

Atari ST
Amiga
CBM 64/128
Spectrum
Amstrad
IBM + more

ISSUE TEN • JULY 1988 • £1.50

ACE

ADVANCED • COMPUTER • ENTERTAINMENT

MUSCLE UP!



Sports sims to get you in shape for the Summer

HOW do they crack those games?

WHY are they breeding viruses?

WHAT will they think of next?

HACKERS

Spindizzy
Cassette
(Not for export)

FREE!

SPINDIZZY

The incredible hit game
Electric Dreams
is complete on

AMSTRAD
SPECTRUM
COMMODORE

ATARI ST +
AMIGA owners
claim your FREE DISK
see page 71

If your cassette is missing
see page 26

Full game instructions on page 58

ACES HIGH

Interceptor wins the flight
sim dogfight



NEW MUSIC MICRO!



The year is 1987; Robin, an 11 year old boy with phenomenal psychic powers is in a trance. His mind has left his body and travelled through time, taking him to a post-holocaust Southampton ruled by Fascist forces — The System. Everywhere is bare, scorched and desolate. He is totally alone!

The friends he left behind are powerless to help him as they stand over his inert body, watching transfixed as his fluorescent green eyes reveal like a TV screen the horror and devastation of his surroundings.

Will Robin survive?

Can he blow up the enemy generator, defeat The System, free the prisoners and return to the present?

He has just 24 hours to save the world!

NEW FEATURES

- Icon driven
- Intelligent interactive characters
- Full OOPS command
- Optional RAM save all versions
- Auto door opening
- Full graphics all versions
- Extremely user friendly
- Full D & D combat sequences

ADDITIONAL / OTHER FEATURES

A FULL OOPS COMMAND SEQUENCE FOR MINICOMPUTER, PLUS A 10 PAGE SUPERBAGA REFERENCE OF THE STORY	
C64/128 Disk	19.99
C24/128 Cassette	14.99
24 Spectrum 48K/128K + Cassette	14.99
Amstrad CPC Cassette	14.99
Amstrad CPC Disk	19.99
Apple II	24.99
Amstrad PCW	24.99
Amiga	24.99
MS-DOS	29.99

A flight into a nightmare— **MINDFIGHTER**



Mindfighter storyline and characters
1987 Strategic Simulations, Mindfighter
computer game © 1988 Activision Inc.
Published and distributed by Activision
UK Ltd. All rights reserved.

ACTIVISION PACKED ADVENTURE GAMES



**ABSTRACT
CONCEPTS**

SPECIALS

31 License to Thrill

Shoot the film, write the book, win the race, blow the drums, get a hole in one... and then make a million from the computer game. Peter Connor explores the lucrative world of games licensing...

37 Muscle Up!

ACE pumps iron with a delightful round-up of over 12 specially selected sports simulations - grab that joystick and sweat it out.



Screeners *Blazing 88* - just one of over 12 environmental sports titles.

72 Hook A'Track

Illegal entry, piracy, bombs, viruses... Andy Wilson plugs into the hackers' network and discovers the hidden truth about computer abuse. He wonders: these people-and up to them!

SPINDIZZY

The month's inevitable free cover cassette!

What can we say? It's one of the most playable games ever - it's all the cover, and it's completely free. Check out page 76 and be amazed.



ACE

INTERFACE

7 News

Get your ear to the ground and catch up on what's been done and what's been said in the world of computer entertainment... plus special reports from Pecos, India and Aldermaston, Bucks.

18 Previews

ACE's feature in the future gives you a sneak pre-view of US Game's Roadbusters plus a host of other games you can't buy today, but will be playing tomorrow.



US Game's Roadbusters - check out the traffic jam on page 18.

103 Letters

Editorial-stimulated, the Committee 66 defended, and a strange note from St. Junipero.

130 The Bitter End

Fastively the final page of the magazine. Are you an ACE card possessor?

SIGHT...

21 Photon Torpedoes

Plasma Patters the Arrog and Spectrum 512 for the ST - two of the most powerful joint programs to date reviewed by graphics expert Brian Walker.



...AND SOUND

90 New Music Micro

Reviews have been circulating about a new Amstrad music micro. ACE visits Fair Technology in Cambridge and witnesses a machine in the making - but will it be an Amstrad?

93 Midi Panel of Experts

Mark Jenkins makes more music for muddled MIDI users.

GAMEPLAY

41 Screen Test

In Electronic Arts' interactive best combat flight sim ever? Check out its staggering 834 ACE rating and then join the ACE team as we 100 bombs in Cashemerk, burn rubber in ST. Outrun, shoot the moon in Earthlight... and then make a film about it in Spring Charlie-Clapin.



Page 41: Show the skies in film superior Interceptor.



Page 42: You better believe it's the ST version of Nelson. Really slow, but not in the great original.

36 Arcade Ace

Cor, shake a leg and an arm, and just about everything else. Pete Connor flies back and takes it like a man in the new Super X Simulator.

83 Play-By-Mail

Access universal dominion. Cool '89.

85 Tricks 'n' Tactics

Inspectionary-gatory to help you crack Amstrad's ATX, Migration, Juggo Boy and many others. ACE tips you the ultimate secrets of today's top-selling games and sets your high-scores soaring.

97 Adventures

Pick up your phone, dial a number, visit other worlds, meet real people, and BUD them. ACE presents the definitive guide to Multi-User Games including MUD (Mud and Truth).

BUY LINES

12 The ACE Card

Every month we splash out on hundreds of CDs, with bonuses. Grab your ACE card, check out the wrong numbers, and get saved.

14 Competition

Amesl Formula One Test Drive Deluxe Flight Simulator™ - just some of the recent **blockbusters** from Electronic Arts. ACE gives you the unique opportunity to win \$10000 Electronic Arts release for a whole year, a prize worth at least \$2000 to most other units and lots more in added value.

94 Special Offers

OK, you don't have to buy the stuff, you know. After all, we're only offering some of the **best games available**, with **fast-speed delivery** AND up to £400 off a single title. So just close your eyes, turn the page, and let everybody else grab the best multi-order bargains around.

93 Subscription

What?!! I started thinking US Got games - half price! Plus the amazing perks of ACE shipping through your letterbox every month?!! I am so glad!! And make your wildest dreams come true.

ACE PINK PAGES

107 Buyer's Guide

Just for complete in your collection? Over 100 ACE recommended games complete with non-reviews and price details so you can buy with confidence and get the games you really want to play. And if you need a new computer to play them on, check out our hardware upgrade guide.

124 Random Access

To read the magazine, solve the puzzles and win a prize.

127 Readers Pages

That means you. All your secret desires laid bare in our mail ads, plus help for stranded adventurers in the ACE helpfiles.

THE ACE CARD

Win an Atari ST!

Turn to page 11 for details of your chance to win one of two Atari ST's we're giving away - and check The Winner Card to see if you're one in a million as any of the staggering 24 software prizes we offered last month.

ARE YOU A WEIRDO?

Of course you are. Everybody who plays computer games is a weirdo. You're one of those people who actually enjoys that mindless rubbish, aren't you? Shooting aliens...all that hideous racket...waste of money...I expect you probably pulled the rings off flies when you were little and watched TV ten hours a day. What a moron!

Well, that's what a large proportion of the population still seem to think. Here at ACE we get sick and tired of concealing our true identities at cocktail parties, pretending to be accountants or ad executives, while at the same time we're secretly conducting a slow-motion mental replay of the last ship down in Xenon.

Yes, thank you Mrs Codeveloper-Smythe, the salmon mousse was delicious...Damn!! a quick swerve to the left would that fuel dump might have saved me...must try that one out next time...Oh yes, and how is little Jimmy?...just wait till I get him in my sights...Computers?!!! Good gracious no, horrible things, never touch them...because I'm too busy gripping the joystick, coffee - get back to the canapes before I unleash a smart bomb and...Of course! I would just love to hear Jimmie play Auld Lang Syne on the harmonium..'

...and so on and so on. You know how it is...

But it needn't be like that. Soon even the Codeveloper-Smythes will succumb. Guess which machine the software houses are currently getting all worked up about - the PC, that's what. Millions have been sold and now even PC owners are getting fed up with spreadsheets and loading up Ellis, or Hitchhiker's Guide.

Of course, the Codevelopers have probably got a PC in their drawing room. It may even have a modem. You might have a modem too. You could log on and...

...smart bombs away!

Future Publishing Ltd

4 Boken Street

BATH BA2 1EQ

Tel 0225 446034

Fax 0225 446010

Telexcom Gold 04737183

Postal/Microsoft 045 074 011

Contributors: Peter Connor, Dave Cook

Reviews: Sellar, Andy Smith

Production: Sellar, Neil Lester

Staff Writer: Andy Smith

Art Editor: Trevor Gilman

Art Team: Angela Neal, Sally Muddings

Advertisement Manager: Jonathan Jones

Advertising Sales Executive: James Dixon

Publisher: Colin Inneson

SUBSCRIPTIONS: Single (Direct Mail, PO Box 1, Posthead, Bristol BS20 9BQ, 0202 666637 - 5PM only, 40p/issue) (Cheque/Debit) The Old Bank, Broomfield, Barnham, T411 1TY, 0456 750111 - CD/DVD ONLY (CD/DVD News) Newsline, 85/86 West Road, Broomfield, CO1, 0957888/0908 0M Distribution, 1075 Finch Gardens, London SE26 5DL, 0171 6611115 - FUTURE'S Choice First Offer, Postcode: 0 FUTURE PUBLISHING LTD 1998 - No part of this publication may be reproduced in any form without our permission.

ATARI ST

EXPLORE THE

OF

OC

You've plane had-died and on a mountain in a plateau somewhere in deep, old Tibet. You and your companions are alive but recovery from the impact is short-lived—a large of water is rising toward you, so it gets closer you rub your eyes in disbelief—is a Dinosaur—where are you... and what? Now you learn to survive in a world surrounded by modern life—a world frozen in time—surviving graphics and starting action in this thrilling, riveting game.



ARMY MOVES

You are one of the Elite—a hand-picked, crack trooper in battle against a formidable enemy. You'll need all your skill to take advantage of every situation, determine to keep on going where others would fall and courage to face the countless hazards that await in enemy troops, helicopters and artillery. And if you survive, Army Moves you'll have some great tales to tell.



AND BEAT
HIGHEST
YOUR



£19.95
EACH



THE TREASURES

THE



The Award-winning film by Oliver Stone has been ingeniously transcribed to the software entertainment medium creating a Platoon® Computer Game. Hailed as the "Best Film" (even to date) — the program has received brilliant reviews on all formats. Special bonus pack containing a FREE 16-page game picture and audio cassette of the iconic Robinson's classic song "Tracks of my Tears".



BEYOND THE HEIGHTS OCEAN



the name
the game



Ever fantasized... and desire equipment similar to the original ARKANOÏD game? Ocean is controlling DoH back to life, and occupying the huge space craft ZARC, has introduced Universe ARKANOÏD into space fighter MIXTIC runs through intelligent computer data until it finds the answer to the threat... "VARS 2" is launched and speeds towards the threatening alien presence, before it can extract its revenge. "The Revenge of DoH"



MUSIC MICRO, PLEASE



THE BIG MATCH

If you're going to produce a soccer game that's a launch at the same time as the European Championships, it's all seems like a good time to do it. Even better if — in the tradition of Gianfranco, Gary Lineker, Peter Shilton, Bryan Robson and Michel Platini — you can get a soccer star to endorse the product.

Grandson have got both. They're bringing in Peter Beardsley's European Football around the 10th of June — just when things get going over in West Germany.

The game is essentially an arcade-style soccer game, but with a 'tournament' feel and allowing you to play other European teams up to the finals of the competition.

The arcade part is in the usual mode of control passing to the player named the ball. A Grandson spokesman commented that the game should feature 'some of the most animation' you will have seen.

The game should appear first on the Amiga ST, then the Amiga, at around £20. A USA version will follow at the end of June (US \$5 late sale, £14.95 dual) with Amstrad, Spectrum and MSX appearing towards late summer. Peter Beardsley is expected to make a number of general appearances to support the game's launch.

The industry has, as usual, been swash with rumors about the trademark from Amstrad. Following our suggestion that the company might release a games console, industry commentator Guy Kewney recently reported that Alan Sugar's next venture would be a Spectrum of with musical capabilities.

As usual, there's a lot of confusion misinformation behind all this. Amstrad are quite adamant that they have nothing scheduled at the moment — but then that doesn't really mean anything. However, ACE can reveal at least part of the truth behind the rumors: there *is* a musical micro in the making, but it isn't necessarily for Amstrad's — check out page 88 for the full story.

Meanwhile, the Amstrad rumors continue: 'They've got ten releases coming up,' declares Code Masters' Bruce Beveridge, 'one pitched just above the current Spectrum, and one just below...'. Other magazines have joined in the story speculating that the Spectrum of will be a 32KB machine with a high-speed 200, ST type graphics... built in washing machine... etc... etc. Personally, we doubt the reality of Plat's computer detailed later in this issue is a bit more interesting than industry speculations, but there's no doubt that the rumors certainly swirling around the Amstrad office — with the space for news of the file.

A C E N E W S

PIRANHA SINKS

Latest software house to sink is Piranha, the label set up by book publishers Macmillan to dip the corporate toe in the games software market.

With the name conjures up images of aggressive marketing, Piranha never really got the mustard in the world of games. His were few and far between, with the result that the Macmillan brand pulled the plug on the project.

Piranha's demise means that the virtually completed games of Peter Jones, Ray of the Bowers and an ST version of Flunky are up for grabs. There's no news as yet on any potential purchasers.



There's an unexplored boom in the non-polar entertainment industry thousands of people in the UK have bought high power machines that can handle 16-colour game screens or (as in an ST-1) and they're loving them for games!

What are these games, high-performance (what?) PCs like VGA, PC's, IBM compatibles made by some manufacturers like Amstrad and Spas. You can buy them in the High Street, mail order and, for such the same price as an ST or Amiga system, they can run a larger range of software than either and they'll make great games machines if they get the chance - surely don't they?

The problem lies in how people see PC clones. ACE (last called them 'toy') back issue 1, and there's an element of truth to the charge. Games like Falcon, Optimaty and a

some feisty duty games too. As it stands they're still got as much to offer as any other machine out there.

In the UK, games tend to be a lot more particular, getting them to buy PCs instead of comparably priced Amiga- or ST's would be at best impossible. That's why software houses have an increasingly strong bias into the gameplaying market in making PC systems. An awful lot of PC users don't play games, or even get to hear about them! (see Microsoft's Daily Cosmos, but we are making inroads). Perhaps the answer is to produce games that fit in with other ways of using the PC. Top-up games like Microsoft's Tetris can be held in memory at the same time as a serious program like a spreadsheet or wordprocessor, ready to spring into life at the touch of a key when the user gets bored. Other games need more of the computer's attention but



Falcon (Optimaty included) is its still unbeaten ST's winner - and it's looking good already!

PC POWER

great version of Duke have shown us that the machine can be really exciting, but the fact is that PC super in the country are still largely after wordprocessors, databases and spreadsheet files.

Across the Atlantic things are very different. Cheap PCs are seen as general purpose home machines, not toys, and most of them will sell and perform games at one time or another. It makes sense, really. PCs have the largest software base of any machine in the world, and modern clones have the power to run

can still co-exist with serious job-app programs like Wordstar or PC Outline.

VIDEO CARDS

There are several different graphics standards for the PC, but the main one for games is still the aged Color Graphics Adapter (CGA) standard. This offers a 320 x 200 pixel four colour screen very similar to the four colour mode on an Amstrad CPC. Though it's still to be seen in the one in the Amstrad PC 164 can show three graphics modes a VGA screen at a far odd speed - PC offers a great example of this - the display simply can't compete with the 16 colours of an ST screen or the 32 that many Amiga games offer.

The CGA's days are numbered now, mind you. Increasingly, cheap PCs like Amstrad's PC 164 are fitted with the Enhanced Graphics Adapter (EGA) as standard, and the CGA's an altogether more impressive beast. It can offer screens with resolutions of up to 640 x 350 pixels, or 16 colours for a single 640. The ST and Amiga may have more colours than this to choose from, but the ST can only manage that kind of resolution in mono - and the Amiga needs a special monitor to display more than 256 lines on the screen without flickering.

That's all good news for graphics buffs - a PC 164's a serious rival for the Amiga as an art machine, if its detail rather than colour that you're after - but game playing fans will be more interested in seeing the speed the PC can move its graphics around it. On the face of it, the ST and



State (pictured) shows the kind of work it can do on the VGA adapter computer.

Amiga with their Motorola 68000 processors should convincingly favour the PC here - but things aren't always what they seem.

PROCESSOR SPEEDS

The 68000 is not the fastest chip in the world, and at comparable clock speeds the 68000 will generally show it a clear pair of heels. The compatible 80086 and 80386 can offer substantially higher performance, but only at a price beyond most people's pockets. In any case they've got competition of their own in the 68000's faster cousins, the 68010 and 68015.

The 68000 family's speed comes from the fact that they were designed from the outset to handle 32 bits (that's four bytes) of data at once. The 80086 took a lot of a year later here it has to break 32-bit lumps of information down into two 16-bit halves. This complication still works out faster than the 68000's pure 16-bit approach when there's a lot of data to be moved, and screen-handling's just that sort of situation.

A typical EGA game screen - 500 x 350 pixels in 16 colours - takes

up just as much RAM as an equivalent ST or Amiga screen, and the size of a screen tends to determine how much work the processor needs to do. The ST and Amiga can really get moving on those wide-open spaces of screen memory - but what happens the PC here?

EGA ADVANTAGES

Strongly enough, the design of the PC's video hardware gives a slight edge (it's not against the nearest machines. The 68000's only advantage is that it can access four bytes of screen RAM in one go (more or less) - but thanks to the clean design of the EGA board, the 68000 can do this too!

When it comes to moving blocks of the screen around, drawing lines or filling large areas of colour, an 80086 EGA PC like the 1640 normally works out at least as fast as the ST or Amiga. Its screen can take conventional gaming tiles - nobody on sports handling - but when it comes to the headline-making solid 3D graphics work coming so much more of these days, the 1640 can certainly hold its own.

THE SOFTWARE GAP

The PC's total sound performance is certainly a black mark against it, but with the amount of graphic power available the PC's real hand-out as a games machine isn't hand-outs at all. It's software. Just as the ST or Amiga would do fine as business machines if they had a better software base, so an EGA PC clone would make an excellent choice for gamers if only more software used the graphics standard fully. There's already the literature out there to write those games, if only the industry could move the UK users into playing around a bit more. ■

MESSY DIVORCE

Following our report last month that the marriage between CRL and EA was on the rocks, news has broken that divorce has taken place - and a very amicable one too.

CRL, are alleging that EA has been a bit of money, under the terms of the distribution agreement signed a year ago. EA are countering with the claim that CRL's games had won't of the 'high industry standard' stipulated.

Both sides counter with are now being as CRL, but for alternative means of distributing their games.



HORACE LIVES ON...

The Maharashtra Industrial Development Company near Pune. One of the buildings in the background supplies the wheels of taxis with Spectrum machines - the rotation drives in the foreground result from a survey and sales for parts to pay for the factory under the Bombay building. The factory has the capacity to manufacture about 40 machines a day but import duty of up to 20% on parts makes the machine expensive - about 1500 cost.



Some parts of the world are just a hoppy-essence behind the rest when it comes to computer entertainment. ACE recently paid a visit to a country where Mexico is still doing down the big slopes and Monogam (remember them?) Full Thriller is currently top of the charts.

The country's kids, and for the last year or so a small company called Garfield Electronics have been churning out Spectrums for the local population of 850 million people. Unfortunately the statistics of real life soon whittle down the size of the market: 98% of the population earn less than US\$ a week, and 73% wouldn't be able to read messages on screen even if they

came across a computer in the first place.

The firm's discouraged Dealer and distributors Computer Point. Top of the charts are Full Thriller, Chequered Flag, Peter's Night Simulator and... Saboteur. Games sold amount to each title a week's salary for someone on the poverty line. Street of the games are expertly printed - even the distributors seemed unimpressingly anxious as to who the original publishers were of the games they sold.

Meanwhile, business is booming. There's just one ten machines to Bombay's announced manufacturer of M. Blue triumphantly 'demands' is going through the roof.

TRIPLE FORMAT DISCOVERED

First came dual format STAtunga disks, now Level 5 have gone one further and developed a disk loading system that enables the same disk to be used simultaneously for Spectrum +3, Amstrad CPC, and Amstrad PCW machines. Furthermore, unlike other systems, the new format uses only one side of the disk, with each computer sharing data. Machine-specific code for each mode is kept in special 'partitions' on the same side while the other side of the disk holds compressed graphics data.

Even more intriguing is the fact that those people purchasing the new system will be able to use it to convert earlier Level 5 disk-based software published by Rainbow onto different machines. It's hardly new, however, just how useful being able to change an Amstrad CPC disk to Spectrum +3 format will be for anyone other than the pretty small minority of users who have both machines.

It's all made possible by the fact that the three machines use the same disk hardware, so the actual tracks on the disk are in the same position for each format. Otherwise you'd have serious problems... explained Pete Austin of Level 5.

Apart from space-saving for retailers, the real boon of the new systems is going to be in better software availability for users. Previously some shops would have been unwilling to give up shelf space for copies of PCW versions of adventure software.

Time & Magic from Level 5 markets - same disk for PCW/Amstrad/Spectrum +3 users.



Somehow who used to pick their tanks in view-port, take them in kills, and then fill them with molten lead in order to conquer all opponents will doubtless be taken by a new project underway at Origin Systems.

Continued: Tank battles, the program allows the player to program his own tank using a special, easy-to-use set of commands. Once you're picked it, as it were, you send it into battle with the computer and see who wins. After the battle you can then tweak the design or -- if

MINE'S A 500ER...

you were severely wounded -- start again.

To be, as you'd say -- but what really makes the package sound interesting is the fact that the data for your tank designs can be stored on disk and circulated amongst other players. In the States they're even setting up a big central computer system that players can log onto and go "publicly" with their fastest design.

Origin tops the game will be available later this year. Watch this space for more details. Meanwhile, the long-awaited Ultima V, latest in the popular Ultima role-playing series, has been still further delayed. The Piggy tells us he hopes to be able to preview it next month...



Ultima II -- new addition to the IV and IVa, but Ultima V also not far off (Origin) is still under way...

ACE ON THE ROAD...

The interceptor empire

Interceptor are one of those companies who've been around a real long time -- remember such jolly titles as *Trilogy Wily* and *Arabian Nights*? -- but who don't really have a lot of in these days' of 16-bit mega-games. ACE took to the M4 to find out what they are up to now.

At the moment the public probably knows Interceptor best for its budget Player's range -- *Joe Blade* reached number 1 and stayed in the charts for quite some time. But what you notice when you actually go to the Interceptor HQ is that they're much more than a software company.

There's a tape and disk-duplication plant, a tape case-manufacturing facility, a printers, an art studio. There's even a removal and transport firm. The chances are that even if you've never bought an Interceptor game in your life, you will have bought a tape they duplicated, or at least a tape made a box that they made. Plus, hope you aren't moved house in one of their trucks.

Despite these multifarious interests, Interceptor are still very much involved in software production. The in-house team is working on *Joe Blade 2* and other budget titles, while the Pandora line has several 16-bit releases up its sleeve.



The software programming team with some of their current projects.

SNIPPETS...

Up and coming titles for your micros

TRIGGER HAPPY

OS/2
DOS 04/85 £14.95

Rumour has it that alien armies are invading Earth in the outer solar system, so it's down to you as Flight Commander McCoy (the real one, per se) to climb in your Advanced Flight Capsule and go give 'em hell. Use your three multi-directional guns well and you might survive the 50 levels of gun turfs, mines, traps and destroyers. Look out for it soon.

STAR FLEET

Intermedia/Action Arts
Amiga £24.95
Atari ST £24.95
IBM PC £24.95
C64 £14.95

The big G.A. are geared up for the imminent release of the first of Interceptor's Fleet series. The player takes command of one of 20 galactic heavy cruisers and has to protect the outer regions of the Alliance from invading Spiker and Galber warships. Be prepared to remove Starbases, capture and tow enemy vessels, lay minefields, search for intruders and repair damaged systems in this intensive strategy turn-tile playing game.

LASER SQUAD

Target Games
Spectrum £14.95
C64 £14.95

Laser Squad heralds a new weaponising system involving a variety of weapons and unit types. The basic one or two-player game comes complete with three scenarios and Target Games plan to release future scenarios that can be loaded into the main programme. Each scenario is

effectively a completely separate game with different units, maps and objectives. The Spectrum version will be here first with the Commodore version following in the Autumn.

STALINGRAD

DOS
Spectrum £4.95

The latest role wargame (available now) by Ken Wright takes the player back to the Eastern front of 1942. Ken's slugging it out with Jerry (that's you) across a varied terrain the size of seven screens. There's plenty of scope for strategic and tactical planning and three difficulty levels so you should find the game just up a good fight whether you're a novice or an expert.

THE BENTMILL

Proton
Amiga £14.95

This is one of the all-time greats and has been available on most formats for a long time. Now Amiga owners won't have to wait much longer to be able play this classic game -- but first check the ACE updates pages in a future issue before you splash out as not all versions of a game are equally good, and though the signs are the Amiga version's gonna be real hot, it just might turn out to be a turkey.



The Bentmill



Scenario 2 - Starfleet Assault

See
page 130 for a
list of the winners to be.



WIN AN ATARI ST!

Has your ACE card come up trumps this month?
There are 25 great prizes.

For everyone who received a free ACE card on the cover of the April issue, here's another great opportunity to win prizes.

Using the same program as last time, just type in the 25 code 4 letter codes printed on this page. If the program converts one of them into your personal number, you're a winner!

If you missed the April ACE, you can still get hold of an ACE card - see the box for details.

LOOK AT THESE PRIZES!

ONE 1st PRIZE: A TARI ST - COLOUR MONITOR
The winning code: **BBGE**

FOUR 3rd PRIZES: £50 of software - chosen from the ACE
Special Offer pages
The winning codes: **CTIJ** - **8X3G** - **ABDC** - **CSUM**

TEN 3rd PRIZES: £25 of software - chosen from the ACE
Special Offer pages.
The winning codes: **CBBE** - **EMVA** - **BIJL** - **AGOV** - **8XSP** - **BIGR**
- **ELYG** - **CBMG** - **ALJK** - **DFMG**

TEN 4th PRIZES: A year's free subscription to
ACE magazine
The winning codes: **BCUJ** - **DPRL** - **ADM** - **COOK** - **CBOW** - **DDOD**
- **EFZN** - **BLDX** - **EOFH** - **DYOS**

HOW TO CLAIM A PRIZE

If you are one of the winners, you may claim your prize by sending us your ACE card together with a note giving your name and the winning code which won't be used.

For a full list of prizes, including the addresses to send the form to, see the special insert in ACE issue 106 (June 1987).

Prizes may only be claimed in the United Kingdom and the Republic of Ireland (see special insert).

Post to: ACE CARD PRIZE CLAIM, c/o Queen Street,
Bath BA1 1BU. Closing date for claims July 1987, 1987.

HOW TO OBTAIN AN ACE CARD

You need to give us a 1000 or more of ACE cards from the magazine, starting with the first issue. You can get ACE cards from the magazine, or you can get them from the ACE card request form. ACE CARD REQUEST, c/o Queen Street, Bath BA1 1BU. (This offer will end after three years.)

THE DECODER PROGRAM

The decoder program will convert the code into your personal number for the month. It is available on a floppy disk with the magazine or on a separate ACE card. You can also get the program using the computer for your computer.

For the ACE program, I will use the code from the ACE card to find out what the code is for the month. I will use the code from the ACE card to find out what the code is for the month. I will use the code from the ACE card to find out what the code is for the month.

If you are unable to use the program, you can still use the code from the ACE card to find out what the code is for the month. I will use the code from the ACE card to find out what the code is for the month.

604, 606, 61, AMIGA version
10 FOR A=1 TO 25 INPUT "Code";C\$
20 B=0 FOR C=1 TO 4: B=B+C*25
30 IF A=C*25 THEN B=B+C*25
40 IF B=C*25 THEN LET C=C*25
50 B=B+C*25 NEXT C PRINT "Winning Number is";B NEXT A

SPECTRUM version
10 FOR A=1 TO 25 INPUT "Code";C\$
20 LET B=0 FOR C=1 TO 4: B=B+C*25
30 LET C=C*25 NEXT C
40 IF B=C*25 THEN LET C=C*25
50 LET B=B+C*25 NEXT C PRINT "Winning Number is";B NEXT A

TYPING IN THE PROGRAM

SPECTRUM

10 FOR A=1 TO 25 INPUT "Code";C\$
20 B=0 FOR C=1 TO 4: B=B+C*25
30 IF A=C*25 THEN B=B+C*25
40 IF B=C*25 THEN LET C=C*25
50 B=B+C*25 NEXT C PRINT "Winning Number is";B NEXT A

100 PRINT "ACE card code for the month is";B
200 PRINT "ACE card code for the month is";B
300 PRINT "ACE card code for the month is";B
400 PRINT "ACE card code for the month is";B
500 PRINT "ACE card code for the month is";B
600 PRINT "ACE card code for the month is";B
700 PRINT "ACE card code for the month is";B
800 PRINT "ACE card code for the month is";B
900 PRINT "ACE card code for the month is";B
1000 PRINT "ACE card code for the month is";B

604/606

10 FOR A=1 TO 25 INPUT "Code";C\$
20 B=0 FOR C=1 TO 4: B=B+C*25
30 IF A=C*25 THEN B=B+C*25
40 IF B=C*25 THEN LET C=C*25
50 B=B+C*25 NEXT C PRINT "Winning Number is";B NEXT A

AMIGA/604

10 FOR A=1 TO 25 INPUT "Code";C\$
20 B=0 FOR C=1 TO 4: B=B+C*25
30 IF A=C*25 THEN B=B+C*25
40 IF B=C*25 THEN LET C=C*25
50 B=B+C*25 NEXT C PRINT "Winning Number is";B NEXT A

ATARI ST

10 FOR A=1 TO 25 INPUT "Code";C\$
20 B=0 FOR C=1 TO 4: B=B+C*25
30 IF A=C*25 THEN B=B+C*25
40 IF B=C*25 THEN LET C=C*25
50 B=B+C*25 NEXT C PRINT "Winning Number is";B NEXT A

604/606

10 FOR A=1 TO 25 INPUT "Code";C\$
20 B=0 FOR C=1 TO 4: B=B+C*25
30 IF A=C*25 THEN B=B+C*25
40 IF B=C*25 THEN LET C=C*25
50 B=B+C*25 NEXT C PRINT "Winning Number is";B NEXT A

OTHER MACHINES

The ACE card may be used on any computer which has a floppy disk drive. It is available on a separate ACE card. You can also get the program using the computer for your computer.

RULES

The program will be available until the end of the year. It is available on a separate ACE card. You can also get the program using the computer for your computer.

The program will be available until the end of the year. It is available on a separate ACE card. You can also get the program using the computer for your computer.

The program will be available until the end of the year. It is available on a separate ACE card. You can also get the program using the computer for your computer.

The program will be available until the end of the year. It is available on a separate ACE card. You can also get the program using the computer for your computer.

At last the real McCoy

FOOTBALL DIRECTOR



THE MOST REALISTIC FOOTBALL STRATEGY GAME YOU CAN BUY

AVAILABLE FROM ALL LEADING RETAILERS

- FEATURES:**
- 1000+ players
 - 1000+ clubs
 - 1000+ stadiums
 - 1000+ referees
 - 1000+ managers
 - 1000+ coaches
 - 1000+ scouts
 - 1000+ agents
 - 1000+ journalists
 - 1000+ fans
 - 1000+ sponsors
 - 1000+ TV channels
 - 1000+ newspapers
 - 1000+ radio stations
 - 1000+ internet sites
 - 1000+ mobile phones
 - 1000+ cars
 - 1000+ houses
 - 1000+ schools
 - 1000+ hospitals
 - 1000+ banks
 - 1000+ shops
 - 1000+ restaurants
 - 1000+ hotels
 - 1000+ airports
 - 1000+ train stations
 - 1000+ bus stations
 - 1000+ cycle paths
 - 1000+ parks
 - 1000+ gardens
 - 1000+ lakes
 - 1000+ rivers
 - 1000+ mountains
 - 1000+ valleys
 - 1000+ hills
 - 1000+ plains
 - 1000+ deserts
 - 1000+ forests
 - 1000+ fields
 - 1000+ meadows
 - 1000+ pastures
 - 1000+ farms
 - 1000+ villages
 - 1000+ towns
 - 1000+ cities
 - 1000+ metropolises
 - 1000+ empires
 - 1000+ kingdoms
 - 1000+ republics
 - 1000+ democracies
 - 1000+ autocracies
 - 1000+ dictatorships
 - 1000+ theocracies
 - 1000+ monarchies
 - 1000+ aristocracies
 - 1000+ oligarchies
 - 1000+ plutocracies
 - 1000+ technocracies
 - 1000+ meritocracies
 - 1000+ gerontocracies
 - 1000+ plutocra-



SPECTRUM SCREENSHOTS



SPECTRUM GEMS • COMMODORE GEMS • AMSTRAD GEMS

The game also available on other orders of £8.95 per cassette. Send your cheque/PO made out to D & H Games plus postage SAE with 25p stamp enclosed. Please write your name and address on reverse side of cheque. (72 hours delivery)



19, Melton Road, Stevenage,
Herts SG12 8LL
☎ (0438) 728042

Against a silver moon ...
an awesome shape emerges ...
rumbling towards its destiny.



Graphic Graphics Software Ltd.

FREE EA SOFTWARE FOR A YEAR!

A state-of-the-Art competition from ELECTRONIC ARTS

Four fortunate people will receive ALL Electronic Arts releases for their machine for one whole year. That could mean £500 worth of software at shop prices. And it's all good stuff - get a load of these forthcoming titles:



● **PFM Peugeot**: exciting hybrid combination (Spectrum, Amstrad).



● **Ferrari Formula 1**: thrilling run-up based on the world's fastest cars (Spectrum, C64, Amstrad, Atari ST, IBM).



● **Deluxe Paint II**: the ultimate in paint packages (IBM).

● **Sard's Tale**: the accelerated role-playing game (C64, Spectrum, Amstrad, Amiga - versions 1, 2, 3 released throughout the year).

● **EA's first UK-developed product**: by ace programmer Ian Tom of Sloughder fame. It hasn't got a name yet, but it's going to be really special. (Available across all formats in the autumn).

HOW TO ENTER

In the box above are four sections from the screenshots printed on this page; all you have to do is match up the section to the correct program. So, if you think section A is from Ferrari Formula 1, just write that title by the letter A.

N.B. The closing date for entries is July 15th.

A



B



C



D



● **PFM Peugeot**
 C64 1 coin
 Amstrad 2000
 S 3 coins
 IBM 2000
 S 3 coins
 Atari 2000
 S 3 coins

From July 1st
 Open Play 1.4
 Total Play 18
 Per

● **Deluxe Photo Lab**: the amazing graphics package (Amiga).

● **World Tour Golf**: tee off and go for a grade (Amiga).

ENTRY FORM

Cut out this form and send it to EA Software Competition, ACE, 4 Queen Street, BATH, BA1 1EL

NAME _____

ADDRESS _____

AGE _____ TELEPHONE _____

COMPUTER OWNED _____

I think section A is from _____ I think section B is from _____

I think section C is from _____ I think section D is from _____

The Pro's Choice



Competition PRO

5000

Arcade quality joystick fitted with super sensitive microswitches for the ultimate in joystick control. Features include dual fire buttons for left or right hand operation, firm base pads for non-slip control and a robust steel shaft with rubber return for a smoother operation.

£14.95

Competition PRO

5000 CLEAR

Arcade quality joystick with all features of the Competition Pro 5000 but with an exciting clear case. SOGGY LIKE A PRO!



£15.95



Competition PRO

EXTRA

A brand new fully micro-switched arcade quality joystick. Features include firm base pads, dual fire buttons, firm base pads for non-slip control and a robust steel shaft with rubber return for a smoother operation.

£16.49

The Competition Pro range of joysticks carry a two year guarantee.

The Competition Pro 5000 and Pro Extra are suitable for use with the following computers:

Amstrad/Amstrad CPC Spectrum/Amstrad used with an interface. IBM computers, Atari, Commodore 64 and VIC 20.

Specialist UK Suppliers from your computer dealer. For more information contact Dynamics Marketing Ltd, 1000 Old Street, London EC1Y 8LR.

DYNAMICS marketing Ltd

1000 Old Street
London EC1Y 8LR

0204 6050 6100 or 0204 5387 STREET BOYDOR OLDFASH 0204 5387000
Buckingham, Tel: 029 1341 12142 585765 0204

25,000 tons of awesome power knives its way through an ink black sea!



© 1995 Knight-Ridder Inc.

FASTER... FURTHER... BETTER

You are competing against the world's greatest in the greatest and toughest series of winter sports yet devised. Seven events to test your skill and nerve to the utmost, each one with its own tests and demands. Practice, patience and more practice are required to stand any chance of a medal. You can do it, you will do it! And what's more you'll have a great time trying.



Cross Country Skiing — one of the wildest forms of pure athletic prowess ever devised. You will battle with snow, terrain and a bitter wind. Extra training is an essential part of an essential range of practice on a downhill section. Master all the skills and strength you can for this is the ultimate test of endurance!

Speed Skiing — The fastest and simplest sport on earth. A test of strength and speed. A few seconds of flight are rewarded in the world for gold.



Illustration by Peter
Cassidy for the
authorities

Manufactured and distributed
under license by the
authorities to the
I.C.C. Group, Inc.,
111 West 40th
Street,
New York,
New York



Figure Skating — Precision and grace, grace and power, grace and power, grace and power, grace and power.



Available for:
Spectator C.P.Y. Coaster & Disk

Maui 107 Disk

CDM 84 120 Coaster & Disk

BMX 64 Coaster

Spectator 48 120K, a 2 Coaster

Spectator + 2 Disk

© 1987 I.C.C. Group, Inc. All rights reserved.
Printed in the United States of America

EPYX



WORLD CUP



Half Pipe - Skier's favorite
arena of stunts and total control
are compulsory in the freestyle
and most dangerous
sport in their field
skiers and
style icons
leap into
the air.



Skier's
Control
and split second timing makes the
sport the most difficult of all skiing
events. Like the other disciplines
it's a
sporting in their off time.



Event - Skier's
fall to white. A long jump
in your power stance and your
style for balance. You'll
capture spirit of '90s with
no foot fault. It's not
gold and a place in
the crowd leader.



Edge - Skier's
a touch of winter weather!
Lying prone. Feet flat on a sled or footbrake.
Developed to avoid knee you'll see many inside
in your body to make the most of each straight and
curve in a
skier's
career.





... riding can be reached by using the lift or going a flight of stairs.
... are to a DM, a Volvo and a Porsche here.
... using DM.

FOR YOUR EYES ONLY

CORRUPTION

Rainbird/Magnetic Scrolls

These stunning graphics - from the same stable as The Power, quest of Merlin and Jasper - really belong in the Adventure section, but they weren't good, we just couldn't resist putting them in ours. See page 121 for more details, or just gaze at them and wish you had an ST too.

Pay attention, 007! These are some of the very latest pieces of software the boffins in Britain's software houses have come up with. They'll be issued to agents in the field as soon as the teething problems have been ironed out, but in the meantime we'll put a copy of next month's ACE in your mission briefing so you know what to expect - and for heaven's sake, be careful with them! These games are tremendously powerful, and could get very hot while in use!

WHIRLIGIG

Firebird

If the Moscovian Communists have got a space fleet too, they might like to consider the very Televisual one concerning the resident in state-of-the-art solid 3D graphics. We brought you news of this hot little property back in ACE issue 2, when we visited programmer Mike Simpson and his Moscow team. As you can see, it's a far cry from Lord of Midnight - but Moscovs still got the know-how to knock everybody's socks off!

— ST — The same scene of this turned from two sides.





62 • The main game Virus screen is an alien under attack, spraying the landscape with red virus.

ROAD BLASTERS

US Gold

It's an irresistible run-up - either like Out Run with a nuclear strike capability - is making its long-awaited transfer to the home market. Without the route changes of Out Run it should at first see little success either here, but all that fast-moving speed and completely unresistant violence will make it a hell-on-wheels to put it mildly.

63 • Like the original, play like a fast



VIRUS

Firebird

You're probably sick of hearing about it by now, but the 32 conversion of David Johnson's astonishing Antiraiden shoot-em-up (which has really got a noise everywhere's buggy with the game's very badly treated now - we'll give it the sound through ACE treatment next month - and it looks mind-numbingly good, but will it really work on the Spectrum? Surely not)



64 • The great conversion puts the screen the game's antiraiden landscape, long hours of Road Blasters it just does it the wrong way.

TAKE 'EM ALL ON...

IT'S THE ONLY WAY TO LIVE!

Screen
Star

Target Renegade is hugely entertaining and simple justification for a sequel... it develops the theme and develops the game play to end on the original... Renegade is fun games... all beautifully drawn with great comic features. The story is quite wonderful. *Computer User*

PCW
GAME
OF THE
WEEK

Target Renegade has the added excitement of variety, which is not to be found on other games of this kind. Fast too, this is well worth the reader's PCW Game of the week

TARGET: RENEGADE



CASSETTE

SPECTRUM

AMSTRAD

£7.95

£8.95

SPECTRUM

COMODORE

Imagines
...the name
of the game

Every
you
every day
take, the
watching
Fight your
through
project -
back alleys, the
parks, fight your
through the wild
community, the
hazards, the Beatnik
the boarders. One
staying night in New
York is just the tip of
iceberg on your th
quest to confront "MR. B"
A spectacular arcade
brawl with many hoodlums
he'll be ready to ambush
this is Target Renegade
if it moves, it's

OVER THE RAINBOW

As the programming fraternity has become more familiar with the intricacies of coding for the Motorola 68000 series chips, the true nature of these beasts is becoming apparent. Using obscure and almost undocumented features, first Amiga and then Atari ST software developers have discovered ways of displaying the complete palette of 512 or 4096 available colours on-screen at once.

There are now at least two packages for the ST and a dozen or more on the Amiga that can display and manipulate 'Omni-colour' images. Two of these - *Spectrum 512* for the ST, and *Photo Paint* for the Amiga - have recently appeared in the UK. They represent the state of the art in graphics for the Amiga and ST, yet they are very different packages, focussing on quite different aspects of 'screen-painting'. Brian Larkman tries them out.

OMNI-COLOUR PAINTING

Although it is usually pointless comparing packages for different machines (the only real choice was made when we decided on which computer to buy), it is interesting in this case because *Spectrum 512* is 60 instructions. It manages to provide some completely new drawing tools and unique ways of operating some of the old ones, using the large palette in a very effective way. Despite the Amiga's previous lead in this area...

Photo Paint also has a number of new features that rely on a large palette, but by maintaining the basic layout and operating methods pioneered by the original *Deluxe Paint* and *Digitalart*, it feels more like the obvious development of a theme rather than something new. This will work greatly in its favour, especially if the development continues and puts right a number of surprising and annoying deficiencies. Most people find it easier to learn new software if it uses familiar icons and key maps, though the sort of standardisation can sometimes 'lock' work-alike methods into the system.

Both packages have most of the standard equipment of drawing tools, though *Spectrum 512* has no means of deleting regular lines or adding text to the image. *Photo Paint* has no obvious fit-and-tell-in-line any form of gridlock. *Spectrum 512* also has an outstanding plus - a French-mirror that can be directed to any angle (even 90 degrees) with the rubber-band polygon tool. The really innovative aspect of this is that it also applies anti-aliasing to the curves as it draws them, using suitable curves to slightly blur the effects of increasing or decreasing. Very clever! *Spectrum* also uses a totally new method to



3D02 3D03 produced using the 3DPA function in *Photo Paint*. The 3D effect is enhanced by the luminance response.



BEH showing how you can achieve transformation effects in Spectrum 512

the conveyer) of scrolling the magnify window each time the cursor bumps into its visible boundaries. Even the dragging operation and escape is quite different in this program, but since otherwise, most of these new techniques are quite intuitive and easy definite improvements.

MOVING COLOURS

If an on-line colour program is going to be daily real use it must provide an easy way to select and mix colours without being too confusing. Spectrum 512 nearly falls down in this case because it provides so many facilities that it isn't its easy-to-get-on. However, the usual other aspects of this package, with practice the colour palette are straightforward and comprehensible allowing day

number of limited or unlimited palette to be set-up and saved.

Proton Paint uses a system of colour control pioneered by DigPaint that will also probably become a standard for the Amiga or, at least for 14-bit, 4000 colour systems. Often the 14-bit, 16 million colour systems start appearing (the colour wheel used) frequently in the computer graphics industry and probably take over. As far as it goes the DigPaint/Proton system is very good and allows the setting up of a palette of 64 colours. These can be selected at random or required, or manually calculated to produce a progressive range of shades.

The tone in the system is the HAM mode of the Amiga itself. Nonetheless the programming of Spectrum 512 have managed

to provide a system where almost any colour can be used in almost any order without causing jarring effects. When choosing real-world colours to draw with in Proton to any other HAM packages, the effect is often spoiled by jarring and sparse colour effects. These problems can be relieved by careful selection of base colour, but generally one is more aware of 16-bit limitations than of the system used by Spectrum 512.

BLOCKS AND BRUSHES

The tools and techniques discussed so far represent, with a few exceptions, the same methods that would be found in any drawing package. Where these two differ is in the way that they are manipulated as usage since it is on-screen. For that reason the various abilities of each are discussed separately.

A full colour image can be overlaid in two main ways, by editing either the colour or the tone of a chosen group of pixels. Most systems provide a means of picking up part of a screen as a 'block' or 'brush' and putting it down again. Define Paint it to re-sample, colours are used to be transformed and distributed in a number of ways by changing the tone of the group of pixels in a block. When these are pointed down onto the screen, they, and the pixels that they overwrite, can be made to change colour in a variety of ways that produce blurring, stretching, smoothing, loss and saturation changes, and a host of other effects. To a varying degree, both Spectrum 512 and Proton Paint can produce all of these effects and some, though as we shall see, each has an area of strength and one of weakness.

SPONTANEOUS COMBUSTION

Comparing two packages designed for different machines seems a reasonable exercise.

SPECTRUM 512

Amiga/Electric Distribution £39.95

As always, Spectrum 512 has a unique way of doing things. To select a block of the screen a rubber-banded box is drawn out as usual. The area selected is available for use or it is copied to a buffer zone that is 12 full-screen pages in size. Every block copied to the buffer remains available for as long as required. This all seems quite normal until the buffer area is entered. Here all blocks out or copied can be moved in seconds by holding the right mouse button and dragging the screen smoothly and quickly up or down. It really is as simple as holding a strip of transparency or negatives up to the light. Fantastic! To get up a block only requires a double click (in 1, even if it is a full screen, i.e. a 1024 and even saved of together in a compressed form).

When a block is pasted back down a number of options are available. All blocks are anti-aliased as they are drawn. By pressing a combination of Shift, Alt and cursor keys the block can be re-sized and flipped, it is not possible to bend, rotate or give perspective (3D) to the blocks, so in general the form defining characteristics of Spectrum 512 are rather limited. Nevertheless, an interesting range of transformations can be achieved as shown in the picture BEH.

Even within the block menu the gradient fill function can be initiated. Exploring this would be a tedious task in itself for it provides a range of fills that seems to be limited only by

the imagination. Getting to grips with it is probably the most difficult (and most rewarding) aspect of the package as there is only room here for a brief description.

Gradient fill operates in conjunction with any custom palette you might have set up producing a range of colours emanating from various 'source' or 'seed' pixels you have placed on screen. If the palette contains a range of colours progressing from light to dark for example, the gradient will similarly be light to dark. If it is a spectrum of hues, so will the gradient. In any of the drawing tools can be used to position the 'source' and other selected colours, can be positioned to modify the gradient and mask the background. Once again Amiga have provided a unique way of implementing gradient fill, but once mastered it should be amazingly versatile and controllable.

A simple example of the possibilities of gradient fill is shown in the picture CANYON.

As well as gradient fill Spectrum 512 provides several other ways of adding colour locally, globally, or within a block - including anti-aliasing, burning, central control, hue shifting and brightness. Overall, the colour mixing tools provided by the package are quite remarkable both in their versatility and in the unique way they are implemented. The form editing tools are not so good, representing the weakest aspect of an otherwise difficult but remarkable program.

WHICH ATARI PACKAGE?

Some excellent ones (Quantum Paint, EditPaint - see ACE in our Spectrum 512 issue) because of the price (£29 - £39). Offered in a bargain but what is the point if all those colours if you cannot really use them? If version 2 with lots more colour mixing tools, apparently in the same price, then it will compare. As promised, Spectrum 512 is far better.

COLOUR TERMINOLOGY

HUE refers to the position of a colour on the colour SPECTRUM or rainbow. There are Red, Orange, Yellow, Green, Blue, Violet and the SPECTRO spectrum (SUN BATTER) described the purity of the hue or the amount of white it contains, e.g. pink is low saturation red. VALUE refers to the tone of block in a hue - e.g. maroon is low value red.

but making a value judgment about which a test can only tend to help, so I'll cut this off. All general here two represent the ultimate drawing systems for their respective machines though they both have their weaknesses. Nonetheless, the weaknesses of one are the strengths of the other and vice versa without any case.

If Spectrum 3.1/3.2 has brush deletion, colour snapping, perspective, blending and lots of other Paint it would be perfect. If Photon Paint had the French curves, distorting, sliding buffer and contours of Spectrum 3.2 it seems would probably spontaneously combust, myself included. ■

WHICH AMIGA PACKAGE?

Deluxe Paint comes bundled with most Amiga kit present. Deluxe Paint II and DigiPaint were compared in ACE issue 3. Photon Paint comes about mid way between the latter two offering most of the facilities of both and a few more. Moving from Photon to Deluxe level of control almost every function, is able to work freely with brushes, its pattern file, the airbrush, DigiPaint has a greater range of colour editing functions and not much else. Certainly nothing like the brush manipulation, but what not for DigiPaint (I could have all those Spectrum 3.2 goodies) Photon Plus is not early in the reckoning. Deluxe AND Photon Paint would be best as things stand.

PHOTON PAINT

MicroIllusions/ Activision 000 00

In many ways Photon Paint is very similar to Deluxe Paint II. Anyone who has used DP2 will certainly have no trouble using the brush tools in Photon.

A brush can be picked up from the screen by dragging a line out or by leaving an area following an object to be set from a sample background. Once an area has been captured any one of a set of four editing tools can be employed. These are as remarkable in their way as the colour editing tools of Spectrum 3.2. Any brush can be flipped (reversed vertically or horizontally), resized by two or half in either direction as well as freely twisted into a 32 spiral, rotated in 90 degree increments or freely bent horizontally or vertically. Slid in the x, y or z planes to give a perspective effect and, most spectacularly, wrapped around a number of 3D geometric shapes. These last include a sphere, an ellipse, a tube, a cone, a cube, or a free symmetrical solid (a heart for instance). HILL OF MIBBONS shows the use of several of these tools (The original is shown in one corner).

At first this 'Wrap' function seemed to be a bit of a gimmick, but in practice it has proved to be very versatile and useful quite objectively in fact. The picture ACES HIGH was produced very quickly using 'wrap'. Both the surface of the earth and the 'ICE' balloon were originally flat drawings, picked up as brushes then 'wrapped'. The three dimensional effect is

enhanced by the luminance register. This provides gauges to position a light source and alter its brightness. With a bit of experiment the 3D Wrap and lighting function should give some remarkable results.

Like Spectrum 3.2, Photon Paint also provides a number of tools to apply a range of colour though these are very much more controlled by the program. Such control makes the results much less versatile and experimental, but very much easier to understand. Like DigiPaint the effect of a brush painted onto the screen is determined by the mode menu. Depending on your selection the brush can overwrite the background completely, add/subtract the colour of its pixels to/from those of the background or blend to a varying degree with the background. Blending is controlled with a very neat register that allows the gradient and degree of blending imposed to be varied in a number of ways. The effect of blending is to allow transparent, smoothly rounded, shaded or digitized areas of the image to be produced automatically.

Overall, the best editing tools of Photon Paint are quite remarkable, especially for a HAM program, surpassing even those of Deluxe Paint II. The colour editing is not as remarkable, though adequate enough for most people provided they have not just finished using Spectrum 3.2.



HILL OF MIBBONS: some of the distortion and refracting effects that you can get out of Photon Paint

Perhaps it's a good game because of all these things as well as an original idea that grabs your attention and continues to hold it for a long time? Are the flashy graphics, packaging, advertising and sound effects worth the money you've paid for your software?

Take a recent total game like *DO!*—this nice graphics, great sound etc. but fails to hold the attention due to the lack of gameplay it could have been an excellent game if, at the design stage, a lot more thought had been put into the choices and objectives to provide a lot more variety. That same game *DO!* which sold to 80% of the software buying market had, for a lot of people, the ingredients needed to fuel the imagination and justify kept your eye on the edge of your seat.

Software houses should learn from this, a game which has more time spent on it in the development and design stages produces a game with a long shelf life which will occupy the player for a long time. Of course, software houses will need to produce short time hits to provide a constant income. Although games like *Elite*, *Dungeon Master* and *Capitan Blood* initially cost more time and money to produce, as far as far concerned it is



ELITE - Another in its category but one leading in the arcade market category. Let's hope that time it has more releases; the first game was sold to 80% of the software side.

money will spend if the game fails the objectives outlined in my first paragraph. I realize the risk software houses take in releasing a game which costs a lot to produce and their loss for whatever reason — but these risks must be taken for games to improve. If the game is well-designed and the initial idea is good then the product should be well.

LOADS OF MONEY

The old comparison between the software market and the music industry fails to prove that although a lot of money can be made from the charts, the material is usually bland and predictable. Long-term artists and superstars like Peter Dinklage, Kate Bush and Paul Simon, for example, who take a long time to produce their work, stay popular, survive long term, make excellent music and loads of money for themselves and their record companies. These types of artists build up a fanbase following of people who



The winner of your favourite 'a day' competition is Peter Cook, 21, now in a game design at Elite Systems. Peter first became involved in computer involvement when he became obsessed with *Elite* (the game), bought for his 10th birthday. He was seen on April 90, and within software that takes a lot of thought as well as being exciting.

GAMES DESIGN

What makes a good game? Is it the amazing graphics? Fantastic sound? Is the programming the best you've seen in a long time? Winner of the fabulous 'Edit ACE For a Day' competition, Peter Cook, tells you what's what.

appreciate the music and the obvious time and testing that has been put into the work. This is not to say that the charts don't do this type of music — a game can be both popular as well as experimental.

Going back to software, the point I'm trying to make is that if fewer games were released there would be more time for the software house to think about the product. This will hopefully provide much better 'gameplay' which will encourage the public to buy more copies of the game. It's simple — if the game's rubbish people won't buy it. It's good, more people will buy and keep on buying over a long time. As a rule, programmers are a logical breed — a valuable sort — and there have been some brilliant games written. But as a designer and a games player I notice the abundance of designers in software houses who can't create a game which will win the player's imagination and have elements which will inspire the player to continue playing for some time.

FRESH IDEAS

Where are the new ideas to come from

for the next fashion in games? Or fresh ideas for the new technology like 16-bit, CD-i or consoles with all their improved graphics and huge memory. Can the coin-ops and film teams go on forever? Can entirely new genres transfer so well to CD-i or a different form. The future is already here in the form of

CD-i, and more interestingly DVD (Digital Video Interactive). Also are about to release their CD-ROM player and the RCA laboratories have developed DVD which gives 75 minutes of motion picture video on a compact disc. Consumers have been involved in DVD for 6 months and are currently working with Paramount Pictures who are producing a series of stories based on the old film of the studio film. Consumers have had access to all the information behind the production and will be shooting an interactive video with by side with the production team and may will probably release company and personal computer versions to follow. Microsoft have also begun working on some CD-ROM games to be released at the beginning of next year, which should mean we'll see if we can afford it, some amazing simulations.

Today we are beginning to see what computers can really do — don't let us down, software houses, let us see some creative, long-term developments — including game designers — to produce a generation of creative, original ideas that will stretch the computer's capabilities but allow the player to



The new Peter, Petermore took right through his page with elite (Game 100).

become more than a machine. I realize the necessity for software houses to make a profit, but there are a few software houses who are using a lot of imagination and are producing games which are popular and have that certain something that makes the game a classic. ■



DO! — A lot of thought went into the graphics and music side — shows about the best of programming. More control over the character would have been nice. More simulation — a flying site for software — could have brought things up.

...ing...
...about
...we and
...related
...motion
...to. Cre-
...tion for
...winning
...are pro-
...tain the
...One -
...all the
...and
...video
...can
...can be
...a full
...feature
...to be
...of our
...own if
...giving...



KONAMI

SPECTRUM
7-95
SPECTRUM

Beyond Infinity
The first ever 3D
dominated by the
forces of the diabolic
SALAMANDER. A hero who must
overcome his companions to join the
20th century into hell and beyond.
Original Monsters of Demons.

COMMODORE
8-95
AMSTRAD

Midwest
Spiders. Infernal
burning like raging seas
in combat. Caverns of Darkness
Demons beyond the dimensions
of our minds.
NOW IS THE TIME.

SALAMANDER™



...the name
of the game

©1988

HOT ROD

Sega 32x

If it's two-players on driving fun, you're often then you'll be thrilled with Sega's answer to Atari's Super Sprint. The games viewed from above with the monitor sitting in the center of the two like console and the main and sound effects taking into your own brain one hand (see picture). Each player gets to control an on-screen, buggy and guide it through several continuously scrolling courses. You've got standard controls - steering wheel, accelerator and its own to go. The idea is not simply to make it to the end of the course but to collect points (score-over road) symbols on the way and then trade your points for actions that will help you on the next course. As well as picking up points you'll want to pick up Gas symbols because

you start the game with limited fuel and if you run out during a race you're a big trouble.

How you spend your accumulated points is crucial. Do you want to go for a bit of insurance that will strengthen your car body? Do you want wide tires for better manoeuvrability? Or would you rather have a set of wings for better traction? Best is that that some things may be useful for one course change for the next courses but they also hinder you on smaller roads - and you don't want to get left behind, because if the screen should scroll on and you reach the border you are it moves forward to cut the wheel at heavy cost to your fuel. The game's not out there to play well with four people all going at once it can be terrible fun - don't get any sneaky ideas of running two screens at the same. Enough - the car just drive hair-raisingly over each other.



Atari's Super Sprint (controlling the blue car) takes an all course - and gets some points.

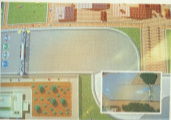
4WD!



At the start of a downward scrolling course.



Be smart: know whether to go for those stops or not. It's a pity you get six seconds left to decide though.



Be smart: to save the points for the next race - Start! You activate this one. BEEP! - Stop and Over take go for the points (and you know get them first and want to go collect the ones).

TAITO'S CONTINENTAL CIRCUS

Get the hot tags of it. Afterward simple word it. Also (and one don't want for it). Most authorities agree it's one of the most important ingredients of the winning coin-op formula. Taito's Continental Circus, however, has none of it. But if the crowds around the machine in a top London arcade are any sort of reliable, Continental Circus looks to be another case for the Japanese giant.

This might tempt the others here and Continental Circus looks to have the 'shoulder' appeal. You know the sort of thing - you see someone in an arcade playing what looks to be a fantastic game and, naturally, you want a piece of that action as soon as possible. Once you've fed the machine and started playing, it's not long before you notice someone looking over your shoulder just waiting for their turn.

Continental Circus breaks all the rules.

To watch somebody playing the game is not merely confusing, it can almost give you a headache. Why? Because it's a 3-D game. A character is held in front of the angled monitor on the upright cabinet by an arm attached to either side. Whoever's playing positions the character and peers through it to watch his self bar around a number of Grand Prix circuits in these stunning dimensions. You've got a time limit to beat for each circuit and bumping into other cars usually penalises your engine into losing out smoke and losing power - pull into the nearest pit and your pit crew will extinguish the flames and you can repeat the race. You'll have to make up that lost time though if you wish to qualify and make it to the Japanese G.P. It's a great car driving game and any well-respecting fan of the genre will want to check it out ASAP. Don't hood your mouth for some more conversations though!

SHAKE A LEG

Following our report some time ago (in ACE issue 6) on the Super II simulator, our intrepid reporter Pete Connor has now been to the company's HQ to try out the system.

The Proton simulator is a jumboised 14-seater, which fits and rolls on micro-processor controlled hydraulics, spin otherwise in a high-quality 8 x 4 video display with loud stereo sound. There's a range of different ride facilities, from moon-like ruses through to actual career simulations.

After his anticlimactic high jinks with Microprose, PC thought that nothing could shake him up. But he was wrong. Super II's Proton simulator is a very realistic ride indeed. Pete sampled the lap of Manx car rally, and found himself being thrown around the apparatus with each gearchange. It really is as if he's being inside the car.

The Proton's a pretty bulky object (it does seat 14 people) so it's a little on the large side to fit in your local arcade or shop show, but Super II have a two-seater version well under way, which is more than likely to find its way to a fun palace near you.

At the moment, there's no interactive element to the ride, but what you get is an excellent and thrilling that your lack of control doesn't bother you. If you get a chance, climb-on-board and take a ride...



The Proton sports, with elevated hydraulics (and high seat, you know). The interior is in white seats, with the picture sitting on these early painted benches.

DEAD ANGLE

A game with plenty of 'over the shoulder' appeal is the Proton-type game. Like the recent spots of losing games, the player's character is shown in the centre of the screen in outline. You guide a sight around the screen with a joystick and try to shoot as many gangsters as possible. Shooting gangsters dressed in red has the added bonus of causing a more powerful weapon to appear on the screen - and a machine gun or grenade can come in very handy at times. If you want your teachers severely tested, check this one out.

DATEL ELECTRONICS



AMIGA PRO SAMPLER STUDIO

- 4 by 4 stereo multi sampling system at a resolution of 20 bits
- Write your tracks in a digital audio file format
- 1280 samples into memory for random playback
- Stereo equalized
- Real-time frequency display
- Real-time meters
- Real-time 3D FFT
- Separable channel volume control per track
- Flexible sample rate and playback speed
- Dynamic speed for recording, playback plus real-time multi-rate playback for the multi-sampled
- Real-time sample rate with easy filter software changes
- Software filter for real-time filter bank control
- Software reverb and delay with real-time feedback
- Discretion of the apply/undo of the operations
- In-depth manual available. More info is available from our website or direct material cost

ONLY **\$69.99** COMPLETE SYSTEM. PURCHASE DATEL 4800/1400/1400



DATEL JAMMER

It's complete! Use Sample Studio (the DateL Jammer gives you a 3 volume keyboard to play and record your sampled sounds.

- 1 and 2 note chords
- 4 track sequencer up to 1000 notes
- Stage and real-time
- Effect controls on instruments
- Load and save sequencer
- Works on standard 8750k boards



DISK/STORAGE BOX OFFERS

• 0340 1000 80 7 1/4" disks lockable

ONLY **\$8.99**

• 0350 1000 80 7 1/4" disks lockable

ONLY **\$8.99**

• 0360 1000 80 7 1/4" disks

• High quality bulk packed with labels

ONLY **\$24.99** PER 50



DATA/SWITCH BOXES

- 4 x 1 expansion box provides a 16 connector
- 16 connector (16 pins)
- 16 connector (16 pins) - 16 pins (16 pins)
- 16 connector (16 pins) - 16 pins (16 pins)

ONLY **\$24.99**

• 16 pins (16 pins) - 16 pins (16 pins)

ONLY **\$24.99**

• 16 pins (16 pins) - 16 pins (16 pins)

ONLY **\$79.99**



MIDIMASTER

- Full MIDI interface for A2007/3000/1200 (Phase-stable model)
- Compatible with most leading MIDI packages (i.e. D/Stream)
- MIDI in - MIDI Out x 2 - MIDI Thru
- Fully SSI isolated
- No need to pay more - Full MIDI standard

ONLY **\$34.99**



PRINTER CABLE

- 25 pin 17' or 36 way Centronics parallel lead
- A 500 or 1000 pinless cable
- 1.5m length

ONLY **\$8.99**

• 25 pin 17' or 36 pin 17' - serial printer lead

• A200 or 1000 - pinless cable

1.5m length

ONLY **\$8.99**

ST COPY - DEEP SCAN NIBBLER

Copy to entire disk - even highly protected programs - in under 60 minutes

- Works with all disk sizes or 5 1/4"
- Multiple copy option allows you to make many copies from one original
- Copy 1 or 2 disk copies - up to 99 tracks
- Dynamic format parameters for easy standard formats
- Using 1040 80 copy a whole disk in one pass with single drive
- Copyable with 800 and 1040 80
- Storage (800) capability - displays what disk parameters, including sector distribution, data dependent, structure status etc.
- Full verify option
- Easy to use disk format program saves the mystery out of disk layout

ONLY **\$29.99**



DATTEL ELECTRONICS

EXTERNAL 3.5" DISK DRIVE

- Interchangeable 5.25" and 3.5" floppy
- High quality 10MB capacity
- Removable disk supporting other drives
- Supports both low level and high level formats
- High capacity
- High retention capacity
- Background rate for protecting in-use data
- **How to fit floppy** - before you slip a floppy disk into the drive - the drive has an LED which will glow green to indicate floppy is OK, will remain on until floppy has finished a revolution. Don't expect a few problems and ask us when you order - we'll remember your address long after installation.
- **Options** - to suit you & your
- Other versions come complete with necessary power supply

ONLY £114.99 POST FREE
A10 (A1 for Courier Delivery if required).



512K RAM EXTENSION • A500

- Available with/without calendar clock option
- Simply plug internally into a 2800 slot
- 10MB in minutes - no soldering etc.
- With calendar/clock onboard time/date automatically loaded
- Battery backed to retain time/date

ONLY £89.99 POST STANDARD 512K CARD GB

ONLY £99.99 POST VERSION WITH CLOCK/CALENDAR

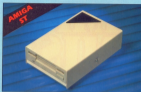


MARAUDER II

• **It's the simplest the best that anyone available for the Amiga (all models)**

- Superior disk space will copy almost any software file
- Friendly user interface - Mouse drives everything
- Completely compatible with Amiga, including systems
- Free Amiga 5000 floppy-based program including 3.5" floppy disks/Power/Manual 2 etc.
- **Special** - Storage filter copy into new format whenever protected extension
- **Supports** up to 8 drives simultaneously for multiple copies
- **Regular updates available** - we always stay the latest
- **Fast operations** - usually around 10 seconds
- **AMIGA key writing expert**

ONLY £29.99 POST FREE



1 MEG INTERNAL DRIVE UPGRADE

- Replaces internal 500K drive with a full 1 meg unit
- High quality 500K drive unit
- Full fitting instructions
- Fully fitted on special order (required)
- Direct plug in replacement
- Available now

ONLY £99.99

SOLDER/DESOLDER KIT

- If you wish to fit you will find Solder and the kit supports this
- Quality soldering iron plus a Solder sucker tool and solder
- No extra to top
- Useful for many other jobs too

ONLY £9.99

1 MEG RAM UPGRADE KIT

- Supports fit to 8 internally run 512 512K
- £100.00 (FREEPOST) to bring your 512 up to a full 1 MEG
- FITTING in a straightforward, step-by-step - supported by support software (2800 expansion)
- Makes use fully 10MB Ram available
- Complete with detailed instructions

ONLY £79.99

ALL ORDERS NORMALLY DISPATCHED WITHIN 48 HRS

HOW TO ORDER

BY PHONE	BY POST	FAX
  0252 744771 24 hr Credit Card Line	 Please always include details of your bank account	0756 744826 THE ORDERING POST OFFICE - 2800/2801 RD - WINDYBANK - WINDYBANK - WINDYBANK -

DATTEL ELECTRONICS

DATTEL ELECTRONICS LTD., FENTON INDUSTRIAL ESTATE,
 80/82A ROAD, FENTON, STOKES-ON-TRENT, ENGLAND.

SALES ONLY
 0252 744707

TECHNICAL ONLY
 0756 744826

It's here-The return of Elvin Atombender!

IMPOSSIBLE MISSION II™

Unsurpassed Espionage Action...

After two year's wait at last it's arrived—the sequel to last fall's sequent Impossible Mission I returns. All the fun and strategy of the original is more expert than ever! In the Challenge to find a safe route to take you the final destination where he will meet his wife! Search each room, find code numbers, objects and keys to help you with your mission. You must avoid or destroy the guards and robots that patrol the five towers or risk being destroyed yourself! Successfully dispose of them and your quest to help her! Now your Mission becomes truly impossible as you strive to manage the beams, avoid guards, robots, mines, trap doors and situations without detection!



Press the 8's you enter the first room.



But where to next?



Who or what is lurking behind these doors?



Can you screen the next tower?



Could the final 7's number be here?



Running into more trouble?



Why is the robot guarding that door?



A message on the tape recorder?



Quick! Change from 0's!

Commodore 64/128 £19.95 (US \$29.95)
Amstrad £19.95 (US \$29.95)
Spectrum 48/128 £19.95 (US \$29.95)
MS-DOS £19.95 (US \$29.95)
IBM PC & Compatible £24.95 (US \$34.95)

EPYX
The Best of the Best
The Best of the Best
The Best of the Best

LICENCE TO THRILL?

Or a licence to print money? Films, coin-ops, TV progs, books, toys, dolls, bod-ies...you name it, someone's licensed it and turned it into a computer game. The chances are that at some time or another, you've bought one of them. But were you happy with it? And just how did that favourite film of yours happen to get turned in to micro game? Read on for all the answers...

It all began back in 1982. Britain's computer game boomtime. In those days nobody paid anybody else money to use his ideas or a character, but you did your game and claimed the consequences. So it was that surprise veteran of the coin-op, *Defender*, appeared, often with such inventive screen as *Defender* or *Defender* although some producers got worried at nobody was actually said in breach of copyright.

Then along came *Conan*, who produced what was probably the last licensed game, coded and delivered licence - matches. The game was an obvious success, and other publishers realised that even paying good cash to someone for a game's licence and ideas you could still make money.

Conan didn't at around a table and spent the concept of licensing. Channon Domico Riva jumps out that looking a big business, but every manufacturer of consumer goods is aware of it. But while the whole concept just emerged, he sees believe that *Conan* treated that of the benchmark that governs how licensing in the games software industry works.

And when someone says that licensing is a big business, you'd better believe it - the whole thing is worth about \$300,000,000 in the US alone. In fact, computer software is pretty small potatoes in that figure. It amounts to about 1.5% of the market, or around \$1.5 billion.

OUT OF THE ARCHIVES

It could be the whole idea of licensing to computer games really started with *Conan*. If people were prepared to spend several hun-
dreds in *Space Invaders* and *Defender*

down-of-the-arcades, why not give them the same thing on their home screens?

Give it to them they did. It spoke and with little else. And not just the biggest games - for every game you could see down of the arcade, you could see down for both a dozen times around for years.

One of the most popular games of that recent prehistoric epoch was *Defender*. It was a sort of platform game in which on-players' age while your get-down. No fewer than 15 different versions of this game appeared within a few months of each other - some of them, to the best of our knowledge, having paid any money to the manufacturers for the rights to use the game's various characters.

As the micro market boomed, the coin-op boys realised that there was money to be made from entering the rights to their

intellectual property. Various games houses (most of them no longer in business) were franchised with legal advice if they produced games with the same title or look and feel as the coin-ops.

The situation was ripe for exploitation, as the games industry became more fractious and companies such as Domico and Riva Gold displayed a more sophisticated approach to retaining their profits.

Coin-op games are now the single biggest source of licences for the micro games industry, and also



Successful bugs in the arcade and just as big at home.

the single most expensive, and lucrative, source. We have recently signed a deal with Capcom which, it is claimed, should generate £2 million income for them over the next year. Our firm is believed to have sold over 200,000 copies of *Chameleon*, (Growth on all-time best seller: *Conan* on all-time best seller: *Conan* into home has top sales since the game.

LICENSING REPORTER

Members office moves for business into Europe



Licensing Reporter: the industry says you can't get in and it's not worth it as the rights to these fall properties.

ENDORSEMENTS

One of the most controversial developments in games licensing over the past couple of years has been the body endorsements. The formula dictates that you find a Page 3 girl, stick her body on the packaging and advertising, and then get thousands of sex-starved teenage boys to buy it.

Perhaps the trailblazer in this respect, they it was who pushed the game-buying public by producing Sam Peck's Strip Poker, back in the days when the gorgeous, posing etc. was in her pants. Rather than a cynical plan, Markwin's David Warburton says this was a happy coincidence of events: 'We had the software first and we were looking for the commercial angle. It worked.' But what about the controversy? 'We had not one single letter of complaint,' he says.

The formula was then refined by Palace software with their combat game Barbarian. This time Maria Whitaker was the gorgeous, posing etc. But there was no digitized Maria in the game, she did her bit on the adverts, busily making a muscular warrior. The game — an above-average shop and slash job — sold like hot cakes.

Not to be outdone, Markwin have bounced back with another gorgeous posing etc. from everybody's favourite Page 3, the Cannon Fused in the View! As with Barbarian, much is made of Cannon's body — especially old and crumbling a full whop on the packaging and advertising.

Endorsement isn't, of course, confined exclusively to young women. If Crush Pezzer

can endorse a flight trainer for EA, and Daisy Thomson can do the bit for Owen, then why should we take Edwards the most successful failure in history? And his name is London's sting prince? How else what we call an endorsement with real style.



Crash-up license deal never cheap, see **Series Money Box** but there are problems as well as money involved, namely competition from other software houses and doing business with Japan. Since a huge income comes can very often translate in a huge micro revenue, companies are naturally anxious to get their hands on the retail hot property — which, equally naturally, leads the digital manufacturers to claim priority through the net. Some big companies involved in licensing software have been forced to complain about others paying silly prices.

Once a company has reached an agreement, there's still a long way to go. Most non-UK games are Japanese, and Japanese is strange really a long way away, with a very different culture and language. As **Harvest Moon**, now of Logline, but formerly of Telesonnet, puts it: 'Doing business with Japan is a few courses. Everything has to go through Tokyo, you've got two to three months of delay, and you never know when you'll get a reply.'

At that factor — and all that money — means you've got to be quite a success, which is why people license etc so heavily promoted in the case of **Crash**.

This can sometimes result in the customer feeling a little peeved at what he is to be buying pre-owned products which produce little of the excitement he bought from the copy-protected, but it's all too easy to remember the disappointments — most crash-up licenses deliver the goods, as anyone who played **Blade Runner** discovered. And Warburton is happy to say he's happy.

BOARD GAMES

In the beginning was **Lairus** Games, and **Lairus** Games began **Scrabble** and **Scrabble** was a damn good game and legal lots of money. And everybody was amazed that how board games were not available on micro, first, they don't have to wait very long. **Lairus** Games (bought up by Virgin) followed up with a whole range of business from board game best-sellers — **Mensiey**, **Cluedo**, **Diplomacy**.

Virgin's Patrick Mitchell says that to be turned into a computer game, a board game

must be 'well known, a household name, or very necessary. It must be stable here, in the United States and in Europe. And it must be suitable for conversion to the computer'. **Scrabble**, he says, was 'absolutely perfect' for conversion, while **Scrabble** was a trickier job altogether.

Successful board game conversions are the sort of thing companies like to have in their catalogue because they are 'easier' sales and can go on for years — unlike most crash-up games, which enjoy spectacular, but brief, lives.

An interesting development in the board game field is **Greenix's** **Gay-Lussac** game. In this case Greenix bought an endorsement from Britain's best drink, around that name they produced both an original micro game and, launched at the same time, an original board game. Both were aimed at soccer-mad boys who were likely to be interested in one if they were interested in the other. We can expect to see more multiple launches in this mould in the future.

THE BOOK OF THE GAME

Although **Crash** was the obvious and main thing to license, it was probably a book — **Tolkien's** **The Hobbit** — which was the way first license, very back in 1981.

The subsequent game-of-the-book was a huge success. **Warlock** came next and resulting **Wargame** and other book licenses followed, although not with the regularity of crash-up licensed games. **Jeffrey Archer's Not a Penny More Not a Penny Less** was written from **Crash**, produced for **Domestic**. **James Clavell's** **The Path** was licensed by **Owen**, the author's **Dragon** was a moderate success to **Virgin**, and one of the biggest book-to-





game licenses was Douglas Adkins, Action-Alex's Guide from Indiana.

But books have never made the really big time in licenses - not even *The Diary of Anne Frank* - and they seem unlikely to ever do so either. All the pleasure of re-creating an imaginary situation is the fun you get playing a game.

THE MOTION PICTURE

It's becoming fashionable to comment on how unlike the games business is getting to



the film industry - it's new Hollywood, and all things. Certainly, software production now seems to require teams of designers, writers, musicians, et al, but one approaching film set.

No surprise, then, that films are the second biggest source of licenses after coin-ops. And big film - and not necessarily those that can be seen by a teenager - is now increasingly likely to be licensed for a game. And it's a film that's already been boxed as a certain form of entertainment - such as a top or a movie ship - that there has to be something very strange going on, if it doesn't become a game.

The last really big film license was *Godfather*, produced by Activision for Christmas 1984 (and an immediate next huge success). *Star Wars* is still one of the best licensing jobs, if managed to retain something of the weirdy spirit of the film, while still being a game you could really get into. And it's still making money, now available for a mere £1.99. At the top of the charts.

Steven David Ward says that what his company is trying to do with titles is to see-

SERIOUS MONEY

So how much have you got to lay out for a decent license? It doesn't always fit a future amount, but it's the Judge Dredd computer game license that for a mere £1000 - but that was a few years ago, and times have changed a bit since then.

For a big film or coin-op license, we are talking serious money (£50,000). Our first license is expected to have cost £200,000 or more, while *The Mummy* of Movie and Media

Marketing has 'big film' available at £200,000 for the world rights. On the other hand, it's said that Donkey got their Bond license for as little as £20,000.

Of course, these figures are rarely upfront payments, a guarantee against sales is the usual procedure. But if a company does not sell the minimum agreed figure they could find themselves with a lot of tapes on their hands but a lot of cash to find.

THE TELLY

Every week, getting on for half the population watches one soap opera or another. Millions watch several of them, while some seem to spend most of their waking lives following their favourite characters' business. Given the popularity of the telly, the only surprise is that it took the games companies so long to get going on TV licenses. Once they started though, they kept on coming with a vengeance.

Acknowledged masters of the game have to be Donkey - it's only because they bought up the titles already produced to the defunct Mervyn - that Donkey are the proud owners of games such as *Bullseye* and *Blackboard*. Donkey's Mark Sheehan describes titles like these as 'good bill payers' - shops use TV Games as multi-stock items. They're not huge sellers, but *Bullseye* - which is 16 years old - sold over 4000

copies at Christmas.

Sheehan points out that there is a two-stage process in licensing a TV programme, the first piece there is the programme itself, the rights to which are owned by the TV company, and then there is the personality who fronts it. You have to pay separately for the rights to use each one - so it fronts a picture of a ball rather than Jim Bowen or the packaging of *Bullseye*, you can perhaps guess why.

Donkey are keeping ahead with their TV Games labels; this autumn should see the release of *Every Second Counts* (of Paul Daniels fame) and *Bob's Fuf House*, with that old favourite *Bob Monkhouse*. Other companies too are interested in the telly as a source of games - this autumn we can expect a second version of *A Question of Sport*. It's not clear as yet which games house has acquired the rights to the program; interestingly it's one for which Donkey 'pitched and lost'. Mark Sheehan is intrigued by the outcome: 'It's interesting because it all depends on that 'what happens next?' How are they going to put that on a screen?

WHERE DO LICENCES COME FROM?

You don't just phone up Paramount and ask for a license to turn *Bullseye* into a computer game. Everything in the world of licensing works through agents, of whom there are 50 significant ones operating in the country. Out of these, perhaps half a dozen are active in the field of licensing to software houses.

One of the most active is Movie and Media Marketing, who have been responsible for licensing such tentacles as *Rambo*, *Top Gun*, *Platoon* and *Robocop*. The company's Tim Massey spoke to ACE about the licensing world from his point of view.

An agency such as his own, says Tim, is 'looking to a company to produce the best game to fit the character, but the game has to be strong enough in its own right'. In other words, you'd have to persuade them you were actually going to produce a decent game rather than a couple of hundred lines of Basic.

But would the agency have already sold the property to someone else? Not necessarily, agents do approach companies, but says Tim, 'we don't believe in the shotgun approach, rather in establishing good working relationships'.

Tim Massey doesn't see the proportion of licensed games getting much larger; 'there are the product to increase it', he believes.

The future, he thinks is more likely to lie in the areas of music and enhanced home technology such as CD. 'For example', he says, 'LD have a movie coming out later this year. They're the world's biggest band, how do you make a game out of it? I don't know, but if someone can come up with a concept...' Such a scenario might be easier to develop if the producers had a more interactive technology such as CD, to play around with.

ity in new classics', and the example he offers in support of this is *Platoon*, which was something of a departure from the simple blasting of a previous licence. *Rambo* in order to add that new dimension he believes it is necessary to concentrate to how a sophisticated 'software infrastructure' - designers, storybookers, engineers, coders, musicians.

WHERE TO MONT

In how will games licensing develop over

the next few years? Ideal people in a position to make some difference seem to believe that things will stay much as they are for the time being. Licences will grow, and selling games is what the software houses see in business is in.

An encouraging sign, though, is that the software houses are talking much more sensibly about what they can do with a licence; they're even ready to admit to past mistakes. *Coast* went so far - at the launch of *Platoon* - as to announce they were cut-

ting down on the quantity of releases to come to improve the quality.

The growing band of third owners also suggest that the games licence may have to change its character over the next few years. At all costs tend to be older than third owners, and are not likely to spend much time playing with toys or watching football TV on their own. The licence can't, they will want more sophisticated games, and a compromise can be provided them. Then some sophisticated licensing deals could be on the cards. ■

LICENCES: SOME HITS AND MISSES

HITS

Rambro

This superb 3D isometric arcade adventure took the aged invader's tone and figure and presented him with some terrific puzzling. In the hands of a lesser programmer than Jim Rabin it could have been a disaster, but *Coast* really came up with the goods on this one.

Double Double

This is a coin-up conversion that gave great playability and value; the more versions, even down to the humble Spring, provided nearly 100% of the coin-up fun - with none of that 'show another trip of someone'.

Redwallers

A simple enough game idea, but great fun nevertheless. Its recent success on re-releases proves that a game of the film doesn't have to coincide with the movie release to be successful.

Coast

A complex mix of strategy and action - and all the best by licence.

Arcade

One of the best conversions of a TV programme; the game had a clever design, great graphics, sensible problems and great addictiveness.



Rambro: one of the year's licences.

Platoon

A brave attempt by *Coast* to do something a bit more sophisticated with a film licence. The temptation was to go for another shoot-em-up. *Rambo*-style, but this was resisted and *Platoon* ended up as a much more thoughtful product. And an attractive bonus was the fantastic *Rambro* song on the other side of the tape.

Achard

A coin-up that you'd have been designed with the more right in mind; it converted superbly and was every bit as playable.



Double Double: the best ever game of the top mental strategy with action.

MISSES

Out Run (M&M versions)

The biggest game of last Christmas was a bitter disappointment on the 8-bit machines; it bore all the signs of a suit job-to get to the shops in time. It was far too slow and gave little sensation of speed. US Gold have remedied these deficiencies on the ST version.

Wright Flyer

Nearly two years late, and not worth the wait, fourth office say that the demo was more fun than the game.

View To A Kill

The first *James Bond* licence was something of a turkey; poorly designed and programmed, it provided little in the way of fun for the punter. Donoh's admit they were 'a little naive' with this one.



View To A Kill: badly done, but a credit on the 8-bit machines.



CORRUPTION



Atari ST screen shot.

Can you cope with Corruption?

The City of London. Deals and chicanery. Factions and profits, wild animals in handsome suits. And you.

Are you a winner? Or a deal maker?

Before your money, check the PT index, and who is going on the Corporate Challenge membership from Kingston. It's yours. It's children. It's an ever-growing market. Because these people are rich. Yours. And they need you.

Corruption is written by Magnus Smith, former editor of *The Press* and *The Guild*.

Thrive. It's fast-paced, like nothing else you've ever played. Not only suspense, communication and information. There's nobody you can trust. And it's a trap. But don't bother to lie.

Just remember: in the real world, the good guys rarely win.

Eye and make plans and your order and minimize. It's a game of the mind. Information is an alien state from *Warrior*! It's a game of strategy and complex data. See *The Making of Corruption*, London: WPC, 1987.



Published by the Rainbird Group, an equal opportunity employer. © 1987 Rainbird Group, Inc.



Atari ST £24.95, Amiga £24.95, IBM PC £24.95.

Information: Star House, 66-74 New Oxford St, London WC2A 0EP.
Rainbird and Rainbird's logo are trademarks of World Communications, P.O.



There's a jewel on top of these pillars. But how are you going to get to them?

SPINDIZZY

Last month's free cover cassette was so good we've had to rack our brains extra hard to come up with something that's as good, if not better, to give away. The result of our deliberations means we can offer lucky Spectrum, Amstrad and C64 owners the chance to own the complete version of the magnificent *Spindizzy*.

THE PLOT...

The game was originally released at full price by Electric Dreams and became an instant success. For those of you who are new to the world of computer entertainment and possibly haven't heard of *Spindizzy* before, there now follows an introduction to the game.

A new dimension has been discovered which contains a strange, artificial world hanging in space. As Trainee Assistant Cartographer for Unknown Worlds, the job of mapping the strange place has fallen to you. The *Hamdy Scout Craft* you are given is an old-fashioned (Geographic) Environmental Resistance Land-Mapping Device, known as GERALD. This craft is expensive to maintain and your time is limited. As the company has far from

notable motivations (it's all government-sponsored work, you know), time is money. The more time you spend out there the more money the company can claim. The ship's computer holds

the initial color map of the surface and your task is to explore each area, collecting stamps in the form of jewels, for which you'll be rewarded with extra time.

Because the world is hung in space, falling off is not a good idea. Should you lose or destroy your craft it will be re-created and learned back to the last location visited. But this will cause an enormous power drain resulting in the loss of valuable time. So there you have it - do a good job and you'll be well rewarded! Not and well, you don't want to be a Trainee Assistant Cartographer of your life - do you?

IF YOUR CASSETTE IS MISSING

If your free *Spindizzy* cassette is missing from the cover of this issue, just cut out this panel and send it with a stamped SAE (return)

SPINDIZZY CASSETTE

to:

ACE, 4 QUEEN STREET
BATH BA1 1EL

KEY CONTROLS

SPECTRUM KEY CONTROLS

- Use joystick or direction keys to control GERALD. Pressing FIRE gives extra speed.
- Pressing the FREQUENCY key will stop your craft on any fractional surface.
- Press 'M' to display the map.
- Press 'S' to display your current score at any time during the game.
- Pressing 1, 2, 3 and 4 will alter your viewpoint. The compass in the bottom right corner of the screen points back at all times to help with orientation.
- Press 'P' to pause the game. When paused, the border will flash. Any other key will restart the game.
- Press 'C' to alter GERALD's shape.
- Press EXTEND MODE or CAPS LOCK/SHIFT/MSK1 SHIFT to abort the game.

HOW TO LOAD IT

Side 1 of the cassette has the C64 version followed by the Spectrum version. Side 2 has the Amstrad version.

Spectrum 48/128k

First press 498 (Basic) and type LOAD " ". Hit the ENTER key and press PLAY on your tape deck.

Amstrad

Press CTRL and the small ENTER keys simultaneously. Then follow the on-screen instructions.

Commodore 64

Press SHIFT and RUN/STOP keys simultaneously then press play on your tape deck.

LOADING GUARANTEED!

All versions will RUN automatically after LOADING is complete.

The cassette on the front of this issue was part of a massive duplication run by specialist ADULTS. They are confident enough of their quality control to offer this guarantee:

If your cassette will not load you may return it direct to them for a free replacement. The address is:
ADULTS Cover Cassettes
Boxer Audio Video Ltd
Harcourt, Hazeledale Rd, Hazeledale TF9 4DR

If you encounter any loading difficulty, please first check that you have followed the loading instructions on this page correctly and that your system is able to load other games satisfactorily.

PAUL SHIRLEY

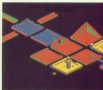
The brains behind *Spiralaxy* belong to some one other than Paul Shirley. A veteran of the programming world, he first ventured into computer entertainment while he was studying at university by writing games for the C64, often 8-bit, 16-bit machines to play. Though these games were good for their time, it wasn't until Paul got hold of an Amstrad 4128 that he wrote *Spiralaxy* - arguably his best game to date (but certainly by the one he's most famous for).

This all-time classic was some eight months in the making and Paul's not ashamed to admit that the gameplay was, to a certain extent, inspired by *Marble Madness*. The idea was inspired by the *Cities in Flight* series of books by sci-fi author James Blish, in which the *Spiralaxy* is a device that enables whole cities to be lifted from Earth and propelled through space.

Paul's moved on from his Amstrad and now uses an ST to create his games on. Paul's had his ST for a year or so and is highly impressed. He's no fan of the Amiga when it comes to writing games, and likes working on one by 'looking with a main frame'. Paul's currently working on an as yet unnamed ST shoot-em-up which seems all eagerly awaiting.



A ready-made 'jump point' perfectly over the water.



The Engineer's location, where you can get to grips with the controls.

TRICKS 'N' TACTICS

The handy hints should help you ease yourself into the game.

Over East of the starting screen is a beginner's section. In this area are simple demonstrations of some playing techniques. Time runs slowly in the section, allowing you to experiment.

Some screens will give a clue as to a switch to activate. This will cause some features to appear or disappear. Occasionally the switches may need to be used together. The clues appear in the bottom left corner of the screen.

Life may be used but may need switching on first. Ice is slippery and trampolines are bouncy! Make a map - it will help you to find short-cuts of which there are quite a few!

- 1 Status display. In the top of the screen. Displays the time left to play the area left to visit and the number of items collected. Activated switches will appear in the bottom left corner of the screen.

STRAY KEY CONTROLS

- 1 Use the joystick to control GERALD. Pressing FIRE gives extra speed. Alternatively use the keys F1 to F8 on the numeric keypad and the SHIFT key for extra speed.
- 2 Pressing the SPACE BAR will stop your craft on any frictional surface.
- 3 Press 'M' to display the map. Unexplored areas are marked in red. Visited areas in yellow. Any area where a jump has taken place but not collected is treated with a 'Z'. Press 'ESC' to return to the game.
- 4 Press 'S' to display your current score at any time during the game.
- 5 The arrow screen keys after your viewpoint.

- 6 The compass in the bottom right of the screen points North at all times to help with orientation.
- 6 Hold the SPACE BAR until your time runs out to start the mission.
- 7 Press 'C' to toggle between colour and monochrome display mode.
- 8 Press 'P' to pause the game. While paused the timer will flash. Any other key restarts the game.
- 9 Press 'V' to alter GERALD's shape.
- 10 Status display. On the left side of the screen. Displays the time left to play, the areas left to visit and the number of items collected. The box at the bottom shows you which switches are activated.

COMMODORE KEY CONTROLS

- 1 Use the joystick to control GERALD. Pressing the FIRE button gives extra speed. Pressing the SPACE BAR will stop your craft on any frictional surface.

- 2 Press 'M' to display the map.
- 3 Press the arrow key above 'CONTROL' to return to the game.
- 4 Press 'S' to display your current score at any time during the game.
- 5 The function keys F1, F5, F6 and F7 will alter your viewpoint. The compass in the bottom right of the screen points North at all times to help with orientation.
- 6 Hold the SPACE BAR down until your time runs out to start the mission.
- 7 Press 'C' to toggle between colour and monochrome display mode.
- 8 Press 'P' to pause the game. While paused, the timer will flash. Any other key will restart the game.
- 9 Press 'V' to alter GERALD's shape.
- 10 Status display.

- On the left side of the screen. Displays the time left to play, the areas left to visit and the number of items collected. The box at the bottom shows you which switches are activated.

To make sure the Atari 520 STFM
only plays games that are worthy of it,



Offer excludes monitor.

Only the Atari Summer Peck gives you the world's best home computer plus the world's best games. Twenty-two software titles that most people would give their right arms for, are yours absolutely free.

it,



we're giving you
£400 worth free.

...est game... There's no catch. You really do get a \$20 STFM and £414 worth of great...
...tally... for just £399.99! But only until September 1st. What are you waiting for?





... A SUDDEN ROCK GULL
INDICATING TO KILL OUR HERO!



SCREEN TEST

There's one outstanding game this month, the only one our rigorous standards have allowed us to award the coveted 900+ score – *Interceptor*, from Electronic Arts. It's a program that we raved over when we saw the demos, and that more than fulfilled its promise when the real thing came along. Read the review, admire the pictures, and marvel.



Elsewhere, it's been the month of the nearly 900s; both *Bionic Commandos* and *Leatherneck* had sterling qualities of playability and fun, but they didn't quite have the complexity or the stamina to make it to the *crème de la crème*. Still rollicking good fun, though.



On the updates front, check out *ST Out Run* – it's a massive improvement on the 8-bit versions, and is well worth a test drive.



THE RATINGS

HOW they're calculated...

If you buy a game, how much enjoyment will you get out of it, and for how long? Just check out our revolutionary PRO (Predicted Interest Curve) for the full story. Brilliant arcade games sit high on the curve, and then steadily fall off as you lose interest; powerful puzzle games may ride the crest of the curve for months – but the moment you solve them they'll come tumbling down; complex strategy games may stump you at first – but climb up the scale as you begin to appreciate the scope of the game play. And as for the fantasies – they start low, stay low, and have nowhere to go but down, down, down.

Once you've seen how long the game can hold your attention, all you need to glance at is the renowned ACE RATING. This is calculated according to the area under the PRO. The bigger it is, the better the game. Add to that our definitive ratings for 10 Factor (tell it give you truth with a dash-sure!) and Fun Factor – a measure of instant appeal and exhilaration as

you dive into the game. And, of course, we rate the Graphics and Audio effects too... for EVERY machine the game's available on.

WHY you can rely on them...

The ACE reviewing team covers a broad spectrum of computer entertainment talent. Andy Wilson knows more about 50000 bp codes than many a commercial programmer – but he can also test the parts of the operation in Clio. Andy Smith doesn't bring an up scale from an alien, but 14 years of game playing experience enable him to pass definitive judgement on anything from snip to shoot em-ups. Add Steve Cooke (the Personal Computer Games and formerly columnist for magazines ranging from *Dragon* to *Your Sinclair*) and Pete Connor (an *Amiga* Action, Personal Computer Games, and Your Computer reviewer) and you've got age and experience as well as youthful enthusiasm.

Every game on the following pages has been seen by all of us. We compare notes, express differing opinions, and only then do we decide what's to take final responsibility for getting our views into print. What follows, then, isn't just a collection of casual comments, but the definitive ACE verdict on this month's software. We've checked it out – now you can too.

INDEX

ACE RATED

44 *INTERCEPTOR*
Electronic Arts

REVIEWED

- 63 *ACRON FORCE 2* Virgin
87 *BIONIC COMMANDOS* GO!
60 *BOB* Infogrames
86 *CHARLIE CHAPLIN* 85 Gold
68 *CROSSWISE* Frebird
50 *CYBERKNIGHTS* CBI
62 *EARTHLIGHT*
Frebird
53 *EDGE EDWARDS SUPER 8X1*
Locus
58 *HERPOWER* Activision
48 *FOUNDATIONS WARE*
Evader
66 *GALACTIC INVASION*
Activision
86 *GOLDBURNER 2* Microdeal
68 *GRANDIOS* GO!
53 *INTERCEPTOR 2* 85 Gold
49 *LEATHERNECK* Microdeal
43 *QUADRANT* Logotron
64 *ROAD WARRIOR* CBI
48 *SEVENTEEN* Mastertronic
68 *SOLDIER OF FORT* The Edge
54 *THEODOR* Activision
43 *THREE STORIES* Microdeal
68 *WEARD WARE* GO!

UPDATES

AMSTRAD CPC
67 *CAPTAIN BLOOD* Infogrames

SIAB 87

64 *OUT RUN* US Gold
67 *TREX* Logotron

COMMODORE AMIGA

64 *BT* Sublogic

IBM PC

67 *CAPTAIN BLOOD*
Infogrames

SPECTRUM

67 *TARGET BENVIGADE* Logotron

STOPPING success means pulling down in a standard enough gesture, goodness only knows, but with its combination of arcade challenge and dynamic layout pushing the line of best time to be different. Together here something of a track record as far as the public side of things goes — that's confirmed. So was 100-rated track as ACE issue 1 — but the arcade couldn't do much larger post. How will they fare against the big fish?

The stakes are high, and not just for Logotron: your task is pretty important too, what with Karlos industry on the brink of collapse. The rotating reactor station John has been awarded by the evil Quadraliens, and our tactics depend on Auto for their power supply, so you'd better get to work. Deconstructive the reactor's four levels, but not the Quadraliens and Karlos economy gets back on its own feet and you needn't bother coming back.

Your boss for the mission consists of six robots, each with different strengths and weaknesses. For each of the six insulated control on a level you'll have to jink the two robots you think best suited to the particular problems there. The problems in question are made up of Auton service-robots, the rough

QUADRALIEN

LOGOTRON get smitten by an Astra

ATARI ST VERSION

Drop-particle gun/segment/maze and through machine with a great response strategy at least. One of the better requirements of previous issue.

GRAPHICS 7 IQ FACTOR 8
 AUDIO 6 FUN FACTOR 6

ACE RATING 850

RELEASE BOX

ATARI ST	£19.95	OUT NOW
AMIGA	£19.95	MARKED
IBM PC	£19.95	MARKED

equivalent of 30m chickens and fat. The service drinks come in two kinds and ones, which affect each other and blue-ones, which equal each other. The structure they form in the reactor consists of each module will typically bleed your souls through to unreconstructed items it releases.

Though you can simply blast your way through the grids of debris, the water you limited energy. Even with the most least-wasteful cast of your six robots, a full-on-gate approach won't get you very far. Better, you'll have to struggle with each structure's physical properties in order to clear a path through. One wrong move can set a disastrous chain-of-events in motion, so good care is needed.

It's not enough to deconstruct the glass structure, and you, the reactor temperature is rising the whole time, and to

NYUK! Nyuk! Nyuk! The Taiwanese Taiwanese have arrived, so get ready to dodge those roasted pies and avoid having your eyes poked. Now, sorry, you! Duty one on a mission, they've got to earn enough money to save the local orphanage from closing and they've only got 30 days in which to do it.

At the start of each day the player has to decide what the Stooges should do to raise the money. A series of icons are displayed across the top of the screen and a small hand jumps randomly from one to the other. By hitting the fire button, when the hand is over a particular icon, a sub-game is entered.

AMIGA VERSION

The game has great graphics and animation and only one atmosphere performance, most often, but it's not the best for the 100th anniversary edition. It's a good one.

GRAPHICS 8 IQ FACTOR 7
 AUDIO 6 FUN FACTOR 6

ACE RATING 850

— you've got to be quick to hit the button of the right time though, or you could wind up using a finger in one of the backrooms (one that are always present). Use four fingers and it's game over.

Along with memorables and sub-games there are also icons for money, trivia questions, the red man and the slow-down. The money icon guarantees the Stooges at least \$200; the trivia question gives the Stooges a choice to earn \$500 if the player can answer a Stooges trivia question, and the red man deducts 10 percent from the Stooges earnings as fat. The slow-down icon puts the player in control of Moe and he has to help and take Larry and Curly on money

THE THREE STOOGES

Mirrorsoft's slapstick-em-up



The earlier sub-game, and how fast the Stooges relax as after the third!



27 - You can enter the third structure to reach that contamination?

energy level falls as you exchange your roles. The sun helps slow the temperature rise by reducing the entropy - the amount of movement, that is - in each of the modules. Certain colors of clouds, particularly blue ones, can

set up continuous oscillations (beating their top can try your time, but contact with an oscillating drum can drain your roles' energy).

To actually lower the weather temperature, you'll have to face constant pool-and-pool

time is possible within a short time limit. If you're successful, the final scores reach down across the lines, enabling you to choose your destiny.

There are four sub-games. The first has you controlling all three Sims as they stand behind a bench full of stacked peas. By moving the joystick and pressing the you can get the Sims to pick up and throw peas of the customers on the opposite side of the dining room. The customers throw peas back though and if they score five hits on any of the Sims it's game-over and on to the next day. There's \$10 to be made for every pea thrown and double pay if the hit



The live simulation screen at the start of the day.

hundred of peas a thrower before you stop the hit.

The second sub-game has the Sims using an doctor machine to the operating theater. They've climbed into motorized wheelchairs and you have to guide them through the corridors of the hospital, avoiding the patients that appear from the top of the vertically scrolling screen. Hit five patients and it's back to the coin selecting screen.

Cutie and Larry are the stars of the third sub-game. Cutie is the looting ring and Larry got to run to the nearest radio shop and

RELEASE BOX		
AMIGA	22-260	OUT NOW
CDI	214-260	ARRIVING
ATARI ST	TD	ARRIVING
IBM PC	TD	ARRIVING



return with a radio before the end of the day's round. The sub-game puts Larry in your direct control, running across a sideways scrolling landscape avoiding obstacles on the pavement.

The last sub-game has the player controlling Cutie's speed during a roller-coasting ride. The machine, built on soap and Cutie has to get to the machines before the system in his soap do.

If you're a Sims fan you'll probably love the game - at least you will the first time you play it. After that the digitized speech gets boring, the disk swapping becomes tedious and the sub-games become too rote. There's simply not enough in here to keep you playing for much longer than a week.

Andy Whit



27 - The six rooms in your town each have different characteristics. Choose carefully - some are better than others for particular models.

from down nearby chutes. There's a strategic edge to this: the pods are most effective when the temperature's highest, so you're best off saving them till things get critical. The chutes also serve another purpose: if you shove empty pods down them instead, you can replace some of the reactor energy you activities have drained up.

All this provides a good structure for some very absorbing gameplay, with a whole lot of minor features adding depth and complexity, but for the most part these and the



27 - There's a lot of oscillation among all these blue doors, and that's leading the machine's energy danger level. You'll have to act fast, before the temperature goes through the roof.

some striking collection that Xie delivered. In Xie, one machine threat you had to control the level. In Quaxxian there's a strategic penalty to be paid when you have to blast your way through a mawing-up structure, but that's not set at immediate or challenging.

People who found Xie just too abstract or frustrating to beat may well find this one a more palatable way of assessing the old team, but the die-hard puzzle fiends out there will probably stick to fish and chickens.

Andy Whit





1 The mission briefing for Force One, the President's personal Boeing 707, is it changed? Can you save the day?



2 How does your ship break through the USN's defenses, your technology.



3 On the catapult deck, your threat's already armed and ready to go.

INTERCEPTOR

ELECTRONIC ARTS hit the flight deck!

SOLID 3D is nothing new in the world of flight simulators, but solid action is a different matter. When you find a program that looks smooth and feels intensely realistic, you don't expect anything additive creeping into the funzone. All that's about to be turned on its head: if you find flight sim funning or tough to get into, 3Datable programming forces Interceptor's programmed shenanigans won't just change your mind — it'll blow it!

In September 1984, and on international tension rises the air over San Francisco Bay is prowled by MiG fighters. In a variety of gauging missions you'll dogfight, strafe and air-bait your way to an emergency landing the skies of Alameda and generally attending the fire world. Can you save the President when Air Force One is attacked? Can you stop the Hoo-Fly from debarking in the forest? Can you stop those insidious red-eating San Francisco? If you can, you'll get even tougher, strange missions, each rivaled to you only when you've completed the previous one successfully. The suspense is aleviating as the landing flares up overhead, and once you've become the game's jet-gipsa like a vice.

You won't be able to get straight into the action, mind you. It's not that there's a huge learning task or a hefty manual to struggle through — in fact the game presents an easy, graded course that'll leave you flying around mission in no time, with very little bookwork required. No, what holds you up is the sheer power of the game's presentation. The sound will dazzle you — you just don't know what game effects can do till you load the one up — and the graphics are simply out of this world.

Clipping Devo from the main menu will get you just the taste of this visual excitement, but to really cut the program loose you'll need to shoot five flight scenes. This lets you fly out from the carrier to intercept a ship of three damage carriers, strike an F-14 Hornet or trace a land-based air F-14 Fighting Falcon, getting the hang of the controls and handling characteristics without enemy fighters or mission objectives to worry about.

Once you've chosen your starting point and plane, you're invited to a briefcutting scene in from a large-scale straight-down to ground (or sea) level. You can take time to recover on the view screen inside the cockpit, ready to take-off, but once you're ready to

RELEASE BOX

AMIGA	IBM PC	OUT NOW
No other versions planned		

AMIGA VERSION

Optimised for the new 68000 chip to bring it steps to Interceptor with the best, but somewhat short on the graphics. On IBM machines the engine, terrain, weapons and controls background play an excellent, fast and expanded 480 x 640-680 high res beta.

GRAPHICS	10	10	FASTER	7
SOUND	8	10	FASTER	8

ACE RATING 934

934
ACE RATED

the movement starts all over again. Once the wheels or hydrofoils or your landing gear retract, or the wheels as you engage the catapult, are the ground but every end of the run into view as you pull up into a climb and almost feel the plane on as you blast through the sound barrier. Fly on!

Not satisfied with the straight-ahead view? Then take a look round, or top-afraid the cockpit entirely? There's a wide range of different viewing angles you can select, using



14 One of 1000s, the original sailing fleet comes up to meet you very soon unless they're under attack when the grey block indicates their size to attack and you would not end up in the boat.



13 Detailed down to 20% zoom, you're almost there. You've got your landing gear and catapult back down ready for a full-throttle launch.



4 The cockpit interior takes your blood up to 100 and the altitude will feel you off the deck!

be momentary, tapped on your keyboard, the controls for the one logically laid out and one way to use it fight. These spectacularly ensure your overview of things - combat maneuvers can make a great deal more sense when viewed from outside the cockpit - as well as the general visual impact.

Of course if you want to get outside the cockpit for real, there's always the option and option. It's not that a mission's over because - it actually gives you a pilot's eye view of being out. This is even better when viewed from outside the plane, as the camera shows your canopy breaking away and then follows your descent by parachute landing gear!

Regardless, Bob D'Amico, and the cockpit team have really pulled out all the stops on the one, with a terrific overall presentation and tremendous attention to detail. Push might dispute the label "simulation" - it certainly doesn't train you to fly a real life plane - but the program combines realism and gameplay for too well for that to matter. If you want out-of-the-park or combat action, miraculous graphics and 3D sound training period, look no further!

Andy Wilco

PREDICTED INTEREST CURVE



Being out for them is a limited number of months.



12 The Predator's plane handles more safely - well, that's how you've just got to find the center and get away from safety.



5 The view from a rear three-quarter position as you power up your jet! You've already engaged afterburners (the orange glow is your jet's exhaust) and you have a restricted view of the horizon!



6, 7 & 8 Afterburners will do! Even then you've got a 400 to deal with, but you can spend the time for a good look at that 70' or there up for that segment of San Francisco International.



11 You're not your own boss for another minute, but it's necessary - that's all of them is all that's left of your opponent.



9 Afterburners off now to reduce your heat signature, you want to avoid that 400. You've already launched your missile at the jet, and here's another for good measure!

FOUNDATIONS WASTE

EXOCET get launched

letter Perhaps best of all are what look like bits of your ship left lying around on the ground. Pick those up and you get side-firing weapons.

Twinkle it, as the screen fills up with loot from your graphics slow like magic. A sprinkling of aliens is food enough, without your ship being reduced to crawling around the screen like an erratic slug.

Be that as it may, Foundations Waste is a good example of its type. For your interest on another, all back with a map of screen and wave the pistol around the ball on four blasting a few more aliens into oblivion. Slightly addictive, and thoroughly outdated.

• Rod Lentin

RELEASE BOX

ATARI ST	CRASH	OUTRAGE
AMIGA	Under development	



It's very pretty, very basic, and very overpriced.

WAST quantities of plasticity come designed from the packaging only gradually reveal that Foundations Waste isn't new company Exocet, it's nothing more than a low-level, vertically-scrolling blast. One side here blasting a few alien ground units firing with hostile retaliations, through space filled by more often waves of various aliens and etc. This - again.

Mind you, if the gameplay hardly does justice to local machinery, the graphics certainly do. Shoot the bad guys, and now and then they leave behind a glowing blue symbol. Pick that up and you either get temporary indestructibility (deducted by a flashing green shield) or a blue laser ball to replace your standard fire-throwing guns. Pick up a red benefit, and you get an automatic shooter - more

RELEASE BOX

AMIGA	CRASH	OUTRAGE
ATARI ST	CRASH	UNDERDEV

AMIGA VERSION

Well, that's strange as most jet games are Exocet's domain. You don't expect being graphics and run through you don't get it. It's impressive that both good and bad are not a surprise as they do it to you.

GRAPHICS	7	IQ FACTOR	1
ACTION	6	FUN FACTOR	7
ACE RATING 60%			



Shoot those aliens, dodge those bullets, don't blow-up from the machine-gunners.

SIDEWINDER

Play it again with MASTERTRONIC

THE more things change, the more they stay the same. Whoever said that could easily have been talking about computer games. You'd have thought that modern hardware would have left the old vertically-scrolling shoot-'em-up far behind, but not so - they just keep on coming.

This one has Mastertronic. It's across when spaceship-destroy ground installations, dodging flying aliens, face increasing levels of difficulty - and so on and so forth.

At first sight there's little to distinguish Sidewinder from a whole host of similar products. The graphics are nice, the backgrounds detailed and colourful, the sprites large and numerous. There's nothing here that hasn't been seen many times before.

At least you pick up bonuses along the way. It gives you Super Fire. F gives you flame that destroys every target with a single hit. G gives you a dual temporary invulnerable ball's worth. H gives you bombs. All nice and handy, but you can't save them up - you have to use them as you find them.

When Sidewinder comes in the progressive way the difficulty builds up. The scenery,

ATARI ST VERSION

Exocet is a slightly old-fashioned, but, unlike games about graphics a fair one for the side get fronts. Very pretty graphics.

GRAPHICS	7	IQ FACTOR	1
ACTION	6	FUN FACTOR	7
ACE RATING 60%			

PREDICTED INTEREST CURVE



Max Score: 1,000,000

too, improve as you go on - screen four is very pretty indeed. Also, after that you've got just two levels to go before you're back to level one, albeit with the difficulty level upped a bit.

And both the trouble Sidewinder must take long to reach. That, before you start the game you can select one of five difficulty levels than Mastertronic to Master, but why not give with one arm tied behind your back, or a patch-over one eye...

• Rod Lentin

PREDICTED INTEREST CURVE



At least Mastertronic to explore and it could have been a master.

NEW LOW PRICE ST!

ST PRICE INCREASE

Due to a worldwide shortage of memory chips, the prices of many computers have gone up. From April 1988, the Atari ST range is also affected by this. For details of any price increases, please return the coupon below for our latest literature.



ONLY FROM SILICA

Atari ST computers are the most powerful and versatile available for under £300. They are the only computers that can handle both text and graphics. They are the only computers that can handle both text and graphics. They are the only computers that can handle both text and graphics.

FREE STARTER KIT - Only From Silica
 Atari ST computers are the most powerful and versatile available for under £300. They are the only computers that can handle both text and graphics. They are the only computers that can handle both text and graphics.

DEDICATED SERVICE - Only From Silica
 Atari ST computers are the most powerful and versatile available for under £300. They are the only computers that can handle both text and graphics. They are the only computers that can handle both text and graphics.

THE FULL STOCK RANGE - Only From Silica
 Atari ST computers are the most powerful and versatile available for under £300. They are the only computers that can handle both text and graphics. They are the only computers that can handle both text and graphics.

AFTER SALES SUPPORT - Only From Silica
 Atari ST computers are the most powerful and versatile available for under £300. They are the only computers that can handle both text and graphics. They are the only computers that can handle both text and graphics.

FREE CATALOGUES - Only From Silica
 Atari ST computers are the most powerful and versatile available for under £300. They are the only computers that can handle both text and graphics. They are the only computers that can handle both text and graphics.

FREE OVERNIGHT DELIVERY - From Silica
 Atari ST computers are the most powerful and versatile available for under £300. They are the only computers that can handle both text and graphics. They are the only computers that can handle both text and graphics.

PRICE MATCH - Only From Silica
 Atari ST computers are the most powerful and versatile available for under £300. They are the only computers that can handle both text and graphics. They are the only computers that can handle both text and graphics.

£260

+VAT=£299

SO MUCH FOR SO LITTLE!

There is nothing but real computers with the incredible value for money offered by Atari's 520ST-FM. For only £260 (incl. VAT), you can purchase a powerful 1250 KHz computer with a 95 key keyboard (including numeric keypad), 800K upgrade, 2MB of 5.25" softcopy, mouse controller, and a 1000 byte on disk drive. The 520ST-FM has a 100 megabyte hard-disk, and comes with a hard to allow you to plug in enough only one dynamic random access. The main disadvantage is also built in to the keyboard, as there are no internal floppy drives. You couldn't wait for a more powerful, powerful and system unit. Atari ST computers are now firmly established in the UK, there are today's 500 software titles already available for a wide range of applications and the list is growing all the time. And there's more! When you buy your new 520ST-FM (or any Atari ST computer), you'll also get a lot more, including a FREE Atari ST Starter Kit worth over £30.00. Return this FREE 520ST-FM to Silica Group, the only UK Atari Specialist. For further details of our range of Atari ST computers and the FREE 520ST-FM Starter Kit, complete and return the reply coupon below.

ATARI 520ST-FM NOW ONLY £260 (incl. VAT) £299
 (incl. VAT) £299 (incl. VAT) £299 (incl. VAT) £299

ATARI 520ST-F - NEW PRICE
 Atari ST computers are the most powerful and versatile available for under £300. They are the only computers that can handle both text and graphics. They are the only computers that can handle both text and graphics.

MEGA ST'S NOW IN STOCK
 Atari ST computers are the most powerful and versatile available for under £300. They are the only computers that can handle both text and graphics. They are the only computers that can handle both text and graphics.



The Silica Group Ltd. Atari ST range is the most powerful and versatile available for under £300.

PLEASE SEND ME FREE LITERATURE ON THE ATARI ST

Name: _____ Initials: _____ Surname: _____

Address: _____

Postcode: _____

If you already own a computer, please tick this box

SILICA (A World Order) 01-300 9191
 14 The Miles, Hellenway Road, Sidcup, Kent, SE13 2JF

LONDON 01-880 8839
 1 Elm Road, 2nd Floor, 207 Tottenham Court Rd, London, W1P 0PL

LONDON 01-889 1234 and 3014
 100 Kingsway 1st Floor, Chiswell Street, London, EC2N 2AB



WALT DISNEY
Mickey Mouse
The Computer Game



IBM 64128

£9.99 - £14.99

Spectrum 48K

£7.99 +3 £12.99

Amstrad
£9.99 - £14.99

Atari ST £19.99

© The Walt Disney Company



All mail order enquiries to:

Graphic Graphics Software Ltd., Alpha House, 18 Carver Street, Sheffield S1 4XL. Tel: (0742) 730423 Telex No. 547234

SIMULTANEOUS four-player action. Both what makes this such a good game. The play simple - you control one on-screen character and you have to advance through several areas of enemy-infested territory - the longer you survive, the more points you get.

You've got three choices of weapons to use against the enemy. The light machine gun has a high rate of fire but not much range, the heavy machine gun has a slower rate of fire but has greater range, and hand grenades can be lobbed over obstacles, switching between weapons is effected by giving your joystick a quick wriggle or by hitting the corresponding key. Ammunition for each weapon is limited, but fortunately ammo boxes have been left by the enemy and you can use them. Simply walk into an ammo box (each of which contains an equal amount of ammunition for each weapon).

You view the game through a large window, with a status window to the right. The status window shows you what weapon you're currently using, the ammo level for that weapon and how many of your initial lives (we've got left). The main playing window scrolls downwards as you move up.



Four go out in the jungle - you're a well-behaved side of the moment with two using grenades and the other two on light machine gun.

LEATHERNECK

MICRODEAL's four-way frolic

to reveal the enemy - who shoot machine guns and hit hand-grenades at you. Ground mutations also make an appearance in the game and have to be destroyed with a well-aimed grenade. Firing your machine-gun doesn't result in a whole stream of bullets slowly crawling their way up the screen. No; all you see is a lot of visible flash and whoever you were lined up with off the line (big the dust). The enemy's shots are visible, however, so you can at least try to dodge them.

Once you hit for the bullet, anything slowly is best of you dies - including people on your own team. This can be almost veritable at times especially when two

people are playing at once.

Though it's just a relatively simple shoot-'em-up, the four-player option makes for long hours of interest. The shot points for each now game way so tactics developed for one scenario simply don't apply to any other. The only time you'll have to think about anything though is when you try to decide whether to shoot your pals in the back and go for that high score.

• **Red Smith**

RELEASE BOX

ATARI ST	ETHNIC	OUT NOW
AMIGA	ETHNIC	IMMINENT

No other versions planned

PREDICTED INTEREST CURVE



Just means being 40% based on its highly positive early reviews.

ATARI ST VERSION

The graphics, sound and control on this version sound like to me impressive features, games and all-around help to make this one of the most enjoyable Commodore-style type games ever to have appeared.

GRAPHICS: 8 | SOUND: 8
 ACTION: 8 | FUN FACTOR: 8

AGE RATING: 007



Even there were three - player four got just a little less close to their grenade explosion and has less time to outdistance (players 1 to 3 have a little advantage).

FOUR-PLAYER FUN

To really get the most from the game, you've got to get some friends round to play the game with you and you'll need the special setup which should be available from the same place you bought the game, or direct from Microdeal at a cost of £5.95 - the price of four of you to play the game using different controllers. It's a pretty safe bet that some four Microdeal games will utilize the setup, so your money will be well spent.

WRITING high quality 8-bit sci-fi games like *Archie* and *Melvin* is one thing, but B.T. Smith has now turned his attention to arcade games. Can he produce them to the same high standards as his earlier work?

Cyberknights is an arcade adventure game with strategic elements. The player controls a Cyberknight and has different objectives to reach, depending on whether one or two players are playing. Assuming there are two players, the objective is to destroy the 10 computer-controlled robots that wander around the arena. In the one-player mode, the objective is to destroy the other player's Cyberknight.

The arena is large and consists of several



There's got a little more than 10 destroying the other while there's a life timer.

CYBERKNIGHTS

CRL have at you!

of rooms connected by various lifts and walkways. Should you happen on a computer-controlled robot in a room you have to use your limited weapons to their best advantage in order to destroy them. Purchasing weapons is full out of this is another objective method of purchasing them off if you can lure them into one.

Scattered around the arena are small bags of money that are used at the end of the game to purchase better equipment for your Cyberknight. Deciding which lets is sold and which to take over is done using the designer program that comes with the package and has to be loaded separately. You can save your Cyberknights to tape so you don't have to struggle to learn just to

reach the point you got to last time. In one of the game's features is a repetitive and the novelty soon wears out. It's very doubtful you'll be playing this in a year's time.

Andy Bell

RELEASE BOX

SPECTRUM £7.95cm CMT 100K
No other versions planned

PREDICTED INTEREST CURVE



Increasing difficulty

SPECTRUM VERSION

The program is suitable for the spectrum in a little area. Found a similar to some machine others and the operation resembles game for other using some other high.

GRAPHICS 5 IQ FACTOR 4
AUDIO 4 FUN FACTOR 5

ACE RATING 518

RELEASE BOX

ATARI ST £19.95 CMT 100K
No other versions planned

ATARI ST VERSION

The walking is just as fast as the speed but the graphics are more than just good and use it well. The graphics were also fast when it was all at one time. The control on this was very good and the whole is one of your 800 games I must recommend.

GRAPHICS 5 IQ FACTOR 5
AUDIO 5 FUN FACTOR 5

ACE RATING 524

PREDICTED INTEREST CURVE



Now called than the original but still a better than other.

GOLDRUNNER II

Metallic jogging with MICRODEAL

GRANDAD was a new world for the business race and now the responsibility for leading on to it has passed to you, the granddad. The game is visually fresh like the original Goldrunner - fast vertical scrolling, lots of obstacles and step cloaking, terminal levels. But what you control is much smaller, but the gameplay has been beefed up.

The family business takes place on a vertically scrolling corridor with large blocks at each end. Flying into them, or any other buildings in the corridor, will result in an abrupt termination of your existence. The design of the corridor takes from level to level, and there are also two scenery disks available that provide completely new backgrounds and obstacle arrangements.

On each corridor there's a network of roads carrying homophobe cars. These are carrying robot pilots which you're supposed to rescue. If you shoot the cars a program recovery stage to appear and push them up. This causes the ship to change colour, at which point you can shoot it and collect the



The original scene where the robot pilots are dropped off.

robot pilot before it steps back. Then all you have to do is step them off at a drop zone for big bonus points at the end of the level.

While this is going on, the money can pile up since that can't actually hurt you, but can bounce you into the ground state due with their fire. The level ends when all the robot pilots are recovered or destroyed and you progress to the next, harder level.

Col Web



PHOTOS Paint

Image not quite right?

Everyone, at one time or another, has come across a car that is too short, a tree in the wrong place, or a sky that's too grey. Now, with MicroVision's Photon Paint, a new high-tech paint program for micro-computers, these adjustments can be made at home. A scanned photograph, or an original image created on the screen of your micro, can be altered to your exact specifications. Your *looked-at* or *seen* image can then be printed out onto paper, transparency, or even onto Polaroid film.

Photon Paint does this through a combination of features from a 32-color paint program and a 16M paint program, with features which were previously unique to the most sophisticated, high-end graphics systems.

- Sophisticated brush operation including twisting, adjustable transparency and mouse operated perspective filling.

- Erasing and mixing.
- Wrapping of brushes onto 3-D objects; ice balls, cones, cubes and free-hand drawn shapes.

- Luminance - light sources from a user-defined direction and intensity.

Watch out for Photon Paint in early June!



Available on Amiga £299.99

MicroVision



MicroVision Systems UK Ltd., Units 7 & 4 Lynch Close,
Preston Road Industrial Estate, Wellingborough, Northampton NN9 6JF
Tel: 02055 78759.

Marketed and Distributed by

ACTIVISION

STARGLIDER 2



COMING SOON...

BY ARGONAUT SOFTWARE

Atari ST/Amiga £24.95



Edinburgh: Penton House, 64-76, Vyse Street, London: W.C.B. 999,
London and London: Argonaut Software, a trademark of Argonaut Software, P.L.C.



Registered and the Rainbird logo are registered
trademarks of British Educational Software P.L.C.

EDDIE EDWARDS SUPER SKI

Get one jump ahead with LORICIELS

EDDIE Edwards may not be the world's most successful skier, but his ski line from Loriciels that beats his name sure has winners.

As ski stars go, this one is hood and shoulders above the rest. The restoration of your skier is vibrant, the background perspective and movement incredibly realistic

and the impression of speed as you race down the piste is tantalizing.

Being either joystick or keyboard you can speed up, slow down, turn - and go flying off the course in a state of falling skies

and alas if you push your luck too far

There are four events to take part in - slalom, giant slalom, downhill and ski jump - and three different pistes for your luck on. If you don't fancy choosing your own (or leg) in the heat of competition, yet, there is also a training mode where you can make a fool of yourself to your heart's content.

If there are critics that can be levelled at Eddie Edwards, it's that there's not a great deal of depth to the game. Four events, three pistes - it's not much, is it? Against that, though, it's going to take you a long, long time to get those time-downs.

Red Lastic

ATARI ST VERSION

Atari's background and perspective are quite superb, but that graphic for skidding (skidded) - which is how you try to slow off base loaders in a section of a long long run.

GRAPHICS 8 IQ FACTOR 8
SOUND 8 FUN FACTOR 8

ACE RATING 8/10

AMSTRAD VERSION

Graphically not as exceptional as the ST version, obviously, but there is technical speed and original content.

GRAPHICS 7 IQ FACTOR 8
SOUND 8 FUN FACTOR 8

ACE RATING 7/10

RELEASE BOX		
ATARI ST	£19.99k	OUT NOW
AMS	£19.99k, £14.99k	OUT NOW
ORIGIN	£19.99k, £14.99k	IMMAYNT



ST - Now's increased graphics.

PREDICTED INTEREST CURVE



INFILTRATOR II

US GOLD sneaks in again

ENTRUSTING your life to a Whistling Infiltrator helicopter is about as sensible as de-jumping made of the Telecom tower, however. James McMillan is the kind of guy that will not only do it once but twice. This time he'll get five new missions to complete to stop the bad lads from gaining world domination.

Each mission consists of a helicopter

flight to the target and then a ground operation. Both sections take exactly the same form as the original game, the missions being the only difference.

Flying the helicopter is a fairly simple, but only fairly just in avoiding the maneuvering at all. There will require IQ from you and if you manage wrongly you're in for fright.

Once you reach the target you proceed on foot to explore the mission base. You are carrying various objects like a mine detector,

gas generator and papers, that will get you past various obstacles. You've also got a number of objects for specific uses like a mobile deactivator, both sensitive and brain required.

You can enter buildings in the base, whereas you can search furniture for more objects that will allow you access to more of the complex. The whole time you are at risk from the camp guards and the 10 minute time limit.

All this action is exactly the same as the original game, the differences are restricted to the mapping and the objects encountered. For fans of the first title it may prove a reasonably new challenge, while anyone new to the game should find it a good combination of in-flight action and war-torn exploration.

Bob Wade

RELEASE BOX

ORIGIN £19.99k, £14.99k, £17.99k

No other versions planned

ORIGIN VERSION

The graphic resolution is good and looks a bit dated. However, the consistency of play being good in this area is best. To sound a reasonable note here is the star and effects aren't the way though.

GRAPHICS 8 IQ FACTOR 8
SOUND 8 FUN FACTOR 8

ACE RATING 8/10



There's little use of the enemy base's buildings and can start searching the furniture for useful items.

PREDICTED INTEREST CURVE





Roam in the buggy that's near the warehouses. Don't think about leaving it parked there though if you're intending to go in any of the buildings - the best jobs are way out in other chunks.

SUNDOG

MIRRORSOFT do the Space Warp again

REVIEWING games that are some space or four years old is not a total sin at ACE (though in very rare cases, but we're never so impressed with Orb's new Challenge Master card especially as we visited PTL's American office last month, we were delighted to hear that Mirrosoft are now geared up to release PTL's last game, previously only available over here as an import.

Recently speaking Benford would be

RELEASE BOX

ATARI ST £14.99 £17.99

Another version planned

ATARI ST VERSION

The graphics are fine, and the animation. The graphics are but you have to get the most in ways to use the benefits like in a. Plus the Benford's Card type of game that, check the old Akropolis collection with that this is how to handle them through.

GRAPHICS 7 SOUND FACTOR 4

GAMEPLAY 5 FUN FACTOR 4

ACE RATING: 7/10



Getting ready to work in a new system. Proceed at sub-light speed to one of the many points, all that matter and you're away.



described as a science fiction theme adventure game somewhere between Ace Quest and Star. Due to your unclear recent character you've just admitted a space freighter (The Sundog) and a whole load of credits. You're also involved in a three-part contract that you have to fulfil. The first part of the contract is to find a religious colony - which is not too difficult as it's somewhere on the skating planet of Jondol. You move around by using your freighter's buggy - a small white rectangle controlled by positioning a mouse-like sight on the landscape and then hitting the mouse button (which - the buggy then moves really toward the sight).

The second part of the contract has you equipping the colony with everything it needs. Again you use the buggy here to transfer from city to city buying and selling goods that are available from the warehouses located in the cities. The third part of the contract sees you recruiting up a bunch of criminals who are on various planets throughout the system.

You control a single character throughout the game and you only have one life, so you'll have to maintain your character's health and stamina levels by ensuring he gets enough to eat and that he doesn't exhaust himself with all that driving around. You feed yourself just past your buggy and walk into a bar - at which there are many in the cities - and buy yourself a burger.

Once you've decided you've stayed long enough on one planet it's time to head off to another. It's always time to move on when you're not making enough profit on the goods you've been buying and selling in order to purchase equipment for the planet, simply select your target planet, proceed at sub-light speed to the warp point and then activate the warp drive - you'll be there in no time at all. Your view of the game whenever you're in space is of the cockpit of the Sundog, and this helps when it comes to fighting off pirates who would just love to rob you of your cargo. Survive a pirate attack and you'll probably need to put in to repairs or even, as you find, that cost money, but after a failed system during a daylight and you could end up receiving the game from the last served position.

Sundog, an ambitious game that gives the player plenty to think about and so, it takes a lot of playing to get anywhere in the game through, and unless you're prepared to put the work in, you'll soon be out of it.

Andy Bell





Firepower - Two-player modem options - the best view angle on the right; the single communication can't match.



Firepower - The one-player option uses the whole playing area. This building is in the enemy zone and houses some of your foes, previously captured and now awaiting rescue.



Galactic Invasion - The map of the universe isn't that inspiring and lack of features makes identification more difficult than in Firepower.

NO need to keep up with the Jones' any more - now you can simply beat them into oblivion on Activision's new label, Modemware, which offers a series of two-player-in games, with play-by-modem options.

Each title offers a choice of single play-in against the computer, standard two-player, and two-player-on-line modes. In the two-player modes, the screen is split to give simultaneous viewpoints for each party as you roam the game-world seeking out your opponent and engaging in death and destruction. There are currently two games available - *Firepower* and *Galactic Invasion* - with a third (*Thunder*) to come in June - waits out for the review next month.

Of the two currently on the shelves, *Firepower* is definitely the one to go for. You drive your tank across the large, scrolling landscape in search of your opponents (AKA, the aim being to capture his dog and return.



Timing: *Firepower* option brings lasting enjoyment on *Firepower* but *Galactic Invasion* doesn't interest.

It's your loss. To regain you are numerous gun-emplacements that can rotate and fire in eight directions as well as overlying tactics involve mapping, meeting up on gun targets, and shooting down the droppers.

There's also a *Chupacabra* aspect to the game, since each time the enemy destroys one of your buildings, your enemy will now invade your tank and, if you wait for 30s, enter it. You must then decide (there's no *Red Cross* resale for extra points) whether to send and thereby likely to get shot or unshaken - which is exactly what you're busy doing to the opponent's tank and you've finished them out with a dose of heavy blasting.

ONE TO ONE

ACTIVISION'S new range of play-by-modem games

MODEM MODES

Sounds a great idea, playing these games over the phone line, but there are some pretty comprehensive drawbacks.

The first is that the software demands a Hayes-compatible modem - and that means it won't work with most of the budget price units that gameplayers are likely to own, although the standard is becoming more popular.

The second drawback is that - even if you're able to get hooked up - you're going to find the phone bills prohibitive. After all, if your opponent is miles away, you're got long-distance cell rates to cope with - and that's not, why not just make her round?

However, if you're got a suitable modem, you're probably accustomed to large phone bills - and let's face it, playing with a remote opponent can be hellish stuff. The Jones' will doubtless be green with envy.

GALACTIC INVASION

Firepower is simple fun, but still good fun in the one-player mode. With two players it becomes an excellent game - which is more than can be said for its companion, *Galactic Invasion*, which has poor graphics and less satisfying gameplay.

In Q2 you get around a small sector of

RELEASE BOX

AMIGA	C1800k	OUT 50k
GRAPHICS	75k	INTEREST
IBM PC	75k	INTEREST

GALACTIC INVASION AMIGA VERSION

For graphics - perhaps understandably since a creation of time is a bit of a programming marvel. For its game sense - it's about paragon logic. For its top of map feature, deep sound, and advanced gameplay - *Firepower* is far better.

GRAPHICS	8	IQ FACTOR	8
AMIGA	4	IBM PC/AT	5

ACE RATING 5/11

FIREPOWER AMIGA VERSION

Effective graphics compensate for lack of variety in the tank game. The game-play may be the most fun, but certainly there are considerable flaws of speed for its strategy. Many controls will be considered fiddly from your opponent's point of view. However, not serious.

GRAPHICS	7	IQ FACTOR	8
AMIGA	5	IBM PC/AT	5

ACE RATING 6/8

the universe, locating enemies and destroying them. Within each one is a colour-coded compound that forms part of its secondary viewpoint intended to deliver your opponent's war system and win the game.

There are five pieces to collect while at the same time avoiding your partners for the computer's hostile ship, collision with asteroids, and running out of energy. In addition, there's a set of gravitational traps that may send you in to a quick, fatal collision.

Galactic Invasion starts from a dull game-world, mediocre graphics, and a scenario that seems to be hit up to the same extent as *Firepower*. Put your money on the tanks and give the universe a taste.

★ Steve Cook

THEXDER

SIERRA's arcade hit

BAFFINS: You're the staple diet of your Thexder Super Assault Vehicle as you deliver deeper and deeper into a maze of tunnels and passages filled with vicious nasty creatures. Your ultimate aim is to find and destroy the central computer which creates these creatures, though with 16 levels to survive you won't do it overnight.

You might not do it at all if your selected weapon fails. The quest is long and hazardous, and not really inviting. To coil the various levels in Thexder means a perhaps stretching a goal, but you might save yourself a bit of time by mapping them as you go along. Your adventures take many turns, including the Tides, Gates and highly unpleasant Closets, and it's a good idea to approach all unfamiliar levels with caution - before wiping them out with your foot-swalling laser.

The various character portraits and features you encounter can be navigated either as listed in the mode, and control either by joystick or keyboard. You're equipped with a shield for use in emergencies, though even the best will be ready use if you plunge into one

of the many maze goals. And using the shield costs you points and saps your energy, which can only be replaced by stopping those Baffins, or other unfortunate victims.

Thexder may be a big arcade hit in Japan, but the version offers a long game task without the boring interest to make you see it through.

■ **Reductor**



Thexder in Super mode hunting a poisonous Baffin.

RELEASE BOX

AMIGA £19.999 C/DJ NOW

No other versions planned

AMIGA VERSION

Complex enough for the graphics, but nothing about it will be a failure. The only bit to be ill - it could get the software creators out with the game much, much more to see directly under their feet.

GRAPHICS 8 80 FACTOR 9
SOUND 8 80 FACTOR 8

ACE RATING 618

PREDICTED INTEREST CURVE



...STARRING CHARLIE CHAPLIN

Alternative shoot-em-up from U.S. GOLD



The hero's on the set and ready to shoot some Baffins.

LIGHTS: America, action U.S. Gold takes you back to the golden era of soapbox, vaudeville and vaudeville. On a shooting budget, it's down to you to direct the legendary Charlie Chaplin through some of his greatest films.

You have to decide where all the full-blown films to shoot first or in to make enough money to shoot the rest of them. Then, choose the script and the order in which to shoot the scenes - but cost varying amounts to shoot and a lot of other costs, number of extras and props is presented to the player prior to filming. Back some stats about the studio during which time you move Charlie around the set, dimming lights, taking and trying to knock the other extras to the ground. Once the scenes been shot, it's all in the cutting room where it can be reviewed at normal or double speed. You can then decide whether to re-shoot (incurs extra costs) or pass, only the best scene. Fill all the scenes, hit a key and the finished film is shown to a cinema audience who will let you know just how funny it was. Make it flop and you have to start again, but make it hit and you can go on to direct your best scene.

U.S. Gold have raised the mark with

...starring Charlie Chaplin. The game also shows itself as moving the spots around the set trying to top the other spots - done well before when you've got to shoot more than those it has scenes. The editing facility is just a fancy copy option adding little to a poor interpretation of a novel idea.

■ **Reduct**

RELEASE BOX

AMSTRAD £19.999 £14.999 C/DJ NOW

SPIC £19.999 £17.999 AMANET

OSAI 28 £19.999 £16.999 AMANET

IBM PC £19.999 AMANET

AMSTRAD VERSION

The best bit about scenes don't get much cheaper and the sound effects are not too bad. The game's simple and fun and you'll be yourself getting back with every scene.

GRAPHICS 8 80 FACTOR 1
SOUND 8 80 FACTOR 1

ACE RATING 392



GET YOUR KICKS ON SIXTEEN BITS

Have you got what it takes

ROLLING THUNDER

undercover cop?



Got an ST??? Then, whatever you do, don't miss out on the latest great releases from U.S. Gold - all designed to make the most of the graphics capabilities and superb animation on your Atari ST. Don't waste a moment - Get your Kicks now!



All titles
£19.99
each

U.S. GOLD REFRESHES THE ATARI ST BITS OTHER GAMES CANNOT REACH!

KINGS OF THE GAMEPACK

More Games!

OVER **20** EXCITING EVENTS

The
GREATEST EVER SPORTS PACK
FEATURING

10 HIT GAMES



A GIANT CONTEST

AMSTRAD COMMODORE SPECTRUM

CASSETTE DISK

9-95 10-95

More Thrills!

Special BUMPER Pack

All these hit games in a special pack for the price of one *PLUS*

Yie Ar KUNG-FU FREE



SPECTRUM AND TRAD COMMODORE

CASSETTE DISK

9-95 17-95

More Value!

5

ALL-ACTION COMPUTER GAMES

FEATURING: ARMY MOVES
GREEN BERT • THE GREAT ESCAPE
RAMBO FIRST BLOOD PART II • TOP GUN

DON'T MISS! ...
LIVE AMMO



SPECTRUM COMMODORE

CASSETTE DISK

9-95 14-95

TELESCOPIC limbs might not have the same immediate appeal as bulletfins, but as the lead role of the Capcom entry progresses you can swing across gaps with greater ease from body zones ever managed. Not surprising really: with bionic strengths to fire that claw and needle-sharp talons to help it grip, your high-tech left arm is dead-on-a-grapping tool. That's not to say it doesn't pack a ton of punch as a weapon, too, of course - but with your trusty blaster at hand, why resort to brute force?

Your mission involves decreasing enemy numbers to free your people from oppression, but the wacky platform-doesn't include much on the game itself. The bonus contains a number of going places, killing anything that tries to stop you, and - well, that's about it.

On each level your aim is to reach a finishing point by climbing from one platform to another, swinging across gaps between platforms and generally making do. There's a time limit to this, but it's loose



Are these bad guys fine, and don't come to you, or do they do all sorts, but don't really fit your weight?

BIONIC COMMANDOS

Six million dollar GO!

enough to let you wait around a while - as needed back-at some points. Which rather than discouraging is the opposite: you'll want to be sure of your footing and bionic-enhancing load-ups. Static talons and gun barrels could also cause you problems, while some large obstacles will cost you a life if you misjudge them.

The game's got plenty of surprises up its sleeve, with faster and heavier opponents showing up as you move through the levels. It also got a clever solution: in the end-of-life dilemma so many games have, rather than sending you back to a fixed restart point when you die (which, makes time limit problems or trapping you back to life exactly when you die (which can put you in a death loop) it postpones you back into the action.

You can save lots of time to save us you find them, pick the landing spot you want,

and then press the to ditch the chute. You'll then drop onto the platform below, complete with shotguns invisibility to get you back in the swing of things. This lets you make a little progress to sugar the pill of



Color that falling scale for extra points - or just because you're enjoying it!

64 VERSION

This may differ with the details of the game system for which it was simulated and the Commission's latest grading, but the two versions are comparable in the same, with how the game's played in other terms!

GRAPHICS 4 IS FACTOR 3
AUDIO 4 FUN FACTOR 4

AGE RATING 838

dyin' - but with only four lives, it's not a cheap way of getting ground.

How such a simple game structure as this can end up as a genuinely addictive is something of a puzzle. The slow action is belatedly animated to be sure, but its long-term attraction lies more in the flexibility of the swinging and climbing it offers. Learning just what your bionic can do takes a while, and the wide range of game layouts offer enormous potential for experimenting with different routes.

Quite simply, *Bionic Commando* offers you the freedom to explore (and to work out your own tactics - and that's like a breath of fresh air in the world of today's side-up conventions.

by Andy Miller



RELEASE BOX			
CM128	CM160	CM180K	CM180K+
CM2	CM160K	CM180K+	CM180K++
CM2	CM160K	CM180K+	CM180K++
*All Amiga and PC versions under development			

STIR CRAZY FEATURING BOBO

Cartoon convicts from INFOGRAMES

YET more cartoon-based entries from Infogrames, the French boarder slide into Bobo attempts to break out of the notorious prison. Infogrames' first series should reach you at what's more, it's wacky and punny, but somewhat lacking in what we English might call long-term playability.

Bobo has to go through six separate games to reach the outside world. First of all he has to escape soup in the greatest obstacle, followed by a boat of speed-breasting fish of out-of-control cybers wrapping levels. After that comes on to winning a free car.

ruined by dogs, comics and warden.

Then you get the most entertaining section, where the fox is bounce his chains over the walls by easily shooting a trampoline as they jump out of windows. Off then to the electrical wires, to a simple move-left-and-right warden, next then you crash up in the dorm trying to stop your warden from shooting, you sub-ground making them and trying to avoid the skull chamber get in the box.

All this is done in very pretty cartoon graphics, to the accompaniment of some great jaunty music. One or two sections are just enough, but there's not enough there to make a satisfying game for anyone over the age of 10. Unless, perhaps, you're French.

► **Pat Carter**

ATARI ST VERSION

The graphics are already based very close to the original - so the warden sees them. They're very nice, and they will amuse. They're just not enough to beat. The music is decent, a tiny more accompaniment to what a pretty wacky game.

GRAPHICS: 0 HD FACTOR: 1
AUDIO: 0 FUN FACTOR: 7

ACE RATING 570



There's more outside you've got up to in the sky but can you get there over the walls?

PREDICTED INTEREST CURVE



Duration: 30 or less in 10.

RELEASE BOX

ATARI ST	1993/3	OUT NOW
AMIGA	1993/3	ARMANDO
IBM PC	1993/3	ARMANDO

GUNSMOKE

GO! Get 'em Floyd



Gunsmoke that stays on level 100 - it's not that boring level of you.

SPECTRUM VERSION

The graphics are all that can describe contemporary world in action. Sound effects are just not worth anything in a well-sustained, its smooth up to, this is not for a reason.

GRAPHICS: 4 HD FACTOR: 1
AUDIO: 3 FUN FACTOR: 4

ACE RATING 438

WYATT help you can't, but some over-worked and underpaid sheriff you is. You've got five stages (but six total) to complete, and some mean gun-toting coppers to avoid.

The first stage is a continuously vertically scrolling shoot-em-up set in a western town. Badies come from the top and bottom of the screen, and the boss is simply to shoot them before they shoot you. Extra benefits are available in the game by shooting when found lying on the floor - you don't get a helpful benefit every time though so you have to be careful when approaching the shot area. At the end of each level there's a considerably worse badie to dispose of before you proceed to the next level. On Level Two you're trying to cause as much damage as possible in the saloon attack. Survive this and next you're in your way down a canyon full of bandit-baiting. The next stage has you shooting the warden causing a riot, and then a final of other badies, before you finally make time to face with a young scamp looking for someone of you to a very determined

before. Complete all the levels and you can rest assured that the remainder of the career can sleep easily in the back.

Gunsmoke offers nothing more than the average shoot-em-up, except some post-rotation and copying graphics. The inability to turn round and shoot badies that are coming up behind you is particularly annoying. There's nothing here to get the adrenaline pumping for very long.

► **Andy Bell**

RELEASE BOX

SPRO	1993/3	1993/3	OUT NOW
AMSTRAD	1993/3	1993/3	ARMANDO
CGA128	Under development		

PREDICTED INTEREST CURVE



Nothing much to here for that about.

CAN YOU TACKLE THE HIGHER STRATEGY?

FOOTBALL MANAGER 2



Kevin Toms, inventor of the world's best-selling football game says, "It beats my best seller - *hards down*!"



New improved features include: Spectacular graphics and tactics with unlimited action, more fun and excitement.



The press says "It's fantastic - another all time great!"



The computer panel says "We were looking for improvements on Football Manager to be assured of a good game. We were surprised - it's outstanding! It's gold class!"

IBM 04120 Cassette	— £9.99
IBM 04120 Disk	— £14.99
Spectrum Cassette	— £9.99
Spectrum 3-Disk	— £14.99
Acorn 04120 Cassette	— £9.99
Acorn 04120 Disk	— £14.99
Amiga Disk	— £19.99
Amiga 3-Disk	— £19.99
IBM PC Disk	— £19.99

"Football Manager 2 is not just an improvement on Football Manager - it's the next generation!"



GO FOR GOLD!

Kevin Toms



IT'S TOTALLY Addictive

Available in a variety of
Price/Content Combinations at
Box 1, Bazel Road,
TUNN,
Hemel Hempstead HP1 1LD.

© 1992 Addictive Games Ltd. All Rights Reserved.

SHARE THE AMERICAN DREAM

SUB BATTLE SIMULATOR™

"The sophisticated champion of U.S. games lovers."

IBM PC COMPATIBLE



CALIFORNIA GAMES™

"California Games shines all the excitement and thrills in a gettable year." C&EG



STREET SPORTS™

BASKETBALL

"Street Sports Basketball should be an essential

to owners."

COMPUTER

COMPONENTS

PERFORMANCE

RELIABILITY



IMPOSSIBLE MISSION II™

"The classic

design has

been enhanced

and improved

to play with better

graphics and

game play."

C&EG



© 1991 EPYX INC.

GAMES SOFTWARE QUALITY BEYOND YOUR WILDEST DREAMS

EPYX



CALIFORNIA GAMES™ STREET SPORTS™ BATTLE SIM™

THE SUB BATTLE SIMULATOR™

GAME SYSTEM	PRICE	REVIEW
IBM PC	\$14.95	★★★★
AMIGA	\$14.95	★★★★
ATARI	\$14.95	★★★★
APPLE II	\$14.95	★★★★
ATARI 2600	\$14.95	★★★★
ATARI 5200	\$14.95	★★★★
ATARI 7800	\$14.95	★★★★
ATARI 800	\$14.95	★★★★
ATARI 800X	\$14.95	★★★★
ATARI 8500	\$14.95	★★★★
ATARI 8500X	\$14.95	★★★★
ATARI 8500X2	\$14.95	★★★★
ATARI 8500X3	\$14.95	★★★★
ATARI 8500X4	\$14.95	★★★★
ATARI 8500X5	\$14.95	★★★★
ATARI 8500X6	\$14.95	★★★★
ATARI 8500X7	\$14.95	★★★★
ATARI 8500X8	\$14.95	★★★★
ATARI 8500X9	\$14.95	★★★★
ATARI 8500X10	\$14.95	★★★★
ATARI 8500X11	\$14.95	★★★★
ATARI 8500X12	\$14.95	★★★★
ATARI 8500X13	\$14.95	★★★★
ATARI 8500X14	\$14.95	★★★★
ATARI 8500X15	\$14.95	★★★★
ATARI 8500X16	\$14.95	★★★★
ATARI 8500X17	\$14.95	★★★★
ATARI 8500X18	\$14.95	★★★★
ATARI 8500X19	\$14.95	★★★★
ATARI 8500X20	\$14.95	★★★★
ATARI 8500X21	\$14.95	★★★★
ATARI 8500X22	\$14.95	★★★★
ATARI 8500X23	\$14.95	★★★★
ATARI 8500X24	\$14.95	★★★★
ATARI 8500X25	\$14.95	★★★★
ATARI 8500X26	\$14.95	★★★★
ATARI 8500X27	\$14.95	★★★★
ATARI 8500X28	\$14.95	★★★★
ATARI 8500X29	\$14.95	★★★★
ATARI 8500X30	\$14.95	★★★★
ATARI 8500X31	\$14.95	★★★★
ATARI 8500X32	\$14.95	★★★★
ATARI 8500X33	\$14.95	★★★★
ATARI 8500X34	\$14.95	★★★★
ATARI 8500X35	\$14.95	★★★★
ATARI 8500X36	\$14.95	★★★★
ATARI 8500X37	\$14.95	★★★★
ATARI 8500X38	\$14.95	★★★★
ATARI 8500X39	\$14.95	★★★★
ATARI 8500X40	\$14.95	★★★★
ATARI 8500X41	\$14.95	★★★★
ATARI 8500X42	\$14.95	★★★★
ATARI 8500X43	\$14.95	★★★★
ATARI 8500X44	\$14.95	★★★★
ATARI 8500X45	\$14.95	★★★★
ATARI 8500X46	\$14.95	★★★★
ATARI 8500X47	\$14.95	★★★★
ATARI 8500X48	\$14.95	★★★★
ATARI 8500X49	\$14.95	★★★★
ATARI 8500X50	\$14.95	★★★★
ATARI 8500X51	\$14.95	★★★★
ATARI 8500X52	\$14.95	★★★★
ATARI 8500X53	\$14.95	★★★★
ATARI 8500X54	\$14.95	★★★★
ATARI 8500X55	\$14.95	★★★★
ATARI 8500X56	\$14.95	★★★★
ATARI 8500X57	\$14.95	★★★★
ATARI 8500X58	\$14.95	★★★★
ATARI 8500X59	\$14.95	★★★★
ATARI 8500X60	\$14.95	★★★★
ATARI 8500X61	\$14.95	★★★★
ATARI 8500X62	\$14.95	★★★★
ATARI 8500X63	\$14.95	★★★★
ATARI 8500X64	\$14.95	★★★★
ATARI 8500X65	\$14.95	★★★★
ATARI 8500X66	\$14.95	★★★★
ATARI 8500X67	\$14.95	★★★★
ATARI 8500X68	\$14.95	★★★★
ATARI 8500X69	\$14.95	★★★★
ATARI 8500X70	\$14.95	★★★★
ATARI 8500X71	\$14.95	★★★★
ATARI 8500X72	\$14.95	★★★★
ATARI 8500X73	\$14.95	★★★★
ATARI 8500X74	\$14.95	★★★★
ATARI 8500X75	\$14.95	★★★★
ATARI 8500X76	\$14.95	★★★★
ATARI 8500X77	\$14.95	★★★★
ATARI 8500X78	\$14.95	★★★★
ATARI 8500X79	\$14.95	★★★★
ATARI 8500X80	\$14.95	★★★★
ATARI 8500X81	\$14.95	★★★★
ATARI 8500X82	\$14.95	★★★★
ATARI 8500X83	\$14.95	★★★★
ATARI 8500X84	\$14.95	★★★★
ATARI 8500X85	\$14.95	★★★★
ATARI 8500X86	\$14.95	★★★★
ATARI 8500X87	\$14.95	★★★★
ATARI 8500X88	\$14.95	★★★★
ATARI 8500X89	\$14.95	★★★★
ATARI 8500X90	\$14.95	★★★★
ATARI 8500X91	\$14.95	★★★★
ATARI 8500X92	\$14.95	★★★★
ATARI 8500X93	\$14.95	★★★★
ATARI 8500X94	\$14.95	★★★★
ATARI 8500X95	\$14.95	★★★★
ATARI 8500X96	\$14.95	★★★★
ATARI 8500X97	\$14.95	★★★★
ATARI 8500X98	\$14.95	★★★★
ATARI 8500X99	\$14.95	★★★★
ATARI 8500X100	\$14.95	★★★★

Head Office: 1000
U.S. Road 1000, Suite 210, Redwood City, Redwood,
Washington DC 140, Tel: 813 755 1800

EARTHLIGHT

FIREBIRD would like to fly you to the moon

THE moon may not be made of cream cheese (but a large portion of the surface would appear to be chocolate) thanks to Pete Conrad's latest game: a strategy to go by (think the ship you brought in to the CIA Academy and Mission One).

In the game you play Scott, a common seaman often who was happily floating his way through the solar system until his ship was dragged off course and forced to land on the moon. Scott's only hope of escape is to disable the moon-based transmitters that made the moon land that landed him down in the first place.

The game breaks down into four levels, each consisting of eight zones. Each zone contains a set number of transmitters (small boxes on the surface) which the player must pick up with his ship to clear the zone. No problem - simply fly into them. (Dodging the surface features - varying in shape and size

and length) isn't like things to master, plus the video check - is a problem though. The landscape scrolls sideways while your ship stays in the center of the screen, though you can move it from foreground to background-to-edge obstacles.

At the start of each zone you can cite the ratio between the steps, fuel, shield strength and communication levels. Some zones have the transmitters widely spaced so you'll have to do make do with less communication.



Even when in first view - called that transmitter (the small box), fuel for home and you'll have completed a zone.

RELEASE BOX

IPC (1986) OUT NOW

No other versions planned

SPECTRUM VERSION

The graphics are the only real set-back about, and the game does very well. There's not too much variety in the transmitters you pick up.

GRAPHICS 8 IQ FACTOR 8

AMUSE 8 FUN FACTOR 7

ACE RATING 7.25

and shield strength for the extra fuel you'll need to reach them and still return. For other zones you'll need plenty of ammo to blast your way through lots-of-rock.

Earthlight boasts some stunning graphics and sound effects and a big task is complete, but each zone is very much like the last and it soon becomes something of a slog to complete the levels.

Andy Smith

PREDICTED INTEREST CURVE



Good graphics and the continuously shifting face of events.

WATCH out Cobra, here come the Aces. These eagles are the front-line fighters that set up your life or die it. Action Force's last man in your hands. You play the part of spending Action Force agent A-101, and it's your job to protect your lucky Quick Kick from Cobra forces.

The evil Cobra forces are holding a whole bunch of hostages in the streets of the city. Quick Kick wants his rescue mission at the base of a building and will climb his way to the top, regardless of any ladder, ropes, or up to you then to look out for him. And rescue his comrades in six levels by going on a street, cross his sight and (KICK) all the Cobra forces who appear in Windows, doors and even obstacles.

RELEASE BOX

IPC (1986) OUT NOW

No other versions planned

SPECTRUM VERSION

The graphics are superb and the game does very well. It does have a slight go-kart-like repetitive nature at the end of each level.

GRAPHICS 9 IQ FACTOR 8

AMUSE 7 FUN FACTOR 8

ACE RATING 7.54

ACTION FORCE II

VIRGIN have another bash at some baddies

If Quick Kick makes it to the top of the building some hostages will be freed and picked up by an A.F. helicopter and taken to safety. The player then gets to choose what weapons he should use for the next building. The weapons include a machine gun, a grenade and what's called a no-gun. Each weapon has its advantages and disadvantages, so choose carefully. Every third level of the game puts the player up against a Cobra tank. To defeat this the player has to wiggle the controls to fire a set number of

shots within a time limit - fail to do this and Quick Kick loses one of his initial three lives. Failure to shoot the tank will lose him a life, so does allowing him to run out of energy. Shooting Action Force tags placed in the walls enough times replenishes the energy.

Although the game style is not original and it doesn't take long to learn, the whole-heartedness of the energy on any particular level, its playable stuff with plenty of that 'jut-out' maze-go obstacles.

Andy Smith



Use the resources right to keep Quick Kick out of danger.

PREDICTED INTEREST CURVE



Playthings abound - it's worth the effort.

OUT RUN

ATARI ST ● US Gold €19.99dk



Steering through the checkered screen you can achieve 100 km/h and a change of scenery too!

ATARI ST VERSION

A good impression is made and some quite a nice, nice fun race up to the brightly lit, shiny screen edges. Some really subtle effects will help you to enjoy and have more fun when you're out on the road.

GRAPHICS 9 IQ FACTOR 9
AUDIO 9 FUN FACTOR 9

ACE RATING 873

AFTER a week driving on the Commodore Spectrum performance and on standard version little short of classic, the predictably blockading game finally makes it onto the ST and - it's great!

As ever, you have to drive your tight and fuzzy footprints on the as possible, as fast as possible. You're racing against the clock over rolling hills and round sweeping bends, passing as the power the whole time and desperately weaving through traffic. Junctions at the end of each highway section allow you a choice of routes to any one of five finishing lines, but in the short term your goal is the next checkpost. Make this before the clock reaches zero and you'll get another sixty seconds in the race - but it's gone over.

There's no system of lines or obstacles, but collisions with other cars or roadside obstacles can stop or crash you - the latter sends you spinning, or even tumbling and some real - burning up process sounds as you get back up to speed. Control use of gears can help - you're only got two, so it's not exactly complex - but for the most part

UPDATE SPECIAL

the game's just a question of learning the curves and steering lines.

This is one of the better ST races on offer, and just shows what the machine can do with careful programming. The car-park who always gets to be a league to contend, but unlike the 8-bit version this one really does catch the spot - and needs of the excitement - at the original.

Andy White



JET

AMIGA ● Sublogic - import only, prices vary

As an old standard on the IBM PC, this one's up against tough tough competition on the Amiga. Though rooted in the Flight Simulator and Flight Sim 2 tradition, its control oriented and leans towards playability rather than realism. The choice of planes - you can fly a ground based F-16 or a carrier-bunched F-14 - puts the game back to head with EA's Intercept and the comparison does not do it in Jet's favor, to put it mildly.

For starters, Jet does not visually. The mouse rate is slow too high, and the graph-

AMIGA VERSION

In presentation, this is a very nice one in the modern's capabilities. The Amiga can produce better screens, and provide more fun via the mouse.

GRAPHICS 7 IQ FACTOR 9
AUDIO 9 FUN FACTOR 9

ACE RATING 684

is on the far from subtle. There's no attempt to show a realistic instrument panel, out-of-cockpit views are limited, and the relevant use of the display are rather unconvincing. There is the same picture-in-picture facility Flight Sim 2 had, and you, if you want, try a view out of the cockpit and one made it at the same time.

The action isn't without its problems either. Its dogfights you have no defense against incoming missiles, having to rely on tight turns or steep climbs to escape the missile-bunched Atoll level of you. This one was a rather 'hokey' business and more like realistic action, making combat a rather hot and hot-official.

On the plus side you do get to bomb ground targets if you like. That sort of thing,

and there's a console option that lets you hook up two machines and slug it out against a human adversary. On both these fronts, however, you'd be well advised to wait and see how Spectrum Hobbyists' Flight Sim 2 turns out on the Amiga - it does feature the 'jet' in you. That is, otherwise, Intercept probably you feel that Jet costs more, doesn't play as well and simply isn't in the same league to previous it found.

Andy White



The view from behind your throne, as you fly back over your center. Compare and contrast with Intercept's (left).

WE HAVE MOVED!

3 1/2

Lifetime
Guaranteed,
double sided,
double density,
135 TPI, bulk
wrapped discs
with labels

Quantity	Price
10	£9.95
20	£18.00
25	£22.99
50	£45.00
100	£89.99

5 1/4

Lifetime
Guaranteed,
double sided,
double density,
40 TPI, bulk
wrapped discs
with labels

Quantity	Price
10	£3.50
20	£6.50
25	£7.99
50	£15.50
100	£31.00

VERBATIM

Fully guaranteed 3.5" 135TPI Verbatim discs

Single Sided Discs

Quantity	Price
10	£11.99
25	£23.49
25	£34.99
50	£67.99
100	£114.99

Double Sided Discs

Quantity	Price
10	£13.49
20	£25.99
25	£37.99
50	£63.49
100	£125.99

LOCKABLE DISC STORAGE BOXES

40 capacity	£5.49	50 capacity	£5.49	
80 capacity	£7.49	100 capacity	£7.49	
120 capacity	£9.99	140 capacity	£9.49	
Plastic Storage Box - holds 10 (state 3" or 5")				£7.50

AT LEAST 30% OFF ALL 16 BIT SOFTWARE

30% OFF ALL CABLES AND ACCESSORIES

SPECIAL! PREMIUM QUALITY
MOUSE MAT NOW ONLY £3.49

HARDWARE

AT LEAST 10% OFF ALL HARDWARE

COMMODORE AMIGA A500 WITH SOFTWARE	£429.00
ATARI - NEW 520 STFM Summer Pack Plus 10 Disc + manual	£369.99
STAR LC - 10	£199.99
Cumaru 1Mb Disc Drive, State Atari/Amiga	£117.99
NEC 1Mb Disc Drive, State Atari/Amiga	£99.99

P&P Free on all orders over £15, under £15 add 75p P&P (UK only)

Overseas disc orders, add £3 P&P.

All prices include VAT!

Cestrian Software

52, Brook Street
Chester CH1 3DN

Phone 24 hour 0244 312656

24 hour Access Hotline

UNBEATABLE PRICES



TURBO... WAR ON WHEELS!



Join the real war and race through the cities, countryside and treacherous mountains. Face the challenge to survive and use your driving skills while you battle your rivals to be the first to cross the finishing line. *Border* offers single player and modern playability. **Range - £29.99.**



CRAPS ACADEMY Craps Academy will enable you to learn craps with the best teachers in the world! Learn useful facts and formulas and which dice are for the numbers. *Advanced dice* give you realistic playability while learning what the numbers on the table mean, and how and when to bet! The table rules can be modified to suit you in the Las Vegas, Atlantic City, Havana rules. *Improve your winnings* with Craps Academy. **Range - £24.99.**

EGONSTAR The year is 2,000 AD. Man's natural instinct for competition has been intensified to amazing levels. This has resulted in Egonstar - where you test your opponents with the most exciting sports car that has ever existed, ultimate and exciting technology. The Egonstar. Players will use turbo players and turbo cars to beat, kill and strategy edge superior in Egonstar. **Range - £24.99.**



tabletop

ACTIVISION



This month's version-changers include a brace of oldies finding new life on the 16-bit scene - and when we say old, we mean it! Captain America (just when you thought it was safe to go back in the Doom Tube) got a mixed reception in its 8-bit incarnations, but even the critically acclaimed Thundercats is all but forgotten now. Also up for grabs are the umpteenth version of Tetris, some violent goings on courtesy of Target; Renegade and a couple of very snappy Captain Bloods. Get 'em while they're hot!

AMSTRAD

CAPTAIN BLOOD

Programs CD ROM/CD ROM

AmiST version released issue 1 - Ace Rating 887

At first, the Thraxic message to get more out of a CPC Beta most people get out of an ST - a lot of graphics and sound are remembered at any rate. The gameplay is the same as the original - converse with others across the galaxy as you search out your clone siblings - or there's still the fascination of a complex 3D system to experiment with. There are still those nagging doubts about the things being interesting too, come to that, but the look of it will overcome most peoples' reserve too.

● ACE RATING 875

ATARI ST

THUNDERCATS

File 28.0kb

Spectrum version released issue 2 - Ace Rating 887

And you thought ST Out Run had been at the pipeline a bit too late! The 8-bit version of this better-advised-on-line series is the steps before Christmas, but still have plenty to follow. One time watching it up on the ST is not the thing, that - the bright, well-drawn graphics are a sure sign of how well spent - but the game's action has moved on, and if anything the action and animation have lost a certain something. In its simplicity the game's still unquestionably very addictive still, but bearing in mind the ST's enormous graphics power you might have expected a little more.

● ACE RATING 886

CAPTAIN AMERICA

CD ROM/CD ROM

CD version released issue 1 - Ace Rating 883

The multi-level Doom Tube of Dr Megalotrons is all leaving a nasty virus inside and as Captain America it's still down to you to save the world etc etc. The graphics are good but the game's dull, the puzzle that appears during the game is little to keep you interested

and though it's not a terrible game, it's certainly not an outstanding one either.

● ACE RATING 553

TETRIS

Microsoft 1.0/1.0kb

CD version released issue 1 - Ace Rating 884

IBMPC version released issue 1 - Ace Rating 887

Spectrum version released issue 1 - Ace Rating 894

AmiST version released issue 2 - Ace Rating 716

One of the most covered games around, the Russian geometrical brain-surger at last makes it onto the ST, and pretty disappointing stuff it is too. There's plenty of colour and graphics nothing to grumble about, but the overall playing feel is poor. Controls are clunky and erratic, while a little 3D effect makes shape alignment difficult without adding anything to the game's appeal. It's a poor indeed when the Spectrum and CD versions can both beat the ST in playability.

● ACE RATING 842

IBM PC

CAPTAIN BLOOD

Programs CD ROM

AmiST version released issue 1 - Ace Rating 887

That snappy clone-funder Captain Blood added to the space-travel class race, the time is CD-ROM only, and suggests. Don't let that put you off too much mind you, because those daffodil Thraxic trials have done them - we're proud with these low-mile masterpieces. The action is so wild and wonderful in colour, with a memorably cranked-out set of ideas and an impressive vocabulary of interventional icons. For what, it not necessarily a terrific one for lasting interest.

● ACE RATING 812

SPECTRUM

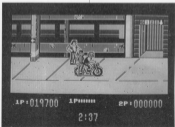
TARGET; RENEGADE

Programs CD ROM/CD ROM

AmiST version released issue 2 - Ace Rating 887

This follow-up to Renegade probably won't take you too long to complete, which is a lot of a shame because the graphics and gameplay are good. Punch and kick your way through five vicious gangs before you confront the diabolical Mr Big! There are some effective extra weapons to pick up but Target; Renegade's not significantly different from Renegade and it's certainly won't take you as long to master it.

● ACE RATING 660



SPECTRUM - Target; Renegade

CROSSWIZE

FIREBIRD do it sideways

Can you manage to survive the onslaught in *Sidewalk*? Even if you don't you can still take part in the action. The time you're saving the planet Land from leveling starts by putting your character in to drive from left to right across the side-

wardly winding landscape. *Crosswize* has great graphics and animation and the game plays well, but its odd ball stuff that sets it off to one side.

—Andy Smith

RELEASE BOX

MSRP: \$19.95 \$17.95
No other version priced

PREDICTED INTEREST CURVE



AGE RATING 511



SOLDIER OF LIGHT

ACEs low

This is very much like *Conquest* and every other sideways scrolling shoot-em-up. *Soldier of Light* doesn't creep in to time and space particularly exotic realms need destroying - it's a good job you can pick up extra weapons then. *Soldier of Light* looks some good graphics and OK animation, but ultimately it's just another run of the mill shoot-em-up that won't get you too excited.

—Andy Smith

RELEASE BOX

MSRP: \$19.95 \$17.95
Device: IBM, T1, IBM, Amstrad

AGE: \$19.95 \$17.95 Amstrad



PREDICTED INTEREST CURVE



AGE RATING 499

ROAD WARRIOR

CRL get a puncture

YOU'RE a one-man-army up against a vicious gang of bikers who are on their annual death run. Use the gun mounted on the front of your car to blow 'em off the road. The game is really easy, you don't run out of fuel before you've destroyed the set number of bikes for that particular stage - it only takes one take to have you down as you run for petrol. Road Warrior's got nothing that hasn't been seen a dozen times, and it looks because tedious to play.

—Andy Smith

RELEASE BOX

MSRP: \$19.95 \$17.95
No other version priced

PREDICTED INTEREST CURVE



AGE RATING 439

WIZARD WARZ

GO! get into RPG



and on those levels is what *Warz* and *Warz* offers you. A plethora of spells and goodies is available to help you defeat the various villains and avoid their traps to ensure wizard in the process. Its fairly standard what do you get, with a lot of rolling around, exercise consisting and

you watch, the presentation isn't bad, with a novel element being the 'window' through which you view the action.

—Peter Coles

RELEASE BOX

MSRP: \$19.95 \$17.95
AGE: \$19.95 \$17.95 Amstrad

MSRP: \$19.95 \$17.95 Amstrad

MSRP: \$19.95 \$17.95 Amstrad

PREDICTED INTEREST CURVE



AGE RATING 613



**ST and Amiga
owners will
wake up on
Thursday June
16th to find their
world changed
forever...**

A new magazine beyond your wildest dreams...

- An incredible monthly package: fat magazine plus dual format disk for only £2.50.
- Disk packed with utilities, games, artwork, interactive buyers' guides, product demos.
- Stunning professional magazine design featuring section icons, pull-out panels, margin notes, fact boxes, product ratings, labelled colour screen-shots, etc.
- Complete support for the entire range of ST and Amiga usage: graphics, music, programming, games, utilities, DTP, business and more.
- Product reviews which are authoritative, well-written and easy to understand, with painstaking comparisons and clearly-stated conclusions.
- A 16-bit machine user's dream come true.

ST
THE
MACHINES
CHANGING
THE
FACE OF
COMPUTING

INCLUDES FREE DISK EVERY MONTH!

It's true. ST Amiga Format will carry a 3.5 inch disk on the cover of every issue. The disk has been specially created to run in both computers. It'll be packed with great software including games, utilities, demos of the latest hot releases, Pokes and much more. Articles in the magazine on programming will include instant examples on the disk, and in the first issue the disk includes an interactive buyers guide of all the main ST and Amiga products - just type in your area of interest and the disk does the rest.

PREVIEW COVER • MAY 1988 • £2.50

AMIGA FORMAT

FROM THE
PUBLISHERS OF

ACE

FUTURE PUBLISHING
LTD

**Launch
issue on sale
June 16th at
all leading
newsagents.**

FREE DISK BOX FREE MOUSE MAT

Become a launch subscriber to ST Amiga Format, and you'll receive a fabulous gift pack made up of a high-quality, hand-wearing mouse mat (RRP £5.95) and a smart, lockable disk box capable of holding 75 3.5in disks (RRP £12.95).

A 12-issue subscription costs just £29.95, and that includes a disk packed with software on every issue.

There's another fact that ST Amiga Format offers: spectacular value for money and provides valuable coverage of all aspects of your computer. So why not guarantee yourself a monthly copy, because you can be sure of one thing: the magazine won't be hanging around long on newsagents' shelves.

NO QUIBBLE GUARANTEE

If after receiving three issues of ST Amiga Format you decide you no longer wish to subscribe, you may write to us and claim a gift box refund for all outstanding issues - you would still be able to keep your gift box.

Yes, I would like to take out a 12-issue subscription to ST Amiga Format, and receive a free disk box and mouse mat - I enclose a cheque/Postal Order for £29.95 made out to Future Publishing Ltd.

Please send me a copy of ST Amiga Format issue 1 complete with cover disk. I enclose £2.50 in the form of a Postal Order/Cheque made out to Future Publishing Ltd.

Name: _____

Address: _____

Machine owned: _____

Full to: Format Sales, Future Publishing Ltd, Boreham, Somerset BA7 0PP

THE NEW INCREDIBLE VALUE MAGAZINE FOR ALL ST AND AMIGA OWNERS

- Databases, DTP, Spreadsheets, WP - definitive tests
- The best reviews of the best games
- Graphics and Music - who's doing it and how
- Crystal clear programming tutorials.
- PLUS hot news, backing, tips, interviews...and so much more!

POWER PACKED DISK WITH EVERY ISSUE

- Blistering games for both machines
- Invaluable utilities for all your needs
- Full details of the hottest
- Jobs...



HACKING

While most of us are using our micros for playing games, running art packages, making music or whatever, a small group of technically skilled people are making their own computer entertainment in far stranger ways. They're dismantling programs to see how the things work; they're logging on to computer systems they aren't supposed to have access to; they're creating twisted 'practical joke' programs that wreck other people's disks. They're hacking.

To

most of us, hackers are mysterious creatures with seemingly limitless powers. When they're really doing it, pushing their equipment to the limit, in a bid to gain as much control as possible over their own machines, our guess they're laughing and don't want to be like us, even when people's online mistakes, errors, even other misdeeds, in this magnificent? Or is it just normal human behavior showing itself in a technical, computer form? And can these people really do all these things you hear about?

● LOGGING ON

Hacking covers a lot of different computer activities, but the one that really got the headlines last logging in—gaining access to private online systems, or that private area of public ones, by underhand means. The popular image of the down-the-plugger hacker has him sitting the balance of his back against a teletype console or word processor, from the comfort of his own home, using some incredibly complex techniques to take control of other people's computers.

The facts are somewhat less glamorous. Let's take computer crimes one by one. Outside hackers usually do it by tele, gaining access by guessing, overhearing or simply being told someone else's password. As for gaining control of someone else's system, that usually means only an email, privately owned online systems—usually referred to as bulletin boards. Even on these BBS's a hacker has to rely on the owner's carelessness in running a "Trojan horse" program—see *Games Beware!* (p. 74)—but has no carelessness (as he/she) must handle. Choosing passwords at random, changing them frequently and distributing them sparingly is usually all it takes to keep hackers out.

ONLINE LAW

The House of Lords, the highest court in the land, decided in April that it isn't good when English law is log on to an online system using someone else's ID or password. The decision finally resolved the long-running IT hack case in favour of Steve Gold

and Robert Schabert, two console enthusiasts—now successful computer professionals—who led the headlines by logging into the Data of Britain's Telecom food studios (among other places).

The Lords explained the judgement in very narrow terms—the whole thing turned on whether you can call something an "instrument" if it acts only for a fraction of a second—but there's a suspicion that Gold and Schabert's motives also had a lot to do with it. Instead of offence you normally associate with dishonesty, and their motives of curiosity and "researching" (see box) doesn't really fit that profile.



It makes things a hacker's job even more to see it can do impossible things with other people's hardware.

Unauthorised logging on may not be good, but it is still legal: the charge nowadays would be "obstructing electricity", a relatively minor offence based on the time amount of extra current drawn by a system when you use it. Is this really possible? Anyone can make an online system see extra electricity just by dialling it up. It takes a minute amount of power just to make the thing ask you for your password, and wait for the reply. Does that mean it's a crime to dial up a machine you don't even know is passworded? Should it be?

● LOGIC BOMBS

Of all the types of fun you can have with computers, making them go wrong is certainly one—in a lot of sometimes subtle, people you've never even met—has to be one of the most popular. Its popular though, cancer as popular among people with the right skills as protection-busting or anti-logging-on. The exact scores given to the different types of practical joke programs—the straight-forward logic bombs, the Trojan horse and the do-it-yourself virus—make a simple truth: there's a lot of very talented computer users out there, many of whom would probably feel that computers spend their spare time drawing cats in the local pond.

Obviously except, the destructive programs designed to a kind of anti-enthusiastic protection device. Wouldn't it be nice, the reasoning went, if a probability of a commercial program could tell it had been packed and used itself? Better still, what if it could just do the job in the process

MEAN KIDS

Did you ever burn ants using a magnifying glass? Did you ever pull the wings off a fly? Lots of kids have a mean streak to them, being unconsciously nasty without any real idea just how much harm they're causing. Sadly a minority of hackers never grew out of such things, and end up using their knowledge to ruin other people's enjoyment of computers. On large networks or online systems they'll try to wreck other users' files. On the public domain, and they'll create logic bombs, or distribute ones they've come across. If you're writing a virus, you probably know enough to create games or viruses that might be of some use to the world—but to a mean kid, doing something useful with your talent is hardly a priority.

CURIOSITY KILLED THE CAT

When a mountaineer sees a game, he sees a challenge. When a hacker sees a game, he sees a shiny thing he absolutely must have. But these points of view are effects of the real, strong comparison at the heart of hacking - simple curiosity. Do you ever pull a watch apart to find out how it works? Are you fascinated by the inner workings of mechanical instruments and station equipment? Then you should try hacking a computer game's hundred times more complex than any watch yet built, and you can fit it back together all kinds of different ways! Working through piles of assembler listings long into the wee small hours, struggling to unravel tightly packed machine code whose purpose you only vaguely understand, rummaging through manuals and badly laid-out technical manuals - that's the real stuff of hacking!

Maybe even like this CPU can have changed the field-packing scene out of all recognition. For mountaineers, they take it like the old mtgbooks for carrying their books on the other hand, they spend things up normally

- by wiping the hard disk its instance - to punish him? After all, that hard disk was probably packed (along with mountains of un-published work) with other game programs. Its doing so is a revenge to punish them, isn't it?

Writing such a program isn't that hard, but it can't just very nice or particularly smart after all, game copies can be used by innocent people. Which means, takes account of legal issues going off because of legal even when there hasn't been any policy in the first place. As with most forms of taking the law into your own hands, vigilance-wise like this turned out to be its center from the problem it was supposed to solve.

If logic boards like these - destructive pieces of code that go to work when they spot trigger conditions - are too dangerous to be used on protection devices, they're also made to computer monitors. The only problem lies in getting the board to do more potential victims as possible. In the world of the IBM PC and its compatibles, the answer to the use was simple: Public domain software for the PC circulates freely on disks and file servers, so-called as install programs can travel a long way if they aren't interesting or useful. Does a logic board up to look tempting and who doesn't have ready-to-use software you can't buy?

QUEERS BEARING GIFTS

For obvious reasons, border-designed is built, hardware and software they own distribution (as known as Trojan horses, or just Trojans for short). The original Trojans were programs uploaded (i.e. sent down a phone line) to bulletin boards by hackers. If the IBM operator can catch a Trojan, it would expose the IBM secret files - including its user passwords - to the hardware giant. Nintendo Trojans usually put wipe data, often mixing themselves in the process to make detection

that much harder.

The problem with Trojans is that they need to need help in spreading. People will accept software without being quite sure what it is, but they'll very rarely pass it on until they've at least had a go at running it - and that's usually enough to detect a Trojan. What you need is a destructive program that spreads its own account, copying itself into other disks without notifying itself otherwise to the user. Then all you have to do is load the public domain system with the program and watch the havoc start: the virus is born.

COLORED AND BREWER

The comparison between self-copying

MOUNTAIN CLIMBERS

Mountaineer hackers are Chris Bootstrap, too types - they break into that entire system or code that game simply because it's there. The fact that people have set up password barriers or elaborate disk protection systems just increases the challenge. Catching someone off their guard isn't really what it, but if they're taken aback it keep you and the hack becomes a contest - and that's fun!

The real mountaineer doesn't actually want to do anything over her's code, except take a look round and maybe leave a calling card. The challenge's the thing, and once that's gone he's off looking for mountains more.

destructive programs, and, and the database organization is on a more new, and that's certainly strong similarities. In particular, computer virus comes produce (as well as, public, constant and 8-bit-based manual at their biological counterparts. Should I make my machine look if it gets infected? Should I keep maintained data separate from clean ones? Is there really any such thing as a computer virus?

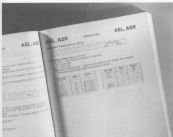
The whole story about viruses stems from a long piece of program code written by a group of three hackers - the self-styled Santa Crossing Associates, or SCA for short. The code lives in the last sector of an Amiga disk, a safe little niche where it won't show up on the directory and can't be deleted. From here it can load into the Amiga's memory, and create copies of itself on the last sector of any other disks you put in the drive. Its technical bit -- you can't get rid of it by reformatting the machine - but it is only a program and can't permanently damage your machine (unless the Amiga bit and the virus agree).

The problem here is that, when you watch the Amiga boot up, you need to get a hard disk in before you can use it again. If that disk has been infected by the virus - has a copy of the virus code in its last sector, that is - then you're right back to square one.

All this would add up to a fascinating record of disease organisms, if it weren't for the virus writer's habit of destroying disk data once it's reproduced a certain number of times. With the message "Something wonderful has happened - your Amiga is alive," it sets about wiping whatever floppy or hard disk it can get its hands on. Most jobs of the world, and you know that.

WORMS TO COME?

The SCA virus isn't actually very impressive,



Real hackers have their machines built out, and for that they need an awful lot of sticky, expensive books. Where do they get them from?

as these things go. It makes no attempt to take them, and can be copied out quite easily by anyone who knows what he's doing. Automatic virus-like programs can clean your disks of it without you needing any technical knowledge at all, and in addition it's so subtle you'll immediately know what you're up against.

For those programs used in the PC world, some of them being almost impossible to spot or identify. With PC hard disks being fairly common things, the potential damage is astronomically greater than on your home machines — and hackers have long since learned the PC's no one else.

The extreme difficulty of preventing this is those days is out of all proportion to the effort involved in writing a destructive program. The one solution is to be better just demonstrate what happens to world over how known for a long time, but naming people's hard work is a good deal easier than actually doing something productive.

BUYING THE EPIDEMIC

There's life on data. The only way they can survive in your computer itself would be in better leveled RAM — some machines have the kind of memory for running a real-time clock or the like — and it's hard to see how that would be possible. The danger is your unknown disks — disks you've got from PC libraries, friends, or disks you've downloaded, made sure you don't put them in a disk-drive at the same time as, or after, an unknown disk. Don't transfer unknown programs to your hard disk, or to disks you subsequently need, copy these disks and put any unknown programs you want to remove the copies.

Things to watch for are the disk accessing a disk it shouldn't need to look at

— a very different thing to spot if you're not on Amiga — or a change in the file date stamp on a file that shouldn't have been updated, if your machine has a real-time clock. Relying on write-protect tabs may not be a good idea, and resetting the computer rather than resetting it off is completely useless. As with online hacking, the best protection is being careful to the point of paranoia — virus infection can happen to you.

● POKING GAMES

Back in the good old days, poking a game was a fascinating and extremely difficult exercise in analytical thought and program-

ming skills. To poke a game you had to break its protection system, and to do that you had to understand how the thing worked.

The love of poking was that every game had its weak spot: there was always a way in. It only you could find it. Like the Garden of Eden, a good protection system was so complex it would be almost impossible for mere mortals to figure out what bits of it did what. The potential rewards of breaking in were enormous — you could see how the game had been written, and often it is your own taste — so "hackerdom" took to poking in their dozens.

What the hackers were after was typically a single machine code instruction — one byte of memory out of perhaps 65536 — that counted on the player's lives each time he died in the game. It could take a number of hours, but programmers rarely took the trouble to hide the crucial decompiling process. Finding the thing was usually quite simple, but you had to get past the protection system first, and that was tough.

Those days are gone now: for 3-bit hackers at least. They were killed off not by sophisticated techniques making the task too difficult, but instead by being too easy. Making it too easy. Magic boxes, these home devices designed primarily to allow easy copying of protected software, reduced the whole art of hacking to mere juggling.

With such low hardware costs available, these combinations on the spectrum of Green Herb 3 on the Amstrad CPC, you can try a game's internal secrets from the touch of a button. There are even programs, designed to work with these magic boxes, that aim to find infinite lives probes for you. When the challenge is using one of those?

The challenge is still there on the 16-bit machines, but with the 3-bit gone to set an example, it can only be a matter of time before 32 and Amiga magic boxes hit the shops. Anyone on a spot of Archimedes hacking? ■

MAGPIES

It's not just the hackers of this world who take an unhealthy interest in protection systems: some hackers like to crack games open in order to copy them. Some protection schemes force you to enter specified words that a bulky manual which offers make it difficult to remember the game code used to enter one, a little hacking skill and the right tools can soon get you an unprotected and instantly playable copy.

The real question is, why do these people do it? For the time, the hackers spend longer "hacking" the protection than they do actually playing the game afterwards. Some hackers accumulate ridiculous numbers of games, so many

that they end up having to wipe old ones to make disk space for new arrivals. These people are magpies, pure and simple. They just want a collection of shiny things, heard opening new games (or even private ones) to hoard and gloat over. After all, there's nothing that FS Top Tools can't do for them!

Magpies have problems with storage space. Their problems are compounded with credit cards that seem not to be personal, parcel sets, many books that cannot return, and firms with built-in digital clocks. A magpie's worst nightmare is having a tremendously powerful computer and no software to run on it. Magpies aren't, as a rule, Archimedes owners.

Probably the best joysticks in the world

THE TOP PEOPLES CHOICE

125 +

The Explosive Joystick

Compatible with ZX Spectrum 48k, 128k, 512k, +2, Commodore 64, Vx 20, Amstrad Alan 48k.

As only 15.95 the features on the 125 have second to none benefits its unique internal structure, built in reinforced composite construction from even the most vigorous game player the joystick remains no less than four extremely sensitive fire buttons, five are housed in the handle which has been moulded for extra comfort and ease of operation. The trigger finger fire button provides ease and comfort for your finger and the top fire button is constructed to fit your thumb for sure fire shooting. The base fire buttons are positioned for easy control and two hand firing whether you are right or left handed.

A built in auto-fire switch provides continuous shooting at the touch of a fire button.

Built in Spectrum +2 Selector Connector

The 125 comes complete with a full 12 months warranty

Professional self storage & packing services available, subject to terms and conditions. Please telephone for details.

Original products available from branches of J.P. Dawsons

Handy **LAZY** MARKETING

High St. Birmingham B1 1AA Computer shops at all major Video Dealers.



A Right Royal Joystick

Cheetah **MACH1** + MICROSWITCH JOYSTICK

- METAL SHAFT ● AUTO FIRE
- + 2 SELECTOR CONNECTOR
- 12 MONTH WARRANTY

ONLY £14.95

- Deluxe, robust construction. ● Comfortable rugged hand-grip. 8 directional MICRO SWITCH control with automatic centering.
- Heavy duty base with strong stabilizing suction cups.
- Highly sensitive light touch MICRO SWITCH fire buttons.
- Ergonomically designed control handle with indestructible METAL SHAFT. ● Built in AUTO FIRE function.

MACH1 Joystick compatible with a Sinclair ZX Spectrum 48k, 128k, 512k, +2 & Amstrad computers. ● Commodore 64 & Vx 20 Computers

- Atari 2600 & Atari 5200 Video Game Systems
- Atari Home Computers

Professional self storage & packing services normally to order. Subject to terms and conditions. Please telephone for details.

Cheetah MARKETING

Handy **LAZY** MARKETING High St. Birmingham B1 1AA Computer shops at all major Video Dealers.

CHEETAH MARKETING LTD
 Factory House, Watling Road,
 Farnborough, Cambs CB21 2NS
 Telephone: Cambs 02055 500028
 Telex: 687465 Fax: 02055 588607





SPORTS SIMS

Shape up for summer! Forget the Jane Fonda work-out records - what you need to blow the cobwebs away is a really good sports sim. One that will get the adrenaline pumping and make you grit your teeth with determination in the effort to be first across the line. Whether you prefer Golf, Football, Boxing or any one of a dozen other sports. We'll tell you what games are worth splashing out for and what games are best left back in the dressing room...

When all takes part in some kind of sporting event of some stage at our lives - we might have played football for our country in our youth or taken part in the parents' egg and spoon race on the infants' sports-day. Whatever the event,

whatever the occasion, we all know there's nothing like a sporting event to make a body perform to its best ability.

A computer game based on something as physically demanding as a major sporting event usually seems like a dumb-thing-to-do. But if you look a little closer it's easy to see why they are so popular. For a start, the computer paper a reality of

a very high standard - by pitting Mulhally at international level to the player's competitive spirit is brought to the surface immediately. The intensity of games, of course, aren't limited to one human player and the amount of computer-generated, when two or more players compete simultaneously in whatever event too to be heard to be believed.

It's quite evident then that the competitive spirit can be channelled as strong when you're playing a sports sim as it would if you were actually taking part in the event. What is missing is the physical exertion normally associated with the sport. Software houses attempted to re-create this by incorporating a feature that became the base of many a games reviewer's lit-

video houses attempted to reproduce this by incorporating a feature that became the bone of many a gamer's grievance: the wobble. The idea was simple enough - the player wobbled the joystick back and forth to move the on-screen character. The later you wobbled, the later you character moved. The feature surfaced in almost every event including swimming, running and even mountain climbing! While the majority of the following games have forgone the wobble, you might just find the odd one or two that still use it.

BARRY McQUIGAN WORLD CHAMPIONSHIP BOXING
Advisor

Available on Game, Set and Match-completion
Amstrad £12.99/\$11.95/\$9
C64 £12.99/\$11.95/\$9
Spectrum £12.99/\$9

Now that Isaac, the Cross Cyclist, has started his career, it would be absurd to leave him out of the sports roundup. *Barry's* is undoubtedly the best boxing simulation for

home, just beating *Prize Fighter* for speed, agility and ease of use.

The virtue of the game is that its coach uses from a simple fat light in the ring. First of all you have to choose your own boxer. Fictitious-style, from the attributes available, so you can make him, black or white, a hard puncher or an aerial diver. Then you have to train him, building up stamina and skills, learning the right sort of life, and so on. Only then can you start to work your way up the rankings through the 14 computer opponents towards a world title shot. The fight themselves have been designed with equal attention to detail - it's not just knowing that will see you victorious, but intelligent boxing to your victim's weak points. Overall, it's a very classy program.

BOBSLEIGH
Digital Integration

Amstrad £9.99/\$14.95/\$6
Spectrum £9.99/\$6

The simulation succeeds in capturing not only the thrill of hurtling down an ice track in a world leader, but also the crucial elements of strategy. You can race on six different tracks,

including the one from the Calgary olympics. That's back to its own designers that can tempt you returning out of control in an instant.

The Spectrum and Amstrad versions have excellent graphics and driving feel. The 64 version isn't as good because of the best driving controls and very graphics. You compete in world championship and olympic competition, using two or four-man bobs. You can alter the bobs' runners depending on the weather conditions, increase the bobs' fitness to make slats and buy better bobs if you do well enough to get more sponsorship money. A superb simulation that demands intense concentration and is always a challenge, so make how often you play it.

BMX SIMULATOR
Codemasters

Spectrum £1.99/\$5
Amstrad £1.99/\$5
C64 £1.99/\$5
Amiga £14.99/\$14.99
Atari ST £14.99/\$14.99

The simultaneous two-player bike-up-for recently made it onto the larger machines after a very successful debut on the 8-bit machines. You have to complete against a rival for the

computer over a succession of event courses. The bumps and turns etc. all affect you like realistically and help to make the game incredibly addictive and tough. With all love to Codemasters Professional BMX Simulator which provides an even tougher challenge.

DECATHLON
Foster

Amstrad £1.99/\$5
C64 £1.99/\$5
Spectrum £1.99/\$5

This is the original weightlifting that had everyone in a sweat-soaked-and-out-of-breath state. The gameplay may not seem very sophisticated these days but for sheer joyful-pounding excitement and competitive action, it's still hard to beat.

The ten events are: 100 metres, long jump, shot putt, high jump, 800 metres, 100 metres hurdles, discus, pole vault, javelin and 1500 metres. The events all require waggling and need good sense use of the fire buttons in time releases, jumps and so on.

This game is guaranteed to test pencils and keyboards but it's an amazingly satisfying way of getting all of your frustrations.



Handball

HANDBALL
LH Ltd

C64 £9.99/\$14.95/\$6
BBC PC £14.99/\$14.99
Amstrad £9.99/\$14.95/\$6

Handball fans will not want to miss this excellent simulation of the American school game. It got a three-screen display, beginning with team selection, moving on to the confrontation between pitcher and batter and then ending up with the end-game scenes of the stadium. It features waffle round the base and ballies try to run them out. Graphics on the 64-bit machines are excellent, and they do a lot for a ball game... Amiga version

could do worse than look at EA's *Earl Weaver Baseball*, which is much the same thing, but with Earl - the wrinkled coach in baseball history - adding his pinch of wisdom.

HYPERSPORTS

Images

Now only available on compilations, e.g. *Acorn's Arcade Collector*

Amstrad £8.95cs £11.95cb
Citi £8.95cs £11.95cb
Spectrum £8.95cs £11.95cb

One of the earliest best-selling games. It's a real test of endurance and timing as you try to wrangle your way through the swimming crowd to the sleek little penguin shooting (like a football) and then the gymnastics event, then comes factory - and the tape jump before you get into it.



Hypersports

mercifully strenuous bout of weightlifting. Great fun that's really fun how it uses joystick aim.

LEADERBOARD

Acorn/CD-ROM

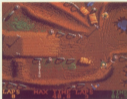
Amstrad £8.95cs £14.95cb
Citi £8.95cs £14.95cb
Spectrum £8.95cs £14.95cb
Amstrad £7 £10.95cb

The only golf simulator worth considering on the 8-bit machines. It's been released in several forms: *Leaderboard* - the original, tournament *Leaderboard* - four new courses to play, *World Class Leaderboard* - an enhanced version with trees and sounds, and most recently a version containing several classic world courses.

The version of the game is in the timing and rhythm required to place shots in which you determine both the strength of the hit and the timing of the swing at the teats. Surprisingly the game is also excellent, retaining the view to the pin



Leaderboard



800 Holes



Double Trouble

from wherever on the course the ball has ended up. You may not get the best out and the essence of the real thing, but you'll certainly get the tension and exhilaration of the shot.



Wits Game



MATCHDAY II

Games

Amstrad £8.95cs £14.95cb
Spectrum £7.95cs £14.95cb
Amstrad £8.95cs £14.95cb

The definitive football game to date. Instead, you take charge of a real team and can play the computer or a friend in an attempt to win the League or the Cup. If you're feeling really mean you and a friend can gang up on the computer. Improvements on the original *Matchday* include the addition of a 'kickometer' which gives the player the chance to vary the power of his shot, pass etc. The Amstrad version arguably the best of the bunch, but if you're after the best football game available for any 8-bit machine, then this is the one.

MATCHPOINT

Games

Available on Game, Set and Match

Amstrad £12.95cs £11.95cb
Citi £12.95cs £11.95cb
Spectrum £12.95cs

Not a game to be looked up lightly, this soccer-wrangler has been known to laugh opponents into the air of

Wendellton. Thrown in 3D into one end of the goal, the defence features itself as you struggle to position yourself properly and then your swing just right. It's not enough to watch and hit the ball; you've got to try hitting it away from the computer player, and that takes vast amounts of

Matchday II

A game that takes fantasy to the next level. You will experience the most intense and battle with your opponent. Its game play will reward you with its combat with battle sequences and magical powers. You will be able to use your magical powers to defeat your opponent. Wizard Warz is a game that will give you the most intense and battle with your opponent. Its game play will reward you with its combat with battle sequences and magical powers. You will be able to use your magical powers to defeat your opponent.

WIZARD WARZ

As Wizard Warz approaches the strategy games and role playing game genres, it is a game that will reward you with its combat with battle sequences and magical powers. You will be able to use your magical powers to defeat your opponent. Wizard Warz is a game that will give you the most intense and battle with your opponent. Its game play will reward you with its combat with battle sequences and magical powers. You will be able to use your magical powers to defeat your opponent.

*Eye of Newt
Blood of Rat
Bring Me The Powers of
Vision & Combat*



CONTACT THE
CANADIAN STORE

CBM 64C
\$11.99
\$9.99

AMSTRAD
\$14.99
\$9.99

SPECTRUM
\$8.99
\$6.99



ROMANUS SOFTWARE 1989

©1989 Romanus Software Ltd. 1000 10th St. North, Scarborough, Ontario M1V 1A7. Tel: (416) 291-2300

ATARI 5.1

practice. Very frustrating stuff, especially for those gamers whose hearts' desire is to play it with the two-player option. If you'd like to skip now and then:

180

Masterpiece

CM	\$2.995
Amstrad	\$2.995
Spectrum	\$2.995

The definitive computer darts game. If you must play darts on your main frame, this is the one to get. 180 puts you up against a variety of foes in the championship game where you start in the quarter-finals and have to defeat two computer opponents before facing the incredibly skilled Johnny Jim. You can of course elect to play a test or go for a leisurely game of 'round the board.' Whatever you choose to do, you should rate your glass and get your belly on the wire.

PING PONG

Space Opera

Available on Game, Set and Match

Amstrad	\$12.950	£7.950
CM	\$12.950	£7.950
Spectrum	\$12.950	

Superbly ping-pong the ping-pong ball, normally hit by a man. Although the Einstein game is no spring chicken - it appeared way back in 1988 - it still manages to be an enjoyable table with your computer opponent. The view is from your end of the table, whether you are serving or not. Shots possible are listed in tables, cuts, drives or strokes, but these are quite sufficient to get a good rally going, a couple of nice-looking shots followed by a strategic stroke is often enough to beat/booby your opponent - on level 1, at least. On the remaining five levels you'll have much more trouble - and much more fun.

PRO SKI SIMULATOR

Odyssey

Spectrum	\$1.995
Amstrad	\$1.995
CM	\$1.995

These budget versions for the Commodore take to the slopes with the flick, engaging parave-



On the Wire

up. Your job is to get down that mountain first, using the traditional controls of left, right, and thrust - a shove on the Joystick in the case - to get through the control gates of each section course and avoid obstacles en route. The slope itself vertically up past the camera as the race progresses, but the side of road is constant so you can get lost behind by it. End up full control and you'll have to struggle down negotiating with the water car, sticky stuff. Seven different slopes, some tough time limits and a great simultaneous two-player mode make the terrific value - even if it is a bit overpriced now.

STEVE DAVIS SNOOKER

CM

Amstrad	\$1.995	
CM	\$1.995	£4.995
Spectrum	\$1.995	

Many use the wooden 'end post'



100

gones competing for your money, but this one - despite its age - is still the best, set like 50 yards. There's not a lot to say about it really, great table, coloured balls, realistic physics, and set as hard to do well of as the real thing. What gets the edge on its competitors is freedom, the ball behaves as they should, and the spin table, top and bottom actually does work. If you end up taking more than 147 balls, you'll have only yourself to blame.

Back to the

SKATE OR DIE

Electronic Arts

CM	\$3.950	£4.950
----	---------	--------

The best boarding sim currently available. You and up to seven other competitors can take part in a grueling three stage head-to-head contest which includes disciplines such as the freestyle ramp or half-pipe with chained high jump and a pool part where you try to score points by knocking your opponent off his deck. Best of all is the Downhill race through a tubular-strewn back alley. It's not just cool - it's radical.

SUMMER GAMES

Epyx

CM	\$3.950	£4.950
IBM PC		£3.950

The game that put Epyx on the map even before Incredible Music, the Olympic multi-eventer offered such unusual disciplines as highboard diving and gymnastics along with the more standard 100m dash and the like. Along with the sequel Summer Games II this one set a standard for athletic action and animation that still stands up on the CM. There's a choice of country to represent - each complete with its own national anthem - and a full Olympic opening ceremony for both fans.

WINTER GAMES

Epyx

Amstrad	\$3.950	£4.950
CM	\$3.950	£4.950
Spectrum	\$3.950	£3.950
IBM PC		£3.950

It may not have broke the logic, but the dose have even critics requiring skill and being all out against nature (and/or scenery). The seven events are bobsleigh, hot-dog-derby, speed skating, ice jump, figure skating, free skating and burling.

Events like the hot dog derby and figure skating require the player to perform various moves to score points. Speed skating and burling require strategic waggling, to name all the events the main problem is staying upright - the real life. A thoroughly enjoyable game that combines good graphics, music and gameplay to make an excellent whole.

4/138

9 1000

9 1000

TRAD

9 1000

9 1000

TRUM

1 236

99

51 119.99

GET INTO CRIME!

In the late 1990's the streets of New York are a jungle. You are the ice cool leader of a gang of drug crazed terrorists. Your main goal is to become the richest, toughest and most notorious gang in the city.

DARE YOU
PLAY.....

FREE
OFFER



FREE!

SEND YOUR NAME AND ADDRESS TODAY FOR YOUR FREE TRIAL OF
IT'S A CRIME THE WORLDS MOST POPULAR PLAY-BY-MAIL GAME

Write to:-

KJC GAMES, PO BOX 11, GLEVELEYS, BLACKPOOL, LANC'S FY5 2UL.

This month Tony Ross looks at PBM newcomers *Creephouse* by Project Basilisk, designers of *Troll's Bottom*, and in *Dubious Battle*, by Pandem Games, a newcomer to PBM in Northern Ireland.

IN DUBIOUS BATTLE

Pandem Games

Suburban 100 players, each taking on the role of a God like those in Roman or Greek legends. Not just any God though, but a unique one designed by each player. 1,000 points are spread through 80 attributes like greed, desire, vengeance etc. The distribution of these points will affect how many worshippers the God gets and how strong he is, so it is very important to play in a manner that fits in with those attributes.

The game is set in two places: Elysium, where the Gods live and fight each other directly, and on the world which is an fantastic piece of 300 areas with 100 human-like. Each God attempts to get power by capturing energy sources in Elysium or by

minefields. On the world, I did a bit of work on one letter to try and push the fantasy up.

As with any new game, it is a matter of luck if not real, trying to work out the best tactics and strategies. With 11 areas that affect the world and 13 which work in Elysium, there is quite a choice of actions.

The rule book is good, well written and produced, but suffers slightly from being reproduced from a non-letter quality printer. Along with some annotation sheets, the starter pack costs £6.99 and the game, I think, two free turns. Later turns cost £11.50 each.

COMPLEXITY	1	ENJOYMENT	7
PRESENTATION	7	SKILL	8
ACE RATING 8			

turns have escaped the game books.

The house is full of other player monsters who begin as Creeps, but can transform into demons or even Wills. In these games, the statistics score about the house, setting guidelines, and lightening other things. In my game there is a pretty girl in the room with me and I'm presently considering whether to seduce her, or lighten her as a demon or a tough demon.

Things in the house give reports on other players and sometimes give wings. On my first printed, the bookends being the Creep Song whose lyrics are something like Creep, creep, creep, creep (Y2B), she's! they cold indeed.

Four prepared maps give the layout on each turn plus a copy of the prepared. These can be photocopied and used to mark the location of furniture and objects like sets of mirrors. It is possible to hand stacks, or move them about in even stack them on top of each other and that, I would guess, is part of the answer for occupying the house.

The minefields and turn costs are similar to *To A Game*, though the order do not use numbers or oil and use a simple English like commands like MINCE ALL, MANANA NEXT THROU ALL CHAIRS, THROU AND BLAST out to go. Up to 20 words can be entered each turn.

Game stats are free and the gets the usual two turn fee as well. Turns are only 10p so at the price the game should appeal to the low budget PBMer. Basically, it is possible to have up to two turns processed each week, assuming the Post Office don't do their usual. My only worry was that this will not allow players other than mine field and give them a better chance. This happens a bit in 80 printed games but hasn't been seen much on this side of the Atlantic.

A most unusual game, which should appeal to younger players and those into adventure games, though serious PBMers would probably not go for it. It is clearly to be improved by the addition of new monsters, objects and graphics on turnsets.

COMPLEXITY	4	ENJOYMENT	7
PRESENTATION	8	SKILL	8
ACE RATING 7			

COMPANY ADDRESS

In Dubious Battle - Pandem Games, PO Box 137, Belfast.

14 Ireland, 616 610

Creephouse - Project Basilisk, PO Box 24, Shamrock Park, ME12 6DE.

MA Games - 15 Fenwick Crescent, Harrow, Midd, HA1 3UB

KAC Games - PO Box 11, Belper, DE19 6AA.

PLAY IT... BY MAIL

bring lots of worshippers on the world. This power is then used to attack other Gods, make demands, bribe demons and help shape the destiny of the tribes on the world.

History goes to the last God for Godhood to achieve dominance over 70% of the remaining players, in who has captured one half of the power points in Elysium. As Elysium is 300 x 100 locations in size, I don't think there are going to be any winners for quite a while.

In my first turn I created some minefields and tried to grab three energy sources. Demons are some of the things that exist in Elysium along with Demons, and Wills which seem to be the equivalent of mobile

CREEPCHOUSE

Project Basilisk

This is quite a different game. Basilisk wants to specialise in quality subjects and have really supported themselves this time. The theme is Comedy Horror and I would guess it derives some inspiration from the musical *Little Shop of Horrors* which also has pretty glib, glibble plants and singing.

According to the designer, Robert Probus, it is more like some computer games than PBM. Each player starts off as a choice minister trapped in a three-story boarded house. Chase live at the original tiny minis-

SPECIAL DELIVERY

Not so much this time. All Games who do a Crit are featured last month are working on a junior version which will have more players and different types of units. No date has been given for its launch yet.

KAC games are bringing out a new magazine

First Open for players of its games. This will cost £1.50 and carry articles about existing and new games.

Send me next time, map of your creeps left to mine. Yeh!



AVALON

THE KNIGHTS OF THE AVALON

The Chronicles of THE KNIGHTS OF THE AVALON is a fantasy based Play By Mail game from JADE Games, where players seek to establish, through trials, collaboration, politics, religion and conquest, empires.

For a free start - up write to JADE Games with future turn cards from as little as 95p or ring 0125 828211 for an immediate start up.

FREE

NEW ORDER

For centuries your civilization has supported the existence of intelligent life on other planets. Until now you could do no more than speculate about the mysterious worlds beyond that your scientists have occasionally photographed. However with the recent development of the hyperspace engine, conditions have become right to reach out and attempt to create a NEW ORDER to link the stars. Will the dominant species in that NEW ORDER be yours, or that of some other planet? In NEW ORDER you get the chance to find out!

NEW ORDER is a detailed game of space exploration, the rule book costs £3.00 (please don't request to play before reading the rules).

NEW ORDER



Could you survive on Reddell?

The rugged planet Phosphor has almost destroyed life on the planet's surface - a sparsely world wide atmosphere, floating ice and volcanic activity.

SHATTERED WORLD is an exciting PBM GAME OF SURVIVAL. Starting costs £3.00, with further turns 1.50 (includes postage back costs).



JADE GAMES

JADE GAMES
FREEPOST
SOUTHSEA
HANTS
PO4 0BR

This month's selection of maps, tips and pokes should help you to make this your highest scoring month ever. Keep those tips rolling in – you never know, yours could be the 'tip of the month', in which case you'll be handsomely rewarded for your effort!

TRICKS 'N' TACTICS



BUGGY BOY

For infinite time on

the Amstrad ver-

sion of this 900+ game simply type in and Run the listing below loading.

```

18 MO0E 18EM00F 10345
28 T01-0
38 F04 5-8000 10 8000
48 READ:AB A:RL (70)+80
58 F000 5.A: T01-101-4
68 NEXT N
78 F T01-1001 THEN PRINT "ERROR IN
DATA" END
88 (SAY)BLOODY
98 F F000 00000-411 THEN CALL 8000
108 F000 8000-875
118 CALL 8000
128 DATA 01 00 00 00 7E 85 03 00
138 DATA 00 00 00 00 00 7F 00 00 00
148 DATA 00 0A 00 00 04 00 00 00
  
```

SEN LALIGHTON, *Schillingfield.*



IO

If you need help with this game, then this Cheat poke should deliver. Load the game first and then reset it before entering:

```

F000 00000-000 (Number of lives)
F000 00000-0 (Number of crew)
F000 000 0-0 (Number of the screen on
which you start).
  
```

SYN 07000 (restarts the game with the changes)

ANDRÉ VAN DER ELST, *Rotterdam.*

ARKANOID II

This Cheat poke will not only give you infinite lives, but it allows you to advance screens at the price of the restore key.



```

1 PRINT CHR$(147)
2 FOR I=0000 TO 0000: READ X: A=A+0: F000
  I,X
4 NEXT
5 IF A=1100 THEN PRINT "ERROR"
6 DATA 100,07,000,07,11,007,000,1,000
7 DATA 10,047,000,000,04,05,1,00,1
8 DATA 00,00,040,000,044,041,040,0
9 DATA 00,1,141,040,0,0,0,0,0,0
10 DATA 00,00,141,04,0,0,0,0,0,0,0,0
11 DATA 00,0,0,0,0,1,141,00,0,0,0
12 DATA 0,0,0,0,0,0,0,0,141,0,0,0
13 DATA 1,141,0,0,1,0,0,0,0,0,0
14 DATA 000,0,0,1,11,000,0,000,0,000
15 DATA 000,0,000,0,1,00,0,0,0,0,0,0
16 DATA 001,000,0,0,0,0,0,0,0,0,0,0
17 DATA 001,000,0,0,0,0,0,0,0,0,0,0
18 DATA 07,0,0,0,0,0,0,0,0,0,0,0
  
```

Two SYN 0000 to start the game.

The D&D Crew, *Oshteyn.*



ATF

A few timely words of advice for anyone needing help surviving in Digital Integration's high flyer.

As your intelligence reports don't give you the whole picture regarding targets, it's advisable to carry out missions close to base and then search for your own targets. When you are near a target that is not in the database, a detector message will appear and will then be entered into your target list.

Manoeuvres are only effective if your heading is within 1 or 2 degrees of your target's bearing. If you are firing over a target, it can sometimes be destroyed by cannon. Bases, factories and convoys (read more than one hit to be destroyed). Beware of using ASPHALL as they are inaccurate and cause the plane to bank, as you guide them. It is a lot simpler and almost as effective to use the cannon.

If an interceptor approaches from behind, bank in the same direction as to bullets, which will rise into you. Reduce thrust and the plane will overshoot, then simply fire at it as it flies off. The automatic landing signal will come on approximately 800m from the runway, and it is advisable to lower the undercarriage first (because the message does not always remind you to).

CHRIS MANTON and JEREMY WEINGARD, *High Wycombe.*

CYBERNOID

This cheat for the Spectrum will provide you with infinite lives and time in which to complete Mr Gaccio's latest offering.



1. Choose the Define Keys option.
2. Type in F000.
3. Reaching the keys as you would normally.
4. Start the game.

GED MONTE, *Winn.*

GRAPPLING

To get anywhere in this game, you've got to get to grips (ironically) with the grapple sequence. The priority is to de-activate the detector. Once the device is safe try and arrange the question marks and boxes in the correct order. If you are low on power, it is a good idea to grapple a device and merely disarm the detector. This will replenish all your energy and you can keep your original parts. Grappling is the only way to recharge yourself in *Magnetron*. If you have a Thrusta Cartridge for your machine, now is a good time to use it!

There are various moves you can use to align the items. For example, if you move a piece along the top or bottom row in an L pattern, you will rapidly be able to complete one row and possibly the screen. Practice and agility are called for here!

MAGNETS

If you are carrying heavy rods near magnets — BE CAREFUL! It is all too easy to get pulled off course and crash if the magnet is near a ramp. Make sure you go slowly and check which way the magnet points. Long magnets can save you power if you can allow yourself to be carried along by them.

DRIVE UNITS

If you're looking for a good drive, the best are the SUPER and ULTRA-PLAGE models. The drive units are useful for extra speed and agility, especially when carrying extra loads. If you have a sluggish drive, you will not be able to ascend steep ramps or reveal magnets. Be careful of going too fast though, especially on ledges, and a drive unit shouldn't be your primary consideration when choosing a drive to dismantle.

POWER UNITS

Unlike *Quatron*, the power units in *Magnetron* are matched to your items. The Cyclic units are more prone to running down, however, so if you feel trigger happy, go for a drive with a Neutral unit. The Cyclic units are also more prone to falling down when you collide with your adversaries.

WEAPONS

Proton Blasts — radioactive weapons that are only useful against low level drods. Not recommended, but a useful starting weapon as it doesn't put excessive demands on your energy.

Cruiser — unique to the P1 drod (drod) if you can find one. The Cruiser is an excellent weapon. It's only effective at short ranges and tends to be inaccurate when compared to other weapons, but it is powerful enough to remove most drods and it also has guided missiles that can follow targets.

Plasmance — a high powered weapon which security drods use to great effect against you — so be careful when you approach a P1 or a P2 unit. Like the cruiser it can destroy any drod with a few shots. The Plasmance is an excellent weapon during the early stages.

Master — a superb long-range weapon that it can also be used for short-range combat and is only bettered by the Anti-drive when it comes to destroying drods just out of normal range.

Bouncing bomb — similar to the master and will work at all ranges. It's difficult to aim and the accuracy isn't devastating — the drods seem to be expert at revealing the booby.

MAGNETRON

Some comprehensive tips here for all Commodore and Spectrabit owners.

Anti-drive — similar to *Quatron's* detector, it will fit all drods on the screen but it will take a few shots to destroy them. The Anti-drive is very useful for 'mopping up' the low level drods — especially cool drods. Beware of overuse though as it drains your energy but has also, don't use on P1 and U2 drods as their Anti-Drive devices make them invulnerable.

Seeker — Hovers it on the nearest target that is at approximately the same altitude as you. Only the P3 drod is invulnerable to the Seeker which is hard to find but it's worth searching for as it is very effective.

As the drods are all weapons experts, the best way to start to grapple with a drod is to come at it from below, on a ramp, with your grapple already lowered.

DEVICES

Boost — Boosts your power unit.

Overdrive — Increases your speed (useful if you're heavy).

Anti-Force — not very useful unless you're on

critical power level.

Ultra-wave — unique to the P1 drod, this device is useful in crowded situations when you can just burn and destroy.

Super-shield — renders you immune to most weapons.

Scrambler — similar to the Anti-Force in operation, this device jams Seekers.

Anti-grav — stops you exploding when you fall off ledges.

GENERAL HINTS

As you approach a cluster of drods, use the table to see if they have anything worth stealing, and then check how well armed they are. Always try to operate a drod on the given you at least 90 and a less fortunate. The best drod is the U2 as it has an Anti-grav, Seekers and powerful drive and power units.

JARICH COLLIS, Bangor Co-Drewn.

FLAME PUTS OUT FIRE — PULL OUT HEAVY, HEAD & LOGS

POUR FUEL ON TO REVEAL GATE

DRIVE REMAINS IF TOP PULLED OFF

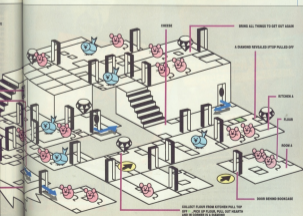
INSIDE OUTING

ALASTAIR OLIPH, Ware

©1988 BROWN

THE MAGNETRON DRUIDS

DRUID	TYPE	SEC. CLASS	DRIVE UNIT	POWER UNIT	WEAPON	DEVICE
D1	Elite Guard	Alpha	ULTRA-PHASE	NEURON 4	ART. DRIVE	EYE-DRIVE
D2	Elite Guard	Beta	ULTRA-PHASE	NEURON 3	SEEKER	ART. PROBE
D3	Elite Guard	Beta	ULTRA-PHASE	NEURON 2	SEEKER	ARTICULAR
F0	Fury Drone	Gamma	INTER-PHASE	NEURON 2	BOUNCING BOMB	SCRAMBLER
F1	Fury Drone	Gamma	INTER-PHASE	NEURON 2	BOUNCING BOMB	SUPER SHIELD
G1	Guard	Gamma	EYOLIC	NEURON 1	ART. DRIVE	SUPER SHIELD
G2	Guard	Gamma	EYOLIC	NEURON 1	NOTOR	SURCELL
G3	Guard	Gamma	EYOLIC	NEURON 1	NOTOR	GRAPPLE
P1	Pursuit Drone	Delta	SPYDRON	EYBAYO 4	FLAMMARD	ULTRA RAM
P2	Pursuit Drone	Delta	SPYDRON	EYBAYO 4	FLAMMARD	ART. PROBE
P3	Pursuit Drone	Delta	ASTRON	EYBAYO 4	GRINDER	EYE-DRIVE
P4	Pursuit Drone	Delta	ASTRON	EYBAYO 4	PROTON DR. I	EYEDRIVE
V0	Void Drone	Apollon	INTER-PHASE	EYBAYO 2	PROTON DR. I	SURCELL
V1	Void Drone	Apollon	ELECTRO-DRIVE	EYBAYO 1	PROTON DR. I	SURCELL
V2	Void Drone	Apollon	MAGNA-DRIVE	EYBAYO 2	PROTON DR. II	SURCELL
V3	Void Drone	Apollon	HOVER DRIVE	EYBAYO 1	PROTON DR. I	SURCELL



AMIGA SOFTWARE



SECONDS OUT - Can you meet the challenge? Take on the champion boxer in your quest for International Amateur's world title. **R.A.P. £14.95**

FROST BYTE - A companion of the fearsome words lexicon, expertly implemented and up-loaded for the Amiga. **R.A.P. £14.95**

FORMULA GRAND PRIX - Experience the thrills and spills of Formula One Grand Prix racing. No license needed, but different cars mean a highly realistic racing simulation. **R.A.P. £14.95**

STOCK MARKET - Is an exciting game of shares, skill and luck for all ages. Drive the market at a glance! The Stock Market One to do please can even take the entire financial world of the London Stock Exchange, where you can gamble, buy and sell shares and calculate your financial strength! **R.A.P. £14.95**

Available on Mail Order via R.A.P. The nearest Postnet and Postbox.

TYNESOF!
COMPUTER SOFTWARE

OBLITERATOR

nick woodruffe, Greenham



WINNERS' BOX SOFTWARE GIVEAWAY!!

After winning prizes in the A2Z contest and the recently announced drawing for the publishing industry (see pp. 197-200), I'm giving an additional \$50,000 away to the lucky \$100 grand prize winner. To win, answer the questions below and send them to your favorite computer magazine.

AGE How old are you? (Please don't use your real age, but your computer age.)

4 OTHERS How many other computer magazines do you read? (Please don't use your real number, but your computer number.)

TRICKS 'N' TACTICS, EXTREME, BATH, GAMES, I, U, J

ANSWER KEY: 1. BOSS, 2. BOSS, 3. BOSS, 4. BOSS, 5. BOSS, 6. BOSS, 7. BOSS, 8. BOSS, 9. BOSS, 10. BOSS, 11. BOSS, 12. BOSS, 13. BOSS, 14. BOSS, 15. BOSS, 16. BOSS, 17. BOSS, 18. BOSS, 19. BOSS, 20. BOSS, 21. BOSS, 22. BOSS, 23. BOSS, 24. BOSS, 25. BOSS, 26. BOSS, 27. BOSS, 28. BOSS, 29. BOSS, 30. BOSS, 31. BOSS, 32. BOSS, 33. BOSS, 34. BOSS, 35. BOSS, 36. BOSS, 37. BOSS, 38. BOSS, 39. BOSS, 40. BOSS, 41. BOSS, 42. BOSS, 43. BOSS, 44. BOSS, 45. BOSS, 46. BOSS, 47. BOSS, 48. BOSS, 49. BOSS, 50. BOSS, 51. BOSS, 52. BOSS, 53. BOSS, 54. BOSS, 55. BOSS, 56. BOSS, 57. BOSS, 58. BOSS, 59. BOSS, 60. BOSS, 61. BOSS, 62. BOSS, 63. BOSS, 64. BOSS, 65. BOSS, 66. BOSS, 67. BOSS, 68. BOSS, 69. BOSS, 70. BOSS, 71. BOSS, 72. BOSS, 73. BOSS, 74. BOSS, 75. BOSS, 76. BOSS, 77. BOSS, 78. BOSS, 79. BOSS, 80. BOSS, 81. BOSS, 82. BOSS, 83. BOSS, 84. BOSS, 85. BOSS, 86. BOSS, 87. BOSS, 88. BOSS, 89. BOSS, 90. BOSS, 91. BOSS, 92. BOSS, 93. BOSS, 94. BOSS, 95. BOSS, 96. BOSS, 97. BOSS, 98. BOSS, 99. BOSS, 100. BOSS.



The Flare has been designed for simple operation - in the event that unskilled machines will be controllable entirely by speech using an on-board voice front end operating system. The prototype in this picture uses a 2.8MHz disk and is controlled by a standard IBM keyboard, IBM font manufacturing devices are used, so you can easily adapt configuration for machines with fonts that require special configuration with or without keyboard, with or without keyboard, to support console interface, and so on.

There's been a lot of it about Whitting, but it's obvious how keen he is about new machines from Amstrad, resting on the possibility of a Spectrum+4 that has been seriously been reported as a missing item, a 32KB speeded-up Spectrum+1, and more from ACE. We've managed to uncover at least some of the lies behind the rumours: there is a new track, it exists in final prototype form, it is ready for production - but exactly who will be producing it is still uncertain. Now read on...

The Flare One for the machine is called is a 1MHz machine with an 8-bit down configuration, 128K of ROM, 128K of video RAM, and 768K of system RAM. It was designed exclusively as a co-processor and if it receives the instruction it will certainly give both the Amstrad and the 57 a run for their money.

Although 150 based like the Spectrum series, the Flare drops its power line, but retains chips designed by the company with the specific intention of providing general (and) powerful graphics and sound capability. Just to give you some idea, how would you like:

- a micro that can give you a fast-moving game with 256 colours on-screen, update



Martin Brennan (left) and John Whitting - two members of the Flare design team. The Department of Trade and Industry was so impressed by their dedication to the project, that they funded/financed it entirely out of the proceeds from their own work, but they made a film about their own long and tough struggle against their own bosses in the machine and give it to the world with support it deserves.

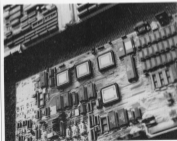
the screen of up to 3 million pixels per second, and play full videos sound with eight voices at the same time.

- a micro that you can program to emulate a C64, ZX Spectrum DS or one of a dozen other dedicated synthesizers.

- a micro that has a dedicated video expansion capability for screen-grabbing.

PLAYPOWER!

At last - the truth behind the rumour: a new music-and-graphics micro that could put real power into the hands of the user who values self-expression more than spreadsheets. Steve Cooke visited Flare Technology, where ex-Sinclair Research boffins are putting the finishing touches to a mighty new micro.



The prototype board, featuring the new special custom-chips designed by the Flare team for handling graphics, sound, and memory. The row of chips along the right are from Amstrad; the silicon die you can see in the middle are the 8088's multiplexing functions; there's more to it, and the video controller chip. In the background you can see some of the bulky and extremely complex TTY, strictly built up from off-the-shelf chips, that Flare (designer) designs into the two custom chips.



FLARE TECHNOLOGY - 0400 488 1007

There's no doubt, Steve Cooke, Martin Brennan (left), John Whitting (right), and Ben Chivers (right) were some of the brains behind Sinclair Research, working with the natural way for life on the stage of the Spectrum and Spectrum microprocessors.

Over 88 percent that never got into the mainstream. Last, however, a powerful music-and-graphics machine that really caught the imagination of the Flare One - in what Sinclair Research's present history they decide to turn their own company to develop Flare One, the machine evolved as Flare One.

The company that spent 2 years developing Flare One, and they're now ready to go into production - but there's just one problem: as far as major companies are concerned, the Flare One, despite their internal fear of how it will make them in the home computer market, there at 400 - no more than the machine is a real effort - to get your average home out, production.

video titling, and other professional graphical applications.

- a main with a powerful 80386 chip that offers two selectable screens, vertical and horizontal keyboard scrolling, collision detection, and lightning-fast image manipulation?

That, claim Flame Technology, is exactly what the Flame One is designed to do. And although the operating software for the prototype is still under development, the demonstrations we saw hint at long way toward proving the capabilities of the macro. However, what's just as impressive is the design philosophy behind it. Flame wanted to design a machine that, while offering significant advances in processing power, also concentrated on taking the micro out of the specialist area of computing and into the wider world of pop music video entertainment.

That's certainly a philosophy that ACE approves in the full. We were only able to preview the Flame One just before our print deadline so our coverage of it in this issue has necessarily been limited by space, but we do believe that it is an impressive machine with some excellent features - check out our further report on it next month. ■

THE SPECIFICATION

A typical "top-end" system would include:

- 128K ROM
- 128K Video RAM
- 768K System RAM
- 3 16000 serial ports: one variable baud rate and the other fixed at 9600.
- MIDI IN, OUT, and THRU
- Industry standard keyboard interface
- Standard joystick interface
- Light-pen interface
- Stereo audio inputs (for sampling and processing) and outputs, plus "Hi-Fi" style headphones socket.
- TV and RGB monitor outputs.
- Video expansion bus to allow fitting of frame-grabbers etc.
- System expansion bays for hard disk and etc.
- Lines 256 x 256 pixels with 256 colours
- Lines 672 x 256 pixels with 16 colours
- Operating software in ROM to include paint program and music editing/synthesis software
- Extended BASIC giving full control of graphics and sound chips.



The graphics chip will control a Flame's studio using the Flame's very comprehensive MIDI spec, you can connect it to a standard synthesizer such as a 207 and then take full advantage of its modules to provide mixing, sample processing, and sequencing software - most of which will be built in ROM and therefore available at the touch of a button. When going to make the world manufacturers really green, however, is the programmability of the machine - which can be made to emulate many modern synthesizers for a fraction of the cost. These options were being set some pretty impressive stuff when we were there - in full stereo, of course, since the Flame allows you to pan (through a left and right speaker - and some of the pan lines in between - within the 3D space) or the standard DSP range (which supports each of the three voices in a stereo channel - left, centre, and right).

FOR THE MUSICIAN...

The Flame sounds like a dream come true for MIDI musicians. Not only do you get a comprehensive MIDI spec with its OUT and THRU but you also get processing power that will enable you to produce some incredible sounds.

The DSP (digital sound processor) in the Flame is a custom-designed chip that operates at a VERY fast speed of 8 million instructions per second (MIPS). That alone would be impressive, but it can do this AT THE SAME TIME as it carries out 1 million multiplications per second.

This means that you can store a waveform or sampled sound in memory and then get the DSP to fetch it, modify it by applying a digital filtering algorithm to the data, and then output the sound via the mono/stereo quality digital-to-analogue converter. The hardware is powerful enough to allow you to generate eight voices simultaneously, individual in pitch, volume, and stereo balance at 200 samples per second.

This basic principle is used in a number of professional synthesizers, but in such instru-

ments the program that determines the performance of the DSP is held in ROM and is therefore unalterable. The beauty of the Flame is that the DSP programs are held in RAM and can be altered by the user. You can therefore emulate in software the workings of conventional synthesizers or even invent some of your own. We want the machine to start people playing with sound in the same way that Micro-Paint on the Macintosh started people playing with computer graphics," says the company.

Flame are currently working on built-in software (on ROM, as instantly executable - no waiting for tape or disk) that will include voice editing, sequencing, and sound/sample/pitch editing modules. The custom chips involved have a strong degree of independence so that you could, for example, roll a sound on screen while listening to it at the same time.

Finally, the design of the machine enables one, two, or more Flames to be linked together. Then you'd really have something to play with...

MIDI PANEL OF EXPERTS

This month's postbag contains an above-average proportion of oddities, ranging from the 'can you tell me all about MIDI?' sort of question (a spot on the vague side) to queries about MIDI software for the Amiga (less common than you may think) and about MIDI accordions (much more common than you may think). Your MIDI means mastered by music maestro MARK JENKINS...

I was inspired by your "True Love" photo-essay in August 1988 and wish I could try IT-based MIDI sequences, sequencing and sound editing packages up to £100 per package. I hope the accessories will be the same price by August 89 because I'm so close to the keyboard.
Michael Ringway, Walsley

Well, the good news is that you don't have to spend as much as £100 on a sequence editor. Sequencer Plus, Mutation of around \$60 will give you 16 levels of sequencing, a very helpful display which includes a number of useful editors of your tempo, and a capacity of ten different songs in memory simultaneously. If you want to spend a little more, you can go for Sequ 200 at £99 which looks like a fully professional sequencer on test in a out door version at the £149 Jango Musicprice. But still reasonably powerful.

Some investigation concerning MIDI data to musical notes on screens for printing is rather expensive - CUBA Motion, for instance, is over \$600, but includes the most powerful powerful Casio sequencer software and can store synth sounds as well. Stay away from Pyralis Art's probably the cheapest decent package - the Helix, offering keyboard or mouse entry - and Syntronic Music on 01-444-4100 for price and availability.

Sequencing packages for the £2100 and other Yamaha four-operator synths are plentiful, and Syntronic Music will probably point you in the direction of their Sequencer PRO package. DR T (publishers: MCMUSIC, 01-704 4100) also has a fairly package called SOP which will handle other Yamaha synths, and if you want to sequence strings you'd be better off going for a synthesised synth module which can play several parts simultaneously. Yamaha's also the TR-60 and Roland's also MIDI also includes three sounds in either case, you'd need a master keyboard, and Oberlin's are the best bet with, as they say, price is not every good.

How would any Commodore 48 sound through a TV set with Micro Rhythm Plus?
Michael Ringway, Clackmarn

The answer is that it would sound ok, but it's very easy to connect to a better for better sound

quality. If you had two phone sockets for TV or 'television' inputs, buy a 5-pin DIN to four phone lead, stick the DIN into the Commodore's audio/video socket, and you'd had one of the phone plugs will deliver perfect sound through your hi-fi (the cable sets to test out which one by test out each, but keep the volume low until you've got it set in place. The sound isn't affected by connecting MIDI equipment, although most software designed for MIDI use won't be using the internal sound chip as well anyway, and MIDI synths will often have their own speakers like the Commodore or will need to go into the hi-fi or other amp, certainly not into your TV.

What you can do with a SAM Music Machine and can you do it with a Spectrum GEM?
R. A. Bates

This is perfectly feasible, as all the members of the SAM user group will confirm, so perhaps they'd like to write and tell us what they've been doing? Meanwhile a few letters or anyone else wants to get in touch with SAM, they've started to Unit 5, 15 and 16 South Lane in nearby accident free, eastern of Lechliffe Industrial Park, Redfield Lane, Church Crookham, Hampshire GU15 0BB, tel 0502 850000.

I want to get up some MIDI gear with an Amiga 500 and wonder the most recommended if there's a MIDI interface I could use in conjunction with it?
Angelo di Maria

The only Amiga MIDI interface we listed in the UK was based on the £49.95 or so - based then of Winchester House, Cottingham Road, Westchester, Sussex, Middle (tel 01-841 1146 for more info) and possibly some local or suitable software such as the Deluxe Music Construction Set, and from Data CM 90. If you ever visit the Newmarket Music Fair you'll find LOGICA MIDI an accordion - they're not so popular over here, but it's worth checking whether either £50

(0761 475125) or Nelson (01-733 4411) import any of their lines into the UK. Either company may be able to put you onto a specialist who will sell MIDI to an existing accordion firm, and in France the Casio's company make a specific MIDI synth module specifically designed for a MIDI accordion's melody, chord and harmony sections - no UK distributor as far as we know though. Angelo also says he's noticed that some MIDIists opt for the £1 - it's not because the Amiga isn't capable of doing the same job, it's just that the Atari already has a MIDI socket and about a half an inch more MIDI software available than the Amiga makes you go on hole in the bank.

I want you should devote some space to sequencers and other events.
Andrew Balfour, Leeds

You're right, because most synths won't make a sequencer without complications. But it's a pretty large field, and you've got two of the best synths, some effects units and a multi-track tape machine lined up, you're looking at the SPANNER. Basically, a single synth will go into your hi-fi - two or three synths will go into your hi-fi and a cheap mixer from Tandy takes synths and effects and you're looking at a real to you said music; they're a real some interesting issues. Professional four-track cassette-based recorders usually have built-in mixers with less or six channels and facilities for mixing in, material effects such as reverb, chorus, etc. and if you're using up your music system only that, you'd better, it's a real hi-fi amp and speakers will be needed (making an exception for a C4 but can give you always sounding results when played back on speakers).

Another have just touched a light-bulb-one machine for the same reason on a budget. At £299, the Studio 100 provides four-track professional, conventional cassette deck for copying, un-distorted mixer, with record deck and mixer, and comes with the mixer, two systems, a pair of headphones and handling tape of three-and-a-half-inch and ten-inch. If you want a recording studio, but not a hi-fi setup in one, and aren't wanting to merge sound performance, this is the only kit on the catalogue for me a sequencer. ■



Black Studio 100 - aimed for the home musician on a budget

Here's an offer that's solid gold. Take out a 12-issue subscription to ACE for just £17.95 and you can at the same time buy any of the titles on this page at half price!

So if you were to spend just £18 on software, you'll have recovered the entire cost of your subscription.

You don't need us to remind you just how exciting a magazine ACE is. So why not guarantee yourself a year's supply. Just cut the coupon, or dial 0458 74011 with your credit card details.

GOLD

at half price!

You can pick up these fabulous US Gold titles at incredible discounts when you subscribe to ACE!

IMPOSSIBLE MISSION 2

The great returning classic featuring the action hero and his robot.

Issue	RSP	100/95	Order code
Software	5.95	4.95	AC148CC
Manual	7.95	7.95	AC148CC
Manual	3.95	3.95	AC148AC
Manual	2.95	2.95	AC148AD
Box Set	19.95	14.95	AC148BT

ARCADE FORCE 4

Open simulation of Road Runner, Indiana Jones, Gauntlet and Mario Cross.

Issue	RSP	100/95	Order code
Software	4.95	4.95	AC149CC
Manual	7.95	7.95	AC149CC
Manual	3.95	3.95	AC149AC
Manual	2.95	2.95	AC149AD
Manual	4.95	4.95	AC149AE
Manual	7.95	7.95	AC149AF
Box Set	24.95	19.95	AC149BT

CALIFORNIA GAMES

Three Sportsports simulation yet, and still saying something.

Issue	RSP	100/95	Order code
Software	4.95	4.95	AC150CC
Manual	12.95	12.95	AC150CC
Manual	4.95	4.95	AC150AC
Manual	7.95	7.95	AC150AD
Manual	4.95	4.95	AC150AE
Manual	14.95	7.95	AC150AF
Box Set	19.95	9.95	AC150BT
Box Set	19.95	9.95	AC150CP

ROLLING THUNDER

Reverse simulation of the famous car to jump an underpass cap a platform.

Issue	RSP	100/95	Order code
Software	4.95	4.95	AC151CC
Manual	10.95	10.95	AC151CC
Manual	4.95	4.95	AC151AC
Manual	7.95	7.95	AC151AD
Manual	4.95	4.95	AC151AE
Manual	14.95	7.95	AC151AF
Box Set	19.95	9.95	AC151BT
Box Set	19.95	9.95	AC151CP

OUTRUN

Computer translation of the strip which hit.

Issue	RSP	100/95	Order code
Software	4.95	4.95	AC152CC
Manual	12.95	12.95	AC152CC
Manual	4.95	4.95	AC152AC
Manual	7.95	7.95	AC152AD
Manual	4.95	4.95	AC152AE
Manual	14.95	7.95	AC152AF
Box Set	19.95	9.95	AC152BT

720°

The all action wheel board game (a user on TV).

Issue	RSP	100/95	Order code
Software	4.95	4.95	AC153CC
Manual	12.95	12.95	AC153CC
Manual	4.95	4.95	AC153AC
Manual	7.95	7.95	AC153AD
Manual	4.95	4.95	AC153AE
Manual	14.95	7.95	AC153AF

EPYX COMPILATIONS

Artistic view package comprising four superb titles.

Issue	RSP	100/95	Order code
Box Set	17.95	14.95	AC154BT
Box Set	14.95	11.95	AC154CC
Box Set	14.95	11.95	AC154CD

JINKS

Another original formulae-solving formulae on up.

Issue	RSP	100/95	Order code
Box Set	24.95	12.95	AC155BT



ORDER FORM

Please tick the following items.

Order code	Title	ACE Price
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		

Total Software Order

Name _____

Address _____

Phone (if poss) _____ Computer _____

Method of payment ACCESS VISA CHEQUE P.O.
 Encl. card no. _____ Exp.date _____

Please make your cheques and postal orders to Future Publishing Ltd
 This form is valid until August 31st, 1988

Send this form to:
 ACE Reader Offers, FREEPOST, Somerset, Somerset TA8 7BB
 No stamp required if posted in the UK, Channel Islands or Isle of Man.

Please note: The prices on this page are valid only for people simultaneously taking out an ACE subscription.

WE ARE THE CHAMPIONS

Ocean
 Stunning value compilation including Starfox, Renegade, Phantasy International, Karate and Super Sports.

Version	MSRP	MSRP Price	Date Available
Spectrum disc	15.95	9.95	10/19/92
CD-ROM	17.95	13.95	10/19/92
CD-ROM	17.95	13.95	10/19/92
Amiga 500	17.95	13.95	10/19/92
Amiga 600	17.95	13.95	10/19/92
Amiga 1200	17.95	13.95	10/19/92

ARKANOID 2

Imagine
 The Revenge of Dr. Robotnik. Incredibly addictive break-out challenge.

Version	MSRP	MSRP Price	Date Available
Spectrum disc	7.95	6.95	10/19/92
CD-ROM	9.95	8.95	10/19/92
Amiga 500	12.95	10.95	10/19/92
Amiga 600	12.95	10.95	10/19/92
Amiga 1200	14.95	12.95	10/19/92
Amiga 1200	14.95	12.95	10/19/92



IMPOSSIBLE MISSION 2

US Gold/Epyx
 Follow up to the stunning classic featuring the cool Professor and his robots.

Version	MSRP	MSRP Price	Date Available
CD-ROM	9.95	8.95	10/19/92
Amiga 500	10.95	9.95	10/19/92
Amiga 600	10.95	9.95	10/19/92
Amiga 1200	12.95	11.95	10/19/92
Amiga 1200	12.95	11.95	10/19/92

BOBSLEIGH

Digital Imagination
 Superb simulation of the exciting winter sport.

Version	MSRP	MSRP Price	Date Available
Spectrum disc	11.95	9.95	10/19/92
CD-ROM	13.95	11.95	10/19/92
Amiga 500	14.95	12.95	10/19/92
Amiga 600	14.95	12.95	10/19/92
Amiga 1200	16.95	14.95	10/19/92

ARCADE FORCE 4

US Gold
 4-gems compilation of Planet Rimmer, Indino Jones, Gauntlet and Action Crisis.

Version	MSRP	MSRP Price	Date Available
Spectrum disc	14.95	11.95	10/19/92
CD-ROM	16.95	13.95	10/19/92
Amiga 500	18.95	15.95	10/19/92
Amiga 600	18.95	15.95	10/19/92
Amiga 1200	20.95	17.95	10/19/92
Amiga 1200	20.95	17.95	10/19/92

TARGET RENEGADE

Imagine
 Virtually follow up to the violent combat game.

Version	MSRP	MSRP Price	Date Available
Spectrum disc	7.95	6.95	10/19/92
CD-ROM	9.95	8.95	10/19/92
Amiga 500	11.95	9.95	10/19/92
Amiga 600	11.95	9.95	10/19/92
Amiga 1200	13.95	11.95	10/19/92

A.T.F.

Digital Imagination
 SCI novel action flight simulator with stunning 3D graphics and high playability.

Version	MSRP	MSRP Price	Date Available
Spectrum disc	19.95	16.95	10/19/92
CD-ROM	21.95	18.95	10/19/92
Amiga 500	23.95	20.95	10/19/92
Amiga 600	23.95	20.95	10/19/92
Amiga 1200	25.95	22.95	10/19/92



PLATFORM

Ocean
 Powerful action based on the award-winning star film.

Version	MSRP	MSRP Price	Date Available
Spectrum disc	11.95	9.95	10/19/92
CD-ROM	13.95	11.95	10/19/92
Amiga 500	15.95	13.95	10/19/92
Amiga 600	15.95	13.95	10/19/92
Amiga 1200	17.95	15.95	10/19/92
Amiga 1200	17.95	15.95	10/19/92

COMBAT SCHOOL

Ocean
 The finest arcade game featuring superb graphics, sounds.

Version	MSRP	MSRP Price	Date Available
Spectrum disc	7.95	6.95	10/19/92
CD-ROM	9.95	8.95	10/19/92
Amiga 500	11.95	9.95	10/19/92
Amiga 600	11.95	9.95	10/19/92
Amiga 1200	13.95	11.95	10/19/92

CALIFORNIA GAMES

US Gold/Epyx
 The best Epyx sports simulator yet. And both ways satisfying.

Version	MSRP	MSRP Price	Date Available
Spectrum disc	9.95	8.95	10/19/92
CD-ROM	11.95	10.95	10/19/92
Amiga 500	13.95	12.95	10/19/92
Amiga 600	13.95	12.95	10/19/92
Amiga 1200	15.95	14.95	10/19/92

XON

Logotron
 Impassioned maze-escape game, packed with mind-bending puzzles. Original version, compelling SCI-based SCI. Extra special price!

Version	MSRP	MSRP Price	Date Available
Spectrum disc	7.95	6.95	10/19/92
CD-ROM	9.95	8.95	10/19/92
Amiga 500	11.95	9.95	10/19/92
Amiga 600	11.95	9.95	10/19/92
Amiga 1200	13.95	11.95	10/19/92

ROLLING THUNDER

US Gold
 Impressive conversion of the famous arcade featuring an unprecedented map & platform shoot-em-up action.

Version	MSRP	MSRP Price	Date Available
Spectrum disc	9.95	8.95	10/19/92
CD-ROM	11.95	10.95	10/19/92



US Gold/Epyx 4-CD-ROM-1 10/19/92

Version	MSRP	MSRP Price	Date Available
CD-ROM	9.95	8.95	10/19/92
Amiga 500	11.95	9.95	10/19/92
Amiga 600	11.95	9.95	10/19/92
Amiga 1200	13.95	11.95	10/19/92
Amiga 1200	13.95	11.95	10/19/92

MAGNIFICENT SEVEN

Ocean
 An incredible value for money compilation which includes Head Over Heels, In a Good Way, Blast O'Clock, Copas, Frontier/Guns to Hollywood, and Yo! Yo! Kung Fu!

Version	MSRP	MSRP Price	Date Available
Spectrum disc	9.95	7.95	10/19/92
CD-ROM	11.95	9.95	10/19/92
Amiga 500	13.95	11.95	10/19/92
Amiga 600	13.95	11.95	10/19/92
Amiga 1200	15.95	13.95	10/19/92



GAME SET MATCH

Ocean
 A massive compilation of 10 complete fun games - including Atom's Hyperball, King Kong, Tennis, Dairy Transport, Super-Ten, World Tennis, Baseball, Pro Championship Basketball, Billy Hattigan, Boxing, Super Soccer and more. Incredibly value!

Version	MSRP	MSRP Price	Date Available
Spectrum disc	12.95	9.95	10/19/92
CD-ROM	14.95	11.95	10/19/92
Amiga 500	16.95	13.95	10/19/92
Amiga 600	16.95	13.95	10/19/92
Amiga 1200	18.95	15.95	10/19/92

ATARI ST TITLES

(In addition to those mentioned)

Continues the incredible Ocean and Ocean Games series, both Atari ST/STX on the high 1000. Leaderboard is the definitive golf action. 2000 is an innovative strategy. 2000 is an ST/STX innovative value compilation of four titles.

Version	MSRP	MSRP Price	Date Available
Styx on ST	29.95	25.95	10/19/92
Great Command	24.95	20.95	10/19/92
Styx	19.95	15.95	10/19/92
Surgeon Master	24.95	20.95	10/19/92
Seigneur	19.95	15.95	10/19/92
2000	19.95	15.95	10/19/92
Galactic Games	19.95	15.95	10/19/92
Leadwrest	24.95	20.95	10/19/92
2000	24.95	20.95	10/19/92





AMIGA TITLES

(in addition to those elsewhere)

Sea is an incredible addictive football action World Games in the Edge sports classic. Football is a great football simulation. Golfmania is the definitive golf simulation. Hottwheel is a superb roller flight sim.

Title	MSRP	ACE price	Order code
Sea	24.95	19.95	ACE0046
Sea Games	24.95	19.95	ACE0046
Golfmania	24.95	19.95	ACE0048
Hottwheel	24.95	19.95	ACE0049
John	24.95	19.95	ACE0048
Steel	24.95	19.95	ACE0049
Hottwheel	24.95	19.95	ACE0049

IBM PC TITLES

(in addition to those elsewhere)

Sea leading games should also run on Amiga! Plus and other computers. Elite is the definitive space trading and combat game. Tomcat is a sophisticated flight simulator. WorldWar is a great football simulation. World Class Leaderboard is the ultimate golf simulation. Steel is an adventure. Elite is a superb roller flight sim.

Title	MSRP	ACE price	Order code
Sea	24.95	19.95	ACE0046
Tomcat	24.95	19.95	ACE0047
WorldWar	24.95	19.95	ACE0048
World Class	24.95	19.95	ACE0049
Steel	24.95	19.95	ACE0049
Elite	24.95	19.95	ACE0046
Elite	24.95	19.95	ACE0046
Elite	24.95	19.95	ACE0046



ACE SPECIAL OFFERS

Your chance to buy some of the hottest titles around and save money!

• Fast delivery • Friendly service • Fabulous discounts

HOW TO ORDER

Just make a note of the details of the items you want, including the order code. Then fill these in on the free post form printed on this page.

Post this, together with your credit card details or cheque to the Free Post address listed - you need pay no postage. Alternatively ring 0458 74011 and ask for ACE Credit Card Orders.

PLEASE NOTE

- All items are despatched by first class mail.
- We have tried to list only those versions of software which are available NOW.
- All prices include VAT, postage and packing.
- You will normally receive software within 7 days of ordering. Please allow 3-4 weeks in case of temporary shortages.

SUBSCRIPTION OFFER

If you want an even more fantastic deal, turn back one page and have a look at our subscription offer: US Gold games at HALF PRICE when you take out a 12-issue sub. Incredible!

SUBSCRIPTION FORM

YES, I would like to take out a 12-issue subscription to ACE magazine at an all-inclusive price of £17.95.

At the same time, I would like to order the following US Gold software titles at half price.

Order code	Title	Half Price
1.		
2.		
3.		
4.		
5.		
6.		

Total payable (software ordered + £17.95)

Name

Address

Phone (if press)

Computer

Method of payment: ACCESS • VISA • MASTERCARD • P.O.

Credit card no.

Exp. date

Please attach our cheque and postal orders to Future Publishing Ltd. This form is valid until August 31st, 1988.

Send this form to:

ACE Subscriptions, FREEPOST, Somerset, Somerset TA11 1BB

No stamp required if posted in the UK. Channel Islands or Isle of Man.

CREDIT CARD HOTLINE

0458 74011



TRI COMPUTER SOFTWARE Ltd.

The AMIGA Specialists

Full Range in Stock
A2000/A500 on permanent Demo.
Full Range of Graphic Software &
Hardware in Stock
Genlocks in Stock and on Demo +
Output Devices like the XEROX 4020
Printer
FutureSound and all sound Packages
always in stock
Midi Interfaces Stocked

DR T's AMIGA SEQUENCER
NOW IN STOCK !

For all your AMIGA needs

Call: 01-840 6136

Or Write to: 161-169 Uxbridge Road
Ealing W13 9AU

All major credit cards accepted
Leading Facilities available to BUSINESS

EXMOUTH MICROS

Post Exchange your used games. We will give you 50% of the RRP price of Atari ST games. Yes, at last you can get half price games! Eg. Balance of Power RRP £26.95. Our just-in price £14.95. Dungeon Master RRP £24.95. Our just-in price £12.48.

Our Run £19.95. Our just-in price £9.95

MANY MORE GAMES
AVAILABLE !

Send your game in a strong envelope to:
Exmouth Micros,
13 South Street, Exmouth,
Devon EX8 2SR.
Tel: 0395 267734.

Please add 50p towards the postage.
Patlex games must be same RRP as the game ordered.

Send for an application form
to the **MICRO CLUB**
FREE Membership for the 1st Year !!

ACE

Collect it!

Missed some earlier issues of ACE? Don't despair. Copies can be despatched to your letterbox for just £1.50 each (postage free). Look at these highlights.

ISSUE 1 (Order code A10081)

- FREE cassette software COMPETE versus world BEAT it - GI Joe's BLUE MAX on the C64 and Cosmos GFT FROM THE SCDS for the Spectrum.
- Which Console? Automated comparison of the Nintendo, Sega and Atari machines and the software available for them.
- Major lists in Holland a review of Ocean Multi-titles.
- Great strategy tips on World of Thrones, Barbarian, Defender of the Crown and more.
- Sport letters page!

ISSUE 2 (Order code A10082)

- FREE cover cassette containing the first complete levels of the arcade smash BURNIN' 2 BURNIN' (C64 and Spectrum versions)
- Buyer's Guide to budget software - 50 top titles listed.
- Rejuvenating guide to MIDI and all 10 models, plus numerous games.
- Features 20-innovative peripherals, 20 graphics and your game playing skills.

ISSUE 3 (Order code A10083)

- Detailed comparison of the Atari ST, C64 Amiga and Acorn Archimedes.
- Buyer's guide to strategy games.
- Playing games to first LED, Snugglers, Boulder Dash, Gray and many more.
- DigPants and Before Pans in comparison.
- Introduction to Play by Mail games.
- Great Computer Displays.

ISSUE 4 (Order code A10084)

- Burger Christmas issue with free 1988 computer user's diary!
- Games of the Future, an ACE investigation.
- Game compilers compared.
- Reviews of 100 rings of electronic keyboards.
- Detailed tips on P-10 Strike Eagle, Indiana Jones and Ray Hunter.
- A Place for Super Sprint, Counter Jack the Jester 2, Hangover, Boulder.

ISSUE 5 (Order code A10085)

- Major investigation into game ownership.
- The definitive comparison of rights protected by professional plots.
- Games Creation reviewed and analysed.
- A complete list of all kinds of 'how-to-do-it' articles.
- Complete list of 1000+ titles.
- Game playing tips on Hercules, Bobsleigh, Terraplane, Sitar, Freddy Hunter and arcade game Double Dragon.

ISSUE 6 (Order code A10086)

- All-in-one issue, but who'da know, there's no space left to tell you about it!

How to order

Use one of the FREE POST order forms on page 105 (Pink Pages), quoting the relevant order code(s). Or just telephone us on 0456 748111 with your credit card details.

The fabulous ACE binder

Order code A10088



Don't just leave your copies lying around to collect the dust. Store them in this superb binder - glowing black with the logo stamped in gold on the front and spine. Comes complete with rings to hold 112 sheets securely. The cost! Just £4.50, post free. Order using the form on page 126/27.

GET MUGGED!

Encarnita Round, darling of a thousand MUGs, vanquisher of innumerable superheroes, and explorer of infinite game universes hangs up the phone, returns to reality, and tells all about the worlds of multi-user entertainment.

Writing: Once you've read this article, the single most common question you'll be asked is: "How do I join the adventure?" You have to be invited. But the challenge lies in getting into the game's world. Not every host will accept you, and you'll have to be ready. There is, however, an alternative: in games where there is never really one live, real-worldy host, you can join a game.

Multi-line adventures, which began at least seventy years ago (even 900 years), have long been known as MUD (Multi-User Dungeons and Dragons). This proved the way for a particular alternate universe — MUD, MUD2, and MUD3 are all able to connect to a few.

Most games run pretty much along the same lines, returning because they allow existing people and provide in-game items and actions. But MUD has recently branched to make sure that you always stay in your adventure. It's not just a matter of being able to make and maintain anything that matters. Other variations exist, such as MUD2 and MUD3, and an American version under the name of MUD3.

Just about every MUD has a "guild" or "party" made up of people who are interested in computer adventures who often happen to live close to a multi-line system. MUD games in MUD3 have a "guild" or "party" made up of people who are interested in computer adventures who often happen to live close to a multi-line system. MUD games in MUD3 have a "guild" or "party" made up of people who are interested in computer adventures who often happen to live close to a multi-line system. MUD games in MUD3 have a "guild" or "party" made up of people who are interested in computer adventures who often happen to live close to a multi-line system.

There has been, obviously, a great deal of activity in the last few years. MUD games in MUD3 have a "guild" or "party" made up of people who are interested in computer adventures who often happen to live close to a multi-line system. MUD games in MUD3 have a "guild" or "party" made up of people who are interested in computer adventures who often happen to live close to a multi-line system.

MUD (Multi-User Dungeons)

An adventure on a grid world. You can move by collecting treasure, and killing others through the levels. You move all the way up to the top level. You can also move all the way up to the top level. You can also move all the way up to the top level.

The game has been around for quite some time, growing larger and more complex. It is a game that is a mixture of many different things. It is a game that is a mixture of many different things. It is a game that is a mixture of many different things.

There are usually players around who are willing to help and give the newbies the best tips. But it will take a long time to get into the game and learn enough to get the most out of it. You may be interested enough to try yourself playing during one of these times when people aren't too busy or when you can get a lot of help.

When MUD3 comes to the world you have to explore. It is a game that is a mixture of many different things. It is a game that is a mixture of many different things. It is a game that is a mixture of many different things.

MUD3 has a "guild" or "party" made up of people who are interested in computer adventures who often happen to live close to a multi-line system. MUD3 has a "guild" or "party" made up of people who are interested in computer adventures who often happen to live close to a multi-line system.

MUD3 (Multi-User Dungeons)

Registration and further information from:
MUD3 Inc. 4100 University Ave., San Diego, CA 92121
Phone: 619-594-1111
Fax: 619-594-1111

DON'T FORGET!

CHECK OUT PAGE 100 FOR THE PILGRIM PRIZE QUESTIONNAIRE, AND HELP SHAPE THE FUTURE OF THE COUNTRY'S BEST EXCITING ADVENTURE SECTION.

PILGRIM



The Pilgrim, late of Poona, India, returns to air-conditioned Britain with all the latest from the world of interactive fiction, including a detailed look at multi-user on-line games, Time and Magic from Level 9/Mandarin, plus Pat's Patch, Player's Guide to The Pawn, and — of course — No Problem!

QUEST 1

Entered via the aforementioned text-based or a game (quest) sheet? This one cracked on an AppleLink IIx. In my opinion, experienced PC gamers should have no problems with the limited BASIC port, as the game was translated to an IBM PC, where it is running happily on the standard.

The game is also in its very early stages. I'd still prefer email, with only 200-300 words. Almost too open for trying to introduce more players into the game and save it some space with 100-200 words, although there aren't quite that many characters.

One word of warning though, if you use a browser that tells you you're in a text-based game, it will be better to use a browser that tells you you're in a text-based game. It will be better to use a browser that tells you you're in a text-based game. It will be better to use a browser that tells you you're in a text-based game.

There are some nice touches to the game though, like the ability to play on a text-based game, but the main thing is that you can play on a text-based game. It will be better to use a browser that tells you you're in a text-based game.

QUEST

Author: Tapani on MUDWorld alone
 Genre: Fantasy
 To get to Quest 1, type 'quest' in the 'MUDWORLD' prompt.
 Author: P4 (being added).
 Cost: Free

GOONS

The game is 100% in story, 100% in story, 100% in story. It is the best of its kind. It is the best of its kind. It is the best of its kind. It is the best of its kind.

It is a world based on a North African sea port. Miles of Labyrinthine, intricate, and complex, ancient ruins, including the Temple of the Gods, are scattered across the landscape. It is a world of mystery and wonder. It is a world of mystery and wonder. It is a world of mystery and wonder.

The main thing is that you can play on a text-based game. It will be better to use a browser that tells you you're in a text-based game. It will be better to use a browser that tells you you're in a text-based game.

The main thing is that you can play on a text-based game. It will be better to use a browser that tells you you're in a text-based game. It will be better to use a browser that tells you you're in a text-based game.

In a game world, complicated enough, you can always be your best of text-based game. It will be better to use a browser that tells you you're in a text-based game.

There is a lot to the game: it's large, running on a text-based game. It will be better to use a browser that tells you you're in a text-based game. It will be better to use a browser that tells you you're in a text-based game.

Author: Tiger Tiger

Cost: When registering, state which of the following is required:

Monthly (approximately) £1.00
 10 hour use £1.00
 Credit card now to arranged by credit card by calling the game's Author phone.

WARRIORS

WARRIORS is a combat role-playing game (MUD) on a MUD. The aim of the game is to collect 50,000 points by collecting various items and slaying a variety of monsters. The equipment of the MUD is very good.

Combat is quite easy to come by. At least, it has been on the occasion that I have played for some reason, the game will quite as easy as some of the other games available. There are plenty of items to equate to after all, 1000 items or so, which is a lot of things to do!

It's a pity that you need a few more games around although MUDs do tend to go through periods of popularity. Even so, perhaps I shall WARRIORS on the site or my third PC.

WARRIORS

Contact: 01 491 8888 (24 hour open 24 hours)
 Contact: 01 491 8888 (24 hour open 24 hours)
 Cost of equipment
 Author: Paul Gwynne (MUDs on the Net - MUDs)
 Cost: Free

HOW TO LOG ON...

First you need a computer plus modem and communications software. Any popular package will do - all MUDs use standard communication protocols. If you're not sure, contact, via e-mail, the most popular software packages are very simple to use and MUDs are straightforward to log onto - you won't find any obscure baud rates or have to deal with terms and conditions. You just set up your package and do the number.

The two following each have their own contact number for game registration, usually necessary before you can play. Obviously if playing changes are involved and the communications protocol for each MUD, note the any costs mentioned as MUDs include the telephone charges! Author details give a 3-character code number, so the number indicating your length followed by party ID, User, M-Name and any personal user communications documents that you get into difficulty.

**QUEST**

Registration details: Log of the Gods Limited, Barkley New Passage, London W4 4PF
 Tel: 01 298 4467
 Telex: 01 444 9786 (029879) 000 0000
 24 hours on-line

TIME AND MAGIK

LEVEL BY MANDARIN finally get it out...

THERE have already been two Level 9 compilations, released by Hasbro, offering updated and expanded versions of their earlier games. Now the popular Time and Magik history, featuring loads of time, fire, lightning, and the Price of Magik, has been given the same treatment—but exactly what sort of treatment it is, and does the compilation deserve your hard-earned cash?

First, you have to remember that Level 9 broke all the games, initially, for a computer-based market dominated by titles with 48K (or even less) usable memory. This put the concept in a bit of disrepute when it came to releasing compilations of earlier titles: the market had changed and now many users have come to disk and own computers with 128K memories or more.

What's more, with graphics in adventure games becoming increasingly sophisticated, the earlier text-only games produced by the Austin family were

beginning to look decidedly old-fashioned. Obvious solutions: reprogram the games, adding greater vocabularies, better parsing, and pictures.

However, Time and Magik falls into a slightly different category here. With the exception of Levels of Time, the games featured one later Level 9 production that featured graphics in the original version—and in the case of Price of Magik—improved parsing and vocabularies as well. The reason that if you already have copies of these games, it isn't going to be worth shelling out for the new compilation—although the graphics have been improved and the games polished up, they don't improve sufficiently on the originals to justify buying a second copy.

On the other hand, if you've only got one

RELEASE BOX

APPC	ETH00, CH000, OLT000
AMSTR	ETH00, CH000, OLT000
AMS	ETH00, CH000, OLT000
APPC BT	ETH000, OLT000
AMSA	ETH000, OLT000
IBM PC	ETH000, OLT000

LANDSCAPE 98 SYSTEM 88
CHALLENGE 98 ENCOUNTERS 88

ACE RATING 9/9

THE GAMES...

LEVELS OF TIME

For a long time, the Pilgrim's favorite Level 9 adventure. A simple scenario, in which you must collect nine artifacts to defeat the infamous Timevile, is expertly programmed into nine separate "mini-adventures," each representing a different time zone—ranging from the past to the distant future. The game was the first Level 9 program to be written by an outside author and the best is excellent, with excellent descriptions and some ingenious puzzles. If you get stuck at the beginning, or the narrative gets a glimpse of itself...

THE PRICE OF MAGIK

This marked Level 9's return to magical mystery following their debut through reference today in *Descent* and *Return to Eden*. For

many readers, including the Pilgrim, the return was a welcome one as you battle against the evil magicker Magpie to save an all-important crystal, source of magical power on the planet, from being put to dark and tedious uses. Spells galore and a wonderful atmosphere of dragons and distorted reality.

THE PIRATE'S BLOOD

Back to the Red Moon for the last in the series, in which you must use magic spells to defeat the evil Magpie. The title of the game refers to your progressive loss of sanity as you become involved in magical endeavor—and indeed some of the puzzles are rather tricky, though not (in my mind) as satisfying as those in the earlier games, particularly the excellent *Levels of Time*.

of the games—and particularly if that one is *Levels of Time*—then the selection obviously represents excellent value for money. Apart from the new digitized graphics the best thing about the updated versions is the *Magik* and *Magik* features, features which the Pilgrim now reasons to be indispensable. Now all we need is a compilation of *The Price of Magik*, *Levels of Time*, and *Descent* to 512K and we'll all be laughing...

THE PILGRIM'S PLAYERS' GUIDE TO THE PAWN - PART 2

Problems with the Adventure? You'll recall that Old Krome asked you to knock him off—but just give him a present and that will do nicely.

You can't carry the Adventure, so get someone else to do it for you. They can carry you as well, and will also provide light in dark places. You can go down whenever you want—in fact, you'll have to sometimes to perform certain actions.

If you have trouble with broken objects, PUT ALL ON THE HORSE. If later you experience a loading sensation after BRUISING THE WALL, simply make your way EAST back to the Lava Pits, where you will find Captain walking patiently for you.

No, you shouldn't have entered the BONES, should you? Simply EXIT BONES and all will be well. Make sure you retrieve the BLUE KEY from under the pedestal. And before you return to the Gory (who's expecting something from you—huh—huh?) make sure you GET THE BONE, and PUT BONES IN THE BOWL. Isn't he ever so grateful...

After satisfying the Gory, pop off to the forest clearing and examine the STUMP! Red, green, and blue are together to make...yes, it's your new source of light! PLED will also seriously affect the SPIDER MAN, allowing you to GET THE PLEDGE—though what good it will do you can't plausibly discuss.

Make sure you're wearing the SPICY BOOTS and pop up the slope. And before we leave you this month, just make a note of this—you CAN open the locked door with the (dot-key), but if you do, you'll end up 40 points poorer. (Just thing to do is SAVE your game, then unlock the door and satisfy your curiosity. Later you can reload and carry on with key and 40 points to unlock elsewhere.)

Watch out for Part 3, in which you deal with the Alchemist and Amy Lee Lewis. This guide is brought to you thanks to the Pawn, Magritte Smith, the Pilgrim, and Honorary Pilgrim Mark Hodman. Let's have some more solutions, everyone...

CONTACTING THE PILGRIM

Although the Pilg quest promises to take seriously all correspondents, he does not much appreciate a letter or two on any aspect of adventuring or related subjects. We don't just intend every month, but we are usually prepared to make space for some one thing (or two) each issue's mail.

You can write to The Pilgrim at ACE 4 Queen Street, BATH, BA1 1EU. Don't forget the ACE 4 addresser you might find our letter making up in Annual Advent if you're already familiar and have a modern, you can contact the Queen's Gate via "Telecom Code: MEX 00,AL20. Look forward to hearing from you.

NEXT MONTH...

Summer is loomin' in, Pilg, and you'll find it celebrated on these pages by a close look at the Ultima series - promised before but postponed so we could give you more space for other goodies. It'll be searching the pages of the next issue - promised! And of course there'll be the usual reviews, news, and tidbits from the world of fantasy and adventuring - so don't miss it!

The Pilgrim regale selection of news and tips for harassed adventurers. Don't forget that YOU can achieve everlasting fame by sending in tips for your fellow adventurers to the Pilgrim at The Pilgrim, 4 Queen Street, BATH, BA1 1EU.

This month's tips are supplied by Jason Ford, Leslie (T), John Valencia, Barry Charities, and P. Byler.

ELDER QUEST II

Open wardrobe in wizard's bedroom door look above wardrobe for key to open wizard's safe. Leave wardrobe open in wizard's bedroom then look behind it and you will find the magic map. Leave door in safe as the wizard can't see it. To escape wizard on the grassy ship stay on the water.

To defeat the dragon use the storm spell.

Eight Ore

To enter castle, throw something at the drawbridge.

The rope is comprised of the fabric, the

PAT'S PATCH

Isn't it amazing how often adventurers who are perched in trees can drop objects and pick them up again without climbing down to the bottom first? It wouldn't happen in the real world so why allow different physical rules to apply in an adventure simply through lack of attention to detail? Here are routines to inject a little realism into your FWW or GAC games, both of which take little memory and are simple to use...

Both routines drop the relevant object before moving it so that the ball is never checked is invoked. Thus the conditions won't work unless the object in question is being carried. Also with GAC in particular, only the GET and DROP actions adjust the amount deemed to be carried so DROP must be used to ensure this is done. If the object were to be shifted directly from carried to the foot of the tree its weight would not be increased from the player's inventory so making a nonsense of any strength limit which may have been set.

In each case the routine MUST be inserted before the normal drop conditions otherwise it will not be read at all. GAC users can ensure this by putting the routine in the local conditions for the room which is 'up the tree'.

For users of the room which is 'up the tree', FWW users should think about setting up a similar routine for 'drop off' too, again to be placed before the normal 'drop off' condition.

There are plenty of other situations which would benefit from this approach. How about dropping objects in a heap, or while lying? Some objects could smash when dropped, or bounce away out of sight. Other characters could steal things as they are dropped if they happen to be there at the time, or could be attracted by some treasure lying around. The possibilities are endless with a little imagination, and they all add something to a game making the player feel that the adventure world really does behave as it should.

FWW ROUTINE - (in response before normal DROP - entry)

```

DROP      AT      (up the tree)
           AUTOD
           PUTO      (foot of tree)
           MES      'You watch as ... tumbles to the ground'
           DONE
  
```

GAC ROUTINE - (in Local/Conditions for room 'up the tree')

```

IF I M01 = (55 AND V030) (drop) AND AT (up the tree) (DROP M01
M01 TO (foot of tree) M030 'You watch as OUL M01 16320 tumbles to the ground' M01 END
  
```

NO PROBLEM!

wasting time, the noise, the other, Pajawalk's hair, the sand, the ball, the leaves and for the last piece investigate the well.

When in Paradise, take off your shoes, open the door, go inside, examine everything, and then take the Marbles and use it to scout the maze and the dragon.

ROBBER REVENGE

Troubled by a worn? Follow tracks. To get uniform, throw rubble at light. To get past the guards, find sword from wizard's.

To enter tent, use boots. The patch and slugs are real feelings (see note

them and note the sword). To find pass, swim east in track. To get past check point, wear uniform, feed rats, and follow bridge. Trouble with animals, look under bench.

PRICE OF MAGIC

A few of the spells and their uses:
 Spell Focus Effect
 SCW Transport things things to the
 DLT Offer cross Mailed things feel secure
 CCW Production Tests if an object is dangerous
 SSP Crystal Ball Tests into things
 PIR Charm spell Turns things into fish
 FOX Selenite plant Restores stamina
 PLY Brown Slaves things fly in the air
 WBL Blue Box Puts her into things
 RL See Makes things fall more effectively
 MAD Obsolete Makes things, means
 SAK Clear Makes things safe
 KAM Prism Tests for magic
 ZAP Ash Costs a lot of lighting
 ZDR Small mirror Transports you to Maze of Time

Your name: _____

Your address: _____

Your age: Under 12 13-16 17-20 21-25
26-30 Over 30 Are you: At school At college/university Neither

Which computer(s) do you own? _____

Do you have: A disk drive? A modem?

The following sections appear regularly in the *Pages* pages of ACE. Rate your interest in them out of 10 (10 = most interested; 0 = not at all interested):

Reviews	==	Players' Guides	==
Play Paths	==	Travelers' Times	==
Shades (Clay)	==	Readers' letters	==
No Problem	==		

If you have any comments on the above sections, or would like to suggest new ones, then please feel free to do so on a separate sheet of paper - we welcome your suggestions!

Rate your interest in the following general topics out of 10:

Non-computer role-playing games	==	Adventure generators	==
(e.g. Dungeons and Dragons)	==	(e.g. Galt, SAC)	==
Computerised role-playing games	==	On-line games	==
(e.g. Bard's Tale, Ultima series)	==	e.g. MUD, Shadow	==
Science fiction books	==	Text-only adventures	==
Fantasy books	==	Play-by-mail	==
Cinema	==	Top-down adventures	==
Topographic adventures	==		

List your three favourite adventures: _____

List up to five adventures which you do NOT own but would like to play: _____

Name up to five software houses who produce adventure games: _____

How do you buy your adventure games:

From a specialist computer shop By mail-order
From a High-Street store (e.g. Boots)

List up to three adventures that you have found particularly difficult to solve: _____

As a rule, do you find the adventures you play:

Very easy Easy Challenging Very challenging Too difficult

How much playing time do you normally get out of an adventure game? _____

Do you ever contact other adventurers via magazine helpline columns for assistance? By post By phone If so, do you find them helpful? Yes

THIS IS YOUR CHANCE...

...to shape the future of ACE's adventure and fantasy section - and win yourself some free software into the bargain.

WHAT YOU DO...

Fill in this form and post it to *Pages* Questionnaire, ACE, 4 Queen Street, SMITH BAR 15U to arrive not later than the closing date of July 30th 1988. Make sure you include your name and address in case you're one of the lucky prizewinners.

WHAT WE DO...

Listen to what you have to say and act on it. The *Pages* is committed to giving you the best possible column every month - to do that, he needs to know exactly what you want. Tell him!

THE PRIZES

Every form received before the closing date will be entered into a free draw and five lucky *Pages* will receive a top-quality software package for their machines chosen from the ACE special offer pages on pages 54/55 of this issue.

Do you ever contact software companies for help in solving one of their games? By post By phone If so, do you find them helpful? Yes

How much money do you spend each year on adventure/fantasy software?

Under £25 £26-50 £50-40 £40-60 Over £60

How many adventure/fantasy games do you think you have played?

1-10 11-20 21-30 31-50 Over 50

Of those you have played, how many do you think you have played in the last 12 months?

1-10 11-20 21-30 31-50 Over 50

How many adventures do you expect to play in the next 12 months:

Same as last year Less than last year More than last year

You needn't fear our little form - a photocopy is quite acceptable. If you need more space to answer any of the questions, don't hesitate to grab another sheet of paper and go into more detail.

Last month we promised an end to the Great Piracy Debate. Well, we lied. You've still got things to say, and who are we to deprive the people of a voice?

Other hot topics include the old 'my machine is better than yours' stuff; a prize goes to one of the few sane voices we've heard on this subject. Are micro owners the most snobbish people in the country?

If you want to get one up on your neighbour by getting your name in print (and possibly winning a prize into the bargain) write to ACE letters, 4 Queen Street, Bath BA1 1EJ.

POWER PROBLEMS

I am thinking of selling my Commodore 64 and saving to buy an Atari ST. However, my family and I may soon be moving to Canada. Straight down to the point — is it possible to buy an ST in England and still play it in Canada? If so, could you please tell me any alterations I would have to make.

Ian Butler
Bassonfield

Canada uses a different voltage in its electricity system. If you buy an ST with monitor you will need to use a 'step-up transformer' to convert the voltage (should cost around £20-30). But wouldn't it be more sensible to sell your 64 here, then buy the ST when you get to Canada? You won't have the trou-

ble of transporting it, and it will probably be cheaper.

MOGAMER

I wish to complain that you said that there were no graphics programs for the Sega. Well you're wrong! There is. Actually it's a graphics tablet, although a UK release date has not been set. Also you can get a keyboard for it. The Atari Buster game was given a bad review. It's one of my favourite games and CASIO gave a bad review. And I bought it and I love it! Lastly, I think your review mark is a good idea.

J. Thornley
Hesperden

OK so there is a graphics tablet for the Sega — but it's not a lot of use

if you can't buy it here, is it? After Buster looked very pretty, but these really weren't much of a game there. The fact that CASIO gave it a good review doesn't carry a lot of weight around here.

YET MORE ON PIRACY

On the subject of software piracy, it is very easy to say that it is immoral, but one can also say that of the games manufacturers who charge very high prices for sometimes mediocre or rubbish games. Take for example *Kaesmode* for the Amiga; this game is a joke and yet costs the £249 had better games.

In the days when I owned a Spectrum it was good value for money to buy the better games around. The argument was that you would be able to play 100

A SANE LETTER

Way back in the beginning I had a bit 'rubber treatment' (Steve) and, to tell you the truth, I loved it. From the striking colour shift to the resplendent beeps, it satisfied my needs perfectly. Games were cheap, and apart from a few more wire add-ons and high players, but, so so frequently happens in life, the combination was ruined by you, you games! Those irritating hypertexts, those meta-words — that bit in itself, ready to pounce on an innocent non-seeing victim, telling them that their computer is the doom of the Earth and that there are countless machines better (in other words, the majority of people that write in to ACE).

So, after four years, feeling disappointed with all these irritating comments, I upgraded to an Atari 5050Z.

I couldn't believe it, the power in my fingertips. I also now keyboard with built-in disk drive

PRIZE
LETTER

complete with 'sappy' trailing noises — a mouse and mouse mat, not to mention the graphics and the quality of the games. AND I'M MY DAPE TO GET SO, IMPRESSIVE SOUND. I felt excited, yep, feeling so bubble-boddy (but not for long) because, to my sheer amazement, there were gifts, good for nothing hypertexted more popping in my head again. I had just spent three hundred quid on a brand new computer, not to mention software which

cost a bomb and these 'things' were showing it to me.

I can't win. Even if I bought an Amiga that would almost be the decision of the Amiga. I am not saying it's not good to have competition in computers. What I think should be made clear, though, is that people have limitations on what computer to buy according to how wealthy they are. This should be made more apparent to those contemplating bids but then that have nothing better to do than pour scorn upon those that do not have the necessary 'wealth' to buy the better computer. After all, any computer is better than none!

Raymond Lightman
Luton

Give that man a prize! It's refreshing to hear a sane and humane view of computer shopping.

A
C
E
L
E
T
T
E
R
S

PBM STRATEGY

I have just read issue 4, and I have to say that I am most impressed. I particularly enjoyed Simon Beasley's article on Life and its derivatives. I had already read William Poundstone's excellent book, but I had little knowledge of Life's many succeeding generations. Many thanks for a fascinating read.

My principal interest is in Play-by-Mail (being an Agilut warden, what else can I do?), and it was because of this that I purchased ACE. But then I became absorbed by the preceding review of Strategy Games. As this is a major area of development in the PBM world also, it occurs to me that there may be much that each can borrow from the other.

For example, I have designed a global war strategy game, called Megamania, that has been well received by PBM-gamers. A smaller version for 2 players could be a very challenging game for a computer format "challenging" because several dozen decisions have to be choreographed into a plan that is then executed simultaneously with that of the enemy. This involves a high level of strategy, especially if the opposition is programmed for various levels of difficulty.

Similarly, many other PBM strategy games would be excellent subjects for computer games, and the benefits would work both ways: computer

PRIZE LETTER

games built could enjoy well-merited prizes whose emphasis is on gaming-related, and PBM-gamers would welcome the opportunity to practise new ideas and tactics.

Any comments you might have as to the merits or otherwise of this idea would be much appreciated. A few suggestions as to how to go about it would also be welcome.

Finally, my congratulations for the inspiration of the brain-teaser on pages 4-5. It gave extra depth to an ACE magazine!

Andrew Dodd
London

The best thing we can suggest is that you get in touch with a company that produces strategy software - your ideas are certainly interesting and you should get a good hearing. A few websites you might try are: PSC (0203 867346), CCI (01-858 2763) and Target Games (0279 8179).

games on a games machine (if you get), whereas you would play many more times on the computer version for the same price - good value for money. However with the arrival of the ST and Amiga with games costing £20 to £25, it may be more economic to play the computer as you may not spend as much as £20 on it before you become bored with it.

This brings me to the topic of piracy. I don't condemn the copying of games between friends, but copying on a large scale is a different matter. Copying between friends on the Amiga is an unlikely thing as you either have to buy expensive software to break into a program or be an expert hacker, plus the fact that you have to know another Amiga owner.

The professional pirate who makes a living is a lucrative sideline on setting pirated games in the

one who is doing the most damage to the software industry. The person who runs the type of business is stopping games using these handy backup programs. What is the purpose of a backup program? I have had hundreds of games and never once has an original copy not worked. Even if there had been a fault I am sure the tape would be replaced. In other words the professional backup program is sold for the purpose of copying software.

Software prices are therefore pushed up due to loss of revenues and the vicious circle continues. The only way to break this vicious circle is to buy originals. If you look at the various advertisements in magazines many top quality games can be bought for under 10 pounds. For example Barbarian (Palace) £10.00 or Defender (Excellent Games) £6.95.

I recently read that some Amiga games are selling their counterpart ST games. This must mean more software development for the Amiga, or less buying originals all you Amiga owners out there.

Finally I think ACE is a very professionally written magazine and I especially enjoy the specials. What about more Amiga reviews?

Mark Campbell
Cardross

Point taken about quality and price, there are some very expensive and very soft games about. But nobody bothers to price these - it's the great games that get copied. We review all the Amiga stuff we can lay our hands on.

WELL MAN

First of all a couple of ideas you could try about:

1. How about reviewing some video releases?
2. How about a high score chart?
3. How about a chart for games?
4. How about making the content a bit more interesting to look at?
5. How about me shuffling up about this and how about that? Maybe there's a couple of ideas here.

I think your compositions are great and the way you go about writing them is brilliant. Your reviewing method is top of the range stuff - 10 out of 10 for that. Is there such a thing to make you able to play Commodore 64 games on a Plus 4? I've always wanted to know that. Oh yes, while rummaging through all the mail a couple of weeks ago I found a really addressed envelope with my name on it. I quickly opened it open and saw a flash of the name ACE on it. I thought "Huh, I've won a competition". With my heart beating 600 a minute I quickly read it to find it was a subscription offer. My heart sank, but then I thought this magazine is obviously not just thinking of money sending a letter to me with my name on it. By the way, where did you get my name from? I think you will be a very successful magazine but I just hope the success won't go to your head like it has with certain other magazines. Well my dad has just come round the corner from his dinner hour so I will finish here.

Sherrin Smyth
Telford

I liked number 3 best, but I'll answer your other points as well. ACE is a magazine about computer entertainment, so we don't really think video or cinema releases

are appropriate - except where they deal with computer matters or use computer technology. We may do something about high scores. The reviewers are already interested to look at. Finally, ACE games will not run on the Plus 4. However, C64 games will.

THE LAST STAMP

You are my last hope (having the best for last). I have written to many magazines and have received no reply at all. This is my last stamp.

I own a S2027FM with both memory and drive upgraded to 1 meg and am going to set up a Bulletin Board but I can't find a program that will allow me to do it.

I used to own a Bulletin Board Construction Set for my 600K, and was wondering if there is something like this available for the ST? Also I was going to buy the Super Modem 3400 from Frontier Software - do you think this will be OK for a BBT?

Mark Orms
Leigh

Unfortunately there's no BBT construction kit for the ST. But you can use a Super Modem to run a BBT.

OBLITERATED

Greetings to all fellow ACE users. I feel it is my duty to warn you about the latest game from Progress, Obliterated. Last week I was in my local computer dealer's shop when to my amazement I spotted Obliterated on the "latest releases" shelf. I immediately dove into my heavy pocket, full of both City money, and bought the game. On the way home I admired the graphics and read through the short story. As soon as I arrived home I immediately A into the disk drive and turned on the computer. It started to load. The first thing that appeared on the screen was the usual Progress title but the title text was music, anyway, the really turned me on and I started to believe that this game was incredible. It seemed to take years to load but once it had I began to play.

My first impression was "Oh no not here at the bottom of the screen again", but even so the game had excellent graphics. I began to play for about five minutes. I found it pointless playing as I didn't really know where I was going, so I got out my pencil and my mapping book and began to map. Three hours of mapping passed which was not at all entertaining, especially when you had the map to go one way but the game

other. In fact, the only interesting part was the section of screens where you fly through space with the jetpack. After four hours of mapping I picked up my last item and I was prompted to leave the ship. This last proved a slight controversy that I had a map. Two minutes and I was at the shuttle station. I had made it only to have the disappointment of witnessing a pathetic explosion from my cockpit.

I therefore phoned up Progress but all they could manage to say was "Well, thanks for your comments. Goodbye." I was by now furious and so I decided to chase the map out really and send it off to ACE hoping that it might be of any merit and also write this letter to ACE warning anyone who intends to buy this game as you will find it obnoxious, frustrating, boring and a waste of money. In my view it is just another Caribbean with a gun in the man's hand.

Greg Bowen
Carmarthy

Well, it's the kind of sad experience that happens to all of us sooner or later — you look forward to a game and then find yourself bitterly disappointed. The moral is — read the review in ACE before purchase.

GRUBBLES AND GRUBS

I would like to have a little grumble about those people who say the Atari 800 DDM 84 is slow!

The Commodore is not slow, due to the fact that using copies of WPC (INTERLUPT REQUEST) makes control very fast (some games I've got are fast fast).

The Amstrad games are much slower than the Commodore's and I think the Spectrum is too, due to the fact that:

- They haven't got sprites, just GDDs.
- They are not as optimised as the Commodore.
- The Commodore has more memory for games, thus making them faster than the Amstrad and Spectrum computer versions of the game.

Next — which is the best, who writes the replies? How do software programs make the computer flash the screen and beep? Finally, where can you get an Amstrad/Commodore?

Michael Kingsley
Othello

I am the 'best' who writes the replies, and I have taken full note of your name and address. So wait a 'You should be able to

buy an assembler or disassembler from any well stocked software shop.

PREDICATE CALICULATTTT

Just done by the entire ACE team for such a superb, high quality, full subject, informative magazine which is second to none. My reviewing system is not only unique, it is also brilliant. Keep up the good work and long may ACE continue to prosper.

In the eight issues of ACE I have to be purchased quite a few controversial topics have been debated, but none more so than piracy. All I want to say on the subject is that it is having a detrimental effect on the software industry, but what can we do about it? No sooner do software companies come up with new protection systems than somebody comes along and cracks them.

I would also like to say that Paul Wilson is a right gem. Where does he think British Research would be now if Amstrad Consumer Electronics Ltd hadn't failed?

out Sir Clive? Probably bankrupt, that's where. He slogging off Alan Sugar is also unjust. Sir Sugar and Amstrad have been manufacturing goods since 1955 and he hasn't got to where he is today without good after-sales service. Where and people like him should think carefully before letting up and even then they should ensure they get their facts right.

I would like to know if you recommend a text on predicate calculus. I am also looking for a copy of PROLOG for the Amstrad CPC800 which will run without CP/M present.

Finally my dad has just acquired an Oric Atmos and he was wondering if there was anything in Britain where he could obtain software for it.

Stuart Bowers
Oxford Moor

A text on predicate calculus? That's one of the weirdest requests we've ever had. Our reader mathematicians and philoso-

phers couldn't come up with any specific titles, but suggested that you browse the shelves in a good bookstore — probably one near a university. As for Prolog, we can't come up with a version that runs without CP/M.

The Oric, incidently, you can get software for. The old Atari 800 software in Matrix (09443-00000) have a stock of around 40 titles — both games and utilities — and can also carry out most Oric repairs.

BUYING THE SPECTRUM

As I was flicking through the Letters pages in issue 8 I stumbled across your Plus Letter written by J. Williams. It started promisingly enough until I reached Feb. 6th. My pen dropped and eyes widened as I got near to the bottom of the second column. "What was that?" I asked myself. This person had put a Commodore 64 into the class of a ZX81! I pinched myself and reread the sentence. I wasn't seeing things for it was there in black and grey. My amusement had

VIRUS

LETTER OF THE MONTH

I am writing to you in order to clarify a major problem on the Amiga computer, namely "The Virus". In my opinion the virus does more damage through people's ignorance of it than it actually does to data. It is not however a good idea to have it on any of your disks, as it does on occasion corrupt them.

The first point to clarify is that the virus cannot ruin your computer. Once the computer is turned on and off the virus is gone. It is impossible to destroy most computers with software. When the files of 512 said that hundreds of Amigas were being returned due to corruption due to the virus, they were wrong (think what that must have done to Commodore's UK sales figures).

There are now many different viruses around for the Amiga, the most well-known is the original SC4 virus, which is easily disposed of and not really a problem. When the SC4 virus is loaded into the computer from an infected disk it immediately goes to a place in memory where it is not affected by a keyboard reset. It then waits until 16 disks have been put in the disk drive, copying itself to any un-write-protected ones, and then prints up the infamous message "something won-

ney however, is to use a monitor and 'surgically' remove the virus. Some knowledge of machine code is needed to do this, and it is not a good idea for the amateur to play around, as you could do a lot more damage than any virus. The best way therefore is to use a virus killer, but because no one virus killer kills all viruses, if you are infected by an SC4 virus killer that there is no virus present, this may not be best.

I have compiled a disk that contains 6 different virus killers to kill all viruses. For a small charge of £2.50 I can provide you with a disk with these files. I am making no profit out of this because by the time I have bought a disk, gift bag and stamps I hit most the £2.50. Write to the address above in an envelope marked "virus killer" in ink and ask for Clive.

Clive Henderson, 14 Park Gate, Kearsley, Gt. Northampton MK2 6DP

Your kind explanation of the various viruses and your offer of a cure at reasonable price wins you all a letter of the month five stars.

turned to anger as I read on.

As you have probably realized by now I'm a C&A owner. I am totally disgusted at the beloved computer of mine being called, I quote, "...and out of date." I can well understand him having his heart set on an Atari ST because I know it's a brilliant computer too as I have friends with Ataris. The C&A is nowhere near the class of the ST, I know, but degrading it in such a manner is totally... I'm lost for words. I'm sure many C&A owners must feel the same way. I mean, a 288!!! Isn't that pushing it a little?! For always hated Spectrums and always will mainly because of the atrocious graphics it shows display. I must admit the C&A had its little go at the 740k more-or-less open a time but is clearly being pushed back by the likes of the Atari ST, Commodore Amiga, and maybe even the Amstrad, but hasn't taken you, J. Williams, if I'm HAF FROM GOING OUT AND THERE IS ABSOLUTELY NO COMPETITION BETWEEN THE COMMODORE AND SPECTRUM.

I wouldn't like to touch on a last note as I will just end by saying that I think that it deserved to be a prize letter due to your performance (with exception of what I

have just touched upon) and as for you Spectre owners... I have nothing against you personally but... There may or will your computers and buy something suitable because in my opinion Spectrums are well and truly DEAD!

G. Abbot
London

We await with interest the replies of those dead Spectre owners...

3D PLUS

I have a Commodore 64 with a 1041 disk drive. I am very interested in 3D graphics, particularly 3D-C.A.D. of objects and their animation.

I understand that these techniques require a large amount of computing power and that the Amiga is the ideal machine.

However, recently I have been tremendously impressed with such games as Arctic Fox, Chuck Yeager's APT, Digger, Elite, Starfighter - all of which utilize these techniques very impressively within the limited memory capacity of the Commodore 64.

Interestingly, Electronic Arts date on the cover of their Arctic Fox that they used a proprietary

graphics package called J-Space to create the 3D world of Arctic Fox. Is this software available in the UK? If so, where and how much?

Are there any other graphics packages that deal with these techniques so I can design and animate my own computer-generated objects?

Also, I think the subject of these techniques would make an excellent feature in a future issue of your magazine, so I am sure many fellow readers are greatly interested in 3D-C.A.D. and animation.

Peter J. Atterton
Newcastle-upon-Tyne

You really have got to start thinking in terms of workstation machines if you want to do serious 3D work, the C&A is really too slow, and the kinds of development system you mention (and other systems, such as Microsoft's Protopipe) are not available commercially if you want to do-it-yourself, and you have some maths and machine code, then you should get hold of Fundamentals of Computer Graphics, by Foley Van Dam; this is reputed to be the bible of 3D graphics programming.

LETTER FROM G2

I was eagerly over a month for your issue even though it is 2 months behind. I would like to congratulate you on a brilliant magazine. The pages are full of wonderful information. For the price at £5.99 Australian it is cheap compared to other magazine fees.

I am a subscriber to the Atari ST and would be interested to hear from other users wishing to be part of it.

W Van Leeuwen,
4 Bolton St, Marsing 4211,
Australia

Out of the service, Man, I'm sure you'll be getting letters any day now.

LOOKS LIKE MONEY

Is there still need to wait on my good subscription? Looks like money! Good! I've got loads of ST versions... well, we got 2! The old 700 (which is three years old) and the new 700 v1.06. I don't make too yet though.

W. G. Ahmed? Made a few... Super! I can't get back money!

A.O.E. (Adult Orientated Computing)? Great. Game as A.O.R. - loadatum-dum for load-summer, as big a threat as pri-

ty... loadsummer!

Home computing? Loadatum enhanced by a few more! Even less if you add ACE (assuming it doesn't substitute itself by to many A.O.E. Operated Views).

H.A.P. Jussuppin
Ipswich

Many Elneth's got a lot to answer for...

GAME DESIGN

I am the very proud owner of an ST. When purchasing the computer, I was hoping to be able to program it fairly easily. When I first opened the little brown box which my accessories were packaged in I found the language disk. Gladly I load it up, attempt to do a spot of useful programming, I was to be disappointed when I started because it was just rubbish. My old MSX Spectre could do more than this. Anyway, the reason I am writing this letter is because I would like to get hold of a 3D-C.A.D. games programming program for the STTM, e.g. 3Doom-em-up, Construction Kit, 3D Game Weaver, Graphic Adventure-Creator etc etc. Please, please could you advise me as to where I can obtain a suitable program?

A. White
Epsom

None of the programs you mention is available yet on the ST. However, there's a four-odd games designer for the ST on its way from Microsoft Software in the next couple of months. Move fast as it becomes available.

OVERSEAS SUBSCRIPTION

Please could you tell me if it is possible to subscribe to your magazine from over here and what it would cost. Otherwise I will be forced to buy the magazine year here at a much higher price, of course. Furthermore, I would be grateful if you would send me an ACE card. I herewith state that I have not got one.

Suzanne Babu,
Melbourne

Yes, you certainly can subscribe. Send your details and £27.95 either as a cheque in sterling or International Money Order made out to Future Publishing in Cambridge-Porter, The Gals Barn, Somerton, Somerset TA11 3PP, England.

CAVEAT VENDOR

Just today (20th April) I received a phone call from a person 'wanting' to buy my computer which was advertised in issue 5.

Well, this person asked me what games I had for the computer, but in the excitement I forgot, and could only answer with GAC.

Now I realize I might have been asking too much for the set-up, and for this reason the guy who phoned me thought he might play the funny guy by putting a wig on it.

When I answered with "GAC he said "Er... off" I sat there, dumbfounded. My hopes were really raised, and then the 'person' goes and tells me to do something right on impossible that it was disappointment at its peak, so I went upstairs for a game of Pictionary to cool down and forget.

The phone rang again about five minutes later. "Oh, not again" I thought. I walked downstairs, less excited this time, and was prepared to tell him where to get off this time.

It turned out to be a per-

PRIZE
LETTER

one buyer this time. He had an almost apologetic sort of voice, but he really wanted to buy the machine, even if it was by foul and wronging else. I was glad to know there was some thrifty people out there.

Jonathan Hoffman
Epsom/Essex

Well, it's not sure what I would say if I don't know what GAC is or on the phone. But it sounds like the Pink Pages did the trick in the end. And in making up for the unpleasant phone call, we're awarding you software as a Prize Letter winner.

ACE PINK PAGES

Want to know the best games to run on your micro? Thinking of upgrading to a bigger machine? Look no further - all the information you need is in the ACE Pink Pages. You'll also find our regular Reader to Reader section, plus this month's brain-teasers in the Random Access pages.

ACE RECOMMENDED SOFTWARE

ARCADE ADVENTURES

These games usually give the player a joystick controlled character with which to explore the huge game area.

AIRBALL

Monitor ■ Am 17 £12.95/16.

Well-timed three-dimensional arcade adventures that seem something of the ultimate style but in years ahead in terms of graphic detail and presentation. As in the arcade in question, most require numbers and some lot of various obstacles - all spelling instant death. An outstanding selection of a popular genre.

DUNGEON MASTER

Monitor ■ Am 17 £12.95/16.

A fascinating arcade adventure with role-playing game that gives you four characters to guide through a series of dungeons in a quest to find the Wizard.

Superb graphics help to create an enthralling game that will keep you playing for a long time to come.

EAGLE'S NEST

Monitor ■ Am 17 £12.95/16 ■ Am 17 £12.95/16.

This is one of the better 'bearded' games, especially on the 16-bit machines. The intense flavour of the arcade adventure adds atmosphere and if you like the particular style of game, you won't be disappointed with Eagle's Nest.

HEAD OVER HEELS

Monitor ■ Spectrum 17 ■ Am 17 £12.95/16 ■ £13.95/16 ■ Am 17 £12.95/16 ■ £14.95/16 ■ £15.95/16 ■ £16.95/16.

3D-exploration reaches its peak with the huge monitor masterpiece. You play two characters - Head and Heels - as you search for the crown that will free the galaxy. The puzzles can get very difficult indeed, and you'll often have to quit Head and Heels up to use their different capabilities. The game's 3D actions are witty, drawn, and the animation is excellent throughout. A real winner.

other end. You can't kill yourself, so the only solution is to change the two halves. But how? Lots of action, plenty of thought and great graphics make of this winner.

MAGIC KNIGHT TRILOGY

Monitor ■ 4 Right price ■ Spectrum 17 ■ Am 17 ■ Am 17 £12.95/16 ■ £13.95/16 ■ £14.95/16 ■ £15.95/16 ■ £16.95/16 ■ £17.95/16 ■ £18.95/16 ■ £19.95/16 ■ £20.95/16 ■ £21.95/16 ■ £22.95/16 ■ £23.95/16 ■ £24.95/16 ■ £25.95/16 ■ £26.95/16 ■ £27.95/16 ■ £28.95/16 ■ £29.95/16 ■ £30.95/16 ■ £31.95/16 ■ £32.95/16 ■ £33.95/16 ■ £34.95/16 ■ £35.95/16 ■ £36.95/16 ■ £37.95/16 ■ £38.95/16 ■ £39.95/16 ■ £40.95/16 ■ £41.95/16 ■ £42.95/16 ■ £43.95/16 ■ £44.95/16 ■ £45.95/16 ■ £46.95/16 ■ £47.95/16 ■ £48.95/16 ■ £49.95/16 ■ £50.95/16 ■ £51.95/16 ■ £52.95/16 ■ £53.95/16 ■ £54.95/16 ■ £55.95/16 ■ £56.95/16 ■ £57.95/16 ■ £58.95/16 ■ £59.95/16 ■ £60.95/16 ■ £61.95/16 ■ £62.95/16 ■ £63.95/16 ■ £64.95/16 ■ £65.95/16 ■ £66.95/16 ■ £67.95/16 ■ £68.95/16 ■ £69.95/16 ■ £70.95/16 ■ £71.95/16 ■ £72.95/16 ■ £73.95/16 ■ £74.95/16 ■ £75.95/16 ■ £76.95/16 ■ £77.95/16 ■ £78.95/16 ■ £79.95/16 ■ £80.95/16 ■ £81.95/16 ■ £82.95/16 ■ £83.95/16 ■ £84.95/16 ■ £85.95/16 ■ £86.95/16 ■ £87.95/16 ■ £88.95/16 ■ £89.95/16 ■ £90.95/16 ■ £91.95/16 ■ £92.95/16 ■ £93.95/16 ■ £94.95/16 ■ £95.95/16 ■ £96.95/16 ■ £97.95/16 ■ £98.95/16 ■ £99.95/16 ■ £100.95/16.

This trilogy is a series of three-dimensional arcade adventures which, as well as all the expected running and jumping, have a complex system of interaction between characters. In Spellbound you must rescue Daniel the Wizard from the fearsome Count of Mar; in Knight Time you have to find a way back in time after being catapulted into the 19th century, while in Spellbringer the final part, we find that the magic knight has been split in two, one part good, the



STRATEGY GAMES

The games for megalomaniacs. The games listed in this section will really test your mettle on the battlefield.

BALANCE OF POWER



BALANCE OF POWER

Microgame/Strategy ■ Amiga 128/1600
 ■ Amiga 25/28/386 ■ IBM PC/386/486
 ■ DOS 3.11/3.86

Definitive strategy game for 16-biters. The player takes the role of one of the superpowers, while allowing the computer to control the other. Then it's a race of trying to run through and obliterate people on a global scale. This can be achieved in a number of ways, including supplying arms or financial aid to radical factions in the hope of toppling a government which is not receptive to the great American or Russian dream (depending on which side you're playing). Its complex, involving and its difficult to play in two words.

systems. Shooting stuff that goes on might into the desolate world of global war.

CARRIER COMMAND

Strategy ■ Amiga 25/28/386 ■ Amiga 128/1600
 ■ Amiga 25/28/386 ■ IBM PC/386/486
 ■ Spectrum 2/4/16bit/2/8/16bit

A magnificent strategy game (paired with some great arcade action) is the incarnation of the superb carrier game. It's your job to stop the invasion of an island outposts by the huge aircraft carrier Omega. One of the 60 graphics are interweaved with great gameplay to make an enthralling and entertaining game.

DIPLOMACY

Classic Strategy ■ Commodore 64
 1/4/16bit ■ PC/386/486

The grand old man of early megacorporate computer games finds a little more computer and host. The game can handle up to seven players and its an engaging and ready addictive game from a master when megacorporate.

UNS

Strategy ■ Amiga 25/28/386 ■ IBM PC/386/486 ■ Spectrum 2/4/16bit
 Amiga 128/1600

Parsons' Universal Military Simulator is

designed to simulate a carrier between two forces of a pre-defined level that can be viewed in three dimensions from any one of eight directions. The game handles a new color high computer graphics. The 3D version is well able to mix with the other versions (telegraphically).

YULCAN

320 ■ Spectrum 2/4/16bit ■ Amiga 128/1600

An elegant, simple and rigorous war game. Vulcan covers the Russian campaign of 1942-43. A huge playing area and an attack phase make the game an improvement over the same author's earlier works. Action and Steam-Ride. Wonderful fun, efficient and



simple to play, and its self-respecting war game should be without it.

SIMULATIONS

Games that put you at the controls. Whether you're flying helicopter or airplanes, or steering bobbleheads, simulation games can become very involving.

BOBSLEIGH

Digital/Strategy ■ Spectrum 2/4/16bit
 ■ Amiga 128/1600/2/8/16bit

Bobsleigh is a thrilling game with enough strategy involved to add another dimension to a highly competitive and addictive simulation. How do you get the bobsleigh to win your way to the end of the season? Remember, opponents don't back down. Unfortunately, though Bobsleigh is available for the C64. It's a poor game compared to the Amiga and Spectrum versions and is therefore not recommended.

CHUCK YEAGER'S ADVANCED FLIGHT TRAINER

Electronic Arts ■ C64 2/8/16bit/2/4/16bit
 ■ PC 2/4/16bit

Chuck Yeager's flight trainer takes the flight simulation game a step further by including a training option. Chuck will guide the novice through such difficult moves as steep climbs and rolls, with so much in one package it will take many hours of intensive fun to master all the available options.

FALCON

Microsoft ■ Apple Mac/386/486
 PC 386/486

A magnificent flight sim that gives you a decent measure of one of two ranks, so there's an awful lot to get through. The game's very control-oriented making it definitely one for fighters rather than jet fans. After a short while of playing it's easy to see why Falcon occupied a whole bunch of awards in America recently.

FLIGHT SIMULATOR 2

Sub Logo ■ Amiga 25/28/386 ■ Amiga 128/1600 ■ IBM PC/386/486

The venerable goddess of flight simula-

tions. Flight Sim 2 is the standard by which all others are judged. Although it isn't a million miles on top of the 3D-graphics, it's difficult to get lost in it. If you have the technology, this is an essential purchase.

GUNSHIP

Microgame ■ PC 2/4/16bit

Excellent graphics, involving simulation and a variety of missions make this one of the better PC games. Picking your target should be tricky as you various goals may not be entirely satisfied - but if you can learn the politics you should have a lot of fun.

INTERCEPTOR

Electronic Arts ■ Amiga 2/4/16bit

It is a simulation containing stunning and 3-D graphics with atmospheric soundtrack an interesting variety of missions - see the main review for all.

LEADERBOARD

Accurate/2/8bit ■ Spectrum 2/4/16bit
 C64 2/8bit/1/4/16bit ■ Amiga 128/1600/2/4/16bit
 C64 2/8bit/1/4/16bit ■ Amiga 25/28/386





ATARI ST SOFTWARE

ARCADE

Out Run	14.95
Scramble II	14.95
Buggy Boy	14.95
Enduro	14.95
Impossible Mission II	14.95
Masters of Universe	13.95
Demolitor	10.95
Captain Blood	10.95
ST Soccer	15.95
Pink Panther	15.95
Vampire Empire	15.95
Ball Warriors	15.95
Outs	18.95
Xenon	15.95
Pub Pool	7.95

STRATEGY

War Games II	15.95
Center Command	15.95
Flight Sim II	29.95
LEAS	18.95
Spitfire 90	18.95
Power Struggle	12.95

ADVENTURES

Knightmare	15.95
Dungeon Master	18.95
Amazon Ash	12.95
Police Quest	14.95
Space Quest	18.95

BUSINESS UTILITY

Fast Base (PC/M)	69.95
Fast Base (DOS)	35.95
1st Word Plus	59.95
Desk Top Publisher	85.95
MCD Fiscal	69.95
Superbase Personal	175.00

SPECIAL OFFERS

Advanced	8.95
Spurline	9.95
Star Trek	12.95
Shut-shoppers	13.00
Flight Sim I	29.95
Tax Calc	13.00
The Ising	6.00

Counted
Memories **£19.95**
Indiana Jones (all 4)
Roadrunner

Hacker II
Deep Space **£24.95**
Little Camp People
Babarcas (all 4)

Phone or write for the lowest price we can offer on our software. As we will do our best to match other dealers prices

HARDWARE AND ACCESSORIES

Pro 5000 Joystick	14.95
Speeding Joystick	11.95
Quickshot 4 Joystick	10.95
Mouse Mat	5.95

We can't advertise all the software we have in stock, so if there's something you are after that isn't listed, give us a ring and we will do our best to get it.

* *
Postage & Packing
FREE in U.K., Europe & Overseas **£2.00**

AMIGA SOFTWARE & HARDWARE

ARCADE

Barbarians	14.95
Jinx	18.95
Wetrot	18.95
Carson II	18.95
Coffin Joe Rally	18.95
Bubble Bobble	14.95
Fantix II	19.95
Scowider	7.95
Match II	14.95
Thunder Boy	14.95
Star Wars	14.95
Obstacle	19.95
Poolstars	15.95
EDD	14.95

IMPORTS

Advanced	21.95
Footstar	11.95
Kyler	11.95
Jed	29.95
COMING SOON	
Hot Ball	T.B.A
LEAS	19.95
Vampire Empire	14.95
Wetrot	19.95
Inspector	T.B.A.

(phone on availability)

AMIGA A500 PACKS

PACK 1

A500 computer +
Hacker II + Music Studio +
Hackers Guide +
Basic Manual
£365.00 + VAT

PACK 2

A500 computer +
1088 col. monitor +
software
£548.00 + VAT

PACK 3

A500 computer +
1088 col. monitor +
Dot matrix printer
"works" software pack +
PC Emulator
£679.00 + VAT

PHONE OR WRITE
FOR LATEST AMIGA
CATALOGUE
SUMMER 88 EDITION

ADVENTURES

Shadowgate	19.95
Dark Via	18.95
Desender of Crown	19.95
King of Chicago	23.95

SIMULATIONS

Jed (IMPORT)	29.95
Flight Sim II	29.95
Scenery Data	16.95

SPECIAL OFFERS

Pink Panther	13.95
The Hunt	12.95
Strike Force Water	19.95

3 1/2" DISKS

x10 **£14.95**
x20 **£27.95**
x50 **£59.00**

VERBATIM
D/S D/D

TIMESOFT

35 LONDON ROAD
TOOTING
LONDON SW17 9JR



01-685-8849
ENQUIRIES & ORDERS



BYTEBACK
 THE ATARI ST SPECIALIST
 BEST PRICES FASTEST DELIVERY!

GAME	ONLY	ONLY
OutRun (ROM in EPROM)	12.95	12.95
OutRun Special	12.95	12.95
OutRun 2	12.95	12.95
OutRun 2 in 2	12.95	12.95
OutRun 3	12.95	12.95
OutRun 4	12.95	12.95
OutRun 5	12.95	12.95
OutRun 6	12.95	12.95
OutRun 7	12.95	12.95
OutRun 8	12.95	12.95
OutRun 9	12.95	12.95
OutRun 10	12.95	12.95
OutRun 11	12.95	12.95
OutRun 12	12.95	12.95
OutRun 13	12.95	12.95
OutRun 14	12.95	12.95
OutRun 15	12.95	12.95
OutRun 16	12.95	12.95
OutRun 17	12.95	12.95
OutRun 18	12.95	12.95
OutRun 19	12.95	12.95
OutRun 20	12.95	12.95
OutRun 21	12.95	12.95
OutRun 22	12.95	12.95
OutRun 23	12.95	12.95
OutRun 24	12.95	12.95
OutRun 25	12.95	12.95
OutRun 26	12.95	12.95
OutRun 27	12.95	12.95
OutRun 28	12.95	12.95
OutRun 29	12.95	12.95
OutRun 30	12.95	12.95
OutRun 31	12.95	12.95
OutRun 32	12.95	12.95
OutRun 33	12.95	12.95
OutRun 34	12.95	12.95
OutRun 35	12.95	12.95
OutRun 36	12.95	12.95
OutRun 37	12.95	12.95
OutRun 38	12.95	12.95
OutRun 39	12.95	12.95
OutRun 40	12.95	12.95
OutRun 41	12.95	12.95
OutRun 42	12.95	12.95
OutRun 43	12.95	12.95
OutRun 44	12.95	12.95
OutRun 45	12.95	12.95
OutRun 46	12.95	12.95
OutRun 47	12.95	12.95
OutRun 48	12.95	12.95
OutRun 49	12.95	12.95
OutRun 50	12.95	12.95
OutRun 51	12.95	12.95
OutRun 52	12.95	12.95
OutRun 53	12.95	12.95
OutRun 54	12.95	12.95
OutRun 55	12.95	12.95
OutRun 56	12.95	12.95
OutRun 57	12.95	12.95
OutRun 58	12.95	12.95
OutRun 59	12.95	12.95
OutRun 60	12.95	12.95
OutRun 61	12.95	12.95
OutRun 62	12.95	12.95
OutRun 63	12.95	12.95
OutRun 64	12.95	12.95
OutRun 65	12.95	12.95
OutRun 66	12.95	12.95
OutRun 67	12.95	12.95
OutRun 68	12.95	12.95
OutRun 69	12.95	12.95
OutRun 70	12.95	12.95
OutRun 71	12.95	12.95
OutRun 72	12.95	12.95
OutRun 73	12.95	12.95
OutRun 74	12.95	12.95
OutRun 75	12.95	12.95
OutRun 76	12.95	12.95
OutRun 77	12.95	12.95
OutRun 78	12.95	12.95
OutRun 79	12.95	12.95
OutRun 80	12.95	12.95
OutRun 81	12.95	12.95
OutRun 82	12.95	12.95
OutRun 83	12.95	12.95
OutRun 84	12.95	12.95
OutRun 85	12.95	12.95
OutRun 86	12.95	12.95
OutRun 87	12.95	12.95
OutRun 88	12.95	12.95
OutRun 89	12.95	12.95
OutRun 90	12.95	12.95
OutRun 91	12.95	12.95
OutRun 92	12.95	12.95
OutRun 93	12.95	12.95
OutRun 94	12.95	12.95
OutRun 95	12.95	12.95
OutRun 96	12.95	12.95
OutRun 97	12.95	12.95
OutRun 98	12.95	12.95
OutRun 99	12.95	12.95
OutRun 100	12.95	12.95

NOTE: All quantities represent what stock is on hand. If you are interested in any of these items, please call for more information or visit our website at www.byteback.com. All prices include VAT and postage. All items are sold by the manufacturer. All prices are in GBP. All prices are in GBP. All prices are in GBP.

BYTEBACK Dept. Acc. 5 MURPHY CLOSE, RE-WARR, NORTHANTS NN21 1JF

If you only buy one golf simulator for your collection, buy **Leontides**. It's fast and accurate, does everything else in playability and realism, sets to get you, with detailed graphics and some weird sounds. Once you've mastered the course in the original, take **Tournament Leontides** that shows Class Leontides (based on real courses, including St. Andrew's, plus the "Golfing Country Club" - deemed by **Acorn** to be as difficult as possible).

TOMAHAWK
 Eagle Navigation • Spectrum Graphics

PUZZLES

If you're after a game that will provide you with a real challenge, without necessarily requiring large doses of strategic thinking, then it's a puzzle game you want.



BOHEMUNCHER
 Superior Software • CDD Games
 £12.95 • Acorn CD-ROM

At last! The most intense they appear to be solving more than a few... **Bohemuncher** is a number of highly innovative puzzles, featuring a number of highly innovative puzzles, featuring a number of highly innovative puzzles, featuring a number of highly innovative puzzles...

BOULDERDASH
 Point Leisure Corporation • Spectrum
 £12.95 • CDD Games • Acorn CD-ROM

A game that has everything - instant addition, long-term challenge, frantic excitement as the clock ticks down and extremely tricky puzzles. You must collect pebbles, hidden in caverns, digging earth and boulders to get at them. Boulder Dash can stop and cause you various damage, while the pebbles are often hidden by seemingly impenetrable walls. **Boulder Dash**, but great fun. **Boulder Dash** is a classic you can't afford to miss if you don't get impatient.

DEFLERTOR
 Gemini/Amos • Spectrum CD-ROM
 £14.95 • Acorn CD-ROM • Acorn CD-ROM

Optics are the order of the day here (not the sport department) as the player has to control a laser beam to a mirror and at the same time destroy a number of cells that are in the way of the laser.

ANNALS OF THE MIND
 £12.95
 One of the oldest great light simulators, **Annals of the Mind** is a strong contender for a top 5 rating. It's a very simple but also a complex game, and the game's main objective is to make connections for better play. Choose one of the three control systems and you can't fail to attack general targets while keeping a weather eye open for enemy attacks. Landscapes, buildings and vehicles are all drawn in sharp vector graphics.

need to make full use of the mirror, three-way contacts and pointing and reflecting beams if you're to advance your aim. Once the first screen and you'll only have 100 more to do. **Annals of the Mind** is highly addictive.

HEBULUS
 Spectrum • CDD Games • Acorn CD-ROM
 £12.95

Guide you to the top of eight teams using the special of patterns, the and logic that form the rules. It's a highly original game that strikes a balance between frustration and addition, added to which is the only rule that making it a good looking, enjoyable experience.

SENTINEL
 Point Leisure Corporation • Spectrum
 £12.95 • CDD Games • Acorn CD-ROM

Secure and compelling strategy game played over the structured arena of a planet controlled by the Sentinel. Fortunately you have to think about every thing to stop the Sentinel from shooting you. A nice twist on the old boulder game is both necessary in the early and late - 10,000 possible landscapes - game.

SKULLIDIGGERY
 Acorn • Acorn CD-ROM

Skullidigerry does that completely outside the original on the particular machine. Again, **Skullidigerry**, solving you digging for diamonds in a mine over 100 different levels - with a time limit for each screen. **Skullidigerry** scores on playability (leader screens) to begin with and a choice of starting points and is entertaining two player action.

SPORE
 Bally • CDD Games • Acorn
 £12.95 • Acorn CD-ROM

The winning combination of strategy, tactical planning and great graphics.

SOFTWARE EXPRESS

EUROPE'S LARGEST
ATARI MAIL ORDER
COMPANY
(021) 328 3585



A - MAGIC Turbodizer(VIDEO)

The A-Magic Turbo-Dizer was developed especially for the Atari ST. It is one of the fastest video-digitizers on the market. Simply plug the small (12 x 7 x 3cm) black box to your ST's ROMport (Mega ST also) and you're ready for action. From now on you can display everything on your \$64 1240125 or colour monitor. All you need is a PAL-video-signal, which is supplied by any TV, video-camera or VCR.

You can digitize using your ST in 2 - 32 graylevels and process like the image using the following programs: Degas (Etna), NeoNews/Colorstar, Monostar (+), STAD, Ani-Director, D.R.A.W. ...

With two gray levels it is possible to digitize up to 25 pictures per second (realtime).
What else can you do with the digitizer?

Advertising - Illustrations - Room Monitoring - Animation - Slideshow

Technical data:

- Hardware:
- resolution 640 x 400
 - goldplated contacts
 - power supply from computer
 - input signal through DIN socket

- Software:
- resolution 640 x 400, 320 x 200
 - gray levels 2, 4, 8, 16, 32, either red, blue, green or gray

NEW
ENHANCED VERSION
INC ANIMATION ETC.
£149.95 inc VAT.



OPEN NOW

OUR NEW ATARI STORE AT

9, EXETER STREET
(THE WADUPT)

PLYMOUTH

PHONE (0752) 265276



HEAD OFFICE 514/516 ALUM ROCK ROAD, BIRMINGHAM B8 3HX (021) 328 3585

ALSO AT 212/213 BROAD STREET BIRMINGHAM B15 2JP (021) 643 9100

9, EXETER STREET PLYMOUTH PL4 9AQ (0752) 265276

DEALER AND OVERSEAS ORDERS FOR ATARI SOFTWARE INVITED

None Open is worthy of a mention - what a bargain! Mail it to us after to get it after £7.99.

TETRIS

Atari ■ Spectrum £1.99 ■ £1.99
 ■ ZX ■ £1.99 ■ £1.99 ■ Amstrad
 £1.99 ■ £1.99 ■ Atari £1.99 ■ £1.99
 Amiga £1.99 ■ IBM PC £1.99

A fascinating geometric puzzle, this Russian puzzle turns the obvious mathematical topic of packing into a cult game. One at a time, shapes fall down into a rectangular playing area. Left to your own devices they'll pile up and they reach the top of the screen, you fail. It's quite them down and you're back to starting so that doesn't happen. Different versions have proved to be rather variable in their early success, but the instantly simple idea behind them means they're well worth a look whenever your machine.

THINK!

Atari ■ Spectrum £1.99 ■ £1.99
 £1.99 ■ Amstrad £1.99

Originally released by Amstrad at full price, but now available for a fraction of the cost from Freixenet, this a handy addition game played on a full grid - either one- or two-player - in which you attempt to connect four counters, horizontally, vertically or diagonally, in a compelling puzzle

which incorporates many additional features and skill levels.

XOR

Atari ■ Spectrum £1.99 ■ £1.99
 Amstrad £1.99 ■ £1.99 ■ £1.99
 £1.99 ■ £1.99

Extremely tricky maze game involving the player controlling two streets, and collecting marks through 10 mazes, which increase in complexity as you progress. Also in later stages, full and clockwise fly in with other blocking the roads and just waiting to trip you and bring you quest to a premature end. Later still, the full set of clocks are the best of your enemies as bombs, traps, poisons and skills pop up to completely against you. (Research working, computer-aided, this one requires planning to complete successfully.



BRAIN GAMES

Fuel up with mindless blasting? Want a game that offers you an opponent who's worthy of your skills? This is your section.

CHESS MASTER 2000

Atari ■ £1.99 ■ £1.99 ■ £1.99
 ■ Amiga £1.99 ■ Atari £1.99 ■ £1.99
 ■ IBM PC £1.99

Strongest chess game on the range, with excellent graphics, 20 or 30 move points, 10 levels of difficulty and all the playing options you could wish for. Plus some fairly witty speech synthesis.

COLOSSUS CHESS 4

Atari ■ Spectrum £1.99 ■ £1.99
 £1.99 ■ £1.99 ■ Amstrad £1.99
 £1.99

Best bet for a fast machine, comes with choice of 20 or 30 move complex levels of difficulty, and myriad options which enable you to play ready, work out chess problems, etc against a five computer opponent.

COLOSSUS MAN JONG

Atari ■ £1.99 ■ £1.99 ■ £1.99

Amstrad £1.99 ■ £1.99

Runny like several games of strategy and chance. A later version and then manual make this an easy to use and highly entertaining piece of software for children and novices alike.



Goel Computer Services

The Complete Computer Store

45, BOSTON ROAD, HANWELL, LONDON W7 3SH TELEPHONE: 01 579 6133

TITLE	SPECTRUM	AMSTRAD	ATARI	IBMDOS	ATARI	AMSTRAD	SPECTRUM
	£99	£99	£99	£99	£99	£99	£99
Angry Men	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 2	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 3	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 4	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 5	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 6	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 7	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 8	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 9	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 10	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 11	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 12	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 13	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 14	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 15	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 16	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 17	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 18	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 19	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 20	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 21	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 22	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 23	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 24	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 25	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 26	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 27	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 28	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 29	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 30	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 31	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 32	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 33	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 34	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 35	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 36	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 37	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 38	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 39	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 40	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 41	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 42	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 43	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 44	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 45	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 46	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 47	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 48	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 49	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Atari 50	1.99	1.99	1.99	1.99	1.99	1.99	1.99

WE STOCK GAMES AND BUSINESS SOFTWARE FOR ALL MACHINES, PLEASE PHONE FOR DETAILS OF TITLES AND PRICES AS AVAILABLE

ACCESS AND VISA HOTLINE 01-579 6133 (24 HR ANSWERPHONE)

for foreign orders please add £1.00 per disk. Please bring this advert to buy at these prices

Goel Computer Services, 45 Boston Road, Hanwell, London W7 3SH

Evesham Micros

All prices include VAT/delivery



2000PM SUMMER PACK!
Includes 800K with 1MB3 drive. 33 games (plus more for the best of us).
Only **£349.00**

128 SYSTEM standard model	£229.00
1280 512K with mono monitor	£239.00
1280 512K with mono monitor	£249.00
1280 512K with mono monitor	£219.00-00
Atari 800K/40K laser printer, great value at	£199.00-00
Atari 800K/40K mono monitor	£134.00-00
Atari SC1284 colour monitor	£249.00-00
1280 512K 512K 1MB3 11 Mega 312000 drive	£119.00-00
Atari 800K/40K hard disk, new price!	£159.00-00
Price Local Model Pack includes software	£179.00-00
Price Local Model Pack monitor for ST last	£139.00-00
Price Local Model Pack monitor for ST last	£139.00-00
Price Local Model Pack monitor for ST last	£139.00-00

Save 500K. Almost all prices include VAT/delivery.

All prices include VAT/delivery. All prices include VAT/delivery. All prices include VAT/delivery. All prices include VAT/delivery.

Amiga & ST Drives

Why pay more?

High quality 2nd drive for the ST and Amiga at an ultra low price

only **£99.95 inc.VAT**

- Very Quiet
- Reliable Writing
- Fully Compatible
- Top quality Ultran disk manufacturers
- Small unformatted capacity
- One year guaranteed

DIECTOR Compact Disk Utilities

- FEATURES INCLUDE:**
- ▷ **PROTECTED SOFTWARE BACKUP** - now includes password backup systems to handle even more programs and improves use of disk storage!
 - ▷ **ORGANISED ACCESSORY** - extremely useful provides essential disk management commands including **FORMAT, REFORMAT, DELETE** etc.
 - ▷ **EXTRA FORMAT** to maximize space on your disks, provides over 95% additional save storage per disk!
 - ▷ **SHREDDER** to recover accidentally lost files.
 - ▷ **RAMDISK** and **SETUP FOR 70/90MB** accessories.
 - ▷ **DIRK AND VTR**
 - ▷ **DIRECTORY PRINTOUT**
 - ▷ **DIRK SPEED CHECK**
- Only **£24.95**
- One year guarantee will be available in the future to handle format disc protection software etc.

For all Atari ST Models

PRINTERS All prices include VAT, delivery & cable



Star printers are recommended for business users as they offer an unbeatable combination of reliability, performance, reliability, and quality. Star printers are available at a special price for business users. All prices include VAT/delivery & cable.

Star L310 replaces the 50/80, features 4 1/2" font, paper peeling from panel operation, PLUS 2 extra ribbon free-of-charge	£199.00
Star L310 1200, features 1200 dpi, 4 1/2" font, 1200 dpi	£279.00
includes 2 extra ribbons free-of-charge.	
Star 950-10 high speed quality, 950/1200 dpi, 4 1/2" font, 1200 dpi, 1200 dpi	£269.00
Star 950-11 budget wide carriage option.	£219.00
Star 950-11 wide carriage version of 950-10	£269.00
Star Laser, new high speed for text, price for 1 year or 6000 pages	£179.00-00
Star Laser 1200, high speed, great value, 1200 dpi	£249.00-00
Amimed L2615 1200 dpi, great value, 1200 dpi and parallel ports.	£169.00-00
Amimed L2600 1200 dpi, 1200 dpi, 1200 dpi	£169.00-00
Amimed L2615 1200 dpi, 1200 dpi, 1200 dpi	£169.00-00
Parsons P3070 1200 dpi, 1200 dpi, 1200 dpi	£179.00-00
Parsons P3070 1200 dpi, 1200 dpi, 1200 dpi	£179.00-00
Parsons P3070 1200 dpi, 1200 dpi, 1200 dpi	£179.00-00

Deliveries free over 50 miles

All prices VAT/delivery included. Next day delivery £120 extra. Free postage P&O or **01203 883833** ext. 9000. Email: **info@eveshammicros.co.uk**

Evesham Micros Ltd
93 Bridge Street
Evesham
Worce WY14 1JF
Tel: 0300 705560

Map to: PO Box 60, Evesham, Worcester, Gloucestershire, WR11 1JF. Tel: 01203 883833

INFOGRAVES' BRIDGE

Integrates • Amiga £1.995 • Spectrum £1.995

Originally the best of all contract bridge simulations, with huge playing cards depicted against a realistic green felt background. Place a good game for a computer, which after all is a lot short on the imagination and feel department, and feature a wide range of options and betting conventions which you can toggle on and off according to your style.

POWERPLAY

Amiga • Spectrum £3.995 • £3.995 • £3.995
CD £3.995 • £3.995 • £3.995

If you want to try out your general knowledge, an answer point to better of all the original and interesting combination of strategy game and skill that will be extremely mind-bending. One of the best is probably why you're into it, sitting on Mount Olympus, home of the gods.

SCRABBLE

Amiga • Spectrum £2.995 • £2.995
CD £2.995 • £2.995 • £2.995

The highly popular word game translated via technology into the modern. Two amazing displays and a surprisingly long vocabulary limit of 12,000 include some strange looking words, an occasional odd word that you've never seen before. One word is enough game at the higher levels.



ARCADE-STYLE

Including coin-op conversions. Games with a high fun factor and plenty of addictiveness feature here.

ARKANOID

Amiga • Spectrum £1.995 • £1.995
CD £1.995 • £1.995 • £1.995

In its turn the best version of the classic Breakout. Simple in concept, the player controls a bar at the base of the screen, whacking ball left and right. The object is to keep a small ball in play bouncing off the bar to destroy formations of bricks in the top half of the screen. Estimate of the bricks and more on its the rest of it. Control. Once you master control in the introduction. As a limited coin-op conversion, Arkanoid comes out the box for a different start on the same theme and some nifty music. By ARKID Impact, which also builds up the effect by levels more gradually.



BOUNDER

Amiga • Spectrum £2.995 • £2.995
CD £2.995 • £2.995 • £2.995

A great arcade bonus game and very



17 EVERSLEY ROAD, BEXHILL, E SUSSEX (0424) 221931

SPECIALIST COMPUTER DEALERS FOR ST & AMIGA

Ami Software 0275 005 Philips 0800 Mod Res Centre 0754 88
 Amiga 286/386 + Printer 0344 99 Monitor + Cable 1 988 88
 Atari 0249 88 Size LG 386/486 + Cable 1 988 88
 Commodore 0449 88 Size LG 386/486 + Cable 1 988 88
 Digital 0244 88

Amiga 486 + Monitor 0488 88 Philips 0800 Mod Res Centre 0754 88
 Amiga 486 + 50M Monitor 0488 88 Size LG 386/486 + Cable 1 988 88
 Amiga 486 + 50M Monitor 0488 88 Size LG 386/486 + Cable 1 988 88
 Commodore 486/500 0754 88

ATARI ST SOFTWARE

Amiga 486 + Monitor	0488 88	Philips 0800 Mod Res Centre	0754 88
Amiga 486 + 50M Monitor	0488 88	Monitor + Cable	1 988 88
Amiga 486 + 50M Monitor	0488 88	Size LG 386/486 + Cable	1 988 88
Commodore 486/500	0754 88	Size LG 386/486 + Cable	1 988 88
Digital	0244 88		

Amiga 486 + Monitor	0488 88	Philips 0800 Mod Res Centre	0754 88
Amiga 486 + 50M Monitor	0488 88	Monitor + Cable	1 988 88
Amiga 486 + 50M Monitor	0488 88	Size LG 386/486 + Cable	1 988 88
Commodore 486/500	0754 88	Size LG 386/486 + Cable	1 988 88
Digital	0244 88		

Amiga 486 + Monitor	0488 88	Philips 0800 Mod Res Centre	0754 88
Amiga 486 + 50M Monitor	0488 88	Monitor + Cable	1 988 88
Amiga 486 + 50M Monitor	0488 88	Size LG 386/486 + Cable	1 988 88
Commodore 486/500	0754 88	Size LG 386/486 + Cable	1 988 88
Digital	0244 88		

AMIGA SOFTWARE

Amiga 486 + Monitor	0488 88	Philips 0800 Mod Res Centre	0754 88
Amiga 486 + 50M Monitor	0488 88	Monitor + Cable	1 988 88
Amiga 486 + 50M Monitor	0488 88	Size LG 386/486 + Cable	1 988 88
Commodore 486/500	0754 88	Size LG 386/486 + Cable	1 988 88
Digital	0244 88		

Amiga 486 + Monitor	0488 88	Philips 0800 Mod Res Centre	0754 88
Amiga 486 + 50M Monitor	0488 88	Monitor + Cable	1 988 88
Amiga 486 + 50M Monitor	0488 88	Size LG 386/486 + Cable	1 988 88
Commodore 486/500	0754 88	Size LG 386/486 + Cable	1 988 88
Digital	0244 88		

Amiga 486 + Monitor	0488 88	Philips 0800 Mod Res Centre	0754 88
Amiga 486 + 50M Monitor	0488 88	Monitor + Cable	1 988 88
Amiga 486 + 50M Monitor	0488 88	Size LG 386/486 + Cable	1 988 88
Commodore 486/500	0754 88	Size LG 386/486 + Cable	1 988 88
Digital	0244 88		

All prices include VAT and Free Delivery in the UK. Overseas orders please add £2.50 per software title and £3.50 per book. Subject to availability goods will normally be despatched within 24 hours. Please enclose cheques with a bankers card no.

CBS Computers,
17 Eversley Road, Bexhill,
E.Sussex TN40 1HT
Order by Phone Tel: (0424) 221931

We can also supply IBM-PC Disk Programs at Discount Prices

Please phone for details and prices





Encounter stands out in both departments, as you play your mate using real, tightly-fighting, fireworks from a mutant race of mutants.

ODDS

Atari ST • April 87 £19.95

A magnificent Thracian tale. The Ods are relying on you to save their land. But the forces aren't going to be things without flowing meadows, forests and a cluster of other responses at you. Included with the program is an edit facility that allows you to design your own characters - great stuff!



PITSTOP 2

Egyptian God • Available only on Atari ST
Eyes Computer • £14.95
£14.95 • IBM PC, £20.95. In comparison with Pitster Games and Summer Games 2!

Thrilling racing game where the winner is left to live, and you can race the computer on a track, take off different Grand Prix circuits, test know-how and receive the all-important pitstop game too to give you hand-camp and you from a real racing track.

SPIDERTRONIC

EBC International • Atari ST • £9.95

Guide your spider-like character around the game area, collecting coloured shells in the correct order. The built-in controller can mean you'll be looking at your own spider in the game some time.

SUMMER GAMES

Egyptian God • £14.95 (at £12.95) • IBM PC, £20.95

Eye-opening simulations are of high quality but more than quite captured the capability and style of the original Summer Games and its immediate successor, Summer Games 2. One to see players can take part in high jump, gymnastics, springboard diving, sky-pogon shooting, swimming, pole vault - and others - with lively large graphics and smooth animation throughout. Control of your athlete can be complete or practice recommended.



over Games and its immediate successor, Summer Games 2. One to see players can take part in high jump, gymnastics, springboard diving, sky-pogon shooting, swimming, pole vault - and others - with lively large graphics and smooth animation throughout. Control of your athlete can be complete or practice recommended.

SUPER SPRINT

Eyes Computer • £14.95 (at £12.95) • IBM PC, £20.95. In comparison with Pitster Games and Summer Games 2!

One of the better spring-competition titles available. Run up to three players.

MWD COMPUTING

DISCS

Bulk £5.00 (10STP)	£5.95
Freeflow with free plastic case	
£5.00 (10STP)	£11.95
Freeflow Write 'n' Wipe with free plastic case £5.00 (10STP)	£12.95
10 Maxell DF2's discs	£2.95

Includes Special Pen

ATARI MEGA ST DESKTOP PUBLISHING SYSTEMS

Do you own an ST but cannot afford a Laser Printer? No problem MWD can print your artwork with our **LASER BUREAU**

WE ALSO SELL DTP SYSTEMS

Phone for latest prices

DOUBLE JOYSTICK EXTENSION LEADS FOR £25 (STFM AND 1040 ST £5.95)

SERIOUS SOFTWARE TO SUIT YOUR NEEDS FULL BACK-UP SERVICE

All prices include VAT & P&P

HOW TO ORDER: Please make cheque P.O. payable to MWD Computing and send to **MWD Computing, Suite 28, Horsehay House, Horsehay Estate, Horsehay, Telford, Shropshire. Tel: 0952 506240**

SMALL SELECTION FROM OUR WAREHOUSE

SOFTWARE & SERVICES	Price	Rating
Amstrad CPC/6128 Computer • Ocean Home Tutor Rev. 4.1 & 5.1 (2P)	£49.95	1/5 (3/8)
Amstrad CPC/6128 Computer • Ocean Home Tutor Rev. 4.1 & 5.1 (2P)	£59.95	1/5 (3/8)
Language Computer • 2P/2/2/2	£51.95	1/5 (3/8)
Amstrad PC-XT Computer • Topaz Printer • 10pin	£49.95	1/5 (3/8)
Amstrad/Sharp Spectrum Upgrade Kit • Computer/Master		
Vision Spectrum 640 Spectrum Plus including user Manual	£27.95	1/5 (3/8)
Amiga 1000, 1000, 1000, 1000, 1000, 1000, 1000, 1000	£79.95	1/5 (3/8)
Amiga 1000/1000 • 1000/1000 • 1000/1000 • 1000/1000	£99.95	1/5 (3/8)
Amiga 1000/1000 • 1000/1000 • 1000/1000 • 1000/1000	£99.95	1/5 (3/8)
Amiga 1000/1000 • 1000/1000 • 1000/1000 • 1000/1000	£99.95	1/5 (3/8)

AMSTRAD/BOSWELL/COMODORE/SAMSUNG/SBC

PC's AT GOOD DISCOUNTS

Amstrad Home Tutor 2 • 10pin/10pin • 10pin/10pin	£49.95	£49.95
Amstrad Home Tutor 2 • 10pin/10pin	£49.95	£49.95
Amstrad Home Tutor 2 • 10pin/10pin	£49.95	£49.95
Amstrad Home Tutor 2 • 10pin/10pin	£49.95	£49.95
Amstrad Home Tutor 2 • 10pin/10pin	£49.95	£49.95
Amstrad Home Tutor 2 • 10pin/10pin	£49.95	£49.95
Amstrad Home Tutor 2 • 10pin/10pin	£49.95	£49.95
Amstrad Home Tutor 2 • 10pin/10pin	£49.95	£49.95
Amstrad Home Tutor 2 • 10pin/10pin	£49.95	£49.95
Amstrad Home Tutor 2 • 10pin/10pin	£49.95	£49.95

SOFTWARE

CURRENT CHART GAMES SOFTWARE

RETAIL LESS 8% - FOR MANY OF OUR BESTSELLERS

Amstrad Home Tutor 2 • 10pin/10pin	£49.95	£49.95
Amstrad Home Tutor 2 • 10pin/10pin	£49.95	£49.95

SEND US A CHECK TO GET YOUR SOFTWARE. Please include address. ALL PRICES INCLUDE VAT & DELIVERY TO ANYWHERE IN THE UNITED KINGDOM. Payment must be by CHEQUE, B.C. or P.O. ORDER. If you are a customer of MWD you may have a special discount on your order.

W.A.V.E. (Trade Only) ACE 786

Wally Audio Visual & Electrical

55 Shearwater Crescent,

Barnack-in-Furness, Cambridgeshire, LK41 5UP

Tel: 0527 55111

at computing at once. The action is fast and furious and it will take a fairly-sized computer to complete some of the more turbulent scenes that appear late in the game.



THRUST

Protek ■ Spectrum 17.0k ■ C64 ■ C1.0k ■ Amiga ■ Amstrad 4.0k

Swiftly sensitive controls and a large helping of realistic physics make this fast get like an absolute must. Flying down through the caverns of an enemy-held planet, you have to pick up fuel and destroy hostile gun turrets without crashing into the same walls. Tough enough as it is, but then you're got to make the return journey with a heavy load along under your belt. Very hard, very addictive.

THUNDERCATS

Elite ■ C64 ■ C1.0k ■ C1.0k ■ Spectrum 17.0k ■ Amstrad 4.0k ■ C1.0k

The game based on the hit TV programme (please say that a million times over!) that just issues garbage. Each of the planet's 14 levels is a straight line dash from start to finish with a multitude of obstacles to avoid along the way. Graphically impressive and competitively playable too.

URIDIUM

Protek ■ Spectrum 12.0k ■ C64 ■ C1.0k ■ C1.0k ■ Amiga ■ Amstrad 4.0k ■ C1.0k

The pace is a mixture of exciting shoot-and-kill and the thoughtfulness and planning stages while dodging around big target structures. Great multi-layered thoughtfulness and the smoothest scrolling you'll ever see parallaxed and slanted down the opposition. A game not to be missed, especially now the C64 version came packaged with the excellent (Protek)

ZARCH

Superior Software ■ Amstrad ■ Spectrum 17.0k ■ Amiga and later 17 versions under development.

ACE's latest and greatest in this. A solid three-dimensional shoot-em-up with such graphic perfection and smoothly selective gameplay that it belongs in instant classic. Zarch should do for the Amstrad what the Zapper did for the Amiga.

SHEKHANA COMPUTER SERVICES - ESTAB: SINCE 1978

ACCESS - CREDIT BY CREDIT CARD LINE 01-340-7607 - VISA *** FREE POSTER WITH ORDER DASH £10.00 **

SOFTWARE TITLE	PRICE	SOFTWARE TITLE	PRICE	SOFTWARE TITLE	PRICE	SOFTWARE TITLE	PRICE	SOFTWARE TITLE	PRICE	SOFTWARE TITLE	PRICE	SOFTWARE TITLE	PRICE	SOFTWARE TITLE	PRICE		
ALPHABET	£1.95	BALLOON	£1.95	CANDY	£1.95	CHOCOLATE	£1.95	CRAZY	£1.95	CRICKETS	£1.95	CROWN	£1.95	DANCE	£1.95	DAWN	£1.95
... (many more titles) ...	...	... (many more titles) ...	...	... (many more titles) ...	...	... (many more titles) ...	...	... (many more titles) ...	...	... (many more titles) ...	...	... (many more titles) ...	...	... (many more titles) ...	...	

For full details of our products and services, contact SHEKHANA COMPUTER SERVICES, Unit 11, The Arcade, High Street, Shekhana, Warwickshire, CV35 9EF. Tel: 01340 7607. Fax: 01340 7608. Email: shekhana@compuserve.com. Website: www.shekhana.co.uk



UNIT: CORPORAL, JOHANN
MORALE: 100
STAMINA: 215
ACTION POINTS: 42
CONSTITUTION: 31
WEAPON: MARK II AUTO GUN
TEL: (0275) 38128

**LASER
SQUAD**



TARGET GAMES LIMITED

Johns Computer Store

☆ Atari 520 STFII - £279

(including printer pack)

☆ Atari 520 Summer Pack £379

☆ Atari Entry Level PC - £499

☆ Amiga A500 - £499

(including printer pack)

☆ Amiga A500 Business Pack £799

ALL HARDWARE AND SOFTWARE AVAILABLE NOW!

MAIL ORDER OFFER
4 Graham Street, Airdrie,
Scotland ML4 6BU
Telephone: (0228) 68874

ATARI 520 STFII

PRICE £279.00
ATARI 520 STFII
1.5MB RAM (expandable)
Atari 520 Disk II system
Hardware
£299.95
FREE 1 Year 20
Software Titles
with cost £400.00 + V.A.T.

PRICE £399.00
ALL NEW SUMMER PACK
Atari 520 Summer Pack
Atari 520 Summer Pack
Atari 520 Summer Pack
Atari 520 Summer Pack
Atari 520 Summer Pack
Atari 520 Summer Pack
Atari 520 Summer Pack
Atari 520 Summer Pack
£299.95

PRICE £499.00
Atari 520 Summer Pack
Atari 520 Summer Pack
Atari 520 Summer Pack
Atari 520 Summer Pack
Atari 520 Summer Pack
Atari 520 Summer Pack
Atari 520 Summer Pack
Atari 520 Summer Pack
Atari 520 Summer Pack
£499.95

PRICE £799.00
Atari 520 Summer Pack
Atari 520 Summer Pack
Atari 520 Summer Pack
Atari 520 Summer Pack
Atari 520 Summer Pack
Atari 520 Summer Pack
Atari 520 Summer Pack
Atari 520 Summer Pack
Atari 520 Summer Pack
£799.95

ACCESSORIES

PRICE	PRICE	PRICE	PRICE	PRICE	PRICE
Atari 520 Summer Pack	Atari 520 Summer Pack	Atari 520 Summer Pack	Atari 520 Summer Pack	Atari 520 Summer Pack	Atari 520 Summer Pack

PRICE	PRICE	PRICE	PRICE	PRICE	PRICE
Atari 520 Summer Pack	Atari 520 Summer Pack	Atari 520 Summer Pack	Atari 520 Summer Pack	Atari 520 Summer Pack	Atari 520 Summer Pack

SOFTWARE

ATARI ST SOFTWARE

Atari	£10.00	Atari	£10.00
Atari	£10.00	Atari	£10.00
Atari	£10.00	Atari	£10.00
Atari	£10.00	Atari	£10.00
Atari	£10.00	Atari	£10.00
Atari	£10.00	Atari	£10.00
Atari	£10.00	Atari	£10.00
Atari	£10.00	Atari	£10.00
Atari	£10.00	Atari	£10.00
Atari	£10.00	Atari	£10.00

AMIGA SOFTWARE

Amiga	£10.00	Amiga	£10.00
Amiga	£10.00	Amiga	£10.00
Amiga	£10.00	Amiga	£10.00
Amiga	£10.00	Amiga	£10.00
Amiga	£10.00	Amiga	£10.00
Amiga	£10.00	Amiga	£10.00
Amiga	£10.00	Amiga	£10.00
Amiga	£10.00	Amiga	£10.00
Amiga	£10.00	Amiga	£10.00
Amiga	£10.00	Amiga	£10.00

MAIL-CENTA

17, CAMPBELL STREET, BOLTON DERBY, DER 14P
TELEPHONE: 0202 82600

Prices include V.A.T. unless otherwise stated. Prices of £10.00 and £10.00 are for software only. Hardware prices are shown in separate columns. Prices are for the main computer system only. Prices are for the main computer system only.

SPECIALS

Original works that are simply unclassifiable feature in the section.



SPECTRUM
48/128/64

ATP

Digital Integration ■ C64 £199.95
£11.95 ■ Spectrum £199.95 ■ £11.95
■ Amstrad £199.95 ■ £11.95

Explosive combat flight simulator that's a bit of a change for Digital Integration, the simulation specialists. The emphasis is on solid action, the result being a terrific hit.

DRILLER

Introsive ■ C64 £199.95 ■ £11.95 ■ Spectrum £199.95 ■ £11.95 ■ Amstrad £199.95 ■ £11.95 ■ PC £199.95

This three-dimensional masterpiece of exploration and adventure took a year's slaving, but the wait was worth it. A whole world was crisscrossed into 3-D, including the player such a feeling of being there. It's amazing, it's bold, and it's simply original and very playable. A lifetime computer entertainment.

ELITE

Freedom ■ Spectrum £199.95 ■ £11.95 ■ C64 £199.95 ■ £11.95 ■ Amstrad £199.95 ■ £11.95 ■ PC £199.95

Get the best space trading game. Elite is a standard for other space games to follow. One of the first space games to use vector graphics, it's a stunning and leading title. All action, with a lot of detail, with plenty of variety to the gameplay. You can trade legal goods in (relatively) safe systems, or cut the throat of pirates in the galactic danger zones with your hold out of combat. Either way there's a new fire in your eye, and so is big a

best as you'll find anywhere.

MAGNETRON

Freedom ■ Spectrum £199.95 ■ £11.95 ■ Amstrad £199.95 ■ £11.95

Puzzles and action drive Magnetron. Save the world by dominating eight evil foes. Good jobs but the enemy doesn't appreciate your own good, and hopefully make your job a little easier. The real game for all Spectrum fans looking for a unique, new challenge.

MATCH DAY 2

Freedom ■ Spectrum £199.95 ■ £11.95 ■ C64 £199.95 ■ £11.95 ■ Amstrad £199.95 ■ £11.95

Definitely the hottest game on soccer, magnificent animation, great graphics, music and 3D computer graphics. Various improvements over the original make this a must for all computer football fans.

QUEDX

Freedom ■ C64 £199.95 ■ £11.95

In this impressively challenging game you must learn to handle, not through an obvious course of action, bonuses and obstacles, of which a lot are time. The single game concept has a host of added features to make it particularly pleasing. You can only see yourself in the first screen, for example, and look in the other screens or games in any order you wish. Excellent graphics and very exciting play.

SPINDIZZY

Freedom ■ Spectrum £199.95 ■ £11.95 ■ C64 £199.95 ■ £11.95 ■ Amstrad

Wizard £14.95

Wizard will take your spinning top over rough obstacles and collect gems, against a familiar time limit. The game interface is a neat system of cameras, ramps, levers, and traps, all controlled by either steps - and NO safety rails. Floor switches activate lifts and bridge gaps, but trapping them in the right order can be harder than it looks. A few well-placed gems and a lot of time counts, for the explosion of the ring.



Wizard

Color ■ Spectrum £7.95 ■ Amstrad £8.95 ■ £10.95 ■ IBM PC £14.95 ■ £14.95 ■ Apple II* £14.95 ■ Amiga £14.95

TAU GETS ACADEMY

GB ■ Spectrum £9.95 ■ £9.95 ■ £14.95 ■ £14.95 ■ Amstrad £9.95 ■ £14.95 ■ £14.95 ■ Apple II* £14.95 ■ Amiga £14.95

Eight simultaneous sets up and its support which are 3000 incredibly smooth and well put together. The attention to detail is impressive as you set off on non-racing missions on a space station. In Academy you get to design your own space station (and so on).

A compelling and original ball game in which you become the ball and must set out to conquer the 'board creation' which are often so irritating the spectrum and rendering the landscape grey and dull. Conquering the world is great fun and makes this one of the most playable games to have appeared for a long time.

ADVENTURES

Adventure games require text input from the player and give a text response in return. There are many sub-categories, involving icon-control, graphic depiction of locations, and even speech output.

THE BARD'S TALE

Electronic Arts ■ £14.95 ■ £14.95 ■ Amiga £14.95 ■ £14.95 ■ £14.95 ■ £14.95 ■ £14.95 ■ £14.95

Back a party of six on adventures and only back through the city in search of treasure, combat, and fame. Your character develops in experience during play and the tale unfolds in a pretty continuous - and epic - fashion. It's made in a month or two.



BEYOND ZORK

MicroPro ■ £14.95 ■ £14.95 ■ £14.95 ■ £14.95 ■ £14.95 ■ £14.95 ■ £14.95

MicroPro attempt to provide in on the role playing market is a great success. Unlike the Shadow Council of Dumbie it is a game that combines the art and ingenuity of one of the world's most original software companies with state-of-the-art gaming and graphics. Not only, but with an on-screen mapping facility.

GUILD OF THIEVES

Random Magic ■ £14.95 ■ £14.95 ■ £14.95 ■ £14.95 ■ £14.95 ■ £14.95 ■ £14.95

£14.95 ■ £14.95 ■ £14.95 ■ £14.95 ■ £14.95 ■ £14.95 ■ £14.95

British based adventure software house produce a classic, traditional treasure hunt with state-of-the-art graphics and some very tricky puzzles. Random Magic have made a convincing game world with humor and imagination.

JEWELS OF DARKNESS

Random Magic ■ £14.95 ■ £14.95 ■ £14.95 ■ £14.95 ■ £14.95 ■ £14.95 ■ £14.95

Level 8, British based adventure programming family, have put together one of their classic releases, Jewel of Darkness. The game has been created with graphics and larger soundfiles and are an ideal to the original spirit of adventuring as you're likely to find.



EXPRESS REPAIR

BBC, SPECTRUM, AMSTRAD, IBM, PC + COMPATIBLES...

PROMPT AND PERSONAL SERVICE BY QUALIFIED ENGINEERS

* FREE ESTIMATES *

061-301 2210

ORT/GEC ITeC LTD.

MELBA STREET, MANCHESTER M11 1FL

mousemats

MAKEMICRO MICEMOVE



Hardwearing, removable black laminated polyester quick fix pads, Size 50 x 71 cm.

SHORE BREAK DESIGNS LTD. High Street, Saltlake, Saltburn, Cleveland TS13 5DQ. 0647 840711. £4.95 including VAT and postage.

MEGASAVE FANTASTIC SAVINGS

Software Title	Amstrad	Atari	Commodore	IBM PC	Macintosh	MS-DOS	Spectrum
Amiga	£14.95	£14.95	£14.95	£14.95	£14.95	£14.95	£14.95
Amstrad	£14.95	£14.95	£14.95	£14.95	£14.95	£14.95	£14.95
Atari	£14.95	£14.95	£14.95	£14.95	£14.95	£14.95	£14.95
Commodore	£14.95	£14.95	£14.95	£14.95	£14.95	£14.95	£14.95
IBM PC	£14.95	£14.95	£14.95	£14.95	£14.95	£14.95	£14.95
Macintosh	£14.95	£14.95	£14.95	£14.95	£14.95	£14.95	£14.95
MS-DOS	£14.95	£14.95	£14.95	£14.95	£14.95	£14.95	£14.95
Spectrum	£14.95	£14.95	£14.95	£14.95	£14.95	£14.95	£14.95

... to see the details of our services and prices...
 MAIL ORDER ONLY FROM THE FOLLOWING ADDRESSES: 1000 HIGH STREET, 1000 HIGH STREET, 1000 HIGH STREET
 £1.50 per item, full service. Send cheque/PO to: MEGASAVE Dept 40
 400 Southdown St, Victoria, London SW17 4JX
 (Orders placed by air or by credit card subject to 4.95 service charge. All prices include VAT and postage.)

● **HARDWARE UPGRADE**

	BUYLINES	GRAPHICS & SOUND	
ACORN ARCHIMEDES			
<p>The ARCHIMEDES comes in the 10, 100 and 1000 packages. Each package comes with a software starter kit (many of which are included in a 4.75 volume) and a 1000 package also includes the 1000 software with 1000, and the 100 package 1000 software.</p> <p>■ Recommended upgrade: from 1000 to the 100 series or 1000 to a 1000 with expansion.</p>	<p>RAM/ROM is the order of the day for Acorn's Archimedes. You'll want enough to increase performance.</p> <p>■ One year warranty—Acorn machines come with a one-year warranty.</p>	<p>RESOLUTION is either 320 x 256, 640 x 384 or even more (40 x 320) with each one monitor. 640 resolution is 640, 640, 640 software program or more for 640x320 resolution or 640x480. The Archimedes can also handle digital graphics. Use the 100 resolution in the package.</p> <p>■ Monitor output: yes—composite video output—RGB is yes.</p>	<p>THE ORIGINAL ARCHIMEDES is a good quality video for its price. It's also for 1000 resolution. Video output is 640 resolution. It comes with a 1000 resolution video output.</p>
APPLE MACINTOSH			
<p>The Apple II series is the range in the 10 and 100 series. A complete starter kit (with software) is included with each package. The 1000 package also includes a 1000 software with 1000, and the 100 package 1000 software.</p> <p>■ Recommended upgrade: from 1000 to the 100 series or 1000 to a 1000 with expansion.</p>	<p>RAM/ROM is the order of the day for Acorn's Archimedes. You'll want enough to increase performance.</p> <p>■ One year warranty—Acorn machines come with a one-year warranty.</p>	<p>RESOLUTION is either 320 x 256, 640 x 384 or even more (40 x 320) with each one monitor. 640 resolution is 640, 640, 640 software program or more for 640x320 resolution or 640x480. The Archimedes can also handle digital graphics. Use the 100 resolution in the package.</p> <p>■ Monitor output: yes—composite video output—RGB is yes.</p>	<p>THE ORIGINAL ARCHIMEDES is a good quality video for its price. It's also for 1000 resolution. Video output is 640 resolution. It comes with a 1000 resolution video output.</p>
ATARI ST			
<p>The ATARI ST series is the range in the 10 and 100 series. A complete starter kit (with software) is included with each package. The 1000 package also includes a 1000 software with 1000, and the 100 package 1000 software.</p> <p>■ Recommended upgrade: from 1000 to the 100 series or 1000 to a 1000 with expansion.</p>	<p>RAM/ROM is the order of the day for Acorn's Archimedes. You'll want enough to increase performance.</p> <p>■ One year warranty—Acorn machines come with a one-year warranty.</p>	<p>RESOLUTION is either 320 x 256, 640 x 384 or even more (40 x 320) with each one monitor. 640 resolution is 640, 640, 640 software program or more for 640x320 resolution or 640x480. The Archimedes can also handle digital graphics. Use the 100 resolution in the package.</p> <p>■ Monitor output: yes—composite video output—RGB is yes.</p>	<p>THE ORIGINAL ARCHIMEDES is a good quality video for its price. It's also for 1000 resolution. Video output is 640 resolution. It comes with a 1000 resolution video output.</p>
COMMODORE AMIGA			
<p>The COMMODORE AMIGA series is the range in the 10 and 100 series. A complete starter kit (with software) is included with each package. The 1000 package also includes a 1000 software with 1000, and the 100 package 1000 software.</p> <p>■ Recommended upgrade: from 1000 to the 100 series or 1000 to a 1000 with expansion.</p>	<p>RAM/ROM is the order of the day for Acorn's Archimedes. You'll want enough to increase performance.</p> <p>■ One year warranty—Acorn machines come with a one-year warranty.</p>	<p>RESOLUTION is either 320 x 256, 640 x 384 or even more (40 x 320) with each one monitor. 640 resolution is 640, 640, 640 software program or more for 640x320 resolution or 640x480. The Archimedes can also handle digital graphics. Use the 100 resolution in the package.</p> <p>■ Monitor output: yes—composite video output—RGB is yes.</p>	<p>THE ORIGINAL ARCHIMEDES is a good quality video for its price. It's also for 1000 resolution. Video output is 640 resolution. It comes with a 1000 resolution video output.</p>
IBM & COMPATIBLES			
<p>The IBM PC series is the range in the 10 and 100 series. A complete starter kit (with software) is included with each package. The 1000 package also includes a 1000 software with 1000, and the 100 package 1000 software.</p> <p>■ Recommended upgrade: from 1000 to the 100 series or 1000 to a 1000 with expansion.</p>	<p>RAM/ROM is the order of the day for Acorn's Archimedes. You'll want enough to increase performance.</p> <p>■ One year warranty—Acorn machines come with a one-year warranty.</p>	<p>RESOLUTION is either 320 x 256, 640 x 384 or even more (40 x 320) with each one monitor. 640 resolution is 640, 640, 640 software program or more for 640x320 resolution or 640x480. The Archimedes can also handle digital graphics. Use the 100 resolution in the package.</p> <p>■ Monitor output: yes—composite video output—RGB is yes.</p>	<p>THE ORIGINAL ARCHIMEDES is a good quality video for its price. It's also for 1000 resolution. Video output is 640 resolution. It comes with a 1000 resolution video output.</p>

RANDOM ACCESS

Welcome to the regular section of the magazine that promises to puzzle, tease and perplex you. We've got a fiendish puzzle and a cryptic crossword to give you some mental exercise, and something to make you chuckle. If you reckon you could draw a cartoon that will give us a giggle, don't hesitate to send it in (for the best chances of reproduction, draw your cartoons black on stiff white paper). If you're one of those types that needs extra motivation to get your thinking cap on then consider the fact that the first correct entry pulled from the hat after the closing date for both the puzzle and the crossword wins £25 worth of software - so, heads down and get to it!

THE ACE PUZZLE No4

Sally Archie Meeke

ACE divided by 2 = 967
and OAD divided by 3 = 430
and AZD divided by 4 = 135
what four-letter word divided by thirteen will equal..... what?

Instead of working this out with pencil and paper why not devise a simple listing that will answer your question for you?

PUZZLE ENTRY FORM

NAME

ADDRESS

COMPUTER OWNED

I think the solution is:

... divided by thirteen = ...

Send your answers to:

PRICE PUZZLE 4,
ACE, 4 Queen Street, Bath BA1 2EL
Closing date July 1993.

SOLUTION TO PUZZLE No2

The only possible arrangement for the words is shown below in white text in the diagram area. (Note - to right it is used, A is the only word that is a first letter which is B, E, G, A, D, I, F, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, and the other letters are used out of the hat.)

In order to perform the operations as described there are certain conditions which must exist at certain points during the operations. For example, to exchange the positions of A and B the rule is that the box at the moment, cannot be at the end of the row. Consequently, for any random distribution of words at the start of the operation, there is a chance that, at some point during the movement of words an impossible situation will be created. With the words here we 3 (division) 5 possible starting orders. Factors here is based on multiplying 3 x 4 x 3 x 2 x 1 and divide into the result to give the possible combinations of words in the box. Four options for the second word so on. These set-up possibilities are left in the dark area in the program. This happens for best material using a simple algorithm in which permutations have been created.

Each of the permutations is then a list of representing the arrangement of the words at the start of the operation and each input is generated in order. To do this, the numbers value of each character in the string is remembered in the second column of the string table. To create the words, the program has looked through the characters and created their addresses in a grid and then written the values in the array as required in the operations. Should an impossible state be required, the next combination would then change position to allow.

The two instructions that result in ACE being in fourth position, in which case the start and final positions are equal.

```

AC 00000001
BE 00000002
BE 00000003
BE 00000004
BE 00000005
BE 00000006
BE 00000007
BE 00000008
BE 00000009
BE 00000010
BE 00000011
BE 00000012
BE 00000013
BE 00000014
BE 00000015
BE 00000016
BE 00000017
BE 00000018
BE 00000019
BE 00000020
BE 00000021
BE 00000022
BE 00000023
BE 00000024
BE 00000025
BE 00000026
BE 00000027
BE 00000028
BE 00000029
BE 00000030
BE 00000031
BE 00000032
BE 00000033
BE 00000034
BE 00000035
BE 00000036
BE 00000037
BE 00000038
BE 00000039
BE 00000040
BE 00000041
BE 00000042
BE 00000043
BE 00000044
BE 00000045
BE 00000046
BE 00000047
BE 00000048
BE 00000049
BE 00000050
BE 00000051
BE 00000052
BE 00000053
BE 00000054
BE 00000055
BE 00000056
BE 00000057
BE 00000058
BE 00000059
BE 00000060
BE 00000061
BE 00000062
BE 00000063
BE 00000064
BE 00000065
BE 00000066
BE 00000067
BE 00000068
BE 00000069
BE 00000070
BE 00000071
BE 00000072
BE 00000073
BE 00000074
BE 00000075
BE 00000076
BE 00000077
BE 00000078
BE 00000079
BE 00000080
BE 00000081
BE 00000082
BE 00000083
BE 00000084
BE 00000085
BE 00000086
BE 00000087
BE 00000088
BE 00000089
BE 00000090
BE 00000091
BE 00000092
BE 00000093
BE 00000094
BE 00000095
BE 00000096
BE 00000097
BE 00000098
BE 00000099
BE 00000100
BE 00000101
BE 00000102
BE 00000103
BE 00000104
BE 00000105
BE 00000106
BE 00000107
BE 00000108
BE 00000109
BE 00000110
BE 00000111
BE 00000112
BE 00000113
BE 00000114
BE 00000115
BE 00000116
BE 00000117
BE 00000118
BE 00000119
BE 00000120
BE 00000121
BE 00000122
BE 00000123
BE 00000124
BE 00000125
BE 00000126
BE 00000127
BE 00000128
BE 00000129
BE 00000130
BE 00000131
BE 00000132
BE 00000133
BE 00000134
BE 00000135
BE 00000136
BE 00000137
BE 00000138
BE 00000139
BE 00000140
BE 00000141
BE 00000142
BE 00000143
BE 00000144
BE 00000145
BE 00000146
BE 00000147
BE 00000148
BE 00000149
BE 00000150
BE 00000151
BE 00000152
BE 00000153
BE 00000154
BE 00000155
BE 00000156
BE 00000157
BE 00000158
BE 00000159
BE 00000160
BE 00000161
BE 00000162
BE 00000163
BE 00000164
BE 00000165
BE 00000166
BE 00000167
BE 00000168
BE 00000169
BE 00000170
BE 00000171
BE 00000172
BE 00000173
BE 00000174
BE 00000175
BE 00000176
BE 00000177
BE 00000178
BE 00000179
BE 00000180
BE 00000181
BE 00000182
BE 00000183
BE 00000184
BE 00000185
BE 00000186
BE 00000187
BE 00000188
BE 00000189
BE 00000190
BE 00000191
BE 00000192
BE 00000193
BE 00000194
BE 00000195
BE 00000196
BE 00000197
BE 00000198
BE 00000199
BE 00000200
BE 00000201
BE 00000202
BE 00000203
BE 00000204
BE 00000205
BE 00000206
BE 00000207
BE 00000208
BE 00000209
BE 00000210
BE 00000211
BE 00000212
BE 00000213
BE 00000214
BE 00000215
BE 00000216
BE 00000217
BE 00000218
BE 00000219
BE 00000220
BE 00000221
BE 00000222
BE 00000223
BE 00000224
BE 00000225
BE 00000226
BE 00000227
BE 00000228
BE 00000229
BE 00000230
BE 00000231
BE 00000232
BE 00000233
BE 00000234
BE 00000235
BE 00000236
BE 00000237
BE 00000238
BE 00000239
BE 00000240
BE 00000241
BE 00000242
BE 00000243
BE 00000244
BE 00000245
BE 00000246
BE 00000247
BE 00000248
BE 00000249
BE 00000250
BE 00000251
BE 00000252
BE 00000253
BE 00000254
BE 00000255
BE 00000256
BE 00000257
BE 00000258
BE 00000259
BE 00000260
BE 00000261
BE 00000262
BE 00000263
BE 00000264
BE 00000265
BE 00000266
BE 00000267
BE 00000268
BE 00000269
BE 00000270
BE 00000271
BE 00000272
BE 00000273
BE 00000274
BE 00000275
BE 00000276
BE 00000277
BE 00000278
BE 00000279
BE 00000280
BE 00000281
BE 00000282
BE 00000283
BE 00000284
BE 00000285
BE 00000286
BE 00000287
BE 00000288
BE 00000289
BE 00000290
BE 00000291
BE 00000292
BE 00000293
BE 00000294
BE 00000295
BE 00000296
BE 00000297
BE 00000298
BE 00000299
BE 00000300
BE 00000301
BE 00000302
BE 00000303
BE 00000304
BE 00000305
BE 00000306
BE 00000307
BE 00000308
BE 00000309
BE 00000310
BE 00000311
BE 00000312
BE 00000313
BE 00000314
BE 00000315
BE 00000316
BE 00000317
BE 00000318
BE 00000319
BE 00000320
BE 00000321
BE 00000322
BE 00000323
BE 00000324
BE 00000325
BE 00000326
BE 00000327
BE 00000328
BE 00000329
BE 00000330
BE 00000331
BE 00000332
BE 00000333
BE 00000334
BE 00000335
BE 00000336
BE 00000337
BE 00000338
BE 00000339
BE 00000340
BE 00000341
BE 00000342
BE 00000343
BE 00000344
BE 00000345
BE 00000346
BE 00000347
BE 00000348
BE 00000349
BE 00000350
BE 00000351
BE 00000352
BE 00000353
BE 00000354
BE 00000355
BE 00000356
BE 00000357
BE 00000358
BE 00000359
BE 00000360
BE 00000361
BE 00000362
BE 00000363
BE 00000364
BE 00000365
BE 00000366
BE 00000367
BE 00000368
BE 00000369
BE 00000370
BE 00000371
BE 00000372
BE 00000373
BE 00000374
BE 00000375
BE 00000376
BE 00000377
BE 00000378
BE 00000379
BE 00000380
BE 00000381
BE 00000382
BE 00000383
BE 00000384
BE 00000385
BE 00000386
BE 00000387
BE 00000388
BE 00000389
BE 00000390
BE 00000391
BE 00000392
BE 00000393
BE 00000394
BE 00000395
BE 00000396
BE 00000397
BE 00000398
BE 00000399
BE 00000400
BE 00000401
BE 00000402
BE 00000403
BE 00000404
BE 00000405
BE 00000406
BE 00000407
BE 00000408
BE 00000409
BE 00000410
BE 00000411
BE 00000412
BE 00000413
BE 00000414
BE 00000415
BE 00000416
BE 00000417
BE 00000418
BE 00000419
BE 00000420
BE 00000421
BE 00000422
BE 00000423
BE 00000424
BE 00000425
BE 00000426
BE 00000427
BE 00000428
BE 00000429
BE 00000430
BE 00000431
BE 00000432
BE 00000433
BE 00000434
BE 00000435
BE 00000436
BE 00000437
BE 00000438
BE 00000439
BE 00000440
BE 00000441
BE 00000442
BE 00000443
BE 00000444
BE 00000445
BE 00000446
BE 00000447
BE 00000448
BE 00000449
BE 00000450
BE 00000451
BE 00000452
BE 00000453
BE 00000454
BE 00000455
BE 00000456
BE 00000457
BE 00000458
BE 00000459
BE 00000460
BE 00000461
BE 00000462
BE 00000463
BE 00000464
BE 00000465
BE 00000466
BE 00000467
BE 00000468
BE 00000469
BE 00000470
BE 00000471
BE 00000472
BE 00000473
BE 00000474
BE 00000475
BE 00000476
BE 00000477
BE 00000478
BE 00000479
BE 00000480
BE 00000481
BE 00000482
BE 00000483
BE 00000484
BE 00000485
BE 00000486
BE 00000487
BE 00000488
BE 00000489
BE 00000490
BE 00000491
BE 00000492
BE 00000493
BE 00000494
BE 00000495
BE 00000496
BE 00000497
BE 00000498
BE 00000499
BE 00000500
BE 00000501
BE 00000502
BE 00000503
BE 00000504
BE 00000505
BE 00000506
BE 00000507
BE 00000508
BE 00000509
BE 00000510
BE 00000511
BE 00000512
BE 00000513
BE 00000514
BE 00000515
BE 00000516
BE 00000517
BE 00000518
BE 00000519
BE 00000520
BE 00000521
BE 00000522
BE 00000523
BE 00000524
BE 00000525
BE 00000526
BE 00000527
BE 00000528
BE 00000529
BE 00000530
BE 00000531
BE 00000532
BE 00000533
BE 00000534
BE 00000535
BE 00000536
BE 00000537
BE 00000538
BE 00000539
BE 00000540
BE 00000541
BE 00000542
BE 00000543
BE 00000544
BE 00000545
BE 00000546
BE 00000547
BE 00000548
BE 00000549
BE 00000550
BE 00000551
BE 00000552
BE 00000553
BE 00000554
BE 00000555
BE 00000556
BE 00000557
BE 00000558
BE 00000559
BE 00000560
BE 00000561
BE 00000562
BE 00000563
BE 00000564
BE 00000565
BE 00000566
BE 00000567
BE 00000568
BE 00000569
BE 00000570
BE 00000571
BE 00000572
BE 00000573
BE 00000574
BE 00000575
BE 00000576
BE 00000577
BE 00000578
BE 00000579
BE 00000580
BE 00000581
BE 00000582
BE 00000583
BE 00000584
BE 00000585
BE 00000586
BE 00000587
BE 00000588
BE 00000589
BE 00000590
BE 00000591
BE 00000592
BE 00000593
BE 00000594
BE 00000595
BE 00000596
BE 00000597
BE 00000598
BE 00000599
BE 00000600
BE 00000601
BE 00000602
BE 00000603
BE 00000604
BE 00000605
BE 00000606
BE 00000607
BE 00000608
BE 00000609
BE 00000610
BE 00000611
BE 00000612
BE 00000613
BE 00000614
BE 00000615
BE 00000616
BE 00000617
BE 00000618
BE 00000619
BE 00000620
BE 00000621
BE 00000622
BE 00000623
BE 00000624
BE 00000625
BE 00000626
BE 00000627
BE 00000628
BE 00000629
BE 00000630
BE 00000631
BE 00000632
BE 00000633
BE 00000634
BE 00000635
BE 00000636
BE 00000637
BE 00000638
BE 00000639
BE 00000640
BE 00000641
BE 00000642
BE 00000643
BE 00000644
BE 00000645
BE 00000646
BE 00000647
BE 00000648
BE 00000649
BE 00000650
BE 00000651
BE 00000652
BE 00000653
BE 00000654
BE 00000655
BE 00000656
BE 00000657
BE 00000658
BE 00000659
BE 00000660
BE 00000661
BE 00000662
BE 00000663
BE 00000664
BE 00000665
BE 00000666
BE 00000667
BE 00000668
BE 00000669
BE 00000670
BE 00000671
BE 00000672
BE 00000673
BE 00000674
BE 00000675
BE 00000676
BE 00000677
BE 00000678
BE 00000679
BE 00000680
BE 00000681
BE 00000682
BE 00000683
BE 00000684
BE 00000685
BE 00000686
BE 00000687
BE 00000688
BE 00000689
BE 00000690
BE 00000691
BE 00000692
BE 00000693
BE 00000694
BE 00000695
BE 00000696
BE 00000697
BE 00000698
BE 00000699
BE 00000700
BE 00000701
BE 00000702
BE 00000703
BE 00000704
BE 00000705
BE 00000706
BE 00000707
BE 00000708
BE 00000709
BE 00000710
BE 00000711
BE 00000712
BE 00000713
BE 00000714
BE 00000715
BE 00000716
BE 00000717
BE 00000718
BE 00000719
BE 00000720
BE 00000721
BE 00000722
BE 00000723
BE 00000724
BE 00000725
BE 00000726
BE 00000727
BE 00000728
BE 00000729
BE 00000730
BE 00000731
BE 00000732
BE 00000733
BE 00000734
BE 00000735
BE 00000736
BE 00000737
BE 00000738
BE 00000739
BE 00000740
BE 00000741
BE 00000742
BE 00000743
BE 00000744
BE 00000745
BE 00000746
BE 00000747
BE 00000748
BE 00000749
BE 00000750
BE 00000751
BE 00000752
BE 00000753
BE 00000754
BE 00000755
BE 00000756
BE 00000757
BE 00000758
BE 00000759
BE 00000760
BE 00000761
BE 00000762
BE 00000763
BE 00000764
BE 00000765
BE 00000766
BE 00000767
BE 00000768
BE 00000769
BE 00000770
BE 00000771
BE 00000772
BE 00000773
BE 00000774
BE 00000775
BE 00000776
BE 00000777
BE 00000778
BE 00000779
BE 00000780
BE 00000781
BE 00000782
BE 00000783
BE 00000784
BE 00000785
BE 00000786
BE 00000787
BE 00000788
BE 00000789
BE 00000790
BE 00000791
BE 00000792
BE 00000793
BE 00000794
BE 00000795
BE 00000796
BE 00000797
BE 00000798
BE 00000799
BE 00000800
BE 00000801
BE 00000802
BE 00000803
BE 00000804
BE 00000805
BE 00000806
BE 00000807
BE 00000808
BE 00000809
BE 00000810
BE 00000811
BE 00000812
BE 00000813
BE 00000814
BE 00000815
BE 00000816
BE 00000817
BE 00000818
BE 00000819
BE 00000820
BE 00000821
BE 00000822
BE 00000823
BE 00000824
BE 00000825
BE 00000826
BE 00000827
BE 00000828
BE 00000829
BE 00000830
BE 00000831
BE 00000832
BE 00000833
BE 00000834
BE 00000835
BE 00000836
BE 00000837
BE 00000838
BE 00000839
BE 00000840
BE 00000841
BE 00000842
BE 00000843
BE 00000844
BE 00000845
BE 00000846
BE 00000847
BE 00000848
BE 00000849
BE 00000850
BE 00000851
BE 00000852
BE 00000853
BE 00000854
BE 00000855
BE 00000856
BE 00000857
BE 00000858
BE 00000859
BE 00000860
BE 00000861
BE 00000862
BE 00000863
BE 00000864
BE 00000865
BE 00000866
BE 00000867
BE 00000868
BE 00000869
BE 00000870
BE 00000871
BE 00000872
BE 00000873
BE 00000874
BE 00000875
BE 00000876
BE 00000877
BE 00000878
BE 00000879
BE 00000880
BE 00000881
BE 00000882
BE 00000883
BE 00000884
BE 00000885
BE 00000886
BE 00000887
BE 00000888
BE 00000889
BE 00000890
BE 00000891
BE 00000892
BE 00000893
BE 00000894
BE 00000895
BE 00000896
BE 00000897
BE 00000898
BE 00000899
BE 00000900
BE 00000901
BE 00000902
BE 00000903
BE 00000904
BE 00000905
BE 00000906
BE 00000907
BE 00000908
BE 00000909
BE 00000910
BE 00000911
BE 00000912
BE 00000913
BE 00000914
BE 00000915
BE 00000916
BE 00000917
BE 00000918
BE 00000919
BE 00000920
BE 00000921
BE 00000922
BE 00000923
BE 00000924
BE 00000925
BE 00000926
BE 00000927
BE 00000928
BE 00000929
BE 00000930
BE 00000931
BE 00000932
BE 00000933
BE 00000934
BE 00000935
BE 00000936
BE 00000937
BE 00000938
BE 00000939
BE 00000940
BE 00000941
BE 00000942
BE 00000943
BE 00000944
BE 00000945
BE 00000946
BE 00000947
BE 00000948
BE 00000949
BE 00000950
BE 00000951
BE 00000952
BE 00000953
BE 00000954
BE 00000955
BE 00000956
BE 00000957
BE 00000958
BE 00000959
BE 00000960
BE 00000961
BE 00000962
BE 00000963
BE 00000964
BE 00000965
BE 00000966
BE 00000967
BE 00000968
BE 00000969
BE 00000970
BE 00000971
BE 00000972
BE 00000973
BE 00000974
BE 00000975
BE 00000976
BE 00000977
BE 00000978
BE 00000979
BE 00000980
BE 00000981
BE 00000982
BE 00000983
BE 00000984
BE 00000985
BE 00000986
BE 00000987
BE 00000988
BE 00000989
BE 00000990
BE 00000991
BE 0
```

SOLUTION TO PRIZE CROSSWORD No.2



Prize crossword winner was Steve Guy of Wexham.

IN THE DUNGEON

by Stricker

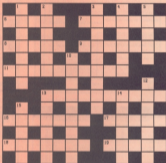


ACE PRIZE CROSSWORD 4

Set by Mike

The first correct entry taken from the postbag wins software worth £25.00. Closing date for entries July 10th.

The ACE crossword is cryptic. The answer might be an anagram, or formed from the end of one word and the beginning of another, or simply another word hinted at by the clue. Most - but not quite all - of the answers are computer-related.



ACROSS

- Language that's plain and simple (6)
- Drive around Northern Ireland to get a system (7)
- Makes a hit with the suit (5)
- Game played by the Man of Venice (7)
- The main strength of a war game from Acropolis (5,2)
- Not mutually exclusive (10)
- Stunt Ed performed as a heater (7)
- Peter's reason is a bit separate (5)
- Not fun to guess in games (7)
- A cool revolutionary software house (5)

DOWN

- The old snail of recompiling - all gone! (7)
- A few bits to bits of (5)
- Grandin's guiding light (5,4)
- Came in to develop silver screen (5)
- Makes a delivery of the game (5)
- Some trials held here annually (8)
- Writing instructions for computer held doing translation (8)
- All home-Optimizing is all there (8)
- Where to shop for memory space (5)

CROSSWORD ENTRY FORM

NAME _____

ADDRESS _____

COMPUTER OWNED _____

PRIZE CROSSWORD 4, ACE, 4 Queen Street, Bath BA1 1BA. Closing date July 10th.

MEGABYTE

SCOTLAND'S PREMIER COMPUTER CENTRE
14 Clarks Square, Town Centre, Dundee, DD9 1BB

SUMMER MAGAZINES IS IN THE AIR AT MEGABYTE
THE SUPER COMPUTER SUPERFUND IS WITH US
IS THIS YOU?

YOU OWN A COMPUTER.

YOU WANT MORE INFORMATION.
YOU WANT AN ADVANTAGE.
YOU WANT TO GET THE MOST FROM YOUR COMPUTER.

WE CAN PROCESSORS, CIPHERS AND SOFTWARE. WE CAN HELP YOU WITH STORAGE PROBLEMS. WE CAN HELP YOU WITH YOUR SOFTWARE. WE CAN HELP YOU WITH YOUR HARDWARE. WE CAN HELP YOU WITH YOUR BUSINESS. WE CAN HELP YOU WITH YOUR LIFE.

OR IS THIS YOU?

YOU WANT A SMALL BUSINESS. YOU WANT TO GROW YOUR BUSINESS. YOU WANT TO TAKE ITS NEXT STEP. YOU WANT TO TAKE IT TO THE NEXT LEVEL. YOU WANT TO TAKE IT TO THE NEXT LEVEL. YOU WANT TO TAKE IT TO THE NEXT LEVEL. YOU WANT TO TAKE IT TO THE NEXT LEVEL.

WHATEVER DESCRIPTION YOU WANT TO USE, THERE IS ONLY ONE COMPUTER.

THE COMMODORE AMIGA 500 SYSTEM

THE AMIGA 5000 COMPUTER
AND MODELS/SOFTWARE ETC.

THE 286X SUPERIOR MONITOR

THE SUPER SOUND SYSTEM

AMIGA TRANSFORMERIC BOARD

APPLICATIONS SOFTWARE ETC.
SERIES 1-10/20/30/40

Special Deal £999.00

MEGABYTE FREE!

SEND ME THE...

SAYS WHAT? I DON'T KNOW WHAT I DON'T KNOW!

SEND ME THE...

SAYS EVERYTHING! I'D LOVE TO KNOW MORE!

YES!

TELEPHONE 031 73288

POOLSWINNER

THE ULTIMATE POOL PREDICTION PROGRAM

- ★ **TRAINING SOFTWARE** - Professional pool training software for instructors and players.
- ★ **FRAGMENTS** - An interactive pool game for Amiga, DOS and Macintosh.
- ★ **PROFESSIONAL** - High quality pool training software for professional players.
- ★ **POOLSIMULATOR** - An interactive pool game for Amiga, DOS and Macintosh.
- ★ **POOLSIMULATOR 2** - An interactive pool game for Amiga, DOS and Macintosh.
- ★ **POOLSIMULATOR 3** - An interactive pool game for Amiga, DOS and Macintosh.
- ★ **POOLSIMULATOR 4** - An interactive pool game for Amiga, DOS and Macintosh.
- ★ **POOLSIMULATOR 5** - An interactive pool game for Amiga, DOS and Macintosh.
- ★ **POOLSIMULATOR 6** - An interactive pool game for Amiga, DOS and Macintosh.
- ★ **POOLSIMULATOR 7** - An interactive pool game for Amiga, DOS and Macintosh.
- ★ **POOLSIMULATOR 8** - An interactive pool game for Amiga, DOS and Macintosh.
- ★ **POOLSIMULATOR 9** - An interactive pool game for Amiga, DOS and Macintosh.
- ★ **POOLSIMULATOR 10** - An interactive pool game for Amiga, DOS and Macintosh.

FRAGEN 808

FRAGEN 808 is a powerful pool training software for Amiga, DOS and Macintosh. It is designed for professional players and provides a comprehensive pool training system.

Price £49.95 (incl. postage)

Price £14.95 (incl. postage)

Price £14.95 (incl. postage)

Price £14.95 (incl. postage)

Price £14.95 (incl. postage)

Price £14.95 (incl. postage)

Price £14.95 (incl. postage)

Price £14.95 (incl. postage)

Price £14.95 (incl. postage)

Price £14.95 (incl. postage)

Price £14.95 (incl. postage)

Price £14.95 (incl. postage)

Price £14.95 (incl. postage)

Price £14.95 (incl. postage)

Price £14.95 (incl. postage)

Price £14.95 (incl. postage)

Price £14.95 (incl. postage)

Price £14.95 (incl. postage)

MAIL-SOFT

SIMPLY THE CHEAPEST MAIL ORDER COMPANY

Product Name	Price	Product Name	Price
Amiga 5000 Computer	£1299.00	Amiga 5000 Keyboard	£29.99
Amiga 5000 Mouse	£29.99	Amiga 5000 Joystick	£29.99
Amiga 5000 Printer	£49.99	Amiga 5000 Modem	£49.99
Amiga 5000 Hard Drive	£99.99	Amiga 5000 CD-ROM Drive	£99.99
Amiga 5000 Floppy Disk	£14.99	Amiga 5000 3.5" Disk	£14.99
Amiga 5000 5.25" Disk	£14.99	Amiga 5000 8" Disk	£14.99
Amiga 5000 10" Disk	£14.99	Amiga 5000 12" Disk	£14.99
Amiga 5000 14" Disk	£14.99	Amiga 5000 16" Disk	£14.99
Amiga 5000 18" Disk	£14.99	Amiga 5000 20" Disk	£14.99
Amiga 5000 22" Disk	£14.99	Amiga 5000 24" Disk	£14.99
Amiga 5000 26" Disk	£14.99	Amiga 5000 28" Disk	£14.99
Amiga 5000 30" Disk	£14.99	Amiga 5000 32" Disk	£14.99
Amiga 5000 34" Disk	£14.99	Amiga 5000 36" Disk	£14.99
Amiga 5000 38" Disk	£14.99	Amiga 5000 40" Disk	£14.99
Amiga 5000 42" Disk	£14.99	Amiga 5000 44" Disk	£14.99
Amiga 5000 46" Disk	£14.99	Amiga 5000 48" Disk	£14.99
Amiga 5000 50" Disk	£14.99	Amiga 5000 52" Disk	£14.99
Amiga 5000 54" Disk	£14.99	Amiga 5000 56" Disk	£14.99
Amiga 5000 58" Disk	£14.99	Amiga 5000 60" Disk	£14.99
Amiga 5000 62" Disk	£14.99	Amiga 5000 64" Disk	£14.99
Amiga 5000 66" Disk	£14.99	Amiga 5000 68" Disk	£14.99
Amiga 5000 70" Disk	£14.99	Amiga 5000 72" Disk	£14.99
Amiga 5000 74" Disk	£14.99	Amiga 5000 76" Disk	£14.99
Amiga 5000 78" Disk	£14.99	Amiga 5000 80" Disk	£14.99
Amiga 5000 82" Disk	£14.99	Amiga 5000 84" Disk	£14.99
Amiga 5000 86" Disk	£14.99	Amiga 5000 88" Disk	£14.99
Amiga 5000 90" Disk	£14.99	Amiga 5000 92" Disk	£14.99
Amiga 5000 94" Disk	£14.99	Amiga 5000 96" Disk	£14.99
Amiga 5000 98" Disk	£14.99	Amiga 5000 100" Disk	£14.99

Address: MAIL-SOFT, 1000 P.O. BOX 488, LONDON N15 4AP

TRIANGLE

THE AMIGA/ATARI
MUSIC
AND MIDI
SPECIALISTS

NEW PRODUCT NEWS
DR.T MUSIC SOFTWARE

Introducing Multi computer software for the AMIGADOS. These new products are for the most powerful music digital recording system for Amiga & Atari.

THESE ARE THE TRUE DIGITAL WORKSTATIONS!

- DR.T MUSIC 1.0**
A 4-track digital recorder with 4 P.B. channels (including two stereo, one bass and one function). Transients and sustain. Super-contrast and touch, multi-track.
- DR.T MUSIC 2.0**
A 4-track digital recorder with 4 P.B. channels (including two stereo, one bass and one function). Transients and sustain. Super-contrast and touch, multi-track.
- DR.T MUSIC 3.0**
A 4-track digital recorder with 4 P.B. channels (including two stereo, one bass and one function). Transients and sustain. Super-contrast and touch, multi-track.
- DR.T MUSIC 4.0**
A 4-track digital recorder with 4 P.B. channels (including two stereo, one bass and one function). Transients and sustain. Super-contrast and touch, multi-track.
- DR.T MUSIC 5.0**
A 4-track digital recorder with 4 P.B. channels (including two stereo, one bass and one function). Transients and sustain. Super-contrast and touch, multi-track.

"ATARI"

Looking for more in our amazing Pro-24 (3.1) - Last Generation, when you buy Pro-24 (3.1) - Last Generation.

"MORE MIDI"

Comes with MIDI and music software (including Pro-24 (3.1) - Last Generation) and our amazing Pro-24 (3.1) - Last Generation.

"TRIANGLE RGB VIDEO ENCODER"

Expand your graphics into video.

TRIANGLE TELEVISION
100 BROOKWOOD ROAD,
SOUTHFIELD, LONDON SW18 2SD
TEL: 01-877 102875/876/878

(Prices on complete systems)

THE BLITTER END...



Johnny Dumtrie looks as if he's appearing in *Blitter End* without a hat or - what is a shame - 'as he looks' when the *Blitter End* computer editors get

under the rather unconvincing name of Conns, but even ACE's hardened investigative journalists were shocked to find that the brand had reached Britain. Gyrax's coin-op sequel has been showing up in *Blitter End* kiosks over the last few weeks, but all pretence of normality is gone - even here, the machines are called Super Conns. Rumours about the 'feminists government' stockpiling Gyrax units are probably premature.

SUMMERTIME COPIES

Misses fans may have been twiddling their thumbs through the spring, but last issue certainly gave them something to cheer on. Page 76's map of the Duxford Motor Hall of Champions was, well, useful, but unfortunately the key to it wasn't. Handy a missive took - it was enough to figure out what's where - but it still saves a healthy 80% on the ACE's expense. Another top-up worthy of note can be found on page 71, where slight colouration problems mean that (a) Charlie Chaplin is black and white and red all over, while (b) Earthlight's 'low panel' in the background ends up a rather lurid magenta. Heck, cosmic pollution hasn't got that bad yet, has it? ■

EAR TROUBLE

Budget heroics Code Masters sponsor Johnny Dumtrie, a former racing enthusiast now driving for the Silk Cut Jaguar team, so when Johnny was riding at 130mph recently the *Blitter End* brothers threw a last throw for the computer press. ACE's man on the spot was demon stateside Andy Smith, a sucker for anything on four wheels. Andy is native of Freetown, caught a lift to 130mph off local programming at The Oliver Twins. The Olivers have clearly done very nicely off Code Masters titles like Grand Prix Simulator - they've just bought a flash new Japanese car, pop-up headlights and all - but that didn't stop them charging Andy for his share of the petrol. Quite right, we say, as Johnny Dumtrie proved when he ran out of just 207 laps through the 210-lap track, you really start to be careful about fuel economy.

THE MIND BOGGLES

After a respectful break last month for our American issue, it's back to the mystifying translations of Gyraxgate. Centre stage are Konami, creators of the complex Rambo-styled Gyrax. Regular readers of the *Blitter End* will know that Nintendo console cartridges of Gyrax sell in the States, but even ACE's hardened investigative journalists were shocked to find that the brand had reached Britain. Gyrax's coin-op sequel has been showing up in *Blitter End* kiosks over the last few weeks, but all pretence of normality is gone - even here, the machines are called Super Conns. Rumours about the 'feminists government' stockpiling Gyrax units are probably premature.

SATURDAY NIGHT AT THE MOVIES...

After you've savoured the last archive letters (is that even if you still think out loud), the latest blockbuster and cinema gems (imagine just one with a sequel on their face) might just be James Bond from London, Dr Robert's Bayler from Tibbidity in parking P Degreee from Henry Co Green. You see, these lucky, lucky people were the winners of the ACE Cinema's Three Scoops competition in issue 1. They were the Scoop 1 was Gary, Scoop 2 was Mike and Scoop 3 was Larry and now they each scoop 1 free cinema ticket! Doug Peterson from Dunstable and Daniel Malwood from London were the winners up and both received a special Cinema's good.

Table of winners, keep checking our MSB card number. These lucky people have already won some fabulous prizes.

J.F. Bates, Middleburgh (No 200) in issue 7 wins a year's subscription to ACE. B. Pennington, Huddersfield (No 2000) in issue 7 wins 120 of software. G. Tomlin, Isle of Man (No 2000) in issue 7 wins 120 of software. Alan Roberts, Bradford (No 400) in issue 7 wins 120 of software. Ian Patten, Staines (No 400) in issue 7 wins 120 of software. Graham Ray, Bradford (No 400) in issue 7 wins 120 of software. Andrew Roberts, Farnham (No 500) in issue 8 wins a year's subscription to ACE. Michael Sautter, Copenhagen (No 500) in issue 8 wins 120 of software. M.B. Stark, London (No 700) in issue 8 wins 120 of software. M.J. Batten, London (No 700) in issue 8 wins 120 of software. Lyndon Nelson, Exeter (No 1400) in issue 8 wins a year's subscription to ACE. Michael Scott, London (No 1600) in issue 8 wins a year's subscription to ACE.

Keep checking your ACE card - what'll all get loads of the juicy goodness to give away!

ADVERTISERS' INDEX					
Artivision	276-5, 51, 84	Hammerhead	118	Shoshana	118
Atari	29-29	Hexwell	112	Shovercast	121
Bytebeat	110	Jade	84	Silvia Shop	47
CEB	118	Johns Computer Store	120	Software Express	111
Castrian	81	K&J	80	Torget	100
Debit	24-24	Light Speed	110	Timesoft	100
D & H	73	Mail-Cards	120	Triangle	120
Dynamix	18	Mail Soft	120	TRE Computer	80
Everham	114	Megabyte	120	Timesoft	80
Express Music	86	Megabyte	120	UK Soft	80B, 10-11, 20, 27, 82, 80
Express Music	121	Oricon	100, 8-7, 20, 26, 40, 40	Verbitronics	110
Fordist	20, 52	Pitman	80	WMO	117
Gal	112	SBG	118	W.A.S.E.	117
Granada	15, 18, 40	Sales	120		



AN INVITATION TO JOIN THE BEST

You could be part of the team that creates the blockbusters.

You could be part of the program development force which has won commendations and acclaim from the computer industry.

You could be the name featured and revered as creator in the national reviews.

You could earn the respect and security that goes with being part of OCEAN –
The Brand Name in Entertainment Software

Make your mark NOW – if you're accomplished in coding for Z-80, 6502, 68000, or 8086 microprocessors, or have experience in the field of computer graphics/animation then write to us and we will quickly arrange an interview.

Get the invitation...

It's up to you to rise to the challenge ... and if you fit the bill – the rewards will speak for themselves.

ocean

Write at once in confidence to:
Gary Tracey
Software Development
Ocean Software Limited
6 Central Street
Manchester M2 5HS

SMASHING IT'S WAY TOWARDS YOU!



Based on Sega's superb Halls of Katano coin op game you must free those held captive by the great Satan, BARROS, himself. Smash down the doors and explore the maze of halls and passageways that hold the key to extra energy and speed. Release those held captive behind vast mirrors and use yourself transform into an invincible fighting warrior. Watch out for the deadly henchmen, avoid the fireball hurling witches punch the fire breathing deer's head and watch your enemies disappear. Alone in battle you must enter the mysterious and supernatural world of Katano. DETERMINATION. DEFIANCE. DESTRUCTION... THAT'S...



DISLOCATOR

Out of the arcade into the computer... a fury of havoc and destruction straight from the Halls of Katano.

SEGA
SEGA OF AMERICA, INC.
1633 RIVERSIDE DRIVE
IRVING, TEXAS 75038
TELEPHONE (214) 346-5000
FAX (214) 346-5001

IBM PC/XT \$19.99, \$14.99; Spectrum \$19.99, \$14.99;
Amstrad \$19.99, \$14.99; Next \$19.99

U.S. Retail List
\$19.99 (Suggested Price)
©1989 Sega of America, Inc.
All Rights Reserved

