

Issue 12 • Jan 28 1989

Only 48p!

The sinister new breed of hacker - page 6

NEW COMPUTER EXPRESS

First news, first reviews - every week



How a PC1512 changed my life

- page 10



KNOW YOUR RIGHTS

The Express guide to being a smart computer shopper - page 17

BUNDLE BONANZA

Atari ST
PC
Amiga
Spectrum
C64
CPC
PCW
QL
BBC
MSX

Special sections - pages 44-51

Major new deals from Commodore, Atari and Amstrad



ST • page 5
AMIGA • page 3
PPC • page 2



THE FIRMS THAT JACK BUILT

The remarkable story of Jack Tramiel: from Auschwitz to Atari - page 23

Battle of the BASICS

GFA and HiSoft fight it out on the Amiga - page 20

SUPER HANG-ON



Another great conversion for the Amiga

page 28

Data protection for soccer ID info

The controversial computer files of soccer fans held in football grounds around the country will come under the Data Protection Act.

All spectators will thus be allowed to see the information on them which is being held. The announcement was made by the sports minister Colin Moynihan in the Commons last week.

The football club's computer will only say whether or not a fan is banned from the ground. It will not give reasons or criminal records. The Police, though, will be able to check the central computer.

Moynihan told the Commons: "There was nothing requiring the scheme to be subject to the act, but I firmly believe in the civil liberties argument."



• Moynihan: Civil liberties

FREE MONITOR FOR AMSTRAD PPC

Amstrad has decided to bundle a free monitor with its portable computer, the PPC.

The offer starts this week and will run through to the end of February. However, it will only affect buyers of the double disk drive versions - Amstrad feels that single drive machines are so cheap there is no room for freebies.

Buyers are being offered a 12 inch mono monitor worth £100. The prices of the 520K and 640K machines will remain at £549 and £649 respectively. The PPC's entry level price is £399.

"We've built up market leadership in the portable sector," said Amstrad's Malcolm Miller. "Now we want to expand the market again with a good value proposition." He claimed that consumers had asked for a proper monitor which could be used at home or in the office.

The theory is that portables are really used in only two locations with the machine being lugged continuously from one to the other. If so, Amstrad argues, a monitor in one of those sites would be a bonus.



• PPC: Monitor freebie

Many have earmarked Amstrad's screen display as being the worst aspect of the machine.

Amstrad boasts that it has

established a firm grip on the portable sector since the PPC was launched a year ago. Market research firm Romtec puts its share at 34 per cent. But Amstrad readily admits that the market is not yet a terrifically big one.

One drawback for the bundle is that once the PPC is connected to an external monitor it cannot run business graphics. The portable's LCD screen is

accessed through a CGA adaptor whilst the mono monitor will run through an MDA adaptor which won't run graphics.

Cheap Z88s at Comet

Those punters who are looking to pick up a portable but don't fancy Amstrad's offering should consider dashing over to Comet.

The electrical chain is clearing out old stocks of Cambridge Computer's Z88 and is selling the machine at £150 - £100 lower than the normal price.

Comet admits that many of these will be display machines and claims that "stocks won't last long". Once these have all been sold the new £299 Z88 pack will be whisked onto the shelves.



• Z88: £100 off

Ah so! I am a crever computer

A computer has been developed by Matsushita which can hear a sentence in Japanese and then speak it in English. The prototype has been put together in conjunction with Carnegie Mellon University in the US. It is claimed to be the world's first computer to understand whole phrases that it has not already been pre-programmed to recognise.

Offensive US Gold advert hammered

Games publisher US Gold has been rapped by the Advertising Standards Authority for its portrayal of women in a publicity campaign.

The ASA received eight complaints about US Gold's ad for *Psycho Pigs UXB*. When the ad was shown in various computer magazines last summer it prompted industry protest - it has since been pulled.

The ad depicted two young men looking up at a poster hoarding of a scantily clad young woman in seductive pose. She was holding the game. The ad was captioned "I know



which one I'd rather play with", with a reply: "Yes, but have you seen the reviews for *Psycho Pigs UXB*."

The people who complained all considered the ad to be "offensive and exploitative". The ASA's verdict is accompanied by a condemnation of the widespread use of semi-nude models to sell products. The Authority reminds advertisers to consider those people who are offended by the "gratuitous portrayal of semi-naked woman as an attention getting device."

US Gold's Tim Chaney explained to *Express*: "It was a

funny ad and the intention was to be humorous. Obviously we're sorry if anyone was offended."

However, insiders suggest that US Gold is surprised by the response and that the firm considers it is simply ahead of its time. Apparently, the firm privately feels the ad would be considered normal in European computer mags and that it had simply tried to bring successful continental ploys to the UK.

Despite the advertisement's implication that *Psycho Pigs*, had received good reviews, the game was almost universally panned by computer magazines.

SIXPACK AMIGA OFFERS BLAST OUT

The mystery as to exactly which software is being bundled with the Amiga came to light last week with announcements of a total of six offers.

Because of the intricate machinations of the computer trade the matter is a rather complicated one. In effect normal dealers have a choice of three main packs. Any dealers which trade with computer supplier Microdealer will have the choice of a further three. These dealers will generally display Microdealer stickers on their windows.

Whatever the background Amiga buyers are being advised to shop around since the bundles differ. Also, whilst dealers will always want to be competitive on price there are bound to be differences as confusion sets in. No recommendation is being made to dealers to up the price of Amigas though.



• A500: SIX DEALS

Whilst this is not being labelled as a Commodore bundle it was the hardware manufacturer which came up with an original list of recommended games (Express 10). In turn suppliers have sealed various deals to obtain other games for the bundles which range in value from £135 to £250. To add to the confusion distributor SDL (linked closely to retail chain Silica Shop) is offering its own bundle of ten games.

Commodore itself will be launching an official bundle within the next few months.

A fistful of offers

Sports Pack - value £135

Champion Basketball
Champion Baseball
Champion Football
Summer Olympiad
Winter Olympiad
Football Manager II

Deluxe Pack - value £190

Four Computer Hits
Football manager II
Starglider II
Rocket Ranger
Garrison
Mega Pack
Platoon

Super Pack -value £225

Barbarians
Arkenoid II
Spitting Image
TerrorPods
Army moves
Terramex
Obliterator
Wizball
International Soccer

Formula 1

Microdealer 1 - value £180
Strike Force Harrier
Garrison I
Garrison II
Sky Chase
Bermuda Project
Fernandez Must Die
Power Struggle
Tetris

Microdealer II - value £250

The same as Microdealer I but also with Photon Paint

Peripheral Pack

Mouse bracket
Disk box
Mouse mat
Ten blank disks
Dust cover
Cheetah joystick
Joystick extender
Head cleaner
Workbench 1.3
DPaint

Dixons boosts PS/2

Dixons has given IBM's fledgling PS/2 range a shot in the arm by selling IBM's range of high end machines at cut down prices.

The Model 30 20 Mb version is down £300 from £1599 to £1299. The twin drive model is down £200 to £799 (or £999 with colour monitor).

"Because the IBM's aren't selling so well we've taken the price down to a level nearer to that of Amstrad's machines," explained a Dixons salesman. "The IBM's are that much better though."



• IBM Model 30: Dixons price cut

World does not end shock

Reports that the much feared 1813 virus would have catastrophic effects on PC owners throughout the country appear to have been greatly exaggerated.

The virus was due to strike on Friday 13th last. Although doom for all computer users had been widely predicted, the world was still intact when Saturday 14th arrived. Virus busting company S&S Enterprises admitted that it spent more time on Friday talking to the press than helping distraught computer users. The virus story appeared in numerous nationals as well as on television.

"The press have gone absolutely potty about it," said S&S's boss Dr Alan Solomon. "It's no big deal - just one of about six viruses that are going around on the PC."

He estimated that about 14 sites

will have been infected throughout the country.

The virus has been lurking in some machines for months, and only comes to life when the micro's internal clock reaches a Friday 13th. Then it springs into action wiping any files which people attempt to run. On subsequent days the computer then runs much slower.

S&S had urged people not to panic saying that the 1813 virus is "very rare" and easily avoided. It markets a £5 program that will look for the virus. Canny users simply re-adjusted their clocks so that Friday 13th never really happened.

Despite S&S's assurances the popular press duly went into mad dog mode. Solomon accepted that the Friday 13th angle had done much to set journos' noses twitching.

CONTENTS

COVER FEATURES

CASEBOOK

Why Richard Challis can't do without his PC 10

EXPRESS SPECIAL

How to be a smart consumer 17

AMIGA BASICS

GFA vs. HiSoft 20

REGULARS

EXPRESS COMMENT 4

CHARTS 5

LETTERS 13

MICROBIOGRAPHY

The battles of Jack Tramiel 23

BEGINNERS

What you can do with a modem 26

GAMES 29-31

Life and Death, Super Hang-on, Hybris, Advanced Rugby Simulator, Hostages, Soldier of Light, Question of Sport, Mini Golf, Dragon Ninja, Grand Prix Circuit

RELEASE SCHEDULE 35

GAMES PREVIEWS 37

Captain Fizz, Neuromancer, Thunderbirds, Running Man, Timescanner, Space Harrier

TECH TIPS 39

VOUCHERS 41

YOUR MACHINE

ST 44

PC 45

Amiga 46

Spectrum 47

Commodore 64 48

CPC 49

PCW, QL 50

BBC, MSX 51

SUBS 52

PSST... 54

EDITOR **Rob Ainsley** • CONTRIBUTING EDITOR **Peter Worlock** • NEWS EDITOR **Colin Campbell** • REVIEWS EDITOR **Andy Storer** • STAFF WRITER **Rik Haynes** • PRODUCTION EDITOR **Rod Lawton** • ART EDITOR **Julia O'Shea** • ART ASSISTANT **Harriet Athay** • ADVERTISEMENT MANAGER **Mark Salmon** • AD EXECUTIVES **Jennie Evans, Andy Smith** • AD TYPESETTING **Terry Turner** • PUBLISHER **Greg Ingham**

© Future Publishing Ltd • 4 Queen St, Bath, BA1 1EJ • Tel: 0225 446034 • Fax: 0225 446019

It's Big Money

IBM is so huge that it makes £10,000 every minute - or £170 a second. This compares with poor old Amstrad boss Alan Sugar who only manages to make a fiver every second. IBM's latest profits were up 12 per cent for the last quarter to £1.33 billion.

COMMENT

Going a bundle?

Critics of Amstrad's PPC say it stands for 'luggable personal computer' but it's still a convenient way of taking your work from the PC at the office to the hotel room or your study in the front seat of your Sierra.

Like a doctor's surgery, the screen is nice and big but seems designed to conceal more than it reveals with its dim grey-on-grey display.

Now comes Amstrad's bundled monitor, worth £100, with every twin drive PPC. And very nice too: most people only use their PPC in two or three locations, so now you can have your PPC as the link between your PC at work and your monitor at home.

The fact that the monitor emulates MDA and so can't cope with any graphics is being carefully underplayed. But the very fact that Amstrad is using a monitor as a carrot to potential PPC buyers seems an admission of the awful quality of the PPC display.

Over at the Amiga vs. ST match, the bundling of games with the Amiga will no doubt attract quite a few more buyers. Meanwhile Atari's new Mega ST is set not only to bridge the gap between the 1040 and the Mega 2 models, it is also being aimed firmly at the serious end of the market - hence the talk of bundled word processing software with the new machine.

The concept of the Amiga as a graphics workstation and the ST as a MIDI unit, and both as primarily games and leisure machines, is surely due for a change. And in the eternal Commodore-Atari war, Atari has again taken the initiative in the battle for the Serious User.

Foul play

The new scheme forcing computerisation of fans upon football clubs will surely kill off many of the smaller outfits. Apart from the cost, many of these clubs depend on occasional supporters to pad out their gates - supporters who won't get round to getting registered and will stay home to listen to the game on the radio.

And, at the end of the day, how much hooliganism will this actually prevent? Won't it just push the yobbos outside the grounds, where they do most of their damage anyway?

Such blind belief in the magic of 'computerisation' is insidious and dangerous. It will ruin Saturday afternoons for hundreds of thousands of casual fans while doing nothing to deter those responsible for the problems. English clubs look as far as ever from getting back into European competition.

In for a pound...

Budgeteer Code Masters has finally abandoned selling games at £1.99.

Last November it began selling new budget titles at £2.99 but the old games stayed at the old price.

Now though oldies such as BMX Simulator and Grand Prix Simulator will cost £2.99.

I SINCLAIR THEREFORE IBM

Sir Clive Sinclair's Cambridge Computer is working on an IBM PC compatible portable computer.

The firm is already in the portable market with the A4 sized Z88. However, that is not PC compatible - users who wish to transfer work done on the move to their PC must link up using cables. Cambridge itself is not prepared to comment on the matter and is clearly disturbed that the news has leaked out.

"We'd prefer to be our own conductor of when announcements of new products are made," said the firm's Paul Streeter. "New products are always a delicate matter."

He added: "You can rest assured that whatever it is, it will be innovative." Streeter was keen to stress that any new launch would not mean the demise of the Z88. "We're definitely not intending to replace the Z88. People tend to



• Sinclair: "Innovative" IBM compatible

misconstrue these things." Cambridge is worried that this news will damage sales of the established machine.

Citizen is manufacturing a 3.5 inch disk drive for the machine as part of a special deal: That firm, though, refuses to discuss any deals of this nature.

As yet it is not known when the machine will arrive. Industry pundits, though, are suggesting that autumn will see the arrival of Sinclair's PC portable.

Games console planned by secretive Epyx

A new games console is being secretly developed by US software giant Epyx.

Details of the machine are virtually non-existent and Epyx is refusing to comment on the matter. However, speculation is growing that it will be a low cost hand held affair.

Epyx president Gil Freeman refused to be drawn on the subject. "I cannot confirm any rumours you may have heard," he said. "We are developing new hardware but if we launch it later this year and it turns out to be a solar powered flashlight you're going to look pretty stupid."

Trusted trade customers were apparently given a sneak preview of the machine behind closed doors at the recent Consumer Electronics Show in Las Vegas.

The likelihood is that any such console will be launched later this year and could be available here soon after.

Wizball virus worries Ten Star bundle buyers

A virus has appeared on one of the games included in the Amiga Ten Star games bundle.

It emerged last week that some copies of Wizball - which is sold as part of the ten game pack - had been infected during duplication. Computer supplier SDL - which sells the bundle to dealers around the country - assured Express that the problem has been largely resolved.

SDL claims that the Byte Bandit virus had been accidentally transferred to Wizball when the disks were duplicated on Christmas Eve. It was found

two days later and all the disks were apparently "re-duped".

However, SDL admits that a few slipped out.

"Of all the Ten Star packs out there I would imagine that the numbers of infected Wizballs are negligible," commented SDL's Paul Ellis. "There wouldn't be any but because of all the Christmas, as rush a few sneaked out."

Ellis said that any infected Wizballs would be replaced



• Wizball: Ten Star problem

providing Ten Star buyers are "absolutely sure" they have the virus. SDL's address is SDL UK, Unit 10, Ruxley Corner Industrial Estate, Sidcup Bypass, Sidcup, Kent, DA14 4BR.

Mindware loses its way in Labyrinth saga

The development of Telecomsoft's upcoming adventure epic *Lasers and Labrynth* has ground to a halt.

The development team responsible Mindware has been taken off the project and, according to the firm's agent, has "ceased trading". No

decision has yet been made as to what will happen to the game but it is way behind schedule. It was due to be launched in late summer

Mindware's agent Marjacq Micro is clearly furious with the developers' handling of the project. "We knew they were

having difficulties and that deadlines were slipping so we got onto them," said the firm's Jacqui Lyons. "Then they just said they couldn't finish it. I lost my rag because they took it so casually. Kind of like cancelling a dinner engagement."

Mindware was previously responsible for *Tracker*. Neither of the firm's directors were available for comment last week.

Telecomsoft is likely to have forwarded money to Mindware - the firm is yet to decide its course of action.

ATARI PREPARES NEW MEGA ST

Atari is planning to introduce a new model ST into its range for the low end business user - and a word processing bundle will appear for the new configuration at Easter.

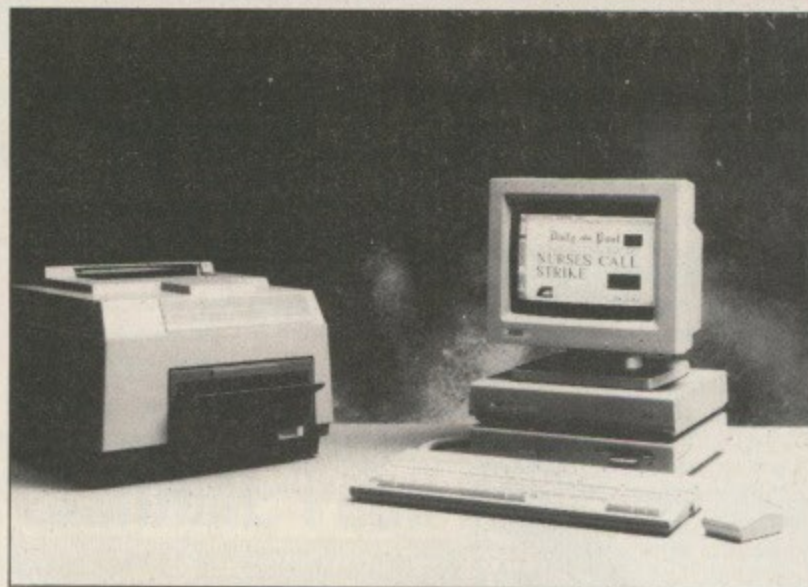
In effect, the new Mega 1 ST will be a 1040 inside a Mega ST casing. The Mega shape is generally regarded as more aesthetic and easier to handle than the 1040's.

The new machine comes with a mono monitor and will be priced at £599 excluding VAT. A 1040 with monitor will also be on offer for £599 including VAT. It costs £499 without monitor.

Atari is viewing this as a reshuffling of its range to suit different users. Instead of being a low end business machine the 1040 is now regarded as a high end home machine: "It's like the 520's elder brother," explained a spokesman.

On the bundle he said: "We want to make it easy for the first time computer user to get a full package rather than having to be confused by jargon."

"When we launched the 520 it was seen as a high end computer for the home. But as time goes on computing becomes cheaper. That's the way the 1040 has gone. In ten years time our Transputer will be a low cost computer for the home."

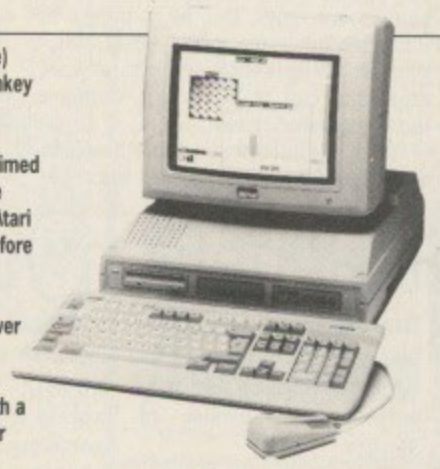


• Mega ST: Low cost 1040 version soon

● In an attempt to promote its PC2000 range (above) Amstrad has become the latest manufacturer to monkey IBM's famous advertising campaign based on the catchline "I think therefore IBM".

Those chaps at Brentwood are splashing out a claimed £7 million on promoting their top machines using the slogan "I think more carefully therefore I Amstrad". Atari has already had a go with the immortal "I think therefore IBM won't get my PC order".

Opinions vary as to how effective, or indeed comprehensible, the new Amstrad line is. One observer commented: "One might have thought that since the hardware manufacturers claim to be offering an alternative to IBM they could manage to come up with a satisfying alternative to IBM's advertising ploys rather than traipsing around in their shadow."



The no-touch joystick arrives

One of the weirdest creations on offer at this month's CES show in America was a revolutionary joystick for the Nintendo.

The box-shaped device is operated by sticking your hands inside and moving them in the desired direction without needing to touch the sides. To 'fire' you simply needed to shake your hands violently for a split second.

The mysterious U-Force caused something of a stir but it isn't likely to reach the UK until next year at the earliest.

City planning by computer

Inner city planners are turning to computers in order to avoid the creation of urban decay and ghettos.

Super advanced programs and computers are being used to analyse the £5 billion re-development of the Kings Cross area. Since it is cut off by so

many railway tracks there looms the danger of a ghetto appearing and mis-use of space.

"We are using a computer to humanise the environment," said Bill Hillier of University College.

"Some of the major problems of the past lie in freezing out natural

patterns of movement and leaving much space empty. It is isolated empty places which are dangerous."

His computer has enabled him to analyse how the area will develop under different environments.

This method is called "space syntax".

Help at hand for baffled PC users



• SuperHelp: Tips on PC software

PC owners still tip-toeing their way through the minefield of business software are being offered a range of help programs.

Costing £40 each the SuperHelp series from Trend Dataspeed contains tips which should help users through the likes of Lotus 1-2-3, WordPerfect 5.0 and dBase III+. Each contains a 'how to' section, reference points, index and overview of terms and features.

More info on 06285 30611.

GAMES TOP TWENTY FULL PRICE

Rank	Game	Developer	Full Price
1	Operation Wolf	Spec, C64, CPC, ST, Amiga	OCEAN
2	Robocop	Spectrum, C64, CPC	OCEAN
3	Afterburner	Spectrum, C64, CPC, ST	ACTIVISION
4	Thunder Blade	Spectrum, C64, CPC, ST, Amiga	US GOLD
5	Double Dragon	Spectrum, C64, ST, Amiga	MELBOURNE HOUSE
6	Batman	Spectrum, C64, CPC, ST, Amiga	OCEAN
7	Double Dragon	Sega console	SEGA
8	Last Ninja 2	Spectrum, C64, CPC	SYSTEM 3
9	Falcon	ST, Amiga	MIRROSOFT
10	Giants	Spec, C64, CPC	US GOLD
11	Football Manager 2	Spectrum, C64, CPC, ST, Amiga, PC	ADDICTIVE
12	Pacmania	Spec, C64, CPC, ST, Amiga, MSX	GRAND SLAM
13	Microprose Soccer	C64	MICROPROSE
14	R-Type	Spectrum, C64, CPC, ST	ELECTRIC DREAMS
15	Lombard RAC Rally	ST, Amiga, PC	MANDARIN
16	Game Set and Match 2	Spectrum, C64, CPC	OCEAN
17	Return Of The Jedi	Spectrum, C64, CPC, ST, Amiga	DOMARK
18	Four Soccer Simulators	Spec, C64, CPC	CODE MASTERS
19	Elite	Spec, C64, CPC, ST, Amiga, PC, BBC, Elec, MSX	FIREBIRD
20	Heroes of the Lance	Spectrum, C64, CPC, ST, Amiga	US GOLD

GAMES TOP TEN BUDGET

Rank	Game	Developer	Budget
1	Bomb Jack	Spectrum, C64, CPC, ST, C16	ENCORE
2	ACE 2	Spectrum, C64, CPC	CASCADE
3	Joe Blade 2	Spectrum, C64, CPC, BBC, C16, Electron	PLAYERS
4	Commando	Spectrum, C64, CPC, BBC, Electron, C16	ENCORE
5	End Zone	Spectrum, C64, CPC	ALTERNATIVE
6	Turbo Boat Simulator	Spec, C64, CPC	FIREBIRD
7	Leaderboard	Spectrum, C64, CPC	KIXX
8	Skooldaze	Spectrum, C64, CPC	ALTERNATIVE
9	ACE	Spectrum, C64, CPC	CASCADE
10	Advanced Pinball Simulator	Spectrum, CPC	CODE MASTERS

COMPILED BY GALLUP

NE - new entry
RE - re-entry

Schofield wins ball



The editor of *The Guardian's* computer page Jack Schofield, a renowned enthusiast of Atari machines, was so keen to get his hands on another ST to add to his collection that he entered *New Computer Express's* Christmas Competition.

Unfortunately, the influential pundit failed to walk away with the desired first prize. He did however manage to come 88th and win a football signed by the Liverpool team.

Schofield commented: "It's going to be jolly difficult getting that into the disk drive of my ST."

Other hopefuls should turn to page 54 for a full list of winners.

Labour saves labour

Neil Kinnock's Labour Party has just splashed out a hefty £270,000 on computerising its headquarters in London.

The Opposition is hoping to use the 14 terminals to store information on the million or so members it hopes to have by the time the next election comes around.

Names, addresses, union information and the like will all be at hand.

Anyone thinking about starting up a computerised major political party might be interested to learn that Labour is using McDonnell Douglas MidBoy hardware with 2Mb memory on each terminal and a 333Mb Winchester hard disk.

BUNGLERS!

New breed of hacker causes chaos

The danger of hacking is spreading from "bespectacled whizz-kids" to ordinary computer enthusiasts - and they are the most dangerous.

That's the view of Professor Henry Beker who will warn delegates at next month's Corporate Computer Security Conference that hacking is becoming easier with the emergence of more sophisticated programs and computer literate users.

Beker, who provides security systems to various Government agencies and advises large companies, says the new breed of hackers is even more dangerous than its predecessors. He claims that amateurs can do far more damage than hardened hackers.

"This is analogous to the break-in at home. The professional may get

away with more items of value but at least he will not destroy your home. A hacker can be disastrous to a corporation."

He adds: "While data has always been vulnerable, the increasing awareness of both the ease with which it can be obtained and manipulated and the fraudulent uses to which it can be put has meant that computer fraud is now reaching epidemic proportions."

Beker will be addressing delegates at the Novotel, Hammersmith from February 14-16. He runs Zergo Limited, which advises companies on ways to beat the hackers.



• Beker: Watch out for the new breed

Magnetic mystery baffles Logotron

Games publisher Logotron is blaming magnetic interference on loading problems with the PC version of *StarRay*.

Although the game was launched in November the reason for the large number of returns has only just come to light after a thorough

examination of the disks. Logotron says that it is currently following some leads in order to track down the source of the magnetic interference.

Logotron's Herbie Wright told *Express* that any punters experiencing difficulties should return the

game to Logotron rather than to any shop. The firm will then send a new version as well as a £5 voucher off any Logotron game. To qualify though the game must be returned by February 10th.

"We're genuinely mystified as to where the interference

came from," said Wright. "We just know that large numbers of the game were in the vicinity of a magnetic field. We're giving away the voucher by way of apology to customers," he said. Logotron's address is: Greyhound House, 16 Greyhound Road, London W6 8NX.

When the chips are down...

American electronics firms are so worried by Japanese domination of the D-RAM chip market that they are planning to form a consortium and fight back.

Manufacturers plan to join forces and so increase production of the vital chips. The shortage of these chips has been the cause of computer prices rising in the past. American hardware manufacturers have long felt that their inability to compete in the chip market bodes ill for their position in all fields of electronics development.

US computer manufacturers appear to be willing to share the cost of setting up a consortium and manufacturing the chips. This, they reason, would leave them less

vulnerable to the volatility of the Japanese D-RAM market which has swung from cheap chips being "dumped" on the US market (and thus forcing US companies to pull out of chip manufacturing) to severe shortages (causing computer companies to lose money and hold back launches of new machines).

The announcement of a consortium comes through the American Electronics Association, which has 3,500 members, and the Semiconductor Industry Association. Talk of an agreement has been circulating through electronics conventions for some time. But insiders say the companies are now willing to take action.

Kalamazoo: familiarity breeds contentment?



Kalamazoo has come up with an invoicing package for the PC which it claims will dispense with old fashioned book-keeping for good.

The £295 program runs with Kalamazoo's established accounting package *One-Up*.

The company hopes that because many small businesses are familiar with Kalamazoo's manual book-keeping system, they will feel less daunted at upgrading to a similar computerised system.

Kalamazoo reckons there are over 100,000 businesses in the country which still operate manual accounting systems. It says that *One-Up* and the associated products "closely resemble the layout of existing manual accounting systems."

520ST-FM SUPER PACK



**1Mb DISK DRIVE
£450 OF SOFTWARE**

ARCADE GAMES

Arkanoid II	Imagine	£19.95
Beyond The Ice Palace	Elite	£19.95
Black Lamp	Firebird	£19.95
Buggy Boy	Elite	£19.95
Chopper X	Mastertronic	£9.99
Ikari Warriors	Elite	£14.95
Marble Madness	Electronic Arts	£24.95
Quadralien	Logotron	£19.95
Ranarama	Hewson Consultants	£19.95
Return To Genesis	Firebird	£19.95
Roadwars	Melbourne House	£19.95
Starquake	Mandarin	£19.95
Test Drive	Electronic Arts	£24.95
Thrust	Firebird	£9.95
Thundercats	Elite	£19.95
Wizball	Ocean	£19.95
Xenon	Melbourne House	£19.95
Zynaps	Hewson Consultants	£19.99

SPORTS SIMULATIONS

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

PRODUCTIVITY SOFTWARE

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

JOYSTICK

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

FREE ATARI BUNDLE VALUE: £458.97

£399
INCLUDING VAT

With SM124 mono monitor: £498 INC VAT

With SC1224 colour monitor: £698 INC VAT

1040ST-FM PROFESSIONAL PACK

NOW WITH TV MODULATOR

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



£499
INCLUDING VAT

With SM124 mono monitor: £598 INC VAT

With SC1224 colour monitor: £798 INC VAT

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

NORMAL RRP: £884.82

LESS DISCOUNT: -£385.82

PROFESSIONAL PACK PRICE: £499.00

2Mb & 4Mb MEGA ST

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



2Mb MEGA ST

£899 INC VAT

+ mono monitor = £998

+ colour monitor = £1198

4Mb MEGA ST

£1199 INC VAT

+ mono monitor = £1298

+ colour monitor = £1498

DTP PageStream £149 +VAT =£171.35

Desktop Publishing (DTP) is one of the fastest growing applications for personal computers. We are pleased to announce a powerful low cost package for the Atari ST called PageStream. PageStream costs only £149 (+VAT=£171.35) and, because it works with an Atari 1040ST and a Seikosha SP-180AI printer, you can be up and running with a complete system for less than £1000. Some of the features of PageStream are listed to the right. If you would like further information on this program, complete and return the coupon below, ticking the 'DTP' box in the corner.

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

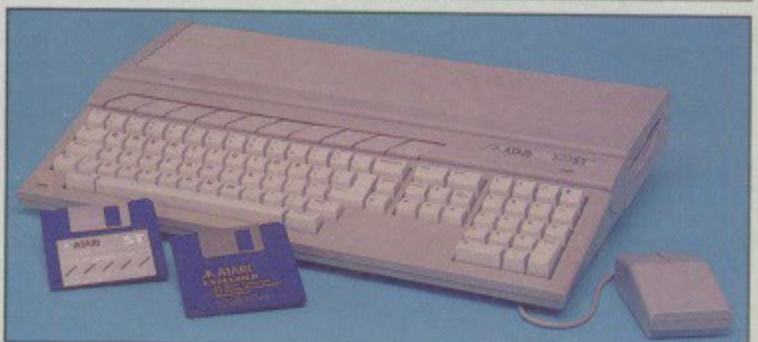


ST COMPUTERS

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

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

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



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

£260 +VAT = £299

ONLY £2.51 PER WEEK
RETURN COUPON FOR DETAILS

+ SM124 mono monitor: £398 INC VAT

+ SC1224 colour monitor: £598 INC VAT

WHY SILICA SHOP?

Before you decide when to buy your new Atari ST computer, we suggest you consider very carefully WHERE you buy it. There are MANY companies who can offer you a computer, a few peripherals and the top ten selling titles. There are FEWER companies who can offer a wide range of products for your computer and expert advice and help when you need it. There is ONLY ONE company who can provide the largest range of Atari ST related products in the UK, a full time Atari ST specialist technical helpline and in-depth after sales support, including free newsletters and brochures delivered to your door for as long as you require after you purchase your computer. That one company is Silica Shop. We have been established in the home computer field for ten years with an annual turnover in excess of £8 million and can now claim to meet our customers requirements with an accuracy and understanding which is second to none. But don't just take our word for it. Complete and return the coupon below for our latest literature and begin to experience the Silica Shop specialist Atari service.

SILICA STARTER KIT: Worth over £200, FREE with every Atari ST computer bought from Silica.
PROFESSIONAL PACK: Free business software with 1040ST-FM and MEGA ST's bought from Silica.
DEDICATED SERVICING: 7 full-time Atari trained staff with years of experience on Atari servicing.
THE FULL STOCK RANGE: All of your Atari requirements from one place.
AFTER SALES SUPPORT: The staff at Silica are dedicated to help you get the best from your ST.
FREE CATALOGUES: Mailed direct to your home as soon as we print them, featuring offers as well as all of the new releases.
FREE OVERNIGHT DELIVERY: On all hardware orders shipped within the UK mainland.
PRICE MATCH PROMISE: We will match competitors on a 'same product same price' basis.
FREE TECHNICAL HELPLINE: Full time team of Atari technical experts always at your service.

FREE SILICA STARTER KIT WORTH OVER £200

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

DO YOU OWN AN ATARI ST?

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

SILICA SHOP:

SIDCUP (& Mail Order) 01-309 1111
1-4 The Mews, Hatherley Road, Sidcup, Kent, DA14 4DX
OPEN: MON-SAT 9am - 5.30pm LATE NIGHT: FRIDAY 9am - 7pm

LONDON 01-580 4000
52 Tottenham Court Road, London, W1P 0BA
OPEN: MON-SAT 9.30am - 6.00pm LATE NIGHT: NONE

LONDON 01-629 1234 ext 3914
Selfridges (1st floor), Oxford Street, London, W1A 1AB
OPEN: MON-SAT 9am - 6.00pm LATE NIGHT: THURSDAY 9am - 8pm

To: Silica Shop Ltd, Dept NCE 0189 1-4 The Mews, Hatherley Road, Sidcup, Kent, DA14 4DX
PLEASE SEND FREE LITERATURE ON THE ATARI ST

Mr/Mrs/Ms: Initials: Surname:

Address:

Postcode:

Do you already own a computer
If so, which one do you own?

DTP

The Atari 520STFM.



Of £450 worth



MARBLE MADNESS. £24.95
Electronic Arts.



TEST DRIVE. £24.95
Electronic Arts.



BEYOND THE ICE PALACE. £19.95
Elite.



BUGGY BOY. £19.95
Elite.



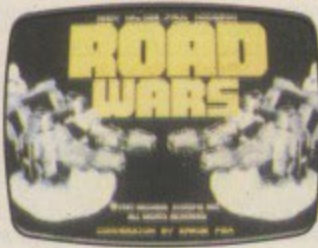
EDDIE EDWARDS SUPER SKI. £19.95
Elite.



IKARI WARRIORS. £14.
Elite.



CHOPPER X. £9.99
Mastertronic.



ROAD WARS. £19.95
Melbourne House.



XENON. £19.95
Melbourne House.



ARKANOID II. £19.95
Imagine.



WIZBALL. £19.95
Ocean.



BLACK LAMP. £19.95
Firebird.

Here it is! The new Super Pack from Atari. You don't just get the brilliant 520STFM. We're giving you twenty-two great software titles that most people would gladly sell their grannies for.

There's no catch. You really do get the 520STFM and £450 worth of great software titles for just £399.99.

So make sure you include yourself in this great offer.*

*Available from most Atari dealers. Offer ends March 1st 1989.

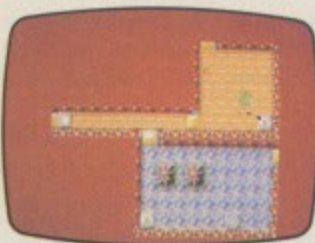
£399.99 inclusive.



th of software.



ATARI WARRIORS. £14.95
Elite.



RANARAMA. £19.95
Hewson.



THUNDERCATS. £19.95
Elite.



ZYNAPS. £19.99
Hewson.



QUADRALIEN. £19.95
Logotron



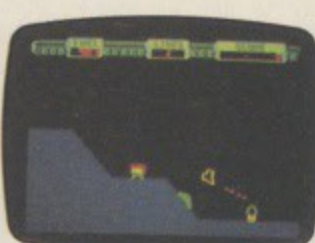
STARQUAKE. £19.95
Mandarin.



BLACK LAMP. £19.95
Firebird.



GENESIS. £19.95
Firebird.



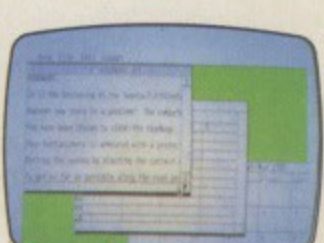
THRUST. £9.95
Firebird.



SECONDS OUT. £19.95
Tynesoft.



SUMMER OLYMPIAD 88. £19.95
Tynesoft.



ORGANISER BUSINESS SOFTWARE. £49.95
Triangle Publishing.

Please send me details of this and other Atari Products NCE 26 JAN

Name _____ Address _____

_____ Postcode _____

Atari Corp (UK) Ltd., Atari House, Railway Terrace, Slough, Berkshire SL2 5BZ

ATARI SUPER PACK

How a PC1512 changed my life!

Richard Challis suffers from dyslexia. The handicap was ruining his career prospects and his sense of self esteem - until he bought an Amstrad PC1512...

Early in 1987 Richard Challis was told he would never be able to sit his A-Levels. His ambitions to enter university and gain an electronics engineering degree looked remote. Three months later he bought an Amstrad 1512 - it changed his life. Last June he became the first student to take exams with the aid of a computer. Today he's studying three A-Levels and well on his way to higher education.

Challis suffers from the word recognition disability dyslexia. His IQ is said to be 130 but his handwriting looks like that of a ten year old's. He writes half as quickly as is average for people of his age and intelligence; most times he can't even read the writing himself. He can spell in his head but can't get it onto paper without messing up all the letters.

He walks to Bath College every day with a bag that's obviously far too big for him. It contains a motley crew of dog-eared text books and bulging file folders as well as a jumble of computer leads, some batteries, manuals, 5.25 inch floppies and a Cambridge Computer Z88 portable. The PC1512 stays at home.

The Z88 completely cancels out all his disabilities, since there is now no need to make use of the handwritten word. Each lesson he's tapping notes while his peers are scribbling. The formula is thus: dyslexia + computer = normality.

"I began using the Z88 about two weeks after I started at college. Before that I just had to take notes and do as best as I could. But with dictation

education. Challis had a go at gaining a grant for the Z88 but it came to nought. "Maybe there's a chance at the Dyslexia Society for someone without any money. But they've only got limited funds."

Examining the advantages of a PC

While the other nervous students were in a draughty hall last June, Challis was on his own in front of an Amstrad 1512. Being the first student to take his exams on a computer there was no correct procedure to follow - teachers duly checked and rechecked all the disks.

Without the computer Challis has no doubt that he would have failed. "When the examiner had come to read my notes he wouldn't have been very pleased, especially if he was tired. Without a computer they would have given me 15 per cent extra time to work in. But that's not satisfactory because I'm still rather messy."

Education authorities at the time were completely entangled by the administration and organisational red tape of the new GCSE curriculum. It was in this environment that Challis and his family applied to use his PC in appropriate exams.

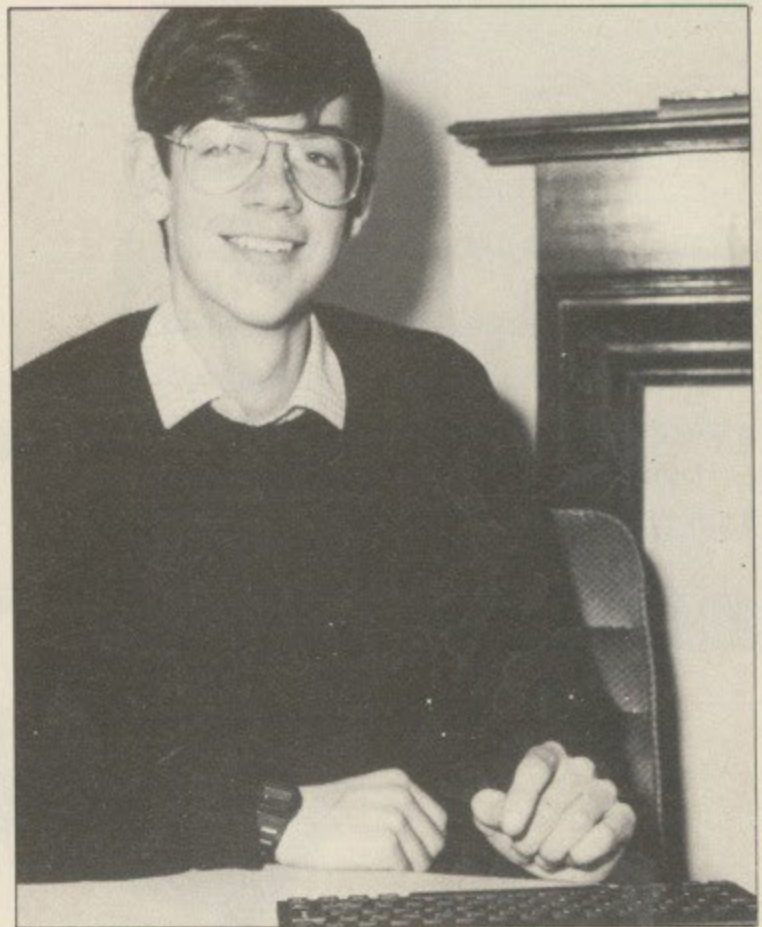
"At first there was some lack of communication. We wrote to the school and they wrote to the board. It took ages for any decision to be reached. It was like taking one step forward and two steps back. It wasn't that the board was saying 'don't worry about this midget'. They just wanted it to be fair on everyone. In the end the board of governors gave us a one month warning to be ready for the exams. It was plenty of time to get organised."

Now that the precedent has been set teachers insist that, if they want to use one, dyslexics must apply to use a computer at the beginning of their course. If so, they are required to see an educational psychiatrist who will check speed of handwriting to speed of word processing. Richard's word processing averages out at 25 words per minute -

about the same as handwriting. Therefore there was no unfair advantage in the micro. Also, he was allowed to do the printing outside of exam time, since that would have been an intolerable distraction.

Limited help

Computers will help only some dyslexics. Those who have problems reading will find it just as difficult to use the keyboard. Those who can read and take in the printed word easily will find word processing a godsend.



• Challis: Dyslexia? No problem

The dishonourable among us will immediately spot, though, that a sly character might easily be able to turn the PC into a very unfair advantage.

"I could have taken in a memory resident database, but everything was checked very thoroughly. It would have been amusing to try but the first person who uses a computer and cheats will get a red letter from me. If I had been caught cheating there would have been a right howl about it. My disks were all validated by a teacher who understood MS/DOS and WordStar 1512."

"The computer has made me more confident, because I can deal with the problem I can talk about it and not just clam up."

WordStar was the only software used and he wasn't allowed to use the spelling checker disk except for on the English Oral exam in which other students can use a dictionary anyway. He didn't use the computer for papers which required short answers or formulae such as Maths. Those which required long essays such as Geography, History, English made the most of the word processor.

Students taking the new GCSEs have enjoyed a softened focus on the exam itself with more attention being paid to projects. Challis used his computer to design graphs and pie charts for an Economics project. "I didn't use anything like VP Planner though. I'd rather design the graphs pixel by pixel using GEM Paint." All students are allowed to use computers for projects, though, with many turning to the trusty on-site Beeb for assistance. ●

What is dyslexia?

Dyslexia is an organising disability which impairs short term memory, perception and hand skills so causing interference in the development of language. Five per cent of students suffer from it.

Specialists say it should be diagnosed by the age of nine. However, Richard Challis was diagnosed at the age of 13. Dyslexia is often hereditary and there is no known cure. Famous dyslexics include Lewis Carroll, Leonardo da Vinci, Thomas Edison, Albert Einstein and George Washington.

that's particularly difficult. People criticise the Z88 because of its rubber keyboard but I think it's brilliant because it's silent. It would be a distraction for the other students if I was going clickety clack all day." After taking notes Richard can plug the Z88 into the Physics department's printer or he can go home and port it over to the 1512. The end result of course is a set of notes superior to normal handwritten ones.

"I am computer minded and I enjoy working with them," says Challis. He's currently working with Borland's Pascal language to produce a program for Dyslexics which will help them recognise figures better.

Obviously the computer is essential to his

Evesham MICROS

WE ACCEPT EXPRESS VOUCHERS

All prices include VAT and Delivery

ATARI® 520STFM SUPER PACK

Includes STFM with 1MEG drive, 21 games with business software (worth over £450) & joystick.

Only £349.00

520 STFM latest version with 1MEG drive fitted	£279.00
1040 STFM latest model, inc. TV modulator, with 'Microsoft Write' and 'VIP Professional' for only	£419.00
1040 STFM model with 2 software items as above, with mono monitor	£529.00
1040 STFM model with 2 software items as above, including same extras as supplied with above '520 STFM Super Pack'	£489.00
1040 STFM with 'super pack' extras as above, with SM124 monitor	£599.00
Mega ST2 with mono monitor, 'MS-Write' and 'VIP Pro.'	£849.00
Mega ST4 with mono monitor, 'MS-Write' and 'VIP Pro.'	£1099.00
SLM804 laser printer, great value at	£1099.00
SM124/5 mono monitor	£119.00
Mega ST2 package - includes Mega ST2, mono monitor, external 1Mb 3.5" drive, SLM804 laser printer, 'Microsoft Write', 'VIP Professional', 'Fleet St. Publisher' software and 90 days on site maintenance	£1795.00
Atari DTP system - includes Mega ST4, mono monitor, SLM804 laser printer, 30Mb hard disk, 'Fleet Street Publisher' software and 90 days on site maintenance	£2795.00
5.25" External drive 40/80 track 360/720K formatted capacity	£159.95
Pace Linnet Modem Pack inc. cable & software	£179.00
Pye 1185 15" FST teletext remote ctrl TV/Monitor c/w ST or Amiga cable	£269.00
Philips CM8833 colour monitor c/w ST or Amiga cable	£229.00
Philips CM8852 as above, higher resolution	£299.00
Cameron Handy Mouse, high quality replacement ST mouse	£39.95

commodore hardware

SPECIAL OFFER AMIGA PACK

A new Amiga 500 package including the following: (extras worth over £270)

- | | | |
|----------------------|-----------------|--|
| * Amiga 500 computer | * Photon Paint | * Demolition |
| * TV Modulator | * Karate Kid II | * Atax |
| * Mouse & Mouse mat | * Goldrunner | * plus 5 disks of public domain s/ware |
| * Joystick | * XR 35 | |
| * Las Vegas | * Grid Start | |

all for only
£399.00

Oceanic OC-118 64/128 disk drive for 64/128 with free GEOS software	£129.95
Oceanic OC-118 as above with Freeze Machine	£149.95
Freeze Machine complete backup cartridge, with integral reset button	£28.95
LC-10 commodore 64/128 ready printer inc. 2 extra black ribbons free	£199.00
LC-10 7-colour version of above printer inc. 2 extra black ribbons	£249.00

Amiga & ST 3.5" Drives

- * Very Quiet
- * Slimline Styling
- * Fully Compatible
- * Top quality Citizen drive mechanism
- * On/Off switch for Amiga
- * External plug-in PSU for ST
- * Throughport for Amiga
- * 1Mb unformatted capacity

Fully compatible, high quality 3.5" external drives for the ST and Amiga

Amiga version only £79.95

Atari ST version only £82.95

Prices include VAT & delivery

Western Digital Filecards

Upgrading your PC to hard disk? Look no further, we offer the best prices on top quality hardcards. Thorough documentation supplied, low power consumption, with free XTree file management software and Speedread. For Amstrad PC1512/1640 users we supply hardcards tested and formatted, with our simple software installation procedure. The best packages available!

20 MEG...£229.00 32 MEG...£249.00

DISECTORST V4

for all Atari ST models
only £24.95

New Version 4 disk utilities for the ST, features include: protected software backup, featuring the new turbo nibbler, a faster and more powerful copier, which uses all available drives & memory and includes 56 parameter options for handling a greater range of software; drive B boot to allow many programs to startup from drive B; organiser accessory providing many major disk management commands; extra format giving over 15% extra user storage area per floppy disk; fast backup; ramdisk accessory; undelete file; PLUS many more!

3.5" disks

10...£11.95 in plastic case £13.95
25...£27.95 in 40 cap case £34.95
Fully guaranteed double sided media

5.25" disks

25...£13.95 in 50 cap box £22.95
in 100 cap box £24.95
Fully guaranteed double sided media

Amstrad PC1512/1640/2086

We offer a wide choice of Amstrad PCs with many upgrade options, including the very latest PC2086 range. For the hard disk option, check our 'Evesham Upgraded Models'. Only the best will do - so we normally upgrade by means of a Western Digital Filecard, which includes XTree and SpeedRead software; however on single drive 1512/1640 models we can offer internal installations at the same price (leaving more expansion room but no upgrade opportunity for a 2nd floppy drive). We can provide on-site service contracts at time of purchase - please phone for details. Prices in lighter type exclude VAT.

Free with 1512 models... Ability and 4 US Gold Games

	SD	DD	AMS H.D.	SD 20MEG	DD 20MEG	SD 32MEG	DD 32MEG
EVESHAM UPGRADED MODELS							
MONO 1512	384.35 442.00	477.39 549.00	N/A N/A	583.48 671.00	676.52 778.00	600.87 691.00	693.91 798.00
COLOUR 1512	494.78 569.00	555.65 639.00	N/A N/A	693.91 798.00	754.78 868.00	711.30 818.00	772.17 888.00
MONO 1640	474.78 546.00	555.65 639.00	738.26 849.00	673.91 775.00	754.78 868.00	691.30 795.00	772.17 888.00
CGA COLOUR 1640	581.74 669.00	651.30 749.00	825.22 949.00	780.87 898.00	850.44 978.00	798.26 918.00	867.83 998.00
EGA (ECD) 1640	677.39 779.00	738.26 849.00	938.26 1079.00	876.52 1008.00	937.39 1078.00	893.91 1028.00	954.78 1098.00
2086 MONO	576.26 665.00	686.96 790.00	917.39 1055.00	777.39 894.00	866.09 1019.00	794.78 914.00	903.48 1039.00
2086 CD	717.39 825.00	825.22 949.00	1056.52 1215.00	916.52 1054.00	1024.35 1178.00	933.91 1074.00	1041.74 1198.00
2086 12" HRCD	808.70 930.00	920.00 1058.00	1147.83 1320.00	1007.83 1159.00	1119.13 1287.00	1025.22 1179.00	1136.52 1307.00
2086 14" HRCD	900.87 1036.00	1012.17 1164.00	1241.74 1428.00	1100.00 1265.00	1211.30 1393.00	1117.39 1285.00	1228.70 1413.00

PC1640 Summer Promotion Pack

Includes PC1640 DD with mono monitor, DMP4000 printer and software pack inc. Wordstar 1512, Supercalc 3.1 and Accounts Master DD £899.00 inc.VAT

optional extras

3.5 inch drive (720K) for any single drive models	£89.95	1512 memory upgrade to 640K	£39.95
Maths Co-processor 8087-2	£139.00	NEC V30 (8086 replacement)	£24.95
Amstrad Modem Card V21/23	£99.00	Cipher CT1525 tape streamer	£319.00
Amstrad MC2400 Modem Card	£199.00	Joystick & Controller Card self centering analog type	£34.95

Amstrad PPCs

Low prices on all portable PCs - especially twin drive models prices in brackets are excluding VAT

PPC512S	(£373.04) £429.00	PPC640S	(£477.39) £549.00
PPC512D	(£433.91) £499.00	PPC640D	(£546.96) £629.00

New low price External 3.5" floppy drive (720K) to suit ANY Amstrad 1512/1640 inc. DD and HD models! Uses no expansion slots £99.95

Central Point Software

For all your PC disk management requirements

PC Tools Deluxe.....Other utilities may claim to 'do it all' but only PC Tools Deluxe is the complete disk utility package, providing a fast hard disk backup, the best undelete available, 100% safe formatting of floppy and hard disks, uniform, reliable disk caching, compress facility, in fact everything required to manage & protect your data at a sensible price.....£49.95

Copy II PC Version 5.....The most effective floppy disk backup utility of it's type. We always ship the latest version. Can also transfer many programs to hard disk and then run them without reference to floppy. Supports both 5.25" and 3.5" disk format. Don't be without it.....£24.95

Copy II Deluxe Option Board.....The ultimate solution to backing up copy-protected software using the hardware option. All the original features of the Option Board, including the most powerful backup copier product on the market, and can even transform any PC equipped with a 3.5" drive into a dual purpose IBM/Macintosh drive. Allows your PC to read and write to MAC data disks easily through DOS. Comes as an easy-to-fit short card.....£84.95

PRINTERS

All prices include VAT, delivery and cable



We use and recommend Star printers since they do offer an unbeatable combination of features, print quality, reliability and value. Make the sensible decision - get it right with a Star printer at our special, all in, prices.

Star LC10 best-selling 144/36cps printer, 4 NLQ fonts, inc.2 extra ribbons free	£199.00
Star LC10 7-colour version of above printer, inc.2 extra black ribbons	£249.00
Star LC24-10 feature-packed multifont 24 pin printer	£339.00
Star NB24-10 great value 24pin inc. cut sheet feeder + 2 extra ribbons	£499.00
Star NX-15 budget wide carriage printer	£329.00
Star NB24-15 wide carr.version of NB24-10 inc. cut sheet feeder	£649.00
NEC P2200 budget 24pin, great value 168/56 cps	£319.00
Amstrad DMP3250DI good value 10" with serial/parallel interfaces	£189.00
Panasonic KXP1081 reliable budget 10" printer 120/24 cps	£169.00
Panasonic KXP1124 great new sturdy 10" multifont 24pin printer	£319.00
Epson LX800 popular 10" 180/25 cps	£199.00
Epson LQ500 good 24pin printer 150/50 cps	£319.00
Citizen 120D good value 10" 120 cps	£139.00
Citizen HQP-45 wide carriage 24pin printer - a bargain	£399.00

How to order

All prices VAT/delivery inclusive
Next day delivery £5.00 extra
Send cheque, P.O. or ACCESS/VISA details
Phone with ACCESS/VISA details
Govt., educ. & PLC official orders welcome
All goods subject to availability E.&O.E.
Open to callers 6 days, 9.30-5.30
Telex: 333294 Fax: 0386 765354

Evesham Micros Ltd

63 Bridge Street
Evesham
Worcs WR11 4SF
Tel: 0386 765500

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

SECTOR SOFTWARE

WE SPECIALISE IN SINCLAIR QL, CAMBRIDGE COMPUTERS, Z88 AND
COMMODORE AMIGA SOFTWARE AND HARDWARE

AMIGA A500 SPECIAL OFFER!

AMIGA A500 WITH BASIC AND EXTRAS

**MODULATOR
WORKBENCH
MOUSE
AMEGAS
INSANITY FIGHT
ART OF CHESS**

ALL FOR £389

INCLUDING VAT /POSTAGE

ACCESS AND VISA ACCEPTED
OFFICIAL COMPANY ORDERS ACCEPTED
BY MAIL OR FAX

**MERCENARY
BARBARIAN
ULTIMATE WARRIOR
TERRORPODS
BUGGY BOY
THUNDERCATS
IKARI WARRIORS
WIZBALL**

CAMBRIDGE COMPUTERS Z88

Z88 portable computer	279.00
512K RAM pack	190.00
128K RAM pack	45.00
32K RAM pack	20.00
128K EPROM PACK	50.00
32K EPROM pack	20.00
PC link software and cable	35.00
QL link software and cable	25.00
BBC link software and cable	25.00
Serial printer cable	10.00
Parallel interface.....	30.00
Custom carry case for Z88	10.00
Mains adaptor	10.00

SINCLAIR QL

Trumpcard (897K expansion + disk I.F)	290.00
Taskmaster (allows many programs to run in the QL at once).....	25.00
Touch Typist (Typing tutor for the Standard QL).....	12.00
Spellbound (Checks your spelling as you type)	30.00
Flashback (The fastest database available on the QL).....	25.00
Page Designer 2 (A full feature colour desktop publisher)	35.00
Omnidump (NLQ output in draft mode PD2 dumps + grey scale).....	10.00
QZ (QL to Z88 file transfer program and lead).....	25.00
QL World Index (Very fast database to contents of QL World).....	6.00
Writeturn (Print Spreadsheets etc sideways on your printer).....	12.00

1084S Stereo Colour Monitor**£290.00**

Mono Monitor for Amiga inc. Lead**£95.00**

Demon 2 V21/V23 Auto Modem..**£91.00**

Star LC10 Colour Printer (UK Version)..**£290.00**

Cumana 1Mb Switched Disk Drive for A500**£95.00**

Midi Interface for A500/A2000 .**£289.00**

Casio Midi Keyboard for A500 or A2000..**£289.00**

Mains Adaptor for Casio Keyboard£10.00

A501 RAM/Clock Card for A500
(512K RAM).....**£140.00**



Amiga A2000, Monitor, 1Mb RAM, Keyboard, Mouse**£1600.00**



NORTHERN SINCLAIR SHOW

Due to a lack of previous shows in the North for Sinclair machines Sector Software are to be organising a Northern Sinclair show around Preston in Lancashire (junct 28 or 29 M6) in about March, anyone who would like to be mailed with details or any Spectrum, Qt, Z88 companies or peripheral suppliers please contact us for details.

We have a range of QL, Spectrum, ZX81, and Amstrad spare parts including service manuals, ring for prices on individual items.

SECTOR SOFTWARE are always on the lookout for Good quality programs for the QL, Z88 or Amiga, if you have written one then please contact us.

BULLETIN BOARD

We are now running a Viewdata bulletin board on 0772 454328 6pm to 9am weekdays and all weekends which is mainly QL specific but includes a Z88 section and is soon to include an Amiga section.

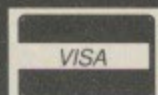
We are at the moment writing Amiga to Z88 file transfer software and Amiga to QL software. If you are interested in either of these then please contact us for more details.

We stock too many products to mention in any advert, (we have a regular four page advert in QL World each month), so please send us a SAE or give us a ring for our free product guide and price list.

A goods ordering section is now available on the Bulletin Board, so goods can be ordered by Modem.

Tel: 0772 454328 **SECTOR SOFTWARE** Fax: 0772 454328
39 Wray Crescent, Ulnes Walton, Leyland, Lancashire, PR5 3NH

Access and Visa accepted. All prices include VAT/UK postage



THEY'VE GOT NO SOLE

I have been having great problems with Mirrorsoft and the new simulation, Falcon, for the ST. Apparently they do not load on some ST disk drives. Well, mine didn't, so I sent it back at Mach 3 as they claimed they were in the process of writing a new program that would work. I kept in contact with them as to the progress of the new disks and waited expectantly.

To my horror they say they have never received my disks, five or six weeks after I sent them. As I did not send them by recorded delivery, as far as they were concerned that was the end of it. They of course blamed it on the Christmas post, but as they admitted a few others have not been received either, I remain sceptical.

I am sure many of your readers will agree that there are few things more infuriating than forking out £25 for a long-awaited game which does not load. I think we must not tolerate so much of this in the software market or more care would be taken before the release of the game. I cannot see the logic in spending two years on developing a game when it does not load up at the end of it. An analogy with some other commodity, like a pair of shoes would be no matter how nice they looked they are not a lot of use without soles.

Iain Ramsbottom, London.

● **First the problem of the disc. Copy protection often works by relying on the disc drive to behave in a certain way when you ask it to do something extraordinary - read a sector that can't normally be read**

DON'T WASTE YOUR MONEY

Has anybody out there ever sat down and asked themselves "What makes us spend up to £25 for a computer game?" (The honest amongst us, that is.) I mean, what do we get for our money? Is it:

£25 for flashy graphics?
(No: you get better pictures on TV)

Well then, is it £25 for music?
(Flick on the radio. Much better quality and more quantity)

Then it must be £25 for entertainment?

(£1 for a video, £3 for the pictures and it's more social and can be more fun)

Is it £25 for addictiveness?
(Do you really get £25 worth?)

Occasionally you can, but 98% No. You could spend £25 in the arcades. More choice and you'll probably play longer there than you would on the £25 game) Then what the hell is it? If only I knew. I still spend £50 a month on software for my ST. The only game worth £20 in my opinion is Speedball.

Computers can be anti-social and like a drug to spend money on. But we love them. I honestly don't think there is an answer to the question. If there is then write in and let me know.

Now a few quick points:

- 1 Mary Whitehouse. You're a pest. Go away and leave us in peace.
- 2 Martech. So the ST can't handle

or suchlike. This may well be outside the specifications of the drive that the manufacturers have decided on, but if it works in practice then everything is OK. The problem comes when the

manufacturers change the drives slightly, while still conforming to the agreed specifications: maybe that sneaky copy protection routine doesn't work any more.

This is what may have happened in Falcon's case. It just highlights the problems caused by lack of communication between the software company, which understandably wants copy protection, the programmers, who understandably devise what they think are the cleverest protection routines possible, and the drive manufacturers, who change drives while still sticking to standard specs.

Whoever has lost your disc - the Royal Mail or Mirrorsoft - doesn't really matter now. Though it's easy to say now, whenever you send discs back, always use registered post. Then if they do go astray you at least know who to nail.

HELP WANTED

Please help. There is obviously something very wrong with me because I feel no urge to sell my CBM 128 system and buy an Amiga! I'm not frightened of progress but I'm not a techno-junkie either. I believe it doesn't matter which computer you have, it's what you do with it that counts, and the fact is that most Amiga 500 owners just play games and draw pictures.

Nothing wrong with that, I do it too, but until there is more (and cheaper) 'serious' Amiga software then it will remain very much a games machine for many owners. Not what I need at all.

Phantom Fighter's graphics? Well to hell it can't. You've lost a customer for a rubbish statement. You should be ashamed.

- 3 Well done Express. The mag's great.
- 4 Well done Ocean. Operation Wolf's great.

5 8 bit owners: stick by your machines. They are still the main source of software income. Without you, there would be none of us.

6 Aren't Hearts doing well?
(UEFA cup)

Kenneth Jackson, Edinburgh.

● **I wish I knew what makes us spend money on games too. As someone who used to put his paper round money into the Space Invaders machines in the arcades I can say it goes beyond the graphics or the gameplay itself. Anyone who does know the answer will be a rich person; come to think of it, perhaps they already are, and they happen to head large games houses.**

Whatever you think of Mrs W, she speaks for a lot of people. She's not a politico or a rock start or a writer or anything, just a housewife; her views have become well known because so many share them, though I am not one of them. As for points 3, 4 and 5, you're quite right of course.

I know that one day there will be no more cheap 64/128 software and no more spares and I'll have to upgrade. I wonder if the Amiga will itself have been overtaken by then? Meanwhile, I'll enjoy not worrying about viruses, or which



Dear Reader

Three pages this week, packed with another selection from our postbag. Got something to say? Make your voice heard in computing's liveliest letters page! Send your contributions to: **Express Mail, 4 Queen Street, Bath, Avon BA1 1EJ**
PS. Sorry, NO personal replies, whether you include an SAE or not. We're too busy putting Express together!

kickstart I need, or if I can get it, or if it will run my programs. I'll enjoy using Superscript, Superbase and GEOS. I'll enjoy writing my own programs in BASIC 7.0 and yes, I'll enjoy playing games too, but I won't sell a year-old system at a loss just so I can play them in stereo with 4,096 colours.
Stephen Mercer, Shaftesbury, Dorset.

FREE LOVE

Your helpful feature on computer problems in issue 9 was not entirely accurate in its comments on the Amiga, possibly because you were looking for commercial solutions.

Amiga users are fortunate in having a great deal of excellent public domain software and shareware available which can cure any shortcomings. To recover an accidentally deleted file there's the PD program Undelete on Fish disk 154, although it does need two disk drives. Diskalv (Fish disk 20 or the January '89 issue of Jump Disk for the latest version) usually recovers deleted files and is much better than DiskDoctor for salvaging corrupted disks.

There are at least half-a-dozen PD programs to provide macro facilities, as well as commercial products such as Zing!Keys and Hotkey in the Gizmo collection of utilities.

ARP (Amigados Replacement Project) on Fish disk 123 provides an alternative operating system that is smaller and faster than AmigaDos and includes a Resident feature to keep often used commands in memory. If you prefer to keep such commands on a RAM disk then ASDG's recoverable RAM disk on Fish disk 58 will survive rebooting the computer.

John Walker, Bath, Avon.

AMIGA VIRUS

I have just moved up to the 16-bit market with the purchase of an Amiga A500. As a computer user since 1981, I have kept abreast of the latest news and developments by reading mags like NCE and now consider myself fortunate. If it wasn't for the publicity given to the spread of computer viruses, and the various ways to combat them, I would now be the proud owner of a complete set of infected discs.

When I received my Amiga, complete with the Ten Star games pack, I write-protected all my discs as a matter of

course. A friend who was already an Amiga owner brought round his PD software to show me, and whilst demonstrating SYSTEM Z, a virus killer, we discovered that one of my games pack discs was infected with the Byte-Bandit virus.

I have contacted the dealer who sold me my machine and he said they have only just found out about the virus from the distributor of the games pack discs. The virus is on Wizball (disc no 10).

I feel very sorry for all the hundreds of computer beginners who bought the Amiga special offer packs at Christmas, who may not have write protected their discs, and now unwittingly have transferred the virus to all their collection. My congratulations to the distributors of the Ten Star games pack for doing more to spread the virus than anyone before them.
M J Post, Aldershot, Hants.

FOR FRACTAL FANS

The subject of fractals has been generating interest to home computer users. I am considering starting a small newsletter *Fractal Report* containing articles on the subject. The articles will be about practical programs for generating fractal images on specific home computers or on PCs, and also machine code routines for specific microprocessors. In addition relevant general interest articles will be considered, together with readers' letters. Ideally, articles should be submitted on A4 sheets "camera ready" for reproduction. However, handwritten articles may be considered in exceptional circumstances.

An introductory flyer and the first edition will be issued free to anyone interested. Anyone who submits articles that are accepted for publication in the first issue will get the next five issues free of cost, if there is sufficient interest for the newsletter to continue. At the time of writing I have already had some high level interest, and if any of the people who have enquired actually send in articles the newsletter should be a good one.

John de Rivaz, West Towan House, Porthowan, Truro, Cornwall TR4 8AX.

A LOAD OF DOS?

I am writing about Issue 9 of your magazine, where on page 26 in your

article called "Working out with Workbench" you call the Amiga's operating system a "clumsy collection of commands by the name of AmigaDos."

Granted the Amiga has to refer to the disc for the information on the commands but that hardly slows the operating system down at all.

Saying that the workbench is not a patch on the Mac or ST is in my opinion utter nonsense. A program will take time to go into operation if it takes up a lot of memory and if there is another application running. However, under normal conditions workbench is very effective.

Until now I have found that *Express* and I share opinions in many subjects but in my opinion you have never written anything so far from the truth.
Jon Steadman, Banstead, Surrey.

● Well, everyone's entitled to their own opinion of course, but I find the Amiga's operating system sluggish compared not just to the Mac's and ST's, but also to that of the single-tasking, 1-colour monitor, one-channel one-note mono sound, no-blitter machine the Amstrad PCW. Which is not so say that CP/M is faster than AmigaDos, just that it's... er... less slow.

STOP MAKING CENSORS

I am writing to you on the subject of censorship. Whether it be censorship of TV, radio, books or computer games - it does not matter which as I believe censorship is bad. As soon as people try to tell others which to see, hear, listen, think or do we have problems. I'm not saying that young children should not be protected. What I am saying is that grown, mature adults should be allowed to play violent computer games if, when and how they want to.

The likes of Mary Whitehouse can go and mind their own business and let others get on with theirs. The world does not need 'nose parkers' and 'busy bodies' so I say to everyone out there who likes to interfere with other's lives "push off you whinging nerd. If you don't get your nose out of my business I'll break it!"

Gary McCombie, Stonehaven, Kincardineshire.



• Do we need protection? (see Stop making censors)

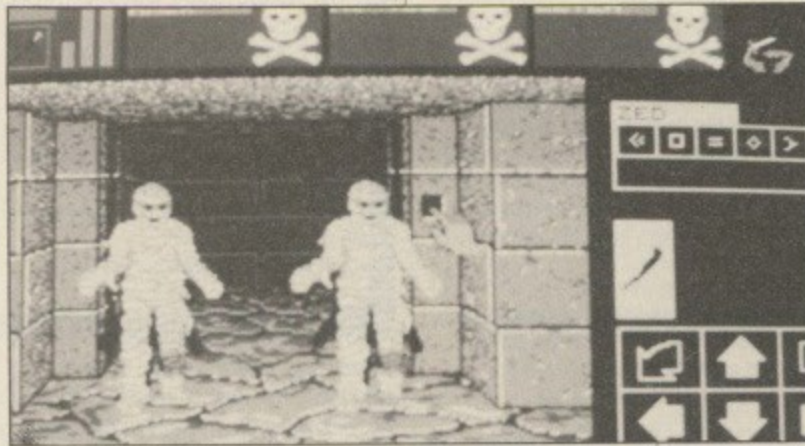
● I always get suspicious when people say they don't believe in censorship. More often than not, what they mean is they don't believe what they like should be censored. If you don't have censorship, then you

literally allow anything at all. Do you think it right that people should be allowed to make and sell videos where willing participants are actually killed in front of the camera, such as reportedly happens in America? Surely you have to have some form of censorship; at least then you can argue where the line should be drawn on, for example, violent computer games. To a point, I agree with you that adults should be allowed to play violent computer games, though I wouldn't like an anything-goes situation.

And I don't think Mary Whitehouse or anyone else particularly wants their nose in your business.

MEMORY MEMO

I feel I have to write about the state of Amiga software, to be frank, it's a real pain. I am a student, I earn £50 a week from a part-time job. I cannot afford to waste my money on bad, expensive software.



• Dungeon Master on the Amiga: Why should it need 1 meg? (see Memory memo)

The final straw for me was hearing, and reading that *Dungeon Master* needs 1 meg of memory. Why? You said in your review of the game that it was more or less a straight conversion from the ST. If so, then why the need for an extra 512k?

Double the Amiga's memory, that's an extra £100 odd to play a game that fits into other machines' standard 512k. It's really pathetic. It makes the Amiga look stupid, and makes me feel sick at the thought that I'll have to keep expanding

512k is a lot of memory. Programmers are getting lazy; to ask the users to spend extra on memory just to play a game is not fair. The Amiga is supposed to be a step forward in home computing, which surely is why it is fitted with some fantastic custom chips, and 512k of memory.

I don't want to be forced into piracy, that will make the situation worse, but I'm sure companies can reduce their prices to the same as ST software. You said yourself in issue 10 that Commodore was the second largest computer supplier, next to IBM. Surely then this indicates a large enough market to allow for price reductions in software. I hope so. I don't want to have to feel I wasted £400 on a machine that's going to be badly supported.

N Turner, Aylesbury, Bucks.

● And of course you're right; there's no reason why *Dungeon Master* couldn't have been better converted for the 512K Amiga -

other than laziness. Odd, because you'd think that in the end less copies would be sold. Not everyone can afford the memory upgrade.

AMIGA UB40?

I would like to contribute to your hacking-piracy debate from a different perspective. I am an unemployed Amiga 500 owner, who has never either bought or been given an item of pirated software, and I would not know where to start hacking a piece of software.

Looking through all the computer publications including your excellent magazine one cannot help but be excited and amazed by all the games of such quality and depth that are released at this time of the year. As these games are £20 - £30 each (in some cases even more) this can become extremely expensive.

My point is that those who are out of work (like me) or on low incomes cannot help but be tempted to buy or accept a game from a friend or commercial pirate at a cheap price. I consider myself to be an honest person, but I would find it very difficult to refuse a cheap pirated copy of a game.

Perhaps the law of supply and demand applies here. If those that cannot afford to buy full price software did not exist then the commercial pirate would not exist, and the hobbyist cracker could carry on as before without harming anybody.

In conclusion then it seems that this problem is a much more fundamental one that afflicts our society as a whole.
A J Bremer, Great Yarmouth, Norfolk.

● There are a few points here. The

first, which we are bound to say, is that pirating of software is evil and not justified under any circumstances, that if you condone it because someone is unemployed then you may as well condone stealing, etc. etc.

But if one of your friends was unemployed and wanted to 'borrow' your word processing software that they couldn't afford so they could write job application letters (clearly vital), you'd be hard pushed to say no. Then you extend it to games (vital again to while away the long hours in the afternoon) and it becomes difficult to draw the line. Having principles is fine, but when you're unemployed it makes you rather more pragmatic.

It seems the real problem isn't the price of software so much as the fact that you can't afford it at the moment. I'm not an economist but I suspect the long-term solution is not to bring the price of software down, but to improve everyone's spending power. Two equally glib replies to you would be a) if you can't afford the software, go and get a job and b) if you can't afford the software, the Government should get you a job. Neither of those would be any practical help to you or anyone else though.

What about a similar scheme for the unemployed to the one for students, whereby you can borrow money from the bank to buy a machine and/or a bundle of software, and pay off just the interest until you get a job when you pay the loan back in instalments?

With suitable software (word processors, programming languages et al.) you could learn marketable skills and make your job applications too, or perhaps use your micro to earn money in some other way. And once you do, you'll be able to afford any game you like. Unless you're a computer journalist, of course, in which case you won't have any spare time to play them anyway.

PSION LANGUAGE

At last a magazine for everybody. It's great! But not perfect. How about a column for Psion organiser users?
Chris Birch, Sutton, North Yorkshire

● Sure! And Z88s and Einsteins and Orics and Dragon 32s and PETs and Lynxes and... No, you have to draw the line somewhere, unfortunately. Otherwise you'd have columns for machines like the MSX.

PCW FILE: LAST WRITES

I see there was a piece in your news pages last issue about the PCW File International User Group, on page 6.

I'm actually head of the group, not David Axford as you said, and decided to close it down due to financial difficulties. David will continue the magazine on a section of the British Osbourne Owners Group.

I have enclosed details about how the group intends to carry on with Bob Ellis offering free public domain software to anyone that wants it.

Chris Bryant, Seaton, Devon

● It's a shame the newsletter had to close as it was one of the better fanzines around. PCW owners can

continue to get free PD software, as Chris mentions, for a minimum copying fee of £2 per disc. A catalogue of the 29 discs can be had by sending a blank formatted disc to 'Rowan', 100 St Peters Close, Moreton-on-Lugg, Hereford HR4 8DW. Chris assures everyone that any outstanding debts will be paid off in time.

PCW owners can get a special

● **There are bound to be some smaller companies releasing games which only a machine-specific mag would know about. Also such mags tend to be monthly, and their definition of 'imminent' may be 'in the next five weeks or so' rather than our 'expected at the time of publication', ie. in the next seven days, thus making their lists look**

time I am 75, as I intend to go on a world cruise then!
'Old George', Darlaston, West Midlands

PET SHOP BOY

If you can remember the 8K Commodore PET (the title of which, incidentally, sparked the trend for silly acronyms - PET apparently represented "Personal Electronic Transactor!") when it was being offered as first prize in a competition by



• Elite: Old yes, but obsolete...? (see Pet shop boy)

BEYOND OUR KEN

I am not normally given to writing to magazines, but the letters in issue 10 from Ken Hardacre, whose Commodore PC1 failed on the day of purchase, prompted me into action.

Under the Sale of Goods Act 1979 and goods sold in the course of business must be of 'merchantable quality'. This is defined as being fit for the purpose for which they were intended.

Clearly, in Mr Hardacre's case his Commodore PC1 was not of merchantable quality because you wouldn't expect any product to fail on the day of purchase, provided it was used in accordance with instructions.

In cases such as this the claim rests with the retailer who should have refunded Mr Hardacre's money straight away. Of course Mr Hardacre could have accepted a new machine if that was his desire but in law he was only entitled to a refund.

Again the Sale of Goods Act 1979 states that goods sold by description - as all mail order goods inevitably are - must correspond with that description, or once again, the purchaser is entitled to a refund.

Your comment that the retailer may have many satisfied customers is, to some extent, reasonable but future customers should have a right to know that they are running a risk in purchasing an expensive item from this firm; though hopefully having lost one County Court case they will be wiser in future. A wronged customer should not have to resort to such measures to gain that to which he is legally entitled.
Robert Pugh, Cardiff, S Glamorgan

RESTORE SOME ORDER

I feel that Mr Hardacre's experiences with Lan computer systems and the Commodore PC1 were just bad luck. I do not know that details of the case but would like to share my experiences with your readers to balance things.

In the past I have ordered, by mail, many items ranging from a spare printer ribbon to a Spectrum, a PCW 9512, a Sanyo PC and Panasonic printers. I have never received any goods 'next day' as promised and always there has been some problem with the goods themselves.

You think this might put me off buying by mail order for ever; but no. Last October I saw Lan's advert for the Commodore PC1. I phoned them many times with questions, as I did Commodore. Both were very helpful and able to answer my questions quickly and fully.

I rang Lan on the afternoon of October 25th and placed my order. The person on the phone said 'thanks for your order, you should receive this tomorrow'. Pull the other one, I thought.

Next morning, just after nine, sure enough it arrived. Since then it has been used five to six days a week and up to nine hours at a time; it works perfectly.

I can imagine no better value than this - £307.85 including VAT and postage. For my money I got the system unit, a hi-res monitor, keyboard, MSDOS 3.2, GW BASIC, ABLE-ONE (wordprocessor/spreadsheet/database/graphics/comms/spelling checker etc.) - worth £99 and so easy to use.

In the end it must be the luck of the draw. This time Mr Hardacre lost and I - for once - won!
MA Newport-Ball, Telford, Shropshire

THE THIRD REICH MAIL ORDER CO.

Referring to issue 10 "Bring out Skeletons", I totally agree with Ken Hardacre's letter and think you should produce an article on disreputable computer firms with County Court judgements against them.

If you or I had a County Court judgement against us you would find it impossible to get credit and have therefore had one bad action causing you five years of misery. Many

databases would hold the information upon your credit worthiness, and if they are incorrect you have little hope of correcting them even with the Data Protection Act helping you. You state "just because a company has had a County Court judgement against it in one case doesn't mean that all its dealings are suspect". Bullshit! That's like saying that just because Hitler murdered millions of people doesn't mean he was not a nice person. He was a cruel, heartless animal. If man will treat one person with contempt do you think they will not do it to another.

It's time the computer press looked after its readers and not its advertisers. We are the people who pay everybody's salary in the computer industry and related businesses, and we demand to know who we are dealing with.

Would you buy a used car from Arthur Daley? Not on your nelly! Well Done Ken. G Holt, Doncaster.

● **Comparing a software house that mislays your order to a despot who tried to annihilate an entire race seems a bit excessive; I can think of few mail order companies that have invaded Poland recently.**

We aim to look after our readers by giving them unbiased reviews of software, by bringing them news about the computer scene, by providing interesting features and so on, all at a reasonable price. We don't print stuff just because the advertisers want us to, and that way you can be reasonably sure of what you read. We're not a consumer watchdog and don't feel we would be doing anything particularly constructive by running an article criticising specific companies for specific things, other than satisfying a few people's sense of revenge.

And no, I wouldn't buy a used car from Arthur Daley either, because he's a fictional character.

bundle of 14 back issues of PCW File for £13.95 - nearly 400 pages of information! Cheques to 11 Havenview Rd, Seaton, Devon EX12 2PF.

THE HAPPY RELEASE

I would love to complain about something but I'm not going to - yet. Express is a great mag and seems like ACE should have been.

But look at the release schedule page - not exactly well informed are you? Looking through Acorn magazine, I find eight imminent releases for the Archimedes (games) and even more for the Beeb and Electron. Most Archie owners would also buy an Acorn mag so this is only a minor grumble. Some extra Acorn/Beeb coverage wouldn't go amiss though.

Andrew Williams, Neath, West Glam

bigger.

Prepare to be deluged by letters of protest from ACE readers! Fans will be pleased to know that the disgruntled software buyer on our cover is ACE's Andy Smith.

ONLY AS OLD AS THE MACHINE YOU FEEL

I wonder if I am your oldest reader? I have a two-year old CPC6128 which I use for word processing and even for playing a few games. At the age of seventy-two I have become a convert to computing, having never touched one in my life before. Although I am retired I still never seem to have the time to do everything I want on my machine.

My next buy will be a 16-bit machine, and I have my eye on the Atari ST (also my great-grandson is interested in MIDI). I hope to learn programming by the

a major breakfast cereal manufacturer ("the machine that every housewife has dreamed of...helps you budget, stores recipes, controls your home, etc etc"), and if you can remember gazing in awe at a TRS-80 mark one in Tandy's window before going home to your half-soldered UK101, then you're probably as old as I am (depressing, isn't it).

After the argument about which was better, the TRS-80 with its nasty plastic case and cheap monitor, or the PET with integral dodgy cassette player and toy keyboard, the following years saw endless identical arguments between owners of rival companies' equipment that far exceeded the feelings of, say, rival car owners.

Haven't things changed! The arguments, once fairly civilised and based on comparative appraisal of technical differences, have degenerated

into straightforward slanging matches. I was therefore amused to see that the annual Christmas rush has produced

massive sales of the Spectrum and especially the Commodore 64. The former is hopelessly outperformed by modern 16-bit devices, and the latter still retains most of the original Commodore Basic designed for the PET all those years ago. I would like to think that these machines are selling only partly because the others are too expensive, but mainly because an awful lot of people aren't interested in state-of-the-art and just want a machine that delivers the goods in terms of entertainment and value for money.

Sadly, even older computer games sometimes come in for unwarranted criticism. In "Amiga Blit" Jason Holborn took time to pick holes in Elite simply because it was not "innovative", compared to Starglider 11. Yet the gameplay of the latter is decidedly old hat and comprises the simplest of adventure scenarios - collect various items, reach a target, kill it, end of adventure.

Please, why not judge gameplay as a priority, and consider graphical presentation simply in terms of how much (or little) it contributes to the overall atmosphere? After all, Elite was/is widely regarded as a fine game in its own right, and I don't believe that Scrabble or Monopoly would be condemned simply because the layouts weren't innovative ("Sorry, Waddingtons, but it's time to move on...?")

I wouldn't wish to imply that only old is beautiful; as an ST owner myself I could hardly do that. But in the quest for excellence both in software and hardware, not everyone wants to be right behind the cutting edge of technology if previously praiseworthy standards are to be disdained simply by virtue of age. Old is not necessarily obsolete, as I tell myself every morning whilst looking in the mirror.

P.S. The PET was better than the TRS-80.
Chris Osborne, Lowestoft, Suffolk

● **Awful puns in computing go back further than the PET: in the 1950s Lyons, the Tea People, were the first business to use a computer. They called it Lyons Electronic Office, or LEO, har har.**

Despite the increasingly hi-tech and automated nature of cameras, for example, you still can't take a better picture than was possible with a pre-war Leica; though today's hatchbacks are more comfortable and economical than the Morris 1000 was, they're no better for just getting from A to B; although the TVs you buy now are superior to the tiny black and white jobs of the sixties, the programs are no better. Out with Network 7! Bring back Bill and Ben!

AMIGA PC
MSX SPECTRUM
ATARI SEGA

SILICON

CONSULTANCY . SALES . INSTALLATION

Dreams

AMSTRAD
BBC CBM 64
APPLE

✓ WE ACCEPT
EXPRESS
VOUCHERS

01-543 3420

✓ WE ACCEPT
EXPRESS
VOUCHERS

JOIN OUR **FREE** SOFTWARE CLUB ENTITLING YOU TO OVER 30% DISCOUNT ON ALL GAMES SOFTWARE

MEMBERSHIP IS AUTOMATIC WHEN YOU PLACE YOUR FIRST ORDER

CLUB PRICES

RRP	OUR PRICE
29.99	19.50
24.99	16.50
19.99	13.50

CURRENT MEMBERSHIP OFFERS

DRAGONS LAIR (1 MEG ONLY)	29.99
DRAGONS LAIR + 1/2 MEG EXP	159.99
OPERATION WOLF	13.50
RETURN OF THE JEDI.....	13.50
DUNGEON MASTER (1 MEG ONLY)	16.50
DUNGEON MASTER + 1/2 MEG EXP ...	147.99
512K UPGRADE WITH CLOCK.....	134.99
PAL GENLOCK (EXTERNAL)	110.00

BUSINESS SOFTWARE
NOW AT 30% OFF RRP
PHONE FOR MORE DETAILS

PHONE FOR MORE OFFERS ON ALL
COMPUTERS

ALL THESE PRICES INC VAT

AMIGA B2000

£845 EX VAT

INC VAT 917.75

20 MEG INTERNAL DRIVE

£321.73 EX VAT

INC VAT £369.99

Commodore
AMIGA PACKS

AMIGA A500+
IKARI WARRIORS
BARBARIAN
THUNDER CATS
AMIGAS
BUGGY BOY

PHOTON PAINT
MERCENARY COMP
INSANITY FLIGHT
WIZBALL
ART OF CHESS
TERRORPODS

+
TV MODULATOR
£375 INC
VAT

PHONE FOR PRICES ON ALL HARDWARE AND PERIPHERALS
FREE DELIVERY ON ALL ORDERS

CHEQUES AND POSTAL ORDERS MADE PAYABLE TO "SILICON DREAMS"
SILICON HOUSE, 73 SOUTHPARK ROAD, WIMBLEDON, LONDON SW19 8RT

How to be a smart consumer

Buying a computer or software? Everyone wants your money: mail order houses, High Street retailers, street traders, even people selling their Christmas presents in the classified ads...

The vast majority of dealers are reliable and professional, but how do you avoid the cowboys? And what do you do when things go wrong? Rik Haynes investigates the dos and don'ts of computer consumerism...



Buying a piece of software should be like buying a record or CD: you pick what you want, pay your money and take your goodies home to enjoy. But in practice it's never like that. For a start, you have a choice between sources: should you order cheaply from a mail order house you can't be sure will be there after they've cashed your cheque, or stick with your High Street store, which may not know the first thing about your machine? And what do you do when your disk doesn't work, the program is useless or you don't even receive what you ordered? Being a smart computer user isn't enough - you need to be a smart consumer too.

Perhaps the best way to be a smart consumer is to find out as much as possible about the product before you attempt to purchase it. This means reading all the computer magazines which might review it, or include it in their 'best buys' section. Word of mouth can be a good guide too - maybe some of your friends have heard or seen what you're after.

The idea is to give yourself an informed and unbiased opinion on the product before you're introduced to all the sales hype. The more you know about the product, the better you can judge its value, weaknesses and strengths. And the final decision must be as to whether you really

want or need it, and this requires a reasonable amount of thought, especially if it's an expensive item.

Before deciding on the source of purchase, look around - a superior product at a more desirable price might just be round the corner. When talking to a trader, don't be afraid to ask questions, even if you feel they sound stupid.

Whenever possible, try to use the product before you buy. It may say in the advert that it's "easy and intuitive to use" or that it has "stunning graphics" but the best judge of that will be yourself. Ask for a demonstration in the shop, or if possible find someone you know who owns it. This is the acid test, and if you're dissatisfied with any aspect of it, then think it over before you hand over your money.

Method of payment is also an important factor. For instance, if you pay by credit card you not only have the benefit of being able to pay the amount back up to a month later, but when purchasing a single item costing over £100 you may be able to claim your money back from the credit card company if you have any difficulties with the trader. This is particularly useful if the trader goes out of business. On the other hand, some traders will give a discount if you pay by cash.

Multiple high-street retailer

As computer products have evolved through the years, they've become more of a mainstream purchase like a video, Compact Disc player, etc. So where better to buy a computer product than from your local branch of a well known multiple high-street retailer? But wait, computer products aren't that mainstream: they're complex products that manage to acquire huge amounts of information, thus requiring a salesperson with a high degree of knowledge about the subject. Surely not the same salesperson who also sells the washing machines, personal stereos and blank videos?

So it's unfair to expect any great before- or after-sales support in the form of detailed information about your purchase. What you can expect is an excellent service when returning faulty items, as multiples have to preserve a high level of customer service in order to survive. Going back and asking how to set tabs on your word processor or how to get to level 36 on the game will be a waste of time, but if your disk is faulty they'll give you another straight off the shelf.

Prices will normally be recommended retail prices - or just below - so you won't get many bargains either. Overall, multiples are a just fast,



convenient way of purchasing computer products – some even have salespeople that actually know a little bit about computing. If you're lucky!

Independent retailer

The second type of outlet – your local computer specialist in the Yellow Pages – can be differentiated from the High Street chain store by its lack of washing machines and plethora of pot plants. The advantages of shopping in an independent retailer can mainly be summed up in one word: experience. It's very unusual to find an independent retailer who doesn't know at least a little bit about your particular computer, however obscure, and its associated range of software and peripherals.

This is the place to go if you want the latest software release, or some up-to-date information, or indeed buy your computer. Most offer informed after-sales support provided by a usually very knowledgeable and

enthusiastic salesperson.

The drawback, is of course, the cost of this service – with product prices likely to be highest out of all the other types of outlet. Though sometimes if you're lucky, you can discover the exception that proves this rule.

Mail order retailer

Mail order advertisements appear frequently in most computer magazines, presenting a wide choice of hardware and software at reasonable prices – quite often a lot cheaper than shop prices. Buying computer products by post gives you the chance to compare prices easily and get the very best deal.

Unfortunately despite the many legitimate mail order companies providing an excellent service, there are a few less reputable firms who'll take your money but won't dispatch your ordered goods on time, or at all.

When buying goods by post, it's a good idea to:

- Use the most recent advertisement – mail-order companies constantly update their product range and prices.
- Never send cash by post – use a cheque, postal order or credit card. When paying by cheque write your name and address on the back.
- Use recorded delivery if your order entails a large sum of money.
- Include your name and address in any correspondence.
- Keep a copy of your order and the advert.
- Make a note of the date you send it, and probably most important
- Phone the company beforehand to confirm it has the product in stock, that it is what you want and that the price is as quoted in the advert. This gives you a chance to weigh it up: if the company never answers the phone or is permanently engaged you can try someone else.

A company that's been advertising regularly for years will be pretty reliable, or it wouldn't still be in business.

Goods bought through the post are covered by rules one and two of the consumers legal rights, i.e. goods must be of "merchantable quality" and "as described". Also if you set a delivery date (or if the advert states one, such as 28 days) when you order the goods, and that date isn't met, you can cancel your order and ask for a refund.

For further information you can obtain the free Office of Fair Trading leaflet, *Buying by post*, from your local consumer adviser or many public libraries.

Street market retailer

Despite their frequent claims to the contrary, street market retailers are bound by consumers' legal rights and should therefore provide one of the cheapest ways of purchasing a computer product. The trouble lies in making the average market trader uphold their obligations if the item purchased is faulty. If they do get too many complaints it's easier for them to move on to another area than it is for a shop trader.

But bargains can be found – if you're willing to take the risk. Although demonstrations of the desired software title or peripheral can be difficult, if not impossible – for obvious reasons. Fine for picking a few old budget games, sure, but if you buy a second-hand ST you have to accept the consequences!

Private sale

Purchasing computer products second-hand in a private sale can yield some of the best bargains around. As long as you do business with an honourable person.

When purchasing goods privately – perhaps from a friend, or more likely from a classified advertisement in a computer magazine such as ACE or a local newspaper – only rule two of the consumer rights applies. The item sold must be



Do you know your rights?

"I know my rights!" is a phrase that everyone resorts to at one time or another, but not many people actually do know the specifics of their rights.

Consumer legal rights cover any goods bought from a trader. The term trader includes high-street retailer, independent retailer, street market retailer or mail order retailer. Goods purchased in a sale are also included.

The law has three basic rules:

- Goods must be of "merchantable quality". Goods must not be broken or damaged and must work properly. For example, if an Amiga computer works perfectly, but its mouse doesn't move left, the goods are not of merchantable quality. With software this can be a tricky problem to interpret. For instance, if you buy a word processor which claims to be able to print letters but only prints draft quality, you could claim that for its price and given general standards of word processing software that it was not of 'merchantable quality', because it didn't do the job it was meant to do.
- Goods must be "as described".

If the package, display sign or seller describes any of the features of an item that is sold, then that item must contain those features. If you're told a computer comes with a joystick then the seller must supply a joystick, and if an accounts package claims to be able to do VAT then it must be able to do that.

- Goods must be "fit for any particular purpose". Your particular purpose must be made known to the seller prior to any purchase. If you tell the seller you want an art package that produces circles, then any art package the seller provides should indeed produce circles.

If there's a fault with anything you buy, you should inform the seller at once because it's the seller – not the manufacturer – who must sort out your complaint.

If any of the three rules of the law have been broken you can:

- Reject the goods and get your money back.
- or
- Get a cash payment to make up the difference between what you paid and the reduced value of the faulty goods.
- or
- If you both agree, you may receive a replacement or free repair.

Exactly what you're entitled to depends on the seriousness of the fault and the speed at which you inform the seller. In practice any reputable dealer will give you either a replacement or your money back so long as your protest is reasonable.

Sometimes goods come with a guarantee. This doesn't affect your legal rights but can offer some form of extra protection. But treat any guarantee with caution as it may not be enforceable in law. See your local consumer adviser if you have any queries about a particular guarantee.

Please note that the above information concern consumer's legal rights in England and Wales – Scotland and Northern Ireland may have slightly different regulations. For further information you can obtain the following Office of Fair Trading leaflets (free of charge) from your local consumer adviser or various public libraries:

- How to put things right (England and Wales).
- Dear Shopper in Scotland.
- Dear Shopper in Northern Ireland

Case history of a Wally

Wally sees a mail-order advert for the Atari ST in an old mag he found and decides it's time to buy a computer.

(The company is now in financial difficulties and none of the magazines will take ads from them any more. If Wally had read some more up-to-date magazines, he might have guessed this.)

Wally sends the cash to the mail order company using normal post.

(Never send cash by post. Use a cheque, postal order or credit card. Use recorded delivery for large sums of money.)

Wally continually phones the mail order company from the day after the order was placed.

(You must give the company a reasonable time to deliver the goods, such as 28 days.)

After three months of phoning the mail order company (which now mysteriously doesn't answer its phone) the magazine where he saw the advert (which has no control over what's happened) and the Post Office (who deny any knowledge of the cash being sent), Wally



as described" and if it proves to be faulty, your rights will depend on what you and the seller said to each other before purchase, with the important factors being what you were told about the item's condition and value. If you buy a six-year-old Spectrum described only as "a bargain" and it packs in shortly after you get it home, that's hard luck. If on the other hand someone sells you an ST described as "mint, as new" and it packs in you would be more justified in taking it back to the seller.

When purchasing an item through a private sale, it's usually better to restrict yourself to your local area if you can. The reasons for this are three-fold: you're able to inspect the item before purchase, you can take a friend along to act as a witness (this is a distinct advantage when proving it really was described as you claim it was) and finally, you'll be able to return the item more easily if it proves to be faulty.

Watching the defectives

Obviously there are going to be times when you purchase an item - whether it's the computer itself, a peripheral or a piece of software - and it proves to be in some way defective. In such cases, provided the fault breaks one of the three basic rules of consumer rights, the correct procedure for making a complaint is:

- Stop using the item.
- Write down some details concerning the faulty item, such as the date and place of purchase, the actual problem (as clearly as possible), if the item is a piece of software include the model of your

decides to buy an ST elsewhere.

That night Wally meets a friendly bloke in the local pub who just happens to have an ST for sale. Wally arranges to buy the ST and collects it from the pub on the following night. When he gets the ST home, it doesn't work. Oddly enough, Wally never sees the bloke in the pub again.

(Buying goods in a private sale is a tricky business, and if possible, you should at least try the product before purchase. You should definitely know the name and address of the seller.)

Wally's third attempt at purchasing a computer goes a little more smoothly when he buys an ST from the local branch of a multiple high-street store. The trouble is he didn't bother to find out what software is, and so spends many an hour looking at a blank screen.

(Try to find out as much as you can about a product before you purchase it - read some computer magazines, or talk to any computer-owning friends.)

Wally goes out and buys some software for the Atari. Unfortunately it's for the Atari 800XL and therefore won't work on the Atari ST.

(When purchasing software find out the exact model of the computer it's supposed to be for.)

Wally goes back to the software seller who generously agrees to exchange the software for an ST title. Wally chooses a game and takes it home, doesn't like it and takes it back to the seller demanding a full refund and compensation. A heated argument ensues with Wally threatening physical violence. The seller phones the police who then arrive and escort Wally from the premises.

(If you change your mind about a product you're not entitled to any replacement, refund or compensation. Getting angry doesn't solve a problem, it just helps to escalate it into a bigger one.)

Wally puts the computer on top of the wardrobe and buys a satellite dish, neglecting to purchase the decoder needed to view the scrambled programmes.

(What a Wally!)

True stories

Every computer shop assistant has their favourite tale of irate customers who complain about things explained on page 1 of the manual. A few genuine examples:

"How will I get the paint off my TV screen?" Customer inquiring about the Photon Paint package included in the Amiga bundle.

"That's why the noise was so loud." Customer discovering that you need to use the lead to connect the cassette deck to the computer.

"When it said double-sided disk drive I thought it meant you could put two disks in at the same time." Customer returning an Atari ST with two disks jammed into the disk drive.

"Sorry my son's already got this game, can I exchange it for something else?" Customer presents the original packaged game and a pirated copy.

"When it said floppy disk, I thought I had to dismantle the outer-casing." Customer holding a demolished 3.5 inch disk.

"Is it easy to get pirated games on it?" Customer questioning the credentials of the Commodore Amiga's software base.

computer, etc. This information will be useful to you and the seller in any future dealings.

- Inform the seller as soon as possible.

If you order goods from a mail order company and they don't arrive, all you can really do is keep phoning and writing. Even large, reputable mail order places can misplace orders because of the sheer volume of business.

If you visit the seller:

- Take the item back to the seller.
- Take a receipt or proof of purchase.
- Ask for the manager or owner.
- Be polite, but firm.
- Stay calm! Getting angry doesn't help anybody.

If you telephone the seller:

- Write down what you want to say beforehand.
- Have receipts, guarantees or other proof of purchase on hand.
- Find out the name of the person you speak to.
- Write down the date and time of the call, and what is said.
- Be polite, but firm.
- Stay calm!

If you write to the seller:

- Keep copies of any correspondence.
- Do not use any original receipts, guarantees or other proof of purchase - send photocopies instead.
- You could use recorded delivery, to prove the seller received your letter.

Please note that you're not entitled to anything if you:

- Change your mind about wanting the item.
- Examined the item when you purchased it and missed any obvious faults.
- Were warned about the items faults.
- Created any damage yourself.
- Received the item as a present (the original purchaser must claim).

When the seller is part of a multiple-chain of shops and the local branch cannot help, try contacting the managing director at the head office.

If any of the above attempts fail you can obtain free advice from your local consumer advisers at:

- Trading Standards or Consumer Protection



Departments which investigate false or misleading descriptions or prices of goods.

- Citizens Advice Bureau who can help with the more general aspects of consumer problems.

As a last resort, you can sue for the refund of your money or for compensation in a county court. If your claim is for under £500 your case will usually be settled by a private and informal arbitration hearing, with you unlikely to pay your opponent's legal costs even if you lose. The fee you pay depends on the size of your claim and application forms can be obtained from your county court office. For more details contact your local consumer adviser - the Citizen's Advice Bureau will be in your Yellow Pages or Thomson directory. ●

Back To Basics

Jason Holborn, a hardened veteran of Amiga programming, tries out two new offerings for BASIC programmers

Replacement BASIC languages were inevitable when the Atari ST was first released. The machine came with a lousy version of BASIC that was slow, inflexible, had numerous bugs and was, above all, a real pain to use. The Amiga, on the other hand, offers an implementation that is everything that Atari BASIC isn't; it's fast, fairly flexible and an absolute joy to use. Would any Amiga owner therefore want to buy another BASIC? HiSoft and GFA Systemtechnik think so.

HiSoft BASIC

Amiga ● £79.95dk

HiSoft ● The Old School, Greenfield, Bedford MK45 5DE. Tel: (0525) 718181

HIGHLIGHTS

- Includes powerful compiler
- Easy to use
- Well-written manual
- Fully compatible with AmigaBASIC

DRAWBACKS

- Doesn't provide enough Amiga-specific support

HiSoft is probably better known to Amiga owners for its excellent assembler packages DevPac and, more recently, DevPac version 2. DevPac is in many people's minds the assembly language development system on the Amiga and is used extensively by top programmers such as Jez San, author of the smash hit StarGlider 2.

Features

To describe HiSoft's offering as just another Amiga-BASIC compiler

with a few extras wouldn't be doing the product justice. Rather than take the safe option of producing a straight compiler, HiSoft has opted to extend the language further, adding on a whole range of extra features while still managing to retain complete compatibility with AmigaBASIC.

The high degree of compatibility with existing BASICs on the PC, ST and Amiga will probably be one of the main selling points of the product. After all, for many learning AmigaBASIC was a hard enough task as it was - therefore why should you have to forget all that you've learned and start from scratch? As well as being able to handle AmigaBASIC, HiSoft BASIC will also compile QuickBASIC programs from the PC with minimal alterations needing to be made.

The HiSoft BASIC language is a more up to date version of BASIC that lends itself well to structured, or modular programming as it's now referred to. As well as the usual WHILE...WEND construct, additional structured statements include the likes of DO...LOOP and the

SELECT...CASE construct.

A Straight BASIC is simple enough to produce, but how well does HiSoft BASIC manage to tap the extra power of the Amiga? Unfortunately, this is an area where both fail to hit the mark. Amiga-specific commands are sparse, and it would have been nice to have seen full IFF support from within the package itself. However, HiSoft does intend to bundle an extra software package called Extend with all copies sold after the current offer has expired. Extend is a library of routines that includes full support for IFF and a whole host of other Amiga specific functions.

The Compiler

Undoubtedly the greatest attraction for many of HiSoft BASIC will be the included compiler. How you use the compiler is up to you. You can either run it from the CLI, the Workbench or even from within the Editor itself.

Two types of output can be generated by the compiler; stand-alone or shared library programs. Stand alone programs are, obviously, programs that can be run without having to have access to any other external files, but shared library programs will be very much a new concept to AmigaBASIC programmers. A shared library program requires access to a runtime library that must exist within the LIBS: directory of your boot disk. Shared Library programs do however have the advantage of being considerably smaller than stand alone programs.

Documentation

As with all HiSoft products, the manual is clearly written and informative and an example of how a computer manual should really be written. Whether you're a complete beginner or a seasoned techie, the HiSoft BASIC manual contains all information you will require, organised in a clear and logical manner.

★★★★

GFA BASIC

Amiga ● £64.95dk

Microdeal ● Box 68, St Austell, Cornwall PL25 4YB. Tel: (0726) 68020

Anyone used to using an Atari ST will be no stranger to GFA BASIC. On the ST, GFA can probably claim to be the most popular of all the alternative BASICs available. Many commercial ST packages have been written in the language because of its speed and complexity. With the release of Amiga GFA, is the product set to achieve the same popularity on the ST's rival?

Features

GFA BASIC has always been regarded as a powerful BASIC, and the Amiga implementation certainly isn't going to change that view. Unfortunately, this power is gained at a price: compatibility. GFA is quite unashamedly almost completely incompatible with all other BASICs including AmigaBASIC. While this was OK on the ST (most users probably didn't bother with Atari BASIC anyway), the situation is very different on the Amiga. AmigaBASIC is very usable, and many will regret having to forget what they've already learned.

Where support for structured programming is concerned, it's hard to fault GFA. The language is probably better than HiSoft's product in this department, as it includes all constructs found in HiSoft BASIC and a few more besides.

Amiga-specific commands at first seem extensive, until you realise that there isn't really a great deal there that AmigaBASIC doesn't already offer.

The final niggly point is the number of bugs that exist. Using the ALERT command, I was actually able to crash GFA every time! This isn't really acceptable for a language that is hoping to be seen as a serious development tool.

The Compiler

As if incompatibility wasn't enough, the worst is still to come, as GFA BASIC doesn't even include a compiler. A run time system is included but this is 85K in size. To be fair, though, GFA is working on a compiler for version 3. But as a compiler doesn't even exist for the Atari version,

Amiga owners can expect to have to wait a considerable amount of time for this to arrive. This of course will also mean more expense; probably the same price as the interpreter itself, if past pricing on the Atari is anything to go by.

Documentation

The GFA manual comes ring-bound in a rather professional looking box folder. The only real fault with the manual is the amount of information present; quite a few pages are less than half-full of text, and even what is there does tend to be rather sketchy at times.

★★

Conclusion

So which should you go for? HiSoft or GFA? Both are fast and highly structured languages, and you

could most certainly work comfortably with either. Unfortunately, GFA just doesn't seem to quite fit in the Amiga market in the same way as it did with the Atari; it's non-standard, contains numerous bugs and doesn't as yet possess a compiler.

HiSoft BASIC, on the other hand, has got a great deal going for it. It's fast, highly portable, includes a compiler and with Extend, the soon to be bundled add-on library, it is quite simply the best implementation of BASIC yet seen on the Amiga.

Why buy another BASIC?

AmigaBASIC is one of the best implementations of BASIC you're likely to find on any micro, so why would you want to consider paying for another BASIC when Commodore's offering seems to do the job perfectly adequately?

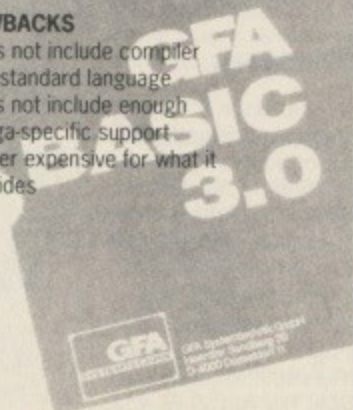
The main reason that most people would consider purchasing another BASIC is so that they can produce stand alone programs, that is, programs that do not need to be loaded into an interpreter to be run. And if that compiler happens to also extend the language in some way and is faster than the existing BASIC, well all the better. HiSoft BASIC includes an excellent compiler that will allow you to do just that but what about GFA? It hasn't got a compiler and it isn't even AmigaBASIC-compatible. Why buy GFA in that case? Er, you tell me...

HIGHLIGHTS

- Extensive structured programming facilities
- Powerful editor

DRAWBACKS

- Does not include compiler
- Non-standard language
- Does not include enough Amiga-specific support
- Rather expensive for what it provides



BATH COMPUTER SHACK

YOU CAN'T AFFORD TO GO ELSEWHERE

***** ATARI SUPER PACK *****

Atari 520stfm, 1 meg drive, 22 games and a joystick	ONLY £349.00
Atari Explorer Pack	£269.00
Atari 1040stfm now with modulator	ONLY £419.00
Atari 1040stfm with SM124 high resolution mono monitor	ONLY £529.00
Atari SH205 Hard Disc	£529.00
Atari SM124 High Res Monitor	£119.00
Atari SC1224 Colour Monitor	£249.00
Atari SLM802 Lazer Printer	£1049.00

ATARI MEGA'S AND PC'S

Please call for our very best prices, you won't be disappointed.

MONITORS

Philips CM8833	£259.00
Philips CM8852	£299.00

* NB: All prices include lead.

PRINTERS

Citizen 120D	£159.00
Panasonic KXP1081	£175.00
Epson LX800	£199.00
Star LC10 (with spare ribbon)	£215.00
Star LC10 colour	£265.00
Star LC24/10	£339.00
Star NB24-15 (free sheetfeeder)	£599.00

* NB: All above prices include lead.

ACCESSORIES

Handycap Keyboard Cover	£7.95
Monitor Stand	£24.95
Mouse Mats	£4.50
Monitor Master (ST Only)	£35.00
Mouse Master (ST & Amiga)	£24.95

COMMODORE

Amiga 500	£369.00
Amiga 500, Deluxe paint, 5 games	£389.00
Amiga 500, Deluxe paint, 2 games, 1084 Colour Stereo Monitor	£619.00
Amiga 500, Deluxe paint, 2 games modulator	£399.00
Amiga 500, Photon Paint, modulator	£389.00
Commodore 1084 Colour Stereo Monitor	£259.00

Full range of PC's in stock please call for our best prices

AMSTRAD

Amstrad PC1640 DD Mono	£669.00
Amstrad PC1640 SD Mono	£559.00
Amstrad PC1640 HD ECD	£1099.00
Amstrad PC1512 DD Colour	£725.00

Amstrad PC1640 DD Mono, DMP4000 Printer, Wordstar, Supercalc 3.1, Accounts Master
ONLY £899.00

All other models available, please call for our very best prices.

Amstrad PPC512S	£429.00
Amstrad PPC512D	£549.00
Amstrad PPC640S	£549.00
Amstrad PPC640D	£629.00

DISCS & BOXES

At UNBEATABLE Prices

10 x 3.5" DS DD Discs in Box	£9.95
25 x 3.5" DS DD Discs in Box	£25.00
25 x 5.25" Discs	£8.50
100 x 5.25" Discs	£29.95
Above Discs Certified & Guaranteed	
40 Cap 3.5" Lockable Box	£4.99
80 Cap 3.5" Lockable Box	£7.99
100 Cap 3.5" Lockable Box	£9.99

All prices include VAT & Delivery.
All Hardware is sent by next day courier

Access & Visa orders welcome.
Mail Order address below.

E&OE



SHOW ROOM
8c Chelsea Road
Lower Weston
Bath
Avon
BA1 3DU

TEL: (0225) 310300 FAX: (0225) 446827

MAIL ORDER
Units 11/12 White Hays South
West Wilts Trading Estate
Westbury
Wilts
BA13 4JT

TEL:(0373) 858031 FAX: (0373) 8580312

**THE BEST REASON FOR BUYING AN ATARI ST
MAIL ORDER ONLY POOLS-SYSTEM !! (TM) TRADE WELCOME
INCORPORATING - POOLSBUSTER & POOLSPLANNER**

OTHERS CALL THEIR POOLS PROGRAMS ULTIMATE. WE CALL OURS "THE" POOLS PROGRAM.

There were and still are a couple of pools programs for the Atari ST that guarantee to you performance better than chance (?) or promise to you power? to forecast the pools the way you want. Others are asking you for disk for free demos while weeks are going by and you are missing your chance for a dividend. Nevertheless **pools-system** still remains the only one in the market that delivers the goods. Lets have a look at some facts. **Fact** user friendly and still the only one that does not require you to be some kind of a football expert or hot shot system analyser. **Fact** pools systems is the only one that performed even slightly during the difficult & unpredictable Australian season. **Fact 13/8/88**. 4 ways out of the recommended first 6. 10 homes out of the recommended first 15. **20/8/88** Start of the English season, the system trapped 9 out of the 14 score draws & all 4 no score draws. **27/8/88** 9 out of the 12 score draws & 3 out of 6 no score draws. 4 homes out of the recommended first 6. **3/9/88**, 6 homes out of the recommended first 7, 4 ways out of the recommended 6. 5 out of the 7 score draws & 2 out of the 3 no score draws. 40 correct results out of the 58 possible. **Fact**, all forecasted printouts available at any time for any checks. So do not waste your time with any other programs or systems. They are not going to entertain your hopes or wishes. And to top all the facts, we guarantee the **Pools-System** performs better than any other pools program in the market on any computer, because we guarantee to you that using the **Poolsbuster in cooperation with Poolsplanner you are going to win the pools more than once a year.**

STOP PRESS!! What does the customer say: "I was very impressed with the general standard of the programs & their ease of use. I had a look around the program & worked out how to input the data without the use of the manual which shows just how good the program structure is set out. To get to the point, the very first entry I did came up trumps with 2 lines of 21 1/2 points. It brought me a win of £11.88. Not bad for a first attempt. Thanks for an amazing program. Regards P.J.L.Solihull. (Name & Address withheld for obvious reasons.

☆☆ Pools System (Poolsbusters & Poolsplanner) cost £40.00 inclusive. ☆☆

**NOW AVAILABLE FOR THE COMMODORE 64
POOLSBUSTER 64
Simply the Ultimate Pools Programme for the C64 - includes
"Magik Prediction" Option
Disc £40**

APOLONIA SOFTWARE (TM) PRESENTS: COMPUSHOP 1 - THE BEST PRICES FOR ATARI ST AND AMIGA HARDWARE AND SOFTWARE. JUST HAVE A LOOK AT POST CHRISTMAS PACKAGES

APOLONIA SOFTWARE

ATARI 520 STFM SUPERPACK

plus extra joystick, plus mouse mat, plus Compushop 1 starter disks, plus tutorial book and basic language disk

£349.00

ATARI 520 STFM (new) 1BM DRIVE

with **FREE** £400 worth of Software plus Compushop 1 Starter Kit.....**£349.00**

ATARI 520 STFM as above plus Pools-System**£359.00**

ATARI 1040 STFM

plus VIP Professional, plus Superbase Personal, plus Microsoft Write, plus Mouse Mat, plus Compushop Starter Disks

£449.00

ATARI 1040 STFM

plus VIP Professional, plus Superbase Personal, plus Microsoft Write, plus Mouse Mat, plus Compushop Starter Disks, plus Pool System

£459.00

ATARI 1040 STFM

plus VIP Professional, plus Superbase Personal, plus Microsoft Write, plus Mouse Mat, plus Compushop Starter Disks, plus Pool System, plus Mono Monitor

£549.00

POST CHRISTMAS PACKAGES

ATARI MEGA ST4 DTP

plus Mono Monitor, plus Laser Printer, plus Fleet Street Publisher, plus Time Works DTP, plus VIP Professional, plus Superbase Personal, plus Microsoft Write, plus First Word, plus Mega File 20, plus Compushop 1 Starter Disks, plus Mouse Mat

£2699.00

AMIGA 500 SUPERPACK

(Modulator plus joystick, plus Mouse Mat, plus Photon Paint, plus 15 games)

£380.00

New Atari PC3 IBM-PC compatible with switchable clock speed-4.77 MHZ or 8MHZ 8088 Micro Processor. EGA.CGA+Hercules Graphics Modes. Built in Twin Drive. 640KRAM. MS DOS 3.2 Operating System. Optional 8087 Maths Co-Processor Socket. Detachable XT Style Keyboard. Includes Parallel & RS232 Serial Ports. 256K Screen RAM. Supplied with Mouse Mono Screen Resolution of 720*350. Colour Screen Res. 640*350. Palette of 64 Colours. 16 can be displayed at the same time. Works with any CGA. MDA. EGA or Multi Frequency Monitor. Comes with **FREE Software & **FREE** Manual. R.R.P. = £647.49. Our price is only £580.00 inclusive! Atari PC3 as above + EGA Mono Monitor R.R.P. = £747.49. Our price is only £670.00 inclusive!!! Atari PC3 + EGA Mono Monitor + 30 MB Hard Disk R.R.P. = £1092.49. Our price is only £819.99 + VAT!!! All prices are inclusive of VAT & Delivery unless otherwise stated.**

Prices inclusive of VAT & deliver unless otherwise stated. These are only some examples, for more information call : **COMPUSHOP 1 ON : 01-738-8400**

If you do not see it, it does not mean we do not have it. Please call us and you will not regret it.

Prices are always fluctuating up or down. Call for the latest information and for availability. Mail Order Only. Speedy Delivery. No Hidden Extras.

STOP PRESS. Look 3 1/2" Disc(DSDD): 10 for £11.00. 20 for £21.00. 40 for £40.00, and 50 for £47.50. For the best prices for all

Atari-Amiga Hardware (Computers, Peripherals and Accessories) call:

Compushop 1 at 01-738-8400. (Make Chqs/P.O.s payable to Apolonia Software) and send to:

Apolonia Software. DPT NCE, 11 South Bank Business Centre, Unit 37 Alexandre House. 140 Battersea Park Road. London. SW11 4NB.



APOLONIA SOFTWARE -THE COMPANY THAT CARES

The Man of War

How one man fought his way from concentration camp to multi-national: Gyorgi Merghan describes the remarkable life of Jack Tramiel, founder of Commodore, now head of rival Atari...

The Jack Tramiel Story is the the stuff of the American Dream born of a nightmare. By lying amid the corpses to escape detection, he survived the unspeakable horrors of the Auschwitz concentration camp. Precious few outlived Auschwitz. Fewer still became the multi-millionaire bosses of global concerns such as Commodore and then Atari.

Having lost all of his immediate family, he was smuggled out of Nazi Germany, taken to the States and subsequently adopted by a Polish Jew. There, he started a small typewriter repair shop in the Bronx, moonlighting as a taxi driver to bring in more cash. Typewriters became computers, selling became manufacturing and via the PET, the Vic-20 and the C64, Commodore became a billion dollar firm.

For their reductive purposes, this sounds like classic rags-to-riches fodder for TV mini-series creators. Certainly, it puts to shame the nearest UK equivalent, the Alan Sugar tale of beetroot-boiling Hackney boy turned computer king. Yet unfortunately for the putative TV adulators, Tramiel is a far from genial man. By turns gruff, rude, forceful and then playfully, brashly humorous, his philosophy is "business is war" - and his constant verbal salvos show he means business.

Though rarely short of a word or five, there is

Revealing facts

Throughout Atari, Tramiel has established an ersatz openness. This means that senior staff are at liberty to discuss new products at length with the outside world. So where Amstrad adopts an almost regal policy of neither confirming nor denying anything, and where Commodore denies pretty much everything until it eventually happens, Atari folk are ever so slightly prone to revealing all far too early.

Hence the ST Plus has been discussed for months now, with no sign of the new machine. Likewise the ST console, and to a lesser extent the ST portable. The policy is then backed by Atari's abiding ability to preview, demonstrate, give first glimpses of, unveil and finally launch any new produce several times over. The CD Rom device, for example, has been paraded for the first time at so many shows that it's now regarded as one of the more perverse highlights on the journos' calendar.

It may all ramp up the interest in all things Atari, but the lengthy product trails are irritating to users hearing that another Next Big Thing is just around the corner.

one episode that Tramiel has never commented upon publicly: his remarkable departure from Commodore. Within days of the internal company celebrations about hitting one billion dollar sales, on January 13th 1984 - Friday the thirteenth - he abruptly resigned in the middle of a board meeting. That meeting was still in progress in New York as Tramiel was jetting out to California and apparently to retirement.

Versions differ as versions will, but the most credible explanation for the extraordinary resignation revolves around his plans to found a Tramiel dynasty. There were strong rumours that Sam, son number one, would come in as president. Then there was Gary, with a financial role being carved out for him. Completing the Tramiel trio was Leonard, who would have some sort of senior software function. For Commodore, it was a question of like father, but not really liking the sons. So Tramiel pere, never one to compromise, departed.

At 56, after a tough life and with the tidy post-Commodore sum of \$100 million tucked in his back pocket, Tramiel tried to play the role of the affluent American travelling the world. But a three month cruise left him bored, the active man cast adrift in the torpor of relaxing for the rest of his life.

Warner tell you a story

Suddenly, in true Hollywood tradition, up popped salvation in the form of Warner Brothers, desperately seeking suitors for its near-bankrupt subsidiary Atari. The firm was losing money like there was no today, let alone tomorrow. To lose one dollar is unfortunate, but to be losing \$538.6 million of them in a year really is quite an achievement.

But from Tramiel's point of view, this would have been simply irrelevant, had it not been for one over-riding factor: MSX. He had no plans to re-enter the computer world unless he felt he had a specific role to play. The Japanese threat provided just such a function. Like many others in early '84, Tramiel was worried at the prospect of a dozen leading Japanese consumer electronics firms uniting with Microsoft to produce a cheap computer standard. Sure, it's been clear for more than three years that the MSX revolution failed to happen, but in '84 the world looked very different. There was a need to fight the good fight, and



• Jack Tramiel - the Godfather-like face is not inappropriate. He believes in keeping it in the family; the Tramiel juniors are all set up in key positions in Atari

when it comes to fighting few can match Tramiel.

And so he bought the ailing Atari via a typically complicated, hard-nosed agreement which in effect meant he had paid Warners \$450 million in IOUs. This included some \$300 million debts owing to Atari. He subsequently managed not to settle some Warners' payments on time - and then renegotiated them downwards in any case. The Jack attack is so strident that he can persuade perfectly sensible businessmen to be bounced into perfectly incomprehensible deals. On much the same basis, he talks such a good battle that he can also persuade legions of computer journalists that this or that remarkable technological breakthrough really will be available next month.

The ironies of Tramiel at the helm of Atari abound. It had been forced so close to the edge by the collapse of the video games industry, which in turn had been precipitated by the exceptionally aggressive sales and marketing practices adopted by the then Tramiel-led Commodore. Having savaged the beast, Tramiel was thus to be cast as the resuscitator.

Further, his sons did indeed all join the new company, with Sam brandishing the brightest torch as president of his father's firm. Far from suffering as Commodore had predicted, the advent of the sons has coincided with the prosperity of the company. Also central to the renaissance of Atari was the part played by former Commodore staff. In all, some 40-odd moved over in the first few months following the Tramiel swoop, the majority of them in senior positions. Since then, the poaching has continued: the UK team, for example, is spattered with former Commodore people from the managing

MICRO BIOGRAPHY

JACK TRAMIEL

director right the way down to the official spokesman.

They helped fill the chasms created by Tramiel's savage staff-chopping. "I love cutting waste," he said at the time, "and if it's people who are the waste, that's tough." Within days, 1,050 American staff out of 1,200 were pushed out. Worldwide, in less than a month over 5,000 employees became just 1,500. With Tramiel, the bite often somehow manages to be even worse than the bark.

Puttin' on the writs

If that was the style, the substance of the man was to back a machine called the ST. To the mildly cynical, it was not a wholly remote possibility that the ST owed more to Commodore's Amiga than it really should have done. After all, the Commodorian great white hope was the Amiga, Tramiel had left the firm under a considerable cloud (taking with him sundry relevant staff), and the two computers do indeed have one or two similarities. Inevitably, the writs flew.

Though subsequently and secretly settled, the antipathy above and beyond the call of commercial duty still dominates discussion of the

Where there's a will

Jack Tramiel talks tough like other people sweat – and it's a toughness he applies to his sons as well, for all the talk of dynasty-building. When it appeared that sibling rivalry would prevent the younger Tramiels from working together, father Jack found a typical solution. He changed his will to prompt them to cooperate if they were to share in his riches.

Tramiel spiel

"Business is like sex. You have to be involved."
 "It turns me on any time I can take a product costing thousands of dollars and I can sell it for hundreds. I think it's good that I can serve society in that way and it satisfies my ego."
 "The Japanese are coming, so we will become the Japanese."
 "I believe people are smart, not dumb. If you can give Rolls Royces at the prices of Volkswagens, I'm sure people will buy them."
 "There are three principles in business: hard work, hard work and hard work."
 "Business is war."

of existence. As a strategy, it has the singular advantage of appearing novel; it doesn't work, at any rate.

Whatever, over the years Tramiel has proved to be a cute operator, turning Atari round to sizeable profitability. Commodore has been outflanked on numerous occasions and been made to look like the honest plodder of the two, at least in the UK. Where once Commodore led the way, it now coat-tails Atari via such matters as transputer workstations, bundling deals and – possibly – consoles. The two are locked together in a danse macabre, with Tramiel believing that he's now calling the tune.

Being such a singular man, it's difficult to predict Jack Tramiel's next major moves. On product, there is some likelihood that he will indeed deliver at consumerable prices the machines that have filled up the column inches in computer publications. Essentially, the strategy is the ST, variations on the ST (the Plus, the

firms. Atari takes a perverse delight in passing on all the supposed failings of Commodore, as though Tramiel himself is on a personal crusade against the firm. Commodore implausibly tries to ignore the rivalry out



• Like father, like son? Sam Tramiel looks lined up to be Atari's next boss...

console), areas beyond the ST (the Transputer workstation) – as well the occasional, almost grudging nod in the direction of PCs.

And personally? The dynasty is in place, with a clear path of succession through Sam. But with Tramiel, even at this stage of his life, you never really know what's going to come next... ●

NEXT WEEK

American boy makes good: The story of Steve Jobs and Apple

AMIGA	CAPTAIN BLOOD		DEFENDER OF THE CROWN		THREE STOOGES		XENON		ATARI ST	CAPTAIN BLOOD		GFL CHAMP AMERICAN FOOTBALL		OIDS		XENON	
	RRP	SRP	RRP	SRP	RRP	SRP	RRP	SRP		RRP	SRP	RRP	SRP	RRP	SRP	RRP	SRP
BAAL	44.90	20.96	49.90	20.92	49.94	21.96	39.94	20.96	BAAL	44.90	20.96	44.94	18.96	39.94	19.96	39.94	20.96
BATMAN	49.90	23.46	54.90	23.42	54.94	24.46	44.94	23.46	BATMAN	44.90	20.96	44.94	18.96	39.94	19.96	39.94	20.96
BATTLECHESS	49.90	24.96	54.90	24.92	54.94	25.96	44.94	24.96	COLLOSUS CHESS X	49.94	23.98	49.98	21.98	44.98	22.98	44.98	23.98
CRAZY CARS 2	49.94	22.48	54.94	22.44	54.98	23.48	44.98	22.48	CRAZY CARS 2	44.94	19.98	44.98	17.98	39.98	18.98	39.98	19.98
DRAGON'S LAIR (1 MEG)	69.90	34.96	74.90	34.92	74.94	35.96	64.94	34.96	DUNGEON MASTER	49.94	22.48	49.98	20.48	44.98	21.48	44.98	22.48
DUNGEON MASTER (1 MEG)	49.94	23.48	54.94	23.44	54.98	24.48	44.98	23.48	ELITE	49.90	22.46	49.94	20.46	44.94	21.46	44.94	22.46
ELITE	49.90	22.46	54.90	22.42	54.94	23.46	44.94	22.46	F-16 COMBAT PILOT	49.90	23.96	49.94	21.96	44.94	22.96	44.94	23.96
F16 FALCON	54.94	24.98	59.94	24.94	59.98	25.98	49.98	24.98	F16 FALCON	49.94	22.48	49.98	20.48	44.98	21.48	44.98	22.48
FED OF FREE TRADERS	54.90	27.98	59.90	27.94	59.94	28.98	49.94	27.98	FED OF FREE TRADERS	54.90	27.98	54.94	25.98	49.94	26.98	49.94	27.98
FISH!	49.90	22.46	54.90	22.42	54.94	23.46	44.94	22.46	FISH!	49.90	22.46	49.94	20.46	44.94	21.46	44.94	22.46
FOOTBALL MANAGER 2	44.90	19.96	49.90	19.92	49.94	20.96	39.94	19.96	FLIGHT SIMULATOR 2	64.94	33.98	64.98	31.98	59.98	32.98	59.98	33.98
GALDREGON'S DOMAIN	44.90	19.96	49.90	19.92	49.94	20.96	39.94	19.96	FOOTBALL MANAGER 2	44.90	19.96	44.94	17.96	39.94	18.96	39.94	19.96
HEROES OF THE LANCE	49.94	24.98	54.94	24.94	54.98	25.98	44.98	24.98	GALDREGON'S DOMAIN	44.90	19.96	44.94	17.96	39.94	18.96	39.94	19.96
HOSTAGES	49.90	22.46	54.90	22.42	54.94	23.46	44.94	22.46	HEROES OF THE LANCE	49.94	24.98	49.98	22.98	44.98	23.98	44.98	24.98
HYBRIS	51.90	24.96	56.90	24.92	56.94	25.96	46.94	24.96	HOSTAGES	49.90	22.46	49.94	20.46	44.94	21.46	44.94	22.46
JOAN OF ARC	49.94	24.98	54.94	24.94	54.98	25.98	44.98	24.98	JOAN OF ARC	44.94	21.98	44.98	19.98	39.98	20.98	39.98	21.98
KRYSTAL	54.94	24.98	59.94	24.94	59.98	25.98	49.98	24.98	KRYSTAL	54.94	24.98	54.98	22.98	49.98	23.98	49.98	24.98
LOMBARD RAC RALLY	49.90	22.46	54.90	22.42	54.94	23.46	44.94	22.46	LANCELOT	44.90	19.96	44.94	17.96	39.94	18.96	39.94	19.96
MENACE	44.90	20.96	49.90	20.92	49.94	21.96	39.94	20.96	LOMBARD RAC RALLY	49.90	22.46	49.94	20.46	44.94	21.46	44.94	22.46
PACMANIA	44.90	19.96	49.90	19.92	49.94	20.96	39.94	19.96	OPERATION WOLF	44.90	20.96	44.94	18.96	39.94	19.96	39.94	20.96
PHOTON PAINT	94.94	46.98	99.94	46.94	99.98	47.98	89.98	46.98	PACMANIA	44.90	19.96	44.94	17.96	39.94	18.96	39.94	19.96
POWERDROME	49.90	24.96	54.90	24.92	54.94	25.96	44.94	24.96	POWERDROME	49.90	24.96	49.94	22.96	44.94	23.96	44.94	24.96
PURPLE SATURN DAY	49.90	22.46	54.90	22.42	54.94	23.46	44.94	22.46	PURPLE SATURN DAY	49.90	22.46	49.94	20.46	44.94	21.46	44.94	22.46
ROBOCOP	49.90	23.46	54.90	23.42	54.94	24.46	44.94	23.46	QUANTUM PAINTBOX	49.90	24.94	49.94	22.94	44.94	23.94	44.94	24.94
ROCKET RANGER	54.94	25.98	59.94	25.94	59.98	26.98	49.98	25.98	ROBOCOP	44.90	20.96	44.94	18.96	39.94	19.96	39.94	20.96
SARGON 3 CHESS	49.90	22.46	54.90	22.42	54.94	23.46	44.94	22.46	SARGON 3 CHESS	49.90	22.46	49.94	20.46	44.94	21.46	44.94	22.46
SPEEDBALL	49.94	23.48	54.94	23.44	54.98	24.48	44.98	23.48	SPEEDBALL	49.94	23.48	49.98	21.48	44.98	22.48	44.98	23.48
STARGLIDER 2	49.90	22.46	54.90	22.42	54.94	23.46	44.94	22.46	STARGLIDER 2	49.90	22.46	49.94	20.46	44.94	21.46	44.94	22.46
SWORD OF SODAN	51.90	24.46	56.90	24.42	56.94	25.46	46.94	24.46	STOS GAMES CREATOR	54.90	25.96	54.94	23.96	49.94	24.96	49.94	25.96
TEENAGE QUEEN	44.90	19.96	49.90	19.92	49.94	20.96	39.94	19.96	TEENAGE QUEEN	44.90	19.96	44.94	17.96	39.94	18.96	39.94	19.96
THUNDER BLADE	49.94	24.98	54.94	24.94	54.98	25.98	44.98	24.98	THUNDER BLADE	44.94	21.98	44.98	19.98	39.98	20.98	39.98	21.98
TV SPORTS FOOTBALL	54.94	24.98	59.94	24.94	59.98	25.98	49.98	24.98	TRACK SUIT MANAGER	44.94	20.98	44.98	18.98	39.98	19.98	39.98	20.98
UNIVERSAL MIL SIMULATOR	49.90	22.46	54.90	22.42	54.94	23.46	44.94	22.46	ULTIMA IV	49.90	24.96	49.94	22.96	44.94	23.96	44.94	24.96
WEC LE MANS	49.90	23.96	54.90	23.92	54.94	24.96	44.94	23.96	UNIVERSAL MIL SIMULATOR	49.90	22.46	49.94	20.46	44.94	21.46	44.94	22.46
W/F ROGER RABBIT (1 MEG)	54.90	27.96	59.90	27.92	59.94	28.96	49.94	27.96	WEC LE MANS	44.90	20.96	44.94	18.96	39.94	19.96	39.94	20.96

All offers subject to availability. Look out for Myth, only from Official Secrets

SPECIAL RESERVE - THE CLUB THAT OFFERS YOU TWO.....

Pick a pair of games. One from the list down the left side and one from the selection across the top. RRP's are the combined retail prices. SRP's are our total prices for both games including post and packing. Pacmania and Xenon are highlighted as an example, our price is 19.96 for the two. We only sell to members of Special Reserve. If you are not already a member please add the £4.00 membership fee. Please note that we add a 50p surcharge per game for orders placed by telephone. We sell almost all games individually at truly amazing prices. For full details please send a stamped addressed envelope or telephone on 0279 600204. All games individually boxed and new. Membership entitles you to: Bi-monthly 12-page Buyers Guide, folder & membership card Best games at best prices (over 700 products) All games despatched individually by first class post Sales hotline open 7 days each week and weekday evenings No commitment - you don't have to buy anything Instant refunds for delayed products (on request)

NAME _____	MEMBERSHIP £4.00	Cheque, P.O., Access, Visa or Amex to:
ADDRESS _____	GAME _____ } £	SPECIAL RESERVE
_____	GAME _____ } £	P.O. BOX 847
_____	COMPUTER _____ } TOTAL £	HARLOW
POST CODE _____		CM21 9PH
		NCE D2

Give expiry date if paying by credit card.
Special Reserve is a department of Inter-Mediate Ltd

FREE! TENSTAR PACK WORTH OVER £229!



FREE! - AMEGAS - by Players



FREE! - INSANITY FIGHT - by Microdeal



FREE! - ART OF CHESS - by SPA

FREE! - MERCENARY COMP - by Novagen



FREE! - BARBARIAN, ULT WARRIOR - by Palace

FREE! - TERRORPODS - by Psygnosis



FREE! - BUGGY BOY - by Elite

FREE! - THUNDERCATS - by Elite



FREE! - IKARI WARRIORS - by Elite



FREE! - WIZBALL - by Ocean

Commodore AMIGA



ONLY £3.34 PER WEEK
RETURN COUPON FOR DETAILS

£346.95

+VAT= £399

INCLUDES FREE UK DELIVERY

The Amiga 500 is one of a new breed of technologically advanced computers, which are now emerging as the new standard for home computing, based around the new Motorola 68000 chip. The A500 has 512K RAM and a 1Mbyte double sided disk drive built-in. It can be connected directly to a wide range of monitors, or to a domestic TV set through a TV modulator. Designed with the user in mind, the A500 features a user friendly WIMP environment and comes supplied with a free mouse. And, when you buy your Amiga from Silica Shop, the UK's No1 Amiga specialists, you will experience an after sales service that is second to none, including a technical support helpline and free newsletters and price lists. Return the coupon below for our current information pack, which will give details of the Silica service and the very latest Silica Amiga offers. E&OE.

WHY SILICA SHOP?

Before you decide when to buy your new Commodore Amiga computer, we suggest you consider very carefully WHERE you buy it. There are MANY companies who can offer you a computer, a few peripherals and the top ten selling titles. There are FEWER companies who can offer a wide range of products for your computer as well as expert advice and help when you need it. There is ONLY ONE company who can provide the largest range of Amiga related products in the UK, a full time Amiga specialist technical helpline and in-depth after sales support, including free newsletters and brochures delivered to your door for as long as you require after you purchase your computer. That one company is Silica Shop. We have been established in the home computer field for ten years and can now claim to meet our customers requirements with an accuracy and understanding which is second to none. Here are just some of the things we can offer you.

THE FULL STOCK RANGE: The largest range of Amiga related peripherals, accessories, books and software in the UK.

AFTER SALES SUPPORT: The staff at Silica Shop are dedicated to help you to get the best from your Amiga.

FREE NEWSLETTERS: Mailed direct to your home as soon as we print them, featuring offers and latest releases.

FREE OVERNIGHT DELIVERY: On all hardware orders shipped to Silica Shop customers within the UK mainland.

PRICE MATCH PROMISE: We will normally match our competitors offers on a 'same product same price' basis.

FREE TECHNICAL HELPLINE: Full time team of Amiga technical experts to help you with your technical queries.

But don't just take our word for it. Complete and return the coupon below for our latest Amiga literature and begin to experience the Silica Shop specialist Amiga service.

PHOTON PAINT PACK

A500 Computer	£399.99
TV Modulator	£24.99
Photon Paint	£69.95
TenStar Pack	£229.50
TOTAL RRP:	£724.43
LESS DISCOUNT:	£325.43
PACK PRICE INC VAT:	£399

1084S MONITOR PACK

A500 Computer	£399.99
1084S Colour Monitor	£299.99
Photon Paint	£69.95
TenStar Pack	£229.50
TOTAL RRP:	£999.43
LESS DISCOUNT:	£350.43
PACK PRICE INC VAT:	£649

FREE FROM SILICA

When you buy the Amiga 500 from Silica Shop, you will not only get a high power, value for money computer, we will also give you some spectacular free gifts. First of all, we are now including a TV modulator with every A500 stand alone keyboard, so you can plug your Amiga straight into your TV at home (the modulator is not included with the A500+A1084S pack as it is not required for use with monitors). Secondly, we have added a free copy of Photon Paint, an advanced graphics package with an RRP of £69.95. Last (and by no means least!), so that you can be up and running straight away, we are giving away the sensational TENSTAR GAMES PACK with every A500 purchased at Silica Shop. This pack features ten top Amiga titles which have a combined RRP of nearly £230! Return the coupon for details.

FREE TENSTAR PACK

Amegas	£14.95
Art Of Chess	£24.95
Barbarian, Ult Warrior	£19.95
Buggy Boy	£24.95
Ikari Warriors	£24.95
Insanity Fight	£24.95
Mercenary Comp	£19.95
Terrorpods	£24.95
Thundercats	£24.95
Wizball	£24.95
TOTAL RRP:	£229.50 INC VAT

DO YOU OWN AN AMIGA?

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

SILICA SHOP:

SIDCUP (& Mail Order) 01-309 1111
1-4 The Mews, Hatherley Road, Sidcup, Kent, DA14 4DX
OPEN: MON-SAT 9am - 5.30pm LATE NIGHT: FRIDAY 9am - 7pm

LONDON 01-580 4000
52 Tottenham Court Road, London, W1P 0BA
OPEN: MON-SAT 9.30am - 6.00pm LATE NIGHT: NONE

LONDON 01-629 1234 ext 3914
Selfridges (1st floor), Oxford Street, London, W1A 1AB
OPEN: MON-SAT 9am - 6.00pm LATE NIGHT: THURSDAY 9am - 8pm

To: Silica Shop Ltd, Dep NCE, 1-4 The Mews, Hatherley Road, Sidcup, Kent DA14 4DX
PLEASE SEND ME FREE LITERATURE ON THE AMIGA

Mr/Mrs/Ms: Initials: Surname:

Address:

Postcode:

Do you already own a computer
If so, which one do you own?

What's your line?

What's so good about comms? What can you do with a modem that ordinary mortals can't? Peter Worlock continues his guide to comms

For most of us a telephone is an obvious instrument for communication since so many people in this country and abroad also have phones. There's no question about the telephone's usefulness.

Similarly, in business a fax machine is another obviously useful communicator because many other businesses have fax machines.

Modems are a different proposition because computer users are still a minority of the population, and modem users are very much a minority among computer users. Computers and modems have a far more specialised range of uses in communication.

Bite the bulletin

Accessing electronic bulletin boards is by far the most common application for modem users. As their name suggests, bulletin boards are the electronic equivalent of the school or office notice board, or the collection of postcards in your newsagent or local post office.

They are a useful and entertaining way of getting in touch with other computer users. They

can act as clearing houses of news, rumours, technical information and moral support when you're struggling with some seemingly intractable problem.

Most bulletin boards are amateur - in the genuine sense of the word - although the quality can range from poor to supremely professional. It depends on both the dedication of the sysop (the system operator) and the number of regular users.

Many boards are operated by individuals who do it for the fun and from a sense of enthusiasm, others are attached to larger organisations - computer user groups, public domain and shareware libraries, local government ITECs, and colleges and universities.

The content of the boards varies but most have similar set-ups: the bulletin board aspect itself, where you can leave messages and read other people's contributions; or news "pages" edited by the sysop or a contributor; if the system supports graphics there may be a demonstration region consisting of contributed graphics screens; and SIGs.

Have a SIG

SIGs are areas of the bulletin board devoted to one subject. You can usually find SIGs for specific computers such as Amiga or Atari ST, or general subjects like laptop computing, and there are also SIGs for various programming languages like C, Pascal, Modula-2 or the "artificial intelligence" languages of Lisp and Prolog.

Other SIGs might have nothing to do with computers. For some reason computer owners seem to read more science fiction than the average human, so you often find SF SIGs with book and film reviews and the occasional celebrity interview.

On the bigger bulletin boards you'll find most of life is represented: Lonely Hearts sections, sport, religion, flying, boating, pop music...whatever you want, somebody somewhere will have it.

Downloads as software

This is the bit where you actually get something concrete in return for your on-going investment in British Telecom.

Download areas are libraries of public domain and shareware software. You can take copies of any that take your fancy provided your comms software is capable of handling the transfer (the process of downloading).

This is also where a high-speed modem begins to repay your initial outlay - a 2,400 bps modem will save you a fortune in phone bills over a 300 or even a 1,200 bps model, especially if you're taking large programs.

A word of warning is also due on this point. Although some - perhaps even most - sysops do a good job of vetting programs before putting them into the download libraries, viruses can lurk here so check out any downloaded program before you run it. It's pointless and petty to blame the sysop if you fall victim to a virus: it's your computer, your risk, your responsibility.

Commercial break

Although by far the greatest number of on-line services are the bulletin boards, there are a handful of commercial systems.

Foremost among these is Prestel, a mammoth collection of on-line services from a host of information providers. Once connected to Prestel you can get regularly updated news bulletins, plus special news like City prices, travel news and sports results.

Prestel is also used by a number of professional organisations, notably travel agents and airlines, so you can browse for a holiday or check up on



I got your number

If you've got a modem and software, the following are some of the better known services you can try. Many bulletin boards carry directories of other BBs around the country and abroad so once you've logged onto one you can usually find your way into others.

Check your manuals for setting up your software for connection to bulletin boards but if in any doubt try 8 data bits, no parity, 1 stop bit. If that doesn't work, experiment!

General interest

CIX • 01 399 5252 • 24hrs • V21, V22, V23, V22bis

Gnome at Home • 01 888 8894 • 24hrs • V23 viewdata

Amiga

01 For Amiga • 01 377 1358 • Mon-Fri: 6pm-10am

• Weekends: 24hrs • V21 and V23

TABBS Amiga BBS • 0533 550893 • Mon-Fri: 6pm-

9am • Sun: 24hrs • V21, V22, V23

Atari ST

ACS BBS • 01 591 6687 • 10pm-9am • V21 and

V23

Carshalton Atari BB • 01 773 0408 • 24hrs • V21

and V23

CP/M

CP/M User Group • 0753 868196 • 24hrs • V21,

V22, V23, V22bis

PC

TUG II • 021 444 1484 • 24hrs • V21 and V23

Club 1512 • 01 204 8755 • 24hrs • V21, V22,

V23, V22bis

cheap air tickets.

However, the main area of interest for computer users is Micronet, a subsidiary part of Prestel dedicated to personal computers. Originally an on-line magazine - with news, reviews and computer-related features - Micronet has developed into much more and now offers an enormous range of services, including the Chatline in which you can "talk" to other subscribers as well as occasional celebrity guests, and several multi-user games (see below).

For details on subscriptions to Micronet write to Telemap Group, Durrant House, 8 Herbal Hill, London EC1 5EJ. If you have a 1200/75 bps modem and viewdata software you can access a demonstration of Micronet by dialing 021 618 1111 then enter the ID 4444444444 (ten 4s) and the password 4444.

The major rival to Prestel/Micronet is Compunet, originally for owners of Commodore 8-bit machines but since expanded to cater for Amiga and Atari ST owners. Compunet offers a broadly similar range of features as Micronet but is renowned for its contributed areas including music and graphic demos and downloadable software. There is also a large library of downloadable software for the C64, with Amiga and ST sections catching up steadily. For more information on Compunet call 01 997 2591.

A third commercial service is CIX. Unlike

Micronet and Compunet which retain the feel of an on-line magazine, CIX is more like an on-line user group meeting.

Instead of being split into SIGs, CIX is divided into conferences which callers can join. You then take part in a discussion on whatever topic is going - maybe advanced features of the 80386 processor, or the seemingly endless "C vs Modula-2" argument, or the variations and near-clones of Unix available for the Atari ST.

CIX appears to be heavily used by industry insiders - professional programmers, software publishers, hardware designers, technical journalists - so if you have a voracious appetite for the hard-core, high-tech subjects CIX could be a good choice.

Bunch of MUGs

Multi-user games have become one of the best reasons for going on-line. Unfortunately, they can be the quickest way to bankruptcy.

The original was MUD - the Multi-User Dungeon - in which you played a hero/heroine (sex-swap patients welcome) in a more-or-less normal adventure game. What was definitely abnormal about MUD was that the characters you encountered during your travels were not computer-controlled but were the alter egos of other real people scattered about the country. That's the "multi-user" part of the title.

MUD has now been joined by several newcomers. In addition to the adventure format, a common variation - typified by Compunet's Federation - is the trade-your-way-to-untold-riches-and-conquer-the-galaxy format. Again, your opponents are not figments of the computer's imagination but live, cunning, conniving, ruthless people. Just like you.

The appeal of MUGs is that they pit you against other people which makes for a tougher and more realistic game. The aspect of MUGs which is definitely not appealing is the cost, since every

minute you're playing, BT is racking up the profits.

HEALTH WARNING: Playing MUGs can seriously damage your bank account. Quarterly phone bills of £300 to £500 are not unheard of.

Email: the superior species?

There are now some half a dozen services offering ways of sending and receiving messages from your computer, and within each of these there are further sub-divisions including electronic mail (or e-mail) itself, telex and fax.

The telex and fax services are simple variations of the non-computer equivalents. E-mail is the computerised version of sending someone a letter: you write it, post it via the on-line service of your choice, and it is sent to the appropriate mailbox.

The catch is that, once the novelty has worn off, many e-mail subscribers may go for days without checking their mailboxes for incoming messages so you might as well have used a 19p stamp and sent it the old-fashioned way.

E-mail isn't cheap either. There are subscription charges ranging from £3 to £13 per month, connection charges (while you're composing and transmitting your missive) of around 10p per minute, plus your normal (or abnormal) telephone bill. If you're the recipient of e-mail messages you also have to pay for storage on the main system.

But perhaps the main drawback to e-mail is the fact that so few people are equipped for it and of those that are, a large number are computer industry insiders - journalists, manufacturers and publishers, retailers, and so on.

For further information on e-mail and related services call the relevant suppliers (voice lines):

One-to-One	01 351 2468
BT Gold	0800 200700
Datalinx	0422 70112
Mercury	01 528 2500
Microlink	0625 878888

Technobabble

A weekly assault on computer jargon

Comms part II

Upload/Download

These directional terms refer to the process of moving data - usually programs but also including messages - between your computer and the host. Everything happens in reference to the host system, so when you send something to the host you're "uploading"; "downloading" is simply traffic in the other direction.

Carrier

Not a variety of bird to be used when your modem breaks. A carrier is part of the signal transmitted by a modem which allows another modem to recognise that it is talking to one of its own and not some irate householder screaming "Wrong number" into the phone.

BABT

The British Approvals Board for Telecommunications (no relation to British Telecom) is the body responsible for making sure that the gadgets dreamt up by the computer industry aren't going to destroy the nation's telephone network. When it's satisfied it issues the equipment with a sticker bearing a green circle. Equipment not approved carries a red triangle.

Unapproved kit is illegal, although not in the normal sense of the word. The manufacturer is legally entitled to make it, the dealer is legally entitled to sell it, and you are legally entitled to own it. It's just illegal to use it and if you're caught - "Your ass is history," as Crockett and Tubbs might express it.

16 BIT CENTRE

MASSIVE DISCOUNTS

Atari STFM Super Pack Inc.
21 Games, ST Organiser, Joystick, Mouse + Manuals

ONLY £343

Philips 8833 Stereo Monitor
inc. Monitor Lead

ONLY £229

Amiga Ten Star Pack Inc.
35 Games, Mouse, Modulator, Manuals

ONLY £399

Citizen 120D Printer inc.
Lead For Amiga ST

ONLY £139

ALL PRICES INC. VAT AND CARRIAGE

PERIPHERALS/ACCESSORIES

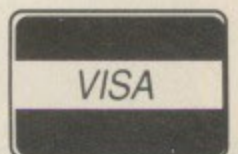
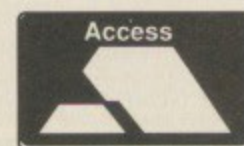
	£
Citizen 100E Printer	179.00
Star LC10 Mono Printer	209.00
Star LC-10 Colour Printer	259.00
Star LC-24/10 Printer	339.00
Philips TV Tuner	69.00
Quickshot II Joystick	9.95
Cumana Disk Drive (A/ST)	99.00
Atari Mouse	24.00
Multiface ST	47.00

SOFTWARE/UTILITIES

	£
F16 Falcon (ST)	16.45
F16 Falcon (Amiga)	22.50
Operation Wolf	13.50
Thunderblade	16.00
Double Dragon	13.50
R-Type	16.00
WordPerfect	175.00
The Works	69.00
1st Word Plus	69.00

16 Bit Centre
Unit 17
Lancashire Fittings Science Village
Claro Road
Harrogate
North Yorkshire
HG1 4AP

Telephone: 0423 526322





SAMDAL COMPUTERS LTD

"Better Than The Best of the Rest!"
TELEPHONE: 0621 - 742617



BARCLAYCARD



Credit Card Hotline 0621-742617
RING NOW!

OR CUT OUT AND SEND THE COUPON

*** FREE Delivery in UK * Orders Despatched in 24 hrs***
For a Fast & Personal Service Ring Now!

ATARI ST

Lombard RAC Rally.....	£19.90	Defender of the Crown.....	£23.90
NightHunter.....	£19.90	Flight Simulator II.....	£31.90
Falcon.....	£19.90	Jet.....	£31.90
Purple Saturn Day.....	£19.90	Pool of Radiance.....	£19.90
Puffy's Saga.....	£19.90	Star Glider 2.....	£19.90
BAAL.....	£15.90	Batman.....	£15.90
Powerdrome.....	£19.90	War in Middle Earth.....	£19.90
Dungeon Master.....	£19.90	F-19 Stealth Fighter.....	T.B.A
Carrier Command.....	£19.90	Bombuzal.....	£19.90
Virus.....	£15.90	Bubble Bobble.....	£15.90
Captain Blood.....	£19.90	Space Harrier.....	£15.90
20000 Leagues Under the Sea.....	£15.90	Return of the Jedi.....	£15.90
Times of Lore.....	£19.90	Test Drive.....	£19.90
Joan of Arc.....	£15.90	Garfield.....	£15.90
Elite.....	£19.90	The Kristal.....	£23.90
Marble Madness.....	£19.90	PowerPlay.....	£15.90
SpeedBall.....	£19.90	Dragon Ninja.....	£15.90

NEW LOW PRICES !

Phone 0621 - 742617 FOR FREE PRICE LIST & CATALOGUE

AMIGA

Pioneer Plague.....	£19.90	Marble Madness.....	£15.90
Dungeon Master.....	£19.90	Flight Simulator II.....	£31.90
Sword of Sodan.....	£23.90	Batman.....	£19.90
Battlechess.....	£19.90	War in Middle Earth.....	£19.90
F/A-18 Interceptor.....	£19.90	Fish.....	£19.90
Superman.....	£19.90	The Kristal.....	£23.90
Rocket Ranger.....	£23.90	Powerplay.....	£15.90
Lombard RAC Rally.....	£19.90	Dragon Ninja.....	£19.90
Falcon.....	£23.90	Heroes of the Lance.....	£19.90
Garfield.....	£15.90	Purple Saturn Day.....	£23.90
Captain Blood.....	£19.90	SpeedBall.....	£19.90
StarGlider 2.....	£19.90	Fusion.....	£19.90
Carrier Command.....	£19.90	Puffy's Saga.....	£19.90
Virus.....	£15.90	Return to Atlantis.....	£19.90
Elite.....	£19.90	Ferrari Formula 1.....	£19.90
Phantom Fighter.....	£15.90	Garfield.....	£15.90
Bombuzal.....	£19.90	Test Drive.....	£19.90

NEW LOW PRICES

Phone 0621 - 742617 FOR FREE PRICE LIST & CATALOGUE

MSX

Time and Magik.....	£14.95	Vampire.....	£5.99
Ingrid's Back!.....	£14.95	Venom Strikes Back.....	£7.99
The Hunt for Red October.....	£14.95	Way of the Tiger.....	£6.99
PacMania.....	£8.95	10th Frame.....	£6.99
Winter Games.....	£9.99	California Games.....	£9.99
Scrabble.....	£9.95	Cluedo.....	£9.95
Colossus Chess 4.....	£9.99	Games Winter Edition.....	£9.99
Elite.....	£14.95	Gary Lineker.....	£7.99
Flintstones.....	£8.95	Ace of Aces.....	£6.99
Indiana Jones.....	£9.99	Flash Gordon.....	£6.99
International Karate.....	£6.99	Footballer of the Year.....	£6.99
Living Daylights.....	£9.95	Gauntlet.....	£6.99
Mad Mix.....	£7.99	Afterburner.....	£9.99
Monopoly.....	£9.95	Mappy.....	£6.99
Pacman.....	£6.99	BMX Simulator.....	£5.99
Peter Beardsley Soccer.....	£8.95	Dig Dug.....	£5.99
Terramex.....	£8.95	Dizzy Dice.....	£5.99

ROBOCOP OUT SOON ! RESERVE YOUR COPY NOW

Phone 0621 - 742617 FOR FULL PRICE LIST

* For a Full Price List of Games for Your Machine **RING US NOW!** or **FILL IN THE COUPON** stating your machine type and **SEND IT TO US NOW!**

* Our unique Customer CareCard which carries **Your** Personal Customer Number and a handy 1989 Calendar - **FREE** with every order!

* Orders despatched by 1st Class Post

ALSO STOCKISTS FOR IBM PC, SPECTRUM, C64 & AMSTRAD GAMES

RING 0621 - 742617 NOW WITH YOUR ORDER !

Mail orders to: Samdale Computers Ltd, 1a Austral Way, Highfield Rise, Althorne, Essex. CM3 6DN.

Software Title	Machine	Amount
Total Enclosed £		

Name

Machine

Address

.....

.....

Postcode Tel. No

FREE Credit Card '89 Calendar with First Order
***Cheque or P.O. Payable to SAMDALE COMPUTERS LTD ***

Overseas orders add £2.00 per item

"WE GUARANTEE NOT TO Cash Cheques OR Debit Credit Cards Until Goods Despatched"

● The arrival of *Life and Death* at our offices this week did prove to inject a certain humour into what can only be described as a fairly average bunch of releases. The smooth-scroll screeching of *Super-Hang On* came out tops with Hitman's loyalties divided between the kick-em-to-death-em-up, *Dragon Ninja*, and the total-everything-in-sight-em-up, *Hybris*. Needless to say we didn't let him anywhere near *Life and Death*.

SUPER HANG-ON

ELECTRIC DREAMS

Amiga • £24.99dk
Also on ST, C64, CPC, Spec



• Turbo, or not turbo – either way, even Mr Sheene himself would have trouble cleaning up on this polished product

The Amiga version of the great ST transworld racer hits the tarmac and bids for pole-position in the road wars. So there's only two wheels, but it shifts faster than the most souped-up Ferrari sim you've ever seen. At a blistering rate of 17 frames per second, actually.

● **GAMEPLAY**

There are four sections to the game – Beginner, Junior, Senior and Expert – represented by a total of 48 stages of track situated in Africa, Asia, America and Europe respectively.

Bonus time at the end of each stage helps prolong the fun by adding another thirty seconds to the fifty you start out with, but the difficulty is carefully tweaked so you'll keep coming back for more. A turbo can be cut in by hitting the right mouse button, and providing you're going flat out this supercharges you right up to around 200 mph. At this speed you can barely control the bike, never mind dodge the other riders you compete against. A lot of the time is consequently spent building up your speed again after being rammed from behind or spiralling headlong into roadside obstacles. It's all a race

against the clock – the key is in becoming familiar with the courses.

● **GRAPHICS AND SOUND**

The impression of speed, bike animation and coloured backgrounds are all phenomenal – cutting in the turbo delivers some of the fastest screen updates yet seen on an Amiga. There are now three levels of scrolling background compared to the ST version's two. Sound is very impressive too, being sampled straight from the arcade version. Hit the tarmac and you hear the Doppler effect of other rider's bikes zooming past in stereo!

● **OTHER VERSIONS**

Apart from the CPC outing, which features poor sound and drab colour, all other versions are well above average, with the ST one coming out tops. The Amiga version is marginally faster and noticeably smoother than its 16-bit cousin and of course scores much higher in the audio department. This is no straight conversion!

● **EXPRESS VERDICT**

A superior racing game which streaks ahead of the competition in terms of audio visuals, highly addictive and marred only by the fact that it's possibly too difficult. But then when did difficulty deter anyone?

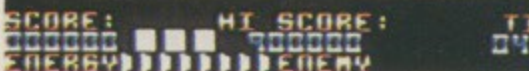
★ ★ ★ ★

Andy Storer

DRAGON NINJA

OCEAN

CPC • £9.95cs
Also on Spec, C64, ST, Amiga



• Plenty of on-screen sprite action

Dragon Ninja is a conversion of the popular Data East coin-op, and is another in the long line of martial-arts kick-em-to-death-em-ups.

● **GAMEPLAY**

Dragon Ninja lets you take on the role of a street-wise hardman travelling through a horizontally-scrolling cityscape wiping out any opponents that dare confront you.

Using a variety of kicks, punches and any weapons you can pick up, you'll discover and fight a myriad of martial-arts morons including shiraken-throwing Ninja assassins, vicious guard dogs and acrobatic women warriors. At the end of each level you'll meet a tougher form of scum known as a Ninja Master, who'll require an extra dose of beating-up before any further progression into the game is possible.

● **GRAPHICS AND SOUND**

Perhaps *Dragon Ninja's* most striking visual element is the amount of on-screen action at any one time, which amazingly doesn't detract from the overall speed. The sprites are varied, exuberantly coloured and defined and expertly animated – and are complemented by diverse and proficient backdrops.

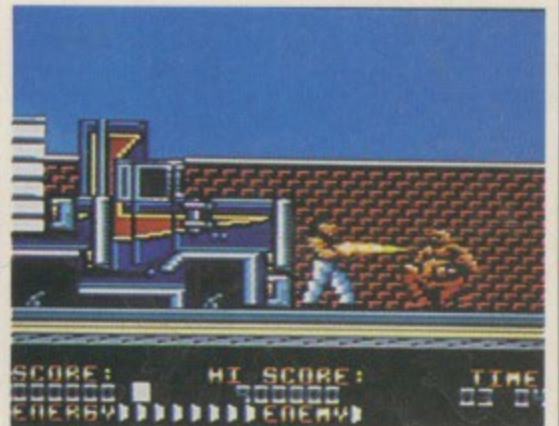
Audio contains functional sound-effects and a suitably oriental soundtrack assisted by a New Wave-influenced drumbeat.

● **OTHER VERSIONS**

We've seen the early pre-productions of the other versions of *Dragon Ninja* and they're looking very promising. We're looking forward to getting our hands on the finished articles.



• Don't get hit by the truck



• Confronting one of the Ninja Masters

● **EXPRESS VERDICT**

Dragon Ninja is a credible and faithful conversion of the first-rate coin-op, and continues Ocean's magnificent run of excellent releases like *Operation Wolf*, *Robocop* and *Batman*.

Certainly one of the most good-looking and playable beat-em-ups on the CPC so far, *Dragon Ninja* would make a welcome addition to any budding Ninja's software collection.

★ ★ ★ ★

Rik Haynes

HYBRIS

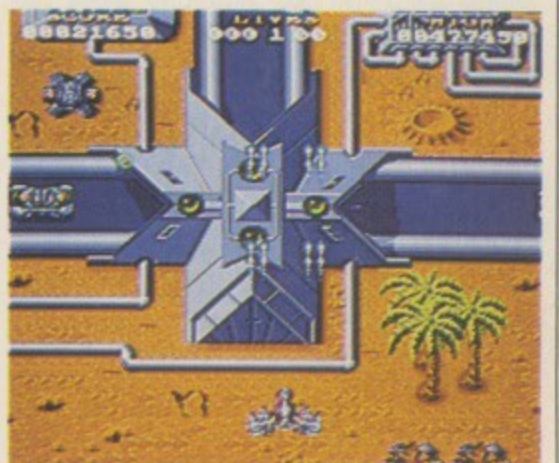
DISCOVERY SOFTWARE INTERNATIONAL, USA

Amiga • £24.99dk
No other versions known

Hybris is a vertically-scrolling shoot-em-up similar to the brilliant coin-op *Terra Cresta*, and is imported by Gainstar, Unit 1, Rear of 7 Wellington Road, Sandhurst, Surrey GU17 8AW. Tel: (0252) 877431

● **GAMEPLAY**

Taking control of a mean-machine space fighter, your mission is to seek out a missing colony. Easy enough,



• Coming up to a ground emplacement, guns a-blasting

you might think, but first you'll have to destroy a multitude of alien spacecraft and ground emplacements all wishing to finish your mission of mercy as quickly as possible.

It's probably a good job that you can pick up some extra weaponry along the way, helping you to blast these killjoys in their tracks.

● GRAPHICS AND SOUND

Hybris visuals are of a high quality throughout, comprising appealing backdrops backed up by an assortment of somewhat conventional, but nevertheless praiseworthy sprite designs.

Audio is also engaging, with dramatic sound spot effects accompanied by an upbeat and infuriatingly catchy soundtrack.

● OTHER VERSIONS

No details of any other versions of *Hybris* are currently available.

● EXPRESS VERDICT

Hybris is another great release from Discovery Software – the maker of the excellent *Sword of Sodan* – and is definitely the most playable Amiga vertically-scrolling shoot-em-up we've seen to date. Gameplay has the right balance between difficulty and actually allowing progression through the many different levels. A great "discovery" (*You're fired again – Ed*), *Hybris* is certainly worth checking out.

★ ★ ★ ★

Rik Haynes

GRAND PRIX CIRCUIT

ACCOLADE

PC • £24.95dk
Due out on C64



• "And there goes the unmistakable figure of Alain Mansell, or is it Nigel Piquet, Murray?"

After releasing *Ferrari Formula One* and *Test Drive*, *Accolade* return to the track for a mean turbo blast and look set to establish themselves as the premier PC Prixers

● GAMEPLAY

You have a range of cars at your disposal to take you around eight international circuits including Monaco, Hockenheim and Silverstone while competing against nine other drivers. You can choose to drive for McLaren, Williams and Ferrari and attempt to handle their corresponding vehicles – A Honda Turbo, A V8 Renault and a V12 Ferrari. Couple their performance differences with the five available skill levels and you have a degree of control from the almost auto-pilot relaxation of the lowest level to the hypersensitive top end. Races are also divided into practice laps, single races and the Championship Circuit, which pits you against the season's best competitors. The overall result is not so much a serious sim as a mix of fun and thrills.

● GRAPHICS AND SOUND

It's quite fast for a PC racing game, which is surprising since most rely on simulating action to a degree where slow screen updates are disguised by the wealth of detail. Here, though, colour and animation are well presented and make *Grand Prix Circuit* look great, especially in EGA mode.

● OTHER VERSIONS

It's due out on C64 some time soon, though we haven't seen any advance copies.

● EXPRESS VERDICT

Nice to see a PC game that actually shifts at a pace for once, and where you're not waiting for the track ahead of you to unfold by the second. Whilst it's by no means a Grand Prix simulator, it's good fun and worth a look for any PC owner wanting a turbo-charged game to show off their machine's spec.

★ ★ ★

Andy Storer

SOLDIER OF LIGHT

ACE/SOFTEK

Amiga • £24.99dk
Also on Spec, C64, ST
Under development on CPC



• Xain all alone in the desert, with no-one around to annihilate

Soldier of Light is a conversion of the cult Taito coin-op, which featured spectacular and original visuals matched by uncompromisingly tough gameplay.

● GAMEPLAY

SOL is a horizontally-scrolling shoot-em-up with you controlling Xain, an intergalactic soldier equipped with exoskeleton armour and jet-boots, sent out to destroy all alien forces in the galaxy.

You first decide which planet you want to clean up next. Then it's down to business blasting anything that moves, ranging from the standard alien foot-soldier to a huge dinosaur-like creature. Luckily you'll find extra armaments pods along the way which increase your firepower when collected. And you'll need 'em.

● GRAPHICS AND SOUND

The most stunning feature of SOL is its fantastic backdrops, which are not only beautifully drawn but also expertly coloured. They add greatly to the atmosphere of the game and present an accurate impression of the coin-op's graphics. Sprites are also nicely defined, being both varied in design and size.

Audio is far less impressive, with only tolerable sound effects uplifted to a small degree by the funky soundtrack – although even this gets irritating after a while.

OTHER VERSIONS

Spectrum SOL was the first version to be released, back in Spring '88, and is a reasonable conversion. The C64 version is a quite playable, with inviting audio-visuals slightly marred by the limited play area. ST SOL has very disappointing audio quality, but contains identical visuals to the Amiga version. No release date has been set for the CPC version.

● EXPRESS VERDICT

SOL is quite a decent shoot-em-up with bright, colourful and attractive visuals underlining a reasonable blast. A slight criticism can be levied at the fact that SOL contains less taxing gameplay than the coin-op parent, thus casting a doubt over its lasting interest. A touch overpriced, but still worth a look.

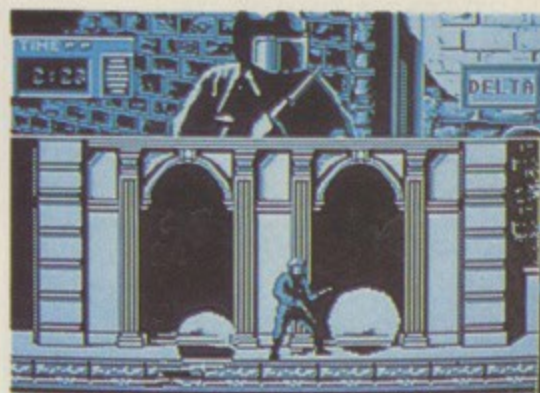
★ ★ ★

Rik Haynes

HOSTAGES

INFOGRAMES

PC • £24.95dk
Also on ST and Amiga



• Just about to start dodging the searchlights and salvos

Infogrames' latest PC release sees anti-terrorism making its way to the micro as you command an elite French SAS squad in a bid to storm an embassy and rescue captives.

● GAMEPLAY

You have to place three marksmen at safe vantage points around an embassy in preparation for a further three to be sent in by helicopter. Guiding them by joystick, you dodge the terrorist searchlights and machine gun fire as they scan the perimeter. Once in place, you flick to a sniper's eye view of the Embassy windows and attempt to take out the occasional figure you might sight behind the glass. You then take the role of the chopper squad and abseil down and through a window.

Once inside you view proceedings from behind the nozzle of a machine-gun. A small map indicates your position and that of any one of the 14 terrorists in the building. From then on it's down to moving from room to room and attempting to cut in half anyone you come across before they do the same to you. As the opposition are pretty hot on the ammo too, you'll be switching to your second and third backups to flush out all floors and find and rescue the hostages.

● GRAPHICS AND SOUND

The graphics aren't bad for a PC running VGA, with windowed foregrounds of animated action overlaid on detailed backgrounds. Inside the Embassy relatively fast screen updates have the effect of compounding the tension. Sound effects feature gunfire and the groans of dying men – what else would you expect from a game that deals with a death squad going about its everyday business?

● OTHER VERSIONS

Both the ST and Amiga versions look and sound great and are streets ahead of this PC release, but then that's only to be expected.

● EXPRESS VERDICT

Quite a good outing in the PC shoot-out stakes, though maybe a little dubious in the contents department. Worth a look if you want to feel the sharp end of law enforcement cut with tension and what we can only assume to be an element of edgy realism.

★ ★ ★

Andy Storer

MINI GOLF

MAGIC BYTES/GREMLIN

ST • £19.99dk
Also on C64, Amiga

Mini Golf is yet another golf game, this time brought to us by German-based Magic Bytes and



• Selecting the angle for the next shot

distributed in this country by Gremlin.

● **GAMEPLAY**

You have to guide your golf ball through courses of varying difficulty, choosing the right angle to pocket the ball in as few moves as possible, using the walls to reflect the ball around the many obstacles that occur.

The view of the action is seen from above, but there's an option to view the course from other angles before you make any final decisions on your tactics for that particular hole.

● **GRAPHICS AND SOUND**

Audio-visuals would have had to been really impressive to make this game stand up. It's unfortunate that they are, in fact, boring run-of-the-mill incarnations, and are certainly below the standard set by Access/US Gold's *Leaderboard*.

Mundane representations of the courses make this game look more like a game of pool or snooker and are matched by poor quality sound-effects.

● **OTHER VERSIONS**

The Amiga version is similar in feel and audio-visuals to the ST version, albeit with small improvements in quality. The C64 version is okay, but still not good enough. There are no other versions planned.

● **EXPRESS VERDICT**

Mini-Golf is a reasonable concept totally ruined by poor implementation. It and just doesn't stack up against the popular *Leaderboard* series of golfing games. Stay clear of this release.

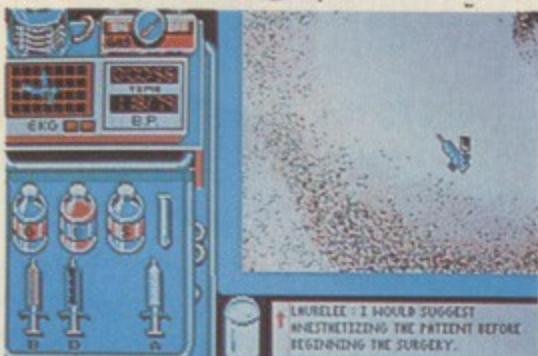


Rik Haynes

LIFE AND DEATH

SOFTWARE TOOLWORKS

PC • £24.95dk
Also on Amiga



• Software Toolworks inject new humour into operating manuals

The purveyors of *Chessmaster 2000* certainly enjoy a good foray into the more esoteric realms of gaming and strategy. *Life and Death* finds you in the role of a surgeon asked to perform a number of operations.

● **GAMEPLAY**

After signing on as a doctor, your first job is to go from room to room diagnosing patients' conditions – most of them are suffering from abdominal pains of some kind. With your mouse you prod various areas of their stomachs and are met with groans and yelps as they register pain. You then decide whether to observe, operate, administer medication, X-ray or ultra-scan the

patient. Scans reveal visual evidence of kidney stones or whatever, whilst the other options are met with a pop-up head surgeon who informs you of the success in diagnosis.

Obviously, though, you're dying to operate on someone, and sooner or later you enter the theatre and prepare to stick the knife in. Your victim's abdomen is exposed, you pump them full of drugs, clean them up a little, and go to work with a scalpel. It's at this point they usually die. Unless you're a medical student, you probably won't have the faintest idea what to do except read the manual. You'll leave the room and wheel in another. Half an hour later half of North America will be dead.

● **GRAPHICS AND SOUND**

Some of the animated sequences are incredibly primitive and slow, but then the game is really about interactive medical treatment, which doesn't normally happen at great speed in any case. Sound is pretty appalling too, with groans and death throes only barely distinguishable from the audio of the most unsociable of bodily emissions.

● **OTHER VERSIONS**

The Amiga version is by far the most gruesome of the range, with truly outrageously loud screams accompanying yet another botched op.

● **EXPRESS VERDICT**

Something of an oddity, of course. *Execution Simulator* might have been a better title, but if you're into human vivisection then this is the one for you. Of course, you may just be interested in medicine.



Andy Storer

ADVANCED RUGBY SIMULATOR

CODE MASTERS

ST • £19.99dk
No other versions planned



• That multicoloured portuguese man-of-war in the centre of the pitch is in fact a scrummage...

No prizes for guessing what type of game *Advanced Rugby Simulator* is...

● **GAMEPLAY**

ARS follows the standard route of the "football"-type (sorry, rugby fans!) sports-simulation game.

During play you control a whole team, with the player under current control being highlighted by a cursor. The player's able to pass or kick in a somewhat subdued game of rigger. All the features of rugby are here, including conversions, scrummages and touch backs. There are also many options which allow you to tweak various attributes of the game, such as choosing one of a possible 17 team policies (the tactics the other players in your team adopt during the game).

The only really novel feature of ARS is the streaker who occasionally shows up!

● **GRAPHICS AND SOUND**

Visuals vary sharply from the competent between-game screens to the chronically undersized player sprites. The strange combination of scrolling, flip-screen and still screen just doesn't work very well, tending to disperse the flow of the action. If they had been better implemented and more attractive, the game would have been greatly improved.

Audio is the worst aspect of the game, without a single digitised grunt, groan or scream to be heard anywhere. Sound-effects are restricted to wave-like sounds which would be better off in a surfing simulator (*What, another Code Masters game? – Ed*).

● **OTHER VERSIONS**

Code Masters already has the budget title *International Rugby Simulator* for the Spectrum, C64 and CPC, but Amiga and PC versions of ARS are unlikely at the present time.

● **EXPRESS VERDICT**

Code Masters' preoccupation with "simulator" games can get tiring at times. What about programming a proper simulator, guys? Still, rugby fans wanting to recreate their favourite sport on the ST will probably enjoy ARS, but for other ST gamers there's not a lot here to keep you interested for long.



Rik Haynes

A QUESTION OF SPORT

ELITE

ST • £19.99dk
Also on Amiga, PC, Spec, C64, CPC



• "Errr...extraordinary!" (if only it were)

REEEMAARKABLE! The most popular TV sports quiz ever, watched by 19 million viewers each week makes it to the monitor. Is this a) a reflection on the appalling competition, b) a reflection on the British public or c) a measure of David Coleman's role as a screen god of the eighties?

● **GAMEPLAY**

Yes, you lead your team through Coleman's masterfully stylistic touches in a game divided into six rounds of questions based on sports trivia. You can play against the computer, another player or with three players per team. The rounds feature four-option multiple choice questions from the picture board, mystery personality, home and away, what happens next, and quick fire – so the game follows exactly the same format as the series. Two points are awarded for correct answers. Running out of time or answering wrongly passes it over to the other team for one point. And...er...well, that's it! (fiddles with earpiece)

● **GRAPHICS AND SOUND**

The ST version is quite novel, in so far as its screen displays mix hi-res mode mono digitised pics of the players with the coloured surrounds of medium res. Screen updates are quick enough, but as with most quiz games the graphics are uninspiring. Sound is confined to the ridiculously insidious jingles and music of the TV programme.

● **OTHER VERSIONS**

The C64 version is okay in the graphics and sound department, with portraits replaced by hand-drawn renditions, and leaves the Spectrum's mostly unrecognisable efforts lurking somewhere in a blurred fog.

● **EXPRESS VERDICT**

UNREEEMAARKABLE! Possibly the most sporting aspect of the game would be to give it away to someone else. Preferably someone you don't like. Otherwise it's a question of waiting for another round of questions to load in and ask "What Happens Next?"



Andy Storer

MASTERTRONIC

Nobody does it better!

Programmers, don't be duped by other companies claims - when it comes down to publishing budget software there's really only one choice.

Fact: Mastertronic has the largest market share in the UK software industry.

Fact: Mastertronic has over 1500 outlets in the UK alone, including high street stores and supermarket chains, more than any other software house.

Fact: Mastertronic has extensive distribution in Europe and its own company in the USA.

Fact: Mastertronic is part of the Virgin Group - one of the worlds most successful entertainment companies.

Fact: Mastertronic is looking for good quality, original C64, Spectrum, Amstrad CPC, Atari ST, Amiga and IBM PC games.

If you think you can meet our standards send a copy of your game with instructions to:

THE MAGIC POST BOX.

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



REPTILIX

DESIGN

Reptilia Design requires programmers to work freelance on Z80, 6510 and 68000. We are also looking for talented graphic artists and musicians. If you think you are talented enough to convert a game from one format to another then write with examples of your work to:

**Reptilia Design,
Unit 27, 33 Noble Square,
Basildon, SS13 1LT**

For Further Details phone Ian or Mick
between 12pm and 7pm on (0268) 590571

A new software label setting new standards in Computer Gaming requires **CODERS** and **GRAPHIC ARTISTS** for the **AMIGA, ATARI ST** and **PC MACHINES**, capable of producing the **BEST** the Medium has to offer.

If you think you've got what it takes, contact
ADRIAN TURNER at
ACTUAL SCREENSHOTS
immediately on
(01) 533 2918
or send C.V.'s and DEMOS to:
**UNIT 7D, KING'S YARD, CARPENTERS ROAD,
LONDON, E15 2HD**

Systems Programmers

Locomotive Software - the creators of LocoScript for the Amstrad PCW, Mallard BASIC and BASIC 2 - are expanding. We need systems programmers to work on the design and development of future MSDOS, OS/2 and Presentation Manager products.

We're looking for people with a good degree, from a good university, preferably with a significant computer content. Ideally you will have some experience of developing PC software - either as a hobby or as part of your job since leaving university.

You will work at our offices in the centre of Dorking, Surrey, where we have a powerful network of 286-based PCs. We provide unlimited coffee and clean air (as smoking is not allowed.) The working hours are flexible, based on a 35 hour week.

We offer an initial salary of £10,000 to £15,000 depending on experience. We see our future success depending on the quality of our products, which in turn depends on an experienced and professional development team. And so we see it as important that we offer an environment where technical achievement is rewarded.

If you are interested, please send your detailed CV to Howard Fisher at



LOCOMOTIVE SOFTWARE

Allen Court
Dorking
Surrey, RH4 1YL
Tel: (0306) 740606

The Problem!

**53,000 vacancies
Forecast
by National
Computing
Centre**

Britain is experiencing a "chronic" shortage of skilled computer staff. At present it is estimated that there are 16,000 vacancies for development staff and a growing shortage of systems programmers.

And The National Computing Centre predicts that by 1991 this could well rise to 53,000.

The low level of attention to training has been suggested as the main cause for this.

The Solution!

**Computeach
Student Wins
National Award**

Keith Burbanks, aged 26, has recently won the National Computing Centre's Bronze Award for the best performance in this year's City & Guilds examinations.

Keith, who is now a well-paid computer programmer, was unemployed before becoming a Computeach student, is just one of hundreds of young people that Computeach International are training to meet the national shortage of skilled computer staff.

Computers are Everywhere! The Computer Industry needs YOU!



The electronic office is now with us. Everywhere you look computers are taking over.

In the secretary's office, in the accounts department, in the sales department and in the design office—just about everywhere.

It's bad news for those who don't have any experience in computers.

But it's **very good** news for those with the right training.

In fact, by 1991 it's predicted that there could be 53,000 unfilled vacancies in the computer industry.

So don't get left behind or worse **left out!**

Get the experience that will get you one of those 53,000 interesting, well paid jobs in computers, with a Computeach distance learning course.

Ring Stourbridge (0384) 378005 (24hr service) **now** or send the coupon to:

**Computeach International Limited, Freepost, Stourbridge,
West Midlands, DY8 7BR.** (no stamp required)

Please send me details of your computer training courses.

Name (Mr/Mrs/Miss) _____

Address _____

Postcode _____ Tel. No. _____

Present Occupation _____ Age _____



COMPUTEACH
GROUP
NCE 26/1

THE RELEASE SCHEDULE

AMIGA

2000 Leagues Under The Sea	19.95	Out Now	Coktel Vision
Amiga Gold Hits 1	24.99	Out Now	U.S. Gold
Beal	19.95	End Jan	Psygnosis/Psyclapse
Barbarian II	19.99	Feb/March	Palace
Batman - The Caped Crusader	24.95	Late Jan	Ocean
Billiards	19.95	Mid Jan	Ere/Infogrames
California Games	24.99	Out Now	Epyx/U.S. Gold
Captain Fizz	14.95	Out Now	Psygnosis/Psyclapse
Circus Games	24.95	Out Now	Tynesoft
Cosmic Pirate	19.99	February	Outlaw
Crazy Cars II	24.99	End Feb	Titus
Custodian	19.99	Mid Feb	Hewson
Dark Fusion	19.99	February 7	Gremlin
Deluxe Paint II/Deluxe Print	69.95	Out Now	Electronic Arts
Earl Weaver			
Commissioner's Disk	9.99	Late Feb	Electronic Arts
F-16 Falcon	29.99	Out Now	Mirrosoft
Freedom	19.95	Out Now	Coktel Vision
Galactic Conqueror	24.95	Out Now	Titus
Galdregon's Domain	19.99	January 27	Pandora
Gary Lineker's Hotshots	19.99	February 14	Gremlin
Gauntlet II	19.99	Out Now	U.S. Gold
Helibent	19.95	Out Now	Novagen
Heiter Skelter	14.95	Out Now	Audiogenic
Hotball	24.95	Out Now	Satory
Incredible Shrinking Sphere	24.99	January 25	Electric Dreams
International Karate+	24.99	Imminent	System 3
Kennedy Approach	24.95	Imminent	Microprose
Manhattan Dealers	24.95	Out Now	Silmarils
Neuromancer	24.95	Late Feb	Interplay/EA
Purple Saturn Day	24.95	Out Now	Exxos
Ringside	24.99	Mid Feb	E.A.S.
Shoot-Em-Up Construction Kit	24.99	February	Outlaw
Skateball	19.99	Late Feb	Ubi Soft
Super Hang-On	24.99	End Jan	Electric Dreams
Superman - Man of Steel	24.95	Out Now	Tynesoft
Technocop	19.99	Out Now	Gremlin
Teenage Queen	19.95	Late Jan	Infogrames
The Munsters	19.99	Out Now	Again Again
Tiger Road	24.99	Imminent	Capcom/U.S. Gold
Track Suit Manager	19.99	Out Now	Again Again
TV Sports Football	29.99	Out Now	Cinemaware
Ult. Sound Tracker	39.95	Out Now	E.A.S.
Wanted	19.95	Out Now	Infogrames
War in Middle Earth	24.99	Mid Feb	Melbourne House
Zany Golf	24.95	Late Feb	Electronic Arts
Zero Gravity	19.95	Out Now	E.A.S.

ATARI ST

2000 Leagues Under The Sea	19.95	Out Now	Coktel Vision
B.A.T.	24.99	Late Feb	Ubi Soft
Barbarian II	19.99	Jan/Feb	Palace
Batman - The Caped Crusader	19.95	Out Now	Ocean
Billiards	19.95	Mid Jan	Ere/Infogrames
Bismarck	24.99	Out Now	PSS
Captain Fizz	14.95	Out Now	Psygnosis/Psyclapse
Chaos Strikes Back	14.99	Mid Feb	Mirrosoft/FTL
Circus Games	24.95	Out Now	Tynesoft
Cosmic Pirate	19.99	February	Outlaw
Crazy Cars II	19.99	Out Now	Titus
Custodian	19.99	Mid Feb	Hewson
Dark Fusion	19.99	February 7	Gremlin
Dragonscape	19.95	February 16	Software Horizons
F-16 Combat Pilot	24.95	Early Feb	Digital Integration
F-16 Falcon	24.99	Out Now	Mirrosoft
Federation Of Free Traders	29.99	January 31	Gremlin
Final Command	24.99	Late Feb	Ubi Soft
Freedom	19.95	Out Now	Coktel Vision
Fusion	24.95	Late Feb	Electronic Arts
Galactic Conqueror	19.95	Out Now	Titus
Galdregon's Domain	19.99	January 27	Pandora
Game Over II	24.95	Out Now	Dinamic
Gary Lineker's Hotshots	19.99	February 14	Gremlin
Helibent	19.95	Out Now	Novagen
Heiter Skelter	14.95	Out Now	Audiogenic
Hotball	24.95	Out Now	Satory
Incredible Shrinking Sphere	19.99	January 25	Electric Dreams
Iron Lord	24.99	Early Feb	Ubi Soft
Joan Of Arc	19.99	Out Now	U.S. Gold
Manhattan Dealers	19.95	Out Now	Silmarils
Night Hunter	19.99	Out Now	Ubi Soft
Purple Saturn Day	24.95	Out Now	Exxos
Ringside	24.99	Mid Feb	E.A.S.
Skateball	19.99	Late Feb	Ubi Soft
Skyfox II	24.95	Late Feb	Electronic Arts
Sputnik 40 & Str. For Harrier	24.99	Out Now	Mirrosoft
Superman - Man of Steel	24.95	Out Now	Tynesoft
Technocop	19.99	Out Now	Gremlin
Teenage Queen	19.95	Late Jan	Infogrames
The Munsters	19.99	Out Now	Again Again
Tiger Road	19.99	Imminent	Capcom/U.S. Gold
Track Suit Manager	19.99	Out Now	Again Again
Wanted	19.95	Out Now	Infogrames
War in Middle Earth	24.99	Mid Feb	Melbourne House
Zany Golf	24.95	January 25	Electronic Arts
Zero Gravity	19.95	Out Now	E.A.S.

COMMODORE 64/128

Action Service	D14.95	Late Jan	Cobra/Infogrames
Action Service	T9.95	Late Jan	Cobra/Infogrames
Barbarian II	D12.99	Imminent	Palace
Circus Games	D14.95	Out Now	Tynesoft
Circus Games	T9.95	Out Now	Tynesoft
Dark Fusion	D14.99	February 7	Gremlin
Dark Fusion	T9.99	February 7	Gremlin
Exploding Fist +	D12.99	Out Now	Firebird
Exploding Fist +	T9.99	Out Now	Firebird
Fish!	D19.99	January 25	Rainbird
Gary Lineker's Hotshots	D14.99	February 14	Gremlin
Gary Lineker's Hotshots	T9.99	February 14	Gremlin
Grand Prix Circuit	D14.95	Imminent	Accolade/EA
Grand Prix Circuit	T9.95	Imminent	Accolade/EA
Hostages	D14.95	Late Jan	Infogrames
Hostages	T9.95	Late Jan	Infogrames
Incredible Shrinking Sphere	D14.99	January 25	Electric Dreams
Incredible Shrinking Sphere	T9.99	January 25	Electric Dreams
Iron Lord	D19.99	Early Feb	Ubi Soft
Iron Lord	T12.99	Early Feb	Ubi Soft
Jordan vs Bird - One on One II	D14.95	Out Now	Electronic Arts
Mini Office I	T2.99	Out Now	Summit
Modem Wars	D14.95	Late Feb	Electronic Arts
Project Firestart	D14.95	Imminent	Electronic Arts
R-Type	D14.99	Out Now	Electric Dreams
Rocket Ranger	D14.99	Late Jan	Cinemaware
Serve and Volley	D14.95	Out Now	Accolade/EA
Serve and Volley	T9.95	Out Now	Accolade/EA
Skateball	D14.99	Late Feb	Ubi Soft
Skateball	T9.99	Late Feb	Ubi Soft
StarRay	D14.95	Out Now	Logotron
StarRay	T9.95	Out Now	Logotron
Street Gang	T1.99	January 25	Players
Superman - Man of Steel	D14.95	Out Now	Tynesoft
Superman - Man of Steel	T9.95	Out Now	Tynesoft
T.K.O.	D14.95	Out Now	Accolade/EA
T.K.O.	T9.95	Imminent	Accolade/EA
Tank Attack	D14.99	Out Now	CDS
Tank Attack	T12.99	Out Now	CDS
Technocop	D14.99	Out Now	Gremlin
Technocop	T9.99	Out Now	Gremlin
The Double	T2.99	Out Now	Summit
The Munsters	D14.99	Out Now	Again Again
The Munsters	T9.99	Out Now	Again Again
Tomcat	T1.99	January 25	Players
War in Middle Earth	D19.99	Mid Feb	Melbourne House
War in Middle Earth	T9.99	Mid Feb	Melbourne House
Word Style	D19.95	Out Now	Supersoft
Word Style	T17.95	Out Now	Supersoft

IBM & COMPATIBLES

2000 Leagues Under The Sea			Coktel Vision	
Abrams Battle Tank	3.5+5.25	24.99	February 15	Electronic Arts
Battlechess	3.5	24.95	Out Now	Interplay/EA
Battlechess	5.25	24.95	Out Now	Interplay/EA
Billiards	5.25	19.95	February	Ere/Infogrames
Circus Games	5.25	24.95	Out Now	Tynesoft
Crazy Cars II	5.25	24.99	End Feb	Titus
F-16 Combat Pilot	5.25	24.95	End Jan	Digital Integration
Fast Break	5.25	24.95	January 26	Accolade/EA
Freedom	5.25	19.95	Out Now	Coktel Vision
Galactic Conqueror	5.25	24.95	Out Now	Titus
Grand Prix Circuit	3.5	24.95	Out Now	Accolade/EA
Grand Prix Circuit	5.25	24.95	Out Now	Accolade/EA
Halls of Montezuma	5.25	24.95	Out Now	SSG
Hostages	5.25	24.95	Out Now	Infogrames
Manhattan Dealers	5.25	24.95	Out Now	Silmarils
Modem Wars	3.5+5.25	24.95	Late Feb	Electronic Arts
Offshore Warrior	5.25	24.99	Out Now	Titus
Puffy's Saga	3.5	19.99	Late Feb	Ubi Soft
Puffy's Saga	5.25	19.99	Late Feb	Ubi Soft
Rackem	5.25	24.95	Out Now	Accolade/EA
Skateball	3.5	19.99	Late Feb	Ubi Soft
Skateball	5.25	19.99	Late Feb	Ubi Soft
Speedball	3.5+5.25	24.99	Out Now	Image Works
Star Goose	3.5+5.25	24.95	Out Now	Logotron
StarRay	3.5+5.25	24.95	Out Now	Logotron
Strikefleet	3.5	24.95	Out Now	Electronic Arts
Strikefleet	5.25	24.95	Out Now	Electronic Arts
T.K.O.	5.25	24.95	Late Feb	Accolade/EA
The Bard's Tale II	3.5	24.95	Out Now	Electronic Arts
The Bard's Tale II	5.25	24.95	Out Now	Electronic Arts
The Train	5.25	24.95	Out Now	Accolade/EA
Times of Lore	5.25	24.95	Imminent	Microprose
War in Middle Earth	5.25	24.99	Mid Feb	Melbourne House
Wasteland	3.5+5.25	24.95	February 1	Electronic Arts
Zany Golf	3.5+5.25	24.95	Out Now	Electronic Arts

SPECTRUM

Barbarian II	T9.99	Out Now	Palace
Captain Blood	T9.95	Late Jan	Exxos
Circus Games	T8.95	Out Now	Tynesoft
Dark Fusion	T7.99	February 7	Gremlin
Emlyn Hughes			
Emlyn Hughes			
International Soccer	T9.95	Imminent	Audiogenic
Exploding Fist +	T7.99	Out Now	Firebird
Fire & Forget	T8.99	Out Now	Titus
Gary Lineker's Hotshots	T7.99	February 14	Gremlin
Incredible Shrinking Sphere	T9.99	January 25	Electric Dreams
Mini Office I	T2.99	Out Now	Summit
Puffy's Saga	T8.99	Late Feb	Ubi Soft
Skate or Die	T8.95	Late Feb	Electronic Arts
SEteball	T8.99	Out Now	Ubi Soft
Street Gang	T1.99	January 25	Players
Superman - Man of Steel	T8.95	Out Now	Tynesoft
Tank Attack	T12.99	Out Now	CDS
Technocop	T7.99	Out Now	Gremlin
The Archon Collection	T8.95	Out Now	Electronic Arts
The Double	T2.99	Out Now	Summit
The Munsters	T9.99	Out Now	Again Again
War in Middle Earth	T9.99	February	Melbourne House

SPECTRUM+3

Barbarian II	D14.99	Imminent	Palace
Captain Blood	D14.95	Late Jan	Exxos
Cash Book	D17.95	Out Now	Supersoft
Dark Fusion	D12.99	February 7	Gremlin
Emlyn Hughes			
Emlyn Hughes			
International Soccer	D14.95	Imminent	Audiogenic
Fish!	D15.99	January 25	Rainbird
Gary Lineker's Hotshots	D12.99	February 14	Gremlin
Ionn Graphix 128	D17.95	Out Now	Audiogenic
Instant Recall	D19.95	Out Now	Supersoft
Mini-Putt	D14.95	January 30	Accolade/EA
Puffy's Saga	D14.99	Late Feb	Ubi Soft
Skate or Die	D14.95	Late Feb	Electronic Arts
Skateball	D14.99	Out Now	Ubi Soft
Technocop	D12.99	Out Now	Gremlin
The Archon Collection	D14.95	Out Now	Electronic Arts
The Munsters	D14.99	Out Now	Again Again

AMSTRAD CPC

Afterburner	D14.99	Out Now	Activision
Afterburner	T9.99	Out Now	Activision
Airborne Ranger	D19.95	Imminent	Microprose
Airborne Ranger	T14.95	Imminent	Microprose
Barbarian II	D14.99	February	Palace
Barbarian II	T9.99	February	Palace
Chuck Yeager's Advanced Flight Trainer	D14.95	Late Feb	Electronic Arts
Chuck Yeager's Advanced Flight Trainer	T8.95	Late Feb	Electronic Arts
Crazy Cars II	D14.99	Mid Feb	Titus
Crazy Cars II	T9.99	Mid Feb	Titus
Dark Fusion	D14.99	February 7	Gremlin
Dark Fusion	T9.99	February 7	Gremlin
Galactic Conqueror	D14.95	Out Now	Titus
Galactic Conqueror	T9.95	Out Now	Titus
Gary Lineker's Hotshots	D14.99	February 14	Gremlin
Gary Lineker's Hotshots	T9.99	February 14	Gremlin
Incredible Shrinking Sphere	D14.99	January 25	Electric Dreams
Incredible Shrinking Sphere	T9.99	January 25	Electric Dreams
Miss Office I	T2.99	Out Now	Summit
R-Type	D14.99	Out Now	Electric Dreams
Technocop	D14.99	Out Now	Gremlin
Technocop	T9.99	Out Now	Gremlin
The Archon Collection	D14.95	Out Now	Electronic Arts
The Archon Collection	T8.95	Out Now	Electronic Arts
The Munsters	D14.99	Out Now	Again Again
The Munsters	T9.99	Out Now	Again Again
War in Middle Earth	T9.99	February	Melbourne House

ARCHIMEDES

Fish!	24.99	January 25	Rainbird
-------	-------	------------	----------

MACINTOSH

Fish!	34.99	February	Rainbird
-------	-------	----------	----------

AMSTRAD PCW

Fish!	24.99	January 25	Rainbird
-------	-------	------------	----------

BBC

Football Director	D12.99	Out Now	CDS
Football Director	T9.99	Out Now	CDS
Mini Office 1 (& Electron)	T2.99	Out Now	Summit

MSX

The Munsters	T9.99	Out Now	Again Again
--------------	-------	---------	-------------

Out Now = Released within the last month Imminent = Expected at time of publication

The Release Schedule is a reference guide to new and forthcoming products. Dates given are expected release dates and will be adjusted weekly. Please allow for slippage. Compiled by Software Information Services, a department of Inter-Mediate Ltd.

SOFTSELLERS

12 SANDPIPER CLOSE, LONGRIDGE PARK, COLCHESTER, ESSEX. CO4 3GE

36a Osborne St,
Colchester,
Essex.
(RETAIL)

Access



We will match any Software price advertised by another company providing the advert is a current issue and not a special offer. Please state the magazine and company concerned

BARCLAYCARD



5a Dogs Head St,
Ipswich,
Suffolk.
(RETAIL)

24hr MAIL ORDER PURCHASE LINE (0206) 869668 (0206) 863193

	ST	AMIGA	HARDWARE		ST	AMIGA	
Afterburner	13.99	16.99	Atari 520 STFM with 1 Meg Drive	£269.95	Lancelot	12.99	12.99
A Question of Sport	12.99	15.99	Atari 520 Super Pack with 21 Games + Business Organiser Database/Spreadsheet/ Diary/Wordprocessor	£349.95	Manhattan Dealers	12.99	15.99
Amiga Gold Hits		16.99	Atari 1040 STFM Professional Pack with Microsoft Write Wordprocessor SuperBase Personal Database V.I.P. Professional Spreadsheet	£449.95	Menace	12.99	12.99
Alien Syndrome	12.99	15.99	Professional Pack with SM 124 Mono Monitor	£549.95	Microprose Soccer	15.99	15.99
Armalyte	12.99	12.99	Professional Pack with SC1224 Colour Monitor	£749.95	19 Boot Camp	12.99	12.99
Batman	12.99	15.99	Atari 1040 Super Pack with 21 Games + Business Organiser	£449.95	Nigel Mansell's Grand Prix	16.99	16.99
Bards Tale I or II	16.99	16.99	Atari 1040 Super Pack with SC1224 Colour Monitor	£749.95	NightRaider	13.99	13.99
B.A.T.	16.99	16.99	Atari SC1224 Colour Monitor	£299.95	Nebulus	13.99	13.99
Barbarian II	12.99	12.99	Cumana 1 Meg Drive ST	£109.95	Operation Wolf	12.99	13.99
Battlechess	16.99	16.99	Amiga 500 with FREE Modulator, Tutorial, & Extra's Disc	£369.95	Out Run	13.99	13.99
Better Dead Than Alien	12.99	12.99	Amiga 500 with 1084S Colour Monitor	£599.95	Overlander	12.99	15.99
Bionic Commando	13.99	16.99	1084S Colour Monitor	£249.95	Paperboy	12.99	15.99
Black Lamp	12.99	12.99	Cumana 1 Meg Drive Amiga	£99.95	Pac Mania	12.99	12.99
Bombuzal	15.99	15.99	Amiga A501 Memory Expansion + Clock Card	£139.95	Peter Beardsley	12.99	12.99
Bomb Jack	12.99	15.99	Citizen 120D Printer £199.95 + VAT		Phantom Fighter	12.99	13.99
Butcher Hill	16.99	16.99	10 3 1/2 inch Blank Discs	£9.95	PowerPlay	12.99	12.99
Buggy Boy	12.99	15.99	Joystick Extendors	£4.95	Platoon	12.99	15.99
Bubble Bobble	12.99	12.99	4 Player Adaptors	£4.95	PowerDrome	16.99	16.99
Carrier Command	15.99	15.99	Mouse Mats	£4.95	Pools of Radiance	16.99	16.99
Captain Blood	15.99	15.99	Cheetah 125 Joystick	£7.95	Purple Saturn Day	15.99	15.99
Chrono Quest	19.99	19.99	QS Turbo Joystick	£12.95	Quadrailen	12.99	12.99
Combat School	12.99	15.99	Pro 5000 Joystick	£14.95	Rambo III	12.99	15.99
Corruption	15.99	15.99	Cheetah Starfighter	£14.95	Return of the Jedi	13.99	13.99
Crazy Cars II	15.99	15.99	Konix Navigator	£14.95	RoadBlasters	13.99	16.99
Daley Thompson's O.C.	12.99	15.99	Pro 5000 Extra	£15.95	Robocop	12.99	15.99
Deluxe Music		49.99	Pro 5000 Clear	£15.95	R-Type	13.99	13.99
Deluxe Paint II		49.99	Disc Storage Box 40	£7.95	Rocket Ranger	15.99	19.99
Deluxe Video		49.99	Disc Storage Box 80	£9.95	Scrabble	12.99	12.99
Degas Elite	16.99	16.99	Sega Master System	£79.95	Shadowgate	15.99	15.99
Dragon Ninja	12.99	15.99	Sega System +	£99.95	Shoot Em Up Construction	15.99	15.99
Double Dragon	12.99	12.99	Sega Super System	£129.95	Space Harrier I or II	12.99	15.99
Dungeon Master	15.99	15.99			Starglider II	15.99	15.99
Driller	15.99	15.99			Skateball	16.99	16.99
Elite	15.99	15.99			Skychase	12.99	12.99
Eliminator	13.99	13.99			ST Five Star	15.99	15.99
Falcon	15.99	19.99			Star Ray	12.99	15.99
F16 Combat Pilot	15.99	15.99			Star Goose	12.99	12.99
Fernandez Must Die	15.99	15.99			STOS	19.99	19.99
Fed. of Free Traders	19.99	19.99			StreetFighter	13.99	16.99
Fish	15.99	15.99			SpeedBall	15.99	15.99
Fire and Forget	15.99	15.99			S.D.I.	13.99	13.99
Fusion		16.99			Skate or Die	16.99	16.99
Football Manager II	12.99	12.99			Super Hang-On	13.99	16.99
Football Director II	12.99	12.99			Techno Cop	16.99	16.99
Gauntlet II	13.99	12.99			Tiger Road	13.99	13.99
Garfield	12.99	15.99			Test Drive	16.99	16.99
Guerrilla War	12.99	15.99			Tracksuit Manager	12.99	12.99
Gunship	15.99	15.99			Trivial Pursuits	13.99	13.99
Goldregons Domain	13.99	13.99			Triad	19.99	19.99
Goldrunner I or II	12.99	12.99			ThunderBlade	13.99	16.99
Gryzor	12.99	15.99			ThunderCats	12.99	15.99
Ghosts & Goblins	12.99	15.99			Time & Majik	12.99	12.99
Heroes of the Lance	16.99	16.99			Times of Lore	15.99	15.99
Hellfire Attack	13.99	13.99			Turbo Cup	12.99	12.99
Hostages	15.99	15.99			TV Sports Football		19.99
Interceptor		16.99			UMS	15.99	15.99
International Karate +	12.99				Victory Road	12.99	15.99
International Soccer	12.99	12.99			Virus	12.99	12.99
Incredible Shrinking Sphere	12.99	15.99			War in Middle Earth	15.99	15.99
Iron Lord	16.99	16.99			Where Time Stood Still	12.99	15.99
Instant Music	16.99	16.99			WEC Le Mans	12.99	15.99
Jet	29.99	29.99			WizzBall	12.99	15.99
Joan of Arc	13.99	16.99			Xenon	12.99	12.99
Leaderboard Birdie	16.99	16.99					
Legend of the Sword	15.99	15.99					
L.E.D. Storm	13.99	13.99					
Lombard R.A.C. Rally	15.99	15.99					
Leathernecks	12.99	12.99					

TITLE	Comp	Price
Total Cost £:		

Name:

Address

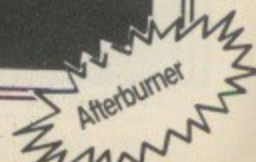
.....

.....

Tel No:

FAST SERVICE **WE ACCEPT EXPRESS VOUCHERS** **NCE JAN**

Cheques & Postal Orders payable to SOFTSELLERS. Post & Packing Free in U.K. Overseas £1.50 per item. Shop prices may vary, but personal callers can claim approx 10% discount off R.R.P. on most listed items on production of this advert.



ATARI ST and AMIGA

Sixteen Bit Superdeals from the Sixteen Bit Specialists!

520STFM Super Pack £349.00

Inc VAT and Next Day Delivery

Super Pack includes:

- ★ 520STFM 512K Keyboard with Built-in 1 Megabyte disk drive and TV Modulator
- ★ £450 of games software including BUGGY BOY, TEST DRIVE, MARBLE MADNESS, WIZBALL and 17 more.
- ★ Organiser Business Software including WORDPROCESSOR, SPREADSHEET and DATABASE.
- ★ FREE JOYSTICK!
- ★ All leads, manuals PLUS MOUSE and free mains plug!

REMEMBER! Many ST's do not come with BASIC-ours come with ST BASIC REV D by Metacomco.

Also available with only one free game and no joystick or Organiser - £279.00 inc.

1040STFM Super Pack £449.00

As above but with 1 meg 1040STFM

1040STFM Business Pack £439.00

Business Pack Includes:

- ★ Atari 1040STFM Keyboard with 1 meg memory and 1 meg built-in disk drive plus TV modulator.
- ★ £360 worth of Business Software including MICROSOFT WRITE word processor (£150), SUPERBASE PERSONAL Database (£60) and VIP PROFESSIONAL Lotus 123 Spreadsheet clone (£150)
- ★ All leads, manuals and mouse

Amiga A500 Game Pack £389.00

Inc Vat and Next Day Delivery

Games Pack includes:

- ★ Amiga A500 512K Keyboard with Built-in 1 Megabyte disk drive.
- ★ Free TV modulator worth £24.99 allowing you to use the Amiga with a normal TV.
- ★ £230 of games software including BUGGY BOY, MERCENARY, AMEGAS, THUNDERCATS and 6 more.
- ★ Amiga BASIC, Amiga EXTRAS, Workbench PLUS the Amiga Step by step Tutorial.
- ★ All leads, manuals PLUS MOUSE and mains plug!

Also available without £230 worth of games software - £369.00

NEW! AMIGA 1 MEG! £509.00

Announcing the new Amiga 1 meg-an A500 with fitted 1 megabyte memory expansion and clock card PLUS TV Modulator AND DRAGONS LAIR a six disk 1 meg megagame!

AMIGA 1 MEG+ £529.00

Our Amiga 1 meg + also includes the £230 worth of games software normally given with our A500 Games Pack.

MONITORS

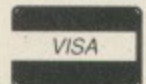
Commodore Amiga A1084 Stereo colour monitor inc lead	£279.00
Atari SC1224 Colour Monitor inc lead	£269.00
Atari SM124 Mono Monitor	£99.00

CREDIT CARD ORDERLINE ☎ 0908 78008 (9am - 6pm)
We've moved to larger premises - Callers most welcome!



DIGICOM

Unit 36, Wharfside, Fenny Stratford, MILTON KEYNES MK2 2AZ



MICRO MOUNTAIN



Telephone 0525 853333
24 Hour Orderline

UNBRANDED DISKS

100% Certified + Lifetime Guarantee, including Sleeves, Labels + WP Tabs.

	D/SIDE 48 TPI	PLUS DP 100 DISK BOX	D/SIDE 96TPI	PLUS DP100 DISK BOX	D/SIDE HD 1.6	PLUS DP100 DISK BOX
5 1/4"						
25	£9.50	£16.25	£10.50	£17.25	£23.75	£29.95
50	£17.50	£24.00	£18.50	£25.00	£46.49	£51.49
100	£33.00	£38.00	£34.00	£39.00	£89.95	£93.95
3 1/2"						
	S/SIDE 135 TPI	PLUS DP080 DISK BOX	D/SIDE 135 TPI	PLUS DP080 DISK BOX	D/SIDE HD 2.0	PLUS DP080 DISK BOX
25	£22.00	£28.45	£24.00	£30.45	£61.25	£66.75
50	£40.00	£46.50	£46.00	£52.50	£120.50	£123.95
100	£75.00	£80.00	£85.00	£90.00	£238.95	£239.95

BRANDED DISKS, TOP BRANDS, BEST PRICES, SHIPPED TODAY

	3M			DYSAN			VERBATIM			3" AMSOFT		
5 1/4												
DS48	10	50	100	10	50	100	10	50	100			
DS96	7.49	34.45	66.90	8.35	38.75	75.49	7.99	36.95	71.90			
DSHD	13.15	62.75	123.50	10.15	47.75	93.49	12.35	58.75	115.30			
Incl DP100 Disk Box	14.25	66.25	130.50	11.99	54.95	107.90	14.49	67.45	132.90	£1.99 ea.		
	Add	Add	Add	Add	Add	Add	Add	Add	Add	Packed in 10's		
	5.95	4.95	3.95	5.95	4.95	3.95	5.95	4.95	3.95			
3 1/2												
DS135	10	50	100	10	50	100	10	50	100	10	50	100
DSHD	15.35	73.75	145.49	14.49	69.45	136.90	13.85	66.25	130.49	14.35	68.75	135.50
Incl DP080 Disk Box	44.20	215.95	429.90	38.15	185.75	369.45	36.69	178.45	354.90	39.99	194.95	387.90
	ADD	ADD	ADD	ADD	ADD	ADD	ADD	ADD	ADD	ADD	ADD	ADD
	5.95	4.95	3.95	5.95	4.95	3.95	5.95	4.95	3.95	5.95	4.95	3.95

NO HIDDEN EXTRAS

VAT INCLUDED

FREE CARRIAGE ON ALL ORDERS OVER £10.00

ALL PRODUCTS CARRY OUR NO-QUIBBLE REPLACEMENT FOR LIFE GUARANTEE

DISK BOXES

DP020	20 x 3"	8.95
DP040	40 x 3.5"	4.95
DP080	80 x 3.5"	6.95
DP050	50 x 5.25"	4.95
DP100	100 x 5.25"	6.95

Anti-Static including Index Dividers

To Order Telephone: **0525 853333**

LABELS

3 1/2 x 1 7/16 Tractor/Friction £4.99/1000



HEAD CLEANING KITS-

5 1/4 + Fluid £2.50, 3 1/2 + Fluid £3.50.

We also supply Ribbons, Listing Paper, IBM printer cables from £7.95 and much more

Micro Mountain 0525 853333 (10 lines). Fax 0525 850485. Datapro House, North Street, Leighton Buzzard, Beds LU7 7EQ

PLEASE SUPPLY

MY COMPUTER IS

I enclose cheque/PO for £ or charge my Access/Visa No. Expiry Date

Carriage £2 but FREE on all orders over £10

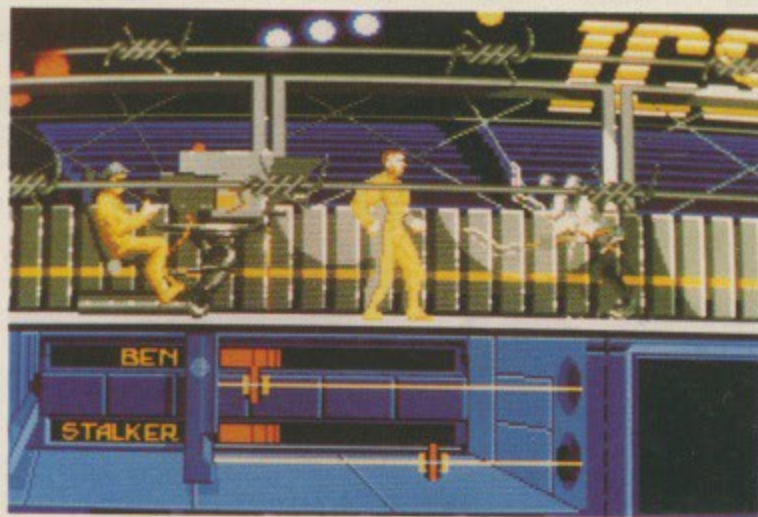
NAME

ADDRESS

POSTCODE DAYTIME TEL NO.

Up and gunning

Andy Storer kills time...and just about everything else he comes across

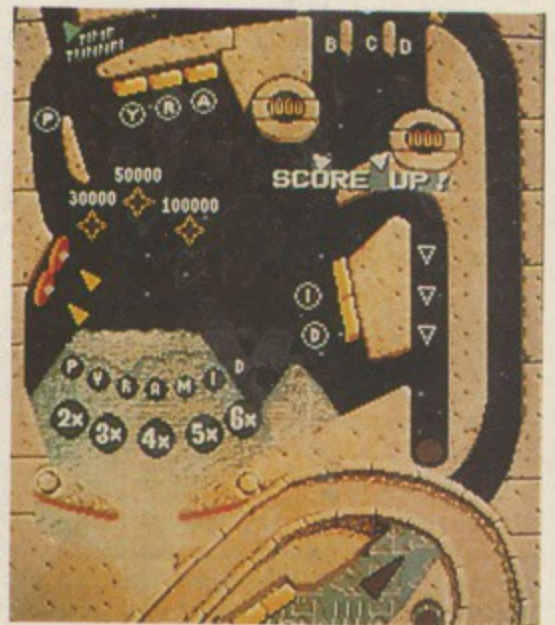


THE RUNNING MAN GRANDSLAM

A tie-in with the up and coming video release of the Schwarzenegger cult movie set in 2019, and revolving around your attempts to survive a TV game show. Watched live by millions, you fend off attacks from various psycho-nutters among the dungeons and caves below the studios. A five-level sideways scroller, *Running Man* will be available on all formats, and this Amiga screenshot shows off the best visuals of any version.

TIMESCANNER ELECTRIC DREAMS

Another Sega arcade conversion, *Timescanner* consists of four split-screen levels - Volcano, Saquarra, Ruins and Final - and is a superior pinball sim featuring nudge and tilt, 6 flippers and up to 3 balls on-screen at any one time. As a special final bonus screen there's also a breakout game included. For all-format wizards the world over.



THUNDERBIRDS GRANDSLAM

Brains, Lady Penelope, Parker and their puny plastic puppet pals who pilot those pathetic polystyrene (*You're fired - Ed*)...er...the famous Tracey family feature in this 4-way scrolling graphic adventure as you guide them against the evil machinations of The Hood, their arch-enemy. Your aim is to cope with innumerable emergency situations whilst...okay I'll pick up my P45 on the way out.



CAPTAIN FIZZ PSYCLAPSE

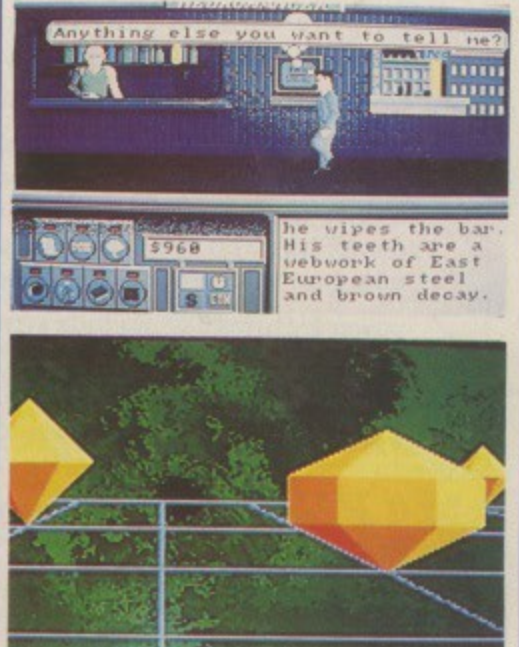
Out soon on ST and Amiga is this simultaneous 2-player shoot-em-up relying on collaborative effort from the Psygnosis stable. Here you're a member of the Queen's Cloned Highlanders and up against the verminous Blaster-Trons as you battle through 22 levels of split-screens which, whilst looking competent enough, don't appear to feature the usual Psygnosis hallmarks of rich detail and colour.

NEUROMANCER INTERPLAY

Fresh from release on the C64 comes the sci-fi RPG Amiga version of Bill Gibson's *Cyberpunk* tour de force. Although the Amiga's spec could have just about handled the book's *Blade Runner* atmospherics, the graphics on show here don't look much more than a straight port. Which is a shame, since the medium of Cyberspace alone would provide a great opportunity to show off the Amiga's custom chips yet further. Hopefully the Devo music score will make some amends.

SPACE HARRIER 2 ELITE

After the great conversion of the original to the ST, comes the sequel, which comprises the other ten levels of the arcade fave. A tortuous fast-blast through surreal sc-fi landscapes, *Space Harrier 2* shifts at speeds not far off its fabulous coin-op parent. Out on the Amiga too this time.



HiSoft BASIC for the Amiga

HiSoft BASIC was first released on the Atari ST where it proved immensely popular because of its speed and ease of use. Now we have ported the system to the Amiga so that even more people can experience the excitement of this super-fast, compiled language.

HiSoft BASIC is a fully-integrated compiler and editor that makes it beautifully easy to convert all your AmigaBASIC programs into fast-running machine code; in fact, **HiSoft BASIC** is so simple and quick to use that you will soon find that you no longer need the AmigaBASIC interpreter at all, you can do everything you want with **HiSoft BASIC**.

Full support of the Amiga is included as standard with extensive window, screen and graphics commands. In the same way as the interpreter, Amiga libraries can also be accessed as if they were built-in statements allowing complete machine access.

HiSoft BASIC includes full MENU support, with event trapping and powerful sprite routines, using the OBJECT keywords.

Compiled programs can execute in their own window(s) or use the CLI window for minimum size. CLI-type programs may be easily written and made resident since they are fully re-entrant.

For larger programs and for those with strong editor preferences we also supply an editor-less compiler for traditional disk-to-disk compilation methods.

ABS	AND	APPEND	AREA	AREAFILL	AS	ASC	ATN
BAR	BASE	BEEP	BIN\$	BLOOD	BREAK	BSAVE	CALL
CALLS	CASE	CDBL	CHAIN	CHDIR	CHR\$	CINT	CIRCLE
CLEAR	CLNG	CLOSE	CLS	COLLISION	COLOR	COMMAND\$	
COMMON	CONST	COS	CSNG	CSRLIN	CVD	CVI	CVL
CVS	CVSIEEE	DATA	DATE\$	DECLARE	DECR	DEF	DEFDBL
DEFINT	DEFLNG	DEFSNG	DEFSTR	DIM	DO	ELLIPSE	ELSE
ELSEIF	END	EOF	EQV	ERASE	ERL	ERR	ERROR
EXIT	EXP	FEXISTS	FIELD	FILES	FIX	FOR	FRE
FUNCTION	GET	GOSUB	GOTO	HEX\$	IF	IMP	INCR
INKEY\$	INPUT	INPUT\$	INSTR	INT	KILL	LBOUND	LCASE\$
LEFT\$	LEN	LET	LIBRARY	LINE	LOC	LOCAL	LOCATE
LOF	LOG	LOG10	LOG2	LOOP	LPOS	LPRINT	LSET
MENU	MID\$	MKD\$	MKDIR	MKIS	MKIEEE\$	MKL\$	MKS\$
MOD	MOUSE	NAME	NEXT	NOT	OBJECT.xx	OCT\$	OFF
ON	OPEN	OPTION	OR	OUTPUT	PAINT	PALETTE	PATTERN
PCIRCLE	PEEK	PEEKB	PEEKL	PEEKW	PELLIPSE	POINT	POKE
POKEB	POKEL	POKEW	POS	PRESET	PRINT	PSET	PTAB
PUT	RANDOM	RANDOMIZE		READ	REDIM	REM	REMAINDER
REPEAT	RESET	RESTORE	RESUME	RETURN	RIGHT\$	RMDIR	RND
RSET	RUN	SADD	SAY	SCREEN	SCROLL	SELECT	SGN
SHARED	SIN	SLEEP	SOUND	SPACE\$	SPC	SQR	STATIC
STEP	STICK	STOP	STR\$	STRIG	STRING\$	SUB	SWAP
SYSTAB	SYSTEM	TAB	TAN	THEN	TIME\$	TIMER	TO
TRANSLATE\$		TROFF	TRON	UBOUND	UCASE\$	UNTIL	USING
VAL	VARPTR	VARPTRS	WAIT	WAVE	WEND	WHILE	WIDTH
WINDOW	WRITE	XOR					

HiSoft BASIC - Reserved Words

HiSoft BASIC is a no-limits language; string variables may be up to 16Mbytes in length and there are no limits on array sizes either (subject to available memory). Code generated is fully 68010/020/030 compatible.

Compiled programs have no run-time overhead; all compiled programs share an Amiga library, which may be distributed with programs without charge. Compiled programs multi-task, of course, and as they all share

the same library, memory usage and disk space is kept to a minimum. There is also an option to produce completely stand-alone programs which include only as much of the library as they need.

HiSoft BASIC - now BASIC programming on the Amiga has come of age.

- ✓ Compatible with Microsoft QuickBASIC 3 on the PC, Atari ST BASIC, AmigaBASIC and most other BASICs,
- ✓ Full structured programming with long IFs, multi-line functions, sub-programs, CASE, REPEAT, DO etc.,
- ✓ optional line numbers, lots of compiler and run-time options allowing tremendous flexibility both at compile & execution time,
- ✓ full recursion in sub-programs and functions plus local and global variables, arrays as parameters,
- ✓ 5 types of variable, integers, long integers, single- and double-precision floats and strings of any size,
- ✓ no limits; no program size limit and no variable size limits,
- ✓ interactive environment; invoke the compiler from the easy-to-use Intuition editor and all errors will be reported, in English, giving you the option to go straight back to the editor for correction or to carry on compiling. You can run your program from the editor so it's just like using an interpreter - but faster!
- ✓ power features like: include symbolic debug, exploit maths co-processors and much more.

HiSoft BASIC - Some Features

Quite Simply - the fastest, most powerful BASIC for your Amiga

Introductory Offer

HiSoft BASIC for the Amiga complete with AmigaBASIC Inside & Out book by Abacus + software ~~£99.95~~ £79.95

this offer available for only the first 1000 copies sold

Special Offers - Amiga

HiSoft Devpac Version 1 ~~£49.95~~ £15.00

Power Windows 2.5 £50.00

TxED Plus editor etc. £50.00

A+L Modula-2 compiler £99.00

Amiga Software

HiSoft Devpac Amiga Version 2 £59.95

Aztec C Professional £129.00

Aztec C Source Code Debugger £79.00

Atari ST Software

HiSoft DevpacST Version 2 £59.95

HiSoft BASIC ST £79.95

HiSoft Power BASIC ST £49.95

TurboST - the software blitter £39.95

HiSoft WERCS resource editor £29.95

FTL Modula-2 Developer £99.95

Aztec C Professional £129.00

Aztec C Developer £179.00

Aztec C Source Code Debugger £79.00

Twist switcher program £39.95

CRAFT shell £99.95

HiSoft
High Quality Software

The Old School, Greenfield, Bedford MK45 5DE

Tel: (0525) 718181 Fax: (0525) 713716

All prices include VAT. We accept Access & Visa and despatch by First Class Post.

HELP! New records

I am looking into computerising the membership records of a club of which I am secretary.

One area that concerns me is the Data Protection Act. Can you advise me where I might find details of the Act's requirements, and what I must do if I start putting people's names and addresses in a computer.

JB Cherry, Coalpit Heath, Avon

The Data Protection Act specifically exempts data held by clubs provided that the club is not being run as a commercial business. So putting names, addresses and other club-related information on computer does not require you to register under the Act.

If you want further details try your local

library which should have all the information you need.

HELP! MSXplanation?

I have a Sanyo MPC 100 MSX computer and an Amstrad DMP 2000 printer. I bought a copy of Anglosoft's *Print-X-Press* on cassette some months ago and I've so far been unable to transfer the characters from the Designer or Compiler programs onto the Manuscript program for printing. Suggestions?

RJ Brett, Portsmouth

I'm afraid I'll have to throw this one open to the MSX fraternity since I've never even heard of your problematic software. Any MSX-owning readers who have any help to offer on this subject

should write to Tech Tips.

HELP! MSXtra drive

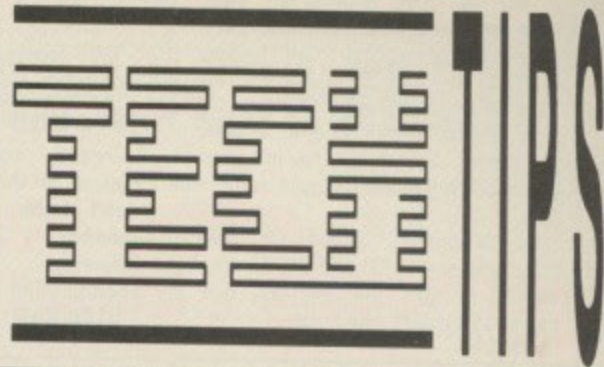
May I congratulate you on an excellent

magazine before I prompt you to

answer my problem. Yes, I am another MSX owner who purchased a JVC HC10 a few months ago.

How does one attach a microdrive to the MSX? How much do they cost, where can I get one? And is it possible to use it for filing, financial planning and a keyboard instructor?

P A Gray, Carlisle, Cumbria



TIPS Amiga Assistance

Having just read your cover feature on infuriating problems, I find myself infuriated. I think that you have given a bad solution to a very minor problem. I am talking about the "Working out with Workbench" piece of your feature. The solution you give is far from ideal for several reasons: firstly, as you state, this will rapidly lead to a half megabyte user running short of memory space; secondly, it is messy and time consuming. The more so if the c directory has had useful PD commands added. The solution I recommend is as follows.

Purchase a PD disk containing a crunch utility, and crunch all large and infrequently-used files (Preferences is a good candidate for starters). Then you will have 20-30 per cent more disk space. Delete all printer drivers and keymaps that are not used (more disk savings).

Enter the CLI and type:

Ed df0:s/Commands

Create the following file:

Echo "**NCopying commands to RAM:"N"

Path RAM

Copy SYS:c/copy to RAM:

Copy SYS:c/cd to RAM:

Copy SYS:c/delete to RAM:

Copy SYS:c/type to RAM:

Copy SYS:c/dir to RAM:

Copy SYS:c/list to RAM:

Ask "**NCopy ED to RAM: (y/n)"

If Warn

Copy SYS:c/ed to RAM:

Else

Echo "**NED not copied"

EndIf

This file can contain any commands that you choose. The PATH command causes the Amiga to search the RAM device before searching the c directory and minimising the amount of RAM used up. This file also gives you the option of copying ED on the screen editor, you can type y or n as soon as the echo command prints the "Copy Commands to RAM:" statement. On entering the CLI you only need to type "Execute Commands" to invoke this batch file as Execute looks for script files in the s directory. (This cuts down the time taken for the Amiga to give a directory of the disk's root by cutting the amount of files in the root.)

I would recommend that Wb 1.2 users obtain copies of the following PD packages: 1. GOMF, 2. Conman, 3. RunBackGround, 4. either DMouse or PopCLI, 5. Crunch!, 6. A function keys editor.

My startup sequence is as follows, and minimises startup time by not doing any copying (apart from the Ram RAM-disk icon).

The CLI is accessed by holding the Left Amiga and ESC keys (DMouse).

Gomf

Path RAM:

Failat 30

Conman -c -q -t

RunBackGround -5 df0:c/FuncKey df0:s/Func.Key

DMouse -a2 -s120 -c2

Copy RAMdisk.info to RAM:disk.info

LoadWb

EndCLI > nil:

If readers are likely to have difficulties obtaining these

packages or installing them, I am willing to give copies to anyone who sends me a disk and adequate return postage. The disk contains all the relevant text files for the PD programs contained within it, which can then be removed to another disk, freeing further disk space. I have also put on 2 virus killers, a bootblock viewing utility and a function key editor. I will do this free of charge as a service to all Amiga owners who need that little bit of help getting to grips with the Amiga's DOS, and OS come to that.

The address is:

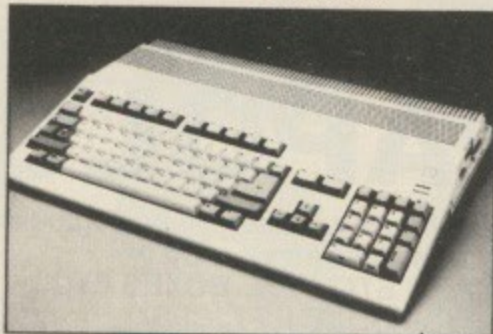
Greg D Hewitt-Long, 111 Marston Rd, Stafford, Staffordshire ST16 3BT.

P.S. This system may be used to set up a RAD: disk in Wb 1.3 as follows:

s/Startup-Sequence

Mount RAD:

Mount NewCON:



```
Resident c:Copy Pure
Resident c:Execute Pure
Ask "**NInitialise RAD: (y/n)"
If Warn
Execute RADSet
Else
Echo "**NRAD: not initialised"
EndIf
Path RAD:
Path RAM:
System/FastMemFirst
Run >NIL: SetAlert
FF >NIL: -0
```

MakeDir Ram:T

MakeDir Ram:Env

Assign T: Ram:T

Assign ENV: Ram:Env

Path sys:utilities sys:system sys: s: ADD

Resident CLI L:Shell-Seg SYSTEM Pure

LoadWb

EndCLI > nil:

s/RADSet

sys:System/FORMAT DRIVE RAD: NAME "RAD Disk" NOICONS

copy Shell.info to RAD:

copy c/cd to RAD:

copy c/copy to RAD:

copy c/delete to RAD:

copy c/type to RAD:

copy c/dir to RAD:

copy c/list to RAD:

copy c/Ed to RAD:

This does, of course, assume that RAD: is included in your mountlist.

Finally, here's a tip that I have not seen printed anywhere.

Everyone knows about Ctrl-D to halt a batch file. This has a low priority interrupt that stops the execution after the current command has been finished, but Ctrl-C has a higher priority interrupt that will halt a command in its tracks. This is useful if, say, you have just asked for something like "DIR c" which can take quite a few seconds to complete. If it was a mistake try a Ctrl-C to end the directory. I have not tried this during a write to disk, as I don't think it is such a good idea - it may knacker the disk (quite possible, knowing how temperamental Amiga DOS is).

Again I have to own up to a lack of expertise in matters MSX. However, by "microdrive" I assume you mean a 3.5" disk drive and not the dubious tape devices originated by Sinclair.

Most 3.5" drives sell for around £100 to £150. Whether you can attach one to your HC10 depends on whether it has a suitable interface (check your manual).

The only supplier of MSX goodies I have an address for is Nightdare, 11b Walnut Road, Chelston, Torquay, Devon. You could write to them and see what they have available. And again, if any MSX owners have specific information on this question, please let us know.

HELP!

Any port in...an ST?

I am on the verge of buying a computer system, in particular the 520 STFM which I feel is a very good buy.

But on approaching local stockists I can get no information on a user port (similar to the BBC's 6522 VIA), a device I laid down as one of the requirements of my new machine.

I would welcome any advice on the subject you can give me. If the ST does not qualify, is there another comparable machine?

M Hart, Irvine, Ayrshire

Since you don't say what you want to use the port for, it's difficult to be specific, but the ST has attracted extensive hardware support for storage, video and audio digitising, and most other standard peripherals.

The 520ST has nothing directly equivalent to the BBC Micro's user port although the cartridge port can be used to drive external devices (many audio digitisers use the cartridge port).

Potentially more useful would be the expansion bus built in to the Mega STs but they are considerably more expensive than the 520 or 1040 STs.

The Amiga has similar difficulties and you have to go to the 2000 series for a true expansion bus, the A500 being broadly similar to the 520ST in this respect.

Best of all for hardware expansion, real-time control, and so on are PCs which employ the well-supported PC expansion bus. Interface cards are readily available for analog/digital conversion, industrial control, IEEE 488 adaptors, and digital I/O.

HELP!

Learning to type

Some time ago we bought a Commodore 64, complete with disk drive and printer. Part of the strategy was that with the aid of a typing tutor our family could learn to type (our older son has a difficulty in writing).

Since then we have tried to locate such a program, but we've had no luck. Can you help?

WM Oswald, Blenheim, Glasgow

• Sorry, Mr Oswald, I'm afraid I can't. I have a vague recollection of a typing tutor program for the C64 about three or four years ago, but I haven't seen it mentioned anywhere for quite some time now.

My researches turned up suitable programs on the PC and the Amiga, but nothing on the C64. Perhaps one of Express's readers could help ...

HELP! Meeting specs

I urgently require a computer for my course at the end of January and I don't know which computers are suitable. I have been given the following specification:

512K RAM, single disk-drive, PC-

TIP ST-PC link

I notice in issue 9 of Express that Karl McAuley is interested in ST-PC disk compatibility. The speed problem you mention only affect 5.25" drives. There are so many PCs with 3.5" drives now that the problems are much reduced.

There is another reason why PCs cannot read disks created by the ST desktop format option. The ST disk format is similar to the PC's except in the number of sectors addressed by one directory entry. The ST's reading and writing routines are rather more flexible than the PC's so it can recognise a number of different formats, including PC format. This is the feature that many extended disk formatting programs exploit. The PC can only read/write its own format, so the compatibility is only one way.

The answer is to get a PD formatting program for the ST which can format PC disks. I use one called FORMAT11 which can do both extended formats and DOS-compatible formats.

Beware of using all DOS-compatible disks on your ST though - the ST stores

a random number in the disk boot sector so that disk swaps can be noted. DOS disks simply have the DOS version number stored in the same place, so disk swaps can go unnoticed when using these disks.

I use a Compaq 386 at work with a 1.44Mb 3.5" drive and transfer data between the machines with no problem. There are a couple of things to note at the PC end.

First, the PC can be made to format a 3.5" disk to 720K in a 1.44Mb drive using the following command (assuming the 3.5" is drive B:):

FORMAT B: /T80 /N:9

It is even possible to format a single-sided disk even though IBM have never used 3.5" single-sided drives. The following line must be added to the config.sys file:

DEVICE = DRIVER.SYS /D:1/H:1

This adds an extra logical drive with only one head allowing STers with single-sided disks to swap information with PCs.

Graham Curtis, Breadsall, Derby

Win a sub!

We want to hear your problems, but we also want helpful hints and tips. And reports of those bugs you've found, from the comical to the downright frustrating. You could scoop the weekly best-tip prize of a free 26-issue subscription!

And remember, there's no waiting around for monthly publication dates. The best tips, and solutions to your problems will be in print before you can say Alan Sugar. (Please don't send SAEs for replies, we can only answer enquiries in print).

So whether it's help offered or needed, write to:
Tech Tips, New Computer Express,
4 Queen Street,
Bath, Avon BA1 1EJ.

going will cost you £600 for ST and colour monitor, and another £70 for PC Ditto -

compatible keyboard, mono monitor, printer and serial ports, mouse, printer, MS-DOS 2.1 or higher, and the machine should be capable of running GEM V2 or higher, Lotus 1-2-3, PC Automator, UCSD Pascal, and First Framework.

In addition to the above I would like to be able to play games and program in several languages. Being a student I do not have much money to spare.

I had thought about the Atari 520STFM with PC-Ditto - does that fit the specification?

Matthew Cochrane

• Although an ST with PC-Ditto might cover the technical side of things, your main problem is likely to be speed under the PC emulator, especially when running your own programs in Pascal.

It won't be your cheapest option either, since you have to have a monitor (running 80-column screens on a TV is not recommended). The cheapest ST deal

your minimum system.

In comparison you could get a working PC-compatible system for as little as £460 (the Olivetti PC1 from Dixons), or around £600 for a generic PC-compatible such as those from SBC, Opus, or a dozen other manufacturers.

Admittedly, the PC-compatibles will be with mono monitors and not good for games on that score, but you could easily upgrade to CGA, or the much better EGA later when you have more money.

In the long term, the PC will work out cheaper if you get into computing seriously. Extra disk drives, memory, and hard disks will cost far less on the PC than on the ST.

For a printer, if you saw last week's issue you'll know that for low-cost printing we recommended the Citizen 120D at about £135, but if you have trouble tracking one down, try the Panasonic KX-P1081 at about £170, or the Micro Peripherals MP135+ for about £140.

SPECIAL OFFER — SPECIAL OFFER — SPECIAL OFFER — SPECIAL OFFER — SPECIAL OFFER

PUBLIC APOLOGY

We at M.D. Office Supplies would like to take this opportunity to apologise to all its competitors. we shall, with immediate effect supply, COMPUTER DISCS AND STORAGE BOXES ETC., AT BELOW WHOLESALE PRICES

JUST LOOK AT THESE AMAZING OFFERS



5 1/4 5.25" DISCS & BOXES **5 1/4**

25 5.25" DS DD 96 TPI with 50 Capacity Lockable Storage Box	£12.49
50 5.25" DS DD 96 TPI with 100 Capacity Lockable Storage Box	£18.49
75 5.25" DS DD 96 TPI with 100 Capacity Lockable Storage Box	£23.49
100 5.25" DS DD 96 TPI with 100 Capacity Lockable Storage Box	£29.49

ALL DISCS ARE CERTIFIED 100% ERROR FREE AND ARE SUPPLIED WITH FULL USER SETS

AT M.D. OFFICE THE BEST COST LESS

3 1/2 3.5" DISCS & BOXES **3 1/2**

25 3.5" DS DD 135 TPI with 40 Capacity Lockable Storage Box	£22.95
30 3.5" DS DD 135 TPI with 80 Capacity Lockable Storage Box	£29.95
40 3.5" DS DD 135 TPI with 80 Capacity Lockable Storage Box	£36.95
50 3.5" DS DD 135 TPI with 80 Capacity Lockable Storage Box	£43.95
60 3.5" DS DD 135 TPI with 80 Capacity Lockable Storage Box	£49.95
80 3.5" DS DD 135 TPI with 80 Capacity Lockable Storage Box	£64.95

ALL DISCS ARE CERTIFIED 100% ERROR FREE AND ARE SUPPLIED WITH LABELS

ACCESSORIES

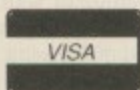
3.5" 40 Capacity Lockable Box	£4.95
3.5" 80 Capacity Lockable Box	£6.95
5.25" 50 Capacity Lockable Box	£5.95
5.25" 100 Capacity Lockable Box	£6.95
3.5 or 5.25 Head Cleaner	£2.95 only if ordered with other goods

STOP PRESS

First Come First Served
BRANDED MAXELL DSDD 135 TPI
10 - £12.95 20 - £22.95 30 - £29.95
HURRY - HURRY - HURRY

PRICE AND QUALITY GUARANTEE

All our Discs are top quality products and are certified 100% error free. Should you ever see a comparable product advertised in this magazine at a lower price we will not match it we will BEAT IT GUARANTEED



M.D. OFFICE SUPPLIES

18 CRESCENT WAY, FARNBOROUGH, KENT BR6 9LS
TELESALES HOTLINES: 0689 61400



All prices include VAT and Delivery UK only

Supplied subject to availability. E & OE

SPECIAL OFFER — SPECIAL OFFER — SPECIAL OFFER — SPECIAL OFFER — SPECIAL OFFER

**The
incredible
New
Computer
Express
voucher
scheme can
save you over
£15
when you buy
from adverts
in this
magazine!**

Full details on next page.

**EXPRESS
VOUCHER**

50p

**EXPRESS
VOUCHER**

£1.00

**EXPRESS
VOUCHER**

£4.00

**EXPRESS
VOUCHER**

£10

SPECIAL OFFER — SPECIAL OFFER — SPECIAL OFFER

50p voucher. Valid for orders above £10

This voucher may be used as 50p part payment on any order totalling over £10 from a participating advertiser in *New Computer Express*. You simply fill in the details below and send it off with your order.

Your name _____

Address _____

Telephone (if possible) _____

Item (s) purchased _____

Only one voucher per order is allowed. This voucher and its accompanying order must be received by the advertiser before 9am **February 13, 1989**

£1.00 voucher. Valid for orders above £20

This voucher may be used as £1.00 part payment on any order totalling over £20 from a participating advertiser in *New Computer Express*. You simply fill in the details below and send it off with your order.

Your name _____

Address _____

Telephone (if possible) _____

Item (s) purchased _____

Only one voucher per order is allowed. This voucher and its accompanying order must be received by the advertiser before 9am **February 13, 1989**

£4.00 voucher. Valid for orders above £80

This voucher may be used as £4.00 part payment on any order totalling over £80 from a participating advertiser in *New Computer Express*. You simply fill in the details below and send it off with your order.

Your name _____

Address _____

Telephone (if possible) _____

Item (s) purchased _____

Only one voucher per order is allowed. This voucher and its accompanying order must be received by the advertiser before 9am **February 13, 1989**

£10 voucher. Valid for orders above £200

This voucher may be used as £10.00 part payment on any order totalling over £200 from a participating advertiser in *New Computer Express*. You simply fill in the details below and send it off with your order.

Your name _____

Address _____

Telephone (if possible) _____

Item (s) purchased _____

Only one voucher per order is allowed. This voucher and its accompanying order must be received by the advertiser before 9am **February 13, 1989**

EXPRESS VOUCHERS

How the scheme works

- The Express voucher scheme is a special launch promotion to encourage you to buy *New Computer Express* regularly.
- It offers you savings of up to £15 when you buy goods through the magazine.
- The vouchers are not limited to specific items – you can save on any purchase from one of the participating advertisers.
- Most mail order advertisers in this magazine are taking part in the scheme – just look for this sign.
- Remember. The use of just one voucher will more than recoup the price of the magazine.

✓ WE ACCEPT
EXPRESS
VOUCHERS

THE FIVE SIMPLE RULES

1. Express vouchers can be used to obtain discounts on purchases of goods advertised in this issue of *New Computer Express*, provided that they are bought directly from an advertiser taking part in the scheme. The vouchers are valid **only** for those advertisements which say "We Accept Express Vouchers".
2. Each voucher entitles you to a discount at the voucher's face value, provided that your overall order level is **higher** than the figure indicated on the back of the voucher.
3. To use a voucher, simply enclose it with your discounted payment when you order. You may use **only one** voucher in any one order.
4. The order including the voucher must be received by the advertiser before the closing date printed on the voucher.
5. You must fill in the details requested on the voucher.

**Only
GFA-BASIC 3.0
makes it
possible.**

£ 64.95 !

MichTron
Box 68
St. Austell
Cornwall PL25 4YB
England

Available in the U.K. from:

Telephone: 07 26 680 20



The Instant Catalog

ALL TITLES IN STOCK

SPECTRUM	CASS	COMMODORE 64	CASS	DISK	ATARI ST	DISK
4 Soccer Simulators	6.45	4 Soccer Simulators	6.50	9.25	5 Star Compilation	14.75
Alter Burner	6.45	10 Great Games Vol 3	9.99	11.99	Action ST Compilation	11.99
Barbarian II	6.45	Alterburner	6.95	9.99	After Burner	13.99
Bard's Tale	6.50	Armalyle	6.45	8.75	Batman	12.50
Batman - Caped Crusader	5.95	Barbarian II	6.45	8.75	Bombuzal	14.75
Command Performance	9.99	Batman - Caped Crusader	6.45	9.45	Captain Fizz	9.99
Cyberoid II	5.50	Bombuzal	6.45	8.75	Crazy Cars II	12.50
Exploding Fist Plus	5.25	Caveman Ugh-Lympics	7.25	10.50	Double Dragon	11.99
Fists 'N' Throttles	8.75	Command Performance	9.99	10.75	Dungeon Master	14.75
Football Manager II	5.75	Crazy Cars	6.50	9.50	Eliminator	13.99
Frank Bruno's Big Box	8.75	Cyberoid II	6.45	9.99	Elite	14.75
Game Over II	6.50	Double Dragon	6.50	9.99	Falcon	14.75
Game Set and Match 2	8.75	Emlyn Hughes Int Soccer	6.45	8.75	Flying Shark	14.75
Giants	9.99	Exploding Fist Plus	6.45	8.75	Garfield	11.99
Gold Silver Bronze	9.99	Fists 'N' Throttles	8.75	9.99	Heroes of Lance AD&D	17.25
Heroes of the Lance	7.99	Football Manager II	6.45	9.99	Hostages	14.75
In Crowd - Compilation	8.75	Frank Bruno's Big Box	8.75	9.99	International Karate (IK+)	11.99
Laser Squad	6.25	Game, Set and Match 2	8.75	11.99	Joan of Arc	13.99
Last Ninja II	8.95	Games: Summer Edition	9.99	11.99	Leaderboard Birdie	13.99
Leader Board Par 3	9.99	Giants	9.99	11.99	Leisure Suit Larry II	21.50
Mega Games Vol 1	9.95	Last Ninja 2	8.75	9.99	Lombard RAC Rally	14.75
Mickey Mouse	5.25	Leader Board Par 4	10.99	12.99	Manhattan Dealers	12.50
Operation Wolf	5.50	Mega Games Vol 1	9.99	10.99	Mickey Mouse	13.99
Pacmania	5.95	Menace	6.75	12.95	Nebulus	13.99
R-Type	6.45	Mickey Mouse	6.45	9.99	Operation Wolf	11.99
Rambo III	5.95	Microprose Micro Soccer	9.95	12.99	Pacmania	11.99
Return of the Jedi	6.45	Operation Wolf	6.45	9.99	Powerdrome	17.25
Road Blasters	5.99	Pacmania	6.45	9.99	Purple Saturn Day	14.75
Robocop	6.25	Rambo III	6.45	9.99	R-Type	17.25
Savage	5.95	Robocop	6.45	9.99	Rambo III	11.99
Spitting Image	6.45	R-Type	6.45	9.99	SDI	13.99
Supreme Challenge	8.75	Sports World 88	9.99	10.99	STOS - Games Creator	19.49
Taito Coin-op Hits	8.95	Supreme Challenge	8.75	11.50	Speedball	14.75
Techno Cop	5.50	Taito Coin-op Hits	9.99	12.99	Spitting Image	11.99
Thunder Blade	6.50	Thunder Blade	6.95	10.99	Teenage Queen	11.50
Tiger Road	6.25	Tiger Road	6.95	10.99	Thunder Blade	13.99
Total Eclipse	6.45	Times of Lore	6.45	8.99	Times of Lore	15.25
Ultimate - The Works	8.95	Total Eclipse	6.45	8.75	Triad Vol 1	17.49
		Techno Cop	7.45	10.75	Wanted	11.50



INSTANT, Boston House, Abbey Park Road, Leicester LE4 5AN
 Mail Order Only. State Computer's make and model.
 P&P: 50p on orders under £5. EEC 75p per title.
 Whole World £1.50 per title for Air Mail.
 New titles sent on the day of release.



0533 510102

FOR DISK PRICES & NEW RELEASES PLEASE RING US.

YOUR FORMAT

MACHINE-SPECIFIC COLUMNS

CLUBCLUBCLUBCLUBCLUBCLUBCLUBCLUB
 CLUBCLUBCLUBCLUBCLUBCLUBCLUBCLUB
 CLUBCLUBCLUBCLUBCLUBCLUBCLUBCLUB
ST
 CLUBCLUBCLUBCLUBCLUBCLUBCLUBCLUB
 CLUBCLUBCLUBCLUBCLUBCLUBCLUBCLUB
 CLUBCLUBCLUBCLUBCLUBCLUBCLUBCLUB
 CLUBCLUBCLUBCLUBCLUBCLUBCLUBCLUB
 CLUBCLUBCLUBCLUBCLUBCLUBCLUBCLUB
 CLUBCLUBCLUBCLUBCLUBCLUBCLUBCLUB
 CLUBCLUBCLUBCLUBCLUBCLUBCLUBCLUB

Palace approves piracy shock?

I well remember my first conversation with Pete Stone of Palace Software. I was interviewing him for *The Guardian* about the *Barbarian/Maria Whittaker* mini-controversy a year or so back. A storm in a D-cup I suppose you could call it, when one retail chain banned the free poster that came with the game.

Pete managed to tell me with a straight face that "Samantha Fox is very big in Germany."

Barbarian II is about to arrive any day now in its ST incarnation. "It was actually finished just before Christmas," Pete told me, "but we've been play-testing it since then to get rid of a few bugettes and it should be out by



• Barbarian II on the ST: Due out any day now

A tale in the sting

The trouble with many amateur magazines is that they're often more amateur than magazine, seemingly produced by some budding teenage entrepreneur with more spots than business sense. The result is that

you send off your few quid for a subscription, get one copy, then a letter of apology over the delayed second issue, followed by an extremely long silence. You then write it off to experience and mutter something about a fool and his money.

They're not all like that, though, and this morning's post brings the first issue of an ST newsletter/club that I know can be recommended, as it's run by someone with impeccable credentials - Sandra Sharkey, who ST users may know as the author of *Shymer*, the sample adventure that came free with Incentive's adventure writer STAC.

Sandra was also involved with the testing of STAC, has been writing an adventure column for one of the glossy monthlies for a while, and knows all about running a magazine because she founded the adventure fanzine *Adventure Probe* - and that's still going strong a couple of years on.

Sting is the name of her new club exclusively for ST types, and the first issue of the newsletter offers you 32 A5 pages for your money. As is to be expected from someone

late January/early February." And a free Maria Whittaker in every pack? "Well, you'll have to make do with a poster."

So what else is happening ST-wise at the Palace?

"We've got *Cosmic Pirate* on our Outlaw label, probably out in February. That's programmed by Zippo Games, who are all people who have been around for quite a while under various names. They've been involved with Rare - you know, the ex-Ultimate people - producing original arcade games for the Nintendo machines, and *Cosmic Pirate* is their first original computer game. It's a space shoot-em-up cum piracy trading game."

Another *Elite* then?

"No, not at all. It does sound like it if you describe it simply like that, but you'd have to see it to know that it's very different. It's got proper graphics for one thing, not vector graphics."

OK, the NCE team will be poised for a comparison road test when it's ready. What else is new?

"We're working on the ST version of *The Shoot-Em-Up Construction Kit*, which first came out on the Commodore 64 about a year ago. The ST version should be ready by about April. It does all the things the 64 version did, but obviously takes account of the extra facilities you've got on the ST, like loading in your own sampled sound effects for one thing. Its big advantage over something like STOS, which I think is the only vaguely similar program on the ST, is that you don't have to be a programmer to produce your own games. It's all menu-controlled, with separate sections for sprite design, background design, linking a particular sound effect to a specific graphic and so on."

Yes, well, they all say that, don't they? But it will be interesting to see such a utility on the ST, as there are several on machines like the Spectrum and 64. I don't recall any Earth-shattering programs being published as a result of them, unlike similar adventure-writing utilities, but they're still fun to mess about with, allowing you to produce your own custom-made games. If you happen to want to write a game called *Rhubarb Invaders from m Venus*, these programs give you your chance. Just don't send it to me, that's all.

Mike Gerrard

Drop me a line

I'd be interested in hearing what you've got to say on all matters relating to the ST, so put pen to paper or finger to keyboard and write to Club ST, New Computer Express, 4 Queen Street, Bath BA1 1EJ.

with such an adventurous background, there's a strong (probably too strong) emphasis on adventure and RPG games, with reviews of *Alternate Reality* and *Lancelot*, maps of *Bard's Tale* and *Alternate Reality*, a solution to *Hitchhiker's* and hints on *Bard's Tale* and *Sentinel*. There's a STOS Basic listing, a few hardware hints and a page explaining the setting up of *Stingware*, which will publish members' games or utilities that they maybe want to earn a few bob from rather than chuck them into the Public Domain.

The first disk available costs £4.25, so it's obviously something of a budget-budget house. There's also a special offer of ten DS/DD disks for £10.95.

STING: The Newsletter will need to add a bit of variety to its contents if it's going to succeed, but as the editor says, "The first issue is always difficult to produce because you don't know your readership and there's no feedback to work from."

STING will sting you for a £15 annual subscription, and for that you'll get eight newsletters, a free PD disk and access to *STING's* own PD library. It's £2 cheaper if you don't want the PD disk, and you get £1 for ever new member you recruit. Further details from *STING*, 78 Merton Road, Highfield, Wigan WN3 6AT.

P
U
B
L
I
C
D
O
M
A
I
N

OVER 500 DISKS FOR THE ATARI ST

The best selection available anywhere in the UK.

OVER 500 DISKS FOR THE COMMODORE AMIGA

The best catalogue you'll find anywhere in Britain.

OVER 300 DISKS FOR THE PC (IBM, Amstrad etc. and compatibles)

A selection of some of the best programs available.

send a stamp or phone for a FREE Catalogue. Remember to quote this magazine and your type of machine (important)

S
H
A
R
E
W
A
R
E

from £1.50 per disk

SOFTVILLE PD SERVICE
 55 HIGHFIELD AVENUE
 WATERLOOVILLE HAMPSHIRE
 PO7 7PY. Tel 0705-266509

PC UPDATE

The BMW syndrome

Advertising inspires many strong emotions. Anything from anger at the gall of the advertiser in believing his offering could fool us into buying, to laughter at the wit of the ad's storyline, to puzzlement at its purpose. This last

Batch keys

One of the failings of the MS-DOS batch file system is the lack of any key press detection. Without it, it's not possible to ask 'Press Y for Yes or N for No' type questions within batch file. It's easy enough to add this feature, though it does require brief use of DEBUG to write a short machine-code program. Just follow the extract exactly as it appears.

The parts you type are printed in bold - the responses of the PC are in normal weight. Note that [Return] means press the Return key, not type the characters. The rows of n's represent address locations which will vary from PC to PC. Note also that the fifth line down is 'cmp a', followed by a lower case L, not a figure one. All other 1-shaped characters you type are ones.

```
A>debug [Return]
-a 100 [Return]

nnnn:0100 mov ah,8 [Return]
nnnn:0102 int 21 [Return]
nnnn:0104 cmp al,0 [Return]
nnnn:0106 jnz 10a [Return]
nnnn:0108 int 21 [Return]
nnnn:010A mov ah,4c [Return]
nnnn:010C int 21 [Return]
nnnn:010E [Return]
-u 100 10d [Return]

nnnn:0100 B409      MOV  AH,08
nnnn:0102 CD21      INT   21
nnnn:0104 3C00      CMP   AL,00
nnnn:0106 7502      JNZ   010A
nnnn:0108 CD21      INT   21
nnnn:010A B44C      MOV   AH,4C
nnnn:010C CD21      INT   21

-r cx [Return]
CX 0000
:e [Return]
-n reply.com [Return]
-w [Return]
Writing 000E bytes
-q [Return]
```

What this bit of work does is to create a file called REPLY.COM which will return the key code of the last key pressed in the batch variable errorlevel. You can incorporate it into a batch file like this. This short file looks for [F1] or [F2] or any other key in a continuous loop. Make sure REPLY.COM is in the same directory as the batch file when you run it.

```
echo off
cls
echo F1 - Clear the Screen
echo F2 - Display the directory
echo Any other key to quit
reply
if errorlevel 61 goto END
if errorlevel 60 goto F2
if errorlevel 59 goto F1
goto END
:F1
cls
goto END
:F2
dir
:END
```

You'll need to look up the codes of the keys you want to detect in a DOS reference book. The code extracts are from Supercharging MS-DOS by Van Wolverton - a great book. Its ISBN is 0-914845-95-0.

condition is especially relevant to cars and computers.

Ask a rising executive (especially one in the computer industry) what car he/she aspires to and its 50/50 the answer will be "A BMW". Through years of newspaper and magazine ads, BMW has managed to establish a niche for itself as a luxury, top-person's saloon car, with all the power and black trim that goes with it. Yet in Germany they are put pretty much in the same league as high-end Fords.

Ask a cross-section of business computer users their opinion of the Apple Macintosh and the polite ones will say "Jolly nice, but miles too expensive". Yet in the US they are one of the true "home" computers. Pricing is such that students and businessmen can afford them in pretty much the same way they did the original Apple IIs. Apple UK has worked hard to give the Mac its exclusive image over here.

Ask a PC power user what the difference is between a Compaq 386 and a Walters 386 and he's likely to say "Quality" (especially if he owns the Compaq). Yet there is not that much difference between them. The Compaq is probably a touch faster (I'm guessing - I haven't tested either), a bit more chic and a whole heap more expensive. And as far as quality goes, I'd be happy to take a small wager that the return and repair rates on the two machines are not that different, though you'd find it hard to winkle figures out of either company.

The whole point of this diatribe is that very similar products can sell in completely different price bands and maintain profits for their suppliers largely on the strength of their respective advertising styles - and budgets. If you're thinking of buying a micro, ask a few questions on return rates and advertising policy. If you get any answers at all you might be surprised to learn which companies are really offering value for money.

What a whopper!

It's always nice to dream, isn't it? If you're a hand-held scanner user or are thinking of investing in some DTP kit, then spare a thought for the Mitsubishi SP-MH216AF. This is the snappily-named scanner from the world's largest manufacturing company. The interesting thing about it is that it's not 2.5" long, nor yet 4" long, but a somewhat exceptional 8" long. This means you can scan an A4 sheet from side to side in one swipe. Gasps of amazement echo round the room.

Not only that, says the hawk now well into his patter, but it can be clipped into an optional motorised cradle (SP-MH01FA for the figure conscious) which allows you to feed sheets through the complete system in the same way you would a FAX. Talking of FAXes, the combined kit would make an ideal FAX input device as well as being just the job for DTP. What a clever idea!

Before you all go out and buy one (try Midwich Thame on 084 421 7676) there are a few things on the down side. First, the software, though smart enough to use your hard disk as a graphics buffer, is rather slow for doing anything useful, like turning an image through 90 degrees. Also, the scanner costs a cool £599, with an extra £168 for the cradle. Adding VAT to that lot gives a total of £882. Still cheaper than many flatbed scanners, though, and for my money a lot more versatile.

Simon Williams

A SMALL SELECTION FROM OUR WAREHOUSE

HARDWARE & PERIPHERALS (Offers end 31st Jan)	R.R.P	WAVE
Amstrad PCW 8512 Computer/WordProcessor + Monitor & Printer	516.35	439.00 ANC
Atari 520 STFM Super Pack inc. Joystick + 22 Software Titles	399.99	339.99 A
Commodore 1541C Disc Drive inc FREE GEOS - 64/128	199.99	144.49 A
Commodore Amiga 500 inc. Free modulator & Paint Software	499.99	339.99 A
Commodore Amiga 500 & A1084S Colour Monitor & Paint Software	918.85	578.49 ANC
Commodore Amiga 500 inc Exp to 1 Meg & Dragons Lair & S/W	594.93	481.24 A
Commodore 1010 3.5" External Drive + 501 RAM Expansion		
+ FREE Superbase Personal - Amiga A500	359.93	254.98 A
Commodore MPS1230 Printer + 1010 3.5" External Drive + FREE TextCraft - Amiga A500	429.96	322.98 A
Commodore MPS1230 Printer + 501 RAM Expansion + FREE Superbase Personal - Amiga A500	439.96	322.98 A
Commodore MPS1230 Printer + 3.5" External Drive + 501 RAM expansion + FREE Superbase Personal - Amiga A500	589.95	450.47 A
Commodore PC1 Single Drive Mono inc Able 1 Software	369.99	307.91 ANC
Commodore PC1 Single Drive Colour inc Able 1 Software	494.50	420.33 ANC
Psion Organiser II CM Portable Computer/Calculator	99.50	83.58 C
Psion Organiser II XP Portable Computer/Calculator	139.50	117.18 C
Star LC10 Parallel F&T NLQ Printer	297.85	196.58 A
Star LC10 Colour Parallel F&T NLQ Printer	343.85	240.70 A
Trojan Lightpen & Graphics Software to Fit		
PC1512/1640, CPC 464 Colour, Commodore 64/128		
Spectrum 48/128/+ , Spectrum + 2	19.95	14.96 E
CPC6128 Colour, Spectrum + 3	23.95	17.96 E
PCW 8256/8512/9512 (9512 Reqs. Dot Matrix Printers)	29.95	22.46 E

Blank Discs & Software

Amstrad CPC Disc Software titles...RRP £12.99/£14.99 Our Price only £5.99 E
Strike Force Cobra, Movie, Ping Pong, Through the Trap Door, Spy vs Spy, Yogi Bear, Mr Weens, The She Vampires, Deactivators, Druid, Flunky.

Amsoft/Maxell 3" Discs DS/All 3" DrivesBOX 1017.99 E
Athana 3.5" DS/DD 135TPI Blank DiscsPKT 107.59 E
Athana 5.25" DS/DD 40/80T Blank Discs.....PKT 256.01 D

Large range of Books & Software Business / Games / Utilities Etc.
All at good discounts. Far too many items to list here. Send 3 19p stamps for lists.
Stating for which products.

Eng. Mainland post & ins : (A)£5.00 (B)£4.00 (C)£3.00 (D)£2.00 (E)£1.00 (F)50p (ANC) 3 Day
£9.00 Next Day £12.00. COD + £2. Max UK Post charge £6 per 20kg/£500.

ALL PRICES INCLUDE VAT. All sales subject to our Trade Terms of Trading.

W. A. V. E. (Trade Dept NCE 2601)
Walney Audio Visual & Electrical Distribution
1 Buccleuch Street, Barrow-in-Furness, Cumbria, LA14 1SR
Telephone: 0229-870000 (6 lines) Hours: Mon-Fri 10.00-5.00

WE ACCEPT EXPRESS VOUCHERS

COMPUTER REPAIRS

Fixed Super Low Prices!

Inclusive of parts, labour and VAT



FIRST AID FOR TECHNOLOGY

1 WEEK TURNROUND

* SPECIAL OFFERS *

SPECTRUMS	£14 + Free Game	VIC 20, C+4	£22
SPECTRUM 128	£18	1541 DISK DRIVE	£36
C64	£22 + Free Game	1531 TAPE DECK	£19
C128	£29	MPS 801	£38
C16	£18		

Please enclose payment with item - 3 month warranty on repair
Please enclose advert with repair

W.T.S. ELECTRONICS
(NCE 260189)

Studio Master House, Chaulend Lane, Luton, Beds. LU4 8EZ

Tel: 0582 491949

(4 lines)

All rights reserved

WE ACCEPT EXPRESS VOUCHERS

NSG

NORTHERN PC SOFTWARE GROUP

Collieston, Aberdeen. AB4 9RT.

Telephone and Help-Line:- 035887-336

NSG offer to ALL Amstrad and IBM Compatible Users a Personal Service.
We are especially interested in NEWCOMERS to COMPUTING. OUR NON-PROFIT MAKING SERVICES INCLUDE THE FOLLOWING:-

- PUBLIC DOMAIN:** Fine programmes available on 5.25" and 3.5" disks. IBM Compatible Material is offered for ALL USERS. on 5.25" Disks at a maximum of £3.50 per Disk. Inc VAT & Post. We hold the largest PD Library in the North of Britain, which is being increased monthly.
- 24 HOUR HELPLINE:** Use this Service at any time of Day or Night for instant assistance to any Member. Especially valuable to newcomers to these excellent PD programmes. Help available on any aspect of Computing, at all times.
- OTHER SERVICES:-** INFORMATION. BBS. COMMS. NETWORKING. DISK EXCHANGE. NEWSOFTWARE. CONSULTANCY
- SPECIAL INTERESTS:** Special Interest Groups encouraged. Share your expertise with other enthusiasts, through our News Letter.

Send for information today without delay.
This is a service for all beginners, and the enthusiast.
Modest registration fee £20.00.
Includes credit for £10.00 PD software.
Special terms for OAP/students/unemployed.

WE ACCEPT EXPRESS VOUCHERS

LAPTOP BONANZA

Goupil Club



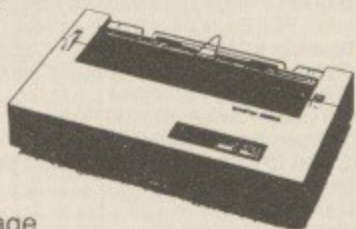
A highly engineered French made LapTop offering a host of advanced features. Twin 3.5" 720KB drives, detachable 77 key keyboard with 10 function keys, Supertwist LCD screen with 25 x 80 characters - 640 x 200 pixels, 768KB RAM. Interfaces include RS232C, Parallel, RGB & NTSC. With switchable power supply, rechargeable battery, soft case, MS-DOS 3.2 & GW BASIC.

PRICE £485.00

+VAT & POSTAGE £5.00 TOTAL £562.75

☆ BROTHER HR5 PRINTER ☆

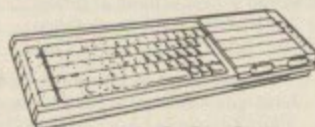
- ☆ 30 CPS ☆ 9-pin dot matrix
- ☆ Very quiet and lightweight
- ☆ Epson compatible
- ☆ Battery or mains
- ☆ Thermal or ink print
- ☆ Standard Centronics



£59.95 plus £3.05 postage

☆ sinclair QL ☆

- ☆ Fast 68008 Processor ☆ 128K RAM
- ☆ Multi Tasking ☆ Twin RS232 Ports
- ☆ Twin fast access microdrives
- ☆ Monitor and TV outputs
- ☆ 4 free business programs

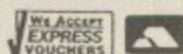


We also stock QL Software at discount prices. Send today for our list!

£99.95
+ £4.05 postage

UK HOME COMPUTERS

82 Churchward Avenue, Swindon, Wilts
Tel: (0793) 695034



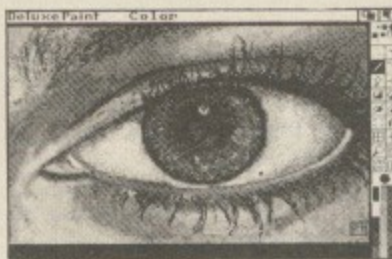
YOUR FORMAT

MACHINE-SPECIFIC COLUMNS

AMIGA BLIT

The Best Just Got Better

If you had to choose one program that is most associated with the Amiga, what would it be? Sculpt 3D perhaps? or how about Photon Paint?



• Deluxe Paint 2: due for major revision in March

While these programs have rightfully earned themselves places in the Amiga history books, the undoubted king of them all is Electronic Arts' *Deluxe Paint 2*. If like me you're an ardent fan of *DPaint 2*, then you'll be pleased to hear that *Deluxe Paint version 3* isn't far off.

At the recent 'World of Commodore Show' in Toronto, Canada, Electronic Arts was showing a pre-release version of the new *DPaint*. The program, that many industry speculators claim should be available around about March, includes many enhancements over the current *DPaint version 2*.

The most notable enhancement is the inclusion of a comprehensive animation

facility. Other features include direct support for OverScan, Extra Half Brite and far superior handling of text fonts. *DPaint 3* also includes Photon Paint lookalike features such as brush wrapping and tinting. At last Electronic Arts has seen the light and the old cronky *DPaint* file requester has been replaced with a new, high-tech requester.

Competition is hotting up, however, as rumours have been filtering through from the States that MicroIllusions is well prepared to defend their flagship product, *Photon Paint*, against this latest threat with the release of a new super enhanced version called not surprisingly, *Photon Paint 2*. No details of this update are as yet available.

Amiga BBC BASIC

The Amiga BBC Emulator is finally with us and after months of waiting, first impressions are generally favourable. The question on most peoples lips at the moment is "Where does the BBC Emulator go from here?"

When I recently phoned Dave Parkinson, programmer of the Beebulator, at Ariadne, I put this question to Dave. Dave seemed uncertain about any future enhancements, "...Updates will certainly continue but something like a BBC Master Emulator seems unlikely unless public

Message Port

If you have any views on any issues raised within AmigaBLIT or any issue within the Amiga scene in general, why not write in and air your opinions. Similarly, if you have any great tips or tricks for either games of serious software that you think will be of interest to other AmigaBLIT readers, why not send them in also? The address to write to is: AMIGA BLIT, New Computer Express, 4 Queen Street, Bath BA1 1EJ.

interest in the existing Beebulator is substantial..."

What seemed most likely and preferable to Dave personally was a complete Amiga version of BBC BASIC complete with all the bells and whistles that the Amiga offers. Dave continued, "...What the Amiga really lacks is a decent, Fast, BASIC. I would like to see the BBC Emulator BASIC evolve into an Amiga BBC BASIC complete with commands to access every facet of the machine such as the Blitter, Sprites and Sampled Sound."

BBC BASIC for the Amiga is still only an idea on the drawing board at Ariadne but if Dave gets the kind of backing he requires, the product could be ready within as little as six months.

Amiga Macintosh Emulator

Not another emulator, I hear you cry! Now all the excitement and public interest in the Amiga BBC Emulator has levelled out, the next machine set to get the Amiga treatment is Apple's highly successful Macintosh Machine.

ReadySoft, the American company which brought you *Dragon's Lair* and the Commodore 64 Emulator, has a hardware based Macintosh Emulator due for release this year. The MAX Emulator plugs into the external drive socket and allows Macintosh software such as *PageMaker II*, *Quark XPress* and most importantly in the view of many at Future Publishing, the excellent Mac game *Crystal Quest*! The cartridge comes as a complete unit and does not require the user to purchase ROMs from Apple as was the case with similar units on the ST. Price is expected to be around \$150 in the States. No news of European distributors as yet but without doubt if the product works well, the MAX unit will eventually reach Europe.

Jason Holborn

Getting the Better of Interceptor

After a weeks rest, the game tips section of AmigaBLIT is back again with a real gem of a cheat. The program below is a great hack for Electronic Arts' Amiga classic, *Interceptor*. The cheat allows you to choose any of the missions within the game without having to have gained the necessary experience and the man to thank for this great cheat?... a certain Dave Collins from Salisbury.

The cheat requires you to first create a log disk within the *Interceptor* game. To use it, first load AmigaBASIC (or HiSoft BASIC!) and enter the program below and then run it. When requested, insert your log disk and the program will do its stuff.

Now load *Interceptor*, insert your log disk when requested and you're away. Now if you select option six from the menu, you will be able to try out any of the missions.

PRINT "INTERCEPTOR HACK V1.01"

PRINT

PRINT "PLEASE INSERT LOG DISK IN DFO:"

PRINT "AND PRESS <RETURN>"

WHILE ANYKEYS = ""

ANYKEYS = INKEY\$

WEND

OPEN "R",#1,"DFO:CONFIG",1

FIELD #1,1 AS AS

LSET AS=CHR\$(1)

PUT #1,2

FOR L = 22 TO 27

PUT #1, L

NEXT L

CLOSE #1

PRINT "OK. JOB DONE....."

PUBLIC DOMAIN SOFTWARE AND SHAREWARE

Extensive ranges of Public Domain Software & Shareware available for the following Computers:

IBM PC & Compatibles

including Amstrads

£2.95 per 5.25" disk £4.50 per 3.5" disk

Apple MACINTOSH range

£5.95 per disk

COMMODORE 64 & 128

at £2.95 per 5.25" disk

Commodore AMIGA

from £3 per disk

Atari ST

from £2.80 per disk

CATALOGUES

Catalogues and lists are available for all the above. Please send SAE or phone if you would like us to send you one, or if you would like any further details. Please state clearly which machine(s) you are interested in.

Please note that we have probably the largest and fastest growing collections of PD software for the Amiga in the UK. Details are included on TWO catalogue disks which are £3 each. These can be updated in the future FREE of charge..

ORDERING

Please note that the above prices are FULLY INCLUSIVE of VAT and postage. Orders are normally dispatched within two working days of receipt. We cannot accept payment by credit card

AMIGA A500..... £349.99

ATARI 520STFM£259.99

Prices are inclusive of VAT. Full range of software and peripherals available. Please phone for competitive prices.

KINGSWAY COMPUTERS

140 Rushdale Road, Sheffield, S8 9QE

Telephone: 0742 588429



SPEX

Call for independents

No fanzine editor has yet been brave enough to send me an issue of their mag for review. No doubt they are afraid of the great influence SPEX has; one derisory comment and they'd be finished!

So for the time being, my friends, you'll have to put up with me plugging independent magazines I already subscribe to and enjoy. One 'zine I'm never seen without is EPROM, a 64-page A5 publication carefully sweated over by editor Tony Worrall. Originally set up to give Tony something to do when he was unemployed, the mag contains loads of in-depth reviews as well as comprehensive programming, adventure and playing tips sections, which ensure no part of Spectrum society is excluded.

Well-written and good looking, EPROM also has a variety of interesting articles and informed comments on the state of all things Spectrum. You really get the feeling certified Speccy fanatics put the mag together, and that's meant in the nicest possible way! Would-be readers should send £1 for the latest issue to Tony Worrall, 328 The Maltings, Penwortham, Preston, Lancs PR1 9FD.

Rarely Playable Games

Now shoot-em-ups I love, arcade adventures can do no wrong, and I've struck up a friendship with many an adventure, but role-playing games on the Speccy have never managed to turn me on.

The heroes seem to have a distinct lack of vowels in their names, you get killed off with alarming regularity, and it's necessary to read through half a dozen phone-directory-thick manuals before you even get the merest sight of an orc.

US Gold has tried to woo moaning minnies like myself with its official AD&D licence *Heroes of the Lance*. This is an attempt to introduce some arcade action into gloomy dungeons with joystick-controlled combat and real-time animation.

I probably would have been won over to the joys of RPG if it hadn't required a multi-load marathon of vast length. I counted six separate loads before I even got to bash a basilisk. Maybe the programmers should take some tips from *Incentive* on how to compress their code.

Anyway, the game plays quite well, despite the aforementioned loads and petite graphics. It's quite involving as you control your fearless party of eight stupidly-named characters through the usual crowd of nasties. I can see a lot of people liking this one, but I'm still not convinced. Now if we could only persuade Mirrorsoft of the commercial potential of *Dungeon Master* on the Spectrum...

Batsolution

Having problems saving the world again this week? That dastardly Penguin getting the better of you? Wearers of external undies and blue tights read on, because I'm proud to

present the solution to *Batman* part one (pause for fanfares).

First of all, insert the disk into the batcomputer. Go to the room with broken machines and use the tool. Leave the Batcave, run right, climb up the ladder and collect the rope. Next, go right until you find a locked door. Pick the lock with the lockpick you should have taken from the Batcave (oops!). Go through the door, wander around and find a lift key. This gives access to the lift (of all places!). Explore some more, and collect a games disk and dart. Head for the room entitled "Two Halfs" and use your rope. Throw the dart at the picture of Batman and a pass will reveal itself. Now exit and return to

Publish and be damned

Mention desktop publishing on the Spectrum and you'll get chuckles, laughs and even hoots of derision. It's just another case of some people not realising our computer's versatility and surprising power.

Don't worry, I'm not going to make a case for the Spectrum being able to outdo a Big Mac, but it can produce some impressive results with a suite of 3 DTP programs from Cardex. They first saw the light of day over a year ago, but I think are worth another mention, just for those new (or not so new) Spectrums who don't know what they're missing.

Anyone lucky enough to get a shining new Spectrum for Christmas should take particular note if they want to use their baby for something other than games.

The package is made up of three separate programs, all available singly. It includes Word Master, a decent word processor worth buying on its tod and Headliner, a useful program which allows you to design headlines (who'd have guessed!), logos and graphics.

The real meat of the package, though, is Typeliner. This is the desktop publisher, and it allows you to position text, past in graphics and shake it all about until you're ready to print.

There's no room for an in-depth review here, but take my word for it, some of the results possible will surprise you. They're easily professional enough for fanzines or newsletters.

The all-in price of £35 may seem a tad expensive, but it is proportional to the cost of DTP software on other computers. Personally, I reckon this one is worth every penny. For more details send an SAE to 61 School Street, Barrow, Cumbria LA14 1EW. The package is also available from MGT on disk at an all-in price of £37.80. You'll find them on 0792 791100.

the lift. Go right, down a ladder and right again until you find the mansion. Before entering, go a screen to the right and pick up the key. Then hotfoot it back to the mansion and gain entry with your pass. Who turned out the lights? Heaven knows. Just use your



torch and stop asking questions. Go to a room containing a TV and video and put the tape on. Find the flight of stairs located somewhere else too complicated to explain, and unlock the door. Walk sedately through the door entitled "3 Steps to Hell" and turn right. After a while you'll come to a room full of computers. Simply use disk to finish.

Robin Alway

☆☆☆ SPECIAL OFFER ☆☆☆

WE ACCEPT EXPRESS VOUCHERS

CERTIFIED DISKETTES INCLUDING SLEEVES, LABELS AND A 100% LIFETIME GUARANTEE!

QTY.	5 1/4" 48 TPI DD/DS	3 1/2" 135 TPI DD/DS
	£	£
25	9.40	22.00
50	17.00	40.00
100	30.00	75.00
1000	280.00	700.00

Prices include carriage and VAT

ALL DISKETTES CARRY A NO-QUIBBLE REPLACEMENT GUARANTEE FOR LIFE! SAME DAY DESPATCH

Call our order desk

0836 775060

quoting your Access number, or send cheque to:-

WESTONING SOFTWARE,

DEPT NCE, 12 SANDERSON ROAD, WESTONING, BEDFORD, MK45 5JY

SPECTRUM TAPE TAPE TAPE UTILITY B

Yes TUB will back up most of your TAPE based software, including most of the recent jerky loaders and those programs with a counter - converts for reliable loading. Can measure speed of faster loaders, manages 100% accurately many blocks over 51k, etc. etc. Unrivaled. On tape at £7.50.

SPECTRUM TAPE TO DRIVE - TP5

A complete software package (includes TUB) to transfer hundreds of programs to your drive - manages some that hardware devices can not reach! Jerky and counter loaders managed easily, but program not for the novice. Only £12 (+£1 on m/driver cart). INFORMATION BOOK covering over 400 transfers, including many top 20 hits £2.50 extra with TP5.

M/DRIVE OWNERS - MICROMATE

The only complete package for m/driver owners, and it pays for itself! These are just some of its features: Format (up to approx 104k), Clone, sector editor, reconditions cartridges, repairs and gives condition of files, 'boot' program, multiple ERASE, rename, true CAT. Copies tape to drive (unsecured), drive to drive, drive to tape. It has so many features and is unique. YOU MUST HAVE THIS PROGRAM IF YOU HAVE A M/DRIVE! £13.99 on m/driver cartridge.

CODE COMPRESSOR, Z80 TOOLKIT

Code compressor - compresses machine code - many uses, but ideal with hardware devices that don't compress code. Only £4.50. Z80 Toolkit - An superb assembler (full screen editor), fast disassembler, single step to see how m/c works, loader, hex/dec toggle, tutorial - ideal for ALL particularly beginners - only £7.99. State TYPE of SPECTRUM + drive system when ordering. E.g PLUS 3 or 128k with Opus disc drive. M/driver cartridges £1.75 each (min 4).

ALL PROGRAMS CARRY OUR MONEY BACK GUARANTEE (not updates - phone for prices of these). All prices inclusive except add £1 Europe, £2 others. SAE for full details. LERM DEPT NCE 11 BEACONSFIELD CLOSE, WHITLEY BAY, NE25 5UW. (Tel: 091-2533615)

AMIGA SPECIALIST

With FREE TV Modulator, Mouse, Mouse Mat, 40 Great Games - Amegas, Art of Chess, Barbarian, Buggy Boy, Ikari Warriors, Insanity Flight, Mercenary, Terrorpods, Thunder Cats, Wizball and many more! Photon Paint*, Amiga Tutorial, Workbench, BASIC/Extras Disks, and 2 Manuals.

AMIGA 500 SUPER PLUS PACK
ONLY £399 (inc VAT!)

AMIGA 500 + 1084S STEREO COLOUR MONITOR & SUPER PLUS PACK
ONLY £625 (inc VAT!)

With FREE TV Modulator, Mouse, Mouse Mat, Photon Paint*, Amiga Tutorial, Workbench, BASIC/Extras Disks, and 2 Manuals.

AMIGA 500 ECONOMY PACK
ONLY £369 (inc VAT!)

ALL HARDWARE HAS 1 YEAR WARRANTY FROM THE DATE OF PURCHASE
FAULTY HARDWARE WILL BE REPLACED WITHIN 25 DAYS FROM PURCHASE DATE

AMIGA BOOKS

Amiga For Beginners (Abacus)	£12.95p
Kickstart Guide to the Amiga (Ariadne)	£12.95p
Amiga Machine Language (Abacus) (D = Book Disk - £9.95p)	£12.95p
Amiga Tricks and Tips (Abacus) (D)	£14.95p
Amiga DOS - Inside & Out (Abacus) (D)	£14.95p
Amiga BASIC - Inside & Out (Abacus) (D)	£16.95p
Advanced Amiga BASIC (Compute!) (D)	£16.95p
Amiga Machine Language Programming Guide (Compute!) (D)	£17.95p
Amiga ROM Kernel Ref. Manual: Exec (Addison-Wesley)	£22.95p
Amiga Hardware Ref. Manual (Addison-Wesley)	£22.95p
Amiga Intuition Ref. Manual (Addison-Wesley)	£22.95p
Amiga ROM Kernel Ref. Manual: Libs & Devices (Addison-Wesley)	£32.95p

OTHER BOOKS AVAILABLE ON REQUEST - TEL. 0706 43519 (Mon - Sat)

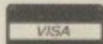
* Photon Paint may be replaced with either Deluxe Paint 1 or Game at any time.

All Offers are subject to availability and may change at any time. E & OE.

All Prices are inclusive of 15% VAT, unless otherwise stated.
Add £6 for 2 Day/£8 for Next Day Courier on ALL Hardware Items.
Disk Drives, Software and Book prices are inclusive of P&P.



ACCESS/VISA ORDERS/ENQUIRIES TEL. 0706 43519 (Mon - Sat)



NEW SHOWROOM NOW OPEN! - Come and have a Demo at:- 1st Floor Drake House, 160 Drake Street, Rochdale, Lancs.
(Phone First Please)
Hours of Business - 9.30 am to 5.30 pm Mon - Fri
24 Hours Ansaphone in operation outside hours

SEND ALL MAIL ORDERS TO - 16-Bit Software, Dept J4, 24 Bankfield Lane, Rochdale, Lancs., OL11 5RJ

BYTEBACK



KEENEST PRICES

FAST
DELIVERY SERVICE

We're programmed to help, so ring us now.

WE ACCEPT
EXPRESS
VOUCHERS

AMIGA A500 COMPUTER (NEW 1.3 KICKSTART!) £369

Including 1Mb Disk Drive, TV Modulator, Mouse, Manuals, Tutorial

AMIGA A500 GAMES PACK (NEW 1.3 KICKSTART!) £389

Including 1Mb Disk Drive, TV Modulator, Mouse, Manuals, Tutorial
** PLUS **

Buggy Boy, Barbarian, Thundercats, TerrorPods, Mercenary, Ikari Warriors, Wizball, Art of Chess, Amegas and Insanity Fight.

AMIGA A500 1MB SPECIAL PACK (NEW 1.3 KICKSTART!) £499

Including 1Mb Disk Drive, TV Modulator, Mouse, Manuals, Tutorial
** PLUS **

The New DRAGON'S LAIR (R.R.P. £44.95) SIX disk MEGA GAME

ATARI 520 STFM EXPLORER PACK £269

Including 1Mb Disk Drive, Mouse, Manual, NEW ST Basic and Ranarama

ATARI 520 STFM SUPER PACK £359

Including 1Mb Disk Drive, Mouse, Manual, NEW ST Basic Joystick
** PLUS **

Wizball, Buggy Boy, Test Drive, Marble Madness, Ikari Warriors, Roadwars, Eddie Edwards Super Ski, Thundercats, Black Lamp, Quadralien, Chopper X, Zynaps, Xenon, Revenge of Doh, Genesis, Starquake, Ranarama, Seconds Out, Thrust, Summer Olympiad, Beyond the Ice Palace + Organiser Business Pack

ATARI 1040 STFM BUSINESS PACK £449

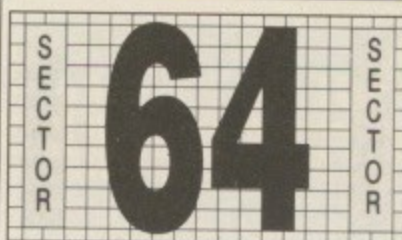
Including 1Mb Disk Drive, TV Modulator, Mouse, NEW ST Basic
** PLUS **

VIP Professional, SuperBase Personal & Microsoft Write
(Also available at same price with SUPER PACK games!)

AMIGA A1084 STEREO Colour Monitor	£279
ATARI SC 1224 Colour Monitor	£269
ATARI SM 124 Mono Monitor	£99
STAR LC10 Mono Printer	£229
STAR LC10 Colour Printer	£269
STAR LC24/10 24 Pin Printer	£339
Cumana Disk Drive (ST or Amiga)	£99

PLUS the BIGGEST Selection of 16 Bit Software
Ask for List!

YOUR FORMAT MACHINE-SPECIFIC COLUMNS



A musical instrument

Since the Commodore 64 was introduced it has become famous for its great Sid chip, which makes it the cheapest and one of the most powerful musical instruments around.

One of the people who helped give the 64 this reputation was Rob Hubbard, who is now in America. Another is Martin Galway, who made the 64 sound like an Amiga.

Things have moved on, though. Martin Galway has left Ocean/Imagine and gone freelance, joining up with Sensible Software and doing some cool sfx for it. And these days there are many more musicians who have mastered the Sid chip, including the Maniacs of Noise, who have done some cool tunes to many commercial games and public domain demos.

Compunet also has its share of musicians, and very good ones too. People such as Steve (Iceman) Hammond, Mark Tait, Deek, Mark Wilson and many more. Lots of famous musicians from Compunet have struck gold and moved on to Ocean/Imagine, one such person being Jonathan Dunn (alias "Choroid"), who left Compunet some while ago. We're sure all the others will be up there soon, and we wish them luck.

head-to-head confrontation with an awesome mechanoid adversary.

Tomcat features progressive weaponry, explosive sound effects, breathtaking graphics and compulsive gameplay. The Commodore 64 version is currently being written by the Digital Light and Magic team. It will feature full colour scrolling, devious enemy flight patterns, devastating sonics and riveting soundtrack by The Maniacs of Noise.

64 FX

The Commodore 64 has come a long way since it was first released, programmers have discovered many new things that this machine can do. Mostly, these revolve around the Vic chip. A team called "SCG" has

Listing

This is a program to protect against reset. If your machine is reset while a Basic program is running, it will re-run the program from the start. The program must start from line 100. It works in the following way. If you put the numbers "SC3,SC2,SCD" at location \$8004 it makes up the word "CBM". And putting the low byte and high byte of a start location at \$8000 (32768) it will jump to it. For example:

```
lo hi - lo hi
->8000 09 80 09 80 C3 C2 CD 38 ... CBM8
->8008 30 00 00 00 00 00 00 00 00.....
```

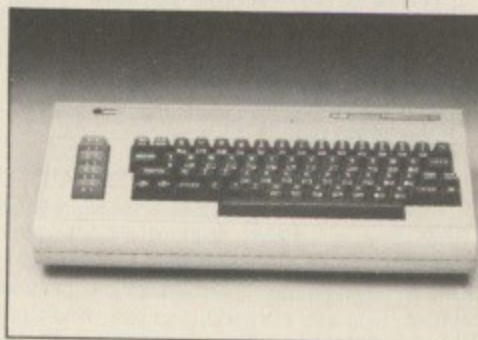
When you reset the C64 it will jump from the example above to \$8009 (\$80-HI 09-LO)

```
0 B=32768
1 RESTORE:FORL=0TO21:READA:POKEB+L:A:NEXTL
10 DATA 9,128,9,128,195
20 DATA 194,205,56,48,120
30 DATA 32,21,253,32,91
40 DATA 255,32,89,166,76
50 DATA 174,167
100 POKE53280,3:POKE53281,1
101 PRINT"[CLR HOME][CURSOR DOWN][CTRL BLUE]"
110 PRINT" **** IAN&MIC STARTUP PAGE V1.0 *****"
120 PRINT"[CURSOR DOWN] 38911 BASIC BYTES FREE LEFT FOR YOU!"
130 END
```

managed to split the screen vertically and have the scrolling travelling in one direction in one half of the screen, and going the other way in the other half.

Here are other effects which have been discovered:

- over eight sprites
- over three sound channels
- 16 sprites on one line
- an effect to make you think you're seeing more than 16 colours
- bottom and side borders wiped out
- vertical and horizontal screen positioning
- screen wobble over 8 pixels
- scrollers using the screen colour
- (now) two-way vertical scrolling



• Is the C64 the most powerful music machine there is?

Another famous Compunet musician is "Demon", who has done lots of work for Softek. It has been rumoured that he's joined The Maniacs of Noise. A few years back Tony Crowther and Benn Dalglish hit the industry as music talents under the name W.E.M.U.S.I.C. and seemed to have done well, but it all died off a year or so later.

Maybe in a few years' time there will be ten times as many people able to play our groovy Sid.

Meeeeeooooowwww...

Coming in January 25th at £1.99 from Players will be Tomcat. The game places you in the cockpit of a powerful F14 Tomcat, and your job is to wreak havoc across four devastating levels using air-to-air, air-to-sea and air-to-ground firepower. You have to destroy enemy tanks, ground installations, gunboats and helicopters, and each level culminates in a

Cheats

Mach • Starvision

Our thanks to Kopmaster for this cheat. Load your cassette as normal, then play the game, trying to achieve a high enough score to get you on the hi-score table. Type STARVISION-IC in the hi-score table to give yourself invincibility.

Tanium • Players

Tanium is a very hard horizontally-scrolling shoot-em-up. These pokes from Derek Hagan should make it easier.

Load the game, reset the computer and type:
POKE 52255,174:SYS 16384

This will give you an infinite number of ships.

Great Giana Sisters • Go!

Gary Gould sent us this tip, which will let you skip to the next level. Load the game, and when you are bored playing the level you're on, hold down the A, N, I, M and R keys.

Ian + Mic

BYTEBACK DEPT NCE6 MUMBY CLOSE
NEWARK, NOTTS NG24 1JE

PAY BY CHEQUE,
POSTAL ORDER OR USE
YOUR CREDIT CARD
0636-79097



24 HOUR



SERVICE

CPC Centre

Midi interfaces

Now I'm not the most musical of people, as anyone who's ever had to listen to me singing in the bath will tell you. Still, that handicap never did Stock Aitken and Dennis Waterman any harm, and despite my cloth ears I try to take an interest in these matters. I pass on the following snippets for your information.

DHCP (0440 61207), which produces its own Midi interface, has raised the price by a tenner to £69.95 - which doesn't include any software (that's an extra £34.95). (Dave Hickford of DHCP, by the way, wrote the laserharp software for Jean Michel Jarre, but we mustn't hold that against him.) The software it brings out is different for the various Midi interfaces for the CPCs, which are incompatible.

Electro Music Research (0702 335747), on the other hand, has brought its prices down. Its Midi Track package was £130 - including interface and software. Now it's down to £92.40 on disk. Its software is more general, but includes a very good 8-track sequencer (for those of you with 8 synths, you swines!).

Finally, while we're on the subject, you may care to hear of a brand new multi-track step time midi sequencer that's just been done - the only one available for the CPC, according to its author Chris Owen. Designed

specifically for Ram Electronic's Music Machine Midi Interface, it works with the £200 Yamaha PSS680 multitimbral synth or similar. It enables you to play up to six different voices and four percussion sounds simultaneously, each with adjustable volume and full seven octave note range.

It's by Foundation Software (0252 543945) and the disk costs £29.95 including p & p. (This price, like all the others quoted here, includes VAT.)

Get your free plugs here

For a long time now I've been a regular and appreciative user of *Mini Office II*. So I was interested to learn of *Interceptor*, a new product from Camel Micros which loads into the extra memory of a 128K and waits for you to bring up its main menu. Now I've seen it in the plastic I can recommend it, and I shall certainly be loading it up each time I reach for *MO II*.

Options allow you to create ready made pro forma modules for the spreadsheet, database, word processor or comms programs. It's easy enough to save individual documents and load them from *MO II*, but with *Interceptor* the program code is saved with the data, making the program much easier to use. There are the usual disk housekeeping tasks (catalogues, renaming/erasing files, copying disks - you know the kind of thing) together with an option to save the current program module and all of its data onto a blank disk. This makes the output from the various packages easy to incorporate within word processed documents.

Interceptor looks very good indeed, though at £15 you'd need to be a regular user of *MO II* (which only costs £20 on disk itself) to appreciate what it can do for you. More details from Camel Micros (0392 421105). There'll be a full review in *Amstrad Action's* March issue, available February 9th (*That's enough free plugs - Express ed*).

What's interesting about this Camel project is that it suggests a completely new avenue for new CPC software. You, dear reader, are one of the thousands of CPC users who have word processors, databases and spreadsheets and who would be very interested indeed to hear of memory expansions, customisers and general turbochargers of programs you already use daily.

Framed

The most hyped film of the 80's, *Who Framed Roger Rabbit* (who nicked his question mark, I want to know), is making its way to the small screen soon - your CPC, to be precise. You guide the lagomorphic hero through three sub-games in an attempt to prove his innocence (if you've seen his wife you'll know that he can't be that innocent.

Kathleen Turner did the husky voice, by the way, though she doesn't get a credit). Activision is the one doing the dirty deed and you'll be able to judge for yourself, eventually. Don't hold your breath, though. Furthermore, recent reviews here in *Express* suggest that the gameplay is unlikely to be in the same league as the graphics.

Steve Carey

Chuck's up!

Chuck Yeager's *Advanced Flight Trainer* has been already been a major success on the PC - and let's face it, if it can make it as a game on the PC, it can make it anywhere! So the news that the CPC version will soon be hitting the streets - though not literally, I hope - is bound to make any lover of flight simulators lick his or her lips. That's the good news.

The even better news is that it's by Electronic Arts, one of the few companies around which seem incapable of releasing a bad game. So if Chuck is anything like as good as some of EA's 1988 releases such as *The Bard's Tale*, *Arctic Fox* and *PHM Pegasus*, then it should be a strong contender for the game of this year.

As if you need telling, Chuck is a flight simulation that puts you at the controls of any of 14 aircraft, ranging from the humble Sopwith Camel to several way-out experimental jets. Chuck Yeager - who's still going strong, I believe - is a retired USAF general and test pilot who's been flying over 35 years. Now all you've got to do is survive one flight. Still, the consequences of letting your mind wander aren't nearly so severe...

Oh yes, you're wondering what buying the farm's got to do with anything. It seems that in the test pilot business - you've seen *The Right Stuff*? - they don't talk about crashing. Makes 'em come over all funny, apparently, and you can understand why. Instead they refer to "auguring in", or - you've guessed it - "buying the farm".



• Chuck: Up in the air, but landing soon

AT £9.95 WE'RE REALLY TALKING!

FREE MODEM
with annual subscription

Turn your computer into a communications terminal that will download free software, access up-to-the minute computing information, play exciting multi-user games and talk to other people for only £9.95. Just join Miconet* before March 31st 1989 and you'll discover a whole new world for less than half the normal price.



FREE SOFTWARE Browse through an extensive software library of free programs for all popular machines, including PC compatibles, the ST and Amiga.

COMMUNICATIONS Use your computer to communicate with thousands of other users. With electronic mail, chatlines and teleconferencing, Miconet lets you do the talking.



INFORMATION Stay informed with Miconet's daily computer news, reviews and features, and then access the huge Prestel database.

ENTERTAINMENT Play a range of games, including the popular multi-user game, *Shades*, where the action is live and so are your opponents!



Low Cost

Now, not only is your first quarter's membership to Miconet less than half price, but using Miconet starts at just 50p an hour, including telephone charges! And if you need a modem, we'll even give you one free when you take out a year's subscription.

Just phone our Sales Desk on 01-837 7872 or clip the coupon today for more information and a free brochure.

Join Miconet, and get talking!

FREE DEMONSTRATION

If you have access to a modem (1200/75 baud) and viewdata communications software you can see a free demonstration of Miconet. Just Dial 021-618 1111 and use the ID 4444444444 and password 4444.

You can look up a local telephone number once on-line.

Return to: Miconet, Telemap Group Ltd,
Durrant House, 8 Herbal Hill, London EC1R 5EJ.

Name: _____

Address: _____

Tel. No.: _____ Age: _____

Machine Type: _____



* Price includes 1st quarter residential subscription by direct debit only (normally £20) and does not include hardware or software. Minimum subscription period 1 year. Offer available only in the UK to new members. Free modem offer available to first time UK subscribers while stocks last.



Why oh why

In some ways the PCW is an invisible computer even after sales of around 1 million units, most of which are still working despite the disparaging comments of industry pundits when they first

This is worth a thought; even the most rabid of games enthusiasts don't put as much time in on their machine as failed hack writers forever adding just another chapter to *Sword of KrayTwo*, *Demon Warrior* or *Lord of Cyberia*: a fantasy cycle in forty six volumes.

Why is this potential market, so tied to its machine that it can no longer function in an environment without a blinking green cursor, so completely ignored by the rest of the computer world? Answers in under 100,000 words on 11 inch continuous paper, double spaced with 1 inch margins all round please.

Talking business

Pay no attention to those who would have you believe that once you've invested your pennies in a PCW you are cut off from the outside world. These haughty folk will point at the PC and boast about the number of slots they have. A swift blow to the jaw will reduce the number of slots they have by one. Now you can tell them about the speech synthesiser board you've just bought.

SM Engineering has built a business on the back of the PCW, pressing it into service as a cheap development system for production control equipment. To show you can have fun on the bus it's put a speech chip and an audio amplifier on a board and made it so easy to program even a technical editor can do it.

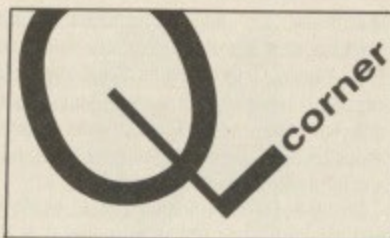
Better still, get the talking board to tell them. Details from the men themselves at SM Engineering on (0323) 766262.

appeared. "What, all that for only £400 pounds all in? It won't last three months." Well mine has lasted three years, printed out more than half a million words and is fitter than I am. Yet despite this success the PCW seems curiously adrift of the mainstream computer consciousness.

thinks it might cause offence, real editors don't care).

Well one of our better fanzines just died. *PCW File*, RIP. Fourteen back issues are available from C. Bryant, 11 Havenview Rd, Seaton, Devon, EX12 2PF for £13.95.

Steve Patient



Quanta

Originally called the *Independent QL User Group (IQLUG)* to distinguish it from the long-defunct official *Sinclair QLUB*, the group's new name stands for *QL Users and Tinkerers Association*. The secretary, Phil Borman, can be contacted at 15 Grosvenor Crescent, Grimsby DN32 0QJ (tel 0472 49850). An annual subscription of £14 gets you a monthly newsletter (usually 32 A5 pages) filled with correspondence from members, loads of workshops/seminars/meetings all over the country, and on-line help.

QUANTA is run by a new committee, following a minor scandal when the previous editor included material defaming a leading QL company and the committee had to publish an apology. The new newsletter has been regular and more interesting, with less emphasis on obscure/non-QL issues. Also, the unsolicited-letters-only format is to be replaced by regular reviews.

Hardly worth emulating!

More time has been spent with the ANT PC Emulator. Where do I begin? The ANT product periodically hangs (well, the manual warns that "it is not difficult to crash the

emulator" - we agree), refuses to even load with *Trumpcard*, doesn't seem to work at all with standard Basics and even MDA graphics do not seem to function (CLS causes crash; subscreen scrolling, windowing and inverse video are all unsupported; characters cannot be read back off the screen).

CGA support? Zilch. The (non-configurable) keyboard driver doesn't cater for many common key combinations! Text output appears to be only in teletype mode - traps to move cursor position are ignored or disobeyed. Date returns what appear to be random numbers. There's no way to move

Not SUBstandard

SUB stands for Super User Bureau - a sort of QL club. It has been around for ten months, and is located in an obscure corner of the land; the non-Antipodean West Auckland! You can write to it at PO Box 3, Shildon DL4 2LW or phone on 0388 450160.

At the start, SUB promised a monthly magazine for £15 a year: apparently, only two issues have been produced. This said, what did appear was fairly well-written and interesting. Certainly, no complaints from members have filtered in our direction. The group is enthusiastically run by Richard and Julie Turner.

data between QDOS and MSDOS, either direction. Multitasking doesn't work - I think CTRL/C is remapped to CHR\$(256)!

Benchmarking is problematic, as virtually nothing works. I've managed to get one assembler working, but *Wordstar*, *Lotus*, *dBase*, *Wordperfect*, *Symphony*, *Framework*, *Supercalc*, *Turbo*-anything etc. all "decline".

However, you can use it to format a floppy. Time - 7 minutes plus. Lastly, there is no way to exit the product - RJOB causes a hang! Apart from that, no problems...!

Eric Simmonds



ATARI DEALER

ATARI 520STFM

Super Pack £359.00

Including VAT and NEXT DAY DELIVERY

Atari 520 STFM Super Pack includes: Built-in TV modulator allowing you to use the 520STFM with your domestic TV set. Built-in 1 megabyte disc drive for fast loading and saving of programs. £450 worth of free games software including *MARBLE MADNESS*, *TEST DRIVE*, *ARKANOID 2*, *BUGGY BOY*, *WIZBALL* and 16 more. ORGANISER Business Software worth £50. FREE JOYSTICK

ATARI 520STFM EXPLORER PACK INCLUDES 1MB DRIVE AND NO SOFTWARE **ONLY £270.00**

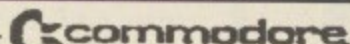
ATARI 1040STFM SUPER PACK INCLUDES £450.00 WORTH OF SOFTWARE PLUS A JOYSTICK **ONLY £445.00**

AMIGA & MONITOR PACK A500 PLUS HIGH RES. STEREO MONITOR AND SOFTWARE **ONLY £585.00**

PHILIPS HI-RES STEREO MONITOR MODEL CM8833 **ONLY £233.00**

HOMESOFT (UK)

Software and Hardware Cares for its customers



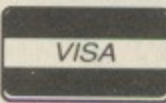
AMIGA A500

£379.00

Including VAT and NEXT DAY DELIVERY

Amiga Pack includes: FREE TV modulator worth £24.99 enabling you to use the AMIGA with your domestic TV set. FREE Game Software worth £125 FREE PHOTON PAINT graphics package worth £69.95

AMIGA 500 + MODULATOR £360.00



AUTHORISED DEALER

SOFTWARE SPECIALS

PACMANIA	ST 11.50	AM 11.50
OPERATION WOLF	ST 11.50	AM 14.50
FALCON (F16)	ST 14.50	AM 17.50
THUNDERBLADE	ST 12.90	AM 14.90
ELITE	ST 14.50	AM 14.50
HERO OF THE LANCE	ATARI ST ONLY	15.90
PUFFY'S SAGA	ATARI ST ONLY	12.90
ROCKET RANGER	AMIGA ONLY	17.50
TV SPORTS FOOTBALL	AMIGA ONLY	17.50
SPEEDBALL	ST 14.50	AM 14.50

EXCLUSIVE DEALER OFFER

COMMODORE AMIGA A500 COMPUTER WITH A500 EXPANSION MODULE PLUS THE 1MB VERSION OF DRAGONS LAIR

FOR ONLY £510.00

LIMITED STOCK

CUMANA 1MB EXTERNAL DRIVE WITH BUILT IN PSU FOR ATARI ST

ONLY £95.00

CUMANA 1MB EXTERNAL DRIVE WITH ENABLE/DISABLE SWITCH FOR AMIGA

ONLY £95.00

COMMODORE HI-RES STEREO MONITOR MODEL 1084S

ONLY 253.00

New Titles will be despatched on confirmed date of release.

PERIPHERALS

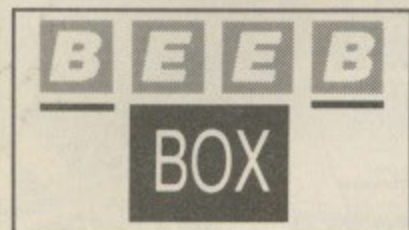
Competition Pro Ex Joystick	11.50
Competition Pro 5000 Joystick	11.35
Cheetah Mach + Joystick	9.50
Cheetah 125+ Joystick	8.80
Cheetah Starfighter Joystick	11.50
Xenix Speedking Joystick	9.70
Quickshot II Plus Joystick	8.99
Quickshot II Turbo Joystick	10.55
Konix Navigator Joystick	12.50
Konix Speedking Joystick	10.20
Suncon Economy Joystick	4.99
3.5" DSDD Disks Per 10	9.50
3.5" DSDD Disks Per 50	47.00
3.5" DSDD Disks Per 10 in case	10.50
100 Cap. 3.5" Storage Box	6.95
100 Cap. 5.25" Storage Box (While Stocks Last)	4.50
100 Cap. 3.5" Posso Storage Box	14.99
3.5" Head Cleaning Disk	2.50
Twin Joystick Expansion Lead	4.50
Quality Mouse Mats	4.50
Twin Joystick Extension 4ft	9.00
DataLink Cable	8.00

Phone for New Releases and Prices

Payment by Chq, POs, Cash, Credit Card accepted

HOMESOFT (UK)
Unit 13, Centurion Way
Industrial Estate, Leyland,
Preston, Lancs
PR5 26U
TEL: 0772 452414

All Prices include VAT & Postage per item. Courier Service Available



Serious business

Discounted Cashflow, Net Present Value and Annuities are all subjects guaranteed to send any small businessman or woman reaching for a stiff drink (*Mine's a treble - Ed*). Why? Because they don't understand them. Yet all three are very standard techniques for helping businesses assess the risk of undertaking any project requiring capital expenditure.

Now you may think this all sounds a bit high falutin' for a column devoted to the BBC, but in fact the good old Beeb has for a long time been the mainstay of many a one-person outfit.

I would even go so far as to say that in its Master 512 incarnation the machine has more business software written for it than ANY other micro. So this week I am going to pay a bit of attention to the business user, by taking a look at some new products that give a helping hand to hard-pressed business people.

Dead Clever Fings

First off the line is *Handling Time* from RBRC software, tel 01-946 8641. This will get you to grips with the aforementioned DCF and associated topics. The program is worth getting for the manual alone, which gives a better exposition on how to use DCF than I ever received when I studied the subject.

The software is, however, really only an on-screen version of the material in the booklet, but as it is designed to be used as part of a course, this is OK.

Going it alone

Secondly, from Science Education Software, tel 0341 423305, comes *Business Planning*, which is directed at those aiming to start up a new business, but who have little or no knowledge of how to do it.

It could also be used in a classroom situation for sixth form students. Coming on three 80-track disks, the software is comprehensive, taking you from basic concepts all the way to your own business plan, and including such things as profit and loss forecasts and drawing up balance sheets.

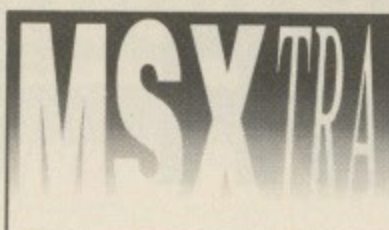
The two manuals provided are not so impressive, being printed in a rather greyish typewriter font. They are also rather cursory in style, something that is inevitable given the size and complexity of the subject.

Andrew Brown

Quiet please!

As an antidote to all this commercial stuff, here is a tip for all you brave people who don't mind taking the lid off their computer. On some Beebs the speaker volume is set so high that it can cause interference on a TV screen, not to mention annoyance to the user.

To alter this, look for a small, blue block just below R24 (on a model B). The back of this block has a volume control, which can be adjusted using a small screwdriver. Master owners can use the *CONFIGURE QUIET command for a similar effect.



Big plans

I have recently been in touch with two of the larger software houses, US Gold and Ocean/Imagine, with a view to finding out what their intentions are regarding releases of MSX software in 1989.

US Gold, it seems, will still continue to support the MSX in the coming year, with *Out Run* due out any time now. I have been promised a review copy, so keep reading Express for my views on the MSX version. US Gold has also promised to send me the *Pepsi Mad Mix Challenge* for review. This game was not well received on other formats, so will the MSX version be any different? Watch this space to find out.

Ocean has no titles for release in the UK at present. Any new Ocean titles you see on sale in the UK have probably come from Spain. Ocean is continuing to support the Spanish market, converting many current titles to the MSX format.

There is good news from Ocean for the UK user, though. It intends to release more titles for the UK MSX market later this year. Is this to coincide with some new machines being

released here, I wonder? One can always hope.

Funny old game

When I received *The Games, Winter Edition* from US Gold (Epyx) for review, I hoped that it would be better than the previous sporting title, *California Games*. Well, it is an improvement, but still could have been better. The graphics are similar to the style used in *California Games*, e.g. monochrome stick figures. Luckily, the games are far more interesting.

Mechanical cheat

If you are an avid Konami cartridge fan (as I am), but get increasingly frustrated at not being able to play the later levels because the early stages are too darned hard, may I recommend the Games Master cartridge from that company.

This device is a reviewer's dream, as it allows you to play stages that would normally take weeks to reach. Games Master also allows you to slow down or stop the action, and increase your number of lives. You can also use Games Master to save your last playing position to tape or disk, and you can then load in this data and start from where you left off.

One of the most useful options for as far as I'm concerned is the ability to dump screens to my MSX printer. The results are quite impressive. Games Master is a great device, but a little expensive at £18.95.

Somehow, I found *Games* to be fun to play, in spite of the graphic limitations. Sound effects are pretty basic, and the multi-load feature is a real pain, so maybe I'm awarding six out of ten for this game. I think Epyx's programmers should look at the way Konami produces sports simulations for the MSX, since the former's efforts don't bear comparison.

Keith Neal

EXPRESS SALES

COMPUTER-WIZE
10 Wiseman Grove, NCE, New Oscott, Sutton Coldfield, Birmingham B23 5YG

Authorised ATARI, ACORN, COMMODORE dealer.
ATARI Games Centre. Citizen Super Dealer

FULL RANGE OF COMPUTER BOOKS SUPPLIED

ATARI 520STFM Super Pack + £450.00 of Software	£349.00
ATARI 1040STFM Super Pack + £450.00 of Software	£489.00
COMMODORE AMIGA Packs from (Ring for details)	£370.00
CUMANA Drives for ST & AMIGA from	£89.00
VISION 4200 Colour Monitor (14") Med Res.	£199.00
CITIZEN 1200 Dot Matrix Printer + Cable	£149.00
CITIZEN HDP-45 Printer Special Offer Save £319	£450.00

3.5" BLANK DISKS £10.00 PER 10 (+£1 p&p) BRANDED & GUARANTEED

ALL BUSINESS ENTERTAINMENT & UTILITY SOFTWARE SUPPLIED - ALL APPLICATIONS CATERED FOR

CALL THE CREDIT CARD HOTLINE NOW!
(021) 377 6698

FAST, FRIENDLY SERVICE BY TRAINED STAFF!
ALL PRICES INCLUDE VAT
ORDERS OVER £50.00 - FREE DELIVERY
COURIER DELIVERY SERVICE AVAILABLE

EURO ST

HIRE AND PLAY LATEST ST HITS FOR ONE WEEK!

UK and Irish ST owners Send your address for more information to:
EURO ST, KINSELLA HOUSE,
JOHNSTOWN, SEA ROAD, ARKLOW
CO. WICKLOW, EIRE.

FED UP WITH GAMES?

Learn BASIC Programming
Get this 16 page Introduction for £3
Use on CPC, Beeb, etc
with notes for Commodore and Spectrum.
Cheque, PO or wee parcel of 3 coins to:
J H Taylor, 18 Seahill Road,
Holywood, Co. Down, BT18 0DA

ATARI ST PUBLIC DOMAIN

PD Wordprocessors, Games, Utilities, Music, Languages, Animations, Art and even Desktop Publishing programs are available from £1.75. Demos allow one to TRY THEN BUY. You'll be amazed at the quality of software in our PREMIER PD. Just send a 19p stamp for a FREE catalogue.

ALPHA COMPUTING
32 Meadow Drive, Halifax, W. Yorks HX 3 5JZ

ACE COMPUTER SUPPLIES

2, Old Mill Close, Market Weighton, York, YO4 3DU
Tel. Enquiries between 5pm-9pm ONLY!
Tel: (0430) 872395 Ask For Chris or Anthony

COMPUTER SOFTWARE **ATARI ST AMIGA**

BLANK DISKS **BRANDED! 10 = £14.95**

ACE IS THE PLACE FOR QUALITY CUT PRICE SOFTWARE
Either send an SAE, stating computer, for the latest prices or telephone between 5pm-9pm for the latest prices
Cheques & PO should be made payable to ACE SUPPLIES

AMIGA Virus Terminator V1.3

The Virus Terminator V1.3 effectively Terminates the SCA and Variants, Byte Bandit, North Star, Byte Warrior, Micro Master and VKill 1.0 (recent anti virus). Features include Workbench compatibility, ASCII boot code screen display. Save boot codes to disk, compare (search) non standard code to saved boot codes, 100% MC and operates within Amiga 2000/1000/A500 V1.2 and V1.3. Enquiries Welcome.

The Virus Terminator V1.3 costs £5.95 inc P+P

Cheques payable to - R G Pickles
29 St Annes Road
Eastbourne
East Sussex
Enquiries/Virus Hotline - TEL 0323 22181 or 21414

ALADDINK

FABRIC RIBBON CASSETTE RE-INK SERVICE.
Fabric ribbon re-ink equipment.
PCW carbon-film ribbon refurbishment.
Send SAE for details of prices and service stating printer make & model to:
ALADDINK, (Dept CE), Eyemouth, Berwickshire, TD14 5AP
or telephone 08907 50965 to 8pm

MICROWARE COMPUTER SERVICES
64 LANCASTER AVENUE, SKEGNESS

Amiga 500 with FREE TV Modulator, 10 Great Games, Mouse, Manuals, Workbench, Basic	£379
Amiga 500 as above plus Cumana CAX354 3 1/2" Disk Drive with on/off switch	£459
Amiga 500 plus A1084S Colour Stereo Monitor Great Games Pack	£599
Atari 520 STFM, Explorer Pack with 1Mb Drive, Desktop Accessories, Basic, Game etc.	£269
Atari 520 STFM Super Pack - 1Mb Drive, 22 Games, Joystick, Basic etc.	£349
Atari 1040 STFM Super Pack - 22 Games, Basic, 1Mb RAM, 1Mb Drive etc	£449
Atari 1040 STFM Business Pack - VIP, Superbase, Write, Basic, 1Mb RAM & Drive	£419
Atari 1040 STFM Business Pack as above plus SC1224 Colour Monitor	£699
AMIGA 500 1MB RAM, TV MODULATOR, 10 GREAT GAMES DRAGON'S LAIR	£529

Just a small selection of our vast range of products for the Amiga & ST. SAE for details.
All Amiga and Atari ST Software available at 25% Discount! Not just games.

PO BOX 2, SKEGNESS, Lincs PE25 2QL TEL: (0754) 610217 (E.O.E.)

THIS SPACE ATTRACTS ATTENTION!

New Computer Express can carry your message effectively and quickly to the most active computer users in Britain. And it costs just £7.00 per column cm (so this 3cm 2-column block would cost just £42.00). Why not call Jennie Evans at Express Sales on 0225 446034?

FOUR FREE ISSUES!

■ At only 48p *New Computer Express* is an incredible bargain, but take out a year's subscription and we'll send you an **additional four** issues of the magazine **absolutely free!**

■ So for just **£24.95**, you'll receive **56** copies of Britain's **most exciting** weekly computer magazine! (Or you can take out a six-month subscription (26 issues) for just **£12.50**.)

■ There's no better way of keeping **100%** up to date on the fast-changing computer scene! (Please allow three weeks for your subscription order to be processed.)

CREDIT CARD ORDERS 0458 74011

You can order your subscription by phone. Just dial 0458 74011 and ask for New Computer Express Subscriptions.



Collect the set!

Missed out on some earlier issues of *New Computer Express*? Here's how you can complete your collection.

We have limited numbers of back issues available for 75p each (48p plus 27p post and packing).

Just send details of the issues you require, your name and address plus a cheque made out to Future Publishing Ltd or your credit card details to:

Express Back Issues, Future Publishing Ltd, Somerton, Somerset TA11 7PY.

Here are the highlights of the previous issues - but remember they also contain all your regular favourites: news, games reviews, machine columns, beginners' guide, controversies, tech tips, letters, PSsst, vouchers etc etc.

- Issue 1: Future of computing, PC graphics, revival of Basic, Xmas games
- Issue 2: Which computer?, the perfect wordprocessor, Konix console
- Issue 3: Portable computing, Alan Sugar profile part I, yuppie software
- Issue 4: Sega's 16-bit console, best value PC, games that change your life
- Issue 5: PC 200 fiasco, DTP guide, computer art, Unix explained
- Issue 6: MGT Coupe, careers in computing, Realtime profile, cracking
- Issue 7/8: Best games of '88, review of the year, look forward to '89
- Issue 9: Censorship controversy, classic computer problems solved
- Issue 10: PC software guide, Christmas games tips, Release Schedule wk 1
- Issue 11: CDI technology, choosing a printer, Alan Sugar profile final part

YES, I'd like to keep in touch with the latest computer news, releases and advertising bargains by subscribing to *New Computer Express*. I would like to subscribe for:

56 issues costing just £24.95 26 issues costing just £12.50
(tick one box only)

Name

Address

Age: <18 18-25 26-35 36-45 >45

Computer

Total payable

Payment by: Access Visa Cheque PO

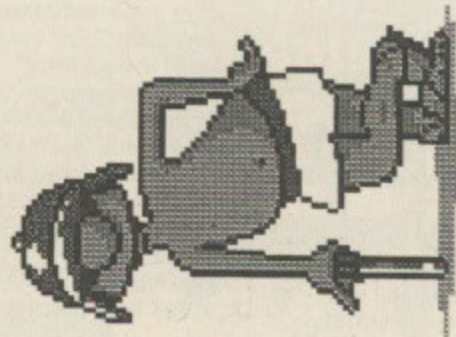
Access/Visa no

Expiry date: February 27th 1989

Please make cheques or POs payable to **Future Publishing Ltd** and enclose them with this form in an envelope addressed to Express Subscriptions, Future Publishing Ltd, Somerton,

Actual Screenshots

STREET RACING



£19.95

AMIGA - ATARI ST

CRL Group PLC, 7 Kings Yard, Carpenters Road, London E15 2HD
If this software is defective in any way please return it to CRL for an immediate replacement.
This software is sold subject to the following conditions: Unauthorised copying, hiring, lending, exchanging,
public performance and broadcasting of the software is strictly prohibited. Made in the U.K.

PSsst!

More last words from
Private I, whoever he (or
she) may be

Christmas Competition Prize Winners

Response to our festive quiz was enormous and at last we've managed to sort out the lucky winners. The first 100 names drawn out of the Express hat, together with the prizes they won, are:

12 War in Middle Earth - Melbourne House

- 1 Ingrid Cox, Bristol
- 2 Kit Lane, Stanton-Under-Bardon, Leicester
- 3 Jeremy Cogman, Fleet, Hampshire
- 4 Kashi Quraishi, Hayes, Middx
- 5 John Charlton, Nexham, Northumberland
- 6 Phil Turner, Camberwell, London
- 7 J P Neale, Sutton, Surrey
- 8 B Page, Blackpool
- 9 Paul Cunningham, Stockport, Cheshire
- 10 T Bratley, Grimsby, S Humberside
- 11 Stephen Norman, Holcombe, Bath
- 12 James Brooker, Stevenage, Herts

11 Football

Jack Schofield, *Guardian*

10 R-Type - Activision/Electric Dreams

- 1 Rem Plenzik, Broadstairs, Kent
- 2 I J Doble, Bristol
- 3 J M Sims, Rustington, West Sussex
- 4 M Holliday, Blackburn, Lancs
- 5 Shaun Donaghy, Rugby, Warwickshire
- 6 K Davies, Farnborough, Hants
- 7 Matthew Crowk, Kensington, London
- 8 Matthew Demonti, Wellingborough, Northants
- 9 W Gilfillan, Bearsden, Glasgow
- 10 A Bogue, Stourport, Worcs
- 11 Nick Taylor, Leechmere, Sunderland
- 12 R A J King, Saltash, Cornwall

9 Purple Saturn Day - Infogrames

- 1 David Sambrook, Manchester
- 2 S Carter, Gillingham, Kent
- 3 Robert Sutton, Congleton, Cheshire
- 4 Trevor Lyall, Berwick On Tweed, Northumbria
- 5 Mark Everett, West Bridgford, Notts
- 6 David Fan, Co. Dublin, Ireland
- 7 W Davies, Clwyd, North Wales
- 8 Christopher Smith, Fintray, Nr Aberdeen
- 9 Kevin Taylor, Manningtree, Essex
- 10 Kolin Robertson, Nr Spalding, Lincs
- 11 G J Jones, Bridgend, Mid Glam
- 12 Kevin Ault, Ripley, Derbys
- 13 Mark R Jones, Sheffield
- 14 David Leadbetter, Crosby, Liverpool
- 15 William Sloane, Co. Antrim, N Ireland
- 16 Mike Hutchinson, Enfield, Middx
- 17 M Baker, Enfield, Middx
- 18 Neil Barber, Leeds
- 19 Stephen Clarke, Worcester
- 20 Eddie Moore, Warrington, Cheshire
- 21 Philip Smith, Bracknell, Berks
- 22 N Tierney, London
- 23 Darren Ruggles, Burnham-on-Crouch, Essex
- 24 James Wicks, Hatfield, Herts

8 The In-crowd - Ocean

- 1 Intyaz Jumani, Birmingham
- 2 David Peters, Ealing, London
- 3 Martyn Hoskins, Bristol
- 4 Michael Wong, Cheshire
- 5 Jonathan Davies, Bristol
- 6 David Roberts, Stoke-on-Trent, Staffs
- 7 Barry Southex, Enfield, Middx
- 8 Gabriel Garrett, Galway, Ireland
- 9 J Cribbin, London
- 10 G Davis, London
- 11 David Wright, Sauchie, Clacks
- 12 Yin Man, Norfolk

7 Konix Joysticks

- 1 Sajid Shafia, Bolton, Lancs
- 2 D G Phillips, Fulham, London
- 3 P Briggs, Crawford, Middx
- 4 S P Kaliszczak, St Annes, Lancs
- 5 Frank C Perkins, Leeds
- 6 Hallam Bannister, Orpington, Kent
- 7 Ricardo Pieroni, Harrow, Middlesex
- 8 Scott Wilding, Kettering, Northants
- 9 R Fontenoy, Llandoverly, Dyfed
- 10 Jon Grandin, Sudbury, Suffolk
- 11 G E Thompson, Hillingdon, Middx
- 12 R J Gribbin, Saltburn, Cleveland
- 13 Mike Pay, Milton Keynes
- 14 Mark Painter, Bridgwater, Somerset

6 Giants - US Gold

- 1 S J Lee, Huntingdon, Cambs
- 2 Amer Butt, Manchester
- 3 A T Reid, Preston, Lancs
- 4 M D Bednall, Macclesfield, Cheshire
- 5 M Abbott, Carlton, Nottingham
- 6 A Williams, Calne, Wilts
- 7 Richard Thomas, Whitecity, Gloucester
- 8 A E Wright, Fakenham, Norfolk
- 9 S Wright, Halesowen, West Midlands
- 10 Stephen Hulley, Hemel Hempstead, Herts
- 11 Rick Billson, Staines, Middx
- 12 Jason Li, Edinburgh

5 Atari XES Games Console

Vijax Mahra, Wolverhampton, West Mids

4 Sega Console

C R Fairweather, Chesham, Bucks

3 Star Wars Videos

- 1 S France, Guernsey, Channel Islands
- 2 Jayesh Pater, Evington, Leicester
- 3 A F Alam, Manchester

2 Commodore 64

Paul Mitton, Comberton, Cambs

1 Atari ST

A T Colwell, Chadwell-St-Mary, Grays Essex

Congratulations to the winners, bad luck to the losers, and to all those who didn't take part, well you're looking pretty silly now.

Lesser known viruses

In the wake of the '1813' virus which threatened to bring the City to a standstill last Friday the 13th, PSsst! has got details through underground hacker sources of the next family of evil viruses that will end civilisation as we know it. You have been warned.

The 'Friday the Thirteenth' virus

Film scripts on word processors infected with this virus produce exact numbered copies of themselves ad nauseam. Classic cases include *Rocky*, *Jaws*, *Death Wish*, *Police Academy* and so on. There is no known cure.

The '1530' virus

This little number inhabits bank cash machines and gets spread through cashcards. It gets its name from the fact that, at 15:30 every day when the banks are shutting, it crashes any cash dispenser it resides in rendering it unable to give cash.

The 'PCW' virus

Cause of infection is unknown but this is now believed by editors to reside in every PCW. It gets into text documents such as letters and novel manuscripts, corrupting the buffer in the printer chip. Perfectly good text on screen is printed out as utter rubbish.

The 'Quantel' virus

This one came from the States and affects graphics computers used in TV. No change of camera can occur without the previous shot going into a box, being wrapped around a globe, spinning around and receding into the distance.

The 'Greenpeace' virus

A curious example rife in PCs in the City. When the user attempts to print anything it displays the message 'Save the rainforests!' and crashes. The solution involves calling in French secret agents who blow up the PC.

The 'Amstrad' virus

An inhabitant of the employees' PCs in Brentwood. If no key is pressed for more than five seconds, the message YOU'RE FIRED appears on screen, the user's P45 is printed and the computer locks up.

The 'Solomon' virus

An insidious routine spread by newspapers which are not hype-protected. This virus inhabits the memories of computer users. After they have told four people what a virus is, they suddenly and irrationally get so scared their own machine might be infected that they hire ridiculously expensive virus-busting services.

NEXT WEEK

Amiga Essentials

The Express guide to the vital programs and best buys for your Amiga

Soccer ID cards

Will they mean the end of your local club?

Video graphics

We look at the State of the Art - today and tomorrow

PC to ST to BBC

Data transference made easy: Express reviews Transfolink

Databases

Everything you always wanted to know about the databases but the shop assistant couldn't tell you: the Express Beginners' Guide

PLUS

More columns for your machine, reviews, previews, letters, tech tips, all the latest news, and more!

On sale
Thursday
February
2nd

Only
48p!

COMPUTER



WE ACCEPT EXPRESS VOUCHERS

EXPRESS

ATARI 520ST-FM

1Mb

£299

plus V.A.T.

With SUPER PACK of over £450 worth of FREE software

plus FREE STARTER KIT

Exclusive Computer Express Atari starter kit.
* ST OWNER'S SECOND MANUAL
* PUBLIC DOMAIN SOFTWARE * MOUSE MAT

ATARI HARDWARE

Atari 520STFM, 512K RAM, 1Mb Disk Drive, Mouse.....	£235.99
Atari 520STFM 512K RAM, 1Mb Drive, Super Pack S/Ware.....	£299.00
Atari 1040STFM, 1Mb RAM, Disk Drive, Mouse.....	£399.00
Atari 1040STFM with SM124 Mono Monitor.....	£499.00
Atari 1040STFM with Philips 8833 Colour Monitor.....	£639.00
Atari Mega ST2, 2Mb RAM, Mouse, Mono Monitor.....	£799.00
Atari SM124 12" High Res Mono Monitor.....	£119.00
Atari SC1224 12" Med Res Colour Monitor.....	£339.00
Cumana 1Mb Double sided 3.5" Disk Drive.....	£99.00
Philips 8833 Med Res Colour Monitor - Excellent Buy.....	£249.00
Super Drive 20Mb Hard Disk - Auto Boot!.....	£455.00

PROFESSIONAL ATARI SOFTWARE

DX Heaven Editor - Midi Synth Editor.....	£86.00
Steinburg Pro 24 software - from as little as.....	£150.00
Film Director - Animation Package for Art Director.....	£44.00
PC Ditto - At Last a Full IBM Emulator.....	£66.00
Timeworks DTP - Xerox Ventura Clone.....	£89.99
Easy Draw II - Great with Timeworks DTP.....	£39.00
Spectrum 512 - The Ultimate Paint Programme.....	£35.00
First Word Plus.....	£56.00
WordPerfect.....	£169.00
Superbase Personal - Powerful Relational Database.....	£73.00
Timeworks Desk Top Publisher - The Ventura DTP Clone.....	£34.00
Fastoom - Popular ST Communications Package.....	£36.00
Mark Williams 'C' Compiler - 'C' How You Like This.....	£90.00
Fast ST Basic (ROM) - It's really fast!.....	£66.00
Fast ST Basic (Disk) - Disk Version of Above.....	£33.00
CAD 3D 2.0 Cyberstudio - The Best 3D Drawing Kit.....	£66.00

ATARI TOP SELLING LEISURE SOFTWARE

Advanced OCP Art Studio - Low Cost Art Package.....	£18.45
Chessmaster 2000 - 3D Graphics With Speech.....	£18.45
Flight Simulator III - Very Realistic Best Seller.....	£36.00
Flight Simulator Scenery Disks - For Use with Above.....	£18.45
International Soccer - Kick 'em to death.....	£17.95
Obolator - Through the plasma in Cinemascope graphics.....	£21.95
Terrorpads - Watch Out They're Here!.....	£18.45

MANY OTHER TOP RELEASES AVAILABLE

All goods guaranteed. Official Purchase orders accepted from Government, Local Authorities, Universities and PLC's. All prices exclusive of VAT and subject to change without notice. Delivery charges extra. No returns or repairs accepted without Returns Authorisation Number (obtainable from our Technical Support Department). Defective dead-on-arrival merchandise repaired or replaced immediately at our carriage expense. Carriage on warranty repairs is paid by the customer. Non-defective credit returns subject to a 15% restocking fee. Technical support available Monday to Friday. Export and trade enquiries welcome.

FOR FULL PRICE LIST PLEASE CALL
EXPORT & TRADE ENQUIRIES WELCOME
TELEPHONE & MAIL ORDERS WELCOME



CALL 0727 37451



MICRO-COMPUTERS, PERIPHERALS
SOFTWARE, SALES & SUPPORT
CREDIT CARDS NOT DEBITED UNTIL DESPATCH

HEAD OFFICE

• CAXTON CENTRE • PORTERS WOOD • ST. ALBANS • HERTS • AL3 6XT • (0727) 37451

NORTH LONDON
MANCHESTER
WEST LONDON
BIRMINGHAM

• 99 PARK STREET LANE • BRICKET WOOD • ST. ALBANS • HERTS AL2 2JA • (0727) 72790
• 85 WASHWAY ROAD (A56) • SALE • MANCHESTER M33 1TQ • 061 962 0780
• 304 KINGSHILL AVE • HAYES • MIDDLESEX • 01-841 8744.
• 1046-1048 COVENTRY ROAD (A45) • HAYMILLS • BIRMINGHAM B25 8DP • 021-772 5212

SHOWROOM OPENING HOURS: Monday-Friday 9am-6pm Saturday 10am-5pm

showroom
near you

ATARI MEGA ST2

Serious computing with unlimited expandability. 68000 processor running at 8MHz, built-in 720K floppy drive, Midi ports with 3 programmable sound channels, Mouse, GEM. Choice of Monitors. High resolution Mono Monitor..... £799
Medium resolution Colour Monitor..... £934
20Mb Supra Hard Disk ex stock..... £455

ATARI MEGA WP LASER PACK

A bargain if ever there was one! 2Mb Atari Mega with Mono Monitor, Atari SLM804 Laser Printer, Lotus 1-2-3 compatible spreadsheet and Microsoft Write WP pack. Our Special Price..... £1479

ATARI LASER PRINTER

8 pages per minute in 300 dots per inch resolution at a price not be missed..... £1085

ATARI 1040ST-FM

All the brilliance of the Atari with 1Mb of RAM and 1Mb double sided disk drive..... £399



GAMES SOFTWARE

Afterburner.....	Call
Carrier Command.....	Atari Amiga £21
Corruption.....	Atari Amiga £23
Dagaz Elite.....	Atari Amiga £23
Daley Thompson.....	Amiga £19
Dragon Ninja.....	Call
Dungeon Master.....	Atari £19
F16 Falcon.....	Call
Flight Simulator 3 IBM.....	Atari Amiga £39
Garfield.....	Amiga £16
Interceptor.....	Amiga £23
Manace.....	Amiga £17
Operation Wolf.....	Atari Amiga £18
Starglider 2.....	Atari Amiga £19
Star Ray.....	Atari £16
Star Ray.....	Amiga £23
STOS Game Creator.....	Atari £26
Super Hang-on.....	Atari £19
Thunderblade.....	Call
U.M.S.....	Atari £23
Virus.....	Atari Amiga £19
Where Time Stood Still.....	Atari £16

Plus a full range of all popular software at low prices.

COMMODORE AMIGA 500

£319

plus V.A.T.

AMIGA

Amiga 500 with free TV Modulator.....	£319
Amiga 500 with modulator and 10 Games.....	£355
Amiga Colour Monitor.....	£249
Amiga Mini Genlock.....	£99
Amiga External Drive 3.5".....	£79
Amiga 500 External 20Mb Hard Disk with SCSI.....	£499
Amiga 2000(B) CPU and Keyboard.....	£979

AMIGA PRODUCTIVITY SOFTWARE

Page Flipper with FX animated graphics and sound.....	£99.00
Descartes? Educational Graphing Tool.....	£21.99
Silver Ray Tracing and Animation.....	£99.00
IntroCAD - Amiga aided design.....	£44.99
Director - Thames TV on your Amiga.....	£42.99
Professional Pagesetting - under.....	£100.00
Educational Software - from.....	£32.50
Deluxe Photo Lab - omnicoLOUR paint system.....	£56
Photon Paint - the latest word in paint packages.....	£49

MIDI for the AMIGA

Call for details of our range of Midi equipment and software.

STAR LC-10

For the money no other printer offers so much. 80 column multifont printer with 8 resident fonts and paper parking. 144cps draft and 36cps in NLQ quality. Parallel or Commodore interface versions available..... £209
Colour version printing 7 colours..... £239

EPSON LX800

This latest offering from Epson zips along at 150cps in draft and 25cps in NLQ. Comes complete with Parallel Esc-P or IBM Parallel interface as standard, plus top mounted tractor feed. Good clear typeface, and 80 column wide..... £159

PANASONIC 1081

At this price who can ignore this little winner. 120cps draft and 30cps in NLQ makes it everybody's favourite..... £143

NEC P2200

At last a 24 pin printer you can afford, and with NEC's renowned reliability. This little baby cruises along at 168cps in high speed, 140cps in standard and a really nippy 56cps in Letter Quality mode. This printer should be on every discerning buyers list. NEC P2200..... £289
Cut Sheet Feed..... £65

TIMEWORKS

The latest in low-cost DTP. An excellent package for anyone wanting to make a start in DTP for a very modest sum. Timeworks is very popular, and has good telephone support from the manufacturer. IBM..... £89
Atari..... £89

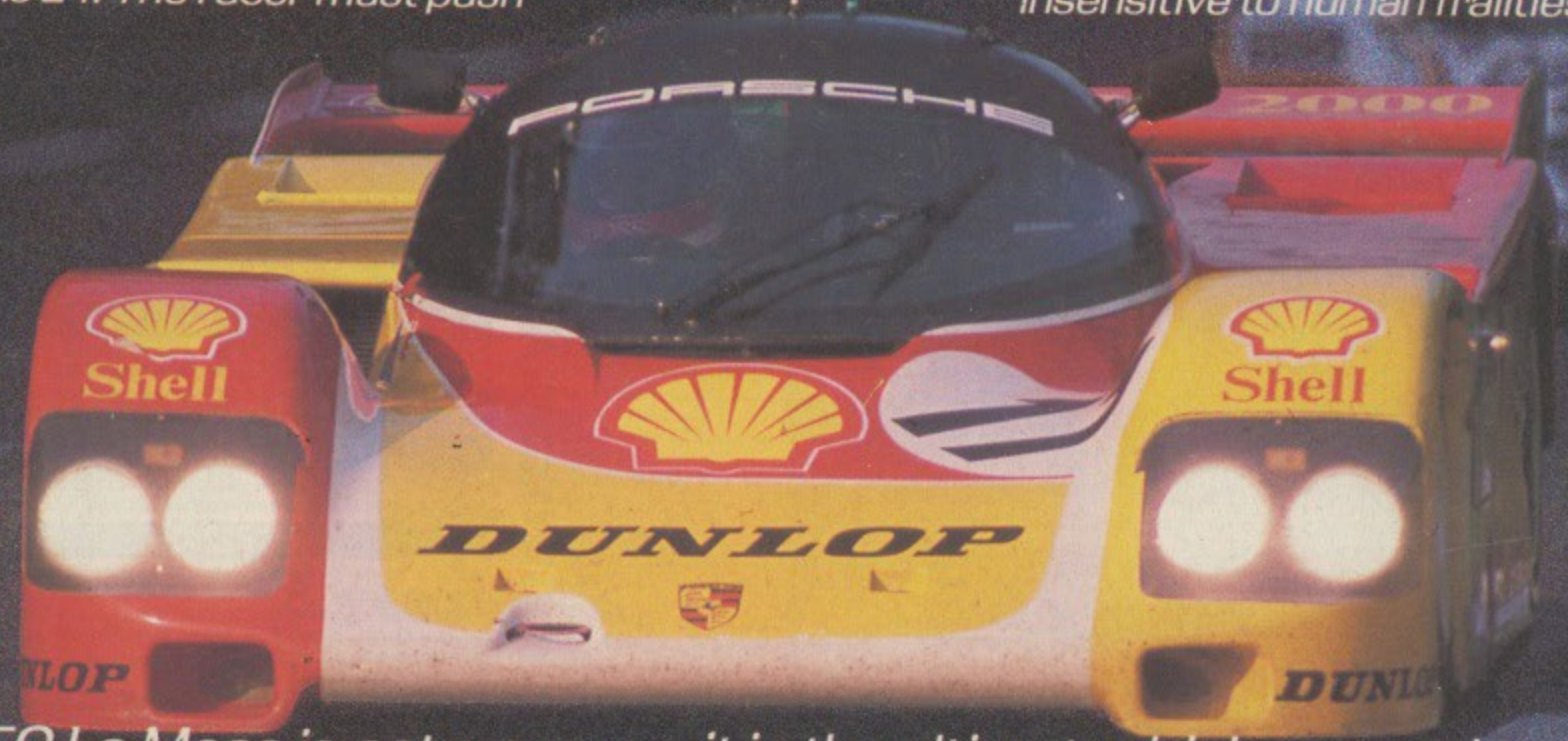
WEC LE MANS

"WEC LE MANS has many things going for it: I reckon it will be the definitive racing conversion for 8-bit machines."



WEC Le Mans is the 24-hour world endurance championship. All other races pale in comparison. No other race challenges a driver, physically or emotionally, as WEC Le Mans 24. The racer must push

himself and his car far beyond limits required by any other race. He must use his sixth sense as he becomes one with a machine which is perilously insensitive to human frailties.



WEC Le Mans is not a game – it is the ultimate driving experience



ATARI ST
£19.95
ATARI ST



AMIGA
£24.95
AMIGA



Imagine
the name of the game



COMMODORE
£9.95
AMSTRAD SPECTRUM

