Throne of Chaos from Westwood Studios, the talent behind Eye of the Beholder I &II.



Available for IBM PC and Compatibles



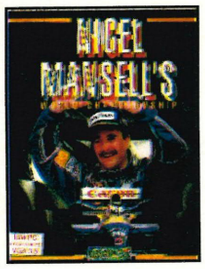




Westwood STUDIOS

Eye of the Beholder I and II are trademarks of TSR, Inc. The Eye of the Beholder games, TSR Inc. and SSI are not connected or related in any way to the Lands of Lore game, Virgin Games Ltd or Westwood Studios, Inc. Lands of Lore is a trademark of Westwood Studios, Inc. © 1993 Westwood Studios, Inc
℗ 1993 Virgin Games Ltd. All rights reserved.

Virgin GAMES



Title	**Space Crusade**
Publisher	**Gremlin**
Contact	**(0742) 753423**
Price	**£34.99**

Having taken a crash course in driving from the mustachioed one, it's time to throw yourself in at the deep end. Racing single circuits is for wimps — try a full season in Formula One instead ...

With MicroProse's Formula One Grand Prix already on the circuit, Nigel Mansell faces stiff competition. Will he get the chequered flag?

Nigel Mansell's World



Nigel Mansell is the current Formula One World Motor Racing Champion and (for anyone who's interested) BBC Sports Personality of the Year. He began his competitive career aged 10 racing Go-Karts, and joined Formula One in 1980. Now, as just about every motor racing fan will tell you, he's abandoned F1 for the oval Indy circuits in America. This grates a little when you're playing Nigel Mansell's World Championship (NMWC): rather than taking part in a current Formula One season or building on last year's success, you're obliged to race back in 1992.

Motor racing simulations and arcade games use either polygons alone or a combination of polygons and sprites to convey a sense of smoothness and speed. Polygons have been used successfully in games like MicroProse's Formula One Grand Prix, Accolade's Grand Prix Unlimited and EA's Indy 500 — these games tend to be more realistic, with crashes, car damage and long learning curves. Sprites are usually only found in arcade-style games such as NMWC: here the instant appeal of the action is more important than the learning process, collisions usually mean nothing worse than entering the pits on the next lap, and the realism level is low.

NMWC does have some elements found in good racing games: a preferences screen allows you to choose between manual and auto gearshift, three difficulty levels and joystick, keys or mouse. You can also use your own name and decide whether or not you want to chart your progress using the on-screen circuit map. Unfortunately, that's about as far as it goes: the rest of the game's features will suffice if you're looking for a quick race thrill, but will barely satisfy if you like a meaty, long-term challenge.

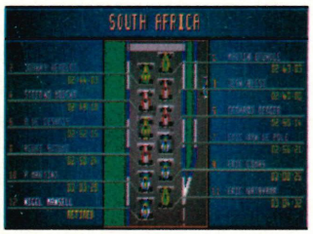
Round the bend

The action begins with five options on the main menu screen. You can practise circuits and achieve targets at the driving school, improve your technique with Nigel Mansell as a guide, select a control method, have a quick, one-off race or enter the World Championship.

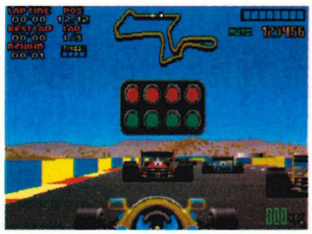
The driving school and 'Improve with Mansell' tutorials are pretty similar. In the school, your maximum car speed is controlled and you are guided along the correct racing line around the course of your choice. If you beat the target lap time, your maximum speed is increased and you have a new time to beat. The Improve with Mansell section is a little less helpful: Nigel's head appears during the practice and offers you such pearls of wisdom as, 'Avoid objects' and, 'Keep on the track'.

Let's face it, though, how many of you will practise before you race? Getting down to business on the track, choose a single

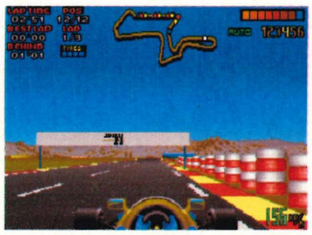
Two Minutes *in a blur of speed*



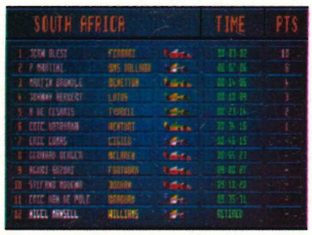
Before each race you're shown the starting line-up — 11 other drivers with differing abilities are out to beat you. If you didn't bother to complete a qualifying lap (not a good idea) you start from the back of the pack.



At last the moment arrives. You're on the grid, the tension is mounting — and you've got an itch in the middle of your back and seven laps to go before you can scratch it. The lights change — and you're off!



If you've chosen manual gears you'll have plenty to think about during the race. Other cars, trackside obstacles, tunnels, bends, dips and weather conditions try to stop you reaching the chequered flag first.



The race is over, but you haven't been too successful this time. Your progress in the World Championship can be saved to disk — but you'll need a little more practice if you seriously intend to compete.

circuit, select your track and have a nippy, competitive drive for three laps. Choose the full race season and you're thrown into the World F1 Championships of 1992, beginning in South Africa and ending in Australia. Here you get just seven laps — not the 60 or 70 you'd expect.

The stages leading up to both types of race are the same. Once you've studied the course map and weather report you can tune the car, try a qualifying lap or enter the race. Tuning isn't quite as exciting as it sounds because there are only four parameters to change: tyres, aerofoils, gear ratios and gears. Each of these has only three variables at most.

Next, it's time to qualify — or it should be, if you've got any sense. Qualification involves a single lap, starting from the pits, to determine your position on the starting grid for the race proper.

At last you come to the race. The lights change, the cars ahead pull away, and ... well, it's all a bit disappointing, really. The major problem is that there's not an awful lot to the game: you drive around for a few laps using a simplistic and sometimes sluggish steering method, you collide with a few cars, and you try to finish first. Apart from the combination of bends and straights, and a few varied track conditions, every course is the same.

In addition, the graphics and sound aren't all they might have been. The 3D is quite pretty, but the trackside detail is sparse and unimaginative, and there are few clues to tell you which country you are supposed to be racing in. There are no grandstand or crowd graphics, no buildings — little, in fact, to convey any sense of atmosphere. Even Monaco, accurately described as 'a tight, twisting city circuit', might as well be taking place in a field. The music is adequate, although you don't get a choice of tunes (an option Gremlin offered on other driving games), and the sound effects are minimal.

Pole position?

Don't think that NMWC is all bad: there's enough in it to keep you playing for a few weeks if you get hooked on the 1992 World Championship and you're prepared to try out the difficulty levels and different gear options. On the whole though, this is a pretty average racing game with a few basic options tacked on to give an impression of complexity. It doesn't have any of the features that might push the mark up a few notches, such as a course designer, stunning visual effects, realistic crashes, a two-player option, a choice of cars or drivers, or action replays. Since it uses sprites to depict the car graphics, you don't get a variety of camera views either.

If you want a no-frills, arcade-style driving game which makes more demands on your fingers than your brain, this should keep you happy; but if you're looking for a successor to Formula One Grand Prix, this isn't it.

■ Gordon Houghton

PCreview **5**

Championship

Techspec ***Nigel comes on two floppy disks which you don't have to install. You need at least 20MHz for decent 3D movement: 16MHz is playable but slow, and 33MHz runs at arcade standard speed. Avoid the PC speaker's grating music and feeble effects.***

Disk requirements

High density	✓
Hard disk only	x
Space taken on hard disk	13Mb

Graphic modes

CGA	x	EGA	x	Tandy	x
VGA	✓	SVGA	✓		

Soundboards

Ad Lib	✓	Roland	✓	Sound Blaster	✓

Control

Joystick	x	Keyboard	✓	Mouse	✓

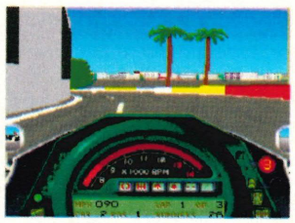
Performance

Optimum speed	20MHz
Minimum memory	640K
Free RAM required	575K

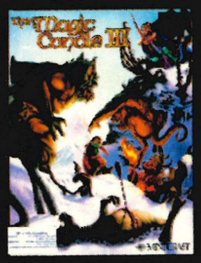
Alternatively...



Formula One Grand Prix
MicroProse, £44.99
Rated 8, Issue 15
This was THE racing simulation of last year, and is a more sophisticated alternative to Nigel Mansell. Featuring a polygon-based 3D display, it has everything you need to recreate the F1 season: circuits, practice and qualifying laps, variable driving complexity, and even 70-lap races! Quick, three-lap races and superb presentation cater for arcade fans. Only the lack of 'real' F1 drivers lessens the experience.



Indianapolis 500
Electronic Arts, £29.99
This is the kind of racing Nigel Mansell currently favours.Indy 500 is one of the oldest, but still one of the best, racing simulations around. Even though it only has one track (the 2.5 mile oval Indy Motor Speedway circuit), there are loads of features which make it enjoyable. These include a six-view replay option, the ability to save spectacular crashes, excellent opponents, difficulty levels and car customisation facilities.



Title	The Magic Candle III
Publisher	Mindcraft Electronic Arts
Contact	(0753) 549442
Price	£34.99





The Magic Candle III

The Magic Candle series has been around since Ultima III was released, but has achieved limited success to date. With the release of the third episode, that may be about to change ...

Nowadays most computerized role-playing games have become nothing more than glorified hack n slay' products which allow you to kill as many creatures as possible in the least time. Although they contain a story-line and a plot, the aim of the game is to enter into combat as often as you can.

Magic Candle III shows a welcome return to a more traditional role-playing style where forethought, interaction and preparation are more useful than a well-used sword-arm. Admittedly, the story-line is common fare. Once again the Solian Lands are under threat from an insidious evil and it's up to you, assuming the role of Luka, to gather together a brave band of heroes to stop it.

The evil takes the form of a mysterious blight which is spreading across the world causing poor harvests, sickness and mutation. Unfortunately the King is away fighting another evil horde, so the Queen asks you to put an end to this deadly plague. To do this, you first choose a character from one of the five different personality profiles in MCIII. That done, you have to select three companions from a host of willing volunteers and after modifying their statistics to suit your tastes, you're ready to begin the adventure.

The game starts with the party in the middle of the blighted forest southwest of Castle Osherun and the town of Telermain. The forest is actually a maze and your first task is to escape it alive.

Once out of the forest, it's best to visit the town and the castle, because important information and new recruits are available there. If you're familiar with the Ultima games, you will have no trouble getting to grips with MCIII. It is similar in both graphic presentation and game mechanics, although there are several major differences which make it unique.

MCIII uses the top-down graphic technique enabling you to see the world as if looking from directly above it. For a game that takes up only 5Mb of hard disk space, I was pleasantly surprised to find the graphics very clear and attractive, with a considerable amount of detail.

You move your group around using either the mouse or the keyboard, in any formation you want. When your team comes across a door or combatant, the screen changes to reveal either a well designed household or an impressive terrain screen, complete with monsters.

Conversation is once again similar in style to the Ultima series. After choosing who you want to talk to — your character only has to have the required person in eyesight to do this — you enter into a sub-menu which enables you to speak to them or question them. The more interesting areas of conversation are written in red and the menu allows further dis-

Techspec

Magic Candle III requires 1Mb of free extended memory to load the digitized Sound Blaster sounds. To run the program you may have to convert expanded memory to extended by removing or altering your EMM386 command. It's recommended that you create your own boot disk purposely configured to do this. You must also have the line "Files =12" or more in your Config.Sys file.

Disk requirements

High density	✗
Hard disk only	✓
Space taken on hard disk	5Mb

Graphic modes

CGA	✗	EGA	✗	Tandy	✗
VGA	✓	SVGA	✓		

Soundboards

Ad Lib	✓	Roland	✗	Sound Blaster	✓

Control

Joystick	✗	Keyboard	✓	Mouse	✓

Performance

Optimum speed	12MHz
Minimum memory	640K
Free RAM required	560K

cussion on this subject, so that important information can be revealed.

From the information obtained, it's possible to piece together what is going on in the plague-ridden areas. The Magic Candle is a massive game, with information appearing on a regular basis, and I was very pleased to see the inclusion of a notepad facility — something every computerised RPG should have — which saved me a terrific amount of time.

MCIII also includes a host of other features that give the game much more depth and atmosphere than most other so-called role-playing games. For example, it's possible to have over 30 adventuring companions working for you at the same time! This is because you can send your friends off on individual tasks and while they're gone you can recruit someone else for another mission.

Getting your companions to investigate things for you and managing their time for them is a deciding factor in successfully completing the game. Again, unlike other games, the NPCs in MCIII each have independent personalities. If you treat them badly or give them a lot of mundane tasks, they won't think twice about seeking alternative employment.

Another element of MCIII I liked were the touches of semi-realism throughout the game. For example, people will reveal less information to your group if they barge in with swords at the ready, and some get very upset if your group walk into their houses unannounced.

Combat also plays its part in MCIII, and when it does occur it's quick and deadly. A well-equipped party which has its tactics sorted out before battle will still find the going tough — any other group will be simply wiped out.

Like Ultima and the AD&D games, each character gets an opportunity to enter into combat once it becomes inevitable. Casting spells, firing missiles and throwing projectiles all produce excellent sound effects when using the digitised option on the Sound Blaster and they really add to the games atmosphere.

Indeed, the sound is used throughout the game in an excellent fashion. Each time an adventurer goes up a level in a particular skill — and there are more than 25 in all, ranging from wood-working to sword-play — a tremendous wall of sound is delivered to announce the fact. The first time I heard it I nearly jumped out of my chair in surprise.

As far as criticisms go there are relatively few. I'm not a great fan of the way the menu system has been designed — a problem the MC series has suffered from before — as this slows down the gameplay somewhat.

Also, when in combat, it's sometimes hard to see the monsters properly because some of them are small and slightly fuzzy. In addition, your lead character often gets surrounded by his NPCs. As a result, he then gets trapped and is unable to move, unless you select a new lead character. Getting round this problem becomes a real chore after a while.

That said, the current fashion for RPG designers is to design games for computers which are based on the latest technology, and this leaves the RPG market open for well-designed games such as MCIII, as it will appeal to people who can't always afford machines at the forefront of technology.

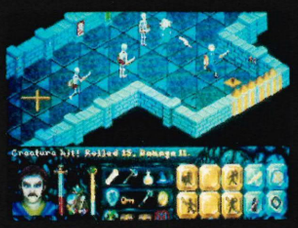
■ Wayne Legg



After visiting the castle and finding the Queen, Lukas officially greets her with a view to talking to her afterwards. Protocol should be followed at all times.

PC*review* **6**

Alternatively...



The Summoning
SSI/US Gold
£34.99
Rated 5, Issue 14

An overhead, but isometric viewpoint role-playing game in which you only get to control your own character, rather than a party, in order to fight, puzzle and use magic in the eternal fight between good and evil. This is a large and complex game (helped by auto-mapping feature), but is hardly state of the art graphically, and the control system is a touch unwieldy.



Ulitma VII: The Black Gate
Origin Systems
£39.99
Rated 4, Issue 9

A brilliant game, even if originally flawed, the graphics are superb (you actually see rain falling as characters travel), the storyline gigantic, and the sound crystal clear. However, you need a PC with 21Mb of hard disk space, 560K free RAM, 2Mb of available memory and a minimum 386 processor (running at 25MHz, but 33MHz is advisable), VGA graphics and a Sound Blaster card.

Two Minutes *of beating Blighty*

An evil plague threatens to engulf the entire world and it is up to you to do something about it. You won't have to go it alone, luckily.



The blight has arrived and the people of the island want something done about it. The queen asks Luka for help. That means you too!



Initially, things don't look too good. All these bones lying around don't exactly fill you with confidence, do they? Still, you have plenty of assistance.



The combat screen shows the battle in full flow. A mysterious orc has joined the fray on your side, so there is only one more blight monster to kill.



With the battle won the orc introduces himself. He is none other than Prince Gazbondger of Kabclo and he seeks your aid. No rest for the wicked!



Title	**Unlimited Adventures**
Publisher	**SSI/US Gold**
Contact	**(021) 635 3366**
Price	**£35.99**



This is your virgin dungeon. Having selected the relevant option from the menu, I'm about to build some walls.

Unlimited Adventures



Dungeon masters everywhere will welcome the chance to flex their creative muscles with this AD&D adventure design kit

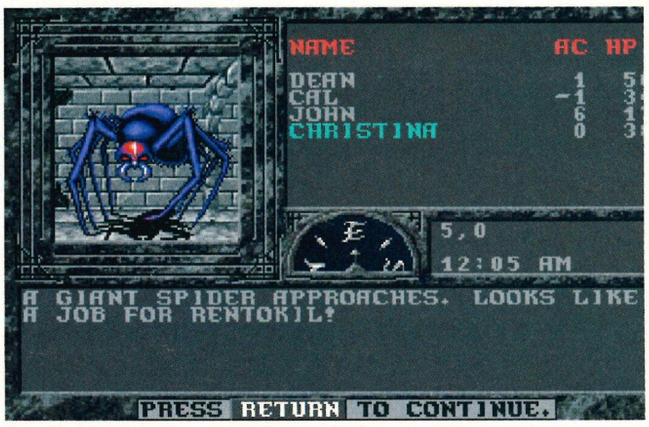
If you think you might be able to come up with something more imaginative than the game designers, SSI's Unlimited Adventures gives you the chance to play God and create your own scenarios. Being a sad old veteran of pen and paper role-playing games, I welcomed the chance to put together a dungeon, even though the results were rather mixed.

The kit gets off on the right footing, in that you don't have to be technically minded to use it. The manual gives good, clear instructions and the point-and-click interface is straightforward and easy to use.

You start off with a blank floorplan to which backdrops and scenery can be added. Walls and doors are placed either by clicking directly on to the floorplan itself, or by using the 3D view and clicking on left and right buttons so, in effect, you build as you go. Scenery, together with maps, monsters and NPCs, can be chosen from the extensive image library which features artwork from previous Gold Box adventures. Budding graphic artists will be glad to know that it's possible to import your own artwork from paint programs such as DeluxePaint.



Here's one I prepared earlier. Once you've created and populated your dungeon, you can give it a testrun using a party of characters. I wouldn't want to find one of these in the bath.



Once you've constructed a basic dungeon, you begin to furnish it with events such as combat, teleporters, stairs or finding treasure. You can be as devious as you like, but it's better to keep things simple at first, or you end up with an unbalanced and unplayable dungeon.

To check whether a chain of events works, and how the dungeon appears from a player's point of view, you can playtest from within the design module. This betrays any structural mistakes, like forgetting to prevent your party from walking through walls, or creating doors which are visible on one side but not the other.

When these bugs have been ironed out, the completed levels can then be linked together to create buildings, cave systems or outdoor sections. These are, in turn, linked to a map area to enable you to travel between them. The game can be as big or small as you want it to be, provided you take into account restrictions like hard disk space.

The main drawback of Unlimited Adventures is not the construction kit itself but the game you get at the end of it; no matter how much time, effort and imagination you put into designing your dungeon, the finished product is rather mediocre. The 3D view window is tiny, the game interface unattractive and the combat sequences are long-winded and ugly to look at. Fans of Gold Box adventures might want to add this to their collection but those with more sophisticated tastes will find it lacking. Just as you can't make a silk purse out of a sow's ear, you couldn't expect to create an Ultima-beater out of the raw materials of a game system which is getting distinctly long in the tooth.

■ Cal Jones

Techspec ***Requires 586K free RAM to play with sound or 524K to run without. Also requires MS-DOS 3.3 or later versions.***

Disk requirements

High density	✓
Hard disk only	✓
Space taken on hard disk	***2Mb***

Graphic modes

CGA	✗	***EGA***	✗	***Tandy***	✗
VGA	✓	***SVGA***	✗		

Soundboards

Ad Lib	✓	***Roland***	✗	***Sound Blaster***	✓

Control

Joystick	✓	***Keyboard***	✓	***Mouse***	✓

Performance

Optimum speed	***16MHz***
Minimum memory	***640K***
Free RAM required	***524K***

Visionary Software

Access **Tel: (0305) 853513** **MON-SAT 9am-9pm**

You might beat our price but you won't beat our service

VISA

Title	Price
ACES OF THE PACIFIC	£29.99
ACES OF THE PACIFIC WW1I 1946	£19.99
A320AIRBUS	£34.99
ALONE IN THE DARK	£30.99
ANOTHER WORLD	£24.99
A.T.A.C.	£32.99
ATP VERSION D	£32.99
A TRAIN	£28.99
BAT II	£29.99
BATTLE ISLE	£26.99
BATTLE ISLE DATA DISC	£16.99
BATTLECHESS 4000	£26.99
BUZZ ALDRIN RACE INTO SPACE	£29.99
CAESAR	£26.99
CALIFORNIA GAMES	£22.99
CAMPAIGN	£29.99
CAPTIVE II	£26.99
CAR & DRIVER	£29.99
CARRIERS OF WAR	£26.99
CASTLE II	£27.99
CHAMPIONSHIP MANAGER	£22.99
CHESSMASTER 3000	£29.99
CIVILISATION	£29.99
COMANCHE MAXIMUM OVERKILL	£33.99
CRUISE FOR A CORPSE	£22.99
CRUSADERS DARK SAVANT	£33.99
CURSE OF ENCHANTIA	£25.99
DAVID LEADBETTER'S GOLF	£33.99
DIZZY COLLECTION	£22.99
DOG FIGHT	£33.99
DUNE	£27.99
DUNE II	£27.99
D/GENERATION	£15.99
ELITE PLUS	£28.99
ELVIRA 2 JAWS OF CERBERUS	£28.99
EPIC	£25.99
EYE OF THE BEHOLDER I	£22.99
EYE OF THE BEHOLDER II	£25.99
F15 STRIKE EAGLE III	£33.99
FALCON 3	£34.99
FALCON MISS FIGHTING TIGER	£18.99
FLIGHT SIM V4	£42.99
FLIGHT SIM 4 GB DATA DISK	£29.99
FRONT PAGE SPORTS FOOTBALL	£29.99
FUN SCHOOL RANGE	£19.99
FUN SCHOOL PAINT & CREATE	£19.99
FUN SCHOOL SPELLING FAIR	£22.99
FUN SCHOOL MERLIN MATHS	£19.99
GOBLIINS 2	£24.99
GRAND PRIX FORMULA 1	£33.99

Title	Price
GRAND PRIX UNLIMITED	£26.99
GREAT NAVAL BATTLES	£28.99
GUN BATTLES ADD ON DISKS	£15.99
GUNSHIP 2000	£28.99
GUNSHIP 2000 SCENARIO DISK	£19.99
HARRIER AV8B	£29.99
HARRIER JUMP JET	£33.99
HEROES OF THE 357TH	£24.99
HISTORYLINE 1914-1918	£29.99
HUMANS	£22.99
HUMANS JURASSIC LEVELS	£14.99
INCA	£33.99
INCREDIBLE MACHINE	£29.99
INDY FATE OF ATLANTIS	£27.99
JIMMY WHITE'S WHIRLWIND SNOOKER	£23.99
JO & MAC CAVE MAN NINJA	£22.99
JOHN MADDENS FOOTBALL	£22.99
KINGS QUEST VI	£33.99
K.G.B.	£26.99
LEGENDS OF VALOUR	£29.99
LEMMINGS	£24.99
LEMMINGS II THE TRIBES	£29.99
LINKS	£28.99
LINKS 386 PRO	£33.99
LINKS COURSES	£17.49
MAUNA KEA	£17.49
BANFF SPRINGS	£17.49
LOST FILES OF SHERLOCK HOLMES	£29.99
MARIO IS MISSING	£29.99
MEGA LO MANIA	£26.99
MICHEAL JORDAN IN FLIGHT	£29.99
NODDY'S PLAYTIME	£22.99
N.F.L.	£28.99
PACIFIC ISLAND II	£26.99
PERFECT GENERAL	£26.99
POWERMONGER	£24.99
PUTT PUTT JOINS THE PARADE	£22.99
QUEST FOR GLORY III	£39.99
REACH FOR THE SKIES	£26.99
RED BARON	£29.99
RED BARON DATA DISK	£18.99
REX NEBULA	£33.99
SECRET OF MONKEY ISLAND 2	£24.99
SENSIBLE SOCCER	£22.99
SHADOW PRESIDENT	£33.99
SHUTTLE	£28.99
SLEEPWALKER	£24.99
SPACE QUEST V	£30.99
STREETFIGHTER II	£22.99
STRIKE COMMANDER	£37.99
STRIKE COMMANDER SPEECH PACK	£14.99
STUNT ISLAND	£37.99
THE LEGACY	£34.99
THE MANAGER	£23.99
TORNADO	£34.99

Title	Price
ULTIMA UNDERWORLD	£28.99
ULTIMA UNDERWORLD II	£29.99
ULTIMA VII	£28.99
ULTIMA VII PART TWO	£29.99
WAX WORKS	£27.99
WING COMMANDER II	£28.99
WING COMMANDER SPEECH DISK	£13.99
WING COMMANDER OPS 1	£14.99
WIZKID	£22.99
X-WING	£33.99
XENOBOTS	£29.99
ZOOL	£26.99

Special Offers

AMAZON	£29.99
B17 FLYING FORTRESS	£30.99
COOL WORLD	£21.99
DARKLANDS	£30.99
DREAM TEAM	£21.99
F117A STEALTH FIGHTER	£26.99
LURE OF THE TEMPTRESS	£16.99
PUSHOVER	£19.99
ROBOCOP 3	£19.99
SPECIAL FORCES	£19.99
THE GAMES ESPANA '92	£22.99
WORLD TENNIS CHAMPIONSHIP	£23.99

Joysticks

CH MACH I	£18.99
CH MACH II	£25.99
CH MACH III	£30.99
CH FLIGHT STICK	£40.49
CH GAME CARD AUTO	£34.99
CH GAME CARD III MCA	£44.99
QUICKSHOT SMARTCARD	£14.99
QUICKSHOT JOY & CARD	£19.99
QUICKSHOT WARRIOR 5	£19.99
QUICKSHOT INTRUDER 5	£25.99

CD ROM

7TH GUEST	£ PHONE
ECOQUEST	£34.99
LOOM	£33.99
SHERLOCK HOLMES II	£36.99
WILLY BEAMISH	£32.99

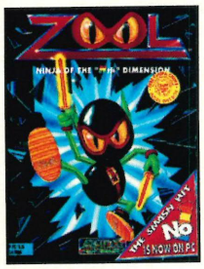
Free P&P on all UK Orders

Order Sensible Soccer here only £22.99!!

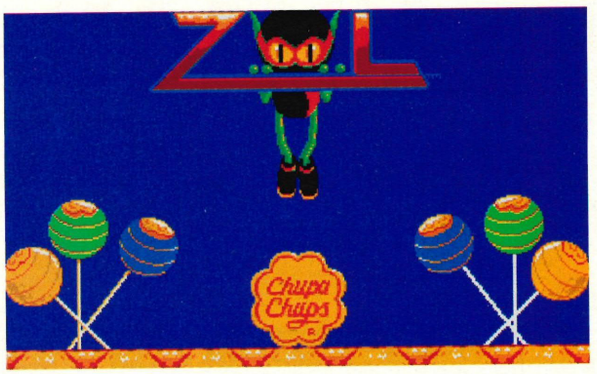
Visionary Software Dept PCR P.O. Box 1594 Dorchester Dorset DT2 8YL

PLEASE PHONE IF YOU DO NOT SEE THE PRODUCT YOU REQUIRE

Credit Cards, Cheques & Postal Orders Accepted. All prices include P&P (UK) and VAT. Goods offered subject to availability. Prices Subject to Change without notice E&OE



Title	**Zool**
Publisher	**Gremlin**
Contact	**(0742) 753423**
Price	**£34.99**





Zool

The much-hyped ninja from the Nth dimension is here —and he's aiming to prove, yet again, that the PC can handle arcade games as well as any other home computer

Zool has a good record on other formats. After its initial release last September, high magazine ratings led to weeks on end at the top of the Gallup charts, a good deal of hype and self-congratulation from Gremlin, and even a prospective coin-op conversion. Of course, if the PC version played like a slug this record wouldn't be worth the price of a rubber shuriken.

But first things first. What you get in the box, apart from a brief manual, is a free Chupa Chups lolly (very tasty) and a huge poster of Zool, the nimble ninja of the title. This only reinforces any initial impressions you might have that the game is directed primarily at 'younger' players. However, if (like me) you'll seize any opportunity to play a decent arcade game, the target age-group shouldn't bother you.

Worlds apart

The plot, for what it's worth, is this: travelling home after a spot of heavy duty ninja work, Zool was sucked into a vortex by a mysterious power. This same mysterious power has set him the challenge of journeying through six perilous worlds filled with baddies and handy collectables. If he fails, he won't be putting on his ninja slippers and supping cocoa in front of the fire tonight.

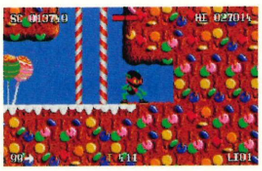
Eager as you may be to begin, it's worth taking a look at the options screen first. As well as allowing you to select a joystick or redefinable key controls, this gives you a choice of two scrolling speeds, three difficulty levels, four music tracks and up to five continues. Effectively, this means you can make the action as easy or as hard as you like — and if you don't want to listen to any of the tunes, you can opt for decent sound effects instead.

You enter the game. Each of the six worlds is divided into three levels, and at the end of every third level a Boss enemy lurks. The screen scrolls smoothly in eight directions, Zool is able to perform seven different basic functions — such as running, clinging to walls and spinning in mid-air armed with a sword — and he can also make use of six special tools, such as smart bombs and shields. The full-screen graphics are quite impressive throughout, with good animation, plenty of variety and lots of colour.

Some of the levels lead to hidden shoot 'em up stages in which you can collect all sorts of bonuses. I won't be giving much away if I tell you that the first is in World 2-1, because you'll probably find it by accident anyway — the others require a little more skill to uncover. All of the levels have secrets to be discov-

Two Minutes *spent searching for the Nth dimension*

Zool, an interstellar cosmos dweller, is lost. He got sucked into the wrong vortex after one sake too many and now he's trying to find his way home to the Nth dimension. Six worlds lie ahead of him, of which this is only the first ...



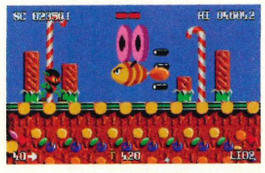
The action begins. With a shimmy and a spin our ninja hero prepares to do battle. He can run, crouch, leap, slide, fire bullets, spin in mid-air and cling to walls. Unfortunately, he's also quite vulnerable — and that means trouble.



Sometimes things aren't what they appear to be on Zool's voyage home. Friends may laugh at you for punching every wall in sight, but there's always a chance that you'll find that special bonus. 10,000 points coming right up ...



As well as a hand-held bullet dispenser used for attacking creatures on the ground, Zool has his own unique way of dispatching airborne enemies. With one giant leap he flies through the air, unsheathes his sword and spins rapidly.



Unfortunately, flying through the air isn't always a pleasant experience: precipitous drops often have a nasty ending. As you can see, the nifty ninja is about to get spiked — and if he doesn't scramble on to the wall, he'll die.



You're not seeing double — this special effect is known as Twozool, and is just one of a range of tools at Zool's disposal. Others include bombs, jumps, shields, time bonuses and extra lives.

ered, whether it's a concealed room, an object which yields collectable items when you hit it or a puzzle sequence which gives you extra points. These secrets and the urge to accumulate a high score are what give Zool a reasonably long playing life. Even if you finish it (and this is an achievement on the hard level or the fast scrolling speed), it's likely that you will have missed something.



Baddies vary from world to world. In sweet world, for example, you face two types of jelly, some mean liquorice allsorts and several squadrons of bumble bees; in fruit world you have to deal with a pomegranate volcano, flying pea pods and spitting carrots. Special tools and two basic weapons (bullets and a spinning sword) make life significantly easier, but you can also jump on some baddies from a great height. This is not recommended when you face the end-of-level Boss enemies: each one — be it the giant bumble bee or the indescribable two-eyed thing — needs unique tactics to be defeated.

Annihilating everything that moves isn't just a matter of survival, however — you can also be rewarded with collectable objects (which give you points and vary, graphically, from world to world) or extra energy. Extra energy goes some way towards compensating for the game's more irksome moments. For example, the baddies aren't so tough as individuals, but there are plenty of them and they tend to regenerate when your back is turned. This can be extremely annoying if you get 'stuck' in a situation where you're trying to scale a wall and enemy bullets keep knocking you back down. Even if you kill your foe you sometimes have to beat him up all over again.

Cool Zool

Despite the ecstatic reaction it's received to date on other formats, I don't feel that Zool has really fulfilled its potential on the PC. The number of levels is quite limited (18, plus hidden bonus stages and rooms), the main character has only half a dozen bonus weapons and tools, and the price is a little expensive for what's on offer — particularly when you consider that the Amiga version is almost £10 cheaper. After all the hype, I was expecting a PC rival for Super MarioWorld or Sonic The Hedgehog, but Zool sadly falls some way short of this.

Even so, it's still very impressive. The challenge of striking a perfect balance between racing through the level and getting as many points as possible is compelling, and there are enough secret features around to keep you searching for that high score even after you've completed the game. Add to this three difficulty levels and a variable continue option, and you have one of the best arcade games currently available on the PC.

■ Gordon Houghton

Techspec

Zool makes few demands on your hardware. Even on a 12MHz 286 the scrolling is impressive and disk loading times minimal; a little faster and you'd be pushed to spot any fundamental differences between this and the Amiga version. You can play from the single low-density floppy or a hard disk — there's little to choose between them. No sound cards other than the three below are supported; if you have one of these you'll be treated to a quartet of varied tracks and good effects. The joystick control is excellent, and preferable to keys unless you're a demon on the keyboard.

Disk requirements

High density	✗
Hard disk only	✗
Space taken on hard disk	0.65Mb

Graphic modes

CGA	✗	EGA	✗	Tandy	✗
VGA	✓	SVGA	✗		

Soundboards

Ad Lib	✓	Roland	✓	Sound Blaster	✓

Control

Joystick	✓	Keyboard	✓	Mouse	✗

Performance

Optimum speed	16MHz
Minimum memory	640K
Free RAM required	540K

Alternatively...



Magic Pockets
Renegade, £30.99
Rated 7, Issue 11
Like Zool, this is one of the more impressive platform and puzzle games for the PC, although its design is aimed more at younger players than adults. However, if you're a fan of cutesy arcade releases, four worlds of action with bonus features and surprise levels should keep you occupied. If you want a slightly more aggressive and 'adult' experience, try Gods (Renegade, £34.99 – Rated 8, Issue 4).



Wizkid
Ocean, £29.99
Rated 8, Issue 16
A joystick is essential to get the most from Wizkid's bizarre combination of platform and puzzle action. A lot of the gameplay lies in completing single screens by killing enemies with bricks and collecting colour bubbles, although there are flick-screen arcade sequences too. Bonus objects, varied difficulty settings and irresistible humour make it even more compelling.



Title	**Xenobots**
Publisher	**Novalogic/Electronic Arts**
Contact	**(0753) 549442**
Price	**£39.99**

After the aerial exploits of Comanche, Novalogic comes back down to earth with a tale of futuristic combat between towering metal mechanoids

Xenobots



Humanoid Xenobot: the primary fighting machine. Medium speed and heavy armour make this the workhorse of your forces. Armed with seekers and plasma cannon, the humanoid is 18m tall and only available in blue. Seats one.



Scorpion Xenobot: Large. Looks like a scorpion, packs the sting of a scorpion, has the agility of a brick. Armed with dual cannons and a tail missile, the scorpion is the cargo carrier and builder of the relay net. Available in Ferrari red with a touch of blue.



Scout Xenobot: lightly armoured reconnaissance robot, best used as an intelligence gatherer, extending the range of your radar picture. Armed with seekers and a small cannon, the scout is 15m tall and looks like a chicken.

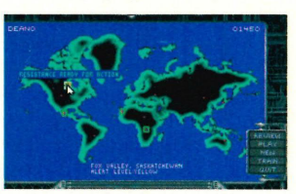
If you think of that old favourite Battlezone, add huge robots that look like Transformers, a pinch of strategic thinking and a shattered post holocaust landscape, what you finally end up with is Xenobots, the new game from Novalogic and Electronic Arts.

Xenobots, the robots of the title, are colossal. They are huge, they are monstrous and they are horribly beweaponed. Fortunately, you have a sizeable number of them under your direct control. Unfortunately, so does the computer and what this all amounts to is a conflict of epic proportions. It's human vs alien or rather player vs computer in a "shoot-everything-and-save-the-Earth" type scenario. After the success of its previous release Comanche Maximum Overkill, Novalogic has opted for ground-based combat, employing the latest in ray tracing and 3D modelling in the hope of creating the feeling of war between these skyscraper-sized robotic death machines.

Rather than have the obligatory animated opening sequence, the opening screens of Xenobots tell the story of the robotic invasion through a series of beautifully rendered static screenshots. These still images work very well together to relate an atmospheric background story to the alien invasion.

In the year 2193, a leviathan alien craft

Once more unto the breach, with a force of heavily armed robotic death machines at your disposal. Serious action is called for to save this post-holocaust world.



Enemy resistance is building slowly in Central America and Africa. Having already neutralised the threat in Central Europe, all attention can now be directed to North America where friendly forces are on yellow alert.

swung slowly into earth orbit and dropped dozens of small pods around the planet. From these, giant robots emerged, shunning the hand of friendship and laying waste to everything around them. Mankind fought valiantly, but total destruction was only averted when the alien vanguard was halted by tactical nuclear bombardment, which also destroyed most of the planet. A time of rebuilding followed where mankind reverse-engineered its own legion of robotic warriors so that as the invaders returned, they could be fought once again, this time on equal terms.

Once more the chance to save the world drops into the lap of the humble gamer. Do we fight with a vengeance or sit back with a cup of tea and forget about it?



On the sludge-brown plain of a blasted Earth a scorpion engages an advancing squad of enemy humanoids. Though still at quite a distance, the target view on the main screen can be magnified up to 16 times.

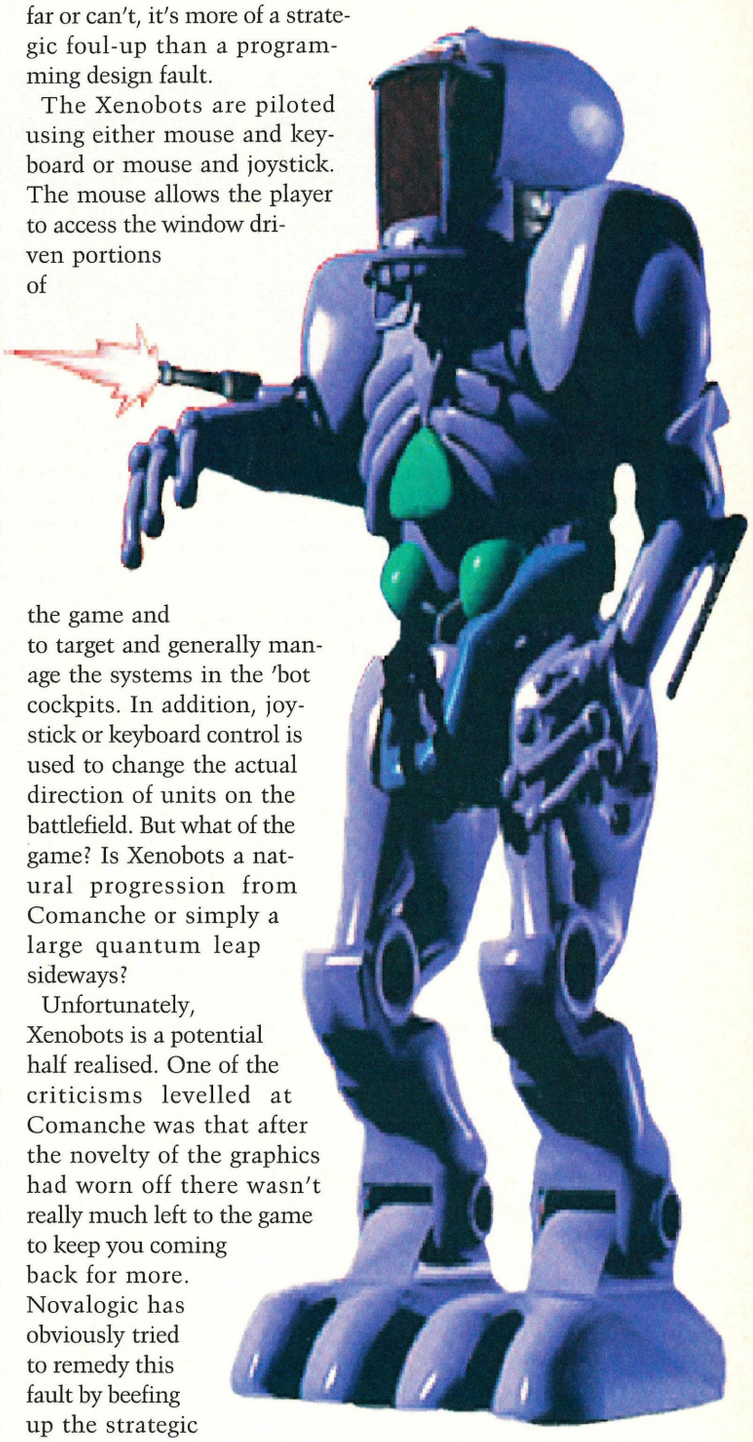
The aim of the game is simple: rid the world of alien infestation by systematically destroying the enemy bases. As the big cheese and the overall strategic commander, it is your responsibility to liberate each area of resistance and finally drive the alien invaders from the planet. This can be broken down into three distinct phases of action: (1) destroy all enemy robots while limiting damage to your own forces and your relay network; (2) expand the relay network towards the enemy base, thereby extending your xenobots' operating range, and (3) destroy, disintegrate, level, blow to kingdom come, the aforementioned enemy base.

To this end the player has three types of xenobot to command: the humanoid, the scout and the scorpion (see box). These 'bots can be controlled directly or set destinations and patrol patterns with the use of auto-programs. The player still retains overall control, able to jump into and command any xenobot at will.

Unfortunately, however, the colossal machines under your authority can only function effectively within a powered relay "net". The relay net is akin to a power grid within which your army of Xenobots can operate powered by energy reserves at the main base. When a unit is beyond the range of a relay node, it can no longer use the net's collective power and is reduced to running on its own limited battery reserves. These onboard batteries are depleted with fast movement and weapons operations. The existence of the net means that any aggressive strategy must be formulated with this restriction in mind.

If, for example, a target lies outside the relay net and the scorpion net builders are damaged or committed elsewhere, it can lead to the player dashing from the protective cover of the net, taking a few pot-shots until the battery is exhausted and then limping back to recharge. This sounds very laborious, but if you haven't planned to extend your relay network that far or can't, it's more of a strategic foul-up than a programming design fault.

The Xenobots are piloted using either mouse and keyboard or mouse and joystick. The mouse allows the player to access the window driven portions of the game and to target and generally manage the systems in the 'bot cockpits. In addition, joystick or keyboard control is used to change the actual direction of units on the battlefield. But what of the game? Is Xenobots a natural progression from Comanche or simply a large quantum leap sideways?



Unfortunately, Xenobots is a potential half realised. One of the criticisms levelled at Comanche was that after the novelty of the graphics had worn off there wasn't really much left to the game to keep you coming back for more. Novalogic has obviously tried to remedy this fault by beefing up the strategic element here, but

Two Minutes *of machine warfare*



Taking command of a humanoid Xenobot you slowly manoeuvre towards the enemy base. Avoid colliding with units in your force such as Bobcat, the well-armoured scorpion programmed to guard the base.



Flicking through the 'bots in your command, you find an enemy scout has breached the perimeter. Though lightly armoured, the scout can be an effective fighter, raiding and quickly retreating. No chance for this one, though.



Back in the humanoid xenobot you have reached the outer limits of the relay network. It is here on the fringes that the combat is most intense. As soon as the enemy is in range, it's best to open up with everything you've got.

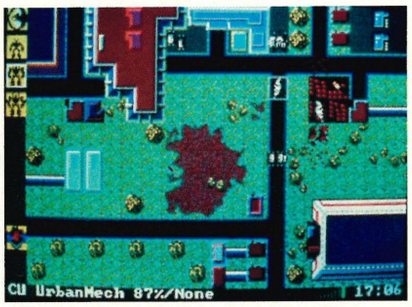


After the enemy 'bots have been destroyed, a quick glance at the map shows the situation. With two 'bots left, one a scorpion, you must extend the relay network closer to the base to be able to destroy it.



After a good two minutes of concentrated seeker and plasma fire, the enemy's geodesic headquarters ruptures and blows skywards with a satisfying boom. Now only another 95% of the world left to save.

Alternatively...



BattleTech 2
Activision, £30.99
Rated 5, Issue 3
A strategy based game with an aerial view, BattleTech is practically a computerised version of the board/role-playing game. A desperate search for his missing father takes Jason Youngblood (with huge robots in abundance) through 20 battle scenarios on five planets and features hovertanks, scout cars, armoured cars and fighters. Though dated, Battletech 2's real strength lies in its recreation of the original role-play game's rule system.



Nova 9
Dynamix/Sierra
Rated 6, Issue 4
Following in the tank tracks of Stellar 7, this super-slick intergalactic shoot 'em up is smooth and stylish. Gir Draxon, the defeated tyrant of Stellar 7, threatens to spread his evil influence throughout the nine worlds of the Nova 9 system. It is up to you, as Captain John Alex, to discover the secret of Draxon's revitalised power, and restore peace to Nova 9, dealing with rough terrain, forcefields, and other attacks along the way. There's plenty of atmosphere in this quality game.

there are a few other problems. It would have been nice to have developed the Comanche 3D terrain system further, allowing 'bots to roll up and down hills and hide behind rocks. But Novalogic appears to have gone sideways rather than forward, turning away from realistically modelled hills and valleys back to the clusters of polygons that pass for terrain in most flight sims.

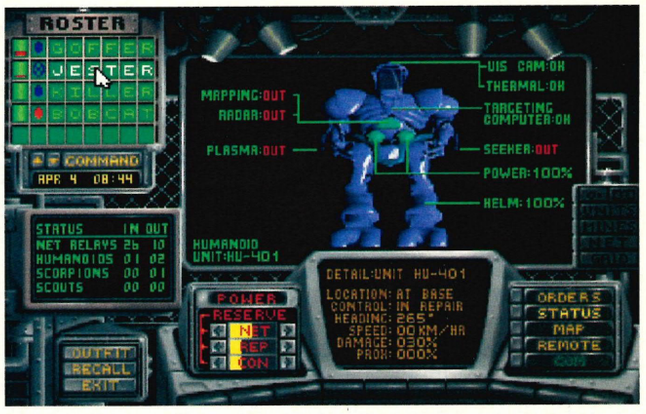
In Xenobots, movement is often slow and laborious. This is particularly evident in large battles where on a 386SX it becomes virtually unplayable. In addition to this there is no sense of robot movement as there is practically no ground detail (apart from the net relays) and the landscapes are a uniform post-holocaust brown. What was really needed perhaps was a bit more speed. I longed to be able to whizz and whoosh over the plain, loosing off a few shots here, the odd burst of cannon fire there. Alas no. At times it can be a chore just to get from A to B.

Graphically Xenobots is not as striking as its forbear, unlikely to cause the sort of interest Comanche aroused. This is mostly due to the unchanging backdrops and the fact that both sides in the conflict have the same model robots. Mankind, in his infinite wisdom, has held the mirror up to alien nature and reproduced the aggressor's hardware exactly. It seems that the world's designers and marketing executives must have perished early in the initial war. Full marks for engineering, none for style.

There isn't much to reward in the sound department either. Would-be Xenobot commanders fight to the death accompanied by the odd thump, muffled shuffling of huge feet and the echoing blast of heavy weapons. If you have a slower machine the manual recommends that you disable the sound effects completely, however if you do this the game suffers. All out robotic warfare should hardly be this quiet. It should be full of bangs, crashes and loud ear-numbing explosions. As it stands you could probably play Xenobots with the sound on in a library and still not get told to "sshhh"

Xenobots also suffers from the same problem that annoys dogfighting purists in flight sims. This is namely that you can target, lock on to and destroy targets without ever actually seeing them. OK, so maybe it's supposed to be like this, and OK the target does appear larger than life on the Xenobot's viewscreen, but this doesn't make up for the lack of real close-up action. Whenever you do finally get to see an enemy 'bot at close quarters it's often too late, as your weapons systems are shot to hell and the word "damaged" flickers prominently on every display. All you can really do is turn tail and hope you make it back to base before your Xenobot explodes in a nicely animated explosion.

Xenobots had the potential to be a really innovative game. Of course, stalking around a battlefield in huge death-wielding robots is nothing new. Battletech (reviewed way back in Issue 3) is probably



The status screen. From the safety of the command base, you can access the situation room. This provides an overview where the mission can be coordinated. Here the status of jester is under review. Battle damaged with both weapons out, he is effectively useless. As a result he has limped back to base for repair.

the guiding inspiration. Like Battletech, Xenobots works as a strategic game quite nicely, but the shoot 'em part is not quite up to scratch. Early in the game the action can be quite fast and occasionally even a touch frantic, but as the game progresses and the battles have more combattants, it becomes slow and tiresome. In addition, as the weapons are always auto-targetted, attacking the enemy is less of a challenge. On the battlefield you can nearly always hit the enemy when you fire. This works both ways of course and you will soon find to your woe that they can nearly always hit you.

While Comanche could hold its own as a shoot 'em up with fancy visuals, Xenobots can stake no such claim. However, it fulfils its promises adequately and although the missions are unvarying the game does present a strategic and tactical challenge to the gamer. Whether the appeal of the package can last that long is debatable.



■ Dean Evans

Techspec

The box advises that you have a minimum of a 386 16MHz processor, though a slightly faster machine would be more ideal. If the game continues to run sluggishly in the combat sequences, it's advisable to turn off the sound and music. The manual gives instructions on how to create the dreaded boot disk if memory is ever a problem.

Disk requirements						
	High density	✓				
	Hard disk only	✓				
	Space taken on hard disk	***3Mb***				
Graphic modes						
	CGA	✗	***EGA***	✗	***Tandy***	✗
	VGA	✓	***SVGA***	✗		
Soundboards						
	Ad Lib	✓	***Roland***	✓	***Sound Blaster***	✓
Control						
	Joystick	✓	***Keyboard***	✓	***Mouse***	✓
Performance						
	Optimum speed	***20MHz***				
	Minimum memory	***1Mb***				
	Free RAM required	***640K***				

NORTH
PC ACTION NORTH
PO BOX 39
LIVINGSTON
WEST LOTHIAN
EH54 9EZ
0506 461600

ALL PRICES INC. VAT P&P

PC ACTION

SOUTH
PC ACTION SOUTH
60 CONSTANCE ROAD
WHITTON
TWICKENHAM
TW2 7JA
081 893 3630

SALES ACTION LINES

Access SOUTH : 081-893-3630 NORTH : 0506-461600 VISA

NEW !!! SOUND BLASTER

SOUNDBLASTER V2.0
DELUXE EDITON :-
LEMMINGS / INDY 500
£89.95

SOUNDBLASTER PRO
DELUXE EDITON :-
LEMMINGS / INDY 500
S.WARE T.WORKS MPC
ENCYCLOPEDIA CD
£139.95

SOUNDBLASTER PRO+
MIDISOFT REC. SESSION
MIDI 1/1 LEAD, MIC.
£169.95

SOUNDBLASTER 16 ASP
16 BIT, ADVANCED
SIGNAL PROCESSING
S.WARE T.WORKS MPC
ENCYCLOPEDIA CD
£249.95

SOUNDBLASTER PRO MCV
SOUNDBLASTER PRO
FOR MICRO CHANNEL PC'S
£189.95

MIDIBLASTER
MIDI ADD-ON BOX
FOR SOUNDBLASTER
£209.95

WAVEBLASTER
MIDI DAUGHTERBOARD
FOR SOUNDBLASTER 16 ASP
£179.95

MIDISOFT STUDIO
SPECIAL OFFER
WHILE STOCKS LAST
£119.95

SOUND BLASTER PACKS

STARTER PACK
Soundblaster V2.0 Deluxe
Screenbeat Speakers
Joystick
£119.95

PRO STARTER PACK
Soundblaster Pro Deluxe
J307 Mains Speakers
Joystick
£179.95

FLIGHT PACK
Soundblaster V2.0 Deluxe
Screenbeat Speakers
CH Flightstick
F15 Strike Eagle III
£169.95

SPORTS PACK
Sounblaster V2.0 Deluxe
Screenbeat Speakers
Joystick
Microprose Grand Prix
Links 386 Pro
£179.95

ADVENTURE PACK
Soundblaster V2.0 Deluxe
Screenbeat Speakers
Joystick
Monkey Island 2
Indiana Jones & Atlantis
£169.95

UNDERWORLD PACK
Soundblaster V2.0 Deluxe
Screenbeat Speakers
Joystick
Ultima Underworld 1 & 2
£169.95

SOUNDBLASTER 16 & WAVEBLASTER
SPECIAL OFFER
FOR DUAL PURCHASE
£399.95

M.MEDIA UPGRADE KITS

DISCOVERY
SB PRO CARD
CD-ROM DRIVE
J307 SPEAKERS
MM MUSIC EXPLORER
SOFTWARE TOOLWORKS
MPC ENCYCLOPEDIA
JUST GRANDMA & ME
WHERE IN THE WORLD
IS CARMEN SANDIEGO
SHERLOCK HOLMES
CONSULTING DETECTIVE
MULTIMEDIA BATTLECHESS
THE ANIMALS
INT. £459.95
EXT. £549.95

SB PRO OWNERS KIT
CD-ROM DRIVE
WINDOWS 3.1
BRING THE WORLD
TO YOUR SENSES
SHERLOCK HOLMES DETECTIVE
MICROSOFT BOOKSHELF
CREATIVE SOUNDS
INT. £369.95
EXT. £429.95

SB V2.0 OWNERS KIT
CD-ROM DRIVE
INTERFACE CARD
WINDOWS 3.1
BRING THE WORLD
TO YOUR SENSES
SHERLOCK HOLMES DETECTIVE
MICROSOFT BOOKSHELF
INT. £369.95
EXT. £429.95

SPEAKERS
Altec Lansing
Multimedia ACS300
£299.95

J307 Mains Speakers
£39.95

Screenbeat Speakers
£24.95

Mains Adapter
£9.95

LATEST SOFTWARE RELEASES

GAMES

X-Wing	£39.95
F15 Strike Eagle III	£29.95
Harrier Jump Jet	£29.95
Ultima Underworld 2	£34.95
Microprose Grand Prix	£34.95
Links 386 Pro	£34.95
Space Quest V	£34.95
Stunt Island	£39.95
Maximum Overkill	£29.95
Flight Sim. 4	£39.95
FS4 Add Ons	£14-29
Incredible Machine	£29.95
Strike Commander	£39.95
Strike C. Speech Pk.	£17.95
Lemmings 2	£34.95
Island of Dr. Brain	£29.95
Dune 2	£29.95

CD-ROM

Sherlock Holmes 2	£49.95
Kings Quest 5	£44.95
Loom	£39.95
Arthur's Teach Trbl.	£34.95
WC2 Deluxe Edition	£39.95
WC1 & Ultima 6	£19.95
Just Grandma & Me	£34.95
Putt-Putt	£34.95
S.W.O.T.L.	£39.95
Monkey Island 1	£39.95
Space Quest 4	£39.95
Ultima 1-6	£59.95
Microprose Coll.	£39.95

ACCESORIES

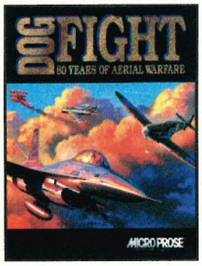
Professional Draw	£119.95
Screencraze 2	£19.95
Microphone	£9.95
Stereo Headphones	£14.95
Caddies	£7.95
Dos Develepors Kit	£59.95
VB Develepors Kit	£59.95
Midi 1/1	£24.95
Midi 1/1 + Sp Pro	£49.95
Midi 1/1 + Rec. Ses.	£69.95
Midi 1/5	£39.95
Midi 1/5 + Sp Pro	£69.95

CH JOYSTICKS

CH Mach 1	£17.95
CH Mach 1+	£22.95
CH Mach 2	£24.95
CH Mach 3	£29.95
CH Flightstick	£34.95
CH Flightstick Pro	T.B.A.
CH Virtual Pilot	£79.95
CH Virtual Pilot Pro	T.B.A.

ALL PRICES INCLUDE VAT, U.K. DELIVERY IS FREE !!!
ANY PRICES OR CONTENTS ARE SUBJECT TO CHANGE WITHOUT NOTICE

NED.93



Title	**Dogfight**
Publisher	**MicroProse**
Contact	**(0666) 504326**
Price	**£44.99**



Dogfight

Six historical settings, 12 different aircraft to fly, the romance of men and machines locked together in mortal combat — what more could the aspiring armchair pilot want in a flight simulation? Well ...

For whatever reason, aerial combat has always had bizarre associations of gentility, chivalry and general good-fellowship. From the Knights of the Sky myth of World War I — when a chap could don silk scarf and goggles, duel with the Hun and tootle home for cucumber sandwiches and tea — air war has been considered cleaner, more romantic. Of course, compared to the poor sods in the trenches being mown down in their thousands, pilots probably had the best of it.

And while the fantasy of chivalry became tarnished after World War II, and vanished altogether by Korea, the glamour of the machines themselves stepped in. The sleek beauty of jets, the raw speed, the high-tech weaponry, and the electronic eyes that could see through cloud and over the horizon — not much chivalry, but true romance of a different sort.

What could be better, then, than a simulator that concentrates on the real business of military airmanship — one-on-one combat through every era of air warfare, from the beginnings over the fields of France, to the latest in supersonic, remote-control, jet-powered destruction? This is just what Dogfight, the latest in a long line of flight sims from MicroProse, aims to give you.

Take the controls of 12 aircraft from six different periods, and test your mettle against computer-controlled opponents. From WW1, we have the Sopwith Camel and Fokker DR1 Triplane; from WW2, the Spitfire and ME109; from Korea, the F-86e Sabre and MiG-15; from Vietnam, the F-4 Phantom and MiG-21F; from the Falklands, the Sea Harrier and Mirage IIIE; and from today — since they had to locate this non-existent conflict somewhere, MicroProse plumped for Syria — the F16A Falcon and MiG-23.

There's an odd sense of schizophrenia in Dogfight, though. MicroProse itself says, "Everyone enjoys the excitement of air-to-air combat in a flight simulation. MicroProse has taken that element and made an entire game around just that — dogfighting." But then someone apparently decided that the "entire game" needed something more, so a full campaign mode was added letting you fly a series of linked missions. And in case the dogfighting isn't enough, some of the missions include ground attack strikes. An unusual feature is what MicroProse calls the "What if ..." mode — the ability to fly any aircraft against any other. So you can try to down an F16 from a Fokker Triplane, or see how long an ME109 lasts against a Sea Harrier.

How real is real?

The critical decision for any flight sim designer is where to draw the line between simulation and entertainment. Assuming it was technically possible to simulate, say, an F16 on today's PCs accurately, would it be a good idea? Few of us possess the necessary skills to get it off the ground, fly it through a combat mission or land it at the finish. It might be accurate, but it wouldn't be much fun as a computer game. At the other extreme, there are programs that offer unabashed fun just flying the craft, and hang the realism.

Dogfight tends towards this latter view. Although it makes big claims for the accuracy with which cockpits are modelled, other aspects of the flying experience have only a tenuous link with reality. For example, although planes lose height in a tight turn, they don't seem to lose speed — you can lock yourself into a turning duel forever without worrying about stalling.

The programmers have also dispensed with things like flaps and rudders. Even in the area of combat — which, after all, purports to be the point of the exercise — MicroProse has taken some surprising liberties, which are all the more surprising when you consider this is from a company renowned for authentic flight simulations. Every aircraft, for example, carries 200 rounds of cannon ammunition regardless of its true armaments. Worst of all, every aircraft in every era must land on a runway. Not only is this unrealistic, it also throws away a key source of suspense and excitement — namely, the risky business of making forced landings or ditching at sea.

Wide horizons

Dogfight gives you the choice of playing in four modes. In duel, you choose the era and which of the two given aircraft you want to fly. You then specify the starting positions — for example, side by side, you behind the computer-controlled player or vice-versa, and so on. Then it's straight into action.

The what if ... mode is basically similar, but removes the specified aircraft. You can fly any of the 12 planes against up to five others, in any of the geographical areas. Modem play provides you with the increasingly common option of playing against another human opponent, either — as the name suggests — via modem, or on two machines directly linked by a null-modem cable. Unfortunately, there is no option to play on two PCs across a network. Pity, really.

Missions mode sets you the challenge of flying — and directing — a campaign of linked missions. Although dogfighting figures somewhat prominently in these (especially in the earlier historical scenarios), ground strikes play a significant role. And the real challenge here, contrary to expectations, is not your own flying ability but your strategic management.

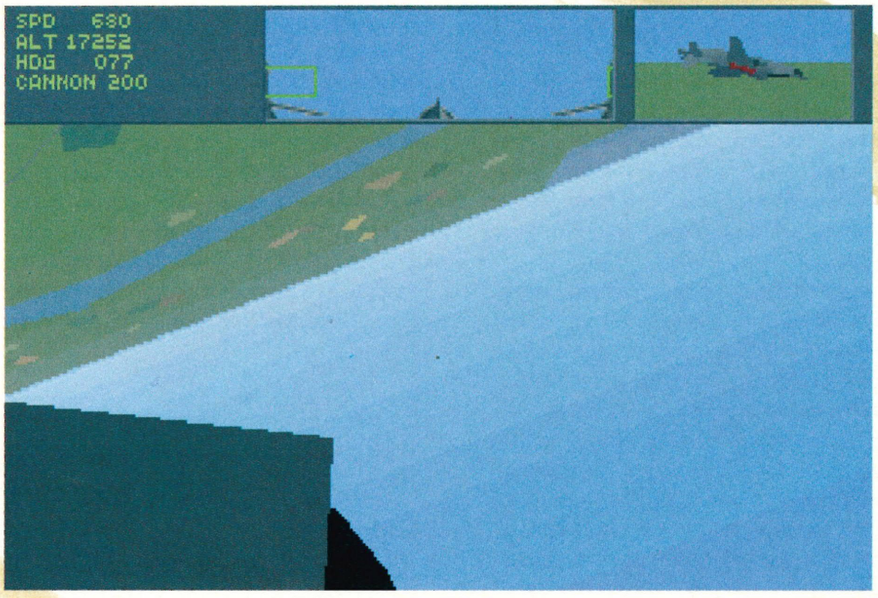
For each mission you have a number of resources — other aircraft, including fighters and bombers, to which you must assign roles and sub-missions. Among the mission options are patrol, attack, support and defend. Success in the campaign depends more on your ability to manage these resources than on your own flying ability. In fact, you don't have to fly at all. You can simply allocate roles to your other aircraft and then watch the events unfold in front of you.

How does she fly?

You may have detected some misgivings about the whole exercise to this point, and you'd be absolutely right. But my biggest complaint concerns the actual flying itself. To be rather blunt, flying in Dogfight is a bitch — the controls are crude, the frame rate is incredibly jerky, enemy aircraft lurch about the sky seemingly at random while your own aircraft does things that would rip the wings off any real flying machine ever built.

MicroProse specifies a 16MHz 286 as the minimum hardware, but that should be taken with a pinch of salt. On my 16MHz 386SX — which has successfully flown just about everything up to and including the wonderful Falcon 3.0 — I had to switch all the niceties off (including aircraft detail and graduated horizons) and still couldn't get acceptable performance out of Dogfight.

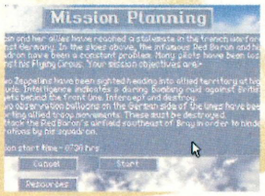
Even worse, I am one of those who actually prefers to use the keyboard for all flight sims, and in Dogfight the keyboard control is about the lousiest I've ever seen. It was all too common to stab at keys with no response at all — then the lightest touch would flip a jet into a 270-degree roll. Often it was impossible to level out of a turn: the aircraft would flip from right-hand bank to left-hand bank at the slightest keypress. It's difficult to land when one wing is pointing skywards while the other ploughs up the runway.



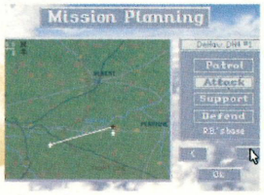
Dogfight has its own version of the padlock view that was such an innovation in Falcon 3.0. Called 'heads-up' view here, it takes some getting used to, but once mastered is an invaluable aid in tracking targets in the heat of combat.

Two Minutes *in a short flying career*

In Dogfight, you can either take two aircraft from the same historical era, or mix and match planes for some potentially intriguing anachronisms.



Having chosen your own aircraft and the historical era, Dogfight's mission mode begins with a briefing. The range of tasks is limited: often there will be ground targets to attack, your own territory to defend, and a number of enemy aircraft to find and destroy.



Clicking on the resources button brings you to the mission map. Those available are usually a basic mix of fighters and bombers (or multi-role aircraft in later scenarios). You can accept the computer's designation of aircraft, targets and missions or allocate your own.



One of the highlights in Dogfight is the ability to leap around the game world, examining all of the participating aircraft and other objects. If you choose to direct operations instead of participating, you watch enemy planes taking off, for example, or view your own forces in combat.



Death comes early to our hero. Having successfully machine-gunned a German HQ tent, I was too busy enjoying the view to remember to pull out of the strafing dive. This is a tragedy: regardless of how many active resources you still have available, the mission ends when you die.

Techspec *The key technical requirement for Dogfight is DOS 5 or 6 — you need better than 600K of free memory to run it. A hard disk is also essential — around 8Mb, although it will fit in less if you install the compressed files and skip the animated intro sequence. The drawback to using the compressed version is that loading modules takes longer.*

Disk requirements

High density	✓
Hard disk only	✓
Space taken on hard disk	3Mb

Graphic modes

CGA	✗	EGA	✗	Tandy	✗
VGA	✓	SVGA	✓		

Soundboards

Ad Lib	✓	Roland	✓	Sound Blaster	✓

Control

Joystick	✓	Keyboard	✓	Mouse	✗

Performance

Optimum speed	20MHz
Minimum memory	1Mb
Free RAM required	600K

Give us a break

To many dedicated sim pilots, the question probably seems like heresy but I think it's worth posing anyway: are we suffering from a surfeit of flight sims? As long as the genre remains a best-seller among PC users, I suppose we can't expect software publishers to turn away from it, but one senses a certain desperation in some recent releases.

More and more, publishers are concentrating on 'the angle', the 'unique selling point', the marketing concept. After the fall of the Berlin Wall and the collapse of the "evil" Russian empire, we had the glut of Russian sims as data on Soviet aircraft become more easily available. Then, as the probability of World War 3 diminished, we had the glut of sims in which South American drug barons became the enemy. After the initial success of Red Baron and Their Finest Hour, we had the glut of historical sims.

But more than any other gaming genre, flight simulation is driven by technology, not concepts. Faster hardware and improved video displays, coupled with new software techniques, have been the driving forces in flight simulation. Faster frame rates, solid 3D modelling and rendering, fractal landscapes — these are the key developments that have heightened the sense of realism, and provided much of the enjoyment in the best of the genre.

Of course, we're still looking for entertainment, and a good scenario and first-class execution of the concept can still carry the day. But by my count there are now more than 30 flight sims for the PC, many of them excellent. The fact that the latest offering from Company X is "the only flight simulator that puts you at the controls of Lichtenstein's only multi-role combat LearJet" is not going to win me over. If publishers can't do better than what we've already got, then please don't bother. I and, I'm sure, many other flight sim fanatics would rather you put the time, money and programming resources into other projects.



Dogfight's title screen shows the potential mix of craft available.

And incredibly, there seems to be no repeat on the spacebar for cannon-firing. In a Spitfire — which, according to MicroProse, could fire at better than 1,000 rounds per minute — I had to pound the spacebar like a maniac to get off more than a round a second.

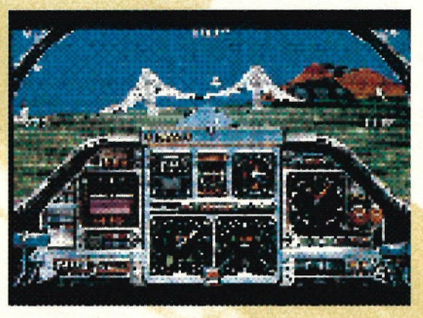
In the end, Dogfight is a jack of all trades and master of none. The feature list reads like a grab-bag of every highlight from rival sims — it even has its own version of the innovative padlock view from Falcon 3.0 — but the underlying program lets everything down unfortunately. Although it offers the widest range of historical scenarios of any sim, it excels at none of them.



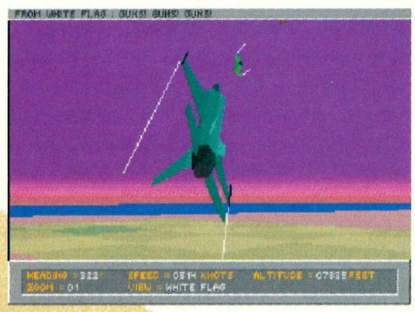
MicroProse's own Knights of the Sky is a better sim of WWI air war, and Dynamix's Red Baron beats it hands down; for WWII, there are a host of better bets, from LucasArts' original Their Finest Hour, through Secret Weapons of the Luftwaffe, Aces of the Pacific from Dynamix, to Heroes of the 357th from Electronic Arts. When it comes to directing campaigns, both of the LucasArts games outshine Dogfight (although with less in the way of graphical finesse). And in the heart of its own territory — the pure one-on-one dogfight with the ability to match aircraft from different eras — Electronic Arts did it first and did it better in Chuck Yeager's Air Combat. Adding insult to injury, MicroProse has positioned Dogfight as a premium product with a £45 price tag. That's at least £25 too much.

■ Peter Worlock

Alternatively...



Chuck Yeager's Air Combat
Electronic Arts, £34.99
If the sheer exhilaration of one-on-one dogfighting is what you seek, then Colonel Chuck's your man. CYAC may not be state-of-the-art — the cubist landscape is less than impressive after the fractal terrains of more recent flight sims — but it is otherwise graphically excellent, and the performance is impressive even on a mid-range 286. It covers three of Dogfight's historical eras — WWII, Korea and Vietnam — and provides six aircraft against Dogfight's 12, but it wins in every other respect.



Falcon 3.0
Spectrum Holobyte, £49.99
Rated 9, Issue 4
For a much better flying experience, combined with the brain-teasing aspects of organising multi-plane campaign missions, check out Falcon 3.0. The sense of realism is unsurpassed, but it also provides a get-up-and-fight mode that lets you take to the air and start swapping Sidewinders in very short order. Although it ostensibly requires much better hardware than Dogfight, and a fast 386 or better is recommended, do not let this put you off. Falcon 3.0 is a must.

Computermate

The Wheel, Robin Way, Cuffley, Hertfordshire EN6 4QB
Tel: (0707) 875757 Fax: (0707) 875513

Mon - Fri 8am - 8pm
Sat 9am - 7pm

THE LEISURE ZONE

3D CONSTRUCTION KIT 2.0	£39.99
4D BOXING	£19.99
4D SPORTS DRIVING	£19.99
A TRAIN	£34.99
AIR,LAND, SPACE(MIG29, 4D Sports Drivin' Star Glider 2)	£29.99
ALONE IN THE DARK	£34.99
ANOTHER WORLD	£26.99
ARMOURED FIST	£39.99
ARNHEM, ANCIENT BATTLES, VULCAN	£24.99
BATTLECHESS 1	£10.99
BATTLE CHESS 4000 SVGA	£34.99
BATTLE COMMAND	£26.99
BATTLE ISLE (Includes Senario Editor)	£29.99
BATTLE ISLE DATA DISK	£15.99
BETRAYAL AT KRONDOR	£34.99
BITMAP COLLECTION (zenon, Speed Ball 2, Cadaver)	£26.99
BOARD GENIUS(Cluedo, Monopoly, Risk,scrabble)	£32.99
BRIDGE PLAYER 2150 (CGA/EGA)	£24.99
BUZZ ALDRINS' RACE INTO SPACE	£TBA
CAR & DRIVER	£34.99
CARRIERS AT WAR	£34.99
CHESSMASTER 2100	£19.99
CHESSMASTER 3000 (DOS +Windows)	EACH £29.99
CIVILISATION	£34.99
COMPLETE CHESS SYSTEM	£29.99
CONQUEST OF CAMELOT	£24.99
CONQUEST OF THE LONGBOW(5.25 ONLY)	£26.99
DAS BOOT	£19.99
DESERT RATS	£19.99
DREAM TEAM (Terminator 2,The Simpsons,WWF)	£29.99
DUNE	£29.99
DUNE 2	£30.99
ELF	£26.99
ELITE PLUS	£29.99
EPIC	£29.99
EYE OF THE BEHOLDER I	£26.99
EYE OF THE BEHOLDER II	£29.99
EYE OF THE BEHOLDER III (Assault on Myth Dronmor)	£TBA
FIELDS OF GLORY	£36.99
FREDDY PHARKUS	£34.99
FRONT PAGE SPORTS FOOTBALL (US)	£34.99
GRAND PRIX (Formula 1)	£36.99
GRAND PRIX UNLIMITED	£34.99
GREAT NAVAL BATTLES	£34.99
ATLANTIC SUPER SHIPS	£15.99
AMERICA IN THE ATLANTIC	£15.99
SCENARIO BUILDER	£15.99
HARPOON 1.3	£34.99
HARPOON DESIGNER SERIES	£17.99
HARPOON BATTLESETS 3 & 4	EACH £13.99
HARPOON SCENARIO EDITOR	£15.99
HEIMDALL	£24.99
HISTORY LINE 1914-1918	£34.99
HONG KONG MAHJONG (VGA)	£29.99
HOYLES BOOK OF GAMES 3	£29.99
HUMANS	£26 .99
IAN BOTHAMS CRICKET	£26.99
INCREDIBLE MACHINE	£34.99
INDIANA JONES FATE OF ATLANTIS	£32.99
....INTELLIGENT STRATEGY GAMES (Backgammon, Bridge, Ches	
Drafts Go)	£29.99
ISHIDO	£26.99
IT CAME FROM THE DESERT	£19.99
JIMMY WHITE'S SNOOKER	£24.99
KINGS QUEST 5	£34.99
KINGS QUEST 6	£34.99
KRISIS IN THE KREMLIN	£26.99
LAURA BOW II	£34.99
LEATHER GODDESSES	£9.99
LEGEND OF VALOUR	£34.99
LEISURE SUIT LARRY 5	£34.99
LEISURE SUIT LARRY ,2&3	EACH £29.99
LEISURE SUIT LARRY1(VGA)	£30.99
LEMMINGS	£22.99
LEMMINGS DATA DISK	£19.99
LEMMINGS DUAL PACK	£34.99
LEMMINGS II (the Tribe)	£34.99
LIFE AND DEATH The Body	£19.99
LIFE AND DEATH 2 The Brain	£24.99
LOST FILES OF SHERLOCK HOLMES	£34.99
M1 TANK PLATOON	£29.99
MARIO ANDRETTI'S RACING	£24.99
MICROSOFT ENT PACK WINDOWS 1, 2 &3	EACH £29.99
MONKEY ISLAND 1 (VGA)	£26.99
MONKEYISLAND 2 (Le Chucks Revenge)	£29.99
MONOPOLY (UK)	£26.99
NIGEL MANSELL	£29.99
NIGHTSHIFT	£19.99
OMAR SHARIF'S BRIDGE (DOS Or Windows)	EACH £34.99
PACIFIC WAR	£34.99
PATRIOT	£34.99
PINBALL (Windows)	£34.99
PIRATES GOLD	£36.99
POLICE QUEST1 (VGA)	£34.99
POLICE QUEST 3	£34.99
POPULOUS 2	£34.99
PREMIERE MANAGER	£26.99
PRINCE OF PERSIA	£12.99
PRO TENNIS TOUR 2	£29.99
PUZZNIC	£20.99
QUEST FOR GLORY(Trial by Fire)	£29.99
QUEST FOR GLORY 3 (wages of war)	£34.99
RAILROAD TYCOON	£29.99
ROBOCOP 3	£26.99
ROBOSPORTS (Windows)	£26.99
RUGBY COACH	£22.99
SCRABBLE DELUXE (CGA/EGA)	£20.99
SCRABBLE (VGA)	£26.99
SENSIBLE SOCCER	£26.99
SHADOW OF THE COMET	£34.99
SHANGHAI II MAH JONG	£26.99
SILENT SERVICE 1 (5.25 ONLY)	£9.99
SILENT SERVICE 2	£29.99
SIMANT	£32.99
SIM CITY/POPULOUS (Twin Pack)	£26.99
SIM CITY TERRAIN EDITOR	£9.99
SIM CITY (Windows)	£36.99
SIM EARTH	£29.99
SIM EARTH (Windows)	£34.99
SIM LIFE	£34.99
SPACE QUEST 1, (Enhanced)	£29.99
SPACE QUEST 4 (VGA)	£34.99
SPACE QUEST 5	£34.99
STAR GLIDER 2 (EGA ONLY)	£9.99
STAR FLEET (51/4 ONLY)	£9.99
STAR TREK 25TH ANNIVERSARY	£26.99
STREETFIGHTER II	£26.99
STUNT ISLAND	£44.99
SUPER TETRIS	£29.99
TANK	£14.99
TASK FORCE 1942	£39.99
THE GAMES (Espana '92)	£29.99
THE LEGACY	£36.99
TRISTAN PINBALL (DOS)	£26.99
TRIVIAL PURSUIT (CGA/EGA)	£12.99
TRIVIAL PURSUIT DELUXE	£26.99
ULTIMA TRILOGY 2 (4,5,6)	£32.99
ULTIMA 6	£19.99
ULTIMA 7	£34.99
ULTIMA 7 ADD ON (Forge of Virtue)	£17.99
ULTIMA 7 II (Serpent Isle)	£36.99
ULTIMA UNDERWORLD	£34.99
ULTIMA UNDERWORLD 2 (Labyrinth of Worlds)	£34.99
V FOR VICTORY	£29.99
VERILUKE LUKE	£29.99
VEIL OF DARKNESS	£29.99
WING COMMANDER 1 DELUXE (Inc. Mission Disks 1 & 2)	£34.99
Mission Disks 1 & 2 (DUAL PACK)	£17.99
WING COMMANDER 2	£34.99
SPECIAL OPERATIONS 1 &2	EACH £15.99
SPEECH ACCESSORY PACK	£15.99
WIZARDRY 7(Crusaders of The Dark Savant)	£39.99
WIZ KID	£26.99
WWF	£24.99
X - WING	£39.99
XENON 2	£9.99
ZENOBOTS	£34.99
ZOOL	£26.99
ZORK 1, 2	EACH £9.99

Free Mousemat on all orders of £30
Please Ring for Details of Our NEW Catalogue

The Hangar

A 10 TANK KILLER Version1.5	£30.99
A 320 AIRBUS	£39.99
ACES OF THE PACIFIC Version 1.2	£32.99
WW2 1946 MISSION DISK	£21.99
ACES OVER EUROPE	£34.99
AIRLINE TRANSPORT PILOT(Version 2)	£34.99
AIRLINE TRANSPORT PILOT UPGRADE	£9.99
ANCIENT WAR OF WAR IN THE SKY	£34.99
ATAC	£36.99
AV8B HARRIER	£34.99
B17 FLYING FORTRESS (Version 2)	£36.99
BATTLE OF BRITAIN (FINEST HOUR)	£26.99
BATTLE OF BRITAIN MISSION DISK	£14.99
DOGFIGHT	£36.99
F15 III	£36.99
F117A	£34.99
F19 STEALTH /MIG 29 FULCRUM DUAL PACK	£29.99
FALCON 3 (Ver D)	£40.99
FIGHTING TIGERS MISSION DISK	£21.99
FALCON AT	£14.99
FLIGHT OF THE INTRUDER	£14.99
FLIGHT SIMULATOR 4	£39.99
AIRCRAFT & ADVENTURE FACTORY	£34.99
911 AIR RESCUE FLIGHT 685/701	EACH £24.99
AIRCRAFT & SCENERY DESIGNER	£29.99
FLIGHT PLANNER	£29.99
FS PRO	£29.99
GRAPHICS & SOUND UPGRADE 1.5	£29.99
NEW FACILITIES LOCATOR	£19.99
SCENERY ENHANCEMENT EDITOR	£29.99
SCENERY DISKS	
CALIFORNIA COLLECTION	£34.99
EUROPE, HAWAII, JAPAN (SUBLOGIC)	EACH £14.99
GRAND CANYON, HAWAII, TAHITI (MALLARD)	£15.99
GREAT BRITAIN 3 DISK SET	£34.99
NORTHERN ENGLAND	£29.99
QUICKSCENE MEMORY MANAGER	£14.99
GUNSHIP 2000	£32.99
ICE & ISLANDS MISSION DISK 1	£21.99
HARRIER JUMP JET	£36.99
JET (5.25 ONLY)	£12.99
JETFIGHTER 2 & MISSION DISK & HINT BOOK	£44.99
MAXIMUM OVERKILL (Comanche)	£39.99
MAXIMUM OVERKILL MISSION DISK 1	£21.99
REACH FORTHE SKIES	£32.99
RED BARON	£32.99
MISSION DISK 1	£21.99
SECRET WEAPONS OF THE LUFTWAFFE	£34.99
(He 162, P80 , P38, Do 335)	EACH £15.99
STRIKE COMMANDER	£44.99
SPEECH ACCESSORY. PACK	£17.99
TORNADO	£36.99
TRACON 2	£36.99
TRACON 2 (WINDOWS)	£39.99

The Golf Club

DAVID LEADBETTER'S GOLF	£36.99
LINKS	£34.99
COURSES- BAYHILL, BOUINTIFUL, BARTON CREEK, DORADOFIRESTONE, NORTH TROON, PINEHURST	EACH £17.99
LINKS PRO 386 (386/486SVGA ONLY)	£39.99
COURSES-BANFF, MAUNA KEA, PINEHURST 2, THE BELFRY,	EACH £19.99
MICROSOFT GOLF (LINKS FORWINDOWS)	£42.99
PGA TOUR PLUS COURSES	£26.99

The Office

AUTO ROUTE EXPRESS	£99.99
BIG BUSINESS SIMULATOR (5.25" Only)	£29.99
COUNTERPOINT	£54.99
DELUXE ANIMATION	£79.99
DESIGN WORKS	£159.99
DELUXE PAINT ENHANCED	£89.99
EXPRESS PUBLISHER	£117.99
HOME ACCOUNTS	£29.99
K SPREAD, K DATA K GRAPH, K WORD,(5.25" Only)	£29.99
MAVIS BEACON 2 DOS & WINDOWS	EACH £29.99
MINI OFFICE PERSONAL	£26.99
M/SOFTWORKS DOS & WINDOWS	EACH £119.99
MS DOS 6.0 UPGRADE (Until 30/5/93)	£57.99
QEMM 386 V6.02	£79.99
QUATTRO PRO WIN/DOS	£119.99
QUICKEN DOS	£49.99
QUICKEN WINDOWS	£64.99
STACKER 3.0	£99.99
TIMEWORKS PUBLISHER 3	£149.99
VISTAPRO	£79.99
WINDOWS 3.1	£79.99
WINDOWS 3.1 & MOUSE	£84.99
X TREE GOLD	£79.99

The Classroom

ADI ENGLISH 1 & 2	EACH £23.99
ADI FRENCH 1 & 2	EACH £23.99
ADI MATHS 1 & 2	EACH £23.99
BODYWORKS	£59.99
CARTOONER 5.25" ONLY	£32.99
CHEMISTRY WORKS	£59.99
ECO QUEST	£24.99
FRENCH MISTRESS	£18.99
FUN SCHOOL 3 (Under 5, 5-7, 7+)	EACH £22.99
FUN SCHOOL 4 (Under 5, 5-7, 7-11)	EACH £22.99
GERMAN MASTER	£18.99
HENRIETTA'S BOOK OF SPELLS (VGA)	£29.99
HOORAY FOR HENRIETTA (Maths VGA)	£29.99
MATHS ADVENTURE	£22.99
MIXED UP FAIRY TALES	£24.99
ORBITS	£49.99
PC GLOBE V.6	£39.99
SPANISH TUTOR	£18.99
SPELLBOUND	£29.99

The Hardware Store

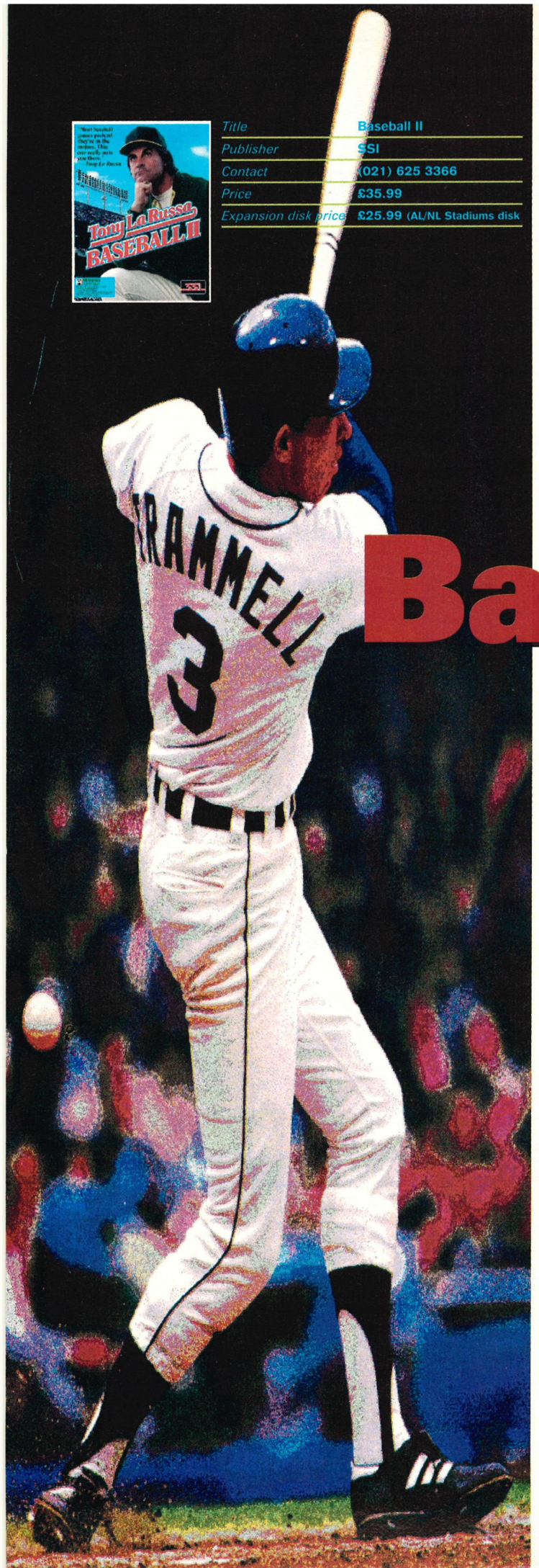
ADVANCED GRAVIS JOYSTICK	£39.99
CH FLIGHT STICK	£39.99
GRAVIS ELIMINATOR CARD	£34.99
GRAVIS GAMES PAD	£26.99
GALAXY NX II SOUND CARD (Inc Speakers)	£109.99
GALAXY NX PRO CARD (Inc Speakers)	£139.99
JOYSTICK CARD	£15.99
JOYSTICK "Y" CONNECTOR	£9.99
NAKSHA MOUSE	£49.99
NIGEL MANSELL'S FREE WHEEL	£39.99
PC MOUSE	£19.99
PROGRAMMABLE GAMES CARD 33 MHZ+	£39.99
QUICKSHOTWARRIOR JOYSTICK	£13.99
QUICKSHOT SOUND PACK (inc soundBlaster, Warrior Joystick & Speakers	£99.99
SCREENBEAT SPEAKERS	£24.99
VIRTUAL PILOT	£84.99

The CD Player

BLACK BOX 3	£82.99
BRITANNICA FAMILY CHOICE	£59.99
COMPTON'S FAMILY ENCYCLOPEDIA	£249.99
GUINNESS DISK OF RECORDS 1992	£59.99
KINGS QUEST 5	£39.99
LAURA BOW 2	£39.99
LEISURE SUIT LARRY 1 (VGA)	£39.99
LOOM	£40.99
MAVIS BEACON TYPING	£39.99
MONKEY ISLAND 1	£40.99
MICROSOFT BEETHOVEN	£54.99
MICROSOFT CINEMANIA	£54.99
MICROSOFT WORKS	£119.99
NATIONAL GEOGRAPHICS MAMMALS	£99.99
NORTH POLAR EXPEDITIONS	£89.99
PLAYING WITH LANGUAGES (ENGLISH , GERMAN, FRENCH, SPANISH)	EACH £64.99
SECRET WEAPONS OF THE LUFTWAFFE (INCLUDES ALL 4 AIRCRAFT DISKS	£45.99
SHAKESPEARE ON DISK	£29.99
SHERLOCK HOLMES ON DISK	£29.99
SHERLOCK HOLMES CONSULTING 3	£49.99
SPACEQUEST 4	£39.99
TIMETABLE OF HISTORY	£99.99
WING COMMANDER 2 DELUXE	£49.99

Full List of CD Rom Software available on request

All prices include VAT & P&P (UK 0nly) and are subject to change without notice. Products offered subject to availability. E. & O.E. Please state Processor and Screen Type & disk size when ordering and allow sufficient time for cheque clearance. Callers by appointment only. IF A PRODUCT YOU REQUIRE IS NOT LISTED PLEASE



Title	Baseball II
Publisher	SSI
Contact	(021) 625 3366
Price	£35.99
Expansion disk price	£25.99 (AL/NL Stadiums disk

Although the game isn't exactly an adrenalin-inducer, there's plenty to amuse those who are both managerially-inclined and well versed in the intricacies of baseball.

Tony La Russa Baseball II

"Striiike two!" The most American of games gets the second-time-around treatment by SSI, but is it more than an over-sized game of rounders to us Brits?

There may be nothing more American than baseball, but outside the US the game has failed to pick up the cult following of other American national sports.

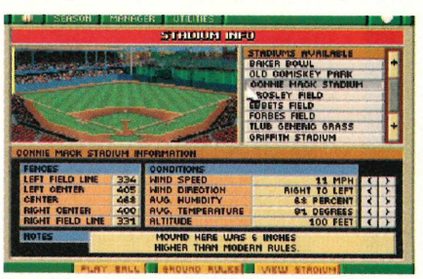
But with the different aspects of batting, fielding and pitching, baseball should be well suited to a computer game interpretation. Previous attempts at baseball simulations, such as RBI Baseball II and TV Sports Baseball, have mostly concentrated on the gameplay, without over-emphasising the team management aspect, whereas Tony La Russa Baseball II (TLRB11) goes for a more faithful reconstruction of the game itself — with all of its attendant quirks and arcane strategic twiddlings.

The basic aim is to play ball, out score the opposition, and manage your team successfully through a season of exhibitions, league or World Series games, at the same time controlling pretty much every detail of how each game is set up.

At times, the attempted reconstruction of the sport in its entirety takes over so much that playing the game itself seems almost incidental to TLRBII. Indeed, you can go so far as to pilot your team through a season as a manager, watching from the sidelines, without ever lifting a bat.

Start the game up, and a bolt of lightning (complete with sound FX) presages an almost TV-quality animated sequence showing a hitter with an electric-blue Ready Brek glow. The game looks great, with sculptured menus and excellent 256-colour graphics. The sound is poor, though, particularly the digitised speech of the commentator, Ron Barr.

With the number of options available, I found the best way to start off is with a friendly exhibition match. Before you can

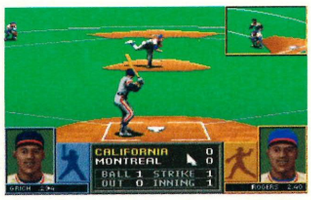


For added realism, TLRBII has a large library of stadia, and you can now get an add-on pack with even more.

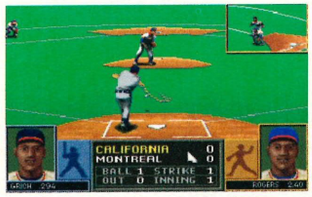
Two Minutes *of wearing your cap backwards*



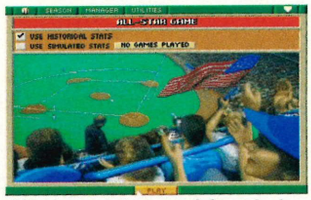
All the game's parameters are set in the ground rules dialogue. Note the speed adjustment — TLRBII worked smoothly on PCs of vastly differing power. The cryptic Computer Pipes Ball is for batting practice.



The game in all its glory — looks good, doesn't it? Here, I'm controlling the pitcher as he fires the ball in at the plate. Some pitchers are more reliable than others, particularly when attempting certain types of pitch.



Unfortunately, that wasn't the best curve ball I've ever thrown. The batter has latched onto this fact, and is about to launch the ball into orbit. Such is life ... Maybe I'd better bring on a substitute pitcher.



After a none to promising start from the pitcher's mound, I've decided to resolve some questions by swapping to an All-Star game with players from the ages, all of whose attributes have been carefully computerised.

play, the program throws up a large dialogue box with options covering your level of involvement, the input device, which bits of the game are looked after by the PC, and various details including sound effects and animation speed. Calibrating a joystick at this stage is important, but isn't properly covered in the manual.

Once you're set up, you're given a chance to change the batting order and pitcher, and it's off to the old diamond.

Before each pitch, small menus pop up for batting and pitching, allowing you to set curveballs, fastballs, powerhits, blocks and so on. These settings are crucial, yet I couldn't for the life of me figure out how to access them using the joystick, and even with the keyboard and mouse they had a nasty habit of disappearing while I was still making up my mind.

Controlling a pitch with either a mouse or joystick gives disappointingly poor control over the ball's trajectory. It wasn't so bad when I used the keyboard, although that still left me with fairly coarse control. One nice touch of realism, though, is that pitchers can rarely perform over a whole season. Since the pitcher's performance is pivotal to that of the whole team, you have to keep track of reserve pitchers and make sure they're ready to step in when your trusty first draft pitcher shows signs of battle fatigue.

I didn't find batting to be the satisfying experience it should have been. You have to choose a type of shot — normal, power, contact (a namby-pamby sort of block) and bunt (which just sounds obscene). Once you've selected your shot, it's just a question of hitting the ball at the right time; precious little skill is involved in this since the margin of error is so small that it's next to impossible to have any real control over the shot.

There's also an item on the menu entitled Signs, which gives you access to special options, like encouraging your hitters to 'steal' bases when the pitch comes in. To score any serious points, it's important you make use of these, but they'll only appeal to diehard baseball fans, as the various options are rather arcane.

Once you've hit the ball, you have to control the hitter's movement between bases, which is best achieved using the mouse. Fielding and running between bases are averagely entertaining, but need to be a lot snappier and also seem heavily weighted in favour of the computer. But it could just be I'm a sore loser ...

But, as I mentioned before, throwing, hitting and chasing after the ball is only a part of TLRBII. It's clear from the allocation of space in the manual (which is nicely produced but often unhelpful) that the team management aspect is a central part of the game. Unfortunately, it's so dense that it's only likely to appeal to baseball fanatics and those who possess an obsession with players' statistics.

Many American sports have been either designed for, or tweaked to fit around TV advertisement slots, with statistics and analyses used to entertain the TV audience before and after the breaks. In trying to recreate the game of baseball realistically, TLRBII has effectively dragged this offputting aspect of American sport from the TV to the PC.

Beside the in-game interruptions, the game gives you managerial control over an entire squad of players (including deciding how soon to bring them back after injury), lets you pick which stadium you want to play in, lets you rotate pitchers and displays a mountain of statistics generated as your season progresses. You can select a league schedule, control the attributes of managers of other teams, transfer players, and pretty much anything else to do with baseball.

From that perspective, Tony La Russa Baseball II is the most complete baseball simulation I've come across. Sadly, the playing of the game is nowhere near as entertaining as I'd hoped, despite the impressive graphics. A large part of the playability has been swamped by the endless round of options, statistics, and yet more statistics. I can see this going down well in the States, where they're used to such interruptions, but over here it's always going to be a minority attraction.

■ Steve Boxer

PCreview **5**

Techspec

TLRBII will get by with 1Mb RAM and doesn't require any fiddling around with expanded or extended memory. However, it has two drawbacks: it needs at least MS-DOS 5.0 or DR-DOS 6.0, and 13Mb (15Mb recommended) of space on your hard disk.

Disk requirements

High density	✓
Hard disk only	✓
Space taken on hard disk	13Mb

Graphic modes

CGA	x	EGA	x	Tandy	x
VGA	✓	SVGA	x		

Soundboards

Ad Lib	✓	Roland	✓	Sound Blaster	✓

Control

Joystick	✓	Keyboard	✓	Mouse	✓

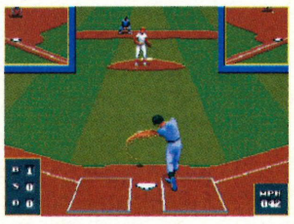
Performance

Optimum speed	25MHz
Minimum memory	1Mb
Free RAM required	580K

Alternatively...



RBI Baseball 2
The Hit Squad, £9.99
Not exactly state of the art graphics. Come to think of it, not what you'd call state of the art anything, really. But RBI Baseball 2 is quite addictive, in a mind-mumbing way, and the mechanics of the game aren't that far removed from either Tony La Russa 2 or TV Sports Baseball.



TV Sports Baseball
Mindscape Classic, £19.99
TV Sports Baseball follows the same very basic playing routines as RBI Baseball 2— only with prettier graphics all round — but doesn't approach the statistic-heavy Tony La Russa 2 in thoroughness, or, for that matter, interruptions. Not bad if you aren't a baseball fanatic.



Title	**Spaceward Ho!**
Publisher	**New World Computing**
Contact	**(021) 625 3366**
Price	**£44.99**

Intergalactic domination for beginners. All you need is a ship, a few foolhardy colonists and somewhere to send them to. Oh yes, and there's the small matter of a bit of cash.

SPACEWARD

Dust off your stetson and climb aboard your spaceship — it's time to boldly go beyond the final frontier

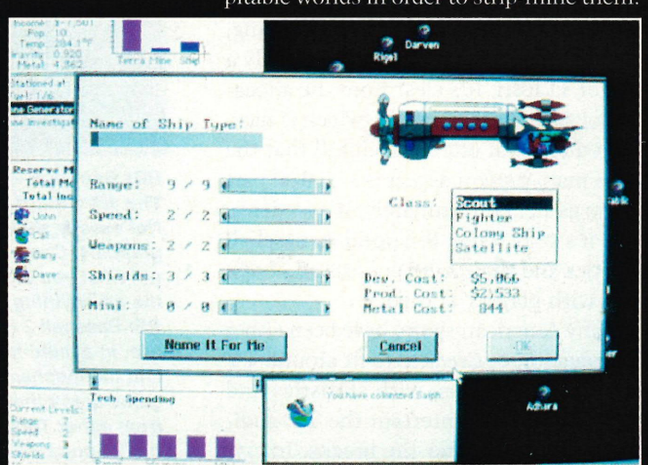
Quite what the conquest of the galaxy has to do with cowboys I'm not sure, but this space strategy game with a wild west theme is a lot less bizarre than it sounds. Starting off with a race who have only recently discovered space travel, your aim is to explore new planets, colonise any suitable worlds and, of course, conquer the galaxy. Simple, eh?

Well, not quite. Since no strategy game would be complete without a rival or two, it's advisable to keep ahead in the space race by spending money on developing faster, meaner and deadlier ships. In practice, this means juggling finances — yes, it's that old chestnut, the "guns or butter" question. If you neglect to develop your technology you'll be lucky to survive an encounter with the enemy, but on the other hand, spend too much on building fighter ships and your colonies will perish.

When you start a game you can choose the size and shape of your galaxy, your skill level, the number of computer players you'll be competing against and just how smart they are. A multiple player option is also available for up to 20 players at any one time. Networks are supported and are the best medium for this type of game. Although it's possible for more than one player to share a machine, in practice, this makes for a rather slow and tedious game since each player will have to log in every time they take a turn.

Once into the game, you'll find a home world surrounded by unexplored planets. It's easy enough to tell which planets are which because colonised planets wear hats and enemy planets also sport cool dude shades or scarves. My first move was to send off a couple of scout ships immediately to find out if any of these were worth colonising. Suitable ones will have a gravity of between 0.4G and 2.5G, because although you can colonise planets with gravities outside that range, they can never become profitable.

Also well worth bearing in mind is the amount of metal a planet has. Metal is essential for shipbuilding and can run out towards the end of a game, so if you're running short it's worth colonising inhospitable worlds in order to strip-mine them.



This is just one of the many weird and wonderful ships you get to develop. Sadly, it looks a lot better than it flies.

At the start of the game, however, you should concentrate your efforts on building profitable colonies.

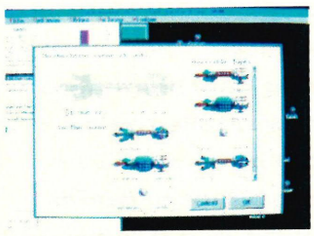
At the same time you should be trying to make technological advances. By playing around with the bar charts you can adjust spending and decide which aspects of technology you want to concentrate on. Early in the game you'll want to improve the range and speed of your ships so that you can explore further afield, but just as soon as you start running into the opposition you will have to start developing decent weapons and shields or risk losing your battles. The basic object of the game is to destroy all your enemies, so it pays to be utterly ruthless.

There's an option on the menu to design new ships, but this isn't nearly as exciting as it sounds. Each time your technology reaches a new level, you get to develop a ship which makes the most of that technology. The appearance of the new ship is already determined by the computer, so unfortunately you don't get a say in how it's going to look.

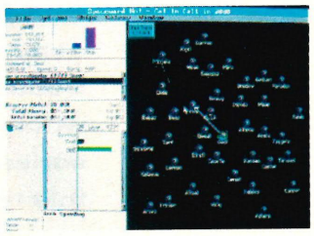
An option to choose a design or colour would have been rather nice, but as it is, you are only allowed to choose the name of the new model. Even so, some of the designs are pretty wild anyway — varying

Two Minutes *of space conquest*

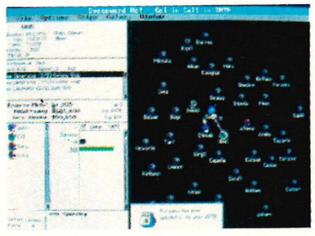
PC review 6



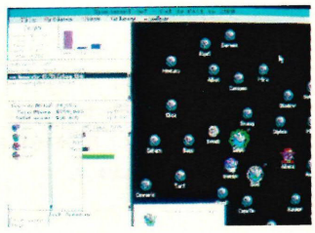
If you start without ships you'll have to build some. Scout ships are first in the queue, followed by a colony ship. At this stage I haven't come across any enemies, so fighter ships aren't on my list of priorities.



Choose a planet and send a scout ship to explore. Drag a line from your home planet to the one you've chosen and you'll hear a "Hyah!". If you change your mind, click back on your home planet and you'll hear a "Whoa!".



At last you've found a suitable planet: hospitable planets are blue, inhospitable planets are brown and cratered. If the planet also has plenty of metal to mine you're laughing. Time to launch a colony ship.



Once you've established a colony, you must make a profit. Balance your spending between terraforming the planet, mining and shipbuilding, but don't forget to allocate some cash to developing your technology.

ho!

from ships which look like wolves or sharks to those with giant boxing gloves attached to the front. The more primitive designs wouldn't look entirely out of place in a 1930s Flash Gordon movie.

Spaceward Ho! is extremely easy to get into. You don't have to spend hours wading through some enormous tome before you can begin to play, since the manual is designed so that you can dip into it as and when you need. That's not to say that the game is a doddle to get through. The rules might be straightforward but the game remains challenging, especially when you're playing against friends or smart computer opponents. The Windows-style interface is clear and easy to use but, like Windows, a mouse is needed.

The game supports a wide variety of sound cards and screen resolutions, but doesn't make the most of them. There's no music and the only sound effects are a few cowboy whoops (when you launch your ships) and a terrible 'pots and pans clanging together' sound as you battle it out with the enemy. Visually the game is nice and simple, but there's no real advantage in using the very hi-res modes. In fact, unless you have a great big monitor, the SVGA modes make everything so small that you'll fry your eyes trying to make out what's going on.

Although Spaceward Ho! is a good, workmanlike game with plenty to recommend it, there's nothing about it which seems particularly innovative. It's a pleasant enough way of passing the time and might brighten up the odd lunch break if you should persuade a few friends to have a game or two on the office network.

On the other hand, it isn't the kind of game which will have you reaching for the strong black coffee at three in the morning because you can't tear yourself away. If you're a fan of the genre or simply want a good introduction to strategy, you'll find a decent if rather ordinary game lurking beneath the corny cowboy facade. If, on the other hand, you are after something fresh and exciting, I'm afraid you'll have to boldly go elsewhere.

■ Cal Jones

Techspec

You will need 640K of RAM to run in 16 colour mode, but 256 colour modes require up to 384K of extended or expanded memory.

Disk requirements					
	High density	✓			
	Hard disk only	✓			
	Space taken on hard disk	3.5Mb			
Graphic modes					
	CGA ✗	EGA ✓	Tandy ✗		
	VGA ✓	SVGA ✓	Hercules ✓		
Soundboards					
	Ad Lib ✓	Roland ✗	Sound Blaster ✓		
Control					
	Joystick ✗	Keyboard ✗	Mouse ✓		
Performance					
	Optimum speed	20Mhz			
	Minimum memory	640K			
	Free RAM required	Less than 550K			

Alternatively...

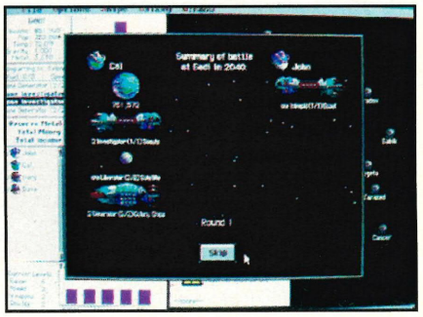


Elite Plus
MicroProse, £39.99
David Braben's space trading game is the game which launched a genre. Although ground-breaking on its original release, the game's wire-frame graphics may not stand up too well when compared to the technically brilliant 3D shaded titles of today, but in terms of sheer depth you simply can't fault it. Braben is finishing off a sequel which should appear towards the end of the year.



When Two Worlds War
Impressions, £TBA
Impression's new space strategy and interplanetary conflict game, due out late next month, may well be worth waiting for. It will feature battles between two warring planets, both in space and on the surface, and designing craft for missions. Most notably, the game is being developed to support Aria's voice-recognition technology, so you will be able to 'talk' your commands to your army.

Send your spaceship to the wrong planet and you just might find yourself involved in an intergalactic incident. Thrilling stuff.





Title	**Space Hulk**
Publisher	**Electronic Arts**
Contact	**(0753) 549442**
Price	**£34.99**

Having foolishly believed you have mastered the early missions, the Deathwing campaign is a whole new challenge. In a series of linked missions this is the big one; marine versus alien in a desperate battle for survival. Brothers, bless your weapons.

Space Hulk

Space Hulk pits mankind against a race of primitive alien killers. Can the board game be as exciting on your home computer?

The digital incarnation of Space Hulk is yet another attempt to bring Games Workshop's "Warhammer 40000" universe to the computer screen. Based completely on the board game of the same name (bar a few added extra features), Space Hulk is very similar to the slightly dodgy Space Crusade reviewed last month. Like Space Crusade, it also deals with heavily armoured space marines, close combat with vicious, throat-ripping alien creatures and sets it all in the narrow corridors of huge derelict space hulks. Action packed with a fair dollop of tension and gruesome death around every corner is probably a fair description.

The premise of the game is a simple one. A huge space hulk, infested with thousands upon thousands of aliens known as gene-stealers, has drifted into human controlled space. Anyone who has watched the Alien series of films must have noticed that the gene-stealer bears more than a passing resemblance to Sigourney Weaver's favourite chitinous killing machine.

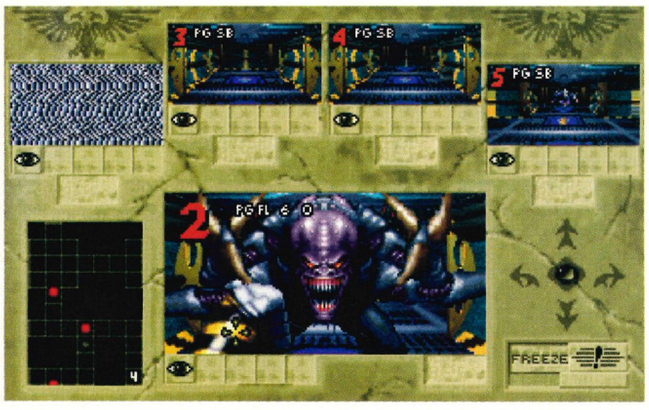
You assume the role of an Imperial Captain of the Dark Angel Chapter of Space Marines, coordinating the movements of your forces using a tactical overhead map screen and cameras mounted on the armour of the marines. In this respect, Space Hulk avoids many of the difficulties that Space Crusade falls foul of, and presents the player with a 3D Dungeon Master style perspective, the long-term depth of a campaign option and frantic realtime combat action.

Space Hulk contains the original six missions that are included in the board game as well as 12 training missions and 12 standalone squad missions. Each one has a set objective, ranging from capturing and holding specified areas to suicide missions where the aim is simply to trash as many aliens as possible before you're overwhelmed by sheer numbers. Finally, several missions have been linked together to form the Deathwing campaign, the ultimate test for the marine tactician.

After the nicely animated opening screens and having chosen a mission, it's on to the mission briefing screen. Here, between the quasi-religious mumblings of your force commander, you're shown the hulk map (if they've managed to scan one), your mission objectives and the expected areas of 'stealer activity. Then it's straight into the action, and it's up to you to formulate the perfect strategy to accomplish the mission. Which corridors should be sealed off? Can an area be captured with a pincer movement? How do you prevent the alien scum from jumping you from behind?

Chances are that after two minutes your entire squad will be completely wiped out and your best laid plans will be in tatters. Space Hulk is not an easy game by any means. But then I suppose that five marines against tens of thousands of gene-stealers was never exactly going to be a tactical breeze.

Marine squads are split into elite units of five, normally four marines with Storm Bolters (advanced AK-47's) and a marine with a six-shot Flamer (flamethrower not a chicken burger). Moving your force about in the game couldn't be easier. Most of the detailed movement is controlled via the 2D overhead map screen. Here a point-and-click interface enables you to direct individual marines around the hulk's many labyrinthine corridors, telling them to turn, open/close doors and to use a certain weapon.

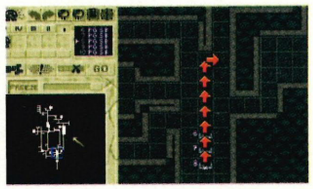


Marine Matthius moves through the space hulk's passageways seeking the enemy. Attack could come from any direction. Unluckily for him it comes from the front and the back and before he knows it, it's goodbye life and hello decapitation.

Two Minutes *of the Deathwing campaign*



At the mission briefing you're told how many marines you control, their weaponry and mission objectives. The squad at the top of the map is retreating towards the squad at the bottom. Time for defensive positions. Defend entry points and prepare to lay down covering fire.



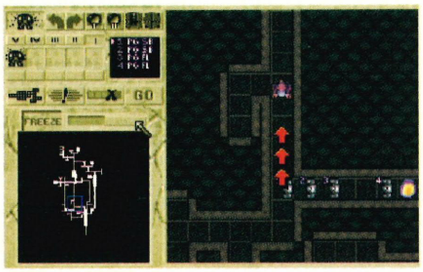
As the squad moves down from the top of the map, squad two has been ordered to fan out into defensive positions. Corridors to the north and east must be secured, allowing aliens to be picked off before they reach the room. Squad one will hopefully be entering from the west.



Meanwhile, squad one runs into trouble. Claudius is almost jumped from behind, but has time to turn and face the genestealer before it strikes. If a marine sees a stealer this close, he usually becomes mincemeat in seconds. Luckily Claudius floors the alien with a punch.



After anxious moments squad one finally enters the room being held by squad two. Marines cover their retreat with Bolter fire, picking off 'stealers as they emerge from the left-hand corridor.Three marines from squad two have been lost but the mission is a success.



Left: the map or planning screen. A merry little band of marines moves to flame a control room on the far left of the map. Marine 1 is selected, the red arrows showing his current direction of movement.

When the game begins you have a certain amount of freeze time. In essence, this is a pause button allowing you to stop the action and give orders to your marines. However, this time (represented by a bar) decreases the longer you remain with the game paused. As a result, you only have a certain length of freeze time to make your decisions before you are abruptly thrown back into the action and everyone starts moving again. Freeze time is restored little by little the longer you stay in real time action.

Techspec ***To play Space Hulk you need at least 580K of free base memory. If the program is installed to run with sound you need a minimum of 260K of EMS. Configuring more EMS gives you more sound effects and makes the game run faster. The No Sound option reduces the amount of hard drive space that the game takes up.***

Disk requirements

High density	✓
Hard disk only	✓
Space taken on hard disk	8.5Mb

Graphic modes

CGA	✗	EGA	✗	Tandy	✗
VGA	✓	SVGA	✗		

Soundboards

Ad Lib	✓	Roland	✗	Sound Blaster	✓

Control

Joystick	✗	Keyboard	✓	Mouse	✓

Performance

Optimum speed	16MHz
Minimum memory	1Mb
Free RAM required	580K

In real time, movement and combat can be controlled from both the map and the three dimensional camera screen. In 3D, clicking the top of the marine's view makes move him forward and when the mouse pointer moves into the centre of the view it becomes a weapons crosshair. As Imperial Captain, you can jump between the marines to let off a few shots or personally redirect a marine to find some action elsewhere.

Obviously, you can't be expected to juggle combat between five marines in the 3D screen, so, thankfully, your marines can operate in overwatch mode. This default setting makes the marine shoot at anything that comes into his line of sight (including doors) and so, as the mission progresses, you can rest easy with the knowledge that your small band of soldiers will try to defend themselves as best they can while you are fighting the bad guys somewhere else.

Later on in the game, when your men have become more experienced and are increasingly glad to be alive, Space Hulk gives the player the option of choosing his or her own weapons for the particular missions. So if you have a particular liking for the destructive power of the Assault Cannon then you can equip your men with those; if you're more of a Storm Bolter kind of a marine then you can rely purely on these. However, if a room has to be destroyed only a Flamer can do it, so the marine charged with carrying it must be protected at all costs.

All in all, Space Hulk is very good. It's graphically impressive and although the map screen is purely functional, where the game comes into its own is in the 3D screen, where the Dungeon Master style of presentation is very effective.

For some people, the computerised version of the board game will score over the original, due to the fact that you only need one person to play it and the computer can take over all the tedious dice rolling and number crunching, letting the player get down to the important business of wholesale tactical genocide. For others, the social interaction, dice rolling and arguments over the rules are essentially what makes Space Hulk fun in the first place. It obviously depends on your point of view. At least with the computer version, your opponent is never too busy and always around when you fancy a battle. However, it is a shame that the game doesn't allow you to play the gene-stealer forces which would have added an extra dimension to the game.

But, if you fancy yourself as an amateur strategist, are the proud owner of an itchy trigger finger, and like the idea of battling against overwhelming odds in confined spaces, then you should look no further than Space Hulk.

■ Dean Evans

PC review **7**

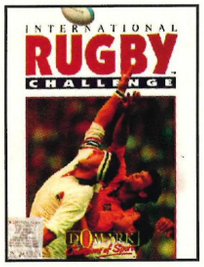
Alternatively...



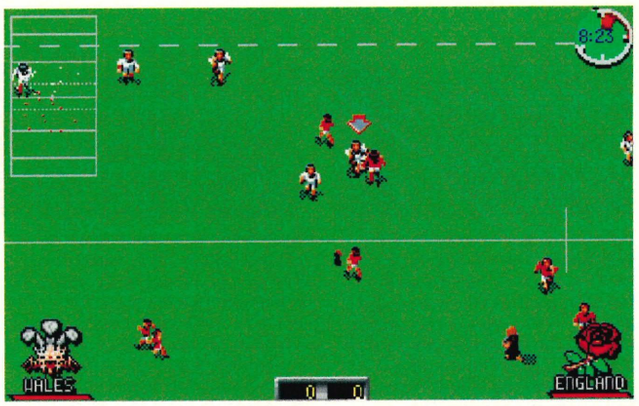
Space Crusade
Gremlin, £34.99
Rated 4, Issue 19
This is a rather flawed conversion of the board game of the same name. Aliens have infiltrated a group of derelict spacecraft and up to three players have a chance to engage in a dozen missions against them. The game uses the forced 3D perspective seen in Cadaver and in all those old Ultimate games on the ZX Spectrum. Space Crusade doesn't have as much depth as Space Hulk and you'd be better off buying the Space Crusade board game for £8 less.



Captive
Mindscape, £19.99
As a prisoner trapped somewhere in the universe, you have to guide four remote-controlled droids through monster- and trap-filled labyrinths in search of the ultimate prize – yourself! Captive utilises the familiar first-person 3D view pioneered by the likes of Dungeon Master and Eye of the Beholder. Although it doesn't really improve too much on that standard formula, to be honest, it's a solid enough RPG adventure, though looking a little dated now unfortunately.



Title	**International Rugby Challenge**
Publisher	**Domark**
Contact	**(081) 780 2222**
Price	**£29.99**



England seem to be holding a reasonable position (for once), but the Welsh team are all over the park. The player position indicator does very little to clear up the confusion, either. Spot the ball, anybody?

Arcade shoot 'em ups? You can do as much damage legally — or mostly legally — on a rugby field

International RUGBY CHALLENGE

There's been a huge surge of interest in rugby union in the UK with the recent sucess of Carling and the boys, and far be it for the PC industry to miss that sort of opportunity. Although the game, like most team sports, promises to be difficult to capture on a PC, International Rugby Challenge aims to bring some of the mayhem of the rugby field to the PC screen, without costing me my hard won couch-potato status.

Domark has been fairly true to the rules of the game, although liberties have been taken, mostly in the form of omissions (like open-field penalties). When it comes to arranging your matches, the fixture and team management aspects are passable enough, with choices of friendlies, The Five Nations, the World Cup, or touring, and choosing a squad according to fitness and ability. So far not so bad, until you step on to the pitch ...

Right from the hurried kick off, it's plain that the game lacks any pattern or structure. Passing is achieved by holding the fire button and directing the ball roughly at the man you want, not easy to do when you're trying to get a man to run forwards and pass backwards at the same time. Otherwise, the ball is automatically passed to the nearest man, or it's supposed to be, anyway. What actually happens is that the ball gets slung backwards and forwards across the pitch in a way that'd have even David Campese hanging up his boots in frustration.

Punting the ball upfield or into touch is straightforward enough, and tackling means hitting the fire button when the opponent is near your player (whether the player makes the tackle depends on his ability rating). But there doesn't seem to be any point in tactical kicking or safety play. It's just a case of waggling the joystick like mad, lobbing in a couple of random passes and running the length of the field.

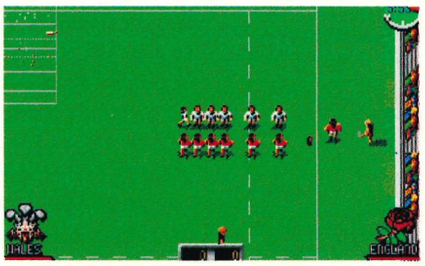
The result is little more than a 30 man game of tag, with no rhyme or reason as to who's where on the pitch. Rugby may seem like a legalised brawl, but it's a game played to patterns, to set pieces. I wouldn't mind if it was just my players who were all over the shop, but the computer-generated team also manages a credible imitation of 15 headless chickens.

Graphically, it's even more of a let down. The first time I sat down to play I was convinced I was looking at old budget re-release, with players that were crude, identical, and only capable of minimal movement. But it's kicking a conversion using the field-level view that really hammers home the fact that this is several years out of date. Even with the limited replay camera facility, it doesn't seem like much effort, or expense, has been put into making this any more watchable.

This, for me, is the final nail in its coffin. I'd have been forgiven a great deal if International Rugby Challenge had captured *some* of the feeling of the game. Sadly, as sports sims go, it lacks either the character and playability of a game like Sensible Soccer (see this month's cover disk), or the graphic excellence of Jordan In Flight (last issue). What you end up with is a distinctly third rate game that's too easy to win, and too frantic to play skilfully, which bears little relation to rugby itself.

■ John Bennett

PCreview 2



You'd be unlikely to see any 'lifting' in this lineout, but calling a six-man line makes the pitch a little less cluttered with bodies after the set-piece play.

Techspec

Not too many problems spring to mind, although the graphics support is limited to VGA only. Size certainly isn't everything, and International Rugby Challenge can hardly be accused of hogging your hard disk.

Disk requirements

High density	✓
Hard disk only	✓
Space taken on hard disk	***670k***

Graphic modes

CGA	✗	***EGA***	✗	***Tandy***	✗
VGA	✓	***SVGA***	✗		

Soundboards

Ad Lib	✓	***Roland***	✓	***Sound Blaster***	✓

Control

Joystick	✓	***Keyboard***	✓	***Mouse***	✓

Performance

Optimum speed	***20MHz***
Minimum memory	***640K***
Free RAM required	***560K***

MICROLAND BULLETIN BOARD SYSTEM

0891 990 505 To Download

0483 725 905 To View

Shareware to download at V32bis, V32, V22bis, V22, V23, & HST etc. 8 data bits, no parity.

Why wait for your software when you can download now direct to your computer. Microland offers high speed connections and most files are compressed to minimise the cost. Check it out on 0483 725 905 at normal call charges. So much shareware you are spoilt for choice.

Over 80 file areas including Desktop Publishing, GIF Files, Microsoft Windows, Games, Database Systems, Clip Art, Unix, Virus Detectors, Laser Fonts, Word Processors, Dbase Apps & Utils, Music Sound Tunes, Spreadsheets, Account & Finance Packages, Mean 18 Golf Courses, and Communications. Area 1 contains file lists for all areas to help you find what you are looking for. Protocols xmodem, ymodem, zmodem, kermit, sealink, and uucp.

Calls to 0891 990 505 charged at 36p per minute cheap rate, 48p per minute all other times. Trevan Designs Ltd. PO Box 13. Aldershot, Hants. GU12 6YX.

Matrix Software Club

The guaranteed way to safeguard your money

Buy your software from us and We'll buy it back! - guaranteed!

" THE LATEST & THE POPULAR BUSINESS, UTILITY, EDUCATIONAL, LEISURE. " NO COMMITMENT TO BUY " SUPER GUARANTEED PRICES " " FAST SERVICE " ESTABLISHED 1981 " OVER 3000 MEMBERS "

VISA

Send S.A.E or phone (24 Hours) for information pack. Matrix Computing Services, Dept PCR6 , 2 French's Yard, Amwell End, Ware, Hertfordshire, SG12 9HP.

0920 484479 - 24 Hours

one-nil

advanced management for soccer addicts (IBM PC game ★)

new era software

ONE NIL takes you right to the heart of soccer team management: buying and selling players, hiring and firing staff, developing youth players, selecting your squad, and choosing team and player tactics. You watch every game your team plays and can adjust your players' positioning and tactics as the game unfolds. You will have to cope with injuries, suspensions, fluctuating player fitness and confidence.

Choose any team from the Scottish and English league databases supplied, or create your own customised league. Can you cope with the club finances and an interfering chairman? Should you enlarge your stadium or buy a new striker? Can you take a lowly third division team to the top of the super league and to cup glory?

FEATURES INCLUDE:
- 176 teams: including non-league and European.
- each team has its own quirks: the better the team, the easier the game.
- domestic league of 4 divisions (English or Scottish). European super league
- league championships, 5 cup competitions, friendlies.
- fixtures, results, statistics for each team.
- trialists, youth players, transfer market.
- negotiate player ard staff contract terms.
- hire/fire assistant, scout, physio.
- poach players and staff from other clubs.
- cash flow statement after every game.
- watch any game, and every move by each player, with text commentary; variable speed control; quick result option.
- bookings, sendings off, suspensions, substitutions, injuries, internationals.
- supports, crowd attendances, stadium capacities.
- player info includes skills (22 categories), confidence, hardness, fitness, energy, age, leadership, experience, goals, position (14 positions), best foot, salary, valuation, tactical instructions.
- team info includes skills (4 categories); formation; tactical instructionss; average fitness, hardness, confidence; staff and chairman details; support; stadium.
- set detailed tactics at both team and player level before and during each game.
- join other teams during the game.
- annual statistical review of your career
- save and reload game.
- customise all main game data: player, team and staff names, strip colours, stadia capacities, etc.
- on-line help always available.
- one or two player game: play against a friend, or manage two teams simultaniously if you wish.

★ ONE-NIL will run on ANY IBM PC or compatible with at least 480K free RAM

one-nil costs only £20 fully inclusive

VISA

phone our sales line on 031 333 4958 or order by mail from:

NEW ERA SOFTWARE,PO BOX 19,LIVINGSTON EH27 8EH

MasterCard

SHAREWARE GAMES SETS

BUY ONE SET FOR £12, TWO SETS FOR £22
THREE OR MORE SETS FOR ONLY £10 EACH
ALL SETS NOW ON HIGH DENSITY DISKS!!

From the numerous shareware and public domain games and leisure programs available we have selected and tested the finest and compressed them into four new collections, updated regularly.Each set now comes on 6 HIGH density (1.44MB) 3.5 inch disks. . These sets are not available on 5.25 inch disks. There is no duplication between any of these 4 sets.

GAMES COMPENDIUM 1 (150 of the best PC games)

Titles include: Dark Ages, Commander Keen, EGA Bomb, Capt Comic, Joust, Americas Cup, Pharaohs Tomb, Battleship. EGA Poker, Global Warfare, Gravwars, Droids, VGA Pinball, 3D Tetris, Seahunt, Snarf,Bananoid, Eatit, Breakout, Bloxter, 3D Chess, VGA Roulette, VGA Miner, EGA Solitaire, Apples & Oranges, Aldo, Robomaze 2, Caddieshack.....dozens more adventure, arcade, board, card, word and strategy games.Over 18 megabytes of games when unarchived. Complete with an easy to use, menu-driven, install program and full instructions.

GAMES COMPENDIUM 2 (Another 150 quality games)

Titles include Wizards Lair, Hurkle, Kursk, 3D Startrek, Condo, bass Tour, Tron, Golden Wombat, Monuments of Mars, PC Railroad, Sorry, Frigate, Antix, EGA Casino Games, Dungeons of Doom, Shooting Gallery, Viking, Ninja, PC Pool, VGA Mahjong,, Commander Keen 4, Secret Agent, Aldo 2., Hugo 2, Moraff's Stones, Conquest , Cosmos Comic Adventure, Bolloball, Galatix, Goldmine, FBI Fred....and many many more !!

GAMES COMPENDIUM 3 (Yet another 150 great games)

Arctic Adventure, Duke Nukem, Aliens Laughed, Moraff's World/Entrap/Superblast, Kroz II, Dracula, Groundwar, Baseball, Picture Puzzle, Jumpman Lives, Aldo 3, Hugo 3, Marble Man, ZZT, Sherlock, Mario VGA, Scud Attack, Battle for Atlantis, Kiloblaster, Last Half of Darkness, Commander Keen 6, Jungle Jack, Lavacap, lots of joke programs ....and more!!

WINDOWS GAMES PACK (Over 160 games programs)

Titles include: Atmoids, Backgammon, Chaos, Checkers, Fractal Paint, Fireworks, Islands, Klotz, Lunar Lander, Magic, Mines, Chomp, Pool, Screenpeace, Spacewalls, Sage, Space War, Tile Puzzle, Pipe Dreams, Taipei, Winfract, Winchess, Winjack, Winpoker, Attaxx, Jewel Thief, Football, Kye, MacBlast, Snakes, Warhead...and many more. For Windows 3/3.1.

Please send me the shareware sets ticked below. Add £1 P&P per order.
☐ I enclose a cheque/PO
☐ Please debit my Access/Visa/Eurocard attach card details & signature.
☐ Games 1 ☐ Games 2 ☐ Games 3 ☐ Windows Games Pack
NAME.....
ADDRESS .....
.....
..... PCR

SHAREWARE CONNECTIONS. Tel: (041 775 1937)
49 BOGHEAD ROAD, KIRKINTILLOCH, GLASGOW G66 4ED

BUYING A CD ROM DRIVE OR CD DISKS ?????

Then Join the CD ROM USER GROUP (UK) and gain the following benefits:

- **A Bi-Monthly Newsletter**
  Reviews of CD-ROM Drives and Disk Titles
  Members Ads / Letters / Photo CD / CDI / ETC
- **FREE** Competitions to win Great Prizes
- **Special Offers** On CD Drives
  Also on Hardware for CD & Multimedia Products.
- **Discount Prices** on CD Disk Titles
  Save yourself some money.
- **CD Exchange**, Swap your CD's
  Finished with a CD Title then put in for exchange to another title you would like.
- **CD Hire Library** of Shareware CD`s
  Hire CD`s on a weekly basis, save buying the disk
- **Technical Help & Advice**
- **CD Pressing Service**
  Have your disk collection or data transferred to CD then use our service. (Fee payable)

All this for just £29.99 PLUS you get a FREE CD DisK & our CD Utilities Shareware Disk

Cheque/P.Order made out to CD Rom User Group (UK)
CD Rom User Group, 19 Faygate Close, Bexhill, TN39 5EE
Or Call us on Tel: 0424 730326 for more info

The people's choice for pc

Games

3D CONSTRUCTION KIT 2	37.95
3D POOL	7.95
4D SPORTS DRIVING	14.95
688 ATTACK SUB	13.95
A-TRAIN	29.95
A-TRAIN CONSTRUCTION SET	12.95
A320 AIRBUS	37.95
ACES OF THE PACIFIC	29.95
AIR BUCKS	27.95
AIR COMMANDER (COMP)	29.95
AIR-LAND-SEA (COMP)	29.95
ALCATRAZ	22.95
ALONE IN THE DARK	34.99
Ancient Art of War in the Skies	29.95
ANOTHER WORLD	22.95
ARMOUR GEDDON	29.95
ASHES OF EMPIRE	34.99
ATAC	34.99
B-17 FLYING FORTRESS	34.99
BANE OF THE COSMIC FORGE	28.95
BARBARIAN I	6.96
BARDS TALE 3	8.95
BAT 2	29.95
BATTLE CHESS	8.95
BATTLE CHESS II	22.95
BATTLE ISLE	27.95
- SCENARIO DISK VOL 1	14.95
Battle of Britain - Their Finest Hour	27.95
BATTLE TOADS	18.45
BATTLEHAWKS 1942	12.95
BATTLESTORM	7.95
BBC Gardeners World 3D Designer	14.95
BETRAYAL AT KONDOR	34.99
BIRDS OF PREY	29.95
BITMAP BROTHERS - VOLUME 1	22.95
BLUE MAX	14.95
BRIDGE PLAYER 2150	22.95
Buck Rogers-C'down to Doomsday	27.95
BUCK ROGERS - MATRIX CUBED	22.95
BUDOKAN	10.95
BUNNY BRICKS	18.45
BUSH BUCK	27.95
CAESAR	27.95
CALIFORNIA GAMES II	22.95
CAMPAIGN	29.95
CAPTIVE	14.95
CAPTIVE - MAP GENERATOR	7.95
CAPTIVE 2	27.95
CAR AND DRIVER	29.95
CARL LEWIS CHALLENGE	27.95
CARRIER COMMAND	7.95
CARRIER STRIKE - South Pacific	29.95
CARRIERS AT WAR	27.95
CHESSMASTER 3000 (Windows)	27.95
CHUCK YEAGER 2	8.95
CHUCK YEAGER'S AIR COMBAT	27.95
CIVILIZATION	29.95
COLUMBUS	22.95
COMANCHE MAXIMUM OVERKILL	34.99
COMBAT CLASSICS	27.95
COMMAND HQ	27.95
CONAN THE CIMMERIAN	27.95
CONTRAPTIONS	14.95
COOL CROC TWINS	18.45
COOL WORLD	22.95
CRIME CITY	22.95
CRISIS IN THE KREMLIN	29.95
CRUISE FOR A CORPSE	22.95
Crusaders of the Dark Savant	29.99
D-DAY	29.95
DAGGER OF AMON RA	29.95



DAILY DOUBLE HORSE RACING	7.95
DARK QUEEN OF KRYNN	24.95
DARK SEED	29.95
DARKLANDS	37.95
DAS BOOT	14.95
DAUGHTER OF SERPENTS	29.95
DAUGHTER OF SERPENTS II	34.99
DAVID LEADBETTER'S GOLF	34.99
DICK TRACY	7.95
DISNEY ANIMATION STUDIO	75.95
DIZZY COLLECTION	27.95
DJ PUFF	7.95
DOG FIGHT	34.99
DREADNOUGHTS	25.99
DREADNOUGHTS - BISMARCK	13.95
DREADNOUGHTS - IRONCLADS	13.95
DREAM TEAM	22.95
DUNE	27.95
DUNE II	27.95
DYNA BLASTER	27.95
EYE OF THE BEHOLDER III	29.95
F-15 STRIKE EAGLE III	34.99
F-16 COMBAT PILOT	7.95
F-19 STEALTH FIGHTER	13.95
F-29 RETALIATOR	27.95
F117A STEALTH FIGHTER	29.95
FA Premiere League Football	22.95
FALCON	12.95
FALCON 3.0	34.99
- OPERATION FIGHTING TIGER	18.45
FANTASTIC WORLDS (COMP)	29.95
FANTASY WORLD DIZZY	7.95
FASCINATION	27.95
FIRST SAMURAI	22.95
FLASHBACK	29.95
FLIGHT OF THE INTRUDER	12.95
FLIGHT SIMULATOR 4	39.95
- FLIGHT ADV 685	22.95
- FLIGHT ADV 701	22.95
- G.B. DATA DISK	29.95
- RESCUE AIR 911	22.95
FLOOR 13	27.95
FOOTBALL MANAGER 3	22.95
FORMULA 1 GRAND PRIX	34.99
FUTURE WARS	10.95
GALACTIC WARRIOR RATS	7.95
GATEWAY	27.95
GATEWAY to Savage Frontier	22.95
GLOBAL CONQUEST	34.99
GLOBAL EFFECT	27.95
GO FOR GOLD	7.95
GOBLIINS (16C)	18.45
GOBLIINS (256C VGA)	22.95
GODS	27.95
GRAND PRIX UNLIMITED	27.95
GRANDMASTER CHESS	27.95
GRANDSLAM BRIDGE II	29.95
GREAT NAVAL BATTLES	29.95
- AMERICAN DATA DISK	14.95
- SCENARIO BUILDER	14.95
- SUPERSHIPS	14.95
GUNSHIP 2000	29.95
GUNSHIP 2000 - ISLANDS & ICE	18.45
HEIMDALL	27.95
HEROQUEST - TWIN PACK	9.95
HISTORY LINE (1914-1918)	29.95
HOME ALONE 2	22.95
HOORAY FOR HENRIETTA	27.95
HOT HATCHES	22.95
HUMANS	22.95
- JURASSIC Levels (data disk)	14.95
- JURASSIC Levels (stand-alone)	22.95
HYPERSPEED	34.99
IMPERIUM	8.95
INCA	34.99
INCREDIBLE MACHINE	29.95
Indiana Jones & Fate ATL. (ACT)	22.95
Indiana Jones & Fate ATL. (ADV)	28.95
Indiana Jones & L. Crusade (ACT)	6.96
Indiana Jones & L. Crusade (ADV)	12.95
INT'L RUGBY CHALLENGE	18.45
ITALY 1990	7.95
JACK NICKLAUS GOLF	10.95
JACK NICKLAUS Signature Ed.	29.95
JETFIGHTER II - Special Edition	37.95
JETSONS	10.95
Jimmy White's Whirlwind Snooker	27.95
JOE & MAC - CAVEMAN NINJA	22.95
JOHN MADDEN FOOTBALL II	22.95
JORDAN IN FLIGHT	29.95
KGB	27.95
KINGS QUEST 5	34.99
KINGS QUEST 6	34.99
LASER SQUAD	27.95
LEGACY	34.99
LEGEND OF KYRANDIA	27.95
LEGENDS OF VALOUR	29.95
LEISURE SUIT LARRY 5	29.95
LEMMINGS (ORIGINAL)	27.95
LEMMINGS 2	29.95
LEMMINGS DOUBLE PACK	29.95
LEMMINGS LEVELS (add-on)	18.45
LEMMINGS LEVELS (stand-alone)	22.95
LES MANLEY LOST IN L.A.	21.95
LIFE & DEATH	14.95
LINKS	29.95
LINKS 386 PRO	34.99
LIVERPOOL FOOTBALL	22.95
LOMBARD RAC RALLY	7.95
LORD OF THE RINGS	27.95
- THE TWO TOWERS	27.95
Lost Files of Sherlock Holmes	29.95
LURE OF THE TEMPTRESS	27.95
M1 TANK PLATOON	13.95
MAGIC POCKETS	22.95
MAGIC WORLDS	22.95
MANCHESTER UNITED	7.95
MANCHESTER UNITED EUROPE	22.95
MANIAC MANSION	10.95
MARIO TEACHES TYPING	22.95
Mavis Beacon Teaches Typing	14.95
Mavis Beacon Teaches Typing V2	27.95
MCDONALD LAND	18.45
MEGA-LO-MANIA	27.95
MEGATRAVELLER 2	27.95
MERCENARIES	29.95
MICROPROSE SOCCER	7.95
MIDWINTER	10.95
MIDWINTER II	34.99
MIGHT & MAGIC 3	29.95
MIGHT & MAGIC 4-Clouds of Xeen	37.95
MONTY PYTHON	7.95
MOONSTONE	14.95
MOONWALKER	6.96
N.F.L.	29.95
Nigel Mansell's Wld Championship	27.95
NODDYS PLAYTIME	22.95
NORTH & SOUTH	6.96
OFF SHORE WARRIOR	7.95
Omar Sharif's Bridge	29.95
Omar Sharif's Bridge (Windows)	27.95
OPERATION STEALTH	12.95
PACIFIC ISLANDS	27.95
PANZA KICK BOXING	7.95
PATTON STRIKES BACK	29.95
PERFECT GENERAL	29.95
- WW2 DATA DISK	14.95
PGA TOUR GOLF - Courses Disk	12.95
PGA TOUR GOLF PLUS	27.95
PICTIONARY	7.95
PINBALL MAGIC	7.95
PIRATES	10.95
PIT FIGHTER	7.95
PLAN 9 FROM OUTER SPACE	29.95
POLICE QUEST 3	29.95
POOLS OF DARKNESS	22.95
POPULOUS II (IBM PC)	29.95
POPULOUS/PROMISED LANDS	12.95
POWER HITS SCI-FI (COMP)	22.95
PREHISTORIK	7.95
PRINCE OF PERSIA	10.95
PRO TENNIS TOUR 1	7.95
PRO TENNIS TOUR 2	27.95
PROPHECY OF THE SHADOW	24.95
PUSH-OVER	16.99
PUTT PUTT (3-7)	22.95
PUTT PUTT FUN PACK	22.95
Quarky & Quaysoo's Turbo Science	27.95
QUEST FOR ADVENTURE (Comp)	29.95
QUEST FOR GLORY 3	29.95
R.B.I. BASEBALL 2	7.95
RAILROAD TYCOON	27.95
REACH FOR THE SKIES	27.95
REALMS	27.95
RED BARON	29.95
RED BARON - DATA DISK	18.45
RICK DANGEROUS I	7.95
RICK DANGEROUS II	7.95
RINGWORLD	29.95
ROAD TO THE FINAL FOUR	22.95
ROBOCOD	7.95
ROBOCOP III	22.95
ROME (AD 92)	27.95



Credit card orders 10 am to 10 pm

071 608 0624

7 days a week (not an answerphone)

You can also FAX your order to 071 608 0688

You're always welcome at our

Games Centre



Mon - Fri 10am to 8pm

Saturday 10am to 4pm

23 Pitfield Street, London N1 6HB

Nearest underground: Old Street (2 minute walk - take exit 2)

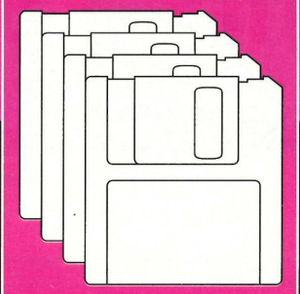
CASTLE OF DR BRAIN	27.95
CASTLES	27.95
- N. CAMPAIGN DATA DISK	12.95
CASTLES 2	27.95
CENTURION	8.95
CHAMPIONSHIP MANAGER	22.95
CHAMPIONSHIP MANAGER '93	22.95
CHESS CHAMPION 2175	22.95
CHESSMASTER 3000	27.95
ELITE PLUS	29.95
ELVIRA II	29.95
EMPIRE DE LUXE	34.99
EPIC	27.95
ESPANA - THE GAMES '92	27.95
ETERNAM	27.95
EURO SOCCER	18.45
EYE OF THE BEHOLDER I	22.95
EYE OF THE BEHOLDER II	27.95
HARDBALL 3	27.95
HARPOON - BATTLE SET 3	12.95
HARPOON - BATTLE SET 4	12.95
HARPOON - DESIGNERS SERIES	14.95
HARPOON - EDITOR	14.95
HARPOON V1.2.1	29.95
HARRIER ASSAULT	29.95
HARRIER JUMPJET	34.99
HEAD TO HEAD (COMP)	29.95
LINKS - BARTON CREEK	13.95
LINKS - BAYHILL	13.95
LINKS - BOUNTIFUL	13.95
LINKS - FIRESTONE	13.95
LINKS - HYATT DORADO	13.95
LINKS - MAUNA KEY	16.99
LINKS - PINEHURST	13.95
LINKS - PINEHURST 2	16.99
LINKS - TROON NORTH	13.95

The people's choice for pc

games and accessories...

SABRE TEAM	27.95
SCRABBLE	22.95
SECRET OF MONKEY ISLAND	22.95
SECRET OF MONKEY ISLAND II	27.95
Secret Weapons of the Luftwaffe	29.95
- DO 335	14.95
- HE162	14.95
- P-80	14.95
SENSIBLE SOCCER 92/93	22.95
SHADOW OF THE COMET	27.95
SHADOW PRESIDENT	34.99
SHADOW SORCEROR	22.95
SHADOWLANDS	22.95
SHADOWORLDS	27.95
SHANGHAI 2	27.95
SHUTTLE	29.95
SIEGE	22.95
SIEGE - DOGS OF WAR DATA DISK	12.95
SILENT SERVICE II	27.95
SIM ANT	27.95
SIM CITY (WINDOWS)	34.99
SIM CITY - TERRAIN EDITOR	7.95
SIM CITY DELUXE	27.95
SIM CITY/POPULOUS	27.95
SIM EARTH	29.95
SIM EARTH (WINDOWS)	29.95
SIM LIFE	29.95
SLEEPWALKER	26.95
Sorceror's Appliance - Spellcast.201	29.95
SPACE QUEST 4	29.95
SPACE QUEST 5	29.95
SPEAR OF DESTINY	29.95
SPELLJAMMER	27.95
SPORTS BEST	18.45
SPORTS MASTERS (COMP)	27.95
SPRING BREAK - Spellcasting 301	27.95
STAR TREK (25TH ANIV.)	27.95
STARGLIDER II	7.95
STEEL EMPIRE	27.95
STRATEGY MASTERS	27.95
STREET FIGHTER	7.95
STREET FIGHTER 2	22.95
STRIKE COMMANDER	37.95
- SPEECH PACK	14.95
STRIKE FLEET	10.95
STUN RUNNER	7.95
STUNT CAR RACER	6.96
STUNT DRIVER	12.95
STUNT ISLAND	37.95
SUMMER CHALLENGE	27.95
SUPER CAULDRON	18.45
SUPER OFF ROAD	7.95
SUPER TETRIS	27.95
TANK	12.95
TASK FORCE	34.99
TELLING THE TIME	12.95
TERMINATOR II	7.95
TEST DRIVE II	10.95
TEST DRIVE III	22.95
THE GREATEST (COMP)	27.95
THE MANAGER	22.95
THE SUN CROSSWORD	7.95
THE TIMES CROSSWORD	7.95
THUNDERHAWK	27.95
TONY LA RUSSA 2	27.95
TORNADO	34.99
TRANSARCTICA	22.95
TRIVIAL PURSUIT	10.95
TRIVIAL PURSUIT DELUXE	22.95
TROLLS	18.45
TV SPORTS BOXING	14.95
U.M.S. II - PLANET EDITOR	18.45
ULTIMA 6	14.95
ULTIMA 7	29.95
- FORGE OF VIRTUE DATA DISK	14.95
ULTIMA 7 PART 2	34.99
ULTIMA TRILOGY II	29.95
ULTIMA UNDERWORLD	29.95
ULTIMA UNDERWORLD II	29.95
V FOR VICTORY 2	27.95
VIKINGS	27.95
WACKY FUNSTERS	14.95
WAR IN THE GULF	27.95
WAXWORKS	27.95
WILD STREETS	7.95
WILLY BEAMISH	34.99
WING COMMANDER DELUXE	34.99
WING COMMANDER I	14.95
WING COMMANDER II	29.95
- SPEC. OPER. 2	14.95
- SPEECH ACCESSORY	13.95
WINTER CHALLENGE	27.95
WORLD CLASS LEADERBOARD	7.95
- THE SERIES	10.95
WORLD CRICKET	7.95
WORLD CUP SOCCER	7.95
WWF EUROPEAN RAMPAGE	22.95
WWF WRESTLEMANIA	7.95
X-WING	34.99
XENOBOTS	29.95
YACHT & DOMINOES (Nick's Picks)	6.96
ZAK MCKRACKEN	10.95
ZOOL	27.95

3.5" Disks



Qty	DSDD	DSHD
10	5.30	7.80
20	10.35	15.35
25	12.65	18.25
30	14.75	21.80
35	16.90	25.20
40	18.95	28.60
45	21.10	32.10
50	22.95	34.40
80	36.35	52.30
100	41.70	61.90
120	49.40	72.40
150	60.95	90.25
200	78.75	115.75
250	97.30	143.30
300	116.30	170.75
400	154.50	221.70
500	184.65	269.65
600	223.50	320.60
1000	364.30	524.40
2000	728.50	1018.75
3000	1065.75	1498.15
4000	1401.45	1957.50
5000	1726.80	2396.85
10000	3325.20	4713.70

All our disks are fully guaranteed and include labels.

Educational

CAVE MAZE	11.95
FRACTION GOBLINS	11.95
MATHS DRAGONS	11.95
PICTURE FRACTIONS	11.95
REASONING WITH TROLLS	11.95
TIDY THE HOUSE	11.95
ANSWER BACK Junior Quiz (6-11)	15.99
ANSWER BACK Senior Quiz (12-AD)	15.99
FRENCH MISTRESS	15.99
GERMAN MASTER	15.99
ITALIAN TUTOR	15.99
MATHS ADVENTURE (6-14)	19.95
SPANISH TUTOR	15.99
MEGA MATHS (A LEVEL)	18.95
MICRO ENGLISH (8-GCSE)	18.95
MICRO FRENCH (Beginners-GCSE)	18.95
MICRO GERMAN (Beg-GCSE-Bus.)	18.95
MICRO MATHS (11-GCSE)	18.95
MICRO SCIENCE (8-GCSE)	18.95
PRIMARY MATHS COURSE (3-12)	18.95
ALVINS PUZZLES	14.95
PAINT POT 2	14.95
SHOPPING BASKET	14.95
WHICH? WHERE? WHAT?	14.95
BETTER MATHS (12-16)	19.95
BETTER SPELLING (8-ADULT)	19.95
JUNIOR ARTIST (5-10)	14.95
JUNIOR TYPIST (5-10)	14.95
MAGIC MATHS (4-8)	19.95
MATHS MANIA (8-12)	19.95
THE THREE BEARS (5-10)	19.95
ADI ENGLISH (11-12)	18.45
ADI ENGLISH (12-13)	18.45
ADI ENGLISH (13-14)	18.45
ADI ENGLISH (14-15)	18.45
ADI FRENCH (11-12)	18.45
ADI FRENCH (12-13)	18.45
ADI FRENCH (13-14)	18.45
ADI FRENCH (14-15)	18.45
ADI MATHS (11-12)	18.45
ADI MATHS (12-13)	18.45
ADI MATHS (13-14)	18.45
ADI MATHS (14-15)	18.45
FUN SCHOOL 2 (6-8)	7.95
FUN SCHOOL 2 (OVER 8)	7.95
FUN SCHOOL 2 (UNDER 6)	7.95
FUN SCHOOL 3 (5-7)	18.45
FUN SCHOOL 3 (OVER 7)	18.45
FUN SCHOOL 3 (UNDER 5)	18.45
FUN SCHOOL 4 (5-7)	18.45
FUN SCHOOL 4 (7-11)	18.45
FUN SCHOOL 4 (UNDER 5'S)	18.45
MERLIN'S MATHS (7-11)	22.95
PAINT AND CREATE (OVER 5'S)	22.95
SPELLING FAIR (7-13)	22.95

Disk Boxes

Capacity

10	Slimpack	0.94
40		4.95
50		5.60
80		6.30
80	Stackable	14.95
100		6.80
120		8.75
150		10.95
150	Deluxe stackable	21.95

Fast response is our trademark

Laser Toners etc.

Toners for:

Apple Laserwriter II Series, Canon II/III, HP II/III	48.00
Apple Personal Writer NT, Laserwriter LS/QMS PS410	59.00
Apple StyleWriter, Canon BJ-10e	15.99
Canon 1, HP Laserjet Plus	79.00
Canon BJ300/330 - black	11.95
GCC BLP/PLP1, GQ3500/Ricoh 6000	12.80
GCC BLP/PLPII, Okidata 400/800	19.50
HP Laserjet III Si	96.00
QMS PS2200	57.00

Ink cartridges

Deskjet - black (double life)	19.95
Deskjet - black (standard life)	13.75
Deskjet 500C - 3 colours	22.50
Paintjet - 3 colours	23.50
Paintjet XL300 - black	16.20
Paintjet XL300 - colours (each)	18.70
Paintjet/Paintwriter XL - black	18.70
Thinkjet/Quiet Jet - black	7.65
Thinkjet/Quiet Jet - colours (each)	8.99

Drums for:

GCC BLP/PLP II (EP magazine), Okidata 400/800 OPC drum	167.75
GCC/PLP I, Ricoh 6000/GQ3500	99.50
(Collection unit/Cleaning mag)	57.95
QMS PMS2200	139.95

Any Laser Toner, Ink Cartridge or Drum for any printer.
Toner, ink cartridge and drum prices exclude VAT and delivery.

DataGEM

has supplied computer hardware and software to tens of thousands of satisfied customers since 1987

Amiga
Atari
PC
Sega

*trust **us** to have all you need*

Joysticks etc.

CH Flight Stick - no card	40.50
Gravis Analogue - no card	45.00
Intruder 5 (QS146) - no card	27.00
Mach 1 - no card	18.00
Quickjoy M5 (SV201) - no card	16.25
Quickshot Joystick + Smartcard	23.50
Quickshot Smartcard	13.50
Quickshot Warrior 5 (QS123) - no card	11.00
Speedking Analogue - no card	18.49
Topstar - no card	22.50
PC Mouse	18.95
Mouse Mat	2.95
Head Cleaner	3.75

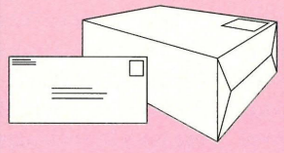


Credit card orders 10 am to 10 pm

071 608 0624

7 days a week (not an answerphone)

You can also FAX your order to 071 608 0688



Cheques/postal orders to

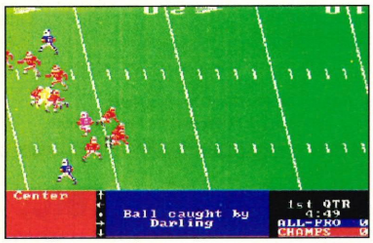
DataGEM Limited
Department PCR
23 Pitfield Street
London N1 6HB

All prices (except Laser Toners, Drums and Ink Catridges) include UK postage and VAT and are effective until 12th June 1993. On overseas orders, postage is charged at cost. New titles will be sent as released and are subject to manufacturers' price reviews. All orders are subject to our standard terms and conditions. E.&O.E.

games and accessories...

Reviews extra

The games that got away



4th & Inches



Strike Fleet



The Simpsons



Populous

We'd like to be able to review every game in depth, but with this month's bumper crop of releases we just couldn't find the space. Reviews Extra aims to cover the games that missed out on the big time.

We 've been inundated with budget releases this month, which is good news for those operating on a shoestring.

No less than four re-releases arrived from the Hit Squad, and first up was 4th & Inches (£12.99), an American football sim with a strategic slant.

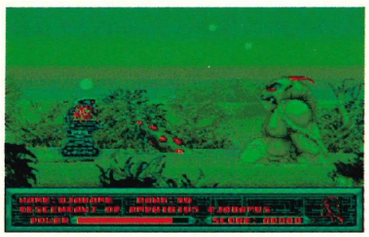
As with many other American football games, it places more importance on figures and statistics than on pure action This is largely a trait of the sport itself rather than the simulation, so unless you're into the whole ball of wax you're going to be in for a boring time.

On the other hand, since there are only two teams, the fictional Champs and the All-Pros, this game is unlikely to appeal to those looking for a bit of league or Superbowl excitement. EGA is the highest graphics mode available, so it won't score any points in the aesthetics division either. With so many alternatives around, there seems to be little to recommend 4th & Inches, even at a reduced price.

Strikefleet, also £12.99, is a naval battle simulator which was first released by LucasArts in 1987. Like

Reviewed this issue

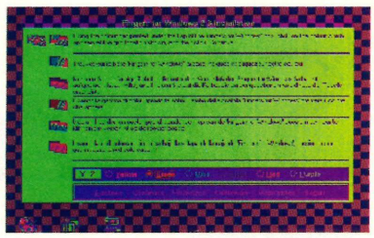
Strike Commander	8
Seventh Guest	7
Space Hulk	7
Ultima VII part 2 : Serpent Isle	7
Zool	7
Buzz Aldrin's Race into Space	6
Magic Candle III	6
Spaceward Ho!	6
Nigel Mansell's World Championship	5
Tony La Russa's Baseball 2	5
Xenobots	5
Dogfight	4
Unlimited Adventures	4
International Rugby Challenge	2


Metal Mutant



Cohort II


Comanche: Maximum Overkill


Fingers for Windows

4th & Inches, it is restricted to EGA graphics and does not support any sound cards. Although it looks its age, it's a fair game and is still quite fun to play. The missions become increasingly difficult as you progress: do well and you'll end up in charge of the fleet; mess up and you could find yourself swabbing the decks. One warning though: the sound is terrible, so turn off your PC speaker if you want to avoid a headache.

PC Review's best buys

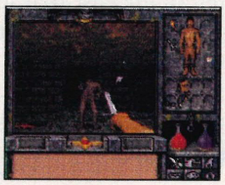
What are the best games currently available? PC Review's Best Buys are taken from the last three months of reviews in order to give you a good idea of what to shell out for.



X-Wing
LucasArts/US Gold, £45.99
The official Star Wars game combines the challenge of a good flight simulator with the excitement of a shoot 'em up. It looks great, it's fun and it will keep you entertained for weeks if not months.



Lemmings 2 — The Tribes
Psygnosis, £39.99
Those wayward critters are back again, and this time there are 12 different tribes, each with their own skills. At least as addictive as the original Lemmings, this superlative puzzle-game should keep you up into the wee small hours.



Ultima Underworld 2
Origin, £39.99
A thoroughbred follow-up to one of the landmarks in PC role-playing games, and part of one of the longest running role playing sagas. Atmospheric and challenging, it would walk into anyone's top 10 role-playing games of all time.



Historyline
Bluebyte, £39.99
Hardly the historical simulation that the title suggests, Historyline offers some of the best, if not the best, and most accessible WWI strategy gaming to be found on a computer.



Stunt Island
Disney/Infogrames, £49.99
Wonderfully original stunt flying and filming game: swoop down to the Golden Gate bridge, or loop the loop over the desert and preserve your efforts on 'film' which can then be cut and edited. A vast program which should last you months.



Shadow President
DC True/Empire, £34.99
An in-depth simulation of life in the White House, with you as the president facing turmoil in the Middle East and potential trouble at home. Not for the faint hearted, or dilettante games player.

The Simpsons (Hit Squad, £9.99) is an arcade adventure, in which you, as Brat, sorry, Bart, take on the hideous space mutants. The aim of the game is to defeat the aliens using your trusty X-ray specs, skateboard, spray-can and slingshot.Overall, it's not that appealing a game unless you happen to be a die-hard Simpsons fanatic.

Populous is now available, packaged with the add-on program the Promised Lands, and retails at £14.99 (Hit Squad). Unfortunately, our copy contained two Promised Lands disks and no Populous disk, so we were unable to test it properly, but rest assured that this is well worth the budget price.

Daze has also come up with a couple of budget games this month. Metal Mutant (£9.99) is a sideways scrolling beat 'em up in which you take control of a robot with the power to form itself into a number of weird and wonderful shapes. In addition to fighting numerous alien nasties, there is also a puzzle element to the game, although solving the puzzles is generally a matter of deciding which robot shape is appropriate for that section of the game.

Having spent a long and dull afternoon playing Metal Mutant, the biggest puzzle for me was why anyone would want to pay money for it. The drab, green graphics and flick-scrolling make it look somewhat dated and there is precious little in the way of action to liven things up.

The Crystals of Arborea (£9.99) is a 3D role-playing game in the Dungeon Master mould. Taking the role of good Prince Jarel, you must lead your party of intrepid adventurers against Morgoth, Lord of Chaos. This game is the prequel to Ishar: Legend of the Fortress and features 16,000 locations. It is not the most sophisticated of role-players, but is reasonably cheap and passes the time. It can be played from floppy disk and needs a mouse to operate at its best.

Getting away from the budget games, we have Cohort II, a strategic battle game set in Roman times. Available from Impressions for £34.99, Cohort II is compatible with Caesar and requires a 286 or better, VGA graphics and 640K RAM. It is easy to get in to and the manual is fairly straightforward, so it is perhaps best suited to novice strategists. You can choose whether to play the Romans or Barbarians, with seven different types of troops and various terrains which influence how a battle is fought. The game is reasonably good fun but is, perhaps, a little too simplistic to tax more advanced gamers.

The first mission disk is now available for NovaLogic's Comanche: Maximum Overkill at £25.99. It includes 30 new missions, three complete campaigns and new terrain types including snow and desert. You'll need the original game to run it, as well as a minimum of a 386SX with 4Mb RAM, VGA, hard disk and MS-DOS 3.3 or higher.

The newest Links Championship Course is Banff Springs in Canada. Set against the back-drop of the Canadian Rockies, Banff Springs is one of the most attractive courses in the world and features the notorious "Devil's Cauldron" hole. It is compatible with Links, Links 386 Pro and Microsoft Golf and is available from Access for £22.99.

On a more serious note we have Fingers for Windows, (£39.95) which is, naturally enough, a Windows-based typing tutor. Fingers allows you to type in six different languages and includes six tutorials and thousands of graded exercises.

For the frivolously inclined, we have the Star Trek fonts pack, designed to be used with Windows 3.1. It includes four Star Trek fonts, culled from both the series and the movies, as well as Star Trek insignia and Klingon symbols. It requires 2Mb and is available now from Mainstream for £16.95. Live long and prosper.

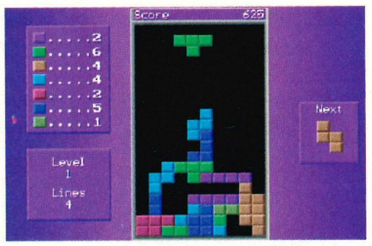
Shareware Reviews

Sam Mackenzie has been irresistibly drawn back to Tetris over the last few weeks and has been trying out some of the shareware derivatives of this timeless classic to produce something of a Tetris special

Tetris

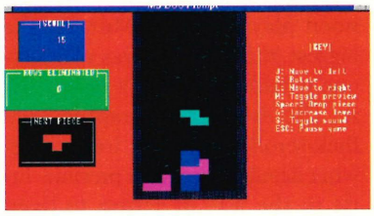
It might be hard to believe that watching coloured blocks fall to the bottom of a well and trying to pack them together could be fun if it wasn't for the phenomenal success of Tetris.

Tetris is notoriously addictive and there is no shortage of shareware implementations of similar games. There are so many, in fact, that finding the right one for you can be a bit hit and miss. You might try one of the less exciting versions and decide that packing blocks together really is boring! To help you though the maze we review a collection of shareware Tetris games.



Nyet

This version of Tetris is about as close to the original as you can find. The game is drawn using a character mode screen and so it will run on almost anything but it doesn't look as exciting as a high resolution graphics mode implementation. The controls are good though and the author ensured that it runs at the same speed on all machines. There is a 'look-ahead' facility so you can see the next block but if you use it your score is decreased. There are plenty of levels to keep you happy and it's not shareware but freeware. Even if you use it forever there are no registration fees to pay. If you have never played Tetris, Nyet will get you hooked but it doesn't have anything to offer the experienced player.



Product:	*Nyet*
Supplier:	*Benetech*
Tel:	*(0533) 611231*
Product code:	*n/a*
Price:	*£2.45*
Registration Price:	*nil – freeware*
What you get for registering:	*n/a*
Machine:	*any*
Disk space:	*27K*
Video modes supported:	*any*
Sound cards supported:	*none*
Input devices supported:	*keyboard*

Zentris

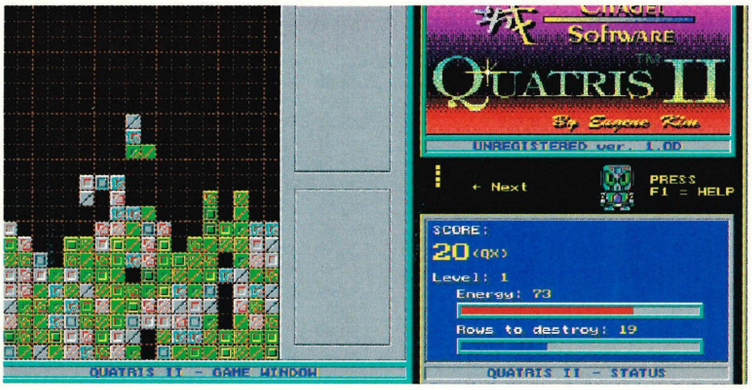
Zentris is another classic version of Tetris, but unlike Nyet it uses a high resolution graphics mode. You may think that this is an unimportant difference because stacking blocks is stacking blocks in any resolution but this isn't true. The controls are responsive and the animation good. The block makes a satisfying sound as it hits the bottom of the well. It is a lesson in what good implementation of a game can do for it.

The product is shareware and to make sure that you register there are a number of points where the program deliberately keeps you waiting. For example, there is a 15 second sign off period where it counts down while you wait.

I also found to my cost that just occasionally the background sounds actually slowed the game down as well. However, none of this can detract from what is undoubtedly a very playable implementation of Tetris.

It only takes a few minutes to get hooked. This one is recommended if you are new to Tetris but again it doesn't add anything new if you're already familiar with the original.

Product:	*Zentris*
Supplier:	*Transend*
Tel:	*(0274) 622228*
Product code:	*10380*
Price:	*£2.50*
Registration Price:	*$15*
What you get for registering:	*latest version, updates*
Machine:	*any*
Disk space:	*135K*
Video modes supported:	*VGA*
Sound cards supported:	*none*
Input devices supported:	*keyboard, mouse, joystick (registered only)*



Quatris Pro (v2) and Quatris II

You have to be careful to distinguish between these two versions of this Tetris clone. Quatris Pro is the older and, in my opinion, better of the two. Both however work nicely in high resolution graphics and feature an annoying little android character that waddles across the screen at the start.

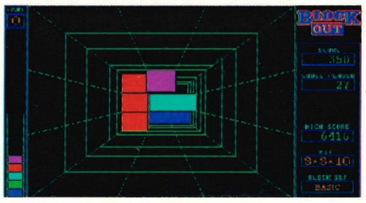
As well as the usual block shapes used in basic Tetris, there are a few extra shapes used. These didn't add much to the game. If anything, they made it easier, especially in Quatris 2 where the wider well increases the number of possible places to drop the block.

Quatris Pro uses a scoring system where the value of each block is displayed on it. When you make a row your score is the sum of the values. You also have a number of bombs which will destroy all the blocks of the current shape or all of the rows. You only have a limited number of bombs but you can get more by making your row scores equal a random number that the robot gives you at the start.

The only difference between Quatris Pro and Quatris II is that the look of the non-game parts of the interface have been 'improved'. The bombs are still there but now you have an energy indicator and the rules about using them are less clear. The worrying aspect of Quatris II is the inclusion of some very strange files, which you cannot delete if you want to run the game, that give details of how the end of the world is upon us and how bar codes ending in 666 are a mark of the devil. At first I thought this was some kind of joke — but I now think that it is the product of a religious xenophobe: "Buy this program and not Tetris because its Russian and we're American".

Well, Pajitnov and Gerasimov thought of the game and if you really dislike Russians (and Israelis and the EEC!) that much why bother to clone their game? This is the sort of thing that gives shareware a bad name. Personally I would keep well away from Quatris as a matter of principle!

Product:	*Quatris Pro-Quatris II*
Supplier:	*Benetech*
Tel:	*(0533) 611231*
Product code:	*n/a*
Price:	*£2.45*
Registration Price:	*$16 +$7 for the latest Quatris Pro (2.7)*
What you get for registering:	*Commercial Version*
Machine:	*any*
Disk space:	*350K*
Video modes supported:	*EGA/VGA*
Sound cards supported:	*none*
Input devices supported:	*keyboard, mouse*



Blockout

Blockout is, as its title might lead you to expect, a 3D version of Tetris. The well is 3D and you rotate and drop 3D blocks down it. The rules are exactly the same — if you complete a layer then it vanishes and you get points.

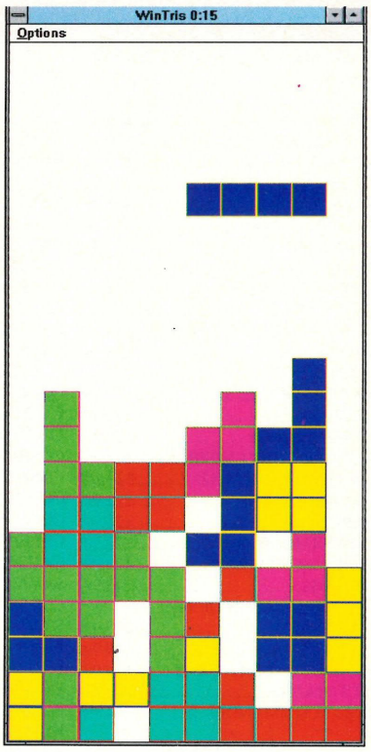
One principal difference, however, is that the blocks don't drop of their own accord as the game is more than difficult enough when you have unlimited time to think about how they fit together. It's up to you to select from a number of different block sets.

Thus you start off using a flat set, which is marginally easier, and graduate to blocks with bits that stick out in all directions. At first it is difficult enough simply mastering the six different rotations that are possible for a 3D block!

I have to say that I don't rate the 3D version as exciting and as compelling as the original 2D game, the reason being it's more of a logical problem than an action game.

In the original rush to decide how a block should be placed obviously has something to do with the addictive quality of the game. My final verdict, though, is that if you like 2D Tetris, you should try the 3D version because it's fun.

Product:	*Blockout*
Supplier:	*Transend*
Tel:	*(0274) 622228*
Product code:	*10380*
Price:	*£2.50*
Registration Price:	*n/a*
What you get for registering:	*commercial version*
Machine:	*any*
Disk space:	*360K*
Video modes supported:	*CGA, EGA, VGA*
Sound cards supported:	*none*
Input devices supported:	*Keyboard*



Wintris

If you are looking for a Windows version of Tetris then it is difficult to beat the version that comes in the Microsoft games pack, but of course this isn't shareware! Wintris *is* shareware and almost as good. It uses larger blocks and so it takes up a fairly large screen area.

I also find it harder on level one because of the number of L-shaped blocks it throws at you — but still if you want to be an expert this is the sort of thing you should expect! It also doesn't play quite as well overall as the Microsoft version but it is still very acceptable and so highly recommended.

ONLY THE BEST

COMPUTER SOFTWARE

7 CLEEVE WOOD RD, DOWNEND, BRISTOL, BS16 2SF

TEL: 0272 401315/401316

MON-FRI 10am - 7pm , SAT 10am - 1pm SUN TIMES VARY. ANSWERPHONE AT ALL OTHER TIMES.

All prices inlcude V.A.T. UK postage add £1.00. Prices subject to change. Access and Visa accepted. Allow 7 days for cheques.

CALL FOR HUGE SAVINGS OFF OTHER SOFTWARE

HIGHLY RECOMMENDED

ATRAIN.....£25.99
ACES OF THE PACIFIC.....£24.99
AIR BUCKS.....£19.99
ANOTHER WORLD.....£20.99
BATTLE ISLE.....£22.49
CHESS MASTER 3000.....£23.99
CIVILIZATION.....£25.99
D'GENERATION.....£13.99
DARK SEED.....£25.99
DUNE.....£23.99
EYE OF THE BEHOLDER II.....£23.49
FALCON 3.0.....£27.99
FALCON MISSION DISK.....£16.99
GUNSHIP 2000.....£24.99
HARPOON.....£26.99
HEROES OF THE 357.....£22.99
LEGEND.....£22.99
LINKS 386 PRO.....£28.99
LURE OF THE TEMPTRESS.....£23.99
MONKEY ISLAND 2.....£23.99
PACIFIC ISLANDS.....£22.99
PERFECT GENERAL.....£26.99
POWERMONGER.....£22.99
RAILROAD TYCOON.....£23.99
REALMS.....£23.99
SECRET WEAPON OF THE LUFTWAFFE.....£26.99
SHADOWLANDS.....£19.99
ULTIMA UNDERWORLD.....£24.99
ULTIMA VII.....£24.99
WING COMMANDER II.....£24.99

NEW TITLES

ALCATRAZ.....£19.99
ALONE IN THE DARK...£26.99
ARCHER MACLEAN POOL.....£28.99
ARMOUR GEDDON.....£25.99
ASHES OF EMPIRE.....£28.99
ATAC.....£27.99
ATRAIN CONSTRUCTION KIT.....£22.99
AV8B HARRIER ASSAULT.....£25.99
B17 FLYING FORTRESS.....£27.99
BAT 2.....£25.99
BATTLE CHESS 4000.....£22.99
BUZZ ALDRIN.....£24.99
CAR & DRIVER.....£24.99
CAESAR.....£24.99
CAESAR'S PALACE.....£22.49
CAMPAIGN.....£26.99
CAPTIVE (MINDSCAPE).....£25.99
CARRIERS AT WAR.....£22.99
CASTLES 2.....£22.99
COHORT 2.....£21.99
COMMANCHE: MAXIMUM OVERKILL.....£27.99
COMBAT CLASSICS.....£22.49
COMPLETE CHESS SYSTEM...£22.99
CONTRAPTIONS.....£13.99
COOL WORLD.....£19.99
CREEPERS.....£25.99
CRUSADE OF THE DARK SAVANT.....£29.99
CURSE OF ENCHANTA.....£22.49
DAVID LEADBETTER'S GOLF.....£27.99
DAUGHTER OF THE SERPENT..£22.99
DOG FIGHT.....£27.99
DUNE 2.....£22.99
ELITE 2.....£24.99
ETERNAM (NEW).....£22.99
EUROSOCCER.....£CALL
F-15 STRIKE EAGLE III £27.99
FIRST SAMURAI.....£20.99
FORMULA I GRAND PRIX.....£27.99
FRONT PAGE FOOTBALL.....£24.99
GOAL KICK 3.....£22.99
GREAT NAVAL BATTLES.....£24.99
G.N. BATTLES MISS DISK.....£11.99
HARE RAISING HAVOC.....£19.99
HARRIER JUMP JET.....£27.99
HISTORY LINE.....£24.99
HUMANS.....£19.99
HUMANS JURASSIC LEVELS.£19.99
INCREDIBLE MACHINE.....£24.99
INDY J, FATE ALTANTIS.....£23.99
INCA.....£27.99
INT RUGBY CHALLENGE.....£15.99
JORDAN IN FLIGHT.....£24.99
K.G.B.....£23.99
KINGS QUEST VI.....£27.99
LASER SQUAD.....£23.49
LEGACY.....£27.99
LEGENDS OF VALOUR.....£24.99
LEMMINGS DOUBLE PACK....£24.99
LEMMINGS 2 THE TRIBES.....£24.99
LETHAL WEAPON.....£19.49
MAGIC CANDLE 3.....£24.99
MERCENARIES.....£25.99
M+MAGIC IV CLOUDS XEEN.£32.49
MOONSTONE.....£9.99
OMAR SHARIFS BRIDGE.....£25.99
NIGEL MANSELL.....£21.99
PACIFIC WAR.....£25.99
PALADIN II.....£14.49
PATRIOT.....£29.99
PINBALL DREAMS.....CALL
POPULOUS 2.....£25.99
PREMIER MANAGER.....£21.99
REACH FOR THE SKIES.....£22.99
RED BARON MIS BUILDER.....£16.99
RINGWORLD.....£25.99
ROBOCOP III.....£19.99
ROBOSPORT.....£19.49
ROME AD92.....£22.99
SCRABBLE.....£20.49
SHADOW PRESIDENT.....£27.99
SHADOW OF COMET....£26.99
SHERLOCK HOLMES THE LOST FILES.....£24.99
SHADOWORLDS.....£22.99
SIEGE.....£18.99
SEIGE MISS DISK.....£12.99
SIM CITY DE LUXE.....£22.99
SIMLIFE.....£24.99
SPACE CRUSADE.....£19.99
SPACE HULK.....£21.99
SPACE QUEST 5.....£27.99
SPACEWARD HO.....£27.99
SPEAR OF DESTINY.....£24.99
SPECIAL FORCES.....£19.99
SPELLJAMMER.....£23.99
STAR CONTROL 2.....£24.99
STAR LEGIONS.....£17.99
STRIKE COMMANDER.£30.99
STRIKE COMMANDER SAP....£12.99
STUNT ISLAND.....£28.99
THE SUMMONING.....£23.49
TASK FORCE 1942.....£27.99
TERMINATOR 2029.....£CALL
TORNADO.....£27.99
TRISTAN PINBALL.....£22.99
TV SPORTS BASEBALL.....£12.99
ULTIMA VII SERPENTS ISLE PART 2.....£27.99
UNDERWORLD 2.....£25.99
UNLIMITED ADVENTURE.....£22.99
V FOR VICTORY 1 OR 2.....£23.49
V FOR VICTORY 3.....£29.99
VALE OF DARKNESS.....£22.99
VALHALLA.....£22.99
WAYNE GRETSKY 2.....£22.99
WAXWORKS.....£22.49
WEEN.....£22.49
WIZ KID.....£19.49
XENOBOTS.....£24.99
X-WING.....£28.99
ZOOL.....£21.99

EDUCATIONAL SOFTWARE

KIDS ACADEMY.....£14.99
FUN SCHOOL
ALL TITLES AVAILABLE
CALL FOR PRICE
DISNEY SOFTWARE
-EDUCATIONAL.....£15.99

CD ROM

7TH GUEST.....£44.99
BEAUTY +BEAST.....£37.99
CASE OF THE CAUTIONS CONDOR.....£37.99
GUINNESS BOOK RECORDS..£45.99
INCA.....£39.99
LOOM.....£32.99
PACIFIC ISLANDS.....£24.99
RAILROAD TYCOON.....£27.99
S.HOLMES CONSULTING DICK.....£44.99
MONKEY ISLAND.....£35.99
WING COM+SEC MISS 1+2.....£35.99
WING COM DELUXE+SPEECH..£29.99
WING COM 2/UNDERWORLD £39.99



TRY ALL THE LATEST PC GAMES B4 U BUY

STREE PC GAME LIBRARY

76 CHURCH ST, LARKHALL, LANARKS ML9 1HE

Phone 0698 883334

Your 1st selection = any PC Game currently available under £50 RETURN IT FOR YOUR CHOICE FROM OUR UPDATED LIST OF OVER 100 GAMES IN STOCK AT ANY TIME.

3.5" Discs ONLY. ALL ORIGINALS, NO COPIES OR PIRATING.

Only £49.95 for your 1st years membership & £3.95 (£7.95 outwith UK) to cover post, packing, insurance for each game exchanged.

THERE IS NO CHARGE FOR ANY GAME ITSELF

PC SUPPORT LINE - 0891 318-411

MEGADRIVE CHEATLINE:-	**0891-318-408**
NINTENDO CHEATLINE:-	**0891-318-410**
GAME-GEAR HELPLINE:-	**0891-318-414**
GAME-BOY HELPLINE:-	**0891-318-412**
INFORMATION LINE LISTING ON ALL OTHER GAME SERVICES:	**0891-318-400**

GAME TRAINERS (USED FOR PC CHEATS, MORE LIVES ETC) AVAILABLE PHONE FOR DETAILS

GAMES BOUGHT , SOLD AND SWAPPED.

SOFTWARE WRITERS WANTED, AND GAME WRITERS WANTED, IF YOU HAVE ANY SOFTWARE (WRITTEN) AND WOULD LIKE HELP PUBLISHING IT

THEN DON'T JUST SIT THERE , GET IN TOUCH!!!!!!!!

NO FRILLS, NO MUSIC, NO WAFFLE, PLEASE HAVE A PEN READY FOR INFORMATION

ALL CALLS CHARGED AT 36p PER MINUTE CHEAP RATE, 48p MIN ALL OTHER TIMES.
PLEASE ASK PERMISSION OF PHONE OWNER BEFORE PHONING

HOME GROWN PRODUCTIONS LTD. PO BOX 193 HAYES MIDDLESEX

To advertise in PC Review



071-972-6700

Ext : 2474 or 2473

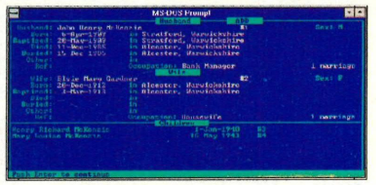
PC Review Magazine
Emap Images
Priory Court
30-32 Farringdon Lane
London
EC1R 3AU

Brothers Keeper

Genealogy, as a hobby, has been transformed by the availability of personal computers. Brother's Keeper is one of the most comprehensive programs for recording and organising family tree information. Information can be printed in a variety of ways. The central reports are descendant charts that show how anyone in the file is related to everyone else. You also may print ancestor charts, family group sheets, alphabetical name lists, descendant trees, birthday lists, and other reports, including 'ahnentafel' charts (lists of ancestors).

When entering data you can include a date of and place for birth, death and three other events. Baptism is one of the events but you can use the field for something else if you wish. Each entry has up to seven message lines of additional data or a text file of unlimited size containing additional data and fields can store the person's current mailing address. You can record details of up to eight marriages per person with date, place of marriage, one additional date and place, divorce information, and up to 24 children.

The four disk version of the program I reviewed included programs previously available as add-ons — BKBox makes box tree charts from the data and can do sideways printing on Epson compatible dot matrix, HP Laserjet and DeskJet printers and BKGedcom which converts Brother's Keeper data to a common format for the interchange of genealogy data. This version (v5) can handle more data — up to 1 million names. It has a field for mailing address and phone number and sources may be entered for footnotes. A person may have two sets of parents and parent type, adopted, step, etc. The program also now recognises unmarried couples and divorced couples.



Product:	*Wintris*
Supplier:	*Softcell Services Shareware*
Tel:	*(0443) 238630*
Product code:	*1221*
Price:	*£2.95*
Registration Price:	*$15*
What you get for registering:	*an upgraded version*
Machine:	*any running Windows 3.1*
Disk space:	*25K*
Video modes supported:	*any Windows mode*
Sound cards supported:	*any Windows supported*
Input devices supported:	*Keyboard*

Product:	*Brothers Keeper*
Supplier:	*Softcell Services Shareware*
Tel:	*(0443) 238630*
Product code:	*4447/QC*
Price:	*£2.50 per disk-4 3.5' disks*
Registration Price:	*$45*
What you get for registering:	*manual and upgrades*
Machine:	*PC with hard drive*
Disk space:	*2.5Mb*
Video modes supported:	*all*
Sound cards supported:	*n/a*
Input devices supported:	*Keyboard*

WHAT IS SHAREWARE?
PC shareware is "try before you buy" software. If you fiind a program useful, and intend to use it regularly, you are required to send a separate payment to the author.

ProSoft Shareware
No Minimum Order! No Post & Packing Charges! No Problem!

OUR PRICES
£2.95.....1 – 5 disks
£2.50.....6 + disks
Catalogue of Shareware and PD £1

GAMES PACK - £7.99
Includes Rockford, Apples & Oranges, Rammer, SuperBall, BoxCar, Jumpjet, Grav, Impact, Marble Man, VGA Roulette, Robomaze III and loads more

CGA GAMES PACK – £7.99
A collection of CGA only or text-based games and some GWbasic/Basica games specifically for those early PC's including Wheel Of Fortune, Connect4 and PCTennis.

WINDOWS 3.x PACK - £7.99
This Windows 3.x pack contains more than 50 programs, including: Rocket5, BangBang, various icons BMPs and TT fonts, Paperboy, Fish, Undelete, Windows Unzipper, Waves and player, plus many more!

GAMES – EGA/VGA
Ancients (1,HD)
Animal Quest (1,HD)
Balistix (1,HD)
Blockout (1,HD)
Bolo Adventures I & II (1,HD)
Boloball (1,HD)
CD-Man Pacman (1,HD)
Chinese Checkers (1,HD)
Commander Keen - Goodbye Galaxy (1,HD)
Crystal Caves (1,HD)
Corncob 3D (1,HD)
Engineering Jones (1,HD)
Fuzzball (1,HD)
Galactix (1,HD)
Hugo House of Horrors (1,HD)
Hugo II WhoDunIt (1,HD)
Hugo III Jungle of Doom (1,HD)
Jill of the Jungle (1,HD)
Keen Dreams (1,HD)
Kiloblaster (1,HD)
Line Drive Baseball (1,HD)
Lost Stone Mansion (1,HD)
Mahjongg (loads of tile sets) (1,HD)
Majik Adventure (1,HD)
Picture Puzzle (1,HD)
Robomaze III (1,HD)
Solit300 (1,HD)
Space Invaders (1,HD)
Space Mines (1,HD)
Starfire (1,HD)
Tank Wars v2. (1,HD)

Many more categories - Tons of programs!

WINDOWS 3.x GAMES
Chomp (1) Pacman clone
Jigsaw Puzzle (1) up 400 pieces uses BMPs
Jewel Thief (1) Steal jewels and avoid guards
Mahjongg for Windows (1)
Super Slot (1) Good Slot machine
Wheel Of Fortune (1) Excellent!

WINDOWS 3.x
Red Button and friends (1) Small collection of utilities to make Windows more interesting.
Icons1 (1) First collection of interesting icons
BMP1 (2) Assortment of BMPs
Fonts1 (1) The first in a series of TrueType fonts
ACLaunch (1) Launcher, Alarms etc.

DOS UTILITIES
Fastmenu Gold v6 (2,HD) Great VGA GUI menu system
Kat120 (1,HD) Diskette catalog system
PC Menu (1,HD) Password Menu system
PocketD (1,HD) The ONLY "dir" command you'll ever need!
PKZIP/UNZIP (1) The very latest version of PK's file archiver
McAfees Anti Virus (1)
Dr Solomans Anti-Virus (1)
GetBak (1) Fast Backup software with GUI

SOUND & GRAPHIX
SuperProPlay (1,HD) Play Amiga MOD tunes
ModPlay Pro (1,HD) One of the best including several tunes - see below for more MOD packs
CD Player (1) Play music CD's on CDrom drive

Vector Demo - Excellent!
Collapse - SB/VGA demo from Crack & Arts
Coma Demo - SB/VGA demo from Europe
Loads more demos - call for the latest!
ROL, VOC, SND, MIDI formats also available

MOD PACKS - ONLY £7.99 PER PACK
MOD1 (5) Five disks of excellent MOD tunes inc. Apache, Airwolf theme, New Order mix etc.
MOD2 (5) Another 5 disks of ace MODs
MOD3 (5) Hey, another five disks full of MODs

Please send cheques/postal orders made payable to J Fellows to:
Dept KH4, 22 Bransdale Way, Macclesfield, Cheshire. SK11 8QT.
Tel: 0625 430085

QED

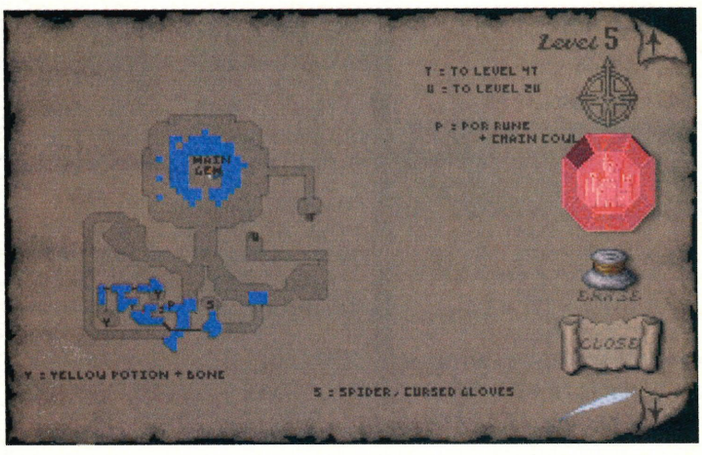
Ultima Underworld II

Part two: *the first three worlds*

The first part of this guide to Ultima Underworld II, published last month, was both a beginners' guide, and hints and tips for the first four levels of Lord British's castle. Part two completes the castle and covers the first three of the other eight worlds that you will visit as you continue your quest.

Level five

This is the lowest level of the castle and is entered via the island complex on Level four. You emerge on the west side and have to deal with some relatively easy monsters. In the middle of the lake is another island, but more of this later. To the south there is another exit which should be explored: make sure you've got your swimming kit with you. After the hectic ups and downs of Levels three and four, this is almost peaceful and many experience points can be accumulated by either zapping the lurkers by magic, or by leaning over the water's edge and disposing of them.



The island contains the key to the rest of the game, but in the meantime check the auto-mapping to examine the other levels and see which areas remain unexplored. Don't forget to use the up and down perspectives, and also note that spells can be combined, eg, the water walk (ylem por) and jump (uus por) spells can get you into areas that other adventurers cannot reach. With one or two exceptions the castle can be completed before you move on, but if you have a non-fighter character the restriction on higher level magic within the castle may still make reapers, gazers and headless too tough.

Be especially careful on the lower levels as not all booty is good news — if you equip and get a yellow flash, then unequip fast: it's cursed. Lore is a particular skill that should not be ignored, and will allow you to sort out good from bad.

At this time your character will likely be at least a Level five/six and you should have skill points in the bank. Unlike Underworld I there are no shrines where these points can be traded for advancement — in Underworld If it is necessary, return to the several tutors and select the skill you wish to improve. Again differing from Underworld I, these advancements seem to be consistent, and therefore not open to the manipulation of its predecessor.

Most of these tutors are on Level one of the castle, but there is a 'back staircase' in the south east of Level five that takes you the other side of a previously un-openable door on Level two. The pull switch will open this and then lead to the ladder up to Level one. This route will now become the main route up and down and will be used a great deal as you return for advancement, to update Miranda and to check developments.

Once you are ready to move on, examine the gem carefully, then have a final word with Miranda, Nystul and Nelson. Tidy up your inventory leaving surplus items in your room and then return to the black gem on Level five.

The big black gem



The big black gem is the gateway to eight other worlds. The Guardian has attacked these worlds too and you will explore each in detail. At this stage of the game three other worlds are likely to be open to you. They are entered by walking into the appropriate face of the gem. These gateways, once used, remain constant and you can travel back and forth as you wish (most of the time, anyway). As the gem face lights up, walk towards it and you will be transported to another world/dimension/universe/whatever you wish to call it.

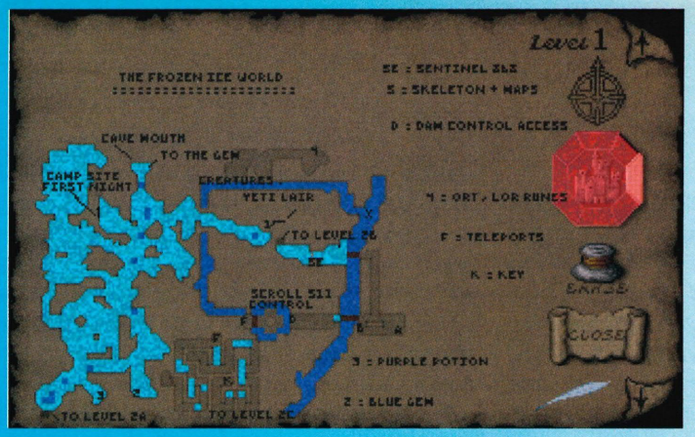
Once you enter these worlds the auto-mapping will continue, but the maps of other worlds can still be

viewed by clicking on the appropriate facet of the 'red seal' shown on the mapping screen. The high magic restriction does not apply to these worlds, so at long last those who have selected magic users can start to use more powerful spells. The magic system is really superb, and it is well worth experimenting with any new found powers. This will of course use up mana, and this can be restored either magically (by potion or scroll) or by sleeping.

A word of stern warning here: if you are hungry, your sleep will be somewhat disturbed and your mana may not be restored. If you have no available food you may not be able to increase your mana enough to cast 'create food' and you will then end up in a particularly vicious circle. A good tip is always to keep at least one 'restore mana' potion, or a couple of items of food handy in your belongings.

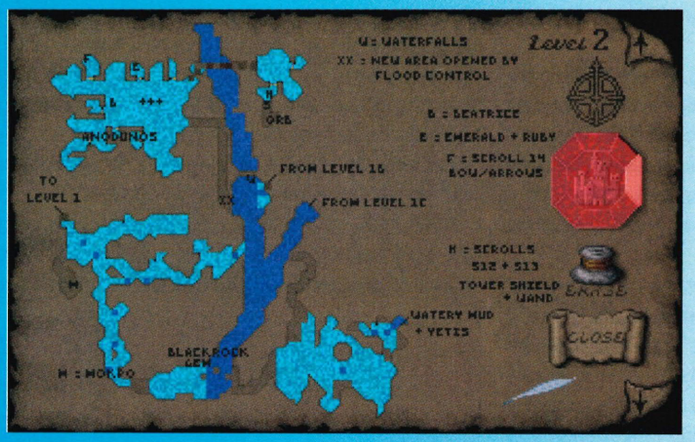
Now let's look at the first three worlds, they can be randomly set within the first three faces of the gem, at north, north-east and east. The eight worlds do not need to be, and sometimes cannot be, completed in one visit — information, items or greater skills may be needed from other worlds.

Depending which face of the gem you enter, the first excursion may be to the ...



1. Several packs: wis rune, scrolls, map, mandolin, bed roll, scroll walk water.
   Pack (axe, pick, oil and rod).
   Pack: (leeches, flute, crossbow and bolts).
2. Colourless and red potions, plus yetis.
3. Purple potion.
4. Ort, plus Lor runes, red gem, silver ring.

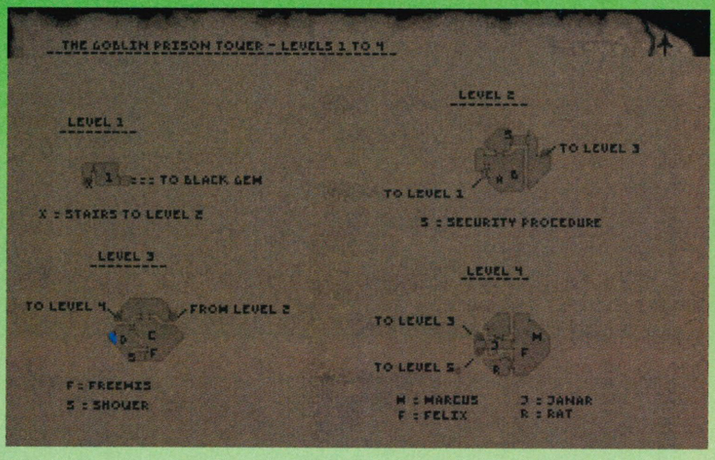
S: skeleton and maps
D: dam control access
F: teleport
K: key

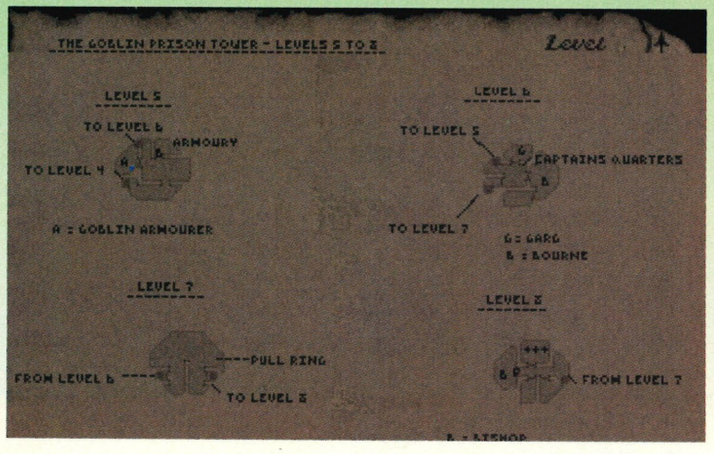


M: mokpo
W: waterfall
B: Beatrice
E: emerald and ruby
F: scroll and bow with arrows
H: scrolls, tower shield and wand
Runes: mani, in and quas

THE ICE WORLD

GOBLIN PRISON TOWER





Goblin prison tower

The easiest of the eight worlds by far and an eight level tower. To make progress you need your wits about you and a takeaway will yield a valuable clue. Don't take umbridge at the jibes and Larry Grayson wouldn't have a problem with the security procedure! Up and up is the only way, making sure that you speak in depth with Felix. He will tell you much and give you a task that you need not fulfil.

The armourer is also important and will give you the password and a 'handy' item for later. When you are near the top, use subterfuge to mislead Bourne and now you'll have a pair of pairs. A chess piece is your goal and you should pay attention as the story unfolds. Once he's free, check the rest and either by magic or combat get the key that will solve your problems.

A primate will now clear the tower, and complete an earlier request. Check the captain's quarters carefully and the jewel in the crown will be yours.

There are other ways of approaching the goblin tower, many of which will leave it inhabitated (?) — there does not seem to be any disadvantage in using this third party approach, other than missing out on the experience points. For those of a more aggressive bent, don't release the hairy inmate and do the dirty work yourself.

The main aim of the tower is to find the sparkler, but the release of Bishop is a sub-quest. This is typical of the various worlds, where there is a standard main objective, and others that are not mandatory, but if completed will gain experience, or useful items.

Now return to the castle and discuss your adventures and in particular your prize with those trapped. If you manage things properly a warm feeling will result that can now be applied elsewhere. A second face of the big black gem will take you to ... ▶

The ice world

This is probably the toughest of the first three worlds although it only consists of two levels. The icy caverns are very slippery and if you move too rapidly you'll be sliding and bouncing around as if you're in a massive pin-ball machine. The walk water spell (ylem por) seems to help, but a new technique needs to be mastered. Move slowly, edging forward to get some momentum ... then move the cursor as if you wanted to go backwards — if you time it correctly you'll come to a halt and using this method can negotiate the caverns reasonably well.

Other than yetis, ice slugs and the slapstick snow cats, there is very little life in this world, and only three non-playing characters. Mokpo is totally off his sledge, but does give you some information. Sentinel 868 has very fixed ideas and certainly with either a fighter or paladin it is necessary to resort to violence to make progress.

The gem in this world can be approached from one of two directions, but there is far more to the ice world than this. To complete the game it will be necessary to find the Lost City of Anodunos which is currently hidden by the waters of the dam. The dam control is a two part problem which will lead to first a key and then a door. Behind the door is a switch that when thrown will open the dam and reveal Anodunos.

There are several clues to the correct combination, which initially is almost all on the up and up with your buttons undone. Once you've got the key, then it's a switch of leverage which when linked with a button hole should reveal the way.

Once the switch is thrown have a good look around Level two. Beatrice is the third NPC and will give you valuable clues that will be needed in the end game. Do not kill any NPCs within the confines of the Lost City. If you dispose of a ghost it's likely to be Beatrice and you need to hear what she says. Also note the local geography.

If you have the open spell (ex ylem) all doors will be open to you, especially the secret one in the far north east of Anodunos — this will yield many goodies and give you an insight into things past and present. It is likely that you will return here, but sooner or later you will move into the third world of ...

Killorn Keep

This is a highly structured and fantastic world that may be as old as Britannia itself. Suspended high above the terrestrial world, it is a proud community steeped in tradition and myth. It has more NPCs than the earlier worlds and there are several plot lines to keep you occupied.

Merzan is a useful peddler of magical options, and there is a 'bug', which can be of some help. Normally, if you want him to ID items he will charge you. If you move an item to the 'trading area' and then click on it, Merzan will inadvertently tell you what the item is. This may only work a couple of times but the routine can be repeated as many times as you wish.

To progress in Killorn Keep you need to gain Mystell's confidence — this is achieved by paying attention to comments from both Kintara and Lobar. Altara is very important, and she should be visited on a regular basis. If you have completed the goblin tower you will have been told something of Altara, and eventually you will need to seem to agree to spy on her. Lord Thibris will tell about a later world, and Ogri will set you a minor quest. Note here that Ogri is also a teacher.

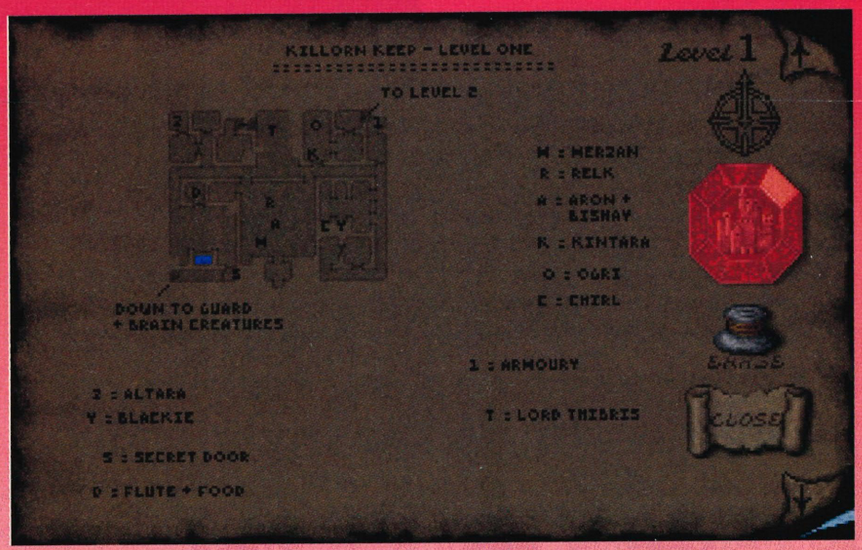
There is someone after your blood in Killorn Keep and a conflict cannot be avoided. A confusing sequence may now follow, but basically you can approach a pit room from one of two ways — one is the short way, the other the long one. If you enter from the locked door and fall into the headless pit, a quick victory will secure the gem. If you enter from the other side, the candles on the altar can be moved, and then you can enter the pit as above.

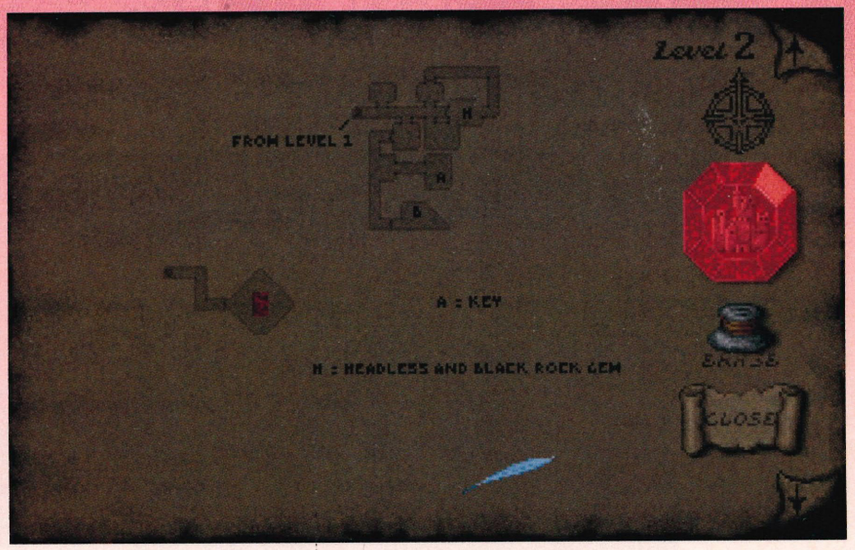
If you do not move the candles, or get the gem by the short way and then enter the altar you are transported to another dimension. Time your moves correctly and you can run through the floating skull and then negotiate the sliding blocks. Some blocks do not move so you can take saves and move on from there. Eventually you will come to an elevator block in a room of fireballs. Climb on, operate the switches and an area will open up behind you. If you can survive the fireballs, sliding blocks and assailants you'll enter a complex that will eventually drop you into the headless pit! The only benefit of the long route seems to be more experience points (and it's 'different').

The Trilkhai quest can be solved later on, but this and Ogri's puzzles are of a minor nature and only result in information you will probably have by that stage anyway — the solutions are not within this world, unfortunately.

There is a hidden area in the keep that should be avoided at all costs at present, and in no circumstances should you use violence here. More of this next month in part three.

KILLORN KEEP





H: headless and blackrock gem
A: axe, magic scroll, key, food and purple potion
B: wand and red ring

Quality Shareware

(PC only) with easy to use menus or on disc help to get you started. Shareware programs require separate payment to the author if found useful. Number of discs is in brackets after the name. HD=requires hard disc. Please remember to state disc size and to total up the number of discs.

Many more programs available.

Testware U.K. LTD.

ONLY £2.50 per disc when ordering 10 or more discs.
£3.00 per disc (2 - 9 discs)
Minimum order: £6.
Overseas, add £2.00 per order

Over 50,000 satisfied customers

BUSINESS APPLICATIONS

GALAXY LITE (1) WordStar Compat. & menus.
WORD FUGUE (2) (HD) Another brilliant WP.
PCTYPE 4 (4) (HD) One of the best.
POPSAURUS (2) (HD) Pop-up thesaurus.
SHARE SPELL (1) Stand alone spell checker.
MR LABEL (1) Flexible label printing program.
WAMPUM (1) Develop your own relational dBase.
ZEPHYR (3) (HD) Menu driven relational dBase.
CLUB (1) Simple membership system.
AS EASY AS (1) 123-style popular spreadsheet.
TUTOR 1-2-3 (1) Interactive tutor for Lotus 123.
INSTACALC (1) Pop-up spreadsheet.
FORMGEN (1) Form designing program.
PF FORM DESIGN (1) Popular form program.
TASK-PRO (1) (HD) Project management.
MANAGEMENT TRAINING (1) Teaches skills.
EASY STOCK MANAGER (1) (HD) Stock control.
PAGE FINANCE CONTROL (2) (HD) Accounts.

MUSIC/GRAPHICS

VECTOR DEMO (1) (HD) (VGA) Awesome!
MODPLAY PRO! (1) (HD) Play Amiga MOD files.
CD MUSIC PLAYER (1) (CD) (MSW3.1) Play CDs.
SCREAM TRACKER (1) Advanced version.
STM LIBRARY (3) Music files for Scream Tracker.

MS WINDOWS PROGRAMS

TOMMYSOFT CAD/DRAW (3 x 3.5" discs only) Brilliant CAD program for Windows.
LOGOGO (1) Change the Windows startup logo.
TERMINATOR (1) Windows "file shredder".
TOUCH TYPING TUTOR FOR WINDOWS (1)
BACKROOM BOY (2) UK Personal Organiser.
WINJAM (1) Full featured midi sequencer.
ARCHIVES (1) PKZIP/PKUNZIP front end.
CD MUSIC PLAYER (1) Play audio CDs.
CLIPBOOK (1) Store multiple pages of clip art.
GRABIT (1) Screen capture program.
WINDOWS SCREEN CAPTURES (1) Grabbers.
MICROLINK (1) Excellent comms program.
TODAY FOR WINDOWS (1) Horoscope program.
TOILET (1) Delete files by flushing them away!
WINDOWS TETRIS (1) Collection of Tetris games.
WINWAV (1) Apply sounds to any Windows event.
WYNDFIELDS (1) Relational database.
PAINTSHOP PRO (1) Popular picture file util.
WINSPELL (1) Checks spelling in any MSW prog.
BIGDESK (1) Increases the size of the Desktop.
ZIP MANAGER (1) Controls, PKZIP, LHAR, etc.
GRAPHIC WORKSHOP FOR WINDOWS (1).
SCREEN PEACE (1) Screen saver.
WINDOWS ICONS (1) Hundreds of icons.
ICON TOOLS (1) Edit, draw or view icons.
WINDOWS TOOLS #5 (1) including WINZIP.
SOUNDER (2) Digitised sounds through speaker.
ACTIVE LIFE (1) Calendar, appointments, dialler.
ORGANISE (1) Personal information manager.
CHOMP (1) PacMan game.
WINDOWS GAMES (1) 12 games, Yahtzee etc.
WINDOWS BACKGAMMON (1) Very good.
WINCHESS (1) Very good chess game.
BATTLE ON DISTANT PLANETS (1) Combat
CASTLE OF THE WINDS (1) Fantasy role play.

Shareware from the people you can trust.
Printed catalogue FREE on request.
Tel: 0423 886415 (anytime)
0423 880471 (9 to 5 only)
FAX: 0423 889728

GRAPHICS

ENVISION PUBLISHER (2) (HD) Fantastic DTP.
PRINT PARTNER (1) Banners, letterheads, signs.
PCX SUPERSHOW (2) (HD) Create presentations.
GRAPHIC WORKSHOP (2) (HD) Convert/view pics
DRAFT CHOICE (1) Easy and very popular CAD.
EASY DRAW (1) Technical drawing.
CHARTS UNLIMITED (1) Flow/Org. charts, etc.
NEO PAINT (1) (HD) 2/16/256 colour PCX drawing.
FINGERPAINT (1) B/W PCX drawing program.
FINGER VGA (1) 256 colour PCX drawing.
VGA PAINT (1) 248 colour drawing.
COOPER SET PCX (2) Over 1500 pics.
PCX HOLIDAY (1) 48 holiday pictures.
FRACTAL GRAPHICS (1) PCX fractal drawing.
SOFTSCENE PCX (1) 24 high quality scenes.

DOS UTILITIES

PKZIP/PKUNZIP (1) THE file archiver!
PKZMENU & PKLITE (1) Two utilities for PKZIP.
HYPERDISK (1) (HD) Disc Caching.
SAFEPACK (1) (HD) Hard disc de-fragmenter.
FLEXIBAK PLUS (1) (HD) Hard disc back-up.
MCAFEE VIRUS TOOLS (2) Anti virus programs.
COPYMASTER (1) Make copies of almost any disc.

PROGRAMMING

C TUTOR (2) Excellent tutorial with examples.
PERSONAL C COMPILER (1) Best compiler.
A86/D86 (1) Fast Assembler/debugger.
TURBO PASCAL TUTOR (2) Very good tutorial.
8086 TUTOR (1) Introduction to Assembler.

HOBBIES & INTERESTS

BROTHER'S KEEPER (4) Popular genealogy.
FAMILY TREE (2) Prints family tree chart or book.
FOOTBALL FORECAST (1) Pools/fixed odds.
PUNTER'S PAL (1) UK horse racing analysis.
ORGANIZE! (1) Choose: Music, Stamps, Videos.
ASTROMART (1) (HD) Calculates Astral Charts.
ONLINE BIBLE V6 (10 X 3.5" discs) (HD) Old and New Testament. Also includes **GREEK/HEBREW LEXICON and CROSS REFERENCES.**
ELECTRIC ALMANAC (1) Astrology, IChing, Tarot.

TESTWARE USER GROUP

When you order goods from Testware you receive a FREE membership to the user group. Members receive regular copies of our newsletter, TESTWARE NEWS, together with money-off vouchers and special offers. Testware News keeps members informed of the latest Shareware releases and other news from the world of Shareware, So for special offers only available to members, money-off vouchers and regular copies of TESTWARE NEWS, order from us today and get your FREE membership!

EGA/VGA GAMES (Need Hard Disc)

COMMANDER KEEN I (1)
COMMANDER KEEN II (2)
COMMANDER KEEN III (1)
JILL OF THE JUNGLE (1)
WOLFENSTEIN 3D (1)
SHOOTING GALLERY (1)
BOLO ADVENTURES (1)
FORD SIMULATOR III (4)
LADDERMAN (1)
CRYSTAL CAVES (1)
CORNCOB 3D (1)
SECRET AGENT (1)
LAST/HALF DARKNESS (1)
JUMPMAN LIVES (1)
SANDSTORM (1)
EGA TREK (1)
CAPTAIN COMIC (1)
1993TRIS (1)
BOLO II (1)
MINDCUBE (1)
GOLDHUNT (1)
DOMINATION (1)
BANANOID (1)
BATTLE OF ATLANTIS (1)
PHARAOH'S TOMB (1)
LEGEND/MYRA (1.44Mb)
SOCCER GAME (1)
COSMO'S... (1)
DARK AGES (1)
HUGO III (2)
F-117A (3)
ANCIENTS I (1)
GALACTIX (2)
PHYLOX (1)
STARFIRE (1)
DUKE NUKEM (1)
KEEN DREAMS (1)
HOOSIER CITY (1)
CRUSHER (1)
PAGANITZU (1)
BOLOBALL (1)
KILOBLASTER (1)
KUNG FU LOUIE (3)
EGAINT (1)
ALPHAMAN (1)
OILCAP (1)
CUBER (1)
TRIBOLO (1)
AVARICIUS (1)
ROBOMAZE III (1)
OVERKILL (1)
BACKGAMMON (1)
POWER CHESS (1)
STARDUEL (1)

EDUCATION

HOORAY FOR HENRIETTA (1) (VGA) (HD) (3.5").
HENRIETTA'S BOOK/SPELLS (VGA) (HD) (3.5").
SPELLBOUND! (VGA) (HD) (3.5") Age 7 to adult.
MONKEY BUSINESS (1) (HD) (EGA) (286) Age 7+.
WHERE'S THAT MOUSE? (1) (HD) (EGA) (286) 4+.
PC LEARNING GAMES (4) (EGA) Age 2 to 8.
WORD RESCUE (1) (EGA) (HD) (3.5") Age 4 up.
MATHS RESCUE (1) (EGA) (HD) (3.5") Age 4 up.
ANIMATED ALPHABET (2) (HD) (EGA) Age 2 to 6.
ANIMATED WORDS (2) (HD) (EGA) Age 2 to 6.
ANIMATED MATHS (1) (HD) (EGA) Age 2 to 6.
PAVIA GAMES (2) (CGA) For pre-school to 10 yrs.
DINO'S BUCKET DROP (1) (CGA) up to age 10.
ANDYS WORD GAMES (1) (CGA) For age 7 to 11.
WORD PROCESSING FOR KIDS (CGA) Age 4+.
EGA COLOURING BOOK (1) (EGA) Very good.
ABC TALK (1) (CGA) Teaches reading: age 1 to 7.
ABC FUNKEYS (1) (CGA) Age 2 to 6.
PRE-SCHOOL EDUCATION (1) (CGA)
PRE-SCHOOL EGA (1) (EGA) (mouse)
TOUCH TYPE TUTOR (1) Easy to use tutor.
FRENCH TUTORS 1 & 2 (2) Multiple choice test.
GERMAN TUTOR (1) Multiple choice tests.
GEOCLOCK UK (1) Map/time with moving sun.
MONARCH (1) Database of English Monarchs.

NEW ADDITIONS

BEAT THE BOMB (1) (EGA) Addition practice.
BILLBOARD VGA (2) Animated colouring book.
ANIMATED MULTIPLICATION/DIVISION (2) (EGA).
ANIMATED CLOCK (1) (EGA) Teaches the time.
VIEW ICON(1) (Windows) Displays icons.
TASK PRO (UK) (1) (HD) Manage jobs/personnel.
QUICK MENU (1) (HD) Graphical DOS desktop.

PROGRAM OF THE MONTH: VIEW ICON (1 disc) (Windows) Displays icons in any directory, one screenful at a time with the icon names underneath.

Access

Order 5 or more Shareware discs and choose 1 extra disc FREE!

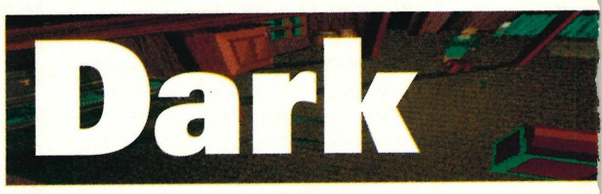
VISA

Dept PCR, TESTWARE (UK) LTD, 46 The Avenue, Harrogate, N. Yorks. HG1 4QD

24 hour dispatch by first class post. Many more programs available. ACCESS, VISA & SWITCH cards.

QED

Alone in the Dark



Jonathan King gives us the second and final part of his guide to Infogrames' Alone in the Dark

In the secret room, take the talisman. open/search the shelves to get three daggers, books, and parchment. Stand in the centre of the pentacle on the floor to read the yellow book (De Vermis Mysteriis) without getting a broken back. Leave all the daggers but the sinusoidal blade (the curvy one) and leave all the books once read. Use the remaining dagger on the vagabond in the library. Leave the dagger.

At the bottom of the stone stairs (again), go right to the closed door, and enter the kitchen. In the kitchen, take the pot of soup (flesh actually) from the fireplace. Enter the pantry by the window and prepare to kill another zombie (rifle works well as does the sword ...). Open/search the coal pile for the shoe box. Open/search the shoe box for the pistol, and leave the empty shoe box. Take the can of oil in the corner, use the oil and leave the empty can. Use the jug at the water barrel. Go back into the kitchen and optionally, open/search the cupboards to find two knives (not really needed) enter the other pantry to the right of the cupboards and take the key and open/search the barrel to get a biscuit box. Eat/drink the biscuit box as needed to increase health points. Go through the door between the counter and pantry: enter the dining room through the closed door straight ahead.

In the dining room, go to the table and drop/put the pot of soup on it to mesmerise the zombies. Go through the single door to the parlour. In the parlour, go to the table, take the lighter, and use the jug of water on the ashtray (cigars). Open/search the cabinet by the window to get a record and a book. Read and leave the book (memories) and leave the record (Chopin's posthumous Opus 69 Nr 1). Use the golden key (from Jeremy's new bedroom) to open the set of locked double doors to the right and enter Jeremy's study. Leave the key to Jeremy's study.

In the study, open/search the shelves in the corner to get a book and a record (Saint-Saens' dance of death). Read and leave the book (Captain Norton). Leave the study and go through the set of closed double doors in the parlour and cross the third hallway to the living room. Note the front doors to the right — leaving now is not a good idea! Enter the living room. Use the sword (from the knight) to kill the pirate (Captain Norton). Take the key he had and the book by the paintings on the floor. Read and leave the book (Demonia Particularis). Use the golden key from the pirate to open the locked set of double doors and enter the dance hall. Leave the key to the dance hall there and ignore the record, Strauss's Blue Danube, on the stand to the right and use instead the record Saint-Saens' dance of death. Avoiding the dancers, take the key from the mantle. Leave the record and the gramophone. Leave through the doors you came in: go back to the third hallway. In the third hallway, optionally, go toward the stone stairs to the locked door on the right. Use the key (the grey one) to enter the cellar.



In the cellar, avoiding the rats, take some bullets from the counter to the rear of the stairs. [optionally, open/search for a book on the far side of the cellar by the barrels. Read and leave the book (The Trial of Captain Pregzt), or, take the block of wood holding the barrels. Don't enter the cave this way.] Go back upstairs, down the third hallway through the parlour to the study (again). Next, go to the sword and shield and put/drop the old calvary sabre to trigger the mechanism. Go down the steps to the caves.

In the caves, run across the bridge. Go down the tunnel to the left. At the fork, run from the worm with a weapon (pistol is best), ready to kill another flying beast quickly (two shots required). Continue down the tunnel until the worm appears and go quickly back up the tunnel.

Go back to the formerly closed stone door and enter. Jump down on the walkway and go around to the left. Jump (new action) over the bridge and up on to the ledge. Go past the closed stone door on the right and kill the creature on the left. The pistol works best (two shots required). Continue past the creature to the pillars. Kill the flying creature (two pistol shots). Jump from pillar to pillar to the other side. If you fall, wade through a tunnel to the cavern with the walkway, but watch the monsters. Go down the tunnel to the fork, and right to the cavern with sabres and skulls. Go right at a sabre and left at a skull to the chest. Kill the flying creature as before if need be.

Use the fancy key to open the chest and get a gem and a book. Read and leave the book (a pirate's log book). Push the rock aside and enter the small cavern behind the chest. Go through the cavern and around the corner, jump down and go past the closed stone door on the left. Use the lantern (use the lighter if it needs to be lit and leave the wet matchbox while you are at it) and enter the maze.

Remember the closed stone door on the left as soon as you enter. If you don't see it go right and turn left when you see it and start the following directions from there. Go, straight (as possible, ignoring little irregularities), right, left, right (only choice), left, left, left (only choice), left (only choice), right (only choice), right (only choice), left (only choice), straight (past a left option), left, right (only choice), left (only option), left, right (only option), straight (past a left option), right (only choice), left, left (only choice), right to the door and put/drop the gem in the door.

Go through into the cavern and head for the tree in the centre, avoiding fireballs and the water creatures while wading to the crypt/alter in front of the tree. Take the hook from the crypt/alter. Put/drop the talisman on the crypt/alter to stop the fireballs, but you must still avoid the water creatures.

Use the lighter to relight the lantern (if you are out of oil at this point, you are in big trouble — try again). Throw the lantern at the tree. Follow instructions and "get out of here!" Wade to the opposite platform you entered on. Jump up and use the hook to open the stone door. Go through and to the left into the maze and go to the stone door to the right and use the hook to open it. Go through and to the left, jumping down to the walkway and walk to the left, jumping the bridge, to the other side. Jump up and go down the tunnel, at the fork, go left (towards you) at the second fork, go right and out into the cellar. Go up the stairs, out by the stone stairs, down the third hallway and out the front door.

AT LAST!! YOUR VERY OWN CUT OUT N MAKE REPLICA OF THE TOTTENHAM COURT ROAD COMPUTER EXCHANGE

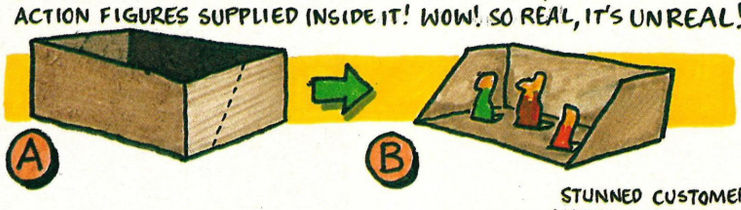
143 WHITFIELD ST. (NR WARREN ST. TUBE) LONDON W1P 5RY. TEL. 071 388 2613 FAX 071 388 5150.

INSTRUCTIONS FOR USE...

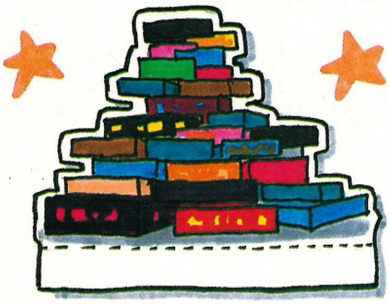
YOU WILL NEED: A SHOEBOX, SCISSORS + GLUE.

SIMPLY FOLLOW THESE EASY-TO-COMPREHEND INSTRUCTIONS. (N.B. IF YOU DO ACTUALLY BOTHER TO MAKE THIS THING, SEEK PSYCHIATRIC HELP. NOW. OKAY? OKAY?)

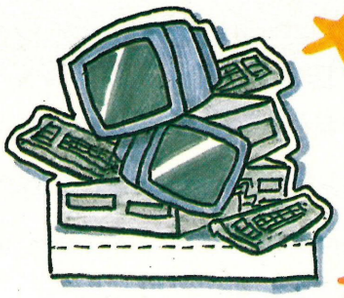
SIMPLY CUT OUT YOUR SHOEBOX AS SHOWN HERE, THEN STAND THE ACTION FIGURES SUPPLIED INSIDE IT! WOW! SO REAL, IT'S UNREAL!!



PILES OF PC SOFTWARE AT LOW LOW PRICES.



PILES OF PC HARDWARE, ALSO AT LOW LOW PRICES



INSTANT CASH WAITING FOR YOUR UNWANTED SOFT/HARDWARE.



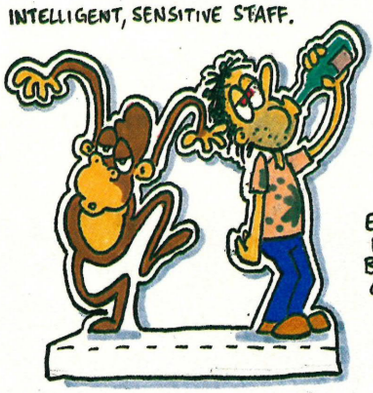
STUNNED CUSTOMER, AWESTRUCK BY OUR GREAT BARGAINS.



INCOMING BALLISTIC MISSILE.



INTELLIGENT, SENSITIVE STAFF.



EXTREMELY HIP KID, BALANCING ON A POLE.

(WE ALSO DEAL IN SEGA + NINTENDO GOODIES.)



AVAILABLE SHEEP.



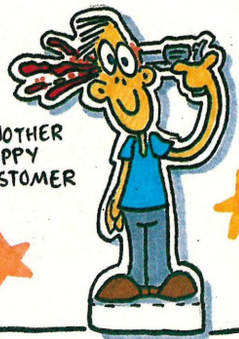
THE ONLY LIVING PACMAN IN CAPTIVITY.



SCREAMING, DISMEMBERED REMAINS OF NOEL EDMONDS.



ANOTHER HAPPY CUSTOMER



IMPORTANT NOTICE



CUT FIGURES OUT, FOLD ALONG DOTTED LINE, THEN SIT DOWN AND HAVE A DAMN GOOD CRY.

WE PAY UP TO £15 CASH FOR P.C. GAMES

PART-EX YOUR OLD TITLES FOR NEW ONES!!

CALL US NOW!! 071 388 2613
FAX: 071 388 5150

RETAIL SHOP, OPEN 7 DAYS A WEEK!!!!!

143 WHITFIELD STREET (NEAR WARREN STREET TUBE STATION) LONDON W1P 5RY

CHARLIE BROOKER™

I.D. MUST BE PRODUCED BY ALL SELLERS OF STOCK

QED

Chapter 2



You should all be safely through the first section of Virgin's Cold War adventure by now; this month we take you through the second and third chapters of the game

Attempt to leave your room. After the phone call, go into the bathroom and inspect the lamp over the basin to find the coded message. The phone call contained the keys to the code. The mirror wall tiles in the bathroom indicate the grid:

B	O	R	I	S	
3	A	B	C	D	E
7	F	G	H	I	J
4	K	L	M	N	O
5	P	Q	R	S	T
2	U	V	W	X	Y

The message is also written backwards. It instructs you to switch on and off your bedroom light three times, then call the number you heard in the phone call (and used to decode the message): 37452. You will be given instructions and a clandestine appointment for seven o'clock this evening. Leave your recording material and a microphone/transmitter, along with files on the local KGB people, in your room. Then go to KGB department 7 (the graphic will be changed, since currently the KGB entrance is not the big door facing you but an almost hidden door perpendicular to the big one!). Tell the man in the entrance that Kusnetzov of Department 7 is expecting you. You'll soon end up in Kusnetzov's office. As soon as you can, visit Agabekov's office and chat briefly. Note his two phone numbers.

Go into the vacant office and phone Agabekov on his outside line. Tell him that you have information concerning a certain Moscow visitor and that you'll be waiting down the street. Go into his office and inspect his dustbin. Take, or inspect, the cigar butt. Go back to your hotel, the Gostinitsa. Pick up your recording equipment and take the Metro to Ladoga Park.

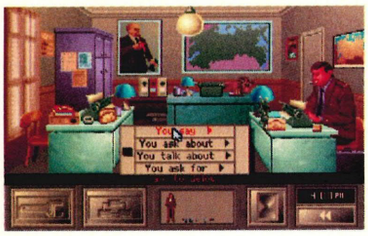


Go along the path as far as the bench. Hide the mike on the bench and then hide yourself behind a tree. Switch the recorder on to 'record'. Wait. When Romeo's contact leaves, pick up the mike and follow him to the subway station. When Romeo's contact (Savchenko) and the new man (Chapkin) have finished their discussion, follow Savchenko. As he punches in the code to open the warehouse door, take out your camera and use it on him to see the series he keys in. Wait for him to enter, then exit the warehouse.

Punch in the series you saw through the camera lens and enter the warehouse. Hide the microphone on the desk in the small back office. Leave the recorder (on 'record') in the loft. Open the loft skylight window. Go back down and out the way you entered and go into the bar beside the warehouse. Go through the bar and up the stairs. In the top room, take the bottle of hooch, open and go through the skylight, go through the warehouse skylight: you're back in the warehouse loft. Go downstairs and hide in the back warehouse (not the front warehouse, the office or the garage). Wait for Savchenko, then Mechulaiev (the gang boss) to arrive. They'll do a little moving around and talking. Another man arrives (Obukov) and joins Mechulaiev in the latter's office. When Obukov comes back out, re-enters the front warehouse and leaves, go up to the loft and through the skylights, down through the bar and back onto the street: you'll see Obukov going down the subway.

Follow him into the cocktail bar of the Syevyermaya Zvyezda hotel and wait. Agabekov enters and they both go into the lobby. Go into the lobby, where you'll see them in conversation, then go into the street. When Obukov comes out, follow him back to the warehouse. Get into the back warehouse and wait until Obukov goes away. It's time for you to leave. On your way out of the loft, don't forget to use the headphones to listen to all the recordings on the tape (most took place in Mechulaiev's office). When that's done, switch the recorder back to record and leave by the skylight. Leave the recorder.

Go to the Gostinitsa. Go round to the back and wait for "Cut-throat" who arrives at 7pm. When he says "Cut-throat", show him your ID. He'll want to know if you've gathered all the information he ordered you to (over the phone this morning). The answers to his questions are: you found a cigar in Agabekov's office; Mechulaiev and Savchenko are holding the videocassettes; the Moscow-Leningrad contact is called Yakuchev; Victor Matsnev will handle the operation; the cassettes will be exchanged for crack; Mr X is Agabekov.









When Cut-throat leaves, go up to your room, where you are to meet your controller (Savinkov) at 7.30. He arrives with a body. Inspect the body: you'll find a phone number. Phone that number and say: ... Yes ... Come up ... Come up. When Savinkov tells you to prepare for the bad guy's arrival, move the body into the bathroom, take his hat and coat and put them on, return to the bathroom and turn off the light. When the bad guy knocks on the closed door, tell him to come in. Savinkov knocks him out as he enters. When he wakes up, the bad guy will explain who he is. Savinkov asks you for a report: it doesn't matter whether you tell him about Cut-throat.

Savinkov gives you an hour to throw the body into the canal from the backstreet behind the hotel. Go into the bathroom. 'Look' at yourself in the objects window, choose the option to take off the hat and coat and put them back on to the body. Use the bottle of hooch on him. Go downstairs, outside and round the back and give the rest of the bottle of rotgut vodka to the down-and-outs. Go back up to your room. Move the body into room number eight and ease it out of the window.

Go down to reception and tell the receptionist someone's making too much noise upstairs. When the receptionist has gone, look at his desk and take the wheelchair out into the street and round the back. Use the wheelchair on the body, to place the body in the chair. Move the wheelchair away toward the canal. The militia men will show up; if the body has his hat and coat and reeks of alcohol, you'll have no problem. Throw the body and wheelchair into the canal, then return to your room. When the hour is up, Savinkov arrives. He tells you to go along to hotel Syevyernaya Zvyezda to discover who sent the two killers after you.

At the Syevyernaya Zvyezda hotel, all you have to go on is a room number. Go into the cocktail bar and talk to the "mini skirted blonde" (Natasha). Ask her about room 304. As she talks, Tamara will enter. Ask to visit 304. She won't go until you've got some dollars. You don't have any, so first you'll need to get some. You get the dollars this way: when you see the American Greenberg (you spent some time with him in a small room at the end of Chapter 1), go to speak with him.

You'll be intercepted by a woman called Wallace. Be nice to her only as long as it takes to wheedle dollars from her, then go to see Greenberg. Answer his questions truthfully. When Greenberg leaves, you can return to Tamara with your dollars and go up to room 304 with her. Ask her about the other room she uses. She'll give you the number, 416, for $50. When you've finished talking with her, go up to that room, bribe the landing lady with $10 and enter the room. Inspect it if you like. Use the lighter on the mirror, it's a two-way job. Smash it with the ashtray. Take a look at the room beyond. You'll see Chapkin's photo. Take it.

Leave the hotel Syevyernaya Zvyezda and make a quick trip to the warehouse (enter through the front door) to pick up your recorder (you could also have done this before going to the Syevyernaya Zvyezda). Listen to the recordings you haven't yet heard. Remove the headphones, stop the machine and leave it on voice-activated playback. You won't be able to get the microphone from Mechulaiev's office: it's locked. Return to your hotel with the recorder. You sleep.

Chapkin wakes you up brutally. Obey him. When you're in the bathroom, you'll have a chance to act: choose a dialogue option containing the word "comrade", which will activate the recorder. When Chapkin turns, slug him. Take the syringe from his pocket and inject him with the contents. Ask him relevant questions of your choice. It's important to learn about Kusnetzov and Viktor Matsnev.

Chapkin will die after a few minutes. Wait for Savinkov, and tell hime what you have learned about Kusnetzov. He will furnish you with a replacement for the camera which couldn't take photos. He then leaves. Hide Chapkin's body in your cupboard and sleep some more.

It's time to start disobeying Savinkov. You have an appointment with Cut-throat for 11 o'clock in the alley behind your hotel. You see one of the previous night's down-and-outs. Ask him to give you his newspaper. He'll give it to you in exchange for your new camera. Make the swap. Look at the paper and decode the message using the same key grid as before. Go to the phone booth in the street in front of your hotel and wait for the call. Get any information you want. He should tell you to expect Yakuchev's address tomorrow. You should have time to go to Ladoga Park to meet Greenberg again. He'll tell you that Yakuchev is Pamyat.

Chapter 3

How to play

Dive into the sea. Go aboard the Viktor Matsnev boat. Hide behind the fish boxes. Go down to the radio room. Go into the rest room. Take the items under the lower bunk. Go up to the deck. Throw the rum bottle into the water on the left side of the boat. When the man dives into the water, go to the stern deck and go down to the engine room. Hide in the closet. Wait until the mechanic goes down.

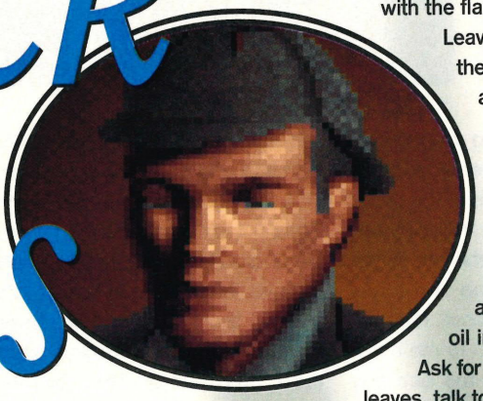
Wait until Savinkov goes down. Wait until the captain goes down and the Viktor Matsnev gets under way. Wait until Kapiton (the mechanic) falls asleep. Use the belt on the engine to repair the engine. Hide again in the closet until 9.30pm: night will have fallen.

Go to the forward deck. Hide behind the fish boxes. Wait until 12pm: everybody's coming on deck. Wallace is coming. Follow the men who go down to the radio room. Listen to the door of the rest room. Come back on deck. Wait until 5am: everybody's coming on deck. Wallace is leaving. Go to the stern deck. Wait: day breaks at 6.45am. Wait: at 7.30am, the Viktor Matsnev comes into port. Dive into the sea.



QED

Sherlock Holmes





Master detective Karl Stewart has deduced his way through The Lost Files of Sherlock Holmes to present this step by step guide to the game

First, here are some general points to bear in mind while playing the game: 1) Examine everything you pick up as it may lead to a new location; 2) Places in capital letters are locations on the map of London; 3) When it says select number two, three, etc, the solution refers to the numbers by the selections of what to say when Holmes is talking to someone.

OK, now we'll get down to business. Go through the door of 221B to the street and turn right. This takes you to the map of London. Click on the alley to go there. Examine the corpse there and knife wounds and pick up the white powdery residue. Pick up the iron bar and battered piece of paper. Talk to Lestrade. When he has finished, go through the backstage door. Ask Watson if he thinks the woman's distress is genuine, and then ask if he has anything to calm her down. When you talk to Sheila, select one, then ask all the other questions. Pick up the spring under the wardrobe, the flowers, the card and the perfume bottle. Give the spring to Carruthers and examine the stain on the door.

Go to 221B and enter the flat. Use the white powdery residue on the lab table. Use the white powdery residue on the test tube and use the matches. Use the white residue on the test tube again. Examine the smoke residue and exit. Then use the flower on the lab table and use the flower on the microscope. Use the matches and use the flower with the flask. Exit.

Leave the flat and talk to Wiggins, the boy in the street outside. Tell him you require his assistance and give him the flower. Leave the screen and go to Sarah Carroway's flat. Open the umbrella and pick up the key. Examine the laundry basket and pick up the sweater. Go to Belle's Perfumerie and talk to Belle. Tell her that the man you are looking for wears Macassar and hair oil in his hair. Then say he has black hair. Ask for some perfume: Cote d'Azur. When Belle leaves, talk to the cleaning girl. Tell her you are looking for a man. Then go back to the counter and wait for Belle. Take the perfume and leave.

Go to South Kensington Field. Talk to the coach. Go to Southwark Morgue and talk to the coroner. Ask him if the body has arrived yet. Carry on the conversation until you ask to see the items. When he returns, look at them, and try to pick up the key. Talk to Inspector Gregson: ask him no 2. Exit. Go to Scotland Yard. Speak to the constable. When he refuses you entry, talk to the vendor. Ask him no 1. Go back to the morgue and talk to Gregson again. Select no 2. You will go to Scotland Yard. Enter and talk to the duty officer. Once he tells you his special orders from Lestrade, go outside and speak to the vendor again.

Select no 2 and carry on the conversation. Go into Scotland Yard and flatter Sergeant Duncan. Talk to Lestrade and get permission to take the items. Speak to Duncan again and get the pass. Go to Southwark Morgue and give the pass to the coroner. Pick up the key. Take a look at the gory dead bodies if you want to. Exit and go to the alley. Use the large key in the door. Talk to Carruthers until he has told you everything. Use the brass key on the chest of drawers. Examine the top drawer and pick up the opera tickets. Keep them. Exit and go to the Opera House.

Give the tickets to the usher and ask the manager as many questions as you can. Talk to the usher by the stairs. Go up the stairs: talk to the elderly woman and give her the tickets. Talk to her again, select no 1, then ask the rest of the questions. Go back to the





manager and give him the note. In Anna's dressing room, try to open the jewellery box, then exit. In the foyer, talk to Watson and go back into the dressing room. Talk to Watson again: select no 2. When they have gone, pick up the contents of the middle drawer. Having examined them, close the drawers and try to pick up the hand mirror: this brings Watson and the manager back. Go to South Kensington Field.

Speak to the coach. First tell him the man's name is James, then that he smokes Senior Service cigarettes. Talk to Sanders and give him the perfume bottle. Exit and go to Eaton Dormitory. Select no 1 and keep asking questions until James throws you out. Go to Baker Street and talk to Jonas: select no 2. Talk to Wiggins: select no 2. Talk to Wiggins again: select no 2. When you have the paper, go back to the Eaton Dormitory and give it to James. Exit and go to Saint Bernard's public house. Talk to the spectator and select no 1 and then no 1 again. Talk to him again: select no 1. Talk to Nobby, select no 1 and no 3, and then say "Not even for money?" to the dandy player (Jock).

Ask the barman if the man in the yellow jumper is married. Talk to Jock again until you are given a choice of no 1 or 2. When he has told you Caruso's address leave and go to Covent Garden. Talk to the flower girl: select no 2, then 3, then 4. Give the card to Lesley and pick up the wire basket with the flowers and use it on the barrel. In the Moongate Pub, talk to the bartender: select no 3, then no 2, then no 3 again.

Challenge each drunk starting with the staggering drunk, then the shouting drunk and lastly the dirty drunk. Once you have beaten them, tell the barman you're ready for that game of darts now. Once you have beaten him, talk to him and select no 3. Exit the pub, read the swinging sign and go to the chemists. Do not pick up the light fixture! Talk to the chemist, select no 1, and keep talking until you have bought Professor Whitcomb's Catarrh Preparation and then ask to see the assistant again.

Leave the distraught Richard once you have questioned him and go to Bradley's shop. Move the top cigar crate, talk to the assistant behind the counter: select no 4. Move all crates until one is on top of the other two and all are underneath the moose head: climb on top. Pick up the moose head. Leave the shop. Go to Oxford Taxidermy and talk to Lars. Pick up the smock and knife. Exit and go to Caruso's flat.

Talk to Caruso, select no 1, and no 1 again until you have Anna Carroway's address. Speak to him again: select no 3. Go to 221B and talk to Wiggins. Ask him for the gyroscope, then go to the picnic site and playground. Use the gyroscope on the solitary boy and keep asking until he asks if it's an English gyroscope, and then give it to him. Ask him if he likes gyroscopes, keep talking and pick up his cap when he leaves. Exit and go to Anna Carroway's flat.

Use the door knocker and then the ring of keys on the door. Once inside, pick up two calling cards in the silver salver and move the plant by the staircase. Go upstairs and speak to the housekeeper: select no 2. When she has left, move the statue and pick up the book. Exit and go to the law offices of Mr Jacob Farthington. Keep asking Jacob questions until he has nothing more to say: then leave. Go to Eddington's equestrian shop. Speak to the counter man: select both questions. Speak to Watson: select no 2. Exit: go to Old Sherman's.



Speak to Sherman. When he gives you a leash, use it on the dog under the window. When you arrive at the docks, open the shed door and pick up the hammer. Move the barrel on the right. Look at the pail, pick it up, get off the barrel and move the barrel again. Pick up the rag. Use the pail on the Thames. Use the rag on the pail. Use the wet rag on the window and look at the window. Use the hammer on the door. Once you have caught Blackwood you will be in 221B.

Go to Bow Street police court and speak to the guard, then go to Scotland Yard. Talk to Sergeant Duncan: select no 2. Go back to Bow Street. Give the pass to the guard and talk to Blackwood. Ask him all the questions you can and then leave. Go to Jamieson's Buying And Selling. Speak to Jamieson, select nos 1, 3, then 1 again. Leave the shop and go to the Moorehead and Gardener Detective Agency. Speak to the secretary and say no 1. Keep asking her questions until you stop automatically.

Look at the framed photograph and exit to the London Zoological Gardens. Enter and go right past the elephant. Examine the corpse and the slash wounds, speak to Inspector Gregson: select no 2. Go through the door on the top left of the screen.

Speak to Hollingston, select no 2, then leave. Walk to the left at the lion, the shiny object and the mud. Exit the zoo and go to Simon Kingsley's flat. Look at the picture and the books. Talk to Simon, asking him questions until he admits Felix is guilty. Talk to him again: select no 2. Go back to the zoo and the lion enclosure. When you select, "Pick up shiny object" Holmes climbs into the pit and pick it up. Examine the piece of paper you find in the watch.

Go to the Moorehead and Gardener Detective Agency. Tell the secretary about the murder. Save the game. Pick up the typewriter. Holmes will now take over, so sit back and watch until you get back to 221B. Back to the Moorehead and Gardner agency where you enter the inner office and move the comfy chair. Look at the shelf of books and move it. Open the safe with the numbers on the piece of paper. Pick up the contents. Examine the letter inside the pendant. Move the comfy chair and go to Lord Brumwell's Mansion.

In the hall, wait for Lady Brumwell, follow and talk to her: select no 2. Go through double doors on the right. Wait for Lord Brumwell to speak twice, then continue the conversation until Lord Brumwell goes off to hand himself in. Move the Persian sword on the left. Open the picture. Open the safe and pick up the contents. Use the small brass key on the double doors you came in through. Leave the mansion — Holmes will take over.

Back at 221B, exit to Robert Hunt's flat. Open the closed chest: use the iron bar. Examine the contents and pick up the document. Open the small book and examine it. Pick up the bookmark and leave the flat. Go to Jameson's Buying and Selling. Give him the pawn ticket. Go to Covent Garden. Enter Madame Rosa's on the left. Move the large candle at the top of the screen. Use the ornate key on the desk drawer. Use the silver key in the desk on the strong box. Open and examine it. Pick up the folded piece of parchment. Go to the Savoy Street Pier and use the iron bar on the door. Watch the ending sequence.

QED TIPS

Do not attempt the tips marked with this icon unless you are sure you understand what you are doing. In any case, it's sensible to make back-ups of the files before you start tinkering around with program editors. PC Review is not going to accept any responsibility for damage to data incurred when trying out tips, so be warned! Send all your cheats to QED Tips at the usual PC Review address. We'll print as many as possible each month and the sender of the highlighted Star Tip wins a software prize – so don't forget to include details of your PC's configuration with your letter.



X-Wing

Paul Mitchell has a technical cheat for X-Wing, the space extravaganza from LucasArts. If you have PC Tools or any Hex editor make a pilot file in the game and then edit the following line:

Relative sector 0000000
Line 0128(0080)

It should read as follows:
00 00 00 00 00 00 08 08 08 00 00 00 00 00 00 00

This gives you your wings for each of the ships (A-Wing, Y-Wing and X-Wing) and saves you having to complete all 24 of the tedious and laborious "maze" levels. But remember, if you want to try this out, back up your files first!

X-Wing

Back in the space lanes again, Barnaby Burman from Winchester has come up with another small cheat for the trainee rebel pilot. If you delete the files Satlite1.brf and Satlite1.xwi and copy or rename the files Dstar1.brf and Dstar1.xwi to Satlite1.brf and Satlite1.xwi respectively, when you play the Satellite training mission again in the X-Wing, you will find that you have the Death Star mission instead. This can prepare you for the real thing which is about 14 missions into the third tour of duty, but be warned ... it could ruin your enjoyment of the game!

Logical

Keith Groves, though quite stuck on this game from Electronic Arts, has consoled himself by unearthing a cheat that allows you to start on any level and dispels the need for remembering passwords. Choose the password option on the title screen as normal and type in "HUGO SAYS" followed by the number of the level you want to go to. For example, to go straight to level 99 type "HUGO SAYS 99".

Also the password "THE FINAL CUTX" allows you to edit existing levels as well as the "THE FINAL CUT" (no "X" this time) to design your own levels from scratch.



Cosmo's Cosmic Adventure

A quick tip from Edwin Mitson of Preston for this Sonic-esque platform romp from Apogee. To get full health, nine bombs etc simply press 'C', Zero and f10.





Battle Isle

(Scenario Disk Vol 1)

Paul Collings has been hard at work compiling all of the codes (both one and two player) for the first scenario disk for Battle Isle, the superbly designed strategy war game from Ubi Soft.

Player one codes

1 BLOCK	10 ITALY	19 NORTH
2 WATCH	11 LINES	20 FJORD
3 LAGUN	12 VARUS	21 DONOR
4 BIRMA	13 SOUND	22 LEYES
5 SERPT	14 TWEAK	23 JUMPY
6 RAMBO	15 NIPON	24 WERFT
7 YUKON	16 FLAIR	25 WINIT
8 POINT	17 ARROW	
9 FROGS	18 KORSO	

Player two codes

1 CLOCK	5 PEARL
2 LOSAG	6 MIROR
3 BOMBS	7 ROMEL
4 COMET	8 MAGMA

Zak Mckracken and the Alien Mindbenders

Many people have been stuck on the plane to Seattle, unable to create a diversion to distract the stewardess and collect the necessary items. Max Reeves from London offers some very timely assistance.

After the stewardess has given you the peanuts, head for the toilet and use the toilet paper in the sink. Next, turn on the taps and when the sink overflows, push the help button. After you have done this, quickly head to the front of the plane and open the microwave, put the egg in it and turn it on. Go quickly back to your seat while the egg in the microwave will promptly explode. When the stewardess starts cleaning the mess on the inside of the microwave, use this time to get the cushion and the lighter that falls out. Finally, open all of the overhead bins until you find the oxygen tank and then sit down. Then it's off to Seattle to get the blue crystal.

Ultima Underworld 1

Having rescued the princess, found the bones of Tyball's brother (Garamon), used the key of infinity, etc, etc, ... how does a humble adventurer go onwards?

First bury Garamon's bones in his empty grave. This is located in the crypt which can be accessed from level five. Garamon's ghost will then appear and ask you two questions, the answers to which are "Talismans" and "Lava" respectively. He will then tell you what to do.

Ultima VII

Dominic Davies has been unable to work out how to cast spells in Ultima VII. To start with you need the spellbook which can be found in the storeroom on the battlements of Lord British's castle. The storeroom can be opened by a key located in the desk in Lord British's study.

You must also have the necessary reagents which can be purchased from any high street mage. To turn the pages of the spell book click in the top corner of the page that you are currently on and once you have the page you desire click on the spell to cast it. Subsequently the spell will only work if you have the correct reagents and are of a high enough level to cast it.



Indiana Jones & the Last Crusade Adventure

Ben Glover offers the benefit of his experience in answer to the questions

posed by Gareth Ellis from Bristol in issue 19:

How do you unlock the chest in Henry's house?

At Henry's house you push or pull the bookcase at the back wall. On the back is a one pixel sized piece of Sellotape. Pick this up and journey to your office. At the office locate the jar (it's on the back shelf) and use the Sellotape with the jar. A key should appear. Finally back at the house take everything off of the table and use the key with the chest.

How do you pick up the torch on the wall under the ground in Venice?

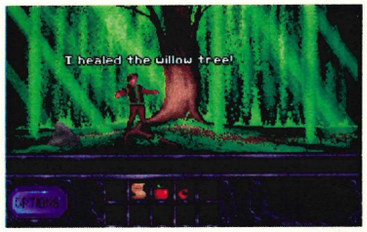
Go to the cafe via the manhole and find the two lovers. Convince them that the wine they are drinking is a load of rubbish. Take the bottle and use it in the fountain. Once it is full of water go to the torch and use the water-filled bottle with the torch. Finally pull the torch.

How do you get past the grating near the manhole cover underground?

You don't. Well, not at this stage. First you must travel around the underground until you get into the room from the other side.

How do you get the plug out of the pool of water without getting wet?

Before you get to this part you must have picked up the hook from a skeleton in the underground. Once you have this and have pulled the torch you will fall down a trap door. Find the plug from the other side and use the hook with it. After checking out the inscriptions in the end tunnel use your whip with the hook. Out comes all the water. Go to the chamber where the water was previously and journey on through the caves.



Legend of Kyrandia

Many readers have offered help to the beleaguered Michael Brocklehurst who has been searching in vain for a hidden fountain part. Clare Batchelor from Letchworth was first in with the answer.

The hidden fountain part can be found in the burning bush. You should have Darns scroll in your possession (gives you the shivers) and must use the scroll on the burning bush. The fire is then extinguished and you can easily get the fountain part. Finally, repair the fountain and fill the flask with water.

Commander Keen: Goodbye Galaxy!

If you can't get into the Pyramid of the Forbidden, Emma Champion can show you the way in this old Apogee favourite. To enter first go into the Pyramid of the Moons. From your entrance point walk to the far right and go down the very last pole. Enter the door and collect the yellow diamond. Take the diamond back through the door and climb back up the pole again. Walk to the left and climb down the fourth pole from the right. Walk to the far right, use the diamond on the door, enter and pull the lever. Walk left until you can go no further. Then walk back to the lever slowly so that the inch worms can keep up. When you are sure you have all the worms (there should be 12), wait a couple of seconds and a foot should appear. Walk to the foot and you will be magically transported to the Pyramid of the Forbidden.

HELP WANTED

Space Quest 4

Steven (who left no address when he called) is stuck in this game from Sierra. Having gone back to Space Quest 1, three men keep killing him on the sandbags. Although he can escape, the men keep on coming back.

Space Quest 5

After curing the woman and boarding the SCS Goliath, I have put the warp drive back where I found it but I don't know what to do next. I can get to every level (1-9) but I can't go through a door without getting killed by a guard.

David Hamilton
Surrey

Wizardry VII

I'm having big problems trying to enter Rattkin Ruins. I'm also having trouble finding the Wikum Power Orb and how do you get the holy work in the last temple, I can't find it! Finally, there is supposed to be a Wizardry hint book but I can't find it in any shop. Does anybody know where one can be found?

Kevin Cottrell
Devon



For those of you who are really, truly stuck, here is an indispensable guide to some of the companies who you can ring for some life-saving assistance.

Acclaim	(0962) 877788
Accolade	(081) 877 0880
Digital Integration	(0276) 678806
Domark	(081) 780 2224
Electronic Arts	
(360, Interplay, Mindcraft, Millennium, Origin)	(0753) 549442**
Gremlin (between 2 and 4 o'clock)	(0742) 753423
Infogrammes	
(Disney Software)	(071) 738 8199
Microprose	(0666) 504326**
Ocean	(061) 839 0999
Psygnosis	(051) 707 2333
Sierra	
(games released after Jan 1)	(0336) 417410
(everything else)	(0734) 304004
USGold	
(Access, Delphine, LucasFilms, Novalogic, SSI)	(021) 625 3366
Virgin (for hint sheets only)	(081) 625 2255

** contact numbers only

You must know the score by now, but for anyone who's still uncertain how to get their words of wisdom published in PC Review's QED pages, here's what you do. Send all your contributions to PC Review at Priory Court, 30-32 Farringdon Lane, London EC1R 3AU. If you have any general tips or cheats for games, share them with us, marking your envelope 'Tips', loud and clear.

If you are hopelessly stuck in a game and need some kind soul to point you in the right direction, send in your cry for help and mark the envelope 'Help Wanted'. And if you have any solutions for the Help Wanted section, write 'Help Supplied' on your envelope, and include details about your PC set-up, so that if you win the Star Tip prize we can send you your software straightaway. Failure to comply with any of the above will mean your deathless prose will only serve PC Review's paper recycling projects, so please make sure our overworked mail-sorters know where to put your letters.

QED

Software Search

Looking for that elusive piece of software which answer all your computing requirements and make your life easier? Try PC Review's Software Search

Can you recommend a home accounts package? I have a 640K machine and a 20Mb hard disk.

D Garrett
Westcliff-on-Sea,Essex

My recommendation would be Quicken for DOS 6.0 (£49.95) from Intuit (081) 759 1955. This program originated in the US, but the UK version has been well converted – which is sometimes a problem with shareware programs. You use it like a cheque book reconciliation program in that you type in the details of cheques as you write them and it categorises each transaction so that you can have an instant analysis of your finances and can budget as accurately as you want to. This is highly professional software that is easy to use and excellent value for money.

If your budget for software is more limited then Personal Accounts Tracker (£15) from Barefoot Software Systems (0730) 260277 is an attractive alternative. It too has the features like standard postings for regular income and expenditure that cut down on the work you have to do.

When it comes to shareware programs the usual drawback is they are American in origin. Transend (0274) 622228 lists four programs, one of which is UK specific, and here are brief comments from their catalogue:

The Home Finance Manager

Order code: 5010
Total disks: 1
One of the more promising packages seen in the shareware market for handling home finances in the UK. The shareware version doesn't allow you to sort any records and will not carry out automatic standing orders, but it is easy to use.

Bank Manager

Order code: 1770
Total disks: 1
Originally developed in 1985, the program has been updated and has been stable for several years. On-line prompts guiding users step by step through the system. The user can see up to the minute balances on 26 different accounts. Entry of transactions is in columnar format and each entry can be edited before it is committed to disk.

Cheque It Out

Order code: 1300
Total disks: 1
A cheque book and expense accounts manager that is friendly, easy to use and well written. This program from the USA can handle many accounts and has a large capacity for hundreds of transactions.

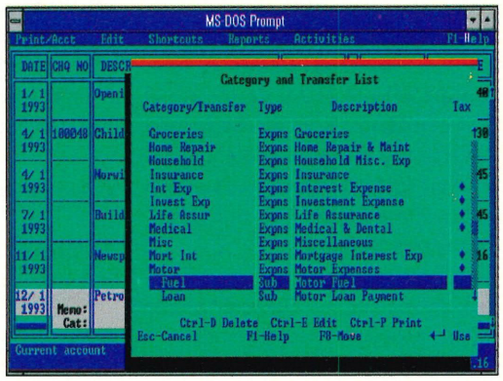
Home Finance Companion

Order code: 5000
Total disks: 1
As well as all the things you would expect from a home finance package, such as automatic standing orders debits and bank reconciliation, this package has extras – a pop-up calculator, a notepad, and you can access the manual at any time during the running of the program. It will produce graphs (if you have EGA minimum) and ASCII reports to be loaded into your word processor.

Shareware Publishing also has a program called Page Cheque Book written in Ireland that is suitable for a small non-VAT business and is therefore applicable to home accounts. It is a cheque book reconciliation program that handles standing orders and includes a search routine.

I am trying to find a program which will list alphabetically and automatically sort into alphabetical order a series of names, addresses, telephone numbers and fax numbers.

Mr M Bridge
Macclesfield



You may already have the software needed for this task without realising it. Many word processors will sort data into alphabetical order and so will any spreadsheet. In either of these two applications you keep your data in a table with a column for each item of information – although in a word processor it is sometimes sufficient to separate the items by commas. In WordStar you mark the text to be sorted as a block and if you want to sort by a field that is not at the left you need to mark it as a column block. Most full featured Windows word processors give a sorting option on the Tools menu and in the case of Word for Windows just type in the number of the field you want that data sorted on.

If you have Windows then you already have Cardfile, very suitable as a name and address database. If none of the software you currently have gives you a facility for sorting names and addresses then you might consider an integrated package such as PC Works 3 or its Windows counterpart Works for Windows. As well as including word processing spreadsheet and database modules, both these programs include a name and address WorksWizard that helps you create and maintain the type of datafile you require.

If you are looking for dedicated software for this purpose then a simple database such as PC File 5.0 (DB27 from Shareware Marketing, 3 disks £7.50) is a good choice. This is available as shareware so you can try it before buying – the full cost is £99 – but even though it is easy to use it will have a lot more features than you need. As you are interested in just names addresses and phone numbers then a mail list manager such as PC-Names (DL24 from Shareware Marketing, £2.50) seems to fit your requirements.

Can you recommend a dungeons and dragons character generator?

Jason Cleaver
Surbiton, Surrey

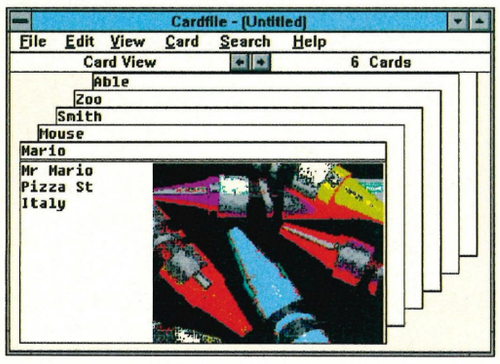
If you want to create an adventure game with graphics, Graphics Adventure Game Builder Version 1.01 (disk GV44 from Shareware Marketing) is an option if you are going to be content with low-res CGA graphics. It allows you to create up to 10 characters by name using six character types. Each character can have up to eight initial attributes and you can use 19 single letter commands.

If you want better graphics the Questmaker (GV45) supports 16-colour EGA graphics and lets you import .PCX files and enables you to create up to 36 games screens with definable boundaries, borders and walk behind areas. This program lets you write games that rely on an inventory of objects with up to 36 objects to be collected and tracked during the game and a pop-up inventory list.

If you do not require graphics, but want to build more complex games that rely on words Adventure Game Toolkit (GV41 3 disks, £7.50) offers two levels, "standard" and "professional", in which the design of the game's universe is the central preoccupation. Its games can have up to 200 locations, 100 objects and 100 characters with over 400 words.

I am an engineering student and a keen games player but I sometimes think about using my PC for other purposes. Is there any software that can help me with the maths component of my course?

Tim Phillips
Brighton



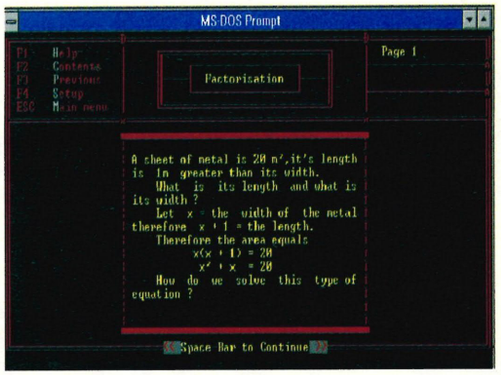
Yes, if you are studying any technical subject with a maths component then you need a copy of MathCad. This is the nearest thing you will find to a notepad that can do algebra! It takes a little getting used to, but once you have grown accustomed to it there is no doing without it. You can get a free demo disk by phoning Adept Scientific on 0462 480055 and asking for one!

Do you know of any course designers for model racing cars and train sets to run under Windows. The problem is to use 45 degree and 90 degree bends with various track segment lengths.

Mark Piercy
Washingborough, Lincoln

I have only dabbled with putting small racing car circuits together and I admit that occasionally I wasn't sure how to complete the course! You could try to use a general purpose drawing package such Professional Draw from Gold Disk (081) 671 7733 or a painting package such as NeoPaint (reviewed in the shareware column in Issue 18). What you would do is to draw 45 and 90 degree curves and some straight sections of the correct length and then use these to assemble the track. In the drawing package you could keep on copying the shapes you need and the painting package you could make the shapes into a 'stamper'.

I had a quick look at Design Your Own Railroad (£39 from Shareware Marketing (0297) 24088 but note that it is not shareware) to see if it would do the job – but it doesn't. It's great fun and allows you to design and simulate the running of model railway layouts, but it doesn't tell you what curves and straights you need to make up the layout. The reason is probably something to do with the model railway track being more flexible than racing car track. So does anyone know of a specific program for model racing car layouts?



Reader update

Like Steen Petersen in your March issue, I found having changed from a 286 to a 33MHz 486DX that some games ran too fast. This was particularly the case with Gunship 2000, which does not apparently auto sense the speed of the processor, but runs as fast as it can. Hence a helicopter that was probably the predecessor to Harrier! After a number of telephone calls and an upgrade to Ice and Islands, I was sent a freeware patch which turns that internal cache of the 486 on and off, as required, with great success. These patches are by Michael Spertus and can be obtained from some bulletin boards.

David Heath
Leicester

If you are using a reasonably up-to-date BIOS you can switch the 486's cache off using the advanced set-up. Exactly how this can be done depends on the BIOS, but once you are in the set-up it is just a matter of looking though the options until you see one referring to the cache.

This will slow the 486 down to the speed of the RAM chips in use which is usually is effectively a 12MHz machine. Seems odd to buy a powerful machine and then cripple it just so that you can run software that didn't anticipate that things might get better ...

If you would like to take advantage of Software Search fill in the form, right, or reproduce it in letter form, and send it to PC Review, Software Search, Priory Court, 30-32 Farringson Lane, London EC1R 3AU. You can also fax your request to (071) 972 6710, or e-mail it to pcreview@CIX.compulink.co.uk.

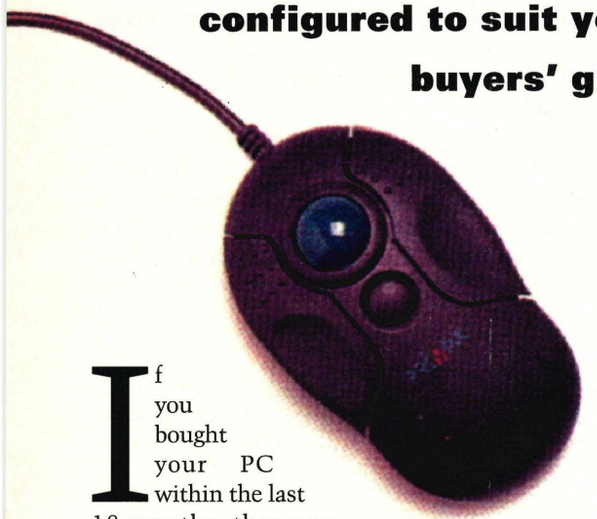
Please note that PC Review doesn't undertake to supply you with the software we come up with, but we will identify the product we believe will suit your purpose, and make our own, necessarily subjective, evaluation of it.

Name .....
Address .....
.....
.....
Daytime tel no (in case we need more details) .....
PC system specifications: .....
Processor ..... RAM ..... Hard/floppy disk .....
Graphics ..... DOS ..... Windows .....
I am looking for software which will perform the following task .....
.....
.....
.....

Finger-clicking good

Is your mouse up to scratch?

If you run Windows, or simply use the mouse constantly, you'll know that not all mice are equal. An unresponsive, uncomfortable mouse can make what should be an intuitive interface a downright chore. In this instalment of our series on upgrading, Christina Erskine looks at different types of mice and the ways in which they can be configured to suit you. There's also a buyers' guide over the page



If you bought your PC within the last 18 months, then you almost certainly acquired a mouse at the same time. The massive increase in use of Windows, and programs, including games, which use pull-down menus, has made the mouse more of an essential item than an optional extra.

So, if PCs nowadays almost all come with a mouse in the package, what's the point of devoting a whole article to buying a mouse? Well, the mouse that came with your PC may not be the world's most advanced or comfortable model. When PCs are sold as value-for-money bundles, there's usually one element where quality has been skimped for the sake of cost. You may have a fast system with a fabulous SVGA monitor and a hopelessly squidgy keyboard — or a very plasticky mouse. And since mice cost around £35-£50, this is one inexpensive upgrade which could make your PC significantly easier to use.

Which mouse?

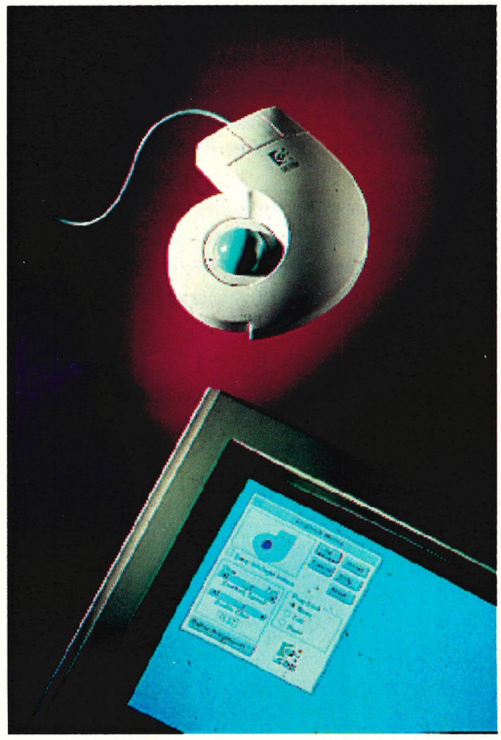
First things first. There is a de facto standard for PC mice, and you should make sure that the mouse you buy is Microsoft-compatible. This doesn't, of course, mean that it has to be Microsoft's mouse, or Microsoft's own mouse driver, but it should be compatible with these, and most mice these days are.

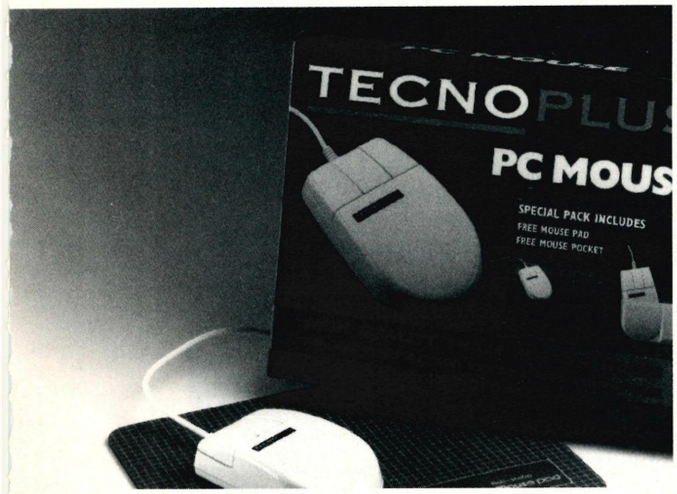
Secondly, there are three main types of mouse, the most familiar of which is probably the opto-mechanical device with the small rubber ball set underneath. Whenever you move the mouse on the desktop, the ball rotates against two internal switches, one which marks left/right movement, and one for up/down movement. The directional movement is transmitted through the cpu to make the on-screen cursor move correspondingly.

Optical mice, however, have no roller ball. Instead they must be used with their own special, supplied mouse mat, usually a silver mat with a very fine squared grid on it. The mouse has a light sensor set into its underside, and this time, when you sweep the mouse across your desk, the pattern of movement is reflected from the silver grid.

Finally, there are cordless mice, of which Logitech's range is currently the most familiar. These operate on a low frequency radio link between the mouse and a receiver attached to the serial or mouse port.

Which of these types of mouse you choose is largely a matter of personal preference. The cordless mice are qute a bit more expensive, and per-





haps not entirely suitable for untidy desktops, where all sorts of clutter is likely to get in the way between mouse and sensor.

Optical mice are more accurate than opto-mechnical devices when you are working with very high resolution screens, and although sensitive, movement is smooth. However, lose or damage the special mat and the mouse is useless.

This leaves roller-ball, opto-mechanical mice as the standard issue, and certainly these are the most common. Their only main drawback is that the cavity in which the ball sits often gets clogged up with dust or dirt, which makes movement of the mouse jerky and inaccurate.

In this case, cleaning a roller-ball mouse is fairly simple. Turn the mouse upside-down, open the 'lid' of the cavity (either by hand, or with a coin or ball-point pen), and wipe both the ball and gently around the inside of the cavity to remove any dust, crumbs, cat-hair, and the like. I always give the roller sensors a quick spin as well just to make sure they aren't getting stuck. Re-assemble the mouse and you should notice the difference immediately.

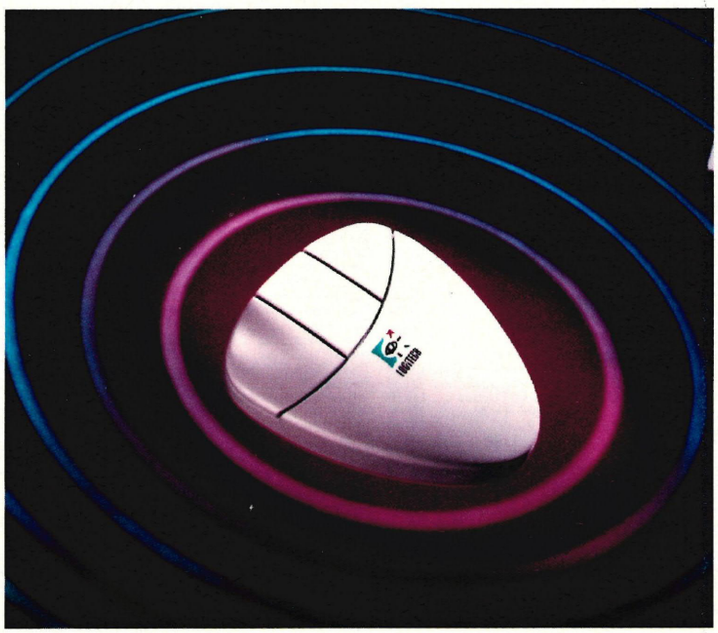
For what it's worth, I've been using both a Logitech Mouseman (standard opto-mechanical device) and Mouse Systems PC Mouse III (optical) on a long-term basis. The Mouse Systems device just shades it as my favourite mouse to use, although, after three years, the silver grid is beginning to look scratched. The Mouseman has performed reliably for the last two years. This device is specially shaped and designed to be comfortable to use for long periods of time, and I can confirm that this ergonomic touch is more than just a gimmick.

However, it makes precious little difference for most applications whether the mouse has two or three buttons. Generally speaking, clicking the left hand button acts as a selector — like hitting Enter — and the right hand button as a 'canceller' — like pressing Esc. There are few, if any, programs which make specific use of the middle button on a three button mouse.

Connecting the mouse to the PC

Aside from the mechanism for translating desktop movement to screen, mice differ in the ways in which they connect to the PC. These days, the two most common are mice which plug into your serial port, and mice which plug directly into a dedicated socket on the back of your PC (called PS/2-type mice, because this port was introduced in IBM's PS/2 series of machines). Bus mice, which come with their own expansion card to be fitted into a spare expansion slot, are pretty thin on the ground these days.

All PCs have at least one serial port, which makes buying a serial mouse the easy option. If you don't have a 6-pin PS/2-type socket on your PC, don't buy a mouse with a PS/2-type connector. You won't have anywhere to put it.



When you buy a mouse, you'll also get a mouse driver — this is software on disk which tells DOS that you have a mouse connected, and how to control the mouse, and this software needs to be installed on your PC for the mouse to work. This is not an arduous process: having connected the mouse, put the disk into drive A: (or B:), log on to it, and type the installation command, which will usually be 'install', and sometimes 'mouse'. There should be fairly straightforward instructions with the disk. The installation program will copy your mouse driver files into their own directory and usually offer to add a line to your Config.sys or Autoexec.bat files so that the mouse driver is automatically loaded whenever you turn the PC on.



Other files may well be included, too: such as a program which enables you to alter the correlation between the extent you move the mouse and the speed of the cursor on-screen, or simple mouse-driven games, like PC Patience to test your mouse's reflexes, or even paint or drawing packages like PC Paintbrush.

Note that you can't mix and match mouse drivers to your heart's content; most are specific to the mouse they were packaged with.

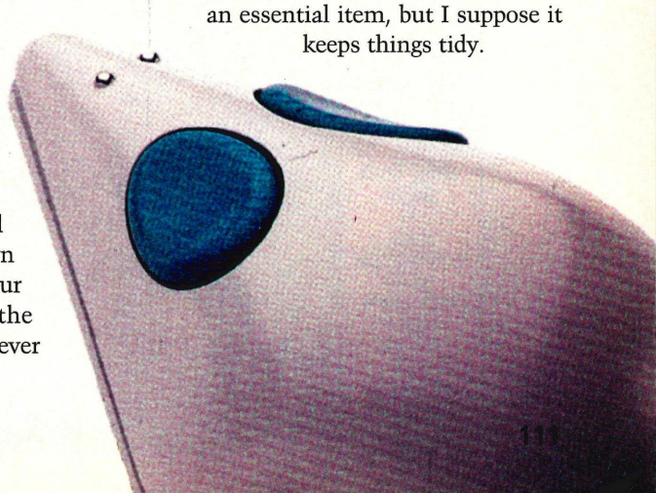
If you buy a serial mouse, there are two further potential complications. If the mouse has a 9-pin plug, but your serial port is a 25-pin socket (or vice versa), make sure the box also includes a 9-pin to 25-pin converter (or 25-pin to 9-pin). It probably will have the adapter in there already, but do check so that you don't have to make a second trip back to the shop.

Secondly, many PCs have two serial ports and it's not always obvious which one is Com1, and which is Com2. If you plug the mouse into the nearest port, run the installation program and find that nothing happens, do try the other serial port before assuming you've bought a dud!

Mouse accessories

A mouse mat provides a smooth even surface for an opto-mechanical mouse. Optical mice, remember, will only work with their own special mat.

A mouse house is often supplied as part of the mouse package. This is a little box which attaches to the side of your PC or monitor. Hardly an essential item, but I suppose it keeps things tidy.



Eagle PC



10% DISCOUNT WITH ORDERS OVER £75 #

TELEPHONE
081 361 6730
OR
081 889 9172
24 HOUR FAX LINE
081 361 2733

118a Palmers Road
New Southgate
LONDON N11 1SL

CD-ROM

Air Warrior	£23.99
Beauty and the Beast	£37.99
Carmen World Deluxe	£32.99
Case of the Cautious Condor	£37.99
Cheesmaster 3000	£32.99
Daggers of Amon Ra *	£32.99
EcoQuest	£32.99
Guy Spy	£24.99
Inca	£39.99
Loom	£32.99
Magnetic Scrolls Collection	£24.99
Mavis Beacon	£29.99
Pacific Islands	£24.99
Realms	£24.99
S.Holmes Consulting Detective1/2/3	£44.99
Secret of Monkey Island	£35.99
Secret Weapons Luftwaffe	£39.99
Spirits of Excalibur	£21.99
Supremacy	£24.99
Town with No Name	£23.99
Ultima Series 1-6	£35.99
W.Commander + Sec.Missions 1 & 2	£35.99
Wing Com Deluxe + Speech Pack	£39.99
W.Com./Ultima VI Deluxe Pack ..	£19.99
Wing Com 2/Ultima Underworld	£39.99
Zork Trilogy	£20.99

3.5 HD DD discs

with Labels (1.4 Mb) boxed in 10's

10 x 3.5	DS	HD	£7.99
20 x 3.5	DS	HD	£14.50
30 x 3.5	DS	HD	£20.99
50 x 3.5	DS	HD	£36.99
100 x 3.5	DS	HD	£67.99

Also available: DS DD disks please phone.
Postage varies, please phone for details.

CLUE BOOKS

Ultima VII	£8.99
Ultima Underworld	£8.99
Wing Commander 1+2 Strategy	£17.50

AWARD WINNERS only £21.99
Space Ace, Kick Off II, PipsMania, Populous

DREAM TEAM only £21.99
WWF, Terminator II, Simpsons

SPORTS MASTERS only £23.99
PGA Tour Golf, Indy 500, Advantage Tennis, European Championship 92

STRATEGY MASTERS only £23.99
Populous, Spirit of Excalibur, Merchant Colony, Cohort, Chessplayer 2150

SOCCER STARS only £16.99
Kick Off II, Microprose Soccer, World Championship Soccer

NAPOLEONICS * only £27.99
Waterloo, Borodino and Austerlitz

COMBAT CLASSICS
only £24.99
F15 Strike Eagle II, 688 Atack Sub, Team Yankee

POWER PACK II
only £15.99
It Came From The Desert, Battlemaster, TV Sports Basketball, Back to the Future III

BITMAP BROTHERS VOLUME II *
only £18.99
Gods, Magic Pockets, Xenon II

AIR, LAND, SEA only £21.99
688 Attack Sub, Indy 500, Soviet Attack Fighter SVI-25

BOARD GENIUS only £19.99
Cluedo, Risk, Monopoly, Scrabble

BITMAP BROTHERS VOL 1 only £21.99
Xenon, Cadaver, Speedball II

THE GREATEST only £27.99
Lure of the Temptress, Dune and Shuttle

DIZZY COLLECTION only £23.99
Fantasy World Dizzy, Magicland Dizzy, Kwik Snax, Dizzy: Prince of the Yolk Folk, Food Fast

10 INTELLIGENT STRATEGY GAMES only £23.99
Chess, Draughts, Go, Backgammon, Othello, Connect 4, Bridge, Gomuko, Renju, Chinese Chess

SPECIAL OFFERS 3.5"

Arachnohobia	£9.99
Blue Max	£13.99
Blues Brothers	£15.99
Captive	£14.99
Cisco Heat	£10.99
Command HQ	£15.99
Elvira Mistress Dark	£16.99
Floor 13	£15.99
Harpoon (original)	£12.99
Home Alone	£15.99
Mavis Beacon Typing	£13.99
Mind Games: Waterloo, Fina Fronteir & Conflict in Europe	£15.99
Moonstone	£15.99
Paperboy II	£16.99
Realms	£15.99
The Godfather	£10.99
Time Quest	£15.99
Turtles II	£15.99
Ultima VII D.Disc	£9.99
Wing Com Deluxe	£27.99

SPECIAL OFFERS 5.25"

Bloodwych	£7.99
Back to the Future III	£7.99
Cisco Heat	£12.99
Champions of Krynn	£10.99
TV Sports Football	£6.99

EAGLEBUSTER
only £15.99
Cisco Heat, Bloodwych, and Back to the Future III

5.25" prices on application only

TOP TITLES 3.5"

3D Chalt: Starfighter Ace *	£24.99
3D Construction Kit 2.0	£37.99
4D Sports Boxing	£13.99
4D Sports Driving	£13.99
A-Train	£27.99
A-Train Con Kit *	£23.99
Aces of the Pacific	£27.99
Aces of the Pacific : WW2	£17.99
Alcatraz	£21.99
Alone In the Dark	£23.99
Amazon	£32.99
Another World	£21.99
Armada	£21.99
Ancient Art of War in Skies	£32.99
Ashes of Empire	£34.99
A.T.A.C.	£33.99
A.T.P.	£27.99
B17 Flying Fortress	£33.99
BAT II	£27.99
Battle Chess II	£20.99
Battle Chess Windows	£23.99
Battle Chess 4000 (SVGA)	£23.99
Battle Isle	£23.99
Betrayal at Krondon *	£32.99
Birds of Prey	£26.99
Blue Force *	£27.99
Borodino	£21.99
Caesar	£23.99
Campaign	£27.99
Captive II	£24.99
Car and Driver	£27.99
Carriers at War	£24.99
Carrier Strike	£26.99
Castle of Dr Brain	£24.99
Castles	£23.99
Castles II	£23.99
Championship Manager	£20.99
Chessmaster 3000 Win/Dos	£23.99
Chuck Yeager's Air Combat	£23.99
Civilization	£27.99
Complete Chess System	£23.99
Cool Worlds	£21.99
Commanche	£32.99
Conflict Europe/Austerlitz	£9.99
Cover Girl Poker	£20.99
Creepers	£27.99
Crusaders of Dark Savant	£34.99
Curse of Enchantia	£23.99
Dark Half	£24.99
Darklands	£33.99
D.Leadbetters Golf	£33.99
Daemons' Gate	£26.99
Daggers of Amon Ra	£32.99
Das Boot	£14.99
Daughter of Serpents	£27.99
D/Generation	£14.99
Disney Animation Studio	£74.99
Dogfight	£32.99
Dragons Lair II	£26.99
Dragons Lair III	£27.99
Dragon Wars	£20.99
Dreadnoughts	£23.99
Dune	£23.99
Dune II *	£23.99
Dungeon Master	£23.99
Dynablaster	£23.99
Eco Quest	£27.99
Eco Quest II (Rainforest	£23.99
Elite +	£27.99
Elf	£21.99
Empire Deluxe	£32.99
Eric the Unready *	£23.99
Eternum	£23.99
Elvira II Jaws of Cereberus	£26.99
Elvira the Arcade	£16.99
Epic	£23.99
Eric the Unready	£23.99
Eye of the Beholder	£20.99
Eye of the Beholder II	£24.99
F15 Desert Storm Scenario	£12.99
F15 Strike Eagle III	£32.99
F117A Stealth Fighter 2.0	£27.99
F19 Stealth Fighter	£27.99
Falcon	£11.99
Falcon 3.0	£33.99
Falcon 3.0 Mission Disk I/2	£17.99
Fantastic Worlds	£27.99
Fate of Atlantis	£26.99
Fields of Glory *	£33.99
Fire and Ice *	£21.99
First Samurai	£21.99
Flight of the Intruder	£15.99
Flight for Victory	£26.99
Flight Sim IV	£39.99
Northern England Scenery	£18.99
Free DC	£24.99
Front Page Sports Football *	£27.99
Gateway II *	£27.99
Gobliiins VGA	£23.99
Goblins II	£23.99
Gods	£23.99
Golden Eagle	£23.99
Golf Companion	£23.99
Go Simulator	£16.99
Grand Prix (Microprose)	£32.99
Grand Prix Unlimited	£24.99
Grandslam Bridge II	£27.99
Great Naval Battles	£27.99
Great Naval Battles D.D.	£14.99
Gunship 2000	£27.99
Gunship 2000 Sen disk	£17.99
Harpoon with Battleset II	£27.99
Harpoon Battleset III	£11.99
Harpoon Battleset IV	£11.99
Harrier Assault AV8I3	£27.99
Harrier Jump Jet	£32.99
Heimdall	£23.99
Hero's Quest	£20.99
Heroes of the 357th	£23.99
Historyline 1914-18	£27.99
Home Alone II	£21.99
Hong Kong Mahjong	£20.99
Hook	£23.99
Horse Racing Game (Kris) *	£23.99
Hoyles book of Card Games	£27.99
Humans	£21.99
I.Botham Cricket	£21.99
Immortals	£20.99
Inca	£31.99
Int. Rugby Challenge	£21.99
Island of Dr Brain	£24.99
Jetfighter II Deluxe	£37.99
Jordan in Flight	£27.99
J Nicklaus Signature ed(HD)	£27.99
KGB	£24.99
Kings Quest V VGA/EGA	£27.99
Kings Quest VI	£33.99
Laser Squad	£24.99
Leath.Goddess of Phobos II	£39.99
L'Emperor Napoleon	£27.99
Legend	£21.99
Legends of Kyrandia	£23.99
Legends of Valour	£27.99
Leisuresuit Larry V V/EGA	£27.99
Lemmings	£22.99
Lemmings - Data Disc	£15.99
Lemmings - Stand Alone	£20.99
Lemmings II	£27.99
LHX Attack Chopper	£26.99
Life & Death	£14.99
Life & Death II	£20.99
Links	£31.99
Links extra courses each	£17.99
Links Pro	£32.99
Links Pro Manua Kea	£17.99
Liverpool Football	£20.99
Lord of the Rings	£23.99
Lord of the Rings II	£23.99
Lost Files of S.Homes	£29.99
Lost Patrol	£18.99
M1 Tank Platoon	£27.99
M. Ditka Ultimate Football	£23.99
Magic Pockets	£22.99
Man Utd Europe	£17.99
Martian Memo (VGA only)	£23.99
Mavis Beacon Typing II Dos	£23.99
Mavis Beacon Typing II Win	£23.99
Maxi Maths (9-14)	£16.99
Mega Fortress	£15.99
Mega Sports	£21.99
Megatraveller I	£23.99
Megatraveller II	£23.99
Mercenaries	£27.99
Microsoft Golf for Windows	£39.99
Might and Magic III	£27.99
Might and Magic IV	£32.99
Millenium	£24.99
Mixed Up Mother Goose	£23.99
Monkey Island	£20.99
Monkey Island II	£23.99
Mouse Serial PS2	£15.99
MS DOS 6 UPGRADE	£54.99
N.Mansell World Champ	£23.99
NCAA Basketball	£23.99
NFL Football	£27.99
Omar Sharrif's Bridge Dos/W	£26.99
Origin Screen Saver	£18.99
Pacific Island (T.Yankee II)	£23.99
Pacific Islands Mission Disk *	£14.99
Pacific Islands II *	£24.99
Patriot *	£32.99
Patton Strikes Back	£26.99
Perfect General	£27.99
PGA Golf Tour +	£23.99
PGA Golf Tournament Disc	£12.99
PGA Windows	£27.99
PGA Windows Courses	£13.99
Police Quest III VGA	£26.99
Populous II	£27.99
Populous/Sim City	£24.99
Powermonger	£24.99
Premiere Manager *	£21.99
Privateer *	£27.99
Prophecy	£21.99
Putt Putt Fun Pack	£21.99
Quarky & Quaysoo's Science	£24.99
Quest for Glory III	£32.99
Railroad Tycoon	£24.99
Rampart	£21.99
Reach for the Skies *	£23.99
Red Baron EGA/VGA	£27.99
Red Baron Mission Builder	£17.99
Rex Nebular	£32.99
Ring World *	£27.99
Risky Woods	£20.99
Robocop III	£21.99
Robosport	£27.99
Rolo to the Rescue *	£27.99
Rome	£23.99
Rules of Engagement	£23.99
Sabre Team *	£24.99
Sands of Fire	£20.99
Sargon V	£18.99
Scrabble	£21.99
Secret Weapon Luftwaffe	£27.99
Secret Weapons DD each	£14.99
Sensible Soccer	£21.99
Shadow of the Comet *	£27.99
Shadow President	£27.99
Shadoworlds	£23.99
Siege	£21.99
Silent Service II	£24.99
Sim Ant Dos/Win	£23.99
Sim City (Windows)	£33.99
Sim City Deluxe	£23.99
Sim Earth Dos/Win	£27.99
Sim Life	£27.99
Sleeping Gods Lie	£11.99
Sleepwalker	£23.99
Sorcerors Appliance	£27.99
Sorcerers get all the Girls	£21.99
Space Crusade	£20.99
Space Quest IV	£26.99
Space Quest V	£28.99
Spaceward Ho!	£32.99
Space Wrecked	£20.99
Spear of Destiny	£27.99
Special Forces	£27.99
Spellcasting 301	£23.99
Spelljammer	£23.99
Star Control II	£27.99
Star Legions	£23.99
Star Trek 25th Anniversary	£24.99
Streetfighter II *	£21.99
Strike Commander	£37.99
Strike Commander SAP	£14.99
Stunt Island	£37.99
Super Tetris	£24.99
Taskforce 1942	£32.99
Team Suzuki	£20.99
Team Yankee	£20.99
Tennis Cup II	£21.99
Tetris	£18.99
The Incredible Machine	£28.99
The Legacy *	£32.99
The Manager	£27.99
The Summoning	£23.99
Their Finest Hour	£21.99
Thunderhawk AH-73M	£23.99
Time Treks	£32.99
Titus The Fox	£16.99
Tornado *	£32.99
Toyota Celica GT4 Rally	£20.99
Transartica *	£27.99
Treasures Savage Frontier	£20.99
Tree House	£24.99
Trivial Pursuit	£21.99
Trolls	£17.99
TV Sports Baseball	£14.99
TV Sports Boxing	£14.99
Twilight 2000	£23.99
Ultima Trilogy I or II	£27.99
Ultima Underworld	£26.99
Ultima Underworld II	£27.99
Ultima V	£32.99
Ultima VI	£14.99
Ultima VII(HD)	£27.99
Ultima VII: Forge of Virtue	£9.99
Ultima VII :Serpent Isle	£32.99
Utopia	£20.99
Valhalla	£23.99
V for Victory	£23.99
V for Victory II Velikye Luki	£23.99
V for Victory III *	£32.99
Veil of Darkness	£24.99
Vikings	£23.99
Visions	£34.99
Wacky Funsters *	£15.99
Warlords *	£27.99
Waxworks	£23.99
Ween	£23.99
Willy Beamish VGA	£26.99
Wing Commander II	£26.99
Wing Com. Speech Pack	£13.99
Wizardry VI	£27.99
Wizardry VII	£34.99
Wizkid	£21.99
World Tennis Championship	£28.99
W.W.F. 2	£21.99
Xenobots	£27.99
X-Wing	£32.99
Zool	£24.99

BUDGET UNDER £10

4th'n'Inches	£8.99
688 Attack Sub *	£8.99
ADS	£8.99
Arcade 1	£4.99
Arcade 2	£4.99
Arcade Bonanza	£4.99
Archipelagos	£4.99
Backgammon	£4.99
Ballistix	£7.99
Bards Tale III	£8.99
Basket Master	£8.99
Battle Chess	£8.99
Battlehawks 1942	£8.99
Blackjack	£4.99
Blood Money	£7.99
Bloodwych	£7.99
Budokan *	£8.99
Carrier Command	£7.99
Centrefold Squares	£7.99
Centurion	£8.99
Chuck Yeagers 2.0	£8.99
Club Casino	£4.99
Colossus Bridge 4	£8.99
Colossus Chess	£8.99
Cycles *	£8.99
D.Double Horse Rac.	£7.99
Def of the Crown	£7.99
Deluxe Strip Poker	£7.99
Double Dragon II	£7.99
Fantasy Pack	£4.99
FM2 Gift Pack	£9.99
F.O.F.T.	£7.99
Football Manager	£4.99
Football Master	£8.99
Future Wars	£9.99
GFL Baseball	£4.99
GFL Football	£4.99
GFL Golf	£4.99
Golden Axe	£8.99
Hammer Boy	£8.99
Hitch Hikers Guide	£7.99
Hotshot	£4.99
I.Jones Last Crusade Adv	£9.99
International Karate	£4.99
Leather Goddess of Phobos	£7.99
Man United	£9.99
Masterblaster	£4.99
Maya	£8.99
Maze Adventuree	£4.99
Mega Phoenix	£8.99
Midwinter	£9.99
Mig 29	£8.99
Murder	£8.99
Never Mind	£7.99
North and South	£6.99
Onslaught	£7.99
Panza Kick Boxing	£7.99
Passing Shot	£7.99
Pictionary	£8.99
Pitfighter	£8.99
Populus + Promised Lands	£10.99
Predator II	£7.99
Pro League B. Ball	£4.99
Promised Lands	£5.99
Pro Tennis Simulator	£8.99
Puzznic	£9.99
Rack 'Em	£8.99
RBI2 Baseball	£8.99
Rick Dangerous I	£7.99
Rick Dangerous II *	£7.99
Sinbad/Def of the Crown	£9.99
Ski or Die	£8.99
Space Games	£4.99
Sports Spectacular	£4.99
Star Glider II	£7.99
Starmovik	£8.99
Strikefleet	£9.99
Strike Force	£4.99
Stunt Car Racer	£6.99
Stunt Driver	£11.99
Supaplex	£8.99
Terminator II	£8.99
The Duel *	£9.99
The Kristal	£9.99
The Immortal *	£10.99
The Munsters	£8.99
The Simpsons	£8.99
The Sun Crossword	£8.99
The Times Crossword	£8.99
Toobin	£8.99
Trivial Pursuit Genus Edition	£9.99
TV Spt Football/Rocket Ran	£9.99
Ultimate Golf	£9.99
W.C.Leaderboard Series	£9.99
Wind Surf Willy	£8.99
W.W.F. *	£8.99
Z.Mackracken	£9.99
Zork I, II or III	£7.99

EDUCATIONAL

ADI English (11/12,12/13)	£16.99
ADI English (13/14, 14/15)	£16.99
ADI French (11/12, 12/13)	£16.99
ADI French (11/12,12/13)	£16.99
ADI Junior Counting (4-5)	£16.99
ADI Maths (13/14, 14/15)	£16.99
ADI Maths (11/12, 12/13)	£16.99
Algebra (EA)	£39.99
Better Maths (12-16)	£16.99
Better Spelling (9-14)	£16.99
Biology (12-16)	£16.99
Chemistry (12-16)	£16.99
Count and Add (3-6)	£23.99
First Class (Shoe People)	£8.99
Fun School 2 (under 6)	£7.99
Fun School 2 (6-8)	£7.99
Fun School 2 (over 8)	£7.99
Fun School 3 (under 5)	£16.99
Fun School 3 (5 - 7)	£16.99
Fun School 3 (7+)	£16.99
Fun School 4 (under 5)	£16.99
Fun School 4 (5 - 7)	£16.99
Fun School 4 (7+)	£16.99
Henrietta's Book Spells	£23.99
Hooray for Henrietta (5-14)	£23.99
Junior Artist (5-10)	£12.99
Junior Typist (5-10)	£12.99
Kid Pix Dos/Win	£23.99
Kid Pix Companion	£16.99
Magic Maths	£16.99
Mario is Missing	£25.99
Mario Teaches Typing	£21.99
Maths Adventure	£18.99
Maths Mania (4-8)	£16.99
Maxi-Maths (9-14)	£16.99
Merlins Maths	£20.99
Mickey's 123	£16.99
Mickey's ABC	£16.99
Mickey's Colors & Shapes	£16.99
Mickey's Crossword	£16.99
Mickeys Jigsaw Puzzles	£16.99
Mickey's Memory Challenge	£16.99
Noddys Playtime	£21.99
Paint and Create	£20.99
Physics (12-16)	£16.99
Physics/Electronics (12-16)	£16.99
Playroom	£18.99
Playschool (3-8)	£16.99
R. Rabbit +Sound Source	£34.99
Spellbound (7-Adult)	£23.99
Spelling Fair	£20.99
The Three Bears	£16.99

VISIT OUR SHOP
AT
120a
MYDDLETON ROAD
WOOD GREEN
LONDON
N22 4NQ.
081
889 9172
SHOP PRICES MAY VARY.

Please make cheques and P.O.'s payable to *Eagle PC*. P&P is £1.00 per item in the UK. Orders under £10 please add 50p per item. Europe: add £3.50 per item. Elsewhere add £5.50 per item. New titles will be sent as released and are subject to manufacturers price reviews. E.&O.E. # SPECIAL OFFER APPLIES ONLY IF REQUESTED AT TIME OF ORDERING. IT DOES NOT APPLY TO DISCS.

Disk Size _____ Date _____

Title _____ Price _____

_____ Price _____

_____ Price _____

_____ Price _____

P40 *Not released at time of going to press

VISA Access

P & P _____

Total _____

Name: _____

Address: _____

_____

_____

Postcode: _____ Tel: _____

Card No: _____

Exp Date _____ Member No: _____

Access ☐ Visa ☐ Cheque ☐ P.O's ☐

Free Membership

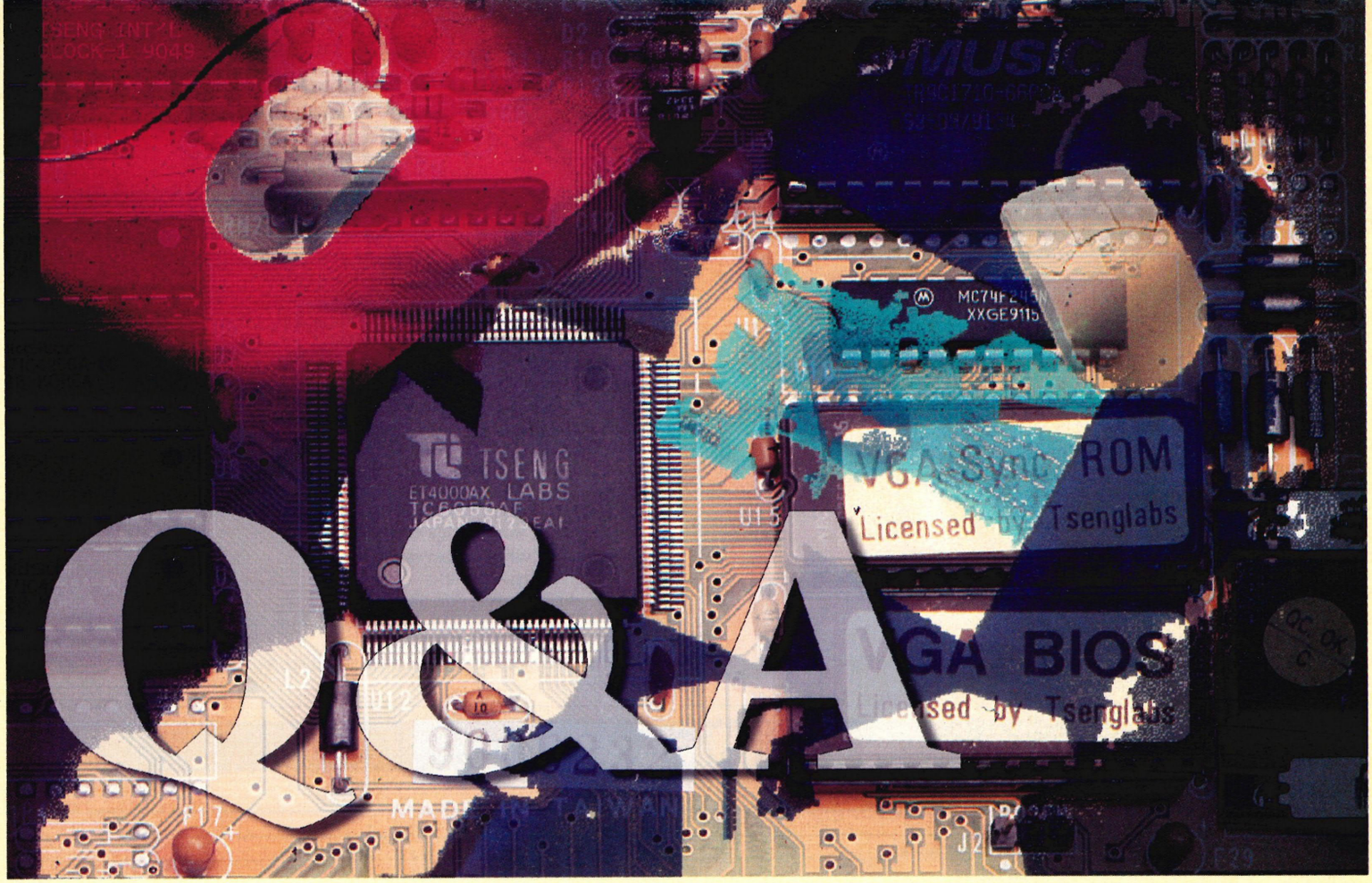
Buyers' guide

Contact

Aashima Distribution UK Limited, Waterside Business Park, Eastways, Witham, Essex CM8 3YQ
Tel (0376) 502050; Fax (0376) 518780
Computermates, The Wheel, Robin Way, Cuffley, Hertfordshire EN6 4QB
Tel (0707) 875757; Fax (0707) 875513
Computers by Post, 46 Central Road, Worcester Park, Surrey KT4 8HY
Tel (081) 760 0014; Fax (081) 760 9861
Concita, Unit 12 Stirling Industrial Centre, Stirling Way, Borehamwood, Herts WD6 2BT
Tel (081) 905 1707 Fax; (081) 207 5822
DataGEM Ltd, 23 Pitfield Street, London N1 6HB
Tel (071) 608 0624; Fax (071) 608 0688
Diamond, Head Office 84 Lodge Road, Southampton
Tel (0703) 232777; Fax (0703) 232 679.
Other branches nationwide.
ESL, Head Office, 334 Queenstown Road, Battersea, London SW8 4NE
Tel (071) 498 7816; Fax (071) 498 3218
Northern Office St Mary's Training & Enterprise Centre,
Newcastle upon Tyne NE4 5QS
Tel 091 233 0770; Fax 091 221 1011
Evesham Micros, Unit 9 St Richards Road, Evesham, Worcs WR11 6TD
Tel (0386) 765500; Fax (0386) 765354
Mail Order Express Distribution, P.O Box 95, Woodford Green, Essex IG8 0PH
Tel (081) 559 1704 or (081) 504 8377
Novatech, Blueprint 1400 Dundas Spur, Portsmouth PO3 5RW
Tel (0705) 664144; Fax (0705) 664244
Optimum Technology Ltd, (FREEPOST), Sunny Gardens Parade, Great orth Way, London NW4 4YP
Tel (081) 203 0220; Fax (081) 203 7004
Powermark Plc, Premier House, 112 Station Road, Edgware, Middlesex HA8 7AQ
Tel (081) 951 3355; Fax (081) 905 6233
Prime Component Distribution, Unit 27 Riversway, Leeward Road, Preston PR2 2YL
Tel (0772) 76881 or (081) 317 3096; Fax (0772) 732079
RSC Corporate, 75-77 Queens Road, Watford, Herts WD1 2QN
Tel (0923) 243301/211060; Fax (0923) 237946
RTM Systems Ltd, Business & Technology Centre,
Green Lane, Manchester M30 0RJ
Tel (061) 787 3022; Fax (061) 787 3021
Technomatic Limited, Techno House, 468 Church Lane, London NW9 8UF
Tel (081) 205 9558; Fax (081) 205 0190
UK Home Computers, Unit 22, Cheney Manor Ind Est, Swindon, SN2 2PJ
Tel (0793) 695034

Mice

Manufacturer	Product	Price
DPI		
	400dpi serial mouse, mat and house.	£19 (RTM)
Genius — all with full Microsoft compatibility		
	HiMouse Serial Advanced Mouse, ergonomically designed, with Zoft's PC Paintbrush IV, Genius driver, mat and 9/25-pin adapter.	Serial £25. Serial/PS2 £27 (Technomatic)
	HiPoint Mouse, portable trackball for desktop, notebook or laptop. clips to keyboard. Includes three keyboard clamps, leather carrying case, 9/25 pin and PS/2 adapters. 3.5/5.25 disks and driver software.	£45 (Technomatic)
	HiMouse Lite. Advanced optical mouse with Mouse Systems engine, for accuracy sensitive applications. With ZSoft Paintbrush IV, PS/2 adapter and mat.	£45 (Technomatic)
	GM-F303, 2/3 button, 350-1050 Dpi, PS/2 9/25 pin adapter, With CasCAD software.	£21 (Technomatic)
	GMF302 As F303 but without CasCAD 1 and PS/2.	£18 (Technomatic)
	MouseOne, serial or PS/2 low cost two button.	£15 (Technomatic)
	HiTrak Tracker Ball, PS/2 adapter, 9/25 adapter, ZSoft Paintbrush IV.	£29
	GM-D220P, mouse for PS/2s and notebooks, plus driver on 3.5" disk.	£15 (Technomatic)
	Handy Mouse — one-handed cursor control, "Ball Button" suitable right or left handed users. Resolution 80-500dpi. Microsoft serial compatible. Driver software supplied.	£34.03 (Evesham)
	Kidz Mouse — two-button (on the ears), mouse-shaped mouse for ages three and up. Serial 9/25 pin adapters. IBM PC, XT/AT, PS/1, PS/2, Amiga, Atari ST and Schneider versions. Supplied with driver plus Dinosaur Discovery Kit educational software.	£42.30
	Miki Mouse — 9/25 pin with disks and manuals.	£13.99 (Mail Order Express Distrib)
Logitech		
	Mouseman Cordless Radio Mouse, 1.8m range, auto sleep mode saves battery life, left or right handed,	£49 (Power Mark)
	Pilot Mouse for first time user. Three-button version fully Microsoft compatible. Two-button version fully IBM compatible. 9/25 pin adaptor, or Mouseport version, 400 dpi, adjustable resolution.	
	Trackman portable, three-button functionality for laptops and notebooks. Left or right handed use. 9/6 pin and 9/25 pin adaptor. 100% Microsoft compatible. Clips on side of keyboard. 5ft cable extension included.	£49 (Power Mark)
	Trackman II, high resolution, thumb operated trackball. 9/25 pin adapter and Mouseport connector included.	£55 (Power Mark)
Naksha		
	Pro Mouse, three-button, serial, 420dpi, ScrapBook for Windows, visual storage system for graphics and text. Mouse mat, mouse holder.	£35 (RSC)
	Three-button mouse with driver (3.5 or 5.25), 250-2500dpi resolution, 9-pin RS232/serial connector.	£9 (RSC)
	PS/2 Pro Mouse, two-button, serial 420dpi, for XT/AT and compatibles, mouse mat, mouse holder and ScrapBook for Windows.	£35 (RSC)
	Bus Pro Mouse, three-button, interface card 420dpi, for XT/AT compatibles, Mouse Mat, Mouse Holder & ScrapBook for Windows.	£35 (RSC)
	Teqniche Black Track, three-button trackball, 200dpi resolution, serial PC connection, Dr Halo III Software.	£16.50 (RSC)
	Teqniche Black Mouse, three-button, 290dpi, Dr Halo III and Mouse Mat.	£12.50 (RSC)
Philips		
	Two-button Pen Mouse ideal for notebook use. 2 metre cable, PS/2 plug, carry case.	£10 (Aashima)
Zydec Truemouse		
	3-button serial (9-pin and 25-pin), PS/2 and two-button Amstrad PC compatible versions.	£22.99 (Evesham



Q&A

Bemused, befuddled, or bewildered about your PC? If your hardware gives you headaches and you're stricken with software seize-ups, share your problem with Q&A's Mike James and he'll endeavour to help

Making a speech

Q I am looking for text-to-speech software for my sound card. It is a Covox Soundmaster Plus which is Ad Lib and Speech Thing compatible (also made by Covox). I wrote to Covox and inquired about text-to-speech software they made, but the response was that could only be sold with the Speech Thing and not separately. They did mention some software made by another company, called Monologue but did not give any details. So could you tell me more?

R Reason
Caversham
Reading

A *It has taken me a long time to answer your question, but I couldn't get hold of a copy of Monologue until recently. It seems to be a very general text to speech program and the surprising part is that it doesn't need any additional hardware to work! It will make use of your PC's tiny speaker if that's all you have.*

On the other hand if you have a Speech Thing, Sound Blaster, PS/1 audio card, Echo or Hearsay cards then Monologue will make use of them to improve the quality of the output.

You can get Monologue from Iansyst Ltd (071 607 5844), price £89 plus VAT, and it is available in both DOS and Windows versions.

Keep your joysticks in balance!

Q Having read Martin Beenham's letter (Q & A, Issue 18, March) I realised it was exactly the same problem that I have had with a Quickshot Intruder 5. Not only did Wing Commander II disable it, but MicroProse games went haywire too. There *is* a solution. The remedy is (as I found through much experimenting) to solder 100K or more of resistance on to the troublesome sliders. For reference, pin two on the Intruder and other Quickshots is the slider.

I soldered 120K on to the right side of the x slider and pin two thus increasing the resistance to the right. The problem being that the difference between the centre and left and the centre and right was not the same. In fact, before my modifications of the joystick, the difference on the right was about 200K less than the left.

Anyway, it now works wonderfully despite MicroProse's claims that it is "not compatible". I hope this is useful.

Matt Knight
Amersham

A *Many thanks for the advice and I can only hope that readers don't burn their fingers soldering! If you feel up to it, you can get the resistors that you need from your local Tandy shop. I have to admit to being a little puzzled by the need to do this hot metal balancing act at all. Good joysticks have a trim control for each axis that is there to allow you to set the centre resistance so that it is more or less balanced. Even if the balance isn't perfect, the calibration routine built into most games is designed to take account of this. If the stick is so out of balance then the calibration routine can't cope and so the joystick is disabled or it gives a jerky and erratic response. Looking at the specification of the Intruder 5 it doesn't mention trim controls but it does say 'automatic control stick centring' – presumably this refers to a spring that returns the stick to the upright position!*

Where does the time go?

Q My query is related to the accuracy of my machine's (a 40MHz 386) system clock. Either from the DOS command line or from within applications the system clock reports a loss in time from when I last set it. For

example, I set the time on Monday as correct against my quartz watch, on Friday I open an application which displays date and time to see the time as having lost five minutes (or thereabout).

My last 286 and several of my friends' computers keep good time. When I approached the company that sold me the components the response was, "All computers lose time on their system clock, and it is not unusual for a loss of five minutes over a week – I guarantee that even if I give you a replacement motherboard you will find the same thing occurs". I queried whether it could possibly be the CMOS battery and he denied this possibility because the computer does boot up. Is his statement correct? If so, then my friends and I are lucky to have such accurate clocks on our other computers.

T Kendrick
London

A I can confirm that 386 and 486 machines don't always have accurate system clocks. My own 486 gains about one minute a month. You certainly don't have a problem with the CMOS battery and I am fairly sure is that there is nothing wrong with the motherboard either.

The original 286 AT design used a special Real Time Clock (RTC) chip (usually an MC146818A) with its own crystal controlled oscillator which was very accurate. Modern 386/486 designs don't use a separate RTC chip because its function is included in the large 'glue' chips that they use – such as the 82C206. Until this question it has never occurred to me to ask where they derive their timing pulses from. As far as I can tell they don't make use of a special timing crystal but work from the many system clock pulse that are available. So in conclusion – 386/486 are very variable in their accuracy and there doesn't seem to be anything that can be done about it. Of course if anyone knows anything more I would be glad to hear about it.

Secret agent

Q I received a pile of shareware disks for Christmas and am having problems with two of the games. The first is Secret Agent from Apogee: this game refuses to run with the message "requires EGA or VGA adapter". I have a 256K EGA card and none of my other games give me this message. Is there any way of forcing it to run? I am prepared to mess around with the code using a hexadecimal viewer if necessary.

The second is a game called Electro Body. This runs fine, but had no documentation on disk. Do you know the keys for this game?

Ian Parkinson
Guildford

A The Secret Agent problem is easy to solve. The first version of the program had a bug which stopped it from running with some older non 100% compatible EGA cards. The only solution is to get hold of an upgrade from the shareware company that supplied the original disks.

As to Electro Body, I can't be as helpful. Does any reader know anything about this game?

How to outsmart Smartdrv

Q I have a 486SX 25MHz, with 4Mb of RAM. To make use of this memory I use a 2Mb SmartDrive Cache; leaving just 750K free. I have tried all sizes of disk cache, but cannot work out what the optimum is. For example, Links Pro 386 runs fastest with no Smartdrv at all. Are games which claim they will use all available extended or expanded memory better off having access to all of the memory or should Smartdrv have some?

This leads on to the question that with games that don't use extended or expanded memory. Can Smartdrv be used to get the whole program into RAM after a few passes and using all the features in the game. It would be useful if software would include in its documentation the optimum disk cache size or alternatively perhaps you could in your reviews.

I have Windows 3.1 on my machine, but don't use it much as I find most games run from DOS and any that run from both seem to have memory problems under Windows. Currently the Smartdrv in my DOS set-up is loaded from my Autoexec.bat as Smartdrv.exe. Is this suitable for using in a general DOS environment as I read in the documentation that sys version was for DOS and exe version for Windows.

Could you also tell me whether to make Smartdrv read only or read and write, that is what is the best use of the switches for games, and the optimum buffers and files set-up? I thought they could be set at a minimum but Shadow President needs 45+ on both, or I find it crashes with amazing regularity.

Finally could you provide me with a handy list of alternatives to Smartdrv.sys/exe as I have heard there are a number available which are a lot quicker, eg, Fast, Hyperdisk etc, although I know nothing about them.

Paul McCarthy
Chelmsford

A Phew, what a question! The art and science of using SmartDrive isn't a difficult one, but working out what really is the optimum is a difficult one and the gain is usually not worth the effort.

It used to be the case that when you worked from MS-DOS it was a safe bet that most applications didn't know anything about expanded or extended memory and so it made sense to use nearly all of it for a disk cache. Today this is far less certain as more and more programs are using either extended or expanded memory for their own purposes.

Two things are clear, however. First, if a game can use expanded or extended memory directly, then let it have all it can get and reduce Smartdrv to the minimum. There comes a point where giving any application more memory doesn't give you much return in performance, but this is likely to be more than 2Mb. Second, if a game doesn't use expanded or extended memory then you might as well let Smartdrv have all of it. If there is enough disk cache then it is possible that eventually all of the game will indeed be loaded into memory and so run faster.

As to quoting optimum figures for cache sizes as part of reviews this isn't feasible because the optimum size varies according to the exact machine configuration – the speed of the disk, the speed of the processor, how much memory is installed – there are just too many variables! It might be possible to say if the program would benefit or not from disk cache but that's about all.

The .exe and .sys versions of SmartDrive are nothing to do with Windows/non-Windows. These correspond to two versions of SmartDrive and the .exe version is the more up to date. Get rid of the .sys version – it is no longer useful and might even be dangerous if you load it by mistake.

There are programs that refuse to work with SmartDrive, but they are generally all-or-nothing type problems. That is the only cure is to remove SmartDrive altogether and altering the size of the cache or any other detail of operation usually doesn't make any difference. In general, fiddling with SmartDrive's parameters isn't much fun and, as I have already said, it doesn't make a great deal of difference to performance. The basic decision to have or not have a cache and its total size does make a difference but I would be surprised if you could notice any difference produced by such fine tuning. Stick to the rule that you should use a read/write cache on hard disk and a read only cache on floppies – but this is what happens by default anyway!

Finally, I do know about other disk cache programs, but rather than spend your cash on a different cache, why not invest in a further 4Mb of RAM (around £30)? It would cost less than a new cache and make far more difference. When it comes to games software, in particular, tinkering with the performance of a disk cache isn't really worth the effort.

Esoteric question of the month!

Q I have a problem with 486 assembly language. When I try to execute an instruction such as MOV [OFFFE], WORD, which overlaps the segment boundary, the machine locks up, presumably as a result of an interrupt.

I want to trap this interrupt routine and have succeeded in so doing

on my 286 machine by trapping interrupt number 13 decimal. This doesn't work on my 486 machine however.

Could you please let me know what interrupt I should be looking at for the 486?

Simon Wright

A *The 486 in real mode works exactly like the 286 in real mode and so it does generate interrupt 13 when you roll over a segment boundary. However, the behaviour of the 486 when it is in protected or virtual 8086 mode is a bit different. In this case the interrupt if trapped and passed to the operating system. You may think that your machine is running in real mode but it will be running in virtual 8086 mode if you have any memory manager, ie, EMM386, 386MAX or QEMM, loaded. The solution to your problem is not to exceed the segment boundary by testing for this before doing the move.*

Is the problem QEMM?

Q Could you please help me with the following problems?

On using a Sound Blaster 2 in Red Baron, the music is fine but the engine noise is just audible on full volume, gun fire is silent. The program installation selects Sound Blaster correctly.

On using an SVGA video card which includes Aircraft and Scenery Designer (22.4.92 version) and Sound, Graphics and Aircraft Upgrade v1.5b in Flight Simulator 4: I am using Qemm-386 which has produced 622K of usable memory, and, while I have never had an out of memory message, but the screen locks up during flights or blocks of different colours partially block out the screen.

L T Bailey
Kent

A *The Sound Blaster has two different methods of generating sounds – FM and digital synthesis. These two methods are completely different sections of the hardware and their output is mixed together before it reaches the speaker. My guess is that Red Baron outputs its music on the digital channel and its sound effects on the FM channel – hence the difference.*

There could be a hardware fault on the Sound Blaster card and the simplest way to check this is to run some of the supplied software that uses the FM voices – such as the intelligent organ and the digital channel such as the speech digitiser. There are other possible reasons for the problem than a hardware fault. It could be that Red Baron is having memory conflict problems due to the incorrect use of a memory manager or it could be that there is a port conflict between the Sound Blaster and another adapter card.

You are probably right to mention QEMM in the same breath as the problem with FS4. This is a program that tends to work because it doesn't really make any out of the ordinary demands on the hardware. As long as you select the correct, very general category of hardware when you first use the program, it should work fine. It only uses a very basic VGA graphics mode which almost any graphics card should be able to support without difficulty.

I would be inclined to suspect that QEMM is probably using some area of upper memory that it shouldn't. This isn't a fault with QEMM in particular however– it's the sort of common mistake that all memory managers tend to make. In an effort to get more conventional memory they can make your system unstable by using a bit of memory space that only appears to be free. To check this out, remove QEMM and see if the problem goes away. If it does then try re-enabling QEMM's facilities a little at a time.

Send your queries to Q&A, PC Review, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU, or, if you have access to CIX, the Compulink Information Exchange, you can e-mail us at: pcreview@cix.compulink.co.uk.

Mike James can only reply to your problems on this page, so please don't include SAEs or requests for personal replies.

Q&A update

Clean boot

A lot of the letters that are sent into Q&A concern machines that don't quite seem to work properly. Most users seem to think that this might be due to hardware problems, bugs, or even viruses. In most cases, however, the most likely culprit is a configuration problem. I'm not sure that I would go so far as to say that 99% of all erratic machine behaviour is due to this cause, but it is far more common than all the others put together.

The trouble with a configuration problem is that the exact cause and the behaviour produced cover a very wide range. However, the method of tracking them down is straightforward and the same in every case – reduce everything back to the simplest possible configuration. If you suspect a hardware configuration problem, then remove all of the adapter cards that you can and run a basic machine, ie, disk drive, video, and nothing else. If the problem persists you either have a real hardware fault or a software configuration error. If you suspect a software problem, remove everything that isn't necessary from the operating system by using a 'clean boot' disk. This is a floppy that has been formatted as a system disk and either has no Config.sys and Autoexec.bat files or has very simple ones. To make a clean boot disk, use the command

Format A: /S

and when the format is complete, restart your machine using it. After you have started using the clean boot floppy you can carry on using the hard disk as usual.

If the problem vanishes when you are running a minimum machine configuration then you have a sort of cure, but it is a bit drastic. The next step is to isolate the exact cause so that you can find a real cure. To do this you add the adapter boards or lines in the Config.sys and Autoexec.bat back one at a time and run the system in its partially configured state.

It is very important that you only ever change one factor at a time. This may seem a slow way to go about the task, but it really is the only way that you can be certain of finding the fault. You also have to run the machine for long enough for there to be a good chance of seeing the error before you make another change. It is much too tempting to change everything at once in a brute force attempt to discover what is wrong – this approach may be quick, but it doesn't work.

Once you find the adapter card or the command that is causing the problem you can focus on it. At this point you need the manual and you need to study it. This time you should set the board or command up as you think it should be. If it still doesn't work you start to vary the configuration. Again the one step at a time approach is essential. Never make more than one change and always test it for long enough for the problem to show itself.

Remember computers are logical machines – even when they appear to behave illogically – and to make them work you have to be logical. Perhaps even more logical than they are! Over to you Mr Spock ...

■ ***Mike James***

Premier Mail Order

Please send cheque/PO/Access/Visa No. and expiry date to:

Dept PCR 06, 10 Tinkler Side, Basildon, Essex SS14 1LE

Please state make and model of computer when ordering. P&P and VAT is included for all UK orders. Please add £2.00 for Europe and £3.50 for the Rest Of the World

Telephone orders: Mon-Fri 9am-7pm. Sat. & Sun 10am-4pm. ***TELEPHONE orders:*** *0268 271172. Facsimile orders: 0268 271173*

Next day service available add £3.00. We are open 364 days a year.

E&OE

P.C. GAMES

3D Construction Kit 2	£32.99
4th & Inches	£9.99
1869	£22.99
A320 Airbus (Edition Europa)	£30.49
A320 AIRBUS (USA)	**£30.49**
A320 Approach Trainer	£30.49
A Train	£29.99
A Train Construction Kit	£22.99
Aces of the Pacific	£25.99
Aces Over Europe	£26.99
Action Sport	£19.99
Advantage Tennis	£19.99
Air Bucks	£22.99
Air Combat Aces	£21.99
Air Commander	£23.99
Air Sea Supremacy	£23.99
Alcatraz	£19.99
ALONE IN THE DARK	**£27.99**
Ambermoon	£22.99
Amberstar	£22.99
Animation Classics	£29.99
Animation Package	£29.99
Another World	£20.99
ARCHER MACLEAN'S POOL	**£20.99**
Armour Geddon	£26.99
Ashes of The Empire	£29.99
ATAC	£27.99
ATP	£27.99
AV8B HARRIER ASSAULT	**£26.99**
Award Winners	£21.99
B-17 Flying Fortress	£29.99
B.A.T. 2	£26.99
Bane of The Cosmic Forge	£24.99
Battle Chess 4000	£22.99
Battle Isle	£23.99
Battle Isle Add on Disk	£16.99
BattleToads	£17.99
Betrayal At Krondor	£27.99
Birds of Prey	£26.99
Blade of Destiny	TBA
Board Genius	£25.99
Buzz Aldrin into Space	£24.99
Caesar	£22.99
California Games	£6.99
California Games 2	£25.99
Campaign	£23.99
Campaign Data Disk	£12.99
Campaign 2	£24.99
CAR & DRIVER	**£24.99**
Carl Lewis Challenge	£22.99
Carrier Strike	£26.99
Carriers At War	£23.99
Castles II	£23.99
Celtic Legends	£23.99
Champions of Krynn	£21.99
Championship Manager	£19.99
Civilisation	£26.99
Colossus Compilation	£19.99
COMBAT CLASSICS	**£22.99**
COMMANCHE MAX OVERKILL	**£27.99**
Contraptions	£24.99
Cool Croc Twins	£16.99
Cool World	£19.99
Crazy Cars 3	£17.99
Creation	£37.99
Creepers	£19.99
Cruise for a Corpse	£20.99
Crusaders of The Dark Savant	£23.99
Curse of Enchantia	£22.99
Daemonsgate	£22.99
Dagger of Amon Ra	£26.99
Darkmere	£25.99
Dark Queen of Krynn	£21.99
Dark Seed	£27.99
Daughter of Serpents	£22.99
DIZZY COLLECTION	**£16.99**
D.J. Puff	£7.99
Dogfight	£27.99
Dream Team	£20.99
Dreamweb	£26.99
Dune	(See The Greatest)
Dune II	£23.99
Dynablasters	£23.99
El Fish	£22.99
Elf	£21.99
Elite Plus	£26.99
Elite 2 (Frontier)	£26.99
Elvira 2	£26.99
Epic	£22.99
Eye of the Beholder	£20.99
Eye of the Beholder 2	£23.99
Eye of the Beholder 3	£26.99
Eye of The Storm	£22.99
F117A Nighthawk	£26.49
F15 STRIKE EAGLE 3	**£27.99**
F16 Combat Pilot	£8.99
FA Premier League Football	£19.99
Falcon	£10.99
FALCON 3 (DOS 5.0)	**£28.99**
Falcon 3 0 Mission Disk (OpTiger)	£16.99
Falcon Operation Counterstrike	£8.99
Falcon Operation Firefight	£8.99
Fantastic Worlds	£26.99
Fantasy World Dizzy	£7.99
Fields of Glory	£27.99
Fire & Ice	£21.99
First Samurai	£20.99
Flight of The Intruder	£10.99
Flight Simulator 4	£34.99
Flight Sim 4- Flight Adventure 701	£20.99
Flight Sim 4- Rescue Adventure 685	£20.99
Flight Sim 4- Aircraft & Adv.Factory	£25.99
Flight Sim 4- Aircraft & Scene Designer	£24.99
Flight Sim 4- Flight Planner	£20.99
Football manager 3	£20.99
FORMULA ONE GRAND PRIX	**£27.99**
Front Page Sports Football	£26.99
Gateway	£22.99
Gateway To Savage Frontier	£21.99
Gobliins 2	£22.99
Gods	£23.99
Graham Taylor	£20.99
Great Naval Battles	£27.99
Great Naval Battles (Super Ships)	£12.99
Gunship 2000	£26.99
Gunship 2000 Data Disk	£17.99
Guy Spy	£26.99
Guy Spy CD ROM	£26.99
Harpoon (Updated)	£26.99
Harpoon Battleset 3 or 4	£11.99
Harpoon Designer	£13.99
Harpoon Scenario Editor	£13.99
Harrier Jump Jet	£27.99
Head to Head (F15 2/Mig 29)	£24.99
Heimdall	£24.99
HISTORY LINE (1914-1918)	**£26.99**
Home Alone 2	£20.99
Hook	£22.99
Humans	£19.99
Humans Data Disk	£13.99
Incredible Machine	£25.99
INDY ATLANTIS ADVENTURE	**£24.99**
Indy Atlantis Action	£24.99
Innocent Until Caught	£25.99
Int Sports Challenge	£22.99
International Rugby Challenge	£20.99
Ishar	£19.99
Jetfighter II	£32.99
Jimmy Whites Snooker	£23.99
Jo Mac Caveman Ninja CD ROM	£24.99
John Madden 2	£20.99
Jordan In Flight	£24.99
KGB	£24.99
Kick Off 2	(see Soccer Stars)
Kings Quest 6	£32.99
Knightmare	£20.99
Knights of the Sky	£27.99
Laser Squad	£21.99
Leather Goddess	£8.99
Leather Goddess 2	£24.99
Legacy	£27.99
Legend	£22.99
Legend of Kyrandia	£23.99
Legends of Valour	£26.99
Lemmings Double Pack	£27.99
LEMMINGS 2 (The Tribes)	**£25.99**
Lethal Weapon	£20.99
Links	£26.99
LINKS 386 PRO (SVGA)	**£29.99**
LINKS BANFF SPRINGS (SVGA)	**£15.99**
Links Barton (VGA)	£13.99
Links Bayhill	£13.99
Links Bountiful	£13.99
Links Firestone	£13.99
Links Hyatt	£13.99
Links Mauna Kea (SVGA)	£15.99
Links Pine Hurst	£13.99
Links The Belfry (SVGA)	£15.99
Links Troon North (VGA)	£13.99
Lombard RAC Rally	£8.99
Loom CD ROM	£32.99
Lure of The Temptress	£23.99
M1 Tank Platoon	£26.99
Maelstrom	£26.99
Mario is Missing	£27.99
McDonald's Land	£17.99
Mega Lo Mania	£22.99
Megatraveller 1 or 2	£22.99
Mercenaries	£20.99
Microprose Golf (D Ledbetters)	£29.99
Midwinter 2	£29.99
MIG 29 Super Fulcrum	(See Head To Head)
Nigel Mansell's World Champ	£22.99
Omar Sharifs Bridge	£24.99
Pacific Islands	£23.99
Pacific Islands CDROM	£26.99
Pacific War	£25.99
Patriot	£22.99
Perfect General	£23.99
Pinball Dreams	£22.99
Pinball Magic	£7.99
PGA Tour Golf +	£23.99
Populous & Promised Lands	£10.99
Populous 2+	£27.99
Powermonger	£23.99
Premier Manager	£20.99
Prince of Persia NAM CD ROM	£24.99
Ragnarock	£24.99
Railroad Tycoon	£24.99
Reach for the Skies	£24.99
Red Baron	£26.99
Ringworld	£25.99
Risky Woods	£19.99
Robocop 3	£19.99
Robosport	£19.99
Rocketeer	£19.99
Roger Rabbit (Hare Raising Havoc)	£19.99
Roger Rabbit + Sound Source	£35.99
Rome AD92	£24.99
Sabre Team	£26.99
Scrabble	£20.99
Secret of Monkey Island	£20.99
SECRET OF MONKEY ISLAND 2	**£23.99**
SENSIBLE SOCCER	**£21.99**
Shadowlands	£22.99
Shadow of The Comet	£24.99
Shadow President	£27.99
Shadoworlds	£22.99
Sherlock Holmes	£28.99
Sherlock holmes Cons Detective	£32.99
Shuttle	£27.99
Silent Service 2	£24.99
Sim A nt	£23.99
Sim City Deluxe	£22.99
Sim City/Populous	£19.99
Sim Earth	£26.99
Sim Earth (Windows)	£27.99
Sim Farm	£25.99
Sim Life	£27.99
Simpsons	(See Dream Team)
Sleepwalker	£24.99
Space Legends	£22.99
Soccer Stars Compilation	£16.99
Space Crusade	£19.99
SPACE QUEST 5	**£25.99**
Spear of Destiny	£25.99
Special Forces	£26.99
Spelljammer	£24.99
Sports Masters	£22.99
Star Trek 25th	£24.99
Strategy Masters	£22.99
Strike Commander	£26.99
Strike Fleet	£9.99
Streetfighter2	£19.99
STUNT ISLAND	**£29.99**
Superfighters	£20.99
Super Tetris	£22.99
Suzuka GP Win Run 2	£21.99
Tales of Magic	£24.99
Task Force 1942	£27.99
Tegel's Mercenaries	£26.99
Terminator 2	(See Dream Team)
Tetris	£17.99
Theatre of War	£23.99
The Animation Studio (Disney)	£59.99
The Complete Chess System	£22.99
THE GREATEST	**£24.99**
The Legend of Myra	£20.99
Their Finest Hour	£25.99
Tornado	£26.99
Town With No Name CD ROM	£24.99
Transarctica	£24.99
TROLLS	**£17.99**
Ultima 7 (The Black Gate)	£26.99
Ultima 7 (The Serpent Isle)	£25.99
Ultima Underworld	£26.99
ULTIMA UNDERWORLD 2	**£26.99**
Ultima Trilogy 2	£26.49
Utopia	£20.99
V For Victory 1 (Utah Beach)	£23.99
V FOR VICTORY 2 (Russian Front)	**£23.99**
V For Victory 3 (Market Garden)	£27.99
Valhalla	£22.99
Veil of Darkness	£24.99
Virtual Worlds	£29.99
War In The Gulf	£22.99
Ween	£23.99
Whales Voyage	£22.99
When Two Worlds War	£25.99
Wing Commander	£14.99
Wing Commander 2	£26.99
Wing Commander Deluxe	£32.99
Wing Commander II Special Ops 1	£13.99
Wing Commander II Special Ops 2	£13.99
Wizkid	£21.99
W.W.F 1	(See Dream Team)
W.W.F2	£20.99
Xenobots	£25.99
X WING	**£27.99**
ZOOL	**£21.99**

EDUCATIONAL

ADI English (11-12) or (12-13) or (13-14)	17.99
ADI Maths (11-12) or (12-13) or (13-14)	17.99
ADI Frencb (11-12) or (12-13) or (13-14)	17.99
Better Maths (12-16)	13.99
Better Spelling (8+)	13.99
Biology (12-16)	13.99
Cave Maze (8-13 Years)	10.99
Chemistry (12-16)	13.99
Fraction Goblins (8-13 Years)	10.99
Fun School 2 (6-8)	8.99
Fun School 2 (+8)	8.99
Fun School 2 (U6)	8.99
Fun School 3 (5-7)	16.99
Fun School 3 (U7)	16.99
Fun School 3 (U5)	16.99
Fun School 4 (5-7)	16.99
Fun School 4 (7-11)	16.99
Fun School 4 (U5)	16.99
Junior Typist (4-10)	13.99
Magic Maths (4-8)	13.99
Mario Teaches Touch Typing	19.99
Maths Dragons (5-12 Years)	10.99
Merlin's Maths(5-13)	17.99
Mickey's 123's (2-5)	16.99
Mickey's ABC's (2-5)	16.99
Mickey's Colours & Shapes (2-5)2	16.99
Mickey's Jigsaw Puzzles (5+)	16.99
Mickey's Memory Challenge (5+)	16.99
Noddy's Playtime (3-7)	16.99
Paint & Create (5+)	17.99
Physics (12-16)	13.99
Picture Fractions (7-10 Years)	10.99
PlayRoom (3-8)	17.99
Play School (3-8)	13.99
Reasoning Wit Trolls (5-12Years)	10.99
Spelling Fair (7-12)	20.99

JUNIOR ADVENTURE

A Christmas Carol (+8)	13.99
Robin Hood (8+)	13.99
The Three Bears (5-10)	13.99
The Wind in The Willows	13.99
The Wizard Of Oz(+6)	13.99

SPECIAL OFFERS

4D Sports Boxing	9.99
4D Sports Driving	9.99
Blues Brothers	8.99
Captive	12.99
Centrefokl Squares	8.99
Colossus Chess	8.99
Jack Nicklaus unlimited Golf	12.99
Jack Nicklaus Courses Disks	7.99
Megafortress	12.99
Paperboy 2	9.99
Teenage Mutant Ninja Turtles 2	12.99
TV Sports Baseball	14.99
TV Sports Boxing	14.99

JOYSTICKS & ACCESSORIES

Quickjoy M5 SV201	15.99
Quickjoy M6 SV202	11.99
Quickjoy Topstar SV227	19.99
The Sound Source	22.99

3.5"BLANK DISKS

	TDK/VERBATIM (BOXED)		PRECISION (BOXED)		UNBRANDED (LOOSE)	
	LOW	HIGH	LOW	HIGH	LOW	HIGH
10 x	7.99	9.99	6.49	7.99	5.99	6.99
20 x	14.50	19.50	11.99	15.50	10.99	13.50
50 x	35.00	47.50	26.00	37.50	23.99	32.50
100 x		95.00	49.99	72.99	44.99	62.99
200 x	125.00	190.00	94.99	141.99	83.99	121.99
500 x	300.00	470.00	219.99	350.00	199.99	287.50
1000 x	580.00	930.00	419.99	680.00	369.99	550.00

RECYCLED BLANK DS/DD (LOW)

10 x	4.50	60 x	21.00
20 x	8.50	70 x	24.50
30 x	12.00	80 x	28.00
40 x	15.00	90 x	31.50
50 x	17.50	100 x	35.00

Letters

PC Review welcomes letters on any subject under the PC sun. The editor will chop them to fit if need be, and we'll assume letters are for publication unless you state otherwise. Send your mail to letters, PC Review, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU. Star letters win software prizes!

Bargain hunter

This letter is in response to Stephen Higgins' letter in Issue 17.

I am quite amazed that anybody would pay £45 for a game. If you look through PC Review you will find many mail order companies selling games at a more reasonable price of £20-£25 as opposed to the £40-plus that shops charge.

I personally have been a member of Special Reserve for over three years and have no great problems with them.

His comments about moving to the Amiga are very worrying. The main problem with the Amiga is "processing power". If you are in the market for platform games, shoot 'em ups, etc (in which case the SNES is better), the Amiga does have an advantage.

However, if you try to convert things like Wing Commander to the Amiga, you will have to do some serious cutting back on the game itself (which is what happened).

I hope this letter does help any frustrated PC owners who find games are too expensive, or find when they get them they are rubbish.

Jeffrey Matt
Essex

CD chaser

I read with great interest December's issue of your rather good magazine because of its look at the CD-ROM scene. I am hoping to purchase a CD-ROM in the summer, but have a few questions that I would like to put to you before then. Are we going to see an influx of newer, more advanced CD-ROM drives as soon as I buy mine in the near future?

Also, I have noted that the minimum system requirements which are stated in a Creative Labs leaflet are 386XS, 2Mb, MS DOS, VGA graphics, 3.5" floppy drive, mouse, and "30Mb hard drive". The only problem I have is the hard drive. Does the 30Mb refer to free space required? If so, I'm going to need a new hard drive ...

Finally, off the subject of CD-ROM, I just have to say that PC Review is far and away the best of the PC magazines even though some of your reviews have been a little questionable. I really couldn't work out why Rex Nebular warranted an 8 – I finished the game in one day of play and, while the graphics and sound are good, that sort of lack of longevity is unacceptable when the price was £45!

In addition, after reading your Front Pages Sports: Football review, which was fairly positive towards the game, I went out to buy it. I've been a fan of US football for years and have played John Madden's to death on my Megadrive, but I was looking forward to FPSF because of its statistics and full league which Madden's doesn't include. Once I'd played my first league game (which my Dolphins won brilliantly in overtime) it was with horror that the computer then simulated *every* other game!

Was I doing something seriously wrong here? I would like to know because I really enjoyed the actual gameplay, but having to wait while the computer plays *slightly* shortened versions of all the other games was nothing short of ridiculous. I hope I did fail to spot something in the manual which tells how to avoid this wait because, as I said, the game itself is very good.

David Espinosa
Ruislip
Middlesex

For the degree of future-proofing you can expect with CD-ROM drives, I'm going to refer you to the article on this very subject in the last issue's This Year's Models supplement (Issue 19). The hardware requirement refers to the original hard disk capacity.

A la mode

I am writing to you with a possible solution to readers who are attempting to run DOS based programs from Windows with a Sound Blaster card but getting an error message that is basically telling them that Windows is using the card and the DOS program can't!

I had this problem occur the first time I used my PC after upgrading its memory from 2Mb to 4Mb, the increase in memory allowed the PC to run Windows in 386 Enhanced mode without having to force it using WIN /3, I had previously only been able to get Windows in Standard mode.

Once running in the 386 Enhanced mode of Windows I started getting the 'Sound Blaster already in use' error and it occurred to me to try running Windows in standard mode by using WIN /S and seeing if the error was still there, but as if by magic the Sound Blaster became available to all my DOS-based programs and no longer the property of Windows-based programs.

This is not the only error I have found that 386 mode issues that standard mode doesn't, some graphics produced by programs are also disliked in the Enhanced mode.

If, like me, you have a wide range of DOS-based programs, which you insist on running through the Windows front end, it may be that standard mode will work better for you.

Scott Wells
Queensborough
Kent

Misnomer

As a role-player as well as a PC user, I feel I have to set the records straight on a matter close to many gamers' hearts.

The News section of the April edition, under the title "Waddingtons goes to the board" (page 19), states that: "Following this will come FIST, a role-player devised by Steve Jackson, the renowned creator of the Dungeons and Dragons board games."

Whereas Steve Jackson is renowned for the creation of FIST,

and with Ian Livingston, the Fighting Fantasy series, the honour of the creation of Dungeons and Dragons actually falls to Gary Gygax.

Neither could you have confused the name with the mastermind behind Steve Jackson Games, who even though he possesses the same name, has not written for the Dungeons and Dragons game either.

Myron Fairweather
Darley Abbey
Derby

CRUG clarified

We would like to thank you for your mention of CRUG in your news pages of the April issue. Unfortunately a telephone number was not given and we wondered if you would publish our telephone number and address again:

CD Rom User Group
19 Faygate Close
Bexhill
East Sussex
TN39 5EE
Tel: 0424 730326
Fax: 0424 438467

K Simpson
Bexhill
East Sussex

Missing the mark

I was delighted to find others who don't always seek out the most sophisticated games (James Fairman in Letters, Issue 17).

I enjoy playing games on my PC, but time is scarce. If I can't get 'into' a game quickly and get pleasure out of playing it in a slot of 15 minutes or so, I won't bother. That's the appeal of games like Tetris and Lemmings (not to mention Space Invaders!).

Please help me and many like me by including a rating in your reviews section (playability?) that could help us choose suitable games.

D E Haverty
Wilmslow, Cheshire

We do. It's called a mark out of ten. Less flippantly, surely the information you require is contained in the body of the review anyway. I'm hugely reluctant either to a) dismiss a game with a poor 'playability rating', or, b) extol one with 10 out of 10 for 'get-into-ability', without any explanation either way, especially as I'd have a devil of a job explaining exactly what 'playability' meant. Lemmings and Tetris may be highly accessible to most people, but take something like Jimmy White's Snooker: if you know how to play snooker, and know a bit about angles, it's very quick to get the hang of; if you don't you could be in for a steep learning curve. Or take Legends of Valour, which we felt (Issue 15) was an extremely 'playable' role-playing game, yet Simon Palmer in this month's Star Letter was less than impressed.

The rating out of 10 takes all game elements into account and is intended as a general guideline.

Star Letter

Priceless imitation

When I started 'computing' some 10 or 12 years ago on my Vic20, computer stores were few and far between, but I used to enjoy going down to Fox's, the keyboard specialists, with £5.50 in my pocket to buy Wacky Waiters or Arcadia. Then Ultimate Play the Game released Sabre Wulf (if I remember rightly) and whacked a £9.95 price tag on it. The game was indisputably brilliant, but all the other companies followed suit and priced their games at a tenner.

When the C64 arrived, so did the best programmers: Andrew Braybrook, Tony Crowther, Jeff Minter, Archer Maclean, Geoff Crammond, and they all competed against each other. I reckon this was the computer industry at its best. Coders pushed the C64 and Spectrum to their limits, we saw the first parallax scrolling and border sprites. We also saw major advances in music with the likes of [Martin] Galway and [Rob] Hubbard. Again, competition was the key.

With the advent of the Amiga and ST, games rose to £20 per title. We saw the larger companies begin to dominate, with games using graphic artists, coders, producers, musicians, writers and God knows what else, and again, up went prices.

It strikes me that all the best in entertainment software is still developed by the few: Tony Crowther (Captive); Geoff Crammond (Formula 1 Grand Prix); Archer Maclean (Snooker). OK, so some larger companies do write good software (Origin, LucasArts, SSI ...), but in my opinion, the best in the business stay single. It's heartbreaking to spend pounds on machines and have companies say, "minimum 386". I just think it's nice that the best programmers the world has to offer — all British, by the way — are still the forerunners and the ones who program for all machines.

All I am trying to say is, where has the competition gone between programmers? I don't want people writing games in high level languages and not optimising their code, then telling us we need more powerful equipment. What I want is people pushing machines to their limits and back.

I am not, however, moaning about pricing. I think £40 for a MicroProse game, with one of its superb manuals, is a good price to pay. Hell, since F1GP's release, I haven't stopped playing it — tell me I haven't had my money's worth. People only moan when they buy a 'dud' game: for instance, I bought Legends of Valour, which lasted five minutes before deletion and was the biggest waste of £40 ever. But if you're happy with the products they purchase, that's all that matters.

I do think, however, that it's about time people stopped copying each other's prices. One company releases a bigger and better game, prices it accordingly, and then everyone else sees it as an excuse to put up their prices, no matter how good their products are.

Simon Palmer
Nottingham

Beat 'em up blues

Where are all the beat 'em ups?

My Dad — an ex-programmer — thinks PC games like KQ5/Monkey Island 2 are brill and tells me a beat 'em up is in comparison as easy to do. So where are they?

All we get are poor quality conversions of popular Sega, etc, games. They may be good on the consoles but seem to lose a lot in porting. Why doesn't a commercial company like Sierra or Lucasfilm make them and start them out on the PC?

Also, why are we still waiting for Sonic-type games to be made for the PC?

My Dad said that PCs were good at every sort of game and I soon proved him wrong. I've been looking for over two years now for a good beat 'em up or platform game that started out on the PC.

Ian Birkett
Newcastle upon Tyne

Nostalgia ain't what it used to be

Let us reminisce for a while ... 1982, ZX Spectrums, 32K RAM packs, squidgy keyboards which typed Print just by holding down the P key, Manic Miner, Atic Atac, etc.

When I first got involved in home computers, the big question at the time was whether I needed a 48K Spectrum, or whether 16K would be sufficient. Well, my choice was made, and I plugged my wonderful

16K Speccy into the telly, connected up the 'ear' and 'mic' leads, had a quick leaf through the manual and inserted the welcome tape called 'sidea' (hmm, must be some strange computer jargon, I though).

Several years later, I have used all kinds of computers, many containing their own adaptation of the Basic programming language. I have never really progressed on to anything else, other than the specific game sprogramming environments such as STOS on the Atari ST or STAC, the Graphic Adventure Creator. At times, near-professional results were almost forthcoming. I've always felt that C and Pascal were beyond me.

Now, in 1993, I have a 25MHz 386SX mini-Tower system with a super-duper SVGA monitor, and in general I am very pleased with it, but for a couple of rather niggling problems. Firstly, why doesn't Microsoft supply a manual for QBasic (the one that comes with DOS 5? I simply cannot use this software efficiently: all I want to do is import a PCX file to use as a backdrop to a game, and manipulate a few sprites around on screen, but I can't find any reference to this in the help facility. Am I using the right program? Sinclair and MSX Basic were hardly industry standard, but were pretty straightforward to use, with lots of nice little examples thrown in.

Alternatively, can you recommend some other language, which will ofer an intuitive games programming environment, with particular reference to graphics and sound in strategy, war and role-playing areas.

Thanks for listening. I hope the history lesson has brought back a few happy memories. I still miss standing a couple of cold milk bottles on the power supply to stop the computer from overheating.

D J Salter
Nottingham

COMPETITION*WINNERS*

Mega PC competition (Issue 16)

Hardly the most taxing competition in the world, identifying the format of the four screenshots printed in the magazine posed few problems for entrants. However, there could only be one Amstrad Mega PC winner, and that winner is Sam Moorhouse, of London W4.

There are 10 further winners in this competition, who each receive a copy of Psygnosis's Creepers game: Philip May, of Solihull; Chris Ash, of Sheffield; Stephen Knight, of Ashton-under-Lyne, Lancs; Conor O'Kane, of Dublin 18; M Watson, of Stockton, Cleveland; James Burrow, of Peterborough; D Warburton, of Warrington, Cheshire; Richard Avery, of Cockermouth, Cumbria; R J Hoy, of Stevenage, Herts; and Edmund Conway, of London SW19.

The answers: screen (a) was a Megadrive shot (from Terminator); (b) was a PC screen (F1GP); (c) Megadrive (Sonic 2), and (d) PC (Alone in the Dark).

Harrier jacket (Issue 16)

One of those 'off the cuff' competitions, entries flooded in for the six Harrier jackets on offer from Domark to complement its excellent AV8B Harrier simulation.

We asked you what V/STOL stood for, and stumped hardly anyone in the process. V/STOL, of course, stands for Vertical/Short Take Off and Landing, and is one of the distinguishing capabilities of the Harrier aircraft.

And the winners are ... Harrier jackets to the following: Philip Goodchild, of Middlesbrough; Neil Mulligan, of North Shields, Tyne and Wear; Mr A Flatman, of Crawley, W Sussex; Hugh McCartan, of Houston, Scotland; Mr P I Browne, of Londonderry, Northern Ireland, and J Mulvany, of Aberdeen.

Polo shirts to the next 10 ... Gary Bolton, of Liverpool; Steve Coles, of East Wittering, W Sussex; W Batrick, of Plymouth; David L Martin, of Matlock Bath, Derbyshire; Mark O'Brien, of Wolverhampton; Jonathan Buisson, of Newbury, Berks; Ivan Phillips, of High Wycombe, Bucks; G Richardson, of Grays, Essex; John Anthony Walker, of Wythenshawe, Manchester; and Mrs H Banbury, of Caversham, Berks.

Congratulations to all!

Trouble in store

I write with reference to a small problem I have — storage. I have all 18 issues of PC Review, and I am finding that storing them is becoming a problem. They won't stand on my shelves as they are too flimsy, so I store them in a box, but I find that when I need a quick reference for any game, I have to get them out of the box and root around for the issue I need.

May I be so bold as to suggest a binder? I think a lot of other regular purchasers of your magazine would also be grateful if you produced a binder for your magazine. Anyway, back to searching through my box (for now?).

Miss M Titley
Gainsborough, Lincs

One of the series of readers' research panels we conducted last year asked specifically about whether binders would be an attractive proposition. The result was an overwhelming "not bothered, really". However, as PC Review approaches its second birthday, we appreciate times may have changed, so if anyone wants to second Miss Titley in her 'binders for PC Review' campaign, do let us know.

Is Virtual Reality the end?

The genesis of Virtual Reality has started; are we really prepared for what this new science might bring? Machines have already begun to control our vision, our senses, our world. This science will open new doors to new worlds and new ideas.

I see a world of science where surgeons will put on their VR helmets and gloves, where they enter the patient's body through a virtual world. They could perform micro surgery with only the movement of their hands. Programmers will program code from within their virtual libraries, where they will pull blocks of code together with their datagloves.

Technology will accelerate and the demands of this virtual science will escalate disproportionately. Helmets and datagloves will be replaced by electrodes attached to our bodies so we can actually feel objects within our virtual worlds. Graphics will increase to a higher definition than television, giving more lifelike vision. VR warehouses will spring up all round the globe where you will lie in your cocoon with electrodes taped to your head. Rows of these cocoons will connect to a large supercomputer creating individual worlds to escape into.

Where would you like to go on holiday? You could bathe on the beach in Hawaii, feel the sun on your body and the breeze in your hair. How about swimming at the bottom of the deepest ocean or walking on Mars; or living as a knight in the days of King Arthur. The places and times to live in are infinite.

These warehouses will start to connect as VR becomes more widespread and starts to branch into the home. The networks will let people interact with each other in these VR worlds. People's fantasies and dreams can be real 24 hours a day. Everyone will be interacting in one large virtual landscape with their physical bodies laying dormant. These people will not want to leave their worlds. They can spend as much money as they want; live their lives as kings compared to the realities of working for a living.

When or if people come out of their VR worlds what sort of people will they be? People that have been virtual birds or fish for the last two years now have the problem of trying to walk on land. People that have lived their dreams now have to cope with reality. VR clinics will deprogram these people so they can live a normal life again.

Is this the VR world of the future? Are we actually physically alive now or are we only players in God's virtual world?

Miles Beverly
London

Evesham Micros • NEW LATE NIGHT SHOWROOM OPENING 'TIL 7PM, WED -FRI • Evesham Micros

Evesham Micros • CALL US NOW ON (0386) 765500 •

Evesham Micros

JOINT WINNER OF COMPUTER SHOPPER'S "Best Customer Service" award for 1991



ANALOG EDGE Joystick
by Suncom Technologies



Suncom's analogue joysticks always set new standards in quality and performance. The *Edge* represents terrific value, incorporating *Injected Resistor Technology*, resulting in a product with unmatched simplicity and breakdown resistance. Features two-way switchable fire buttons, and Aircraft-style grip, with game optimised ergonomics. Requires game port.

£15.31 +VAT (=£17.99)

Suncom FX2000 Joystick



The latest in the highly acclaimed range of Suncom joysticks brings further advances in comfort and control. The pistol grip can be easily rotated to give perfect orientation for left or right handed use, while the unique "V" designed top fire button allows lightning fast response. Switchable autofire, throttle control and suction feet complete the package. Requires game port.

£21.27 +VAT (=£24.99)

FLIGHTSTICK



THE FLIGHTSTICK HAS TO BE THE ULTIMATE, TOP QUALITY JOYSTICK FOR COMPUTER PILOTS!

Test fly a Flightstick with your favourite simulator and you will know the meaning of *control*. Whether you're a novice or experienced combat pilot, flying skills will be improved and enemy kill rate will increase. Excellent construction - looks and feels like the real thing! Includes throttle control and 7ft long connection cable. Requires game port.

Only £34.03 +VAT (=£39.99)

COMMAND CONTROL

TWO-HANDED HIGH DEFINITION CURSOR CONTROL – IDEAL FOR ALL GAMES!



New from Suncom Technologies is this exclusive **Command Control**. Giving full two handed cursor control it adds a new dimension to playing action games. Two fire buttons *and* autofire buttons at your fingertips maximise your scoring. Requires game port.

Only £17.01 +VAT (=£19.99)

Suncom FLIGHT YOKE



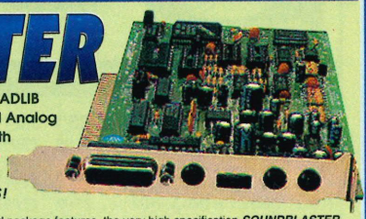
Introducing G-FORCE, designed for realistic control of all simulation software.

The G-FORCE functions as a full size aviation yoke with pitch and roll control, and twin fire buttons at your thumb-tips. For driving games, simply engage the column lock and G-FORCE functions as a stable steering wheel. The base plate has large suction feet and table edge clamps. Requires game port.

Only £51.06 +VAT (=£59.99)

COMPLETE PC SOUND PACKAGE

WITH LATEST VERSION 2 OF **SOUNDBLASTER**

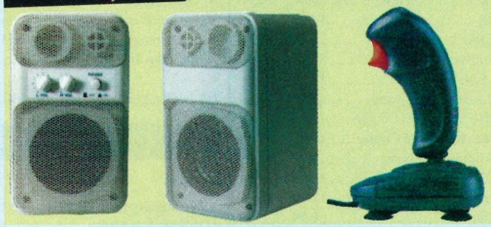


Digital Sound Output • 11 Voice FM Synthesizer (fully ADLIB compatible) • Digital Sampling capabilities • On-board Analog Joystick I/O port • On-board Stereo Power Amplifier with external stereo speaker connections & volume control • Software includes FM organ, Text to Speech & more • Fully ADLIB compatible – *WORKS WITH LOTS OF GAMES!*



PACK ALSO FEATURES 'MONKEY ISLAND 2', STEREO AMPLIFIED SPEAKERS & ANALOGUE JOYSTICK!

Specially compiled package features the very high specification ***SOUNDBLASTER VERSION 2*** - a sophisticated digital hi-fi Sound Expansion card with on-board Power Amplifier and Games Joystick Port. Software includes the adventure **MONKEY ISLAND 2** - *Fantastic Sound and Graphics!* **ZY-FI** Amplified stereo speaker system also included, plus **QUICKSHOT JOYSTICK** which interfaces directly to *Soundblaster*.



PC SOUND PACKAGE INCLUDES :

- ☆ **SOUNDBLASTER VERSION 2 Digital Sound Card**
- ☆ **ZY-FI New Design Amplified Stereo Twin Speaker System**
- ☆ ***Excellent* QUICKSHOT QS-123 Analogue Joystick**
- ☆ **'Monkey Island 2' (requires 286 or higher, VGA & 3.5" HD drive)**

Only £119.11 +VAT (=£139.95)

Kit as above with Soundblaster PRO ..... **£169.11 +VAT** (=£198.70)

Soundblaster Version 2 card available on its own	**£79.00 +VAT**	(=£92.83)
Soundblaster PRO expansion card	**£129.00 +VAT**	(=£151.58)
Soundblaster 16 expansion card	**£199.00 +VAT**	(=£233.83)
Portblaster - new external Soundblaster for portables etc., uses parallel port	**£126.81 +VAT**	(=£149.00)
CD-ROM MULTIMEDIA kit for Soundblaster 2/PRO (specify which) includes *WINDOWS 3.1* with Music Clips, *MICROSOFT BOOKSHELF, SHERLOCK HOLMES* and *EURO CD DISK*	**£349.00 +VAT**	(=£410.08)

COMPLETE MULTIMEDIA PACKAGE



EVERYTHING YOU NEED FOR MULTIMEDIA – PLUS MUCH MORE!





SOUNDBLASTER PRO
Fantastic Digital Stereo Sound expansion card with an amazing array of musical capabilities! Incudes built-in stereo power amplifier with volume control and digital sound sampler. Card also has built-in analogue games port for connection of up to two games joysticks.

FAST CD-ROM DRIVE
Performance optimised Multi-session CD-ROM drive connects directly to the Soundblaster card's interface.

ZY-FI STEREO SPEAKERS
With built-in power amplifier & volume controls.

PLUS! PLENTY OF CD-ROM DISK SOFTWARE:

'MICROSOFT BOOKSHELF' *featuring* Dictionary, Thesaurus, Atlas / Encyclopedia, Quotations

'SHERLOCK HOLMES' game

– PACKAGE INCLUDES –
- 'SOUNDBLASTER PRO' *PREMIUM SOUND CARD*
- INTERNAL MULTI-SESSION CD-ROM DRIVE PLUS CD–ROM SOFTWARE
- TWIN STEREO SPEAKERS

N.B. Requires 286 or higher, with 1Mb or greater & Hard Disk

FANTASTIC VALUE! ALL THIS FOR ONLY **£399.00 +VAT (=£468.83)**

Also available with *External* CD-ROM Drive for only £479.00 +VAT (=£562.83)

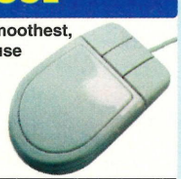
GAME PORT CARD

Game port card for any joystick etc. Works with any clock speed.

Only £12.76 +VAT (=£14.99)

TRUEMOUSE

WE GUARANTEE that this is the smoothest, most responsive and accurate mouse you can buy for the PC.



Excellent performance, amazing low price! 3-Button Serial (9-way & 25-way), PS/2 and 2-button Amstrad PC compatible versions available - please state which version is required when ordering.

Only £19.57 +VAT (=£22.99)

SOUNDBLASTER COMPATIBLE PC SOUND CARD

Includes Speakers and Joystick!



Sound Card
Featuring genuine Creative Labs SoundBlaster chipset, giving full AdLib and SoundBlaster compatibility and adding a new dimension to PC games and entertainment software. It incorporates an 11-voice FM synthesizer for realistic, good quality output. Also has on-board 4W amplifier with volume control, and full duplex MIDI interface.

Joystick
Ergonomic design with auto-centering, 2 fire buttons and autofire.

Speaker System
3" full range magnetically shielded speakers.

Only £79.00 +VAT (=£92.83)

Evesham Micros

RETAIL SHOWROOMS

Unit 9 St. Richards Rd Evesham Worcs WR11 6TD ☎ 0386 - 765180 fax : 0386 - 765354	5 Glisson Road Cambridge CB1 2HA ☎ 0223 - 323898 fax : 0223 - 322883	322 Witan Gate Milton Keynes MK9 2HP ☎ 0908 - 230898 fax : 0908 - 230865	251-255 Moseley Rd Highgate Birmingham B12 0EA ☎ 021 - 446 5050 fax : 021-446 5010

Showrooms open Monday, Tuesday, Saturday; 9.00 - 5.30 and Wednesday - Friday; 9.00 - 7.00

ALL PRICES INCLUDE DELIVERY

Same day despatch whenever possible. *Express Courier* Delivery (UK Mainland Only) £6.50 (inc VAT) extra.

MAIL ORDER DEPARTMENT

Monday-Friday, 9.00 - 7.00; Saturday, 9.00 - 5.30
Technical support (Mon-Fri, 10.00 - 5.00): 0386-40303

Fax: 0386-765354 **Call us now on ✆ 0386-765500**

Unit 9 St Richards Road, Evesham, Worcs WR11 6TD

Send an Order with Cheque, Postal Order or ACCESS/VISA/SWITCH/AMEX card details. Please allow 5 banking days for Cheque clearance.

Government, Education and PLC orders welcome All products covered by 12 Months Warranty All goods subject to availability.

Evesham Micros • NEW LATE NIGHT SHOWROOM OPENING 'TIL 7PM, WED -FRI • Evesham Micros

SOFTWARE CITY

P.O. BOX NO 888 Wolverhampton WV1 1TP
CALL US ON : 24 HOUR CREDIT CARD HOTLINE 0902 25304

VISA

Registered Office: I.J.A. Software Limited 2nd Floor Offices Hampton Walk Queens Street Wolverhampton WV1 1TQ

Access

PC SELLERS

	5.25"	3.5"
3 S tooges/King Of Chicago	12.99	12.99
A Train	N/A	27.99
AV8 Harrier Assault	N/A	27.99
Aces of The Pacific (VGA) (HD)	27.99	27.99
Air Commander	24.99	24.99
Alcatraz (New)	N/A	21.50
Alone In The Dark	31.99	31.99
Amber Star	24.99	24.99
Another World	21.50	21.50
Arcade Fruit Machine	N/A	7.99
Armour Geddon	N/A	27.99
Ashes of The Empire (VGA)	27.99	27.99
B.A.T. 2	N/A	27.99
Battle Chess 4000(SVGA)(New)	N/A	24.99
Battle Isle	24.99	24.99
Battle Isle Data	13.99	13.99
Battle Hawks 1942 (New Price)	N/A	14.99
Blade Warrior	N/A	7.99
Campaign	27.99	27.99
Car & Driver (New)	N/A	27.99
Carl Lewis Challenge	24.99	24.99
Carrier Strike	27.99	27.99
Castles 2	24.99	24.99
Championship Manager	21.50	21.50
Chessmaster 2100	14.99	14.99
Civilisation	27.99	27.99
Comanche Maxover	N/A	31.99
Complete Chess (New)	N/A	24.99
Creepers (New)	N/A	27.99
Crossword (Windows)	N/A	17.99
Curse of Enchantia	N/A	24.99
Dalek Attack (New)	N/A	14.99
Dark Seed(VGA)	27.99	27.99
Daughters of Serpents	N/A	27.99
Deluxe Strip Poker 2	7.99	7.99
Desert Rats	13.99	13.99
Dominium	N/A	24.99
Double Dragon 2	9.99	9.99
Dragon's Lair 3	N/A	27.99
Dreadnoughts	N/A	24.99
Dungeon Master	24.99	24.99
Dynablasters	N/A	24.99
Elite Plus	27.99	27.99
Epic	24.99	24.99
Eternam	N/A	24.99
European Super League	9.99	9.99
Eye of the Beholder	21.50	21.50
Eye of the Beholder 2	24.99	24.99
F15 Strike Eagle 3 (New)...	N/A	31.50
F16 Combat Pilot (CGA OR EGA)	9.99	9.99
Falcon	14.99	14.99
Falcon 3	31.49	31.49
Fantasy World Dizzy	9.99	9.99
First Samurai (New)	21./50	21.50
Floor 13	24.99	24.99
FootballDirector 2 .... (New Price)..	N/A	9.99
Frontline (CCS)	19.99	19.99
Global Conquest	31.49	31.49
Golden Axe	9.99	9.99
Graham Taylor's Football	21.50	21.50
Grand Prix Unltd	24.99	24.99
Grand Slam Bridge 2..... (New)	N/A	27.99
Gunship 2000	27.99	27.99
Gunship 2000 Data Disk	17.99	17.99
Harpoon Ver 1.2.1 + Battleset 2	24.99	24.99
Harpoon Battleset 3	10.99	10.99
Harpoon Battleset 4 (New)	10.99	10.99
Harpoon Editor	13.99	13.99
Harrier Jumpjet (New)	N/A	31.99
Hero Quest (NewPrice)	N/A	11.99
HistoryLine 1914-1918..(New)	N/A	27.99
Hong Kong Mahjong	21.50	21.50
Humans(VGA)	21.50	21.50
Ian Botham's Cricket	21.50	21.50
Indiana Jones Fate of Atlantis(Adv)	25.99	25.99
Indiana Jones Fate of Atlantis (Act)	21.50	21.50
Indiana Jones Last Crusade (Act)	7.99	7.99
Indiana Jones Last Crusade (Adv)	N/A	15.99
Ishar Legend of The fortress	21.50	21.50
Italia 1990	9.99	9.99
Jack Nicklaus Golf + Clip Art	27.99	27.99
Jet Fighter 2 + Mission Disk + Book	N/A	27.99

	5.25"	3.5"
Joe & Mac Caveman Ninja	21.50	21.50
Kings Quest 6 (VGA)	31.99	31.99
Kyrandia	24.99	24.99
Lazer Squad	24.99	24.99
Le Chucks Revenge (Monkey Is2)	24.99	24.99
Leather Goddesses 2	24.99	24.99
Legend	24.99	24.99
Legends Of Valour	N/A	27.99
Leisuresuit Larry 5 (EGA orVGA)	27.99	27.99
Lemmings +Data Disc	27.99	27.99
Lemmings Data Disc	21.50	21.50
Lethal Weappon (New)	N/A	21.50
Life and Death	14.99	14.99]
Line In The Sand (New)	N/A	21.50
Links 386 Pro (Super VGA)	32.99	32.99
Links Barton Creek	12.99	12.99
Links Bayhill Additional Course	12.99	12.99
Links Bountiful Additional Course	12.99	12.99
Links Firestone Additional Course	12.99	12.99
Links Hyatt Addtiional Course	12.99	12.99
Links Mauna Key	12.99	12.99
Links Pinehurst Additional Course	12.99	12.99
Manchester Unt	9.99	9.99
The Manager	21.50	21.50
Microprose Golf	31.99	31.99
Microprose Grand Prix	31.99	31.99
Microsoft Golf (Windows)	34.99	34.99
Might and Magic 3 (HD or LD)	34.99	34.99
N.F.L Football	27.99	27.99
Nigel Mansell (New)	24.99	24.99
Omar Shariff's Bridge	N/A	27.99
PGA Tour Golf + Courses	24.99	24.99
Pacific War	N/A	27.99
Paint & Create	21.50	21.50
Panza Kick Boxing	9.99	9.99
Pictionary (New Price)	N/A	12.99
Police Quest 1 (Enhanced (New)	N/A	27.99
Populous	9.99	9.99
Poulous/Sim City	24.99	24.99
Populous Promised Lands Add On	5.99	5.99
Populous 2	N/A	27.99
Postman Pat 3	N/A	7.99
Prince of Persia (New Price)	N/A	12.99
Robin Hood (School Soft)	17.99	17.99
R.B.I.2 Baseball (New Price)	N/A	9.99
Rome A.D 92	24.99	24.99
Scrabble	N/A	21.50
Scrooge (School Soft)	17.99	17.99
Secret of Monkey Island	21.50	21.50
Secret of Monkey Island 2 (Le Chucks Revenge)	24.99	24.99
Secret Weapons of the Luftwaffe	27.99	27.99
Secret Weapons P38 (Add on Disc)	12.99	12.99
Secret Weapons P80 (Add on Disc)	12.99	12.99
Secret Mission DO335 (Add on Disc)	13.99	13.99
Shadow President (New)	N/A	31.99
Shadoworlds (New)	N/A	24.99
Shoe People (New Price)	N/A	9.99
Silent Service 2	24.99	24.99
Sim City(Windlows)	31.49	31.49
Sim City Populous	24.99	24.99
Sim City/Terrain EdArchitecture 1	N.A	24.99
Sim Earth	28.99	28.99
Sim Life (HD)	N/A	27.99
Sleepwalker (New)	N/A	21.50
Sooty and Sweep	7.99	7.99
Space Crusade (New)	N/A	21.50
Space Quest 5 (New)	N/A	27.99
Starglider 2 (New Price)	N/A	9.99
Star Trek 25th Anniversary	24.99	24.99
Streetfighter	N/A	9.99
Task Force 1942	N/A	31.99
Terminator 2 (New Price)	N/A	9.99
Test Drive 2 (New Price)	N/A	12.99
Tetris	17.99	17.99
Thomas The Tank Engine	N/A	7.99
Tristan Pinball (New)	N/A	24.99
Trivial Pursuit (New Price)	N/A	12.99
Trivial Pursuit Deluxe (VGA)	21.99	21.99
Trolls	N/A	17.99
Ultima 7 (HD)	27.99	27.99
Ultima Underworld (HD)	27.99	27.99

	5.25"	3.5"
Ultimate Golf	9.99	9.99
V For Victory 2 (New)	N/A	24.99
Valhalla (New)	N/A	24.99
Waxworks	24.99	24.99
Ween	N/A	24.99
Wind in The Willows (School Soft)	17.99	17.99
Wing Commander (HD)(New Price)	N/A	14.99
Wing Commander Mission Discs 1&2	N/A	14.99
Wing Commander Speech Add-on	N/A	12.99
Wing Commander 2 LD	N.A	27.99
Wing Commander 2 HD	N.A	27.99
W. Commander 2 Speech AccessPk	12.99	12.99
Wing Commander 2 Special Op (HD)	13.99	13.99
Wing Commander 2 Spec. Op 2 (HD)	13.99	13.99
World Class Leaderboard Ltd Ed.	7.99	7.99
WWF 2	21.50	21.50
Zak McKraken (New Price)	12.99	12.99

EDUCATIONAL SOFTWARE

	5.25"	3.5"
ADI Counting (4-5) or(6-7)	N/A	17.99
ADI French (14-15)	17.99	17.99
ADI Maths (14-15)	17.99	17.99
Better Maths (12-16) (School Soft)	17.99	17.99
Better Spelling (9-14) (School Soft)	17.99	17.99
Biology (12-16) (School Soft)	17.99	17.99
Chemistry (12-16) ...(School Soft)	17.99	17.99
Fun School 2 (U6 or 6-8 or 8+)	9.99	9.99
Fun School 4 (U5 or 5-7 or 7+)	17.99	17.99
Junior Artist (5-10)... (School Soft)	14.99	14.99
Junior Typist (5-10) .(School Soft)	14.99	14.99
Kid Cuts (Arts & Crafts for Children)	24.99	24.99
Magic Maths (4-8) ....(School Soft	17.99	17.99
Mario Is Missing (Geography for theFamily)	N/A	27.99
Mario On Typing	N/A	21.50
Maths Mania (8-12)..(School Soft)	17.99	17.99
Maxi Maths (4-8) ..... (School Soft)	17.99	17.99
Merlin Maths (5-13) (Europress)	N/A	21.50
Noddy's Playtime (Draw, Colour, Simple Maths etc.)	21.50	21.50
Physics (12-16 .....) (School Soft)	17.99	17.99
Physics/Electronics .. (School Soft)	17.99	17.99
Play School (3-8) .....(School Soft)	17.99	17.99
Putt putt (3-7) (Interactive Stories)	N/A	21.50
The Three Bears (5-10 Reading Skills)	17.99	17.99
World Atlas 3 (Windows)	N/A	49.99

COMPILATIONS

☆ SPORTSMASTERS ☆
P.G.A. Tour Golf, Indianapolis 500, Advantage Tennis & Euro Champ Soccer
£24.99 (3.5" only)

☆ THE DREAM TEAM ☆
WWF Wrestlemania, The Simpsons & Terminator 2
£21.50

☆ STRATEGY MASTERS☆
Populous, Spirit of Excalibur, Chessplayer 2150, Merchant Colony & Cohort Fighting for Rome
£24.99

☆ THE R.T. SMITH COMPILATION ☆
WWF Wrestlemania, The Simpsons & Terminator 2
£19.99

☆ MICRO BRIDGE COMPENDIUM ☆
Bridge Baron, Sheinwold Bridge Challenge & Personal Play Library
£27.99(3.5 Only)

☆ THE GREATEST☆
Jimmy White's Whirlwind Snooker, Lure of The Temptress & Dune
£27.99 (3.5 Only)

3.5" DOUBLE SIDED, DOUBLE DENSITY WITH LABELS

1	0.59
10	5.50
25	12.50

5.25 50 PIECE DISC BOX	£6.99
5.25 100 PIECE DISC BOX	£7.99
3.5 40 PIECE DISK BOX	£6.99
3.5 80 PIECE DISK BOX	£7.99
MOUSE MAT 80mm	£2.99

ORDER FORM AND INFORMATION

All orders sent FIRST CLASS subject to availability. Just fill in the coupon and send it to: SOFTWARE CITY, Unit 4, The BDC, 21 Temple Street, Wolverhampton. WV2 4AN.

ORDER FORM

NAME.....
ADDRESS.....
.....
POSTCODE.....**TEL NO :** .....

Name of Game	Computer	Value

Postage	
TOTAL	

POSTAGE RATES : Please add 50p for post & packing on all orders under £5. EEC countries add £1 per item. Non EEC countries add £4 Per Item

PAYING BY CHEQUE - Cheques payable to Software City.

Card Type.....Expiry Date.....

Card No:.....

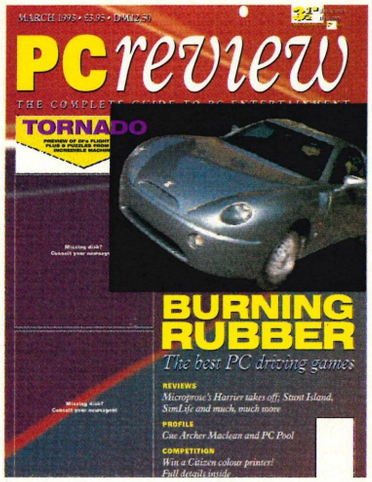
EUROPEAN ORDERS
MASTER CARS
EUROCARD ACCEPTED

Signature :.....

Date :.....

PCR 06 / 93









BACK ISSUES

If you're missing any of PC Review's previous editions, you can order them from the following address:

PC Review
Back Issues Department
PO Box 500
Leicester LE5 0AA

Issues 1-11 inclusive cost £3.95 each; Issues 12-18 cost £4.95 each. All prices include postage and packing. If you're ordering from outside the UK, the price is £5.95 per issue. Make your payments by cheque, postal order or credit card, made payable to EMAP Images. Don't send cash through the post.

Issue 1
Amstrad 5286, Top 100 Games 1991 (pt 1). On disk: Faces, Blues Brothers, Music Maestro, Jokes
3.5" disk edition sold out

Issue 2
Bullfrog, Patton Strikes Back, Pro Tennis Tour 2. On disk: Powermonger, Pit-fighter, Sleuth,
3.5" disk edition sold out

Issue 3
SOLD OUT

Issue 4
Viruses, Eye of the Beholder 2, Chessmaster 3000. On disk: Fingerpaint, Moraff's Superblast
3.5" disk edition sold out

Issue 5
CD-ROM and multimedia, Midwinter II. On disk: Supaplex, Hugo's House of Horrors
3.5" disk edition sold out

Issue 6
Windows, chess programs, Star Trek. On disk: Darkseed, Blox
3.5" disk edition sold out

Issue 7
Flight sims, Disney Animation Studio, Another World. On disk: Another World, Timelord
3.5" disk edition sold out

Issue 8
Ultima Underworld, tips supplement. On disk: European Soccer, Treacles Utilities
3.5" disk edition sold out

Issue 9
Head to head games, Ultima VII. On disk: Magic Pockets, Cool Croc Twins, Dynamo
3.5" disk edition sold out

Issue 10
Music on the PC, Sid Meier. On disk: International Sports Challenge, Jill of the Jungle
3.5" disk edition sold out

Issue 11
Hints, tips and tactics on the PC, Indy IV, Jimmy White. On disk: Shadowlands, Campaign, PocketD
3.5" disk edition sold out

Issue 12
30 best role-playing games, printers, Elite II; A-Train. On disk: World Tennis Championships
3.5" disk edition sold out

Issue 13
Golf games, soundboards, graphics, Playmation; Sherlock Holmes, Kyrandia reviewed. Top 100 Games 1992 supplement. On disk: KGB
3.5" disk edition sold out

Issue 14
CD-ROM complete, PC oddballs; Alone in the Dark, ATAC, reviewed. On disk: Wizkid, PrintPartner
3.5" disk edition sold out

Issue 15
1993 preview; Populous II, F1GP, Harrier AV8B reviewed. On disk: Populous II, Chess, Beyond Columns, Joust, 2D Life, Captain Comic, Addix, Duke Nukem.
3.5" disk edition sold out

Issue 16
A history of adventures, Origin preview; F-15 III, Comanche reviewed. On disk: Lemmings 2, Mandlebrot Magic (5.25" only).
3.5" disk edition sold out

Issue 17
Burning rubber: motor racing games; Archer Maclean profile; Harrier Jump Jet, SimLife, Stunt Island,reviewed; On disk: Tornado
3.5" disk edition sold out

Issue 18
All the way from the USA: PC innovations; MS-DOS 6; Ultima Underworld 2, Battlechess 4000, El-Fish reviewed. On disk: Contraptions (3.5" only), Bill Board VGA.

Issue 19
Flight Sim 4, screen savers, viruses; X-Wing, Lemmings 2, SQ5, Legacy, Pool reviewed. On disk: Print Shop Deluxe, Sleepwalker (3.5" only), Contraptions (5.25").

PCreview BACK ISSUES

Please send me the following back issue(s) of PC Review:

.....(write the issue number(s) here)

with 5.25" ☐ 3.5" ☐ cover disk

I enclose a cheque ☐ postal order ☐ made payable to EMAP Images for £.....

(UK rates: £3.95 per magazine Issues 1-11, £4.95 per magazine Issues 12-17; overseas rates: £5.95 per magazine — all issues)

My Mastercard ☐ Visa ☐ Amex ☐ Diners Club ☐ card number is .....

Expiry date .....

Name.....

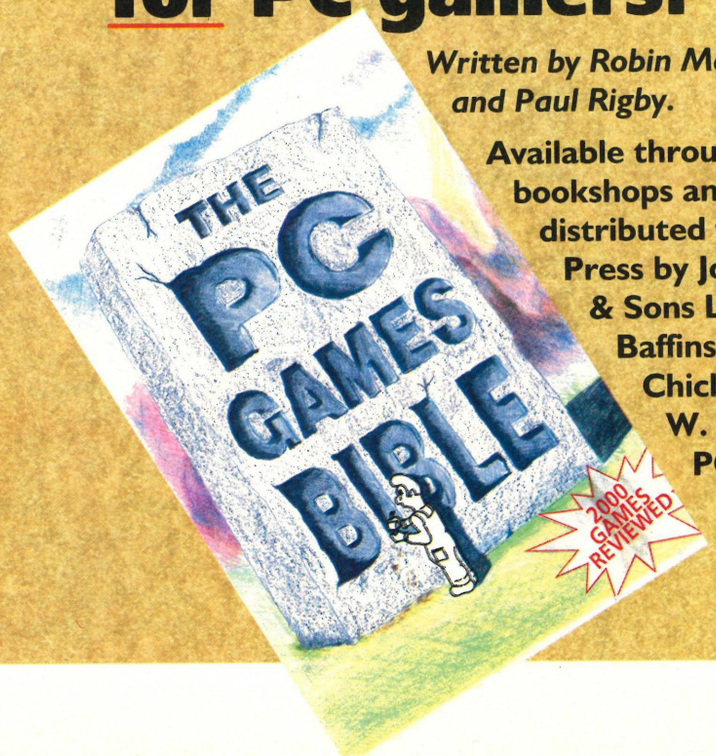
Address.....

.....

Send this coupon and payment (if applicable) to: PC Review, Back Issues Department, PO Box 500, Leicester LE5 0AA

IF PCs A RELIGI
NEED THE PC

At last the definitive guide to PC games written by PC enthusiasts for PC gamers.



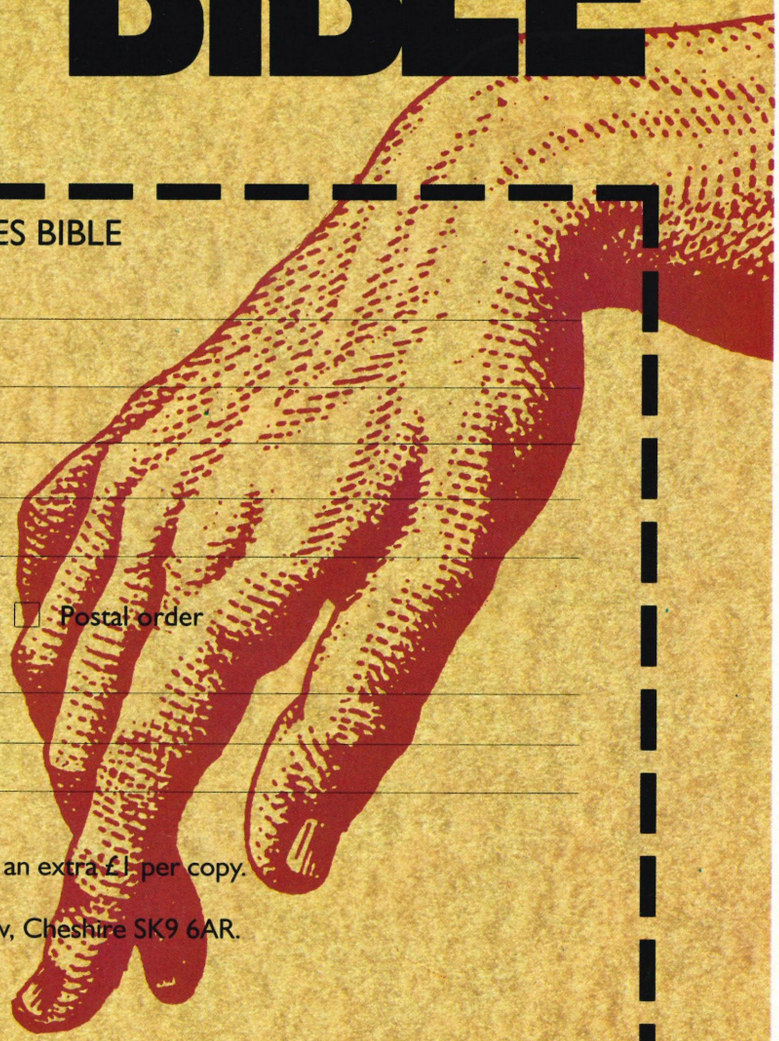
Written by Robin Matthews and Paul Rigby.

Available through all bookshops and distributed for Sigma Press by John Wiley & Sons Ltd., Baffins Lane, Chichester, W. Sussex PO19 1UD.

This unique guide runs to over 300 pages and has a Foreword by Amstrad's Alan Sugar. In it, you will find –

- Reviews of more than 2000 games divided by genre. It's easy to reference all kinds of games from Flight Sims to Beat 'em up, GPGs to Motoring racing.
- Special CD-ROM Section
- Special Education Section
- Only £12.95 + £1 towards post and packaging

RE YOUR ON, YOU'LL GAMES BIBLE



PLEASE RUSH MY COPY OF THE PC GAMES BIBLE

No. of copies required _____

Your name _____

Your address _____

_____

_____

Method of payment

☐ Visa ☐ Access ☐ Cheque ☐ Postal order

Please debit my access/Visa account by: _____

Card number: _____

Expiry date: _____

Copies of the PC Games Bible are £12.95 each, with p+p an extra £1 per copy.
All payments should be made to Sigma Press.
Send all orders to: Sigma Press, South Oak Lane, Wilmslow, Cheshire SK9 6AR.
Telephone: 0625 531035 Fax: 0625 536800

Please allow up to 28 days delivery.

THE PC GAMES BIBLE is available through your bookshop.

SUBSCRIBE TO PC REVIEW

Microprose is well known for state of the art, high quality flight simulators. However, it should be remembered that they have also published some fantastic games from other genres.

MICROPROSE™
SIMULATION • SOFTWARE

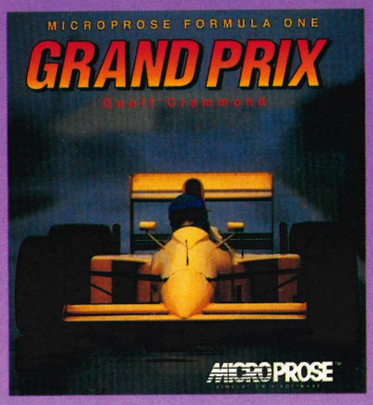
PC Review highly recommends Microprose software and is pleased to offer one of the following brilliant releases FREE - or a top value deal on Formula One Grand Prix - when you subscribe to PC Review!

- **Subscribing to PC Review guarantees delivery to your door of the next 12 issues of Europe's premier PC entertainment guide.**
- **By subscribing to PC Review you can be sure of priority access to essential reviews, previews, features and news stories each month.**
- **Over your next 12 issues we'll be working hard to deliver you the very best in playable demos and shareware.**
- **With our unique editorial mix, you can access our comprehensive reference section and shareware/public domain catalogues.**
- **Subscribe to PC Review and be confident of receiving the ONLY authoritative guide to PC entertainment and much more.**
- **For only £40.00 you will receive 12 issues with cover disk on the format of your choice and your subscription gift - either your FREE game or an exceptionally cheaply priced copy of Formula One Grand Prix.**

FORMULA ONE GRAND PRIX

only £5.00

Have you ever wondered what it would be like to be one of those 26 Grand Prix racing car drivers? Now is your chance to find out with one of the best race game simulations ever - and PC Review bring it to you for only £5.00!! Each car handles

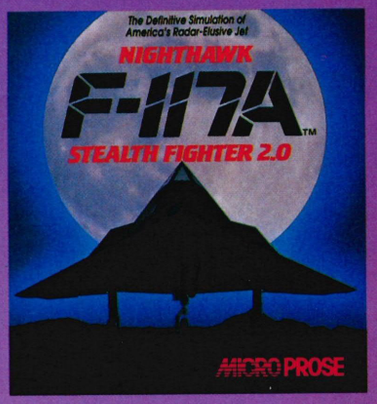


just like the real thing, you can adjust gears, brakes and wings to maximise speed. Experience 16 international Grand Prix tracks in stunning 3D. An amazing simulation and yours for a rubber burning £5.00.

N.B: Please note that you can order Formula One Grand Prix for an additional £5.00 on top of the subscription fee - but you cannot also choose a free game. Choosing to order Formula One Grand Prix counts as your subscription incentive.

F117A

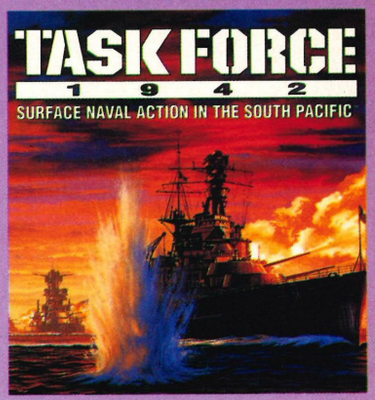
This is the only simulator that could improve on the land-mark combat flight simulator F19 Stealth Fighter.



The same superior game play and design but with much more: true to life new graphics, sound that seems to wrap around you, more worlds to conquer and more scenarios to challenge you.

TASKFORCE 1942

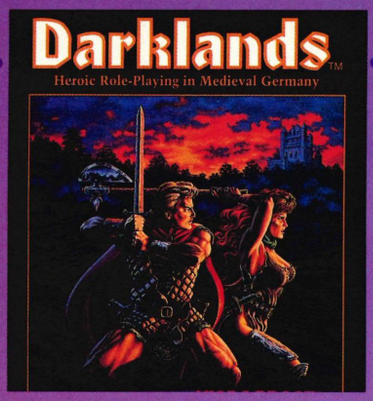
A long lance torpedo rips through the hulk of your flagship. Huge columns of water from enemy gunfire surround your battleship. It's just another day in Task Force 1942. Extensively researched and historically



accurate, this three dimensional game sets new standards in the simulation of warfare at sea.

DARKLANDS

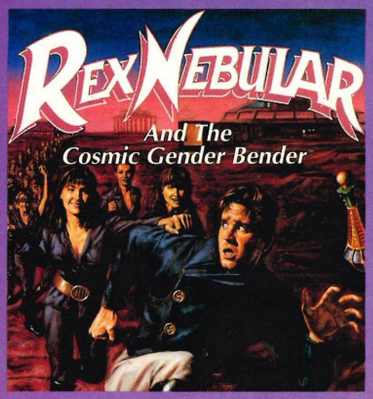
Darklands is the first realistic fantasy role-playing game.



By leading a band of adventurers across the sinister lands of 15th century Germany, you'll encounter the real Middle Ages - steeped in fear, myth and legend. Travel hundreds of miles, visit over 90 cities and watch savage battles unfold before your eyes.

REX NEBULAR AND THE COSMIC GENDER BENDER

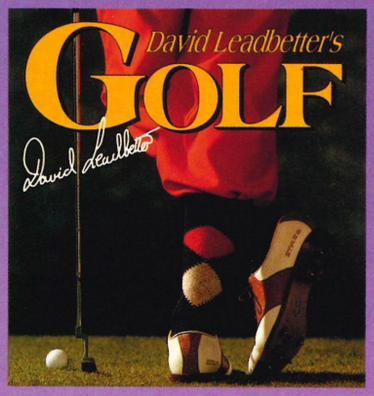
Rex has a problem. His space limo is on a crash course for Terra Androgena - a planet that apparently



does not exist.... Rex seeks a price-less goal, but will he survive the journey? And how will he handle the natives? Can you lend Rex a hand to cope with the numerous demands made on him?

DAVID LEADBETTER'S GOLF

Why go through a box of golf balls every time you hit the course? Improve your game with David Leadbetter's golf. Let the instructor who helped Nick Faldo and Seve Ballesteros become champions help you swing your way to the leader board. With these tournament tested tips, hints and



strategies, you'll raise your golfing skills to new heights as you bring your scores to new lows.

HOW TO PLACE YOUR SUBSCRIPTION

Place your order by completing the coupon (clear photo-copies are acceptable) or send your details on a post-card, or ring our special 24 hour order line on 0858 410 888 and quote your credit card number. When ordering your subscription, please remember to tell us which size cover disk you prefer - 3.5" or 5.25".

SUBS GUARANTEE

If you aren't completely satisfied with your subscription, you may cancel at any time and receive a prompt refund for all unmailed copies.

Your software choice is mailed separately to your first magazine. Please allow 28 days for delivery. We reserve the right to provide you with an alternative game should your choice become unavailable. Free software is ONLY available to UK residents. We advise overseas subscribers to pay by international money order.

Offer closing date:- 14th July 1993

SUBS SUMMARY

12 issues	UK Residents, BFPO	£40.00
12 issues	Europe, Eire - Air Mail	£48.00
12 issues	Rest of World - zone (1)	£58.00
12 issues	Rest of World - zone (2)	£58.00
12 issues	Rest of World - surface	£47.00

ORDER FORM

Please send to PC Review Subscriptions Dept, PO Box 500, Leicester,LE99 0AA (please make all cheques/postal orders payable to EMAP Images Ltd.)

Name .....

Address .....

..... **Post Code**..... **Tel** .....

I would like a subscription for 12 issues of PC Review, please start my subscription from the .....issue (please enter month).
I would like to receive my cover disk on the following format size ❑ 3.5" ❑ 5.25" (please tick one box)
I would like the following subscription incentive:

Formula One Grand Prix *(enclose additional £5.00)*	❑ 3.5" ❑ 5.25"	**source code 0136M**
Rex Nebular & The Cosmic Gender Bender	❑ 3.5" ❑ 5.25"	**source code 0131Q**
David Leadbetter's Golf	❑ 3.5" ❑ 5.25"	**source code 0132U**
Task Force 1942	❑ 3.5" ❑ 5.25"	**source code 0133Y**
F117A	❑ 3.5" ❑ 5.25"	**source code 0134D**
Darklands	❑ 3.5" ❑ 5.25"	**source code 0135H**

Please remember, we reserve the right to provide you with an alternative game should your choice become unavailable.

I enclose a cheque/postal order (payable to EMAP Images Ltd) for £..... Please charge £.....to my Access/VISA Card (please delete

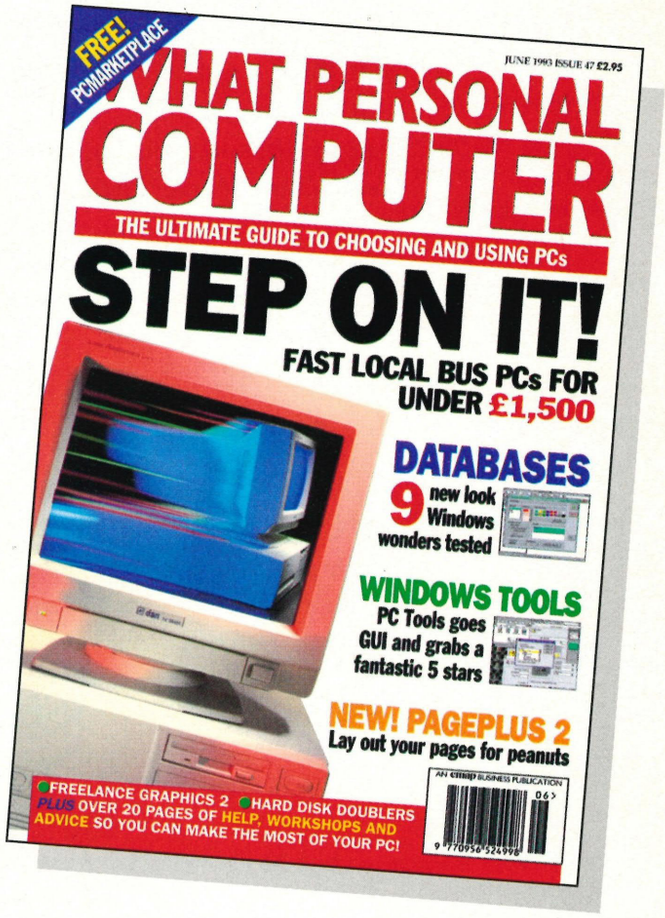
Card Number..... **Expiry Date**.....

Signature : .....

Fulfilment and enquiries : Alan Wells International, Memberline House, Farndon Road, Market Harborough, Leicester LE15 9NR.

Don't look a gift-horse in the mouth!

WHAT PERSONAL COMPUTER – the Ultimate Guide to Choosing and Using PCs – is now even better value for money. Can *you* afford to miss our June and July issues?



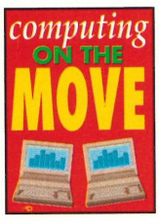
JUNE



Our June issue boasts not one but **two** free cover disks. Both are packed full of utilities and fully working programs guaranteed to send your PC into overdrive.

ON SALE NOW

JULY



Not only a free disk but also an information packed 68-page booklet which tells you everything you need to know about portable computing.

ON SALE FROM 17TH JUNE

PLUS



Don't forget your copy of **PCMARKETPLACE** – Britain's Best Guide to PC Prices – free every month with your copy of What Personal Computer.

AND THERE'S MUCH MORE

Every month **WHAT PERSONAL COMPUTER** is packed full of:

REVIEWS AND BENCH TESTS – The best buying advice from our unbiased product reviews.

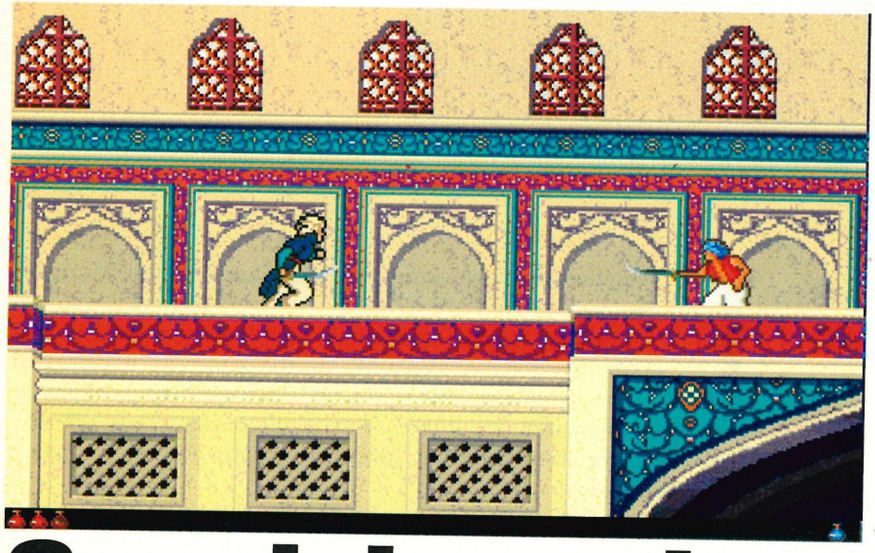
HELP AND ADVICE – Technical problems solved, workshops, and step by step guides.

NEWS – Coverage of all the latest developments in the PC industry.

It's the best value PC magazine money can buy.
Straight from the horse's mouth!

NEXT MONTH IN PC review

Prince of Persia 2



Special preview

Jordan Mechner's sequel to one of the very best PC games of all time.

The future of games design

Find out what the world's top game designers are working on, in Steve Cooke's exclusive report from the US Game Developers' Conference.

Reviews

It's midsummer madness here, with Eye of the Beholder 3, Sensible Soccer, Betrayal at Krondor and Chess Maniac all lined up and ready to go.

PLUS

Get your PC talking: Mike James looks at speech synthesis; hints and tips for Zool, and our second Reviews Compendium.

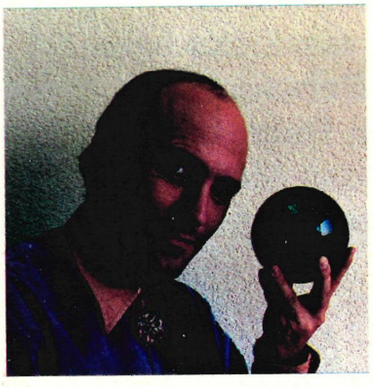
PC Review Issue 21: on sale June 15
Place an order with your newsagent now

Contents subject to change

Chris Crawford's *Classic* GAME OF THE MONTH



Loom



"Loom was a bold attempt to steer graphic games away from their nerdy fascination with obscure puzzles. Brian Moriarty attempted to inject a greater degree of characterisation than is usual for computer games and even some element of artistic content."

Loom, written by the former Infocom maestro Brian Moriarty, was published by LucasArts in 1990, and marked a real step forward in graphic adventures. Not only were the graphics extremely good for the time, but the game also managed to create an atmospheric world, which avoided the usual fantasy clichés. Although Loom lacked some of the action which has now become a staple part of graphic adventures, it has proved an original and enduring game.

Following a half hour introduction on audio tape, the game begins with the members of the magical Guild of Weavers having been turned into swans by a malign force.

Bobbin Threadbare, a young novice weaver, is the only survivor, and Loom is the story of his search for the missing guild and his attempts to put a halt to the chaos which has affected his world. An enhanced version, complete with speech and orchestral music, is now available on PC CD-ROM, priced at £44.99.

PROFILE

Chris Crawford wrote his first computer game in 1975 and sold his first game three years later. Of the 14 games he has had published to date, he will perhaps be best known for classics such as Balance of Power and Patton Strikes Back.

In addition to writing games, he is also the founder of the Computer Game Developers' Conference, the editor of the Journal of Computer Game Design and the author of four books. Crawford is known as something of a games design guru among his peers – his performance presentations at the Game Developers' Conference are always eagerly awaited. Chris Crawford lives in California.

ISHAR 2

Messengers of Doom

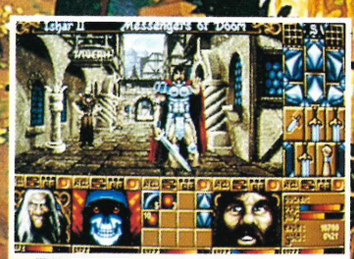
* Several hundred characters.
* Three times larger than ISHAR.
* Genuine medieval city (port, bank, inns, shops, temples, prisons, nightclubs).
* Tree-Cities.
* Mountain paths, with real graded relief effect.
* Complex character psychology (lieing, stealing, murder).
* Day and night cycle.
* Use pet animals as allies !
* Anytime, no penalty save.
* Reuse your saved team from ISHAR 1 !
* Late nights (early mornings ! ?) gauranteed !













Silmarils

* PC & COMPATIBLES : VGA 256 COLOURS, SOUNDBLASTER, ADLIB.
* ATARI ST & STE.
* AMIGA (1 MEG).
* SOON AVAILABLE FOR AMIGA 1200, ATARI FALCON & MACINTOSH COLOUR.

Contact : Daze Marketing 071 328 2762

ISHAR 1 & TRANSARCTICA AVAILABLE NOW FOR AMIGA 1200 & ATARI FALCON : CALL DAZE MARKETING 071 328 2762.

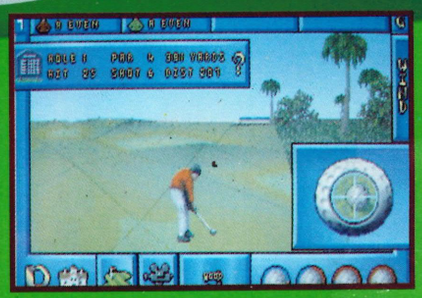
PLAY "THE GREATEST GAME IN THE WORLD"



A GOLF SIMULATION THAT WILL WEDGE YOU INTO YOUR SEAT FOR HOUR AFTER HOUR AS YOU ENJOY THE FINESSE OF THE GAMEPLAY, THE BREATHTAKING GRAPHICS AND AN EXHILARATING ROUND OF GOLF.

INTERNATIONAL OPEN GOLF CHAMPIONSHIP EMPLOYS FEATURES THAT ENHANCE THE GAMEPLAY LIKE NO OTHER GOLF SIMULATION. THE ONLY THING BETWEEN A BOGIE AND A BIRDIE IS YOUR ABILITY. REPLAY YOUR SHOTS FROM VARIOUS ANGLES TO CHECK YOUR TECHNIQUE. SELECT TO PLAY SOLO, OR WITH FRIENDS, FROM SEVERAL TYPES OF





COMPETITION INCLUDING SKINS WHERE YOU CAN PLAY FOR A SUM OF MONEY FOR EACH HOLE. SELECT YOUR CLUB, ADDRESS THE TEE AND STRIKE OFF DOWN THE FAIRWAY FOR A ROUND LIKE YOU'VE NEVER PLAYED BEFORE.

AVAILABLE FOR

CBM AMIGA

IBM PC

ocean®

IN ASSOCIATION WITH

Pringle OF SCOTLAND

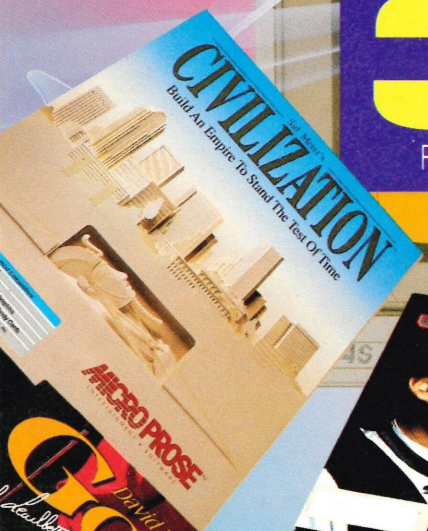
OCEAN SOFTWARE LIMITED · 2 CASTLE STREET · CASTLEFIELD · MANCHESTER · M3 4LZ · TEL: 061 832 6633 · FAX: 061 834 0650

FOR BUSINESS OR LEISURE

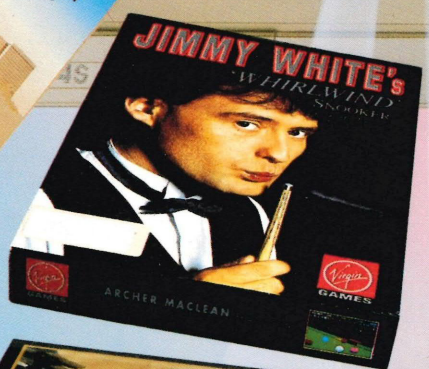
FOR PC OWNERS

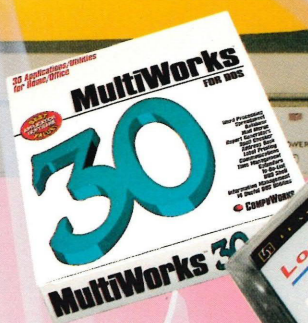
CHOOSE ANY 3 FROM 99p EACH + P&P

















SAVE UP TO £330



ANY 3 FROM 99p EACH + P&P



1 **CIVILIZATION –** Build an empire that stands the test of time and put your strategy skills on the line.

2 **ALONE IN THE DARK –** A spine-chilling adventure takes you into the deepest, darkest reaches of the macabre.

3 **CASTLES –** A superb strategy adventure set in a medieval world of war and intrigue.

4 **GFL CHAMPIONSHIP BASEBALL –** Select your team and control the action of this ultimate ball game.

5 **LEGEND OF KYRANDIA –** On the island of Kyrandia the King and Queen have been murdered. Only you can save the throne!

6 **SOCCER STARS –** A feast of football with *Kick Off 2, Microprose Soccer and World Championship Soccer.*

7 **CURSE OF ENCHANTIA –** A superb graphical adventure that transports you into a bizarre fantasy world.

8 **PACIFIC ISLANDS –** Four tank units must liberate 5 Pacific islands from enemy forces – and you're in command!

9 **LEMMINGS –** The original classic game of award-winning, cliff-leaping addiction!

10 **OH NO! MORE LEMMINGS –** 100 more levels to drive you crazy in this highly entertaining sequel.

11 **ANOTHER WORLD –** An atmospheric adventure that enters a new dimension in computer gaming.

12 **HEIMDALL –** Grab your horned helmet and conquer the world in this award-winning, role-playing Viking adventure.

13 **INTERNATIONAL SPORTS CHALLENGE –** Go for gold in 6 exciting sports – diving, shooting, show jumping, cycling, swimming and marathon!

14 **WRATH OF THE DEMON –** You have been summoned to defend the realm, rescue the princess and rid the kingdom of the evil demon.

15 **EPIC –** Wage war from the cockpit of your spacefighter in this 3D sci-fi extravaganza.

16 **DAVID LEADBETTER'S GOLF –** Improve your game with lessons from the man who coaches the pros.

17 **TWILIGHT 2000 –** Test your political and leadership skills in this post-apocalypse thriller.

18 **JIMMY WHITE'S WHIRLWIND SNOOKER –** The fastest, smoothest snooker sim ever with four skill levels from beginner to world champ.

19 **GOBLIINS 2 –** Mystic mayhem as Fingus and Winkle, two irresistibly funny Gobliins, search for a young Prince.

20 **LETHAL WEAPON –** All the best action from the hit movie trilogy in this fast, explosive platform game.

21 **DARKLANDS –** Your quest is to lead a band of adventurers across the sinister, violent and chaotic lands of Medieval Germany.

22 **HARRIER JUMP JET –** From single-mission sorties to full campaigns, this flight sim puts you in the hot seat of the Harrier GR7 or the US Marine Corp's AV-8B.

23 **GUNSHIP 2000 –** Command seven of the US Army's helicopters in this exhilarating simulation.

24 **SILENT SERVICE II –** A superb submarine simulation featuring digitised speech and graphics.

25 **AIR WARRIOR –** From biplanes of WW1 to jets of the Korean War, experience the thrills of flying. Modem recommended

26 **M1 TANK PLATOON –** Take control as commander, gunner or driver of four of the world's best battle tanks.

27 **BIRDS OF PREY –** With 40 different missions and a huge range of hi-tech planes to fly, this is one of the best flight sims

28 **MiG-29M SUPERFULCRUM –** Fly the world's most deadly fighter in a highly realistic war theatre.

29 **EXPRESS PUBLISHER FOR DOS –** The power of the press at your fingertips with this comprehensive DTP package

30 **GUIDE TO DTP –**This book explains the basic principles of Desk Top Publishing – design, layout, painting, graphics and more.

31 **WORDSTAR RELEASE 5 –** If you've got Wordstar this book will help you get the best from it. Paperback book.

32 **EASY BOOT –** Allows you to create different configurations so you can reboot your PC with the right memory every time.

33 **VOLKSWRITER 3.2 –** A comprehensive WP package that supports up to 400 dot matrix printers, with 170 000 word spell checker.

34 **WALLPAPER ART GALLERY FOR WINDOWS 3.0 –** Window dressing for your PC! Jazz up your background screens with over 6 megabytes of dazzling graphic art images.

35 **TEACH YOURSELF WORDPERFECT –** A fast and easy way to learn this WP system. Paperback book and disk.

36 **TEACH YOURSELF LOTUS 123 –** A series of practical activities on the Lotus spreadsheet package. Paperback book and disk.

37 **MS-DOS 5 & WINDOWS 3.1 MADE EASY –** This step-by-step video guide to the best selling operating systems will put you in command of your machine.

38 **TECHNICAL GUIDE TO WINDOWS –** Invaluable information for Windows users. Paperback book.

39 **NEWNES WINDOWS 3 POCKET BOOK –** A comprehensive yet portable guide to the vast Windows system.

40 **NEWNES PC USER'S POCKET BOOK –** Understand how your machine works and how to fully use all its features.

41 **NEWNES PC PRINTERS POCKET BOOK –** This handy reference guide will help you choose the best printer for your needs.

42 **NORTON COMMANDER –** Take the complexity and drudgery out of using DOS with one of the most popular system management products around.

43 **MULTIWORKS 30 FOR DOS –** All your Home and Office software needs in one comprehensive package.

THE VERY BEST NAMES AT THE VERY BEST PRICES!

BUSINESS REPLY SERVICE LICENCE NO. SN234

21

The Home Computer Club
Swindon
SN3 4BR

ANY

99p

ROM

EACH + P&P





ystic mayhem as Fingus and Winkle, two
oblins, search for a young Prince.

N – All the best action from the hit movie
explosive platform game.

Your quest is to lead a band of adventurers
violent and chaotic lands of Medieval

' JET – From single-mission sorties to
s flight sim puts you in the hot seat of the
US Marine Corp's AV-8B.
– Command seven of the US Army's
exhilarating simulation.

E II – A superb submarine simulation
speech and graphics.
From biplanes of WW1 to jets of the
ence the thrills of flying. Modem

OON – Take control as commander, gunner
the world's best battle tanks.
– With 40 different missions and a huge
nes to fly, this is one of the best flight sims

28 MiG-29M SUPERFULCRUM – Fly the world's most deadly fighter in a highly realistic war theatre.

29 EXPRESS PUBLISHER FOR DOS – The power of the press at your fingertips with this comprehensive DTP package

30 GUIDE TO DTP –This book explains the basic principles of Desk Top Publishing – design, layout, painting, graphics and more.

31 WORDSTAR RELEASE 5 – If you've got Wordstar this book will help you get the best from it. Paperback book.

32 EASY BOOT – Allows you to create different configurations so you can reboot your PC with the right memory every time.

33 VOLKSWRITER 3.2 – A comprehensive WP package that supports up to 400 dot matrix printers, with 170 000 word spell checker.

34 WALLPAPER ART GALLERY FOR WINDOWS 3.0 – Window dressing for your PC! Jazz up your background screens with over 6 megabytes of dazzling graphic art images.

35 TEACH YOURSELF WORDPERFECT – A fast and easy way to learn this WP system. Paperback book and disk.

36 TEACH YOURSELF LOTUS 123 – A series of practical activities on the Lotus spreadsheet package. Paperback book and disk.

37 MS-DOS 5 & WINDOWS 3.1 MADE EASY – This step-by-step video guide to the best selling operating systems will put you in command of your machine.

38 TECHNICAL GUIDE TO WINDOWS – Invaluable information for Windows users. Paperback book.

39 NEWNES WINDOWS 3 POCKET BOOK – A comprehensive yet portable guide to the vast Windows system.

40 NEWNES PC USER'S POCKET BOOK – Understand how your machine works and how to fully use all its features.

41 NEWNES PC PRINTERS POCKET BOOK – This handy reference guide will help you choose the best printer for your needs.

42 NORTON COMMANDER – Take the complexity and drudgery out of using DOS with one of the most popular system management products around.

43 MULTIWORKS 30 FOR DOS – All your Home and Office software needs in one comprehensive package.

44 HARD DRIVE MANAGER – Maximise the performance of your hard drive with this complete management system.

45 SCREEN SAVER PLUS – Eight programs that will protect your monitor plus 4 bonus utilities and 5 DOS file utilities.

46 TIME OUT – If you haven't got time, get *Time-Out* – the per - sonal assistant who never forgets! It organises your day at the touch of a key.

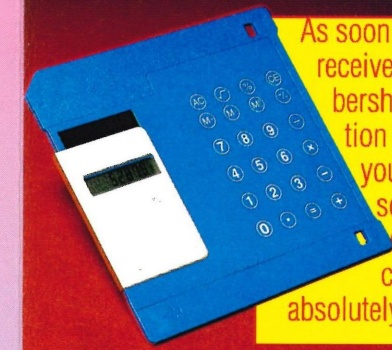
47 QUICK TEMPLATE – Can't find a function on a popular program? Here's on-line help when you need it, giving you instant access to function key commands.

48 HOME ACCOUNTS – You've got no excuse for going into the red with this home finance planner.

49 PETER NORTON'S PC PROBLEM SOLVER – From finding commands to recovering damaged data, problems solved at a glance! Paperback book.

50 THE PC USER'S COMPANION / MICROSOFT COMPUTER DICTIONARY – Two superb books providing comprehensive of information for getting the most out of your PC. Paperback books.

FREE DISK CALCULATOR



As soon as we receive your membership application we'll send you this superb solar-powered disk calculator, absolutely **FREE!**.

THE HOME COMPUTER CLUB

To: THE HOME COMPUTER CLUB, P.O. Box 199, Swindon, SN3 4BR

Please accept my application and enrol me as a member of **The Home Computer Club.** I wish to receive the *Program* magazine reviewing future items for the PC.

Send me the introductory items whose numbers I have printed in the boxes below.

			51 FREE GIFT

Please also send me the FREE GIFT.

Should I decide to keep them I understand you will charge me the Special Offer prices (plus a total of £2.25 towards postage and packing). However, if I am not completely satisfied I may return them within 10 days of receipt. My membership will then be cancelled and I will owe nothing. As a member I agree to buy at least one item from each *Program* magazine, which I will receive approximately every eight weeks. I would like to receive my introductory offer and future selections on the following format:–

3.5" disk ☐ P 5.25" disk ☐ Q (please tick one box only)

I understand that the minimum length of membership is for one year. If after this time I wish to cancel, I may do so by giving one month's notice in writing. All software and books are described in advance in the free club magazine and are offered at up to a maximum of 50% off recommended and published prices (plus postage and packing).

I am over 18 years of age (if you are under 18, membership must be in the name of your parent or guardian. Please obtain their permission). Offer available in the UK only.

Mr/Mrs/Miss

BLOCK LETTERS

Address

Postcode

PLEASE SEND NO MONEY NOW · NO STAMP REQUIRED

BCA SOFTWARE

The best names – the best prices

2XSEE



BUSINESS REPLY SERVICE
LICENCE NO. SN234

The Home Computer Club
Swindon
SN3 4BR

MORE THAN JUST FUN AND GAMES

Choosing software has never been simpler! Our best-ever selection – over 50 top titles – means it's easier than ever before to escape into the fantasy world of role-playing games. And it doesn't stop there – with The Home Computer Club you'll find more than just fun and games. Every issue of the club magazine includes a wide selection of products for business, educational programs, DTP packages, simulations and games, and there is also a PC Library offering a variety of useful books and guides on all aspects of computing. In fact The Home Computer Club can offer entertainment for all the family the whole year round!

We're so confident that our service is the best we are offering a special introduction to The Home Computer Club. Simply choose any three products from 99p each (plus p&p) and you could save up to £330.00. Not only that, along with your introductory selection we'll send you a FREE DISK CALCULATOR

FREE MAGAZINE

When you join The Home Computer Club we'll send you a free club magazine. Called *Program* it is a full-colour review of the latest and the best business, games and practical software available. You'll receive the magazine approximately every two months. Your only commitment is to take one item from each issue of *Program*, and your minimum length of membership is just one year.

MASSIVE SAVINGS

We are able to offer substantial discounts on programs and sometimes you can save up to 50% on manufacturers' prices! Whether you are buying for your own use or for your company you can make massive savings, and build a software collection that is second to none.

CLUB GUARANTEE

With so many standards available for the PC, you'll naturally need to know whether a particular piece of software will work on your machine – that's where our expertise comes into its own. We test programs so you can be sure that when you order you're ordering the right thing. What's more, in the rare event of a program being faulty we'll replace it with the minimum of fuss. You're fully covered by The Home Computer Club's unconditional NO FUSS, replacement guarantee. Your only obligation is to buy one item from each issue of *Program*, which you'll receive approximately every two months – minimum membership is for just one year.

THE HOME COMPUTER CLUB

The Home Computer Club Swindon SN3 4BR

JOIN TODAY

All that remains is for you to fill in the coupon and send it to us (you don't even need a stamp). We'll send you your introductory selection plus FREE DISK CALCULATOR along with your club magazine *Program* and your membership guide. So make your selection and join The Home Computer Club – the best way to buy software. Your assurance of good service is that The Home Computer Club is part of BCA which has over 25 years' experience of providing quality and value to our 2 million members.

COMING SOON

Secret of Monkey Island 2, World Atlas, Design Works, ADI French.



