

Issue 10 • Jan 14 1989

Only
48p!

Ocean steams in for the big number one - page 3

NEW COMPUTER EXPRESS

First news, first reviews - every week



Psion organises its

first laptop

- page 5

PC SHOPPING SPECIAL

We check out
the essential PC
packages

- page 24



AMIGA SHOCK

Commodore surprises with new offers! - page 2

Amiga
Atari ST
BBC
C64
CPC
MSX
PC
PCW
QL
Spectrum

see pages 36-43



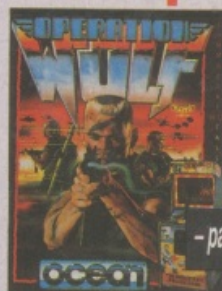
**WE ARE THE
CHAMPIONS?**

*The peculiar tale of
Kenny Dalglish and
the Liverpool licences*

- page 2

Best sellers, best tips

Help on five of the
biggest Christmas
treats: Operation Wolf,
Afterburner, Thunderblade,
R-Type and Batman



- page 23

Charts 3 • Letters 12 • Sugar 19 • Entertainment 24 • New games 26 • Tips 30 • Vouchers 33 • Beginners 35 • Columns 36 • PSsst! 46

Sizzling coin-op batch up for grabs



• **Shinobi: Hot property**

A job lot of "top notch" coin-op licences are currently up for grabs for the software house willing to spend an estimated £500,000.

French software publisher FIL last month went into receivership with the rights to eight Japanese coin-ops in its possession. Its UK agent The Sales Curve is currently negotiating with various software houses one of which is believed to be Virgin/Mastertronic.

Heading the arcade games is beat-em-up *Shinobi* as well as driving game *Continental Circus* and *Ninja Warrior*. One envious software publisher described the floating games as "bloody good stuff".

The games were to appear under the Rebel label. Indeed, it is thought that if a company such as Virgin/Mastertronic were to buy the games it would be adding a whole new label to its stable.

Virgin/Mastertronic though is denying any interest in the titles. "We're not chasing them," said a spokesman. "We're very selective about the the coin-ops we publish, such as *Double Dragon*."

Whatever the outcome of the negotiations, gamers can look forward to the first titles arriving within the next few months. Despite FIL's difficulties, programming and development has gone on undisturbed. "We'll still have three games out in the first quarter of this year," explained The Sales Curve's boss Jane Cavanagh. "And then there'll be another two to follow in the spring."

The day Nintendo came to town...

This week's Consumer Electronics Show in Las Vegas only went to prove what we already know - that Nintendo still wields absolute power in the big money US leisure market.

The firm's enormous stand dominated the packed hall with grateful licensees snuggling up to the Japanese giant. They occupied their own few yards of the Nintendo village and jealously paraded their newest games.

In contrast, Sega's stand

seemed subdued, as if that firm had realised that any attempts to emulate Nintendo would necessarily fall short. There's a real buzz with Nintendo, it's absolutely huge," offered one animated observer. "Sega's stand is dwarfed and really fairly quiet."

In the bars and casinos talk was mainly of Nintendo's forthcoming clash with Atari Games. Should the latter win, everybody agreed, the lucrative console scene will be changed forever.

All this rather overshadowed the CES debut of Epyx, MicroProse, Mediagenic, Taito and UK hopeful Elite.

But all can take heart that the stand fees and flight costs and hotel bills will have been well spent. Businessmen from every corner of the US and from every country on earth descended on Las Vegas for the event, which is vastly bigger than the PC show. The town has 276 hotels. Last weekend there wasn't a vacant room.

Liverpool foul up baffles publishers

An extraordinary sequence of events and misunderstandings has meant that gamers can expect not one, but two Liverpool computer games this year - as well as a further two featuring Liverpool players.

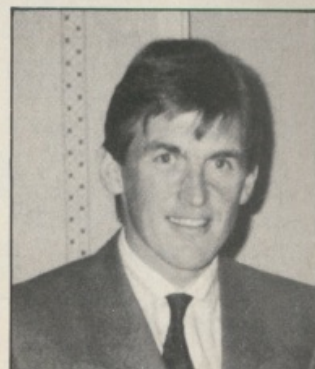
Grandslam announced that it had secured the official Liverpool licence late last year and that a game would be appearing "some time in '89". However, a small company called Video Images last week claimed that it had secured the Liverpool licence and that a budget game would be appearing by Easter.

It would appear though that Liverpool has managed to secure licence fees for two games: Grand Slam has the rights on the team whilst Video Images has the whole football club.

To confuse matters further Liverpool manager Kenny Dalglish - who personally endorsed Grand Slam's game recently - is already featured on a game by Newcastle based Zepelin. And Kop hero Peter Beardsley is also featured in a game - by Grandslam.

"When I saw that Grandslam had the licence I was really worried because we already had approval," said Video Images' Dave Colley. "But we've got the club but not the team." In effect this means that Video Images can't use the players to promote the game in the same way that Grandslam can.

Speaking from Las Vegas, Grandslam's boss Stephen Hall told *Express*: "There's obviously been some confusion but I have to stress that there's no animosity at all. I



• **Dalglish: Three game confusion**

hope that we can settle this in a mature fashion. I'm certainly not going crazy and spitting blood."

Two new Amiga games packs due this month

THANKS A BUNDLE COMMODORE!



• **Amiga: Two bundles due**

Commodore will be selling the Amiga 500 bundled with free games from the end of this month.

In effect, it will mean that Commodore has at last responded to the extraordinary success Atari has had with bundling games for its own 16-bit machine, the ST.

Two separate offers are involved. The first includes nine free games as well as the standard modulator at the normal Amiga price of £399. The titles are *Bubble Ghost* (Infogrames), *Hellbent* (Novagen), *Quadralian* and *Stargoose* (both Logotron), *Atak* and

Better Dead than Alien (both Entertainment International), *International Soccer* (Microdeal), *Winter Olympiad* (Tynesoft) and *Spitting Image* (Domark).

The second is more likely to appeal to experienced computer users. Costing £550 it features an Amiga 500 upgraded to one 1Mb with a copy of the six disk epic game *Dragon's Lair*.

The upgrade would normally cost £150 so effectively buyers are getting *Dragon's Lair* for free. That can only be played on an upgraded Amiga and would normally cost £50 anyway. Commodore will be the only company officially allowed to sell the game in this country for the next three months.

Those who opt for the second bundle will also be able to play the increasing number of 1Mb games which are being imported from the US, including the likes of *Dungeon Master*.

Although this represents Commodore's first foray into games bundles with the Amiga it is not the only one on offer. Dealers are already selling a ten game pack put together by

A2000 next for bundle treatment?

Behind all the excitement of the Amiga games offer lies the strong possibility of a business bundle in the very near future.

Commodore watchers though are all but ruling out any such deal on the A500, favouring a special A2000 assault which will include an impressive bundle of business software coupled with a price rise. Top brass at Commodore are known to believe the machine to be underpriced at its pre-

sent tag of £1,495.

One insider told *Express*: "Corporate buyers are reluctant to believe that the A2000 is a worthwhile machine and better than those which which are two or three times the price. Once the doors have been opened though they say that it's phenomenal. There is a school of thought which says that the price should go up with extra software added."

distributor SDL (*Express* 8).

Commodore is preferring not to comment on the matter although an announcement is expected within the week.

OPERATION WOLF TAKES TOP SLOT



• Operation Wolf: 1988's winner

Ocean's *Operation Wolf* has landed the gaming industry's biggest prize: the Christmas number one.

The company all but dominated 1988's most important chart by also taking the second spot with *Robocop* as well as having six other titles placed in the Top Twenty. *Robocop* might well have surprised everybody

and taken the prize itself, had it been released on the ST and Amiga. According to Gallup it has been out-selling *Op Wolf* on all the 8-bit formats.

This is the first time in three years that US Gold hasn't been in the top slot. In 1986 it won with *Gauntlet* and again last year with *Out Run*. This time, the company had to make do with fifth place with *Thunderblade*.

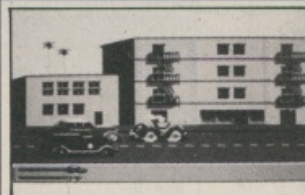
"It's nice to win the top spot and it makes all the overtime worthwhile," said Ocean's Tracey Crook. "But we didn't get any personal satisfaction out of kicking US Gold off the top."

The other hot tip - Activision's *Afterburner* - came in fourth place with Melbourne House's *Double Dragon* proving to be the dark horse of the race with a creditable third

ranking in the Gallup listings.

As always compilations featured well with five in the Top Twenty - *Giants* (US Gold), *In Crowd* (Ocean), *Taito Coin-ops* (Ocean), *Game Set and Match 2* (Ocean) and *Supreme Challenge* (Beau Jolly).

Activision bags Roger Rabbit



• Roger Rabbit: All formats deal

Stunning graphic extravaganza *Who Framed Roger Rabbit* has been scooped up by Activision and should be appearing on most major formats.

The game - developed by Walt Disney's software arm Buena Vista and based on the blockbusting movie - has already appeared here on the Amiga via supplier Gainstar. Activision stresses that it has the "official rights".

It should be launching the Amiga version later this month at £24.95 with other versions set to follow later in the year.

ST gallery

Atari ST specialist Electric Distribution is to launch a pair of clip-art packages - pictures which can be ported onto documents. ScanArt costs £40 and features 100 "professionally drawn and useful" pictures. DrawArt is £10 more expensive and sports 150 pictures. This, says the firm, has more unusual illustrations.

Nintendo hits back

Japanese console giant Nintendo has turned its legal artillery on Atari Games following the latter's \$100 million lawsuit of three weeks ago (*Express* 8).

Nintendo's games console has established itself as the leading toy in the US but Nintendo has always kept a tight grip on software written for the machine. Licensees have to pay to produce games.

Atari Games rebelled against this at the end of last year and launched a legal attack on the Japanese, along with accusations of Nintendo monopolising the market

unfairly. Its subsidiary Tengen has produced its own version of the games. Nintendo is not pleased.

Nintendo is accusing Tengen of breach of contract, unfair competition and activities which violate the Racketeer Influenced and Corrupt Organizations Act. It has also officially terminated the original licensing deal.

The firm says that Tengen has received vital information and help whilst working with Nintendo. Nintendo's engineers are currently examining Tengen's games to see if they violate any

patents or copyrights. The firm is also promising to put up a fight against Atari Games' original lawsuit.

"Having obtained the benefits of the licensing arrangements Tengen has announced that it will begin to independently manufacture and distribute games for the Nintendo which it previously sold under license with Nintendo," said the firm's US senior vice president Howard Lincoln. Atari Games' original suit, he said was an "obvious ploy to divert attention from Tengen's plan to violate the licence agreement."

Chip drought: end in sight

Not for the first time industry pundits have heralded the end of the damaging D-Ram chip drought which has beset the world's hardware manufacturers for more than a year.

Leading analysts Dataquest and Barclays de Zoete Wedd (BZW) were last week forecasting cheaper chips and more of them for 1989. The possibility of PC prices coming down as a result has been aired, although this seems unlikely.



• D-Ram: Rosier future predicted

The chip drought was blamed mainly on Japanese microchip manufacturers concentrating on the more profitable 1 Megabyte chips at the expense of the popular 256 Kilobyte versions. This occurred in the wake of US/Japanese trade ructions. This has caused companies such as Amstrad and Atari to raise prices or announce shipment delays in the past.

A readjustment to the new technology and reorganisation on the part of the Japanese has given rise to the latest optimism. American companies are desperately trying to regain a footing in the chip market but are still lagging behind.

The drought is nothing new to the market. For the past 30 years companies have jolted from severe shortages and high prices to great numbers of cheap chips. Optimists

haven't ruled out a continuation of this trend but signs of a smoothing out are being cited.

Dataquest's chip expert Jim Beveridge said in his 1989 forecast that there would be "some correction to the old syndrome" because chip makers and computer companies are becoming more organised with their inventories.

"The Japanese moving up the technical spectrum has caused a shortage," said a BZW spokesman to *Express*. "But there is now a better yield on popular chips. The problem is that the market is technology driven and you have to move on to new projects very quickly." Stability would be the result of a settling of the 1 Megabyte craze, he said.

He predicted that whilst it was possible that an easing of the chip crisis might mean PC prices slipping there were other factors which might prompt such a trend.

GAMES TOP TWENTY FULL PRICE

1	Operation Wolf	OCEAN
1	Spec: C64, CPC, ST, Amiga	
2	Robocop	OCEAN
2	Spectrum, C64, CPC	
3	Double Dragon	MELBOURNE HOUSE
4	Spectrum, C64, ST, Amiga	
4	Afterburner	ACTIVISION
3	Spectrum, C64, CPC, ST	
5	Thunder Blade	US GOLD
5	Spectrum, C64, CPC, ST, Amiga	
6	Giants	US GOLD
6	Spec: C64, CPC	
7	Falcon	MARLBOROUGH
16	ST, Amiga	
8	R-Type	ELECTRIC DREAMS
8	Spectrum, C64, CPC, ST	
9	Football Manager 2	ADDICTIVE
9	Spectrum, C64, CPC, ST, Amiga, PC	
10	In Crowd	OCEAN
NE	Spectrum, C64, CPC	
11	Batman	OCEAN
14	Spectrum, C64, CPC, ST, Amiga	
12	Taito Coin-ops	OCEAN
13	Spectrum, C64, CPC	
13	Game Set and Match 2	OCEAN
10	Spectrum, C64, CPC	
14	Last Ninja 2	SYSTEM 3
7	Spectrum, C64, CPC	
15	Heroes of the Lance	US GOLD
NE	Spectrum, C64, CPC, ST, Amiga	
16	Pacmania	GRAND SLAM
11	Spec: C64, CPC, ST, Amiga, MSX	
17	Return Of The Jedi	DOMARK
12	Spectrum, C64, CPC, ST, Amiga	
18	Rambo 3	OCEAN
17	Spec: C64, CPC, ST	
19	Supreme Challenge	BEAU JOLLY
19	Spectrum, C64, CPC	
20	Daley Thompson's Olym. Chall.	OCEAN
23	Spec: C64, CPC, ST, Amiga	

GAMES TOP TEN BUDGET

1	Joe Blade 2	PLAYERS
1	Spectrum, C64, CPC, ST, BBC, C16, Electron	
2	Ghostbusters	MASTERTRONIC
9	Spectrum, C64, CPC, Atari 8-bit, MSX	
3	Bomb Jack	ENCORE
2	Spectrum, C64, CPC, ST, Amiga, C16	
4	Through the Trap Door	ALTERNATIVE
NE	Spectrum, C64, CPC	
5	Back to Skool	ALTERNATIVE
NE	Spec	
6	Commando	ENCORE
4	Spectrum, C64, CPC, BBC, C16, Electron	
7	Footballer Of The Year	KIX
5	Spec, C64, CPC, Elec, BBC, Atari 8-bit, C16, MSX	
8	Skooldaze	ALTERNATIVE
8	Spectrum, C64	
9	End zone	ALTERNATIVE
12	Spectrum, C64, CPC	
10	Yabba Dabba Doo	BUGBYTE
RE	Spectrum, C64, CPC	

COMPILED BY GALLUP

NE - new entry
RE - re-entry

clik AMIGA SPECIALISTS

CLIK CHRISTMAS PACK 1£395.00
CLIK CHRISTMAS PACK II£410.00

TITLE	HOUSE	S.N.P.	OUR PRICE
Aaargh	Melbourne House	19.99	13.50
Adventure Con Set	Electronic Arts	29.99	20.50
Alien Syndrome	Softice	24.99	16.50
Annals of Rome	P.S.S.	24.99	16.50
Archie Classics	Robtek	19.99	13.50
Arkanoïd	Discovery	26.00	16.50
Armageddon Man	Martek	19.99	14.50
Army Moves	Ocean	24.99	16.50
Around the World in 80 Days	Pandora	19.99	13.50
Art Fox	Electronic Arts	24.99	17.50
Bad Cat	Rainbow Arts	19.99	16.00
Balance of Power	Mirrosoft	29.99	19.50
Barbarian	Palace	24.99	16.50
Bards Tale I	Electronic Arts	24.99	17.50
Bards Tale II	Electronic Arts	24.99	17.50
Battlehips	Elite	19.99	13.50
Bermuda Project	Mirrosoft	24.99	16.50
Better Dead Than Alien	Elektra	19.99	13.50
Beyond the Ice Palace	Elite	24.99	16.50
Bionic Commandos	U.S. Gold	24.99	19.50
Black Lamp	Firebird	19.99	13.50
Blackjack Academy	MicroIllusions	24.99	16.50
Bomb Jack	Elite	24.99	16.50
Bubble Bobble	Firebird	19.99	13.50
Bubble Ghost	Ere Int.	19.99	13.50
Buggy Boy	Elite	24.99	16.50
Capone	Actionware	29.99	19.50
Carrier Command	Rainbird	24.99	16.50
Championship Golf	Gamestar	24.99	16.50
Chessmaster 2000	Electronic Arts	29.99	17.50
Chubby Gristle	Grand Slam	19.99	13.50
City Defence	Anco	14.99	10.25
Corruption	Rainbird	24.99	16.50
Crack	Lined	19.99	13.50
Craps Academy	MicroIllusions	24.99	16.50
Crash Garrett	Infogrammes	24.99	16.50
D.Thomps Olympic Challenge	Ocean	24.99	16.50
Defender of the Crown	Mirrosoft	29.99	19.50
Deja Vu	Mindscape	29.99	19.50
Division One	Robtek	19.99	13.50
Ebonstar	MicroIllusions	24.99	16.50
Eco	Ocean	24.99	16.50
Elf	Tynesoft	14.99	10.25
Emerald Mines	Anco	19.99	13.50
Empire	Interestel	24.99	17.50
Empire Strikes Back	Domark	19.99	13.50
Enlightenment	Firebird	19.99	13.50
Fairy Tale Adventure	MicroIllusions	49.99	32.50
Ferrari Formula One	Electronic Arts	24.99	17.50
Fire and Forget	Titus	24.99	16.50
Fireblast	Prism	9.99	7.00
Firepower	MicroIllusions	24.99	16.50
Flight Sim II	Sublogic	39.99	26.50
Football Manager II	Addictive	19.99	13.50
Formula One Grand Prix	Microvalue	14.99	10.25
Fortress Underground	Anco	14.99	10.25
Fusion	Electronic Arts	24.99	17.50
Garrison II	Rainbow Arts	24.99	19.50
Get Bee Air Rally	Activision	19.99	13.50
Getysberg	S.S.I.	29.99	19.50
Giganoid	S.C.A.	14.99	10.25
Ice Hockey	Mindscape	24.99	16.50
Ikari Warriors	Elite	24.99	16.50
Interceptor	Electronic Arts	24.99	17.50
Indice	King Soft	19.99	13.50
Jet	Sublogic	39.99	26.50
Jewels of Darkness	Rainbird	19.99	13.50
Jinx	Rainbow Arts	24.99	19.50
Kampfgruppe	S.S.I.	29.99	22.50
King of Chicago	Mirrosoft	29.99	19.50
Lancelot	Level 9	19.99	13.50
Leatherneck	Microdial	19.99	13.50
Leatherneck 4 Player Adapter	Microdial	5.50	4.50
Legend of The Sword	Rainbird	24.99	16.50
Major Motion	Microdial	19.99	13.50
Marble Madness	Electronic Arts	19.99	14.50
Mean 18	Accolade	24.99	17.50
Menace	Pygnosis	19.99	13.50
Mindfighter	Abstract	24.99	16.50
Moon Mist	Infocom	29.99	19.50
Montville Manor	Lencore	24.99	16.50
Motorbike Madness	Pygnosis	14.99	10.25
Obliterator	Pygnosis	24.99	16.50
Off Shore Warrior	Titus	24.99	16.50
Othello	Robtek	9.99	5.50
P.O.W.	Actionware	29.99	19.50
Pandora	Firebird	19.99	13.50
Passengers of The Wind	Glenet	24.99	16.50
Phalanx II	Anco	14.99	10.25
Phantasia III	S.S.I.	24.99	19.50
Pinball Wizard	Kingsoft	9.99	7.00
Platoon	Ocean	24.99	16.50
Plundered Hearts	Infocom	29.99	17.50
Pool	Mastertronic	9.99	7.00
Ports of Call	Aegis	39.99	25.50
Powerplay	Arcana	19.99	13.50
Protector	Prism	9.99	7.00
Quadrangle	Logotron	24.99	16.50
Red October	Argus Press	24.99	16.50
Return to Atlantis	Electronic Arts	24.99	17.50
Return to Genesis	Firebird	19.99	13.50
Revenge II	Mastertronic	9.99	7.00
Rockford	Melbourne House	19.99	13.50
Rolling Thunder	U.S. Gold	24.99	19.50
Romantic Encounters	MicroIllusions	24.99	16.50
S.D.I.	Mindcraft	29.99	19.50
Sacrophaser	Players	14.99	10.25
Sargon III	Sublogic	19.99	13.50
Scenery Disc II	Sublogic	19.99	13.50
Scenery Disc 7	Sublogic	19.99	13.50
Scenery Disc Europe	Sublogic	19.99	13.50
Scenery Disc Japan	Sublogic	19.99	13.50
Scrabble	Leisure Genius	19.99	13.50
Seminal	Firebird	19.99	13.50
Seven Cities of Gold	Electronic Arts	14.99	10.25
Shadowgate	Mindscape	24.99	16.50
Sidewinder	Mastertronic	9.99	7.00
Simbad and The Throne of Falcon	Mindscape	29.99	19.50
Skylark	Imageworks	19.99	13.50
Skylark II	Electronic Arts	24.99	17.50
Space Quest	Sierra	29.99	19.50
Space Station	Prism	9.99	7.00
Star Glider 2	Rainbird	24.99	16.50
Star Wars	Domark	19.99	13.50
Starfleet I	Interestel	24.99	17.50
Starfleet II	Logotron	24.99	16.50
Star Crazy (Bobo)	Infogrammes	19.99	13.50
Stock Market	Tynesoft	19.99	13.50
Street Gang	Players	14.99	10.25
Streetfighter	U.S. Gold	24.99	19.50
Streetfighter 2	Mirrosoft	24.99	16.50
Strip Poker II	Anco	14.99	10.25
Strip Poker II Data Disc I	Anco	9.99	7.00

TITLE	HOUSE	S.N.P.	OUR PRICE
Sub Battle Simulator	Epyx	24.99	19.50
Summer Olympiad	Tynesoft	19.99	13.50
Swooper	Robtek	19.99	13.50
Tanglewood	Microdial	19.99	13.50
Temple of Apshai	U.S. Gold	24.99	19.50
Terrapods	Pygnosis	24.99	16.50
Tetragast	Microdial	19.99	13.50
Thexter	Sierra	24.99	16.50
Three Stooges	Mirrosoft	29.99	19.50
Thundercats	Elite	24.99	16.50
Time and Magic	Level 9	19.99	13.50
Time Bandits	Microdial	24.99	13.50
Tracers	MicroIllusions	24.99	16.50
Ultima III	Origin	24.99	16.50
Ultima IV	Origin	24.99	16.50
Uninvited	Mindscape	29.99	19.50
Vectorball	Mastertronic	24.99	16.50
Virus	Firebird	19.99	13.50
Vyper	Topdown	14.99	10.25
Warzone	Prism	9.99	7.00
Whirligig	Firebird	19.99	13.50
Wizardball	Ocean	24.99	16.50
Witness	Infocom	24.99	16.50
World Darts	Mastertronic	14.99	10.25
World Tour Golf	Electronic Arts	24.99	17.50
Xenon	Melbourne House	19.99	13.50
Zoom	Discovery	19.99	13.50
Zynaps	Hewson	19.99	13.50

IF YOU DON'T SEE IT ON THE LIST THEN PLEASE ASK
WE CAN'T LIST EVERYTHING AS AVAILABLE

NEW RELEASES NOW IN STOCK

TITLE	HOUSE	S.N.P.	OUR PRICE
Hot Shot	19.99	13.50	
Netherworld	19.99	13.50	
Robbery	19.99	13.50	
Alternate Reality	19.99	13.50	
Garfield	24.99	16.50	
Wizard Wars	24.99	16.50	
Chronoquest	29.99	19.50	
Battle Chess	24.99	17.50	
T. Pursuit (New Beginning)	19.99	13.50	
Basketball	24.99	19.50	
Nebulas	19.99	13.50	
Rocket Ranger	29.99	19.50	
Ingrid's Back	19.99	13.50	
Impossible Mission II	19.99	16.00	
Quantum	14.99	10.25	
Spidertron	19.99	13.50	
Football Director II	19.99	13.50	
Eddie Edwards Super Ski	19.99	13.50	
Mega Pak (6 in 1)	24.99	16.50	
Fernandez Must Die	24.99	16.50	
Spacarc	24.99	16.50	
Tracker	24.99	16.50	
International Soccer	19.99	13.50	
Driller	24.99	16.50	
Pacmania	24.99	17.50	
Nigel Mansell's Grand Prix	19.99	13.50	
Outrun	19.99	14.50	
Sorcerer Plus	19.99	13.50	
Cybermind	19.99	13.50	
Reach for the Stars	24.99	17.50	
Super Six	24.99	16.50	
Zero Gravity	24.99	13.50	
Speedball	24.99	16.50	
Delcon 5	24.99	16.50	
Crystal Hammer	14.99	10.25	
Way of the Little Dragon	14.99	10.25	
Pioneer Plagues	24.99	16.50	
Growth	14.99	10.25	
Autoduel	24.99	16.50	
Joe Blade II	19.99	13.50	
Captain Blood	24.99	16.50	
Speedball	24.99	16.50	
Return of the Jedi	19.99	13.50	
Galactic Conqueror	24.99	16.50	
Bombzard	24.99	16.50	
Thunderblade	24.99	16.50	
Mini Golf	24.99	16.50	
Elite	24.99	16.50	
Helibent	19.99	13.50	
UMS	24.99	16.50	
RAC Lombard Rally	19.99	13.50	
Turbo Cup	19.99	13.50	
Arkanoïd II	24.99	16.50	
Computer Hits II	19.99	13.50	
Fish	24.99	16.50	
Hostages	24.99	16.50	
Warlock Quest	19.99	13.50	
Spitting Image	19.99	13.50	
Sideways	19.99	13.50	
Operation Wolf	24.99	16.50	
Circus Games	24.99	16.50	
Chuckie Egg	19.99	13.50	
Final Assault	19.99	13.50	
20,000 Leagues Under the Sea	19.99	13.50	
Hotshot	24.99	16.50	
Double Dragon	19.99	13.50	
President is Missing	24.99	16.50	
Maria Whittaker's Xmas Box	14.99	10.25	
Manhattan Dealers	24.99	16.50	
Archer Collection	24.99	17.50	
Hellfire Attack	19.99	14.50	
4 x 4 Off Road Racing	24.99	19.50	

SPECIAL OFFERS WHILE CURRENT STOCKS LAST

Rocky	Robtek	9.99	5.50
Seconds Out	Tynesoft	19.99	12.50
Silicon Dreams	Rainbird	19.99	12.50
Slaygon	Microdial	19.99	12.50
Starways	Robtek	19.99	12.50
Strange New World	Timewarp	19.99	12.50
Ties Times	Activision	29.99	12.00
Terramex	G.S.E.	19.99	12.50
Tetris	Mirrosoft	19.99	12.50
Thunderboy	Timewarp	14.99	9.00
The Wall	Timewarp	14.99	9.00

PLEASE CHECK AVAILABILITY
ON SPECIAL OFFER PRODUCTS

BUSINESS SOFTWARE

TITLE	HOUSE	S.N.P.	OUR PRICE
A.C./Basic	Absoft	195.99	132.50
Adrum	Bullfrog	39.99	32.50

ACK II		\$410.00	
Animator Images	Aegis	103.50	75.50
Arts Parts 1	Electronic Arts	9.99	7.50
Arts Parts 2	Electronic Arts	9.99	7.50
Audio Master	Aegis	46.00	32.00
Award Maker		39.99	29.50
Artic C Professional	Manx	199.99	132.50
B.B.S.P.C. Coms Pack		119.99	89.50
Butcher II	Eagle Tree	29.99	21.50
C. Library	Benchmark	79.99	60.50
Calligrapher	Interactive	89.99	72.50
C.L.I. Mate	P.S.S.	39.99	29.50
Comic Setter		69.99	50.50
Comic Setter Libraries (each)		24.99	18.50
Critics Choice		149.99	105.00
Data Retrieve		57.99	42.50
Deluxe Music Con Set	Electronic Arts	69.99	50.50
Deluxe Paint II	Electronic Arts	69.99	50.50
Deluxe Photolab	Electronic Arts	69.99	50.50
Deluxe Print	Electronic Arts	24.99	18.50
Deluxe Productions	Electronic Arts	139.99	115.00
Deluxe Video	Electronic Arts	69.99	50.50
Digipack Assembler	Hasoft	59.99	45.50
Diga	Aegis	57.99	42.50
Digialic	Digita	89.99	69.50
Digipoint	Newtek	59.99	42.50
Digiview 3.0	Newtek	149.99	105.00
Digiview Adapter	Newtek	22.50	19.50
Dugdroid	Newtek	59.99	32.50
Digiview Stand	Newtek	59.99	50.50
Director	The Right Answer	59.99	45.50
Dos 2 Dos	Central Coast	39.99	29.50
Excellence	Microsystems	228.99	175.00
Express Paint	P.A.R.	69.99	50.50
Face II		29.99	21.50
Fantavision	Bronderband	39.99	29.50
Forms in Flight		69.99	50.50
Futuresound	Applied Visions	29.99	21.50
Goldspell 2		29.99	21.50
Goml 2.0		29.99	21.50
Gabbitt	Discovery	29.99	21.50
Hot and Cool Jazz	Electronic Arts	9.99	7.50
Home Accounts	Digita	29.99	21.50
L.F.F. Library	Benchmark	79.99	60.50
Impact	Aegis	63.99	44.50
Instant Music	Electronic Arts	29.99	21.50
Interchange		49.99	39.50
Irocaid	P.P.S.	59.99	42.50
K Spread 2		79.99	60.50
K Seka Assembler	Kuma	49.99	32.50
Kara Fonts	Kara	59.99	45.50
Kind Words	Disc Company	49.99	32.50
Lattice C 5.0		249.99	185.00
Light, Cameras, Action	Aegis	57.99	39.50
M.C.C. Pascal	Metacomco	89.99	69.50
Macro Assembler	Metacomco	66.99	50.50
Mailshot	Digita	29.99	21.50
Marauder II	Discovery	39.99	29.50
Mixuplan A500	Oxki	99.99	72.50
Maxiplan Plus	Oxki	149.99	102.50
Microscopic Filter	S.V.	79.99	62.50
Modula II	130.99	130.99	102.50
Music Studio	Activision	34.99	24.50
On Line	M.S.S.	110.46	99.50
Organize II	M.S.S.	69.99	50.50
Perfect Sound		79.99	60.50
Photon Paint	MicroIllusions	69.99	50.50
Piximate	P.P.S.	49.99	39.50
Power Windows 2		69.99	50.50
Prism	Impulse	59.99	45.50
Pro Board	Prolific	475.00	375.00
Pro Net	Prolific	475.00	375.00
Pro Sound Designer (H/W & S/W)	Edspresso	24.99	19.50
Pro Video CGI	J.D.K.	159.99	127.50
Pro Video CGI Fonts	I.D.R.K.	69.99	50.50
Pro Video Plus	J.D.K.	249.99	175.00
Pro Video Plus Fonts	J.D.K.	99.99	72.50
Professional Page	Gold Disc	249.99	175.00
Project D		39.99	29.50
Publisher Plus	North East	99.50	72.50



• Polar Expedition: Real life computer-controlled pictures

Computer users head for the icy wastes

The first interactive videodisc released by Virgin offers students the chance to take part in a uniquely-realistic simulation of an expedition to the North Pole.

North Polar Expedition runs on the BBC Domesday laser disk system which is installed in more than 2,000 UK schools and consists of a laser disk drive hooked up to a BBC micro and monitor (MS-DOS and RMML versions are to follow). The package allows five users operating as a team to follow in the footsteps of Arctic explorer Sir Ranulph Fiennes.

The students are offered puzzles and questions as they travel

across the polar ice. And from time to time they come up against perils generated at random such as polar bears and crevices. According to the progress they make the monitor displays 'extraordinary' film and slide footage of the original expedition.

Despite its sophistication, at £199 *North Polar Expedition* should be affordable for most schools. "It will help teach people Geography, which education has had some trouble with," said Virgin's William Beckett. "It also offers people the ability to use inter-personal skills."

PSION PLANS LONGER LASTING LAPTOP

World famous handheld computer company Psion is working on plans for a laptop machine designed to operate for longer on a set of batteries than any rival.

The firm is saying nothing about the project but it emerged last week that the machine is planned for launch in the autumn - around the time of the PC Show. And given the company's track record the price is

likely to be within reach of the mass market.

Although the machine has been under development for a year now it still has not been given a name. Psion engineers and technicians are still only calling it "the laptop".

But an informed source told *Express* the laptop will probably utilise data storage technology similar to the Psion Organiser handheld: that of insertible EPROM cartridges as opposed to floppy disks.

There is already a base of such software ranging in price from £12 to £100 depending on storage capacity and applications.

The ability for the laptop to be able to communicate with PCs is also being given a high priority.

Just before Christmas Psion bought up Milton Keynes-based modem company Dacom for "an initial consideration" of £4.5 million. "I think it's fair to assume that Psion is very interested in the communications market," said the source.



• Organiser: Laptop sister by autumn

He added: "Psion's engineering strengths are in the ability to offer little power consumption with a large amount of storage."

He said the laptop will use six batteries and that whereas most laptops exhausted a set of batteries within about four hours, the new machine would offer up to a week of continuous use.

Q. Who's famous for shouting Eureka?

Archimedes users are often fondly regarded as the boffins of the computer users world - so Moray Micro has come up with a program to test their mettle.

Arctivia contains more than 7,500 questions and costs £24.95. "It's simple enough to use but the questions can be difficult," said Moray director Dennis Scott. More info on 05427 377

Computing: It's a man's man's world

Girls are losing out when it comes to learning on computers, according to a book published this week.

Celia Hoyle, a maths professor at London University, says boys dominate computers in schools with girls being left behind. In the

book she says boys are more likely to opt for computers as a subject in itself (being more likely to have computers at home).

"It is difficult to avoid the disturbing conclusion that girls are learning less than boys about computers," she

says. Recommendations include using computers for all subjects rather than just for computing.

Also in the book Lynda Carr comments: "Computers are still promoted for men. Even at Christmas we saw adverts for computer

games with a boy at the keyboard, talking to his dad. As long as this male orientated approach exists girls will be put off."

Girls and Computers costs £5.50 from the Institute of Education, 20, Bedford Way, London, WC1H 0A1.

War breaks out over war game

Highly regarded strategy war game *UMS* (Universal Military Simulator) has become the focal point for yet another inter-company battle.

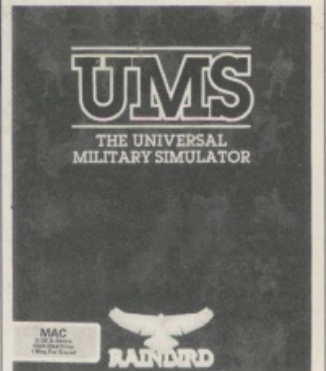
The game is sourced from Iowa-based Intergalactic Development but is published by Rainbird. However, the follow up, *UMS II*, is to be sold around the world by Birmingham-based US Gold.

Intergalactic says that Rainbird handled the original *UMS* poorly. Rainbird has retorted that the American firm is sore because it rejected the sequel.

"We decided that we just couldn't afford to do business with Rainbird any more - it was costing us so much in lawyers and accountants to get them to pay bills," said Intergalactic president Ezra Sidran. "They did a good job but at what cost? They do very bad business."

Rainbird swiftly responded to the harsh criticism: "I'm surprised he's said this about us because he's always been such a nice guy," said the firm's Julia Coombes. "Perhaps he's just upset that we rejected the game. It's not up to the standard of something we'd want to publish."

Either way, US Gold will be launching the game in the summer on ST, Amiga, PC, C64 and Mac. Prices have not been confirmed.



• UMS: Battleground

Midget with more muscle

Fledgling PC manufacturer ACPM has upgraded its 'Micro Midget' machine to include a 20Mb hard disk drive.

The new Micro Midget XX will cost £1,099 as opposed to the original XT which still retails at £595. ACPM is also offering a £449 disk drive upgrade kit for the 1,000 or so existing users. A 40Mb version is also planned for later this winter.

The Micro Midget is so called because of its small desktop footprint: 10" by 10". This, claims the firm, is a factor more and more companies are taking into account.

NEW COMPUTER EXPRESS

OUR OPINION

Ocean Software has pulled off a remarkable coup in snatching the top two spots in the lucrative Christmas games software chart.

And although many in the leisure computing industry are green with envy, the majority would admit the Manchester crowd - recently voted software house of the year - fully deserve its Gallup victory.

US Gold's massive victory the previous year with dubious versions of *Out Run* was widely seen as a triumph of marketing clout over program quality.

So it's something of a relief that this time the top spots went to titles worthy of the honour. *Operation Wolf* the number 1 is a fine arcade conversion, and runner up *Robocop* is not far short of brilliant.

Evidently Ocean meant what it said a year ago when it proclaimed a new commitment to program quality.

Well done, boys. You delivered.

Football mad D&H changes tactics

Soccer crazy games firm D&H is planning to field yet another line up of footie titles - but it admits that it may soon have to change its game plan.

With the range of possible untried football games fast running out, the firm is planning to bring on a new line-up of strategy games from other sports such as horse racing, motor racing, cricket, snooker and boxing.

D&H has built itself on the *Football Director* series plus titles like *International Manager* and *Two Player Super League*. New titles in the tunnel include a budget trio of *Soccer Q*, *Cup Football* and *Euro Super Cup*.

"I suppose we'll run out of football ideas in the end," said joint boss Tony Huggard. "But for the moment we're planning another *Football Director* with graphic players which respond to their own special skills."

New games such as *The National*, *Grand Prix Manager*, *Snooker Manager*, *Boxing Manager II* and *Cricket Captain* should be arriving over the next few months on all formats.

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

PC monitors going cheap(er)

Growing competition in the market for high-resolution PC graphics has led to aggressive price cutting from one of the big players.

Citizen Europe has lowered the price of its CCM-104 high end colour monitor from £795 to £640 making it "approximately half the price of the comparable IBM monitor". The unit is capable of an enhanced VGA resolution of 1024 x 768.

It is expected to appeal particularly to PS/2 system users, although to make full use of the monitor's resolution they will require IBM's optional 8514/A board.

Owners of other PCs can obtain the same resolution by buying Citizen's PCG 1000 graphics display board. The price on this has been cut to £380.



MICROPROSE CHASES UK SOFTWARE RICHES

Ambitious US software house, MicroProse has swooped into Europe to sign up "the very best" arcade games for the ever hungry American market.

The simulation specialist intends taking shoot-em-ups and strategy games back across the Atlantic. A deal has been signed with Oxfordshire based Hewson - and talks are

also under way with French publisher Loriciel and another unnamed UK software house.

Publishers who strike a deal with MicroProse will have their products sold under a new label in the US called Medallist. Hewson's first three games to go Stateside will be *Eliminator*, *Netherworld* and *Exelon*.

"We're real excited about this," enthused MicroProse president Bill Stealey to *Express*. "We've done a big survey here (in America) and the hard core simulation people only account for about 25 per cent of gamers. We want to get to the hard core arcade people as well."

I've already said that we intend being a \$100 million company."

Hewson's boss Andrew Hewson told *Express*: "If the world suddenly didn't want to play simulations then MicroProse would have a problem. I was looking for an American partner and they are ideal."



• Stealey: Euro swoop

SHOWTIME FREEBIES

High profile business software publisher Ashton-Tate is going to be doling out £12,000 worth of free software at the *Which Computer?* show next month.

A prize draw will be held at the end of each day of the exhibition held at the NEC in Birmingham. Winners will be going home with the likes of *dBase IV*, *FullWrite Professional* and *Framework III*. Which? will be held from 21st to 24th February.

MICRO-BOOM

Between 1983 and 1987 the proportion of manufacturing companies using computers rose from 42 to 72 per cent according to a government report on Britain published last week.

Battle of the Amiga Basics

Amiga owners looking to improve on the Basic supplied with their machine are spoilt for choice with the launch of two new packages.

Cornwall based Microdeal has brought out the £64.95 *GFA Basic* which was formerly on the ST; and HiSoft has dealt out its own *HiSoft Basic* priced at £79.95.

Not surprisingly both firms

claim their package is the better. Microdeal is citing its success with the ST version with claimed sales of 70,000. HiSoft is pointing out that its package is a compiler rather than an interpreter and is compatible with *AmigaBasic*. Indeed the first 1,000 copies are being bundled with a free programming guide to *AmigaBasic*.

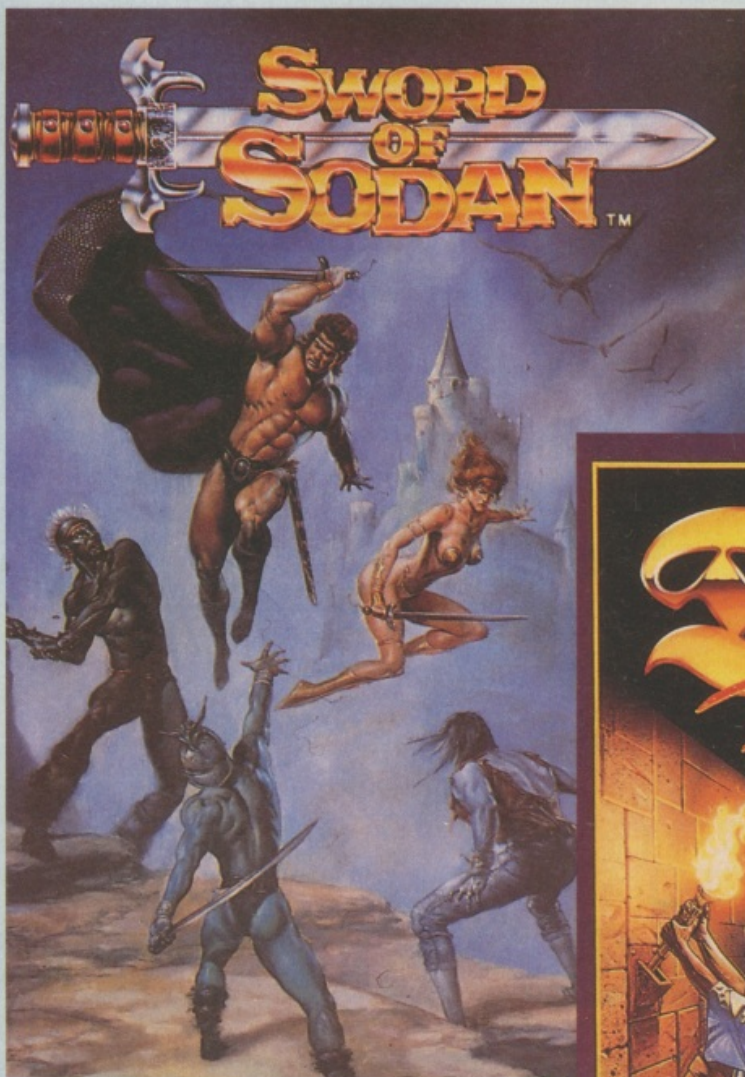
"Despite problems in the past Basic is still the best language to learn on and you can use that experience with other languages," said HiSoft's Andy Pennell.

"Now that the Amiga market has grown so much I don't see any reason why *GFA* shouldn't do as well as it did on the ST," was the Microdeal line.



• HiSoft Basic: Sparring with GFA

BOTH FOR THE AMIGA!



**EXCEPTIONAL
GRAPHICS
+ Gameplay**

**PHONE NOW FOR DETAILS ON:
0252 877431**



"Distributed in collaboration with MIRRORSOFT"

**Sales Department, Unit 1, Rear of 7 Wellington Road,
Sandhurst, Surrey GU17 8AW Tel: 0252 877431**



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 WARR. £14.95
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 LIP. £19.95
First.

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.

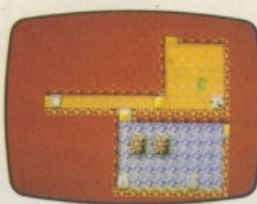
V. £399.99 inclusive.



th of software.



ATARI WARS. £14.95
E.E.



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.



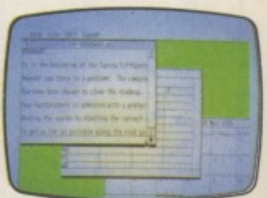
THRUST. £9.95
Firebird.



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

Name _____ Address _____

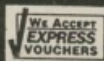
_____ Postcode _____

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

ATARI
SUPER PACK

BLAKELY COMPUTER SERVICES

★ ALL PRICES INCLUDE VAT + DELIVERY ★



AMSTRAD PC 2000 SERIES NOW IN STOCK.

WE CURRENTLY HOLD THE CHEAPEST PRICES ON ATARI, COMMODORE, ZENITH & SHARP COMPUTERS.

PCW SOFTWARE	PPC	PAPER	DISKS
Locoscript II 18.50 Locospell 18.50 Mail Merge 18.50 Dastore 28.50 Database II 77.00 Mini Office Pro 21.95 Locomail 25.00	PPC 512S 430.00 PPC 512 522.00 PPC 640S 516.00 PPC 640D 610.00 PCW 8256 370.00 8512 470.00 9512 520.00	ALL PAPER PRICES FOR 2000 SHEETS 11 x 9.5 80 gsm 20.70 11 x 9.5 80 gsm 22.00 11 x 9.5 60 gsm 14.90 11 x 14.5 60 gsm 18.50 A4 80 gsm 22.00 11 x 8.5 60 gsm 16.00 11 x 8.5 80 gsm 20.00	ALL DISKS UNBRANDED AND GUARANTEED 3" 5 CF2 11.00 50 CF2 87.50 10 CF2 19.00 100 CF2 170.00 20 CF2 35.00
PC 1640	RIBBONS	PRINTERS	5 1/4" DSDD 96 TPI PRICES INCLUDE 100 CAPACITY STORAGE BOX 25 18.25 100 49.00 50 28.25 AMSOFT 3" CF2 5 11.75 50 100.00 10 21.00 100 195.00 20 41.00 For larger quantities please telephone for a quote
Single Mono 520.00 Double Mono 673.00 Single Colour 667.00 Double Colour 820.00 Single ECG 814.00 Double EEG 905.00 20Mb Hardrive Mono 977.00 20Mb Harddrive Colour 1124.00 20Mb Hardrive ECG 1270.00 1640 + 32Mb Hardcard add £300	8256/8512 Fabric 3.50 8256/8512 Carbon 4.75 9512 Multi Strike 3.90 DMP 2000/3000 3.45 DMP 4000 3.50 <i>For larger quantities phone for quote.</i>	Panasonic 179.00 Panasonic 1082 219.00 Micro Peripherals 135 144.00 Micro Peripherals 165 272.50 Micro Peripherals 200 279.50 Canon 1080A 314.00 Juki 6100 316.00 LQ3500 299.00 LQ500 425.00 MP 135+ 155.00 MP 165+ 245.00 MP 200 276.00 MP 201 289.00 MP 480 295.00 MP 700 439.00 IBM Printer Cable 9.50	
DESK TOP PUBLISHERS	ACCESSORIES	DISK BOXES	
Desktop Publisher + Mouse 69.50 Desktop Publisher 27.50 Newsdesk International + Mouse 77.00 Stop Press + Mouse 77.00 Fleet Street Editor 59.95	Mouse Mat 4.99 Surge Protection Plug 14.99	3" 25 capacity 6.75 3" 48 capacity 8.95	
	PCW ACCESSORIES	★ CHEQUES/P.O. TO ★ BLAKELY COMPUTER SERVICES RATHFRILAND BT34 5HQ	★ ACCESS/VISA ★ TELEPHONE 08206 38779 24 HOURS
	1Mb Disk Drive Upgrade for all machines 150.00 RS 232 Interface For 8000 Series 62.00	HOW TO ORDER	

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

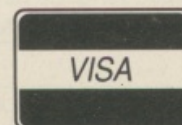
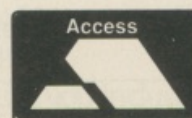
	£
Citizen 100E Printer	179.00
Star LC10 Mono Printer	209.00
Star LC-10 Colour Printer	259.00
Star LC-24/10 Printer	339.00
Philips TV Tuner	69.00
Quickshot II Joystick	9.95
Cumana Disk Drive (A/ST)	99.00
Atari Mouse	24.00
Multiface ST	47.00

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



16 BIT CENTRE

BLAAAAARGH!!!!

I cannot stand it! It's no good, I must put pen to paper or else I shall take it out on the dog!

Your article in Issue 7/8 concerning the International Coalition Against Violent Entertainment got me angrier than just about anything I have read in the computer press in five years.

I am a 38 year old ST owner with a string of computers behind me, starting with a Spectrum some five years ago. I use my computer for a lot of tasks, but mostly I play games, a past-time I still find stimulating and relaxing, paradoxically.

During my computing career, I have zapped aliens, shot up space ships, slashed dragons, blown up buildings, thumped things, and generally created all sorts of havoc on the small hypnotic screen.

Do I then go out and attack little old ladies or kick the dog? I do not - nor do I have any desire to do so. I am a gentle soul, old enough to have had a brush with peace and love in the late sixties and I am, if anything, a pacifist in my approach to the world around me.

So why do I sometimes play violent games? For fun, fantasy, and the satisfaction of reaching a goal. I think not as a substitute for the real thing. People like the coalition

have a nasty habit of simplifying issues to the point where they become black and white, right or wrong. They then go out and tell people what they should think or do. This, to me, is a kind of psychic violence and should be decried as such. Their pseudo-research is inconclusive, non-empirical and extremely petty.

There is enough real violence in the world. This should occupy people's attention. If the coalition want to concentrate on something useful let it be South Africa, the Middle East or any number of violent and dangerous places in the world.

Let them leave the rest of us seeking harmless fun and pleasure alone.

Keith Jenkins, King's Cople, Herts
PS Great mag - it leaves the others standing.

✓ **Couldn't agree more.** When rent-a-quote Tory MPs and Mary Whitehouse start making a fuss, things have a habit of swiftly slipping from absurd imaginings to legislated reality. These are strange days...

Meantime, for the most cogent letter to Express to date, you win a prize. We'll send you the most violent ST game we can find - that's if we don't fight over which one we should choose, that is.

Mystery
WINNER
prize

AMIGA PONDERER

I own a Commodore 64 and have some money in the bank. Before buying this great mag, I was planning to buy a disk drive but I saw that the Amiga was a good buy. Do you think I should buy the disk drive or save a bit more for the Amiga?

Matthew Davies, Glynneath, West Glamorgan

✓ **It depends on your precise needs, but you're probably better off saving for an Amiga.** Disk drives for the 64 are notoriously slow and there are some good deals going now on the Amiga (see news pages).

BRING OUT SKELETONS

I purchased a Commodore PC1 from Lan Computer Systems Ltd, Romford. The unit failed on the day of delivery, and although I tried to get a replacement by phoning and writing it took the Fair Trading Office and myself to get an agreement from Lan to refund my money, but they refused to pay me any out of pocket expenses.

In the final outcome I had to sue them in the County Court and a County Court judgement was granted against Lan Computer Systems Ltd on 12th December 1988. This should be available to view in the Public Records Office from mid-January. I now have my money back and all my expenses and compensation - thanks, Lan.

I will not recommend Lan or the Commodore PC1 to anybody.

This brings an idea to mind. Just how many dealers, suppliers and software houses have judgements against them? We could then avoid using these people. It would make a nice article, which is the motto of public records - "getting the skeletons out of the cupboards."

Ken Hardacre, Bridlington, East Yorks

✓ **It sounds like a useful idea, but ultimately it's not that fair.** Just because a company has a county court judgement against it in one case doesn't mean that all its dealings are suspect. After all, it could well be that many Express readers have found Lan to be fine in the past.

SIZE ISN'T EVERYTHING

I have to agree with Bryan Morton (Issue 5) that Express should cover the more serious

side of computing on the Spectrum and was pleased to hear that attention is to be given to this.

I am also in agreement with Express when you say long program listings can only justify the space they take up if they are extra special. Long listings are not really suitable anyway because of the tedium of typing them in coupled with having no real worth until the hard work is done. These longer home-produced programs are so much more suited to a disk based magazine as they can then be simply loaded. Chezron Software of 605 Loughborough Rd., Leicester, produce such a compilation every month on Opus, Disciple, Plus D, Microdrive as well as on tape.

Short listings, however, are worth their weight in gold if they present some new idea or useful application so I hope you might include the occasional "short".

Again, like Bryan, I like the idea of the most popular computers having their own columns. May I suggest one extra column headed: "OTHERS" to vary each week as you get different material?

Brian Cavers, Manor Park, London E12

✓ **All that would happen is that we'd get the one Comx user insisting that he was worth more than just two sentences a month. Then of course, there'd be the Atari 8-bitters...You just see if we're not right.**

PLEEEEEEEASE!

Pleeeeeeease start including an Atari 8-bit column. No disrespect to MSX owners, but there are probably more Atari 400, 800, 600XL, 800XL, 2600, VCS, 65XE and 130XE owners who'd like such a column. The local Dixons sold out of 65XEs.

RL Thomas, White City, Gloucester

✓ **We WERE right.**

PLAY IT AGAIN AGAIN

We are writing regarding the review of The Munsters on our label Again Again in Express issue 7-8.

It would appear from the review that reviewer has not progressed into the depths of the game and has only reviewed the first section in which you play the character Lily. There is much more to the game than this, ie you play the other characters of "The Munster" family. There are tunnelling scenes,



Dear Reader

We've extended this section to THREE packed pages this week in an attempt to do justice to our ever growing post bag. If YOU write to us we might even drop in a fourth! Send to:

Express Mail, 4 Queen Street, Bath, Avon BA1 1EJ

PS. Sorry, NO personal replies, even if you include an SAE. Just make your query interesting and we'll publish the answer here.

graveyard scenes, and then a situation whereby you have to drive the family hearse in order to rescue Marilyn from the evil grasp of "Old Nick".

So perhaps we could ask you to re-review this game, bearing in mind these further options and should your reviewer, Andy Smith, need any assistance in getting to these further levels then please tell him not to hesitate to contact us.

The game, incidentally, was programmed by Teque, who have recently had many hits, including Pacmania etc.

Roger D Hulley, Managing Director, Tiger Developments

✓ **Given that the review was favourable ("Again Again has done a nice job of capturing the feel of the cult series...It hits just the right level between frustration and addiction"), you haven't really got that much to complain about. Doubtless Andy Smith is not hesitating to contact you at this very minute.**

DIY WP WANTED

Welcome, to your new magazine. My likes are practical articles, hardware reports, business-type software and Public Domain programs.

My dislikes are anything to do with computer games! I would like to see an article on monitors, in regard to fitting higher resolution monitors to home computers. And a series of articles, dealing with programming modules would be great. For example, Word Processing would require Save and Load (from prog.), Word Wrap, Char-width, Margins, etc - all could be dealt with in module form, and the final result might well be a DIY WP program, plus a disk-full of useful modules to use as required.

A module a week would keep the clients buying! Keep up the good work!

G.H. Heppel, Horncastle, Lincs

✓ **One of the mysteries of the modern world is just what will appear in Express next. Sometimes, we even astound ourselves. (A lawyer adds: This is not in anyway meant to intimate that Mr Heppel's wishes will be fulfilled at any stage.)**

CONSOLING THOUGHTS

I am writing to congratulate you on your mag, especially the articles on the Nintendo and Sega machines, and you give more information than other mags about the new 8-bit machines.

Please, for us console users, can we have a page of our own?

Mark Ford, Nechells, Birmingham

✓ **With very few software releases, the**

console market does not easily lend itself to a regular spot. We prefer to cover it for the time being via one-off specials (new Sega machine issue 4) or in the news pages.

MEGA PROBLEMS

For many months I have been eagerly anticipating the issue of the Amiga version of Dungeon Master. Then, in late December, advertisements for this game began to state "1 Meg". A phone call to a mail order company confirms this. Oh horrors! My machine has only 512K of RAM!

Then perhaps a glimmer of hope as I noticed in the combined issue 7/8 of your excellent magazine that you are sending a copy of Dungeon Master to one of your correspondents, a Mr Eliot who presumably owns a standard A500.

What is going on? Or am I doomed never to enjoy the delights of one of this past year's best games on my machine?

BJ Hughes, Worcester

✓ **Dungeon Master does indeed run only on one meg Amigas. Unfortunately, unless Mirrorsoft can work wonders, it looks as though the vast majority of Amiga owners will indeed be denied the pleasure of the game. It's almost enough to make you wish you'd bought an ST...**

TRAINSPOTTERS' CORNER

Probably by the time you get this the whole world and his dog will have pointed the fact out, but I will do it anyway. Do you realise that the recently produced picture of an Amstrad Speccy (issue 6) was printed back to front? No? Oh well, better luck next time, I suppose.

Keep up the good work. I enjoy reading all the mag, even the bits about computers I don't own (I have an early MK1 Speccy which has never ever broken down, and an ST) Robert Morgan, Rhondda, Mid-Glamorgan

?sdrawkcab sgnit gnitirp htiw gnorw s'tahW ✓

THE REAL PIRATES

Over the years I have read more twaddle about software pirates than just about any other subject I can think of.

In my opinion, the biggest pirates are the software houses themselves, who continuously turn out over-priced garbage games programs with only one thought in their greedy little minds, and that is to con money out of children.

I wonder how many of these people have ever seen the disappointment on a ten year olds' face, who, after saving their pocket money and buying the latest slick-packaged



offering from "rip-off" software find they have bought a load of boring rubbish.

If people can get pleasure out of cracking this junk I say best of luck to them, because they will get very little pleasure out of playing 95 per cent of them.

Also in my experience, the majority of copied games are in the hands of children who would not have bought the original anyway because they can't afford to. I recently visited a friend who had just purchased an Atari. When I arrived at his house he was playing a game called Starglider. I watched him for a while and it all looked very familiar, and I realised that I used to have the same game for a ZX81. I think it was called Defender.

Is this producing innovative software? Incidentally, when I talk about pirates I am not referring to commercial pirates.

J Haley, Castleford, West Yorks

✓ **Sure there's a load of junk around, but that's where the magazines come in. Too many sycophantic reviews have done untold harm to games players everywhere - even if they have helped boost advertising revenues in the short term. Rely on knowledgeable, critical reviewers and avoid the dross.**

MEMOTECHNICALITIES

I must join the ranks of those writing to you and start by praising your efforts. A great mag, and the first I have bought regularly in ages. I am a long suffering Memotech owner, but we won't go into that just yet.

My reason for writing is twofold; firstly, please find attached photocopies of an advert from several years back, for a speech recognition unit. A couple of months ago I wrote to another computer magazine to enquire if the company and/or product still existed. I also

ANOTHER PHONE MESS...

After reading about your planned piece on comms (Xmas issue) I thought I'd write and give my opinion on modem mayhem.

Picture it! It's the scorching (!) summer of '88 and I'd just obtained a spanking new Pace Linnet modem. I was thrilled and was "Online" immediately. I was working out my costs using a little booklet from BT. I gave my parents a carefully calculated amount according to how long I'd used the modem and where I was phoning.

Our usual telephone bill is around £60. I had to pay for anything over and above that.

I must admit it was great fun, in fact I think I became mildly addicted. The day wasn't complete without a bit of downloading.

Near the end of just one quarter I had given my parents around £30 (more than enough, I thought). Just to be prudent, my mother phoned BT for an estimate on the phone bill. Back came the astounding figure of £270!!

As you would expect, the modem was immediately confiscated, and after many heated words, my pocket money was taken away (surprise, surprise!).

But this was not the end of my sorry

tale. In about a week's time, the bill arrived and it had miraculously increased to £300!

Remember, I wasn't online at this time. The moral of this story is a) always be generous when calculating costs, b) don't have children!!

David J Boyle, Crieff, Perthshire

✓ **We're such suckers for tales of woe that we've decided to award you a Mystery Prize. To help you work out your costs more accurately - should you ever be allowed within sight of your modem again - a wee calculator is being dispatched forthwith.**

included an SAE but have had no reply! I am repeating the exercise with a far more reputable mag.

My second point is that there seems to be a glitch in one of your adverts. It has in fact occurred in several editions, but I refer to the Christmas issue on page 15. It is a Silica/Amiga effort. In the software section, the Terrorpods screen and the Thundercats screen seem to be identical - is that right? I look forward to hearing from you soon, Neil Duran, Basingstoke, Hants

✓ **As far as we can tell, the company you refer to (William Stuart Systems) is no longer in existence. Possibly that's because there isn't a terrific demand for speech recognition units for Memotechs these days. If anyone is in possession of such a product as a "Big Ears" (we kid you not) and wishes to sell it, then perhaps they could contact us.**

As for the Silica advert, you're absolutely spot on. Fortunately, such errors have nothing to do with us. Quite clearly Silica was so excited at the prospect of appearing in Express once more that it suffered a peculiar repetition. It can happen to anyone. It can happen to anyone.

ACE LETTER

I started to read Express because after purchasing an Amstrad PC1640, I found it an extremely good magazine which combines the latest news in the world of computing, entertainment and sections for the serious users of a computer, as well as "gamesters" or both, like me!

I found Express through ACE which I stopped buying for various reasons namely because the free gift in the next issue was not going to be my format (I wonder how many ex ACE readers feel the same way?) and have not missed an issue since.

Kashif Quraishi, Hayes, Middlesex

X **That's a bit harsh on ACE, matey. Truly in the great scheme of things it is a wondrous publication, regardless of whether or not its freebies run on your machine. That's why it's just won Magazine of the Year from the whole games industry. (There again, it only won because Express hadn't been around long enough...)**

SOME OCEAN NOTIONS

I was interested to read your article on Mr Ward of Ocean Software regarding "new software for the more mature games user". I most certainly will not purchase any as I have found their customer relations non-existent.

I returned on the 26th September 1988 an Amiga Wizball disk which failed to load correctly, but no disk was returned.

I wrote again on the 3rd November 1988; no reply.

THE SOFTWARE BUSTING DEBATE

HARNESS THE CRACKERS

Re Gamebusters, Express issue 6. Having read this article through a couple of times, my reactions are as follows.

There is a lot of truth in what the guy said. Firstly, he is a cracker and not a hacker or pirate. There's a world of difference. He is not out to make any profit from someone else's hard work; nor is he out to make any mischief, but is merely responding to a challenge. Most of us respond to one type of challenge or another almost every day of our lives. It is what makes life interesting for the majority of people. OK, so his preferred challenges are cracking software protection. A lot better than cracking heads, safes etc.

Secondly, as the guy said, "most of it is crap". I think you will agree that one hell of a lot of games are just that - crap, and may possibly hold the attention of some adolescents for two or even three run-throughs. The crap in no way justifies the price asked and paid, I would suggest, by unknowledgeable aunts, uncles, parents or whatever, buying for birthdays, Christmas etc. These well meaning, unsuspecting people should be protected from parting with hard-earned cash for some of the software bilge on the market today.

Thirdly, the guy also said in answer to your question "Why should friends give them to you if they spent money buying them?" - "Because they get better versions of the game back in exchange, especially with games that are hard to play." Software houses could learn something from that remark, such as different levels of play. It's just a thought - maybe they already do, but judging from the remark, they don't.

Surely software houses would benefit from supplying the cracker with a new game and letting him crack it and alter it, if only to see what came back. They could have a protection contract with the cracker. That way, both parties could be satisfied - the cracker's need for that type of challenge, and the software house having the crackers report: difficulty to crack, levels of play etc. Surely to goodness it must be an avenue worth investigating, and beneficial on both sides of the fence?

There must also be more to be gained than I have writ-

ten about. Let's face it: software houses are not going to stop the cracker legally or otherwise. So for goodness sake, they should get their acts together and have the cracker join the team, even if only on a pay for results basis. Better surely above ground and working for them with all the benefits it must bring than underground having to spend money and time trying to beat him which can't be done. I'm sure you are following my drift. Eliminate the cracker by using him and his skills to your advantage, thus freeing time and money to catch the real villains, the pirates. The hackers can be left to the government.

Anyway, this is the view of a 55 year old Amiga owner, who, after a year of struggle with my machine, still can't access its 'libraries'. Oh, for a cracker's assistance at this location!

C Williams, Headington, Oxford

X **Some software houses already use crackers in various ways to help improve their games. But it's really not a solution overall. We suspect most crackers much prefer their own semi-illicit battles with software...**

JUST CRACKERS

For the first time I bought your magazine on Dec 17th 1988, and I'm writing about your article on hackers and piracy. Your so called Hacker (Mr X) is not a hacker (he couldn't hack his way out of a paper bag).

Incidentally, is Mr X real? If so, he must be English! Also, I think you made this article up. I have hacked most disk software on most 6502 machines. All I use is a disk section editor and a machine code monitor. Your Mr X used final cartridge or something similar.

Also, what was the point in deleting pieces of information when the average user of the final cartridge could just do a disk search for Thunderblade to find out what track the relevant addresses were on. I was selling hacked versions of Thunderblade before you got your copy.

Compunet has nothing to do with hackers, but private bulletin boards do in fact have a lot to do with them. If you don't believe me, go onto Mininet and the number should be on Prestel or Gnome at Home. Or go into Limelight and

page the sysop and ask for some phone numbers.

Here is a list of some games that I have hacked: Hypersports BBC Disk; Thunderblade C64 Disk; Moon Buggy C64 Disk; and Operation Wolf C64 Disk.

I can hack most Novaloads. You should have given your hacker a challenge - ask him to transfer Exploding Fist from cassette to disk plus be invincible. If your Mr X can do this, then he is not a bad hacker because I can't. By the way if you want any software by the Virus Man, then go around some of the bulletin boards.

My favourite hacked game is FRAK (BBC version). It's on Mininet.

The Virus Man, Scotland
PS News! Check Larry (PC version) out for a virus (ha ha!)

X **What a remarkable missive. No wonder you're staying anonymous... Whatever, Mr X is indeed both real and English. We censored some salient details in the original because we didn't want to encourage any other hackers or crackers or pirates. In a similar way, we've omitted your simply splendid spelling errors and linguistic oddities, since we don't want our readers to think that all crackers are, er, crackers. PS Your "news" about Leisure Suit Larry isn't news at all to Express readers who read all about it back in issue 5.**

IT'S A FAIR COP?

I would like my opinion heard in the great Piracy Debate. I often receive copies of games from friends/colleagues, for instance Dungeon Master.

I thought this game was so good I bought it. I do this with all the copies I receive - if I like the game, I buy it. If I don't, I wipe the disk. What could be fairer than that?

I had a copy of Pacmania. If I had bought the game for £20 - £25 I would have been very disappointed (VERY disappointed) so I wiped the disk.

Obviously, I can only speak for myself, but I see no harm in the "piracy" that I am involved in - I certainly don't rip anybody off, and I avoid buying games which would be a waste of my meagre grant.

Dave Palmer, Jarrow, South Tyneside

X **Sounds suspiciously like an exercise in conscience-cleansing. Do you really mean to say you go out and buy EVERY pirated game you think is decent?**

All I wished to know, had my disk been received or had it been returned but lost on the way – still no reply.

I have on the 30th Nov 1988 written to the managing director; still no reply.

I have now informed all my friends and colleagues as to Ocean Software's very poor customer relations, also possibly poor quality disks and advised them, like me, to purchase other producer's software.

Keep up the good quality of your magazine which makes very good reading at a very reasonable price.

Brian J Odam, Sheringham, Norfolk

X This matter is being checked through with Ocean even as you read this. It has to be said, however, that your difficulties come as something of a surprise since Ocean is quite possibly the smartest of all software houses when it comes to such matters. Certainly, if it happened regularly, David Ward's crew would long ago surrendered its position as the number one games publisher.

Having raised the topic, doubtless we'll now be deluged with tales of difficulties.

MAIL TALES

I am saddened to see yet another Mail Order Company (MOC) go to the wall. Not because they are out of business, but once again it is the customers who lose out.

So, where does the blame lie? Well, obviously with the MOC concerned, but also I think with the magazines that publish their adverts. I can usually spot a MOC who may run into difficulties: they run single and double page adverts, sometimes in spot colour, in several magazines, and they sell their goods at ridiculous discounts.

On average it costs £500.00 to run a single advert in one magazine per week (more if it is a monthly). In order to cover the cost of the advert alone (let alone all the other overheads) they need to sell approximately £5,000.00 worth of goods. If you multiply this over say two weekly magazines and three monthlies, their monthly turnover has to be £60,000+-. I reckon that's impossible.

So how can you spot a possible liability? Well, choose the company you wish to purchase from, and then pop down to WH Smiths and thumb through all the computer mags. If they are prominent in all the mags with double page spreads in glorious colour – forget it.

So why are the magazines responsible? Well, they are so concerned about competing with each other and filling up their pages with adverts that they are blind to good business sense. If I buy stock from a supplier and don't pay for it within a reasonable time, they suspend further supplies to me. Do magazines do this? Of course not, they just print more adverts. Not until the MOC is dead and buried do they show concern for you.

So is a magazine liable for your losses? Not directly, but morally, most definitely yes, and maybe legally yes. They have a responsibility to you as their customers. If it can be shown that they acted negligently and therefore contributing to the problem, you may just have a case.

I hope that those of you who have lost money (and I'm sure there will be many) succeed in recovering your losses, but sadly I fear that it is money lost forever. But then there's something called Mail Order Protection Scheme.....

Steve Bonnici, Managing Director, Future-place Computers

X Though your comments are doubtless meant well, it really is taking matters a little too far to blame the magazines. Obviously, we're bound to say that. But we have a commercial interest in making sure that those companies who book ads with us will indeed pay for them. And we certainly don't want our readers to be ripped

EXPRESS: COMPLACENT, BLASE

I have owned a PCW for two years now, and have been very satisfied with the high quality of Future Publishing's publications in that time. I therefore started to purchase New Computer Express, which, not surprisingly, is quite excellent, and certainly well worth 48p.

However, I was sorry, surprised and saddened to read your response to H Twiddle's letter (Issue 7&8) regarding his problems when purchasing computer goods. The simple fact is that he has a justified complaint, and nothing can justify – despite your weak excuses – what he has suffered. To say his problem is really an irritant rather than a "real complaint" simply because "at least you got a game that worked" is really appalling. You seem to think that customers should actually be grateful if they receive what they have ordered!

If you go in to a shop and buy something, you expect it to be as advertised/described, working and complete. In my experience, when ordering computer items, this is the exception rather than the rule. It seems that it is just fine if a retailer doesn't comply with his/her side of the deal (in law, a contract) so does this ludicrous situation apply to the customer? For example, if a retailer was given counterfeit money after handing over goods, I am sure you wouldn't take this calm, blase, forgiving attitude; in reality, all hell would break loose.

However, some retailers – and apparently you also – see little wrong in customers being conned into paying over their money, but not receiving the delivery/goods/service as agreed – and then having to engage in a virtual battle to get what they were promised and have paid for in good faith. The simple fact is that this is not only all too common, but becoming increasingly so.

We are supposed to be living in times of a 'buoyant economy' and 'market forces', but to me, I interpret this as really meaning "Customer beware - you are about to be ripped off" simply because so many don't seem to give a damn about reliability, contract compliance and integrity these days, and so many, such as yourselves, are so tolerant of this.

To say as you did that a lack of goods that are advertised is because of the failure of the supplier is pathetic. If someone advertises, they should be efficient enough to at least ensure they have the goods or not advertise them! Not too difficult to comprehend, is it! In the upshot, if everyone behaved in this sloppy, unbusinesslike, care-free (and, I feel, arrogant and dishonest) fashion, pure anarchy would prevail and no one could be trusted, but this is what you seem to

off when companies go bust without supplying goods that have been paid for.

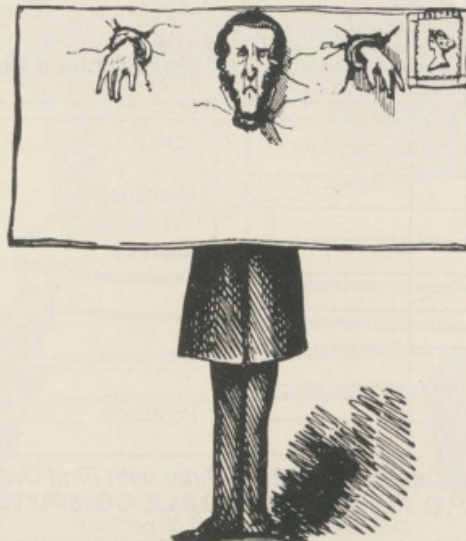
Occasionally, the odd outfit will slip through the net. When you're working on trust, that happens. But Express is especially vigilant: we'd be bonkers to be otherwise.

PRIZE GUY

Your magazine is excellent, brilliant and super-duper. All the people that work at New Computer Express must be really talented and brainy.

I have compiled a list (how original) of why I should be the mystery prize winner this week.

1. I lied a little in the first paragraph.
 2. All home computers are brilliant (I wrote this so as not to offend people).
 3. I would not die for your magazine (it's good, but not that good).
 4. I got nothing for Christmas.
 5. I know somebody called Nigel.
 6. Bros are all women.
 7. Blackburn Rovers are the best football team in the world.
 8. The only game I have ever won is bingo when I was younger. (Well, I'm not going to be older, am I?)
 9. I own an Atari ST.
 10. My Mum and Dad are older than me.
- Paul Livesey, Stockport, Cheshire



• "Yet another mail order company goes to the wall"

endorse. Why should manufacturers and retailers have a unique right to behave like this?

In a society which is becoming increasingly divided, it is all too easy to forget how this type of "irritant" (your word!) affects low-income computer users. For example, there are a great number of people not earning because of say, severe disability, who spend most of their lives in front of a computer and £20 or so is a lot of money which they may have saved up for many months. OK, it might not be much to New Computer Express or even less to retailers, but it is a fortune to some people who find it very distressing to save up and forego something to do this, and then encounter this type of problem. You (conveniently) seem to have forgotten this.

I appreciate that caring about and considering other people is well out of fashion these days, but some still believe this is a better virtue than just amassing mountains of money from dubious practices.

In sum, it is this complacent attitude such as yours that can only lead to this type of behaviour increasing.

Apart from the ethical question and the simple fact that surely you should get what you pay for as promised without this inane pantomime of fighting with a retailer/manufacturer to supply what was originally promised, New Computer Express should spend a little time thinking about its negative attitude – presumably indicated by its response to H Twiddle – and also consider how this looks to its readers who, after all, are in the same situation as the writer.

David J Nicholls, Bellingham, London SE6

✓ Harsh words indeed, and many of your points are taken. But we are really not blase or complacent about the matter: we did after all help draw attention to SDC's failure to supply full goods and we have sorted the problem out for Mr Twiddle.

It has also to be borne in mind that the complaint was about not receiving the instructions for – in this instance – a straightforward game. Our response would've been different had it concerned a complex adventure being supplied without instructions, or had the game itself not been sent. So please don't yoke us in to the moral decline of the nation.

It's doubtless very crass of us, but we're going to award you a prize for placing moral matters on the agenda. We'll send you a wee PCW package. With instructions...

PS Some of the above facts are not true.

✓ Congratulations, you've won our very special mystery prize of one million pounds. (This may or may not be a true statement.)

HELP SPRINGS ETERNAL

In reply to Mr Matthews' letter in Express issue 6, I have copies of both Yahtzee and Cribbage for the Spectrum in Basic that we use quite a lot, in fact my wife plays Cribbage almost every day of the week. (Now I knew there was a reason for me buying this PC!)

Unfortunately my Spectrum is the 16K Issue 2 model which I upgraded with a plus keyboard and 32K RAM upgrade chips, so therefore I only have copies on tape. But if Mr Matthews would like to contact me, I should be able to give him the listings for both games.

Both games are very good considering that they are written in Basic.

Yahtzee can be adapted for numerous players, and unlike PC type games I have used, you play the full six games. There are two screens, the playing screen and the score sheet, which can be accessed at any time in the game.

Cribbage is a game for one player versus the computer, and is set to normal crib rules but it does allow for mixed runs when laying cards, you cannot win on the turn of a Jack, and the computer plays a mean game.

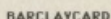
Robert J Waller, 39 Quarley Way, London SE15 6JG

✓ It fair warms the cockles of your heart when one reader helps out another. In fact, we're such sentimentalists that we're sending the helpful Robert a prize. To wit: R-Type on the Spectrum.



"Better Than The Best of the Best !"

TELEPHONE: 0621 - 742617



Credit Card Hotline 0621-742617

RING NOW!

OR CUT OUT AND SEND THE COUPON

*** FREE Delivery in UK * Orders Despatched in 24 hrs***

* Some titles which are new releases may take more than 24 hrs*

AMIGA

Jet	£39.95	Powerdrome	£24.95
Masters of the Universe	£19.99	Puffy's Saga	£24.99
Eddie Edwards Super Ski	£19.99	Test Drive	£24.95
Platoon	£19.95	The Flintstones	£19.95
Ikari Warriors	£14.99	Dungeon Master	£24.99
Time and Magik	£19.95	Space Harrier	£19.99
Virus	£19.95	Garfield	£19.99
Trivial Pursuits	£19.95	Bubble Bobble	£19.95
Better Dead Than Alien	£19.95	D.T. Olympic Challenge	£19.95
Empire Strikes Back	£19.95	Operation Wolf	£19.95
Flight Simulator II	£39.95	Question of Sport	£19.99
SpitFire 40	£24.99	Grail Adventure	£19.95
Chess	£24.95	R-Type	£19.99
F-15 Strike Eagle	£24.95	Spitting Image	£19.95
Bards Tale I	£24.95	SpeedBall	£24.99
Marble Madness	£24.95	Gauntlet II	£19.99
Lombard RAC Rally	£24.95	F-16 Falcon	£29.99

20% OFF ALL ORDERS RECEIVED BY JAN 31ST
IF YOU CAN'T SEE THE GAME YOU WANT RING 0621 742617 AND WE'LL DO OUR BEST TO GET IT!

Phone 0621 - 742617 FOR FREE PRICE LIST & CATALOGUE

Pioneer Plague	£24.95	Ferrari Formula 1	£24.95
Manhattan Dealers	£24.99	Arctic Fox	£19.95
Flintstones	£19.95	Fusion	£24.95
Guild of Thieves	£24.95	Return to Atlantis	£24.95
Ikari Warriors	£24.99	F/A 18 Interceptor	£24.95
Karate Kid Part II	£24.95	Marble Madness	£19.95
Star Glider	£24.95	TestDrive	£24.95
Time and Magic	£19.95	D.Thompson's Olympic Chalk	£24.95
Winter Games	£24.99	Platoon	£24.95
Thundercats	£24.99	Flight Simulator II	£39.95
Puffy's Saga	£24.99	Deluxe Photobal	£69.95
Vixen	£19.99	Deluxe Print II	£49.95
Scrabble Deluxe	£19.95	Deluxe Paint II	£69.95
Galactic Invasion	£24.95	Bards Tale I	£24.95
Championship Golf	£34.99	Warlocks Quest	£19.95
Battlechess	£24.95	Bombuzal	£24.99
Garfield	£19.99	Wav of the Little Dragon	£14.99

20% OFF ALL ORDERS RECEIVED BY JAN 31ST

IF YOU CAN'T SEE THE GAME YOU WANT RING 0621 742617 AND WE'LL DO OUR
BEST TO GET IT!

Phone 0621 - 742617 FOR FREE PRICE LIST & CATALOGUE

MSX

Shoot Out (C)	£8.99	Platoon (C)	£9.95
Batman (C)	£9.95	The American Civil War (D)	£18.95
Soldier of Light (C)	£8.99	Halls of Montezuma (D)	£18.95
Giants (C)	£12.99	Caveman Ugh-Lympics (D)	£14.95
Arctic Fox (C)	£9.95	TestDrive (D)	£14.95
Fast Break (C)	£9.95	Arctic Fox (D)	£12.95
Mini Putt (C)	£9.95	Fast Break (D)	£14.95
Bards Tale I (C)	£9.95	Bards Tale I (D)	£14.95
Puffy's Saga (C)	£9.99	Iron Lord (D)	£19.99
Skate or Die (C)	£9.95	Marble Madness (D)	£12.95
Garfield (C)	£9.99	Mini Putt (D)	£14.95
Flintstones (C)	£9.95	Puffy's Saga (D)	£14.95
F15 Strike Eagle (C)	£9.95	Giants (D)	£14.99
Every Second Counts (E)	£7.95	Shoot Out (D)	£8.05
Krypton Factor (C)	£7.95	Risk (D)	£14.95
Last Ninja (C)	£9.99	Better Dead Than Aliens (D)	£19.95
		Flintstones (D)	£14.95
		Garfield (D)	£14.95

20% OFF ALL ORDERS RECEIVED BY JAN 31ST
IF YOU CAN'T SEE THE GAME YOU WANT RING 0621 742617 AND WE'LL
DO OUR BEST TO GET IT!

Prices for Disk version, cassette versions available for most titles,
Phone 0621 - 742617 for details.

Time and Magic	£14.95	Vampire	£5.99
Ingird'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	Krackout	£6.99
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

20% OFF ALL ORDERS RECEIVED BY JAN 31ST

IF YOU CAN'T SEE THE GAME YOU WANT RING 0621 742617 AND WE'LL DO OUR
BEST TO GET IT!

Phone 0621 - 742617 FOR FULL PRICE LIST
Cassette/Disk versions available for most titles

Also Stockists For IBM PC AMSTRAD, Spectrum +3, Spectrum 48K, Spectrum 128K, MSX and the SEGA Games System. Telephone: 0621 - 742617 **now** for price lists.

"SEGA SUPER SYSTEM (3D Glasses + Gun + Game) - ONLY £125.99"

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

Software Title	Machine	Amount
Total Enclosed £		

Total Enclosed £

Name

Machine

Address

.....

.....

.....

Postcode Tel. No

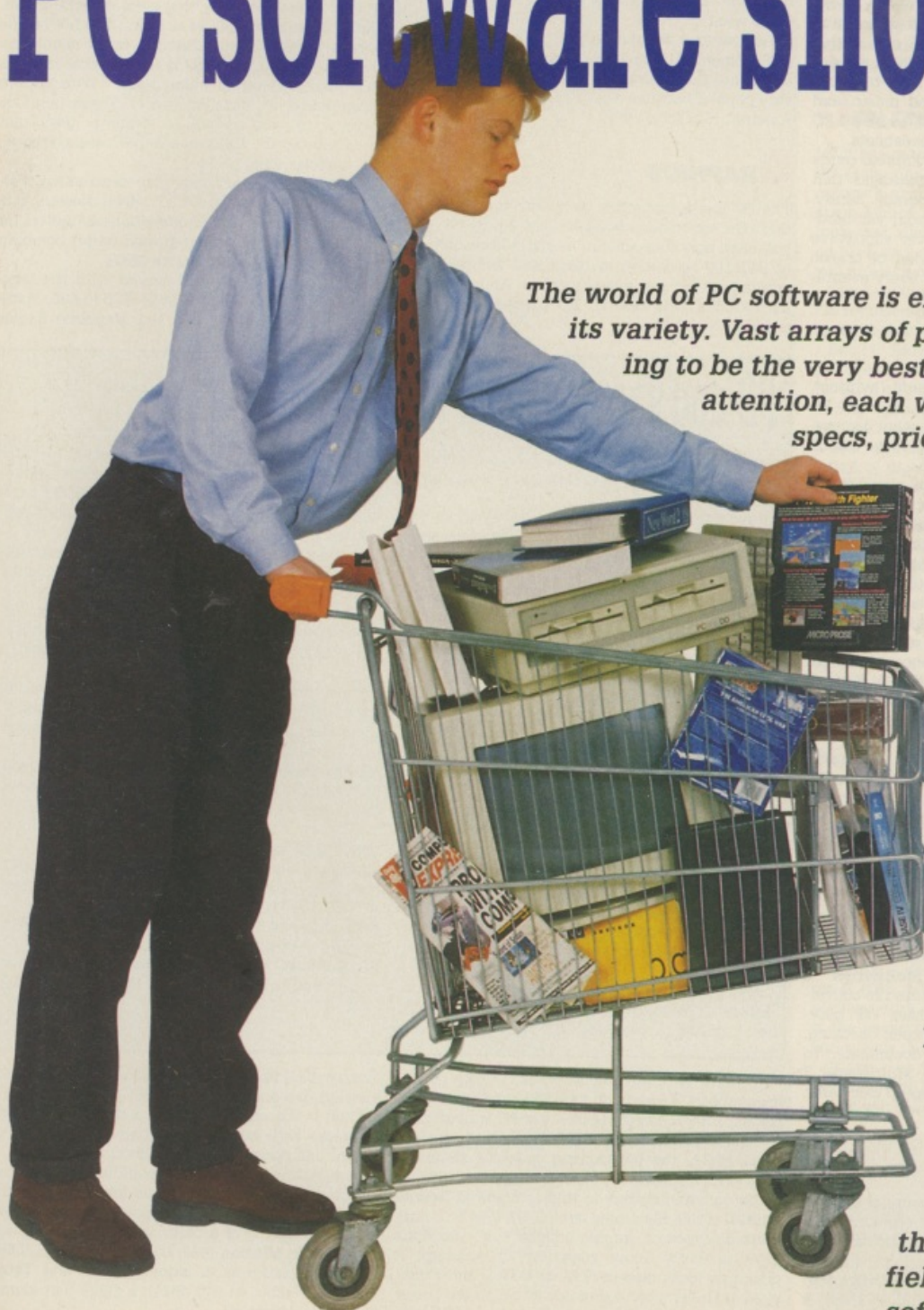
FREE Credit Card '89 Calendar with First Order

*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"

How to be a smart PC software shopper



The world of PC software is endlessly baffling in its variety. Vast arrays of products all claiming to be the very best thing jostle for attention, each with different tech specs, prices and recommen-

dations. But which ones are the truly essential purchases? For word processing, general business, graphics, entertainment, music, utilities and communications, which packages will best fit your requirements without leaving you bankrupt? In the first in a series of definitive sector surveys, Express guides you through the minefield of choosing PC software

Since its introduction the IBM PC has endured a reputation as a hard-core business machine – the suits' computer. However, in the US it quickly became established as a home computer too.

And once it had penetrated the American household, the PC was subverted from its 'strictly business' demeanour – programming languages appeared, then graphics software, and games, and low-cost applications like word processing and database.

In the UK, the PC hung on to its businesslike reputation much longer. Not until Alan Sugar launched the PC1512 did the PC begin to follow its American counterparts into the home. Now the UK market also supports a wide range of software, at prices from the sublimely cheap to the ridiculously expensive.

However, the industry continues to behave as though there were three completely different sets of PC users, with no overlap between these groups: the business user, the programmer, and the home user. If you're a typical PC owner, this makes it difficult to get information on all the different aspects of the PC because the business dealers won't talk about games and music, and the average games dealer doesn't know about PC applications like databases and spreadsheets.

To solve this problem, here is the *Express* guide to PC Essentials – the software packages that merit a place in everyone's program library. Unless you're after computerising your yak-herding operation, or robotic control over shortwave radio, you should find this collection of classic software sufficient to equip you for every eventuality.

WORD PROCESSING

Just about everyone processes words ('writing', as the activity used to be known). But the PC boasts more WP programs than any other computer, and picking your way through the maze can be difficult.

Recommending word processors is also difficult because, like shirts and woolly jumpers, they're largely a matter of personal choice. However ...

For those on a tight budget or with limited word processing needs, the first choice should be **Tasword** (£30, Tasman Software, 0542 438301). Although it does have some limitations, it provides all the basics for creating, editing and printing text which, after all, is what it's all about.

Further up the scale in performance as well as price is **Protext** (£60, Arnor, 0733 239011). *Protext* is fast and powerful, and adds extra features, including a good spell checker, macro language and mail merge.

(Mail merge, if you were wondering, is a method of being obnoxiously familiar with people you've never met. It is how *Reader's Digest* manage to send you letters that say things like, 'Imagine, Mr Smith, how a new Porsche 911 would look outside 123 Acacia Avenue'. What the author actually wrote was 'Imagine, [field1], how a new Porsche 911 would look outside [field2]', and the mail merge utility inserts the appropriate names and addresses.)

Finally, for users needing compatibility with a 'professional' word processor, **Multiwriter 2** (£100, Newstar, 0245 265017) provides file conversion from the most popular business WP packages, as well as offering macros, spell checking, and the ability to edit multiple documents. To make handling this power easier, *Multiwriter 2* provides on-line help. There's a pop-up calculator, too.

BUSINESS

The best buys for small-scale business applications on the PC are definitely the integrated packages – single programs that provide multiple applications.

Easily the best value must be **Mini Office Personal** (£30, Database Software, 0625 878888). It provides modules for word processor, database,

spreadsheet, and communications, and while few of these are especially brilliant they do allow you to swap data between the various parts, and there are one or two surprisingly good features like Prestel support in the comms modules. *Mini Office* is a good choice for anyone who thinks they might need businesslike software on their home computer. At least, at the price, you won't get your fingers burned if it turns out you don't need it after all.

More professional and rather more powerful is Microsoft's excellent **Works** (£145, Microsoft, 0734 500741). It gives you much the same collection of applications – WP, database, spreadsheet, comms and business graphics – but its main plus is the excellent on-screen help facility and series of interactive tutorial sessions.

Each of the modules is good enough to stand against much of the dedicated competition, and swapping facts and figures from spreadsheet to database to word processor is as easy as you could want.

Also worth a mention in this category is **Ability** (£99, Migent, 01 493 2655). A similar collection of utilities to the others, if a little slow at times, but very popular because it was bundled free with the Amstrad 1512 for a while.

GRAPHICS

The PC has a reputation as a poor graphics system. On the most common CGA-equipped PCs you have only four colours in 320x200 resolution, or 640x200 resolution in black and white only – nothing to get the average ST or Amiga owner excited. For this reason, PC graphics software tends to be overlooked.

obvious lines, circles, various brushes and fills, these include the ability to grab sections of the screen and use these as brushes, and various pseudo-3D effects like distorting images for perspective.

Unfortunately, cheaper programs that provide a reasonable degree of usefulness are thin on the ground. Salvation is at hand, however, in the form of public domain software (see the accompanying box for possibilities).

ENTERTAINMENT

If the PC was considered poor for graphics it was long reckoned to be laughable for games. Which is odd when you look at what's available because although the PC may not have as many games as other computers, it has as many great games as its rivals.

The classic PC game isn't really a game at all, although it is definitely first-class entertainment. **Flight Simulator** (£50, Microsoft, 0734 500741) is now in version 3 and although many simulators make the same claim, FS3 is the one that really is 'the nearest thing to being there'. With superb instrumentation, dazzling graphics and fabulous scenery, as well as add-on scenery disks that cover most of the US, Japan and Western Europe, FS3 provides limitless fun.

If you prefer something more destructive, **Falcon AT** (£35, Mirrorsoft, 01 377 4644) delivers. It is graphically excellent and offers various outlets for your aggression including ground target bombing missions and dogfighting with MiGs.

Adventure fans are well served with the complete collection of Infocom titles (£25 to £35, Mediagenic, 0734 311666), and the Magnetic Scrolls

PD and shareware for the real bargains

One of the great attractions of the PC is the enormous range of public domain and shareware software available.

Public domain, or PD, programs are free and you pay only for the disk, and the costs of copying, documentation and postage incurred by the library you buy it from.

Shareware is sold in similar fashion but you acquire only the right to evaluate the software. If you decide to keep and use the programs you must pay a registration fee which is usually much less than the price of a comparable commercial program and which entitles you to receive upgrades and usually printed documentation and technical support.

Cynics might assume that anything free is worth what you pay for it – nothing. But there are gems in most PD libraries, often as good as anything available commercially. Furthermore, PD libraries are good sources for unusual programs that simply aren't available elsewhere.

Finally, free or cheap PD programs can be a good way of trying out new kinds of software. For example, if you're not sure whether you could make use of a spreadsheet, a PD program will let you try before you hand over your cash for a, possibly expensive, commercial product like **Supercalc** or **Lotus 1-2-3**.

Among the best and best-known PD software are:
Galaxy: A full-featured word processor which works like *Wordstar Professional* but includes pull-down

menus for ease of use, and a spelling checker.

Wampum: A database system that produces *dBase III+* files (much cheaper than Ashton-Tate's £500 monster), including report generation. It even supports networks.

Procomm: One of the best communications programs available, including commercial products costing up to £100.

Hack: A mammoth role-playing game, similar to the *Ultima* series but using character graphics. Kill trolls, slay wizards, acquire hernia-inducing amounts of gold.

Among the kinds of programs you can find in PD libraries that are difficult to acquire commercially are:

Composer: Music composition system that allows you to compose, play and print out your works of art.

PC Key-draw: A feature-packed graphics editor, good for creating technical drawings and diagrams. Features mouse support, but also usable from the keyboard.

Useful addresses:

Vasstec, 4 Royal Terrace, Glasgow, G3 7NT, tel: 041 954 6853; 11 Uxbridge Street, Kensington, London W8 7TQ, tel: 01 266 3218

Advantage, 56 Bath Road, Cheltenham, GL50 7HJ, tel: 0242 224340

PD Software Library, Winscombe House, Beacon Road, Crowborough, E. Sussex, TN6 1UL, tel: 0892 663298.

However, with the increasing use of EGA graphics adaptors – providing 640x350 resolution in 16 colours from a palette of 64 – the PC is beginning to look a much better bet for graphics applications. (VGA, the forthcoming graphics standard, goes even further and puts the Amiga to shame.)

The outstanding buy in this category is **Deluxe Paint II** (£100, Electronic Arts, 0753 49442). It supports all types of graphic adaptor – so you don't have to worry about compatibility, although it obviously looks best in EGA or VGA – and it provides features more commonly found on the better graphic machines like the Amiga. Apart from the

library (£25, Rainbird, 01 240 8838). While for role-playing gamers, **Ultima V** (£30, Microprose, 0666 54326) is the one to go for – a massive four-disk universe with hundreds of characters, dozens of towns and dungeons and a million ways to die.

One area in which the PC continues to be weak (largely because of its graphic limitations) is the traditional computer arcade game. However, two products worthy of a place in your collection are **Impossible Mission** (£20, US Gold, 021 356 3388), a classic platforms & ladders romp, and **Tetris** (£20, Mirrorsoft, 01 377 4644), a game that almost defies classification.



Tetris is a fast-moving puzzle game, totally addictive and you can install it as a memory-resident program (so it's always available) for those rare moments when serious work loses its appeal. (Most companies ban *Tetris* very soon after its appearance in the office.)

Finally, breaking new ground in the PC games field is the Freescape range – *Driller*, *Dark Side* and *Total Eclipse* – (£20, Incentive, 07356 77288) which combine aspects of adventure and simulation with a gripping plot and superb solid 3D graphics.

MUSIC

Unlike the perceived problem areas like graphics and games, PC music is a genuine desert. With an ultra primitive sound chip and a tinny built-in speaker the PC qualifies as the worst equipped computer for sound and music.

However, if you're determined, there are a few public domain programs around. See the PD Software box.

UTILITIES

Utilities are those programs that make using your PC easier and/or safer. And top of your list in this category should be *PC Tools Deluxe* (£50, Evesham Micros, 0386 765500), a collection of useful tools that allow you to recover accidentally deleted files, and even to get all your data back even if you format a disk.

The very first time you absent-mindedly delete a file representing several hours work, you'll consider it £50 well spent.

But *PC Tools* isn't just for the bad things. It also provides a disk cache for speeding up disk usage, facilities to optimise and backup your hard disk, and an easy-to-use DOS shell. Since *PC Tools* can also be loaded memory-resident it is particularly useful, and especially so for beginners.

One of the classic PC utility packages was Borland's *Sidekick* but this has since been replaced by *Sidekick Plus* which, although an excellent product, is bigger and more expensive and not "an essential" by any means.

An alternative is *PC Deskmate* (Shareware, most PD libraries) which provides a calculator, calendar, limited notepad and DOS shell in pop-up form. Evaluation copies are available for a couple of pounds, but the shareware registration fee is \$25. A similar product is *Homebase* (£59, Brown Bag Software, 01 874 1106) which provides a database, text editor, calculator, calendar and comms program.

COMMUNICATIONS

PC communicators have a problem in the UK: the fact that most comms software originates in the US where they don't use our peculiar 1200/75 bps viewdata system which is obligatory for joining Prestel/Micronet.

If you don't need viewdata you have a far greater choice, but as it happens one of the leading comms packages – and among the best for value too – does support the Prestel format. *Mirror II* (£83, MDP Ltd, 0225 60491) is a powerful package with a macro language, the ability to run in the background (a sort of limited multitasking) and is easy to use for all its power.

(If you buy Amstrad's new M2400 modem, you get a copy of *Mirror II* free, which is an excellent deal if you haven't yet bought a modem.) ●

PRINTERS

Next week, the Express Essentials guide puts printers under the spotlight. Which models really stack up? In each of the various categories, Express selects the very best. Don't miss it!

THE BEST REASON FOR BUYING AN ATARI ST

POOLS-SYSTEM!!™

MAIL ORDER ONLY

INCORPORATING (POOLSBUSTER & POOLSPLANNER)

**WE ACCEPT
EXPRESS
VOUCHERS**

TRADE WELCOME

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

There are still 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 analyst. Fact, **POOLS-SYSTEM** 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 the 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 that **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 211/2 points. It bought me a win of **£11.80.** Not bad for a first attempt. Thanks for an amazing program. **Regards P.J.L.-Solihull.** (Name & address with held for obvious reasons.)

POOLS SYSTEM (POOLSBUSTER+POOLSPLANNER) COSTS £40.00 INCLUSIVE.

APOLONIA SOFTWARE(TM) PRESENTS: **COMPUSHOP1** THE BEST PRICES FOR THE ATARI ST AND THE AMIGA HARDWARE AND SOFTWARE. JUST HAVE A LOOK AT SOME POST-XMAS PACKAGES:

Atari 1040 Games pack

Atari 1040STFM + FREE games software
worth over £400 + compushop1
Business Starter Pack.

£459.00

as above + Pools System £469.00

Atari Mega ST DTP Pack

Mega ST4 + Mono Monitor + Laser
Printer + Fleet Street Publisher +
Timeworks Desktop Publisher + VIP
Professional + Microsoft Write +
Superbase Personal + First Word +
Megafile20 + compushop1 Starter Kit.

£2699.00

as above + Pools System £2710.00

Atari 1040 Business Pack

Atari 1040 STFM + VIP Professional +
Microsoft Write + Superbase Personal +
mouse mat + four compushop1 Starter Disks.

£449.00

as above + Pools System £459.00

Atari 1040STFM as above + mono monitor:

£539.00

as above + Pools System £549.00

Atari 520 Superpack

Atari 520STFM + FREE £400 worth of
software + one extra microswitch
joystick + mouse mat + compushop1
Business Starter Pack.

£349.00

as above + Pools System £359.00

TRIANGLE 1MB 2ND DRIVE-ATARI/SINGLE	£114.95	£95.00	A1010 1MB 2ND DRIVE(ALL AMIGAS)	£159.99	£117.94+VAT	CLOCK SPEED-4.77MHZ OR 8MHZ.8088 MICRO
TRIANGLE DOUBLE 3.5" DRIVE-ONLY FOR THE ATARI STS AND			MIDI INT. FACE (STANDARD SER.)-AMIGA	£29.95	£25.00	PROCESSOR.EGA.CGA+HERCULES GRAPHICS MODES BUILT
STMS-NOT FOR THE STMS	£199.95	£179.00	PHILIPS CM8833 STEREO COL. MON.	£314.95	£239.10+VAT	IN. TWIN DRIVE.640 K RAM.MS DOS 3.2 OPERATING
TRIANGLE 5.25" DRIVE-4080 TRACK-ATR	£149.95	£130.00	"CM8852 HIGH RES COL. MON.	£343.85	£269.20+VAT	SYSTEM.OPTIONAL 8087 MATHS CO-PROCESSOR
TRIANGLE 5.25" WITH PC-DITTO/ATARI	£229.95	£199.00	AMIGA 1600 MONO MONITOR	£99.99	£84.10+VAT	SOCKET.DETACHABLE XT STYLE KEYBOARD.INCLUDES
TRIANGLE 1MB 2ND DRIVE- AMIGA	£99.95	£85.00	ATARI SM125 TILT & SWIVEL BASE	£149.99	£114.94+VAT	PARALLEL & RS232 SERIAL PORTS.256K SCREEN
TRIANGLE INTERNAL A2000 31/2"KIT	£89.95	£79.00	MONITOR MASTER(THE BEST IN THE MARKET-FOR ANYATARI			RAM.SUPPLIED WITH MOUSE.MONO SCREEN RESOLUTION OF
CUMANA 1MB 2ND DRIVE-ATARI	£144.95	£125.00	ST.520,1040,MEGASTS-			720*350.COLOUR SCREEN RES.640*350.PALETTE OF 64 COL.
CUMANA 1MB 2ND DRIVE-AMIGA	£139.00	£125.00	COLOUR/MONO SWITCH BOX.)	£35.00	£30.00	OURS.16 CAN BE DISPLAYED AT THE SAME TIME.WORKS WITH
ATARI 20MB HARD DISK DRIVE(SH205)	£599.99	£592.97	MOUSE MASTER/UNIQUE MOUSE & JOYSTICK SWITCH-ALLOWS			ANY CGA.MDA.EGA OR MULTI-FREQUENCY MONITOR.COMES
SUPRA 20MB HARD DRIVE	£849.95	£720.22	CONNECTION OF 2 JOYSTICKS & A MOUSE OR ANY OTHER			WITH FREE SOFTWARE & FREE MANUALS. R.R.P.-£647.49 OUR
"30MB"			CONTROLLER-WITH ANY COMBINATION THAT YOU REQUIRE-NO			PRICE IS A JOKE. ONLY £580.00 INCLUSIVE!!! ATARI PC3 AS
MIRACLE WS2000 MODEM(ATARI-AMIGA)	£125.00	£100.00	UNPLUGGING CABLES-BEST MOUSE/			ABOVE + EGA MONO MONITOR R.R.P. = £747.49. OUR PRICE
MIRACLE WS4000 MODEM(ATARI-AMIGA)	£194.35	£160.00	JOYSTICK/CONTROLLER.JATARI/AMIGA	£24.95	£21.00	IS ONLY £670.00 INCLUSIVE!!! ATARI PC3 + EGA MONO MONITOR
LINNET MODEM(ATARI-AMIGA)	£159.85	£125.00	MOUSE PATH(THE BEST MOUSE MAT AROUND.SPECIAL ANTI-			+ 30MB HARD DISK R.R.P. = £1092.49/OUR PRICE IS ONLY
SERIES FOUR 2123S MODEM(ATARI-AMIGA)	£304.75	£250.00	STATIC & UNIQUE SURFACE FOR A BETTER GRIP & SHORT			£819.99+VAT!!!
NIGHTINGALE MODEM(AMIGA)MAN.DIAL	£113.85	£99.00	DISTANCE TRAVEL.PERFECT FOR ANY MOUSE ON ANY			
RS232 MODEM CABLE(ATARI-AMIGA)	£19.95	£12.00	COMPUTER.)	£6.95	£5.50	
ATARI SLM804 LASER PRINTER-SLMC804	£1299.99	£1109.99	MONITOR STANDS/VERY ELEGANT AND SPECIALLY MADE TO			ALL PRICES ARE INCLUSIVE OF VAT & DELIVERY UNLESS
EPSON LX800 DOT MATRIX/9 PIN PRINT	£316.25	£277.50	FIT ANY ATARI OR AMIGA COMPUTER.	£29.95	£24.00	OTHERWISE STATED. THESE ARE ONLY SOME EXAMPLES.FOR
STAR LC10-MONO/DOT MATRIX/9 PIN	£297.85	£230.00	UNISTAND PRINTER STAND	£11.95	£9.50	MORE INFORMATION CALL COMPUSHOP1 AT 01738-8400. IF
STAR LC10-COLOUR/DOT MATRIX/9 PIN	£343.85	£260.00	PVC DUST COVER-MEGA STS	£8.95	£7.50	YOU DO NOT SEE IT,IT DOES NOT MEAN WE DO NOT HAVE
STAR LC24-10/24 PIN-MULTIFONT	£458.85	£387.55	PVC DUST COVER-520STFM,1040STFM	£4.95	£4.00	IT.PLEASE CALL US AND YOU WILL NOT REGRET IT. PRICES
STAR LASERPRINTER 8(1MB STANDARD)£2524.25	£1740.89+VAT		PVC DUST COVER-SC1224,SM125	£5.95	£5.00	ARE ALWAYS FLUCTUATING UP OR DOWN.PLEASE CALL FOR
EIDERSOFT GRAPHIC TABLET-ATARI/AMIGA£343.85	£239.03+VAT		DISK BOXES: 40"3.5" DISKS	£8.95		THE LATEST INFORMATION AND FOR AVAILABILITY. STOP
MICRON 2MB MEM EXP -A2000	£510.00	£370.42+VAT	80"3.5" DISKS			PRESS. LOOK
MICRON 2MB MEM EXP -A500/A1000	£565.00	£391.72+VAT	100"3.5" DISKS			31/2" DISCS(DSDDD): 10 FOR
PRO RAM2000(8MB RAM)UNPOP.	£276.00	£198.00+VAT	120"3.5" DISKS			20 FOR
FLICKER FIXER	£396.75	£281.50+VAT	50"5.25" DISKS	£8.95	£10.95	40 FOR
GENLOCK A500/A2000-(A8802)	£299.00	£212.60+VAT	120"5.25" DISKS	£13.95	£12.95	AND 50 FOR
PROF GENLOCK A500/A2000-(A8802)	£862.50	£605.00+VAT				FOR THE BEST PRICES FOR ALL ATARI-AMIGA HARD-
PERFECT VISION(REAL TIME V.DIGIT.)	£199.00	£151.13+VAT				WARE(COMPUTERS,PERIPHERALS AND ACCESSORIES) CALL
						COMPUSHOP1,AT 01738-8400.



Make cheques / Postal Orders payable to: Apolonia Software, and send to "Apolonia Software, Dept NCE120189 South Bank Business Centre,Unit 25(M), Thames House, 140 Battersea Park Road, London SW11 4NB. Mail order only. Speedy delivery. No hidden extras!

Apolonia Software The company that cares!



The unsound and the fury

Part VII: As the industry's dirty tricks made Amstrad furious, so the firm's later machine launches made the industry puzzled. William Poel proffers the penultimate episode in the Alan Sugar story

When it comes to being incandescent with rage, few can hold a candle to Alan Michael Sugar. He was at his most utterly furious at the time of the infamous "PC 1512s overheat" tale doing the rounds in autumn '86. The machines were said to be incapable of supporting certain types of power-hungry networking cards.

The storyette reached the rumour mongers, having been initiated by one of Amstrad's competitors (which was never actually named, but is probably the reason for the cracks in the M25 as it passes by Brentwood). Some of the regular PC press who had taken a dislike to the abrupt manner of Amstrad leapt gleefully on this story, with their usual macabre lust for bad news and scare stories. Mr S duly went through the roof.

A feature in the *Sunday Times* was quickly compounded by a leader in *PC Business World*...which was shortly afterwards the recipient of legal communications from an outraged Amstrad.

Proven lawyers

For by now, Amstrad had decided that it should expand its staff base, and before hiring anything approaching a PR officer and department, it had chosen to put a lawyer or two on the books. And jolly zealous chaps they are too. If journalists and competitors don't manage to get "confronted" by Amstrad's legal department, they aren't trying.

When Epson claimed proprietary use of the term LQ (letter quality), the fur began to fly, as Amstrad decided to apply this to its range of printers. It was fun at the time, but the action fizzled out when Epson climbed down. But the real irony of all this is the fact that the term PCW was lifted (from Minolta, which had earlier launched the PCW1 computer wordprocessor). And the cute OA (office automation) logo on the PCW badge appears to have been originated by Panasonic,

With fans like that...

Along with the realisation that stakes in the business game attracted dirtier tactics on the part of competitors (who were generally not as comatose as those he had confronted in the world of home computers), came Alan Sugar's famous remarks on the subject of giving the customer what he wanted, and if that meant fans and pink spots, then so be it. The stuffy old City regarded this remark as unduly flippant from a man who was locked in mortal combat with the epitome of everything the City adores (IBM), and it has been quoted frequently when share analysts feel like haunting Amstrad when it is in the throes of one of its "downratings". Coupled with the notion of selling "personal nuclear weapons", Mr S. was widely deemed a rum old cove.

and since Amstrad is a large customer of Panasonic's, I guess an expedient blind eye was proffered.

Now, if anyone had tried to do the same with any Amstrad branding device, or even something remotely and tenuously linkable with same, then stand by for writ to be nailed to the mast. This is commercially sound and thoroughly aggressive posturing, but typifies the 'one rule for them but we can do what we like' approach that soured relations between the increasingly bully-boy Amstrad and the rest of the trade during this phase of Amstrad's inexorable progress.

But the underlying lesson had been learned at Amstrad. The gloves were off. Now that it was in the big league for real, an air of secrecy descended on Amstrad Towers with a vengeance.



• Sugar: Public profile rising, but problems mounting

At the time, the money was on Amstrad to have a 286 AT ready to go, and there was consternation when only the 8086-based 1640 appeared in 1987. All talk of RAM shortages making it impractical was bluff: RAM could be diverted from the lower ticket value items, if necessary.

Quite how and why Amstrad failed to produce a 286-based system at such a vital moment is still a mystery to me (and most others). It was unquestionably an error of judgement. I can only imagine that its great cloak of secrecy effectively prevented the man who needed to know about market trends from knowing that a 286 was a must for a serious presence in the business marketplace.

Just look at the succour and encouragement Amstrad's lack of a 286 system has provided the cloners and importers. Walters, NTS, Opus etc all heaved a huge sigh of relief when it was apparent that Amstrad had utterly missed its marketplace.

Meantime, other battles were being fought. The PPC portables launched in early 1988 were met by a mixture of astonishment (the price including a 2400 bis modem was not then much more than a modem alone) and hilarity at the indifference of the flip-up display. The LCD display was and is truly lifeless when compared to decent backlit offerings, and although as ever Amstrad excuses itself on the grounds of cost, I would wager that most PPC owners would pay an extra £50 for a serious LCD.

This impossibility of an internal hard disk and the rather "modest" battery life both took the product out of the running for serious corporate users, but there seem to have been more customers willing to make do than these observers (including me) would have thought at the outset.

The Alan Sugar Story

Other end of the spectrum

Elsewhere, the Sinclair arm of the operation was continuing to defy gravity and sell significant numbers of virtually unchanged Spectrum machines. They were sporting a version with the (surprise) 3" disk that managed effectively to blend the Amstrad 6128 and traditional Sinclair styles. Prior to the +2A, the basic Spectrum remained largely untouched, ensuring no problems with compatibility. Thus the +3 was a tempting opportunity for owners of earlier 'Speccies to simply obtain a classier lump of hardware without any software obsolescence.

It's a pity that the ST and Amiga challenge has (thus far) been declined. Both MEJ and Locomotive have the talent to give those markets a run for their money, and Amstrad has the money to give them the runs...so to speak. Maybe it will yet emerge in the form of an add-in card for the PCs? Now that would be a creative solution.

So when 1988's launch fever began to build, the marketplace anticipated efforts to catch up and overhaul the problems created by the missing 286. There was much speculation about PS/2 compatibility, Micro Channel Architecture and the rest.

But when the launch arrived, Amstrad broke its rules about pre-announcing, and showed a generally lacklustre range in the new PC200 series. It seems that as the quality of Amstrad brochures has gradually drifted towards the industry standard for gloss and panache, so the products have

Sugar bags airtime

When Alan Sugar appeared on the Wogan Show, there was speculation that his PR adviser had managed to wire electric shock apparatus to delicate parts of the Sugarian anatomy (his wallet). The aim would've been to prevent him rollercoasting into a typical Sugar tirade against the establishment, thereby adding to the already substantial shock to the share price caused by the Stock Market crash. Whatever, Sugar's performance was far from vintage stuff, with his restrained performance replacing the customary incisive wit and perception.

Since then, the great man has appeared on the box endorsing the Department of Trade & Industry's 1992 campaign, and is well on the way to becoming a minor celebrity. Sir Robin Day's *Question Time* surely beckons...

lost their cutting edge.

The Sinclair PC200 also appeared last Autumn. This was received in the wake of the dull performance of the Olivetti PC1 - an almost identical concept and presentation.

In view of the strenuous efforts made by Alan Sugar at the launch to explain problems due to RAM shortage, it seemed as if diverting RAM to the curious PC200 was an act of some contradiction, if, as he claimed, this was the reason for the late arrival of the sorely-needed 286 and 386 systems. ●

NEXT WEEK:

Whither Amstrad?

Just how does Amstrad stack up these days? And what is Alan Sugar planning next?

Mighty quintet steams in on cue

Andy Storer ventures into the future and takes to the skies to go off-world for a spot of strategy, billiards, and assorted carnage



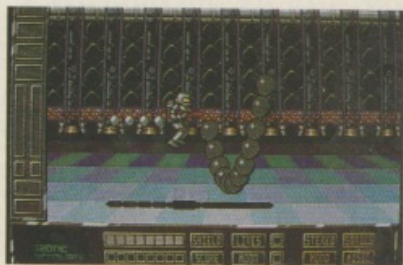
BILLIARDS SIMULATOR INFOGRAMES

Out on the ST later this month is the first Billiards sim we know of, from French graphic geni Infogrames. Catering for either one or two players, it offers a choice of three cue types, differing values of cushion and table friction, rebound and spin effects.

The multi-viewpoint game also allows you to choose strength of shot, angle and ball placement. As it's French billiards you won't be surprised to learn there are no pockets – this game's all about scoring points from cannons.

GUARDIAN MOONS MICRODEAL

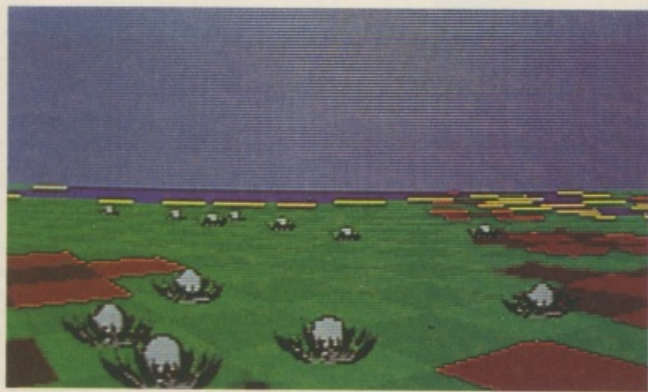
A varied five-stage multi-directional blaster featuring parallax scrolling and interstage animated graphic sequences that include 40 on-screen colours at any one time, *Guardian Moons* certainly sounds superior. With an additional level called Ridiculous – a complex demo of animated horizontal scrolling – you can bet it'll look very good too. The aim? Save the Earth by taking out eight psycho-killers by becoming one yourself.



ARCHIPELAGOS LOGOTRON

In what sounds like an interesting fusion of *Sentinel* and *Virus*, you are floating above a 100-island world attempting to build bridges and find an Obelisk you must destroy. Your enemies are trees, eggs and a Beachcomber – a wanderer who turns land to

sand and sand to water. Featuring fabulous 3D landscapes, *Archipelagos* looks to provide a unique combination of strategy, in-depth gameplay and alternate reality. Due out in a universe near you on ST, Amiga and PC in spring.



F-16 COMBAT PILOT DIGITAL INTEGRATION

Riding the slipstream of Mirrorsoft's *Falcon*, comes the latest sim off the General Dynamics production line. Due out on ST, PC, Amiga and C64, *Combat Pilot* takes you from the crewroom to the hangar, through pre-flight training to the cockpit of the 'latest hi-tech version' of the F-16. There are five training

areas – air to air interception, counter-air operations, interdiction strike, battlefield ground support and reconnaissance – which need to be mastered before you can tackle operational status with one of eight squadrons. Work your way through the sorties and it's onto a multi-mission war game, Operation Conquest.



CUSTODIAN HEWSON

From the same team of Hinsley and Brownjohn that will one day bring you the long overdue *Verminator*, comes this little beauty – a superior shoot-em-up set in a tomb you must protect. You're up against waves of aliens and gain points by collecting energy-absorbing pods and destroying end-of-level guardians. To help you in this mission are shells and demolition rockets, electro bolts, fireballs, multi-plasmas, laser turrets, homing missiles and Megaclear smart bombs.



It's best to buy NOT one game BUT two games or more from the club that gives you TWO for less than the price of ONE

Special Reserve

TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE
AMIGA	ATARI ST	IBM	AMIGA	AMIGA or ST	AMIGA	AMIGA or ST	AMIGA, ST or IBM
Falcon Captain Blood	Falcon Captain Blood	Falcon Captain Blood	Rocket Ranger Three Stooges	Elite Xenon	TV Sp Football (USA) GFL Ch Football (USA)	Starglider 2 Skychase	Football Manager 2 GFL Ch Football (USA)
NOT 54.94 BUT 24.98	NOT 44.94 BUT 22.47	NOT 59.94 BUT 28.98	NOT 59.98 BUT 26.98	NOT 44.94 BUT 22.46	NOT 54.98 BUT 22.98	NOT 44.94 BUT 21.46	NOT 44.94 BUT 17.96
TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE
AMIGA or ST	IBM	AMIGA or ST	AMIGA	ATARI ST			
Galdregon's Domain Captain Blood	Sherlock Lurking Horror	Xenon Skychase	Pacmania Three Stooges	Purple Saturn Day Captain Blood			
NOT 44.90 BUT 19.96	NOT 49.98 BUT 12.98	NOT 39.98 BUT 15.98	NOT 49.94 BUT 20.96	NOT 49.90 BUT 22.46			
TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE
AMIGA, ST or IBM	AMIGA	AMIGA or ST	AMIGA or ST	AMIGA or ST			
Champ Basketball Champ Baseball	Sword of Sodan Xenon	Fish! Silicon Dreams	Superman Champ Basketball	Menace Captain Blood			
NOT 49.98 BUT 12.98	NOT 46.98 BUT 23.46	NOT 44.90 BUT 22.42	NOT 49.94 BUT 21.46	NOT 44.90 BUT 20.96			
TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE
AMIGA or ST	ATARI ST	AMIGA, ST or IBM	AMIGA or ST	ST or AMIGA			
Turbo Cup Skychase	Teenage Queen Star Wars	Universal Mil Sim Captain Blood	Fed. of Free Traders Defender of the Crown	Speedball Champ Baseball			
NOT 39.98 BUT 19.97	NOT 39.90 BUT 19.92	NOT 49.90 BUT 22.46	NOT 59.98 BUT 27.94	NOT 49.98 BUT 21.48			
TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE
AMIGA or ST	IBM	AMIGA	AMIGA (1meg) or ST	AMIGA or ST			
Heroes of the Lance Defender of the Crown	Infocom Solid Gold Lurking Horror	Photon Paint Defender of the Crown	Dungeon Master D.M. Solution Book	Hostages Xenon			
NOT 54.98 BUT 24.94	NOT 49.98 BUT 21.98	NOT 99.98 BUT 46.98	NOT 31.94 BUT 15.47	NOT 44.94 BUT 22.46			
TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE	TWO for the price of ONE
IBM	ATARI ST	AMIGA	ATARI ST	AMIGA or ST			
Elite Tracker	STOS Star Wars	Batman Champ Baseball	Batman Champ Baseball	Track Suit Manager GFL Ch Football (USA)			
NOT 49.90 BUT 23.42	NOT 49.90 BUT 24.46	NOT 49.94 BUT 21.46	NOT 44.94 BUT 18.96	NOT 44.98 BUT 18.98			
WE SUPPORT AMIGA, ATARI ST, IBM, MAC, C64, ATARI 800, SPECTRUM, AMSTRAD CPC & PCW SEND S.A.E FOR FULL LIST		TWO for the price of ONE AMIGA, ST or IBM Lombard RAC Rally Captain Blood NOT 49.90 BUT 22.46	TWO for the price of ONE AMIGA Roger Rabbit (1MEG) Three Stooges NOT 59.98 BUT 28.96	MYTH by MAGNETIC SCROLLS only from OFFICIAL SECRETS... THE CLUB FOR PEOPLE WHO WANT MORE			

Prices include U.K. post and packing. All products are selected for quality, individually boxed and new. We only sell software to members of *Special Reserve*. If you are not already a member please include £4.00 membership fee. It's well worth joining as members receive our expertly written Buyers Guide three times each year, catalogue list, our special folder and membership card as well as the opportunity to choose from over 600 products which we sell individually at amazing prices. We're miles cheaper than elsewhere, if you don't believe us (many don't) please send a stamped addressed envelope for our full price list and details.

NAME _____ NEW C3
ADDRESS _____
COMPUTER _____ MEMBERSHIP £4.00
GAMES { _____
GAMES { _____
CREDIT CARD NO. _____ TOTAL _____

Cheque, Postal Order, Visa, Access or AmEx.
Send your order by post or phone 0279 600204.
We add 50p surcharge per game for telephoned orders.
(BBC orders: £5.00 membership, add 70p per game, credit cards only)
Special Reserve, P.O. Box 847, HARLOW, CM21 9PH
Special Reserve is a trading name of Inter-Mediate Ltd
All offers are subject to availability

FUTUREPLACE COMPUTERS

TELEPHONE: 01-692 8700

12 Loampit Hill
Lewisham
London
SE13 7SW

ATARI ST & AMIGA OWNERS WHY PAY TOP PRICES ALL GAMES SOFTWARE AT 30% DISCOUNT

EXAMPLE PRICES	ST
Thunder Blade.....	14.00
Night Hunter.....	14.00
Lombard Rally.....	17.50
Double Dragon.....	14.00
Super Hang On.....	14.00
Speedball.....	17.50
Pacmania.....	14.00
Hostage.....	17.50
Spaceracer.....	14.00
Falcon.....	21.00
Eliminator.....	14.00

3 1/2	DOUBLE SIDED DISKS DOUBLE DENSITY 135 TPI	Price
10		£8.90
25		£22.00
50		£43.00
100		£84.00

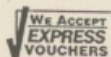
Discount Chart

RRP	OUR PRICE
£12.99	£9.00
£14.99	£10.50
£15.95	£11.00
£16.95	£12.00
£17.95	£12.50
£19.99	£14.00
£22.95	£16.00
£24.95	£17.00
£29.99	£21.00

Atari Super Pack	349.00
Amiga 500 + Modulator	369.00
Star LC10 Colour Printer	245.00
Citizen 120D Printer Parallel Interface	130.00
Philips CM8833 Colour Monitor	235.00

Atari Mouse Extender	5.95
Atari Two Scart Lead	14.99
Mouse Mat	4.99
Amiga Cumana Drive	102.00
Amiga Onemeg Upgrade	149.00
100 Cap Disk Box	9.95
50 Cap Disk Box	7.50

Shop Hours Monday to Friday 10am - 6pm.
Saturday 9am - 6pm



CREDIT CARD HOTLINE 01-692 8700

ACCESS VISA DINERS CLUB AMERICAN EXPRESS



Free delivery on all hardware. Software add £1.00 per order. All prices include VAT CWO to Futureplace Ltd. Also Available to order MOBILE PHONES and FAX MACHINES

SuperGame SuperTips

So. You were given a stack of new computer games for Christmas and have got bogged down on all of them. Here's the perfect antidote: expert playing tips on five of the season's best-selling titles. Time to dust off that wrapping paper...

● AFTERBURNER



and then press the '>' key to advance to the next stage.

The quickest way of reaching the later levels of Activision's conversion of *Afterburner* is to cheat! Start the game as normal, pause the action and type in 'AGES' (which is Sega backwards)

● THUNDERBLADE



On the Amiga and ST, wait until the game has finished loading and the high score table has come on. When the digitised helicopter picture appears, type in 'CRASH'. The screen then flashes to signify that the cheat mode is active. To skip straight to the next level, press the 'HELP' key on the Amiga, and the 'UNDO' key on the ST.

Spectrum owners have to press '2' for the joystick and keyboard option, then press 'G' and 'O' together. Again, the screen flashes to show that the cheat mode is active, and accessing the next stage is achieved by pressing the 'ENTER' key.

US Gold's conversion of Sega's helicopter gunship shoot-em-up has a built-in cheat mode to enable levels to be skipped. This is only available on the ST, Amiga and Spectrum. C64 owners will have to rely on skill and patience to complete their versions.

● OPERATION WOLF

To make the C64 version of *Operation Wolf* a touch less difficult, the listing below provides infinite bullets, grenades and energy. Simply type it in, save it (just in case) and then RUN it.

```
10 DATA 104,173,32,208,96,169,128,133,157,32
20 DATA 86,245,162,32,160,0,142,84,3,140
30 DATA 85,3,96,72,169,173,141,35,137,169
40 DATA 165,141,136,136,141,169,140,76,52,3
50 FOR A=820 TO 824:READ B:X=X+B:POKE A,B:NEXT
60 FOR I=53230 TO 53264:READ A:X=X+A:POKE I,A:NEXT
70 IF X=4525 THEN SYS 53230
80 PRINT "ERROR IN DATA"
```

Spectrum owners wanting to take a shot at the last level of *Op Wolf* can do so by loading the 128K version in 48K mode. Strangely, the program runs - and starts on level six!

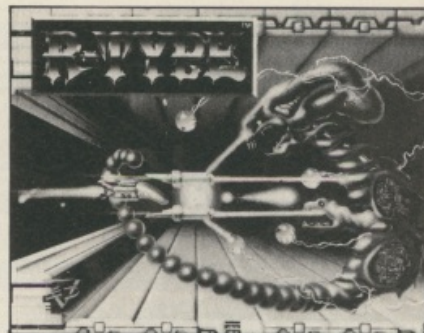


● R-TYPE

Irem's amazing shoot-em-up from Activision is pretty tricky at the best of times. However, ST owners are treated to a useful listing below, which makes the game considerably easier. Enter the program in ST Basic and save it out for future use. Place *R-Type* disk A in the drive and RUN the program.

Lines 60 to 80 provide the following effects: 60 gives infinite credit; 70 installs infinite lives; and 80 retains collected weapons after the ship has been destroyed. By including any or all of these lines, the difficulty level of the game can be varied to suit.

```
10 ADDR=&H7FD00
20 FOR F=0 TO 37 STEP 2
30 READ W$:POKE ADDR+F,VAL("&H"+W$)
40 NEXT F
50 BLOAD "RTYPE.DAT",&H50000
60 POKE &H50004,&H100
70 POKE &H50F5E,&H6026
80 POKE &H50EDA,&H6000:POKE &H50EDC,&H82
900 CALL ADDR
100 DATA 42A7,3F3C,0020,4E41,46FC,2700
110 DATA 41F8,0400,43F9,0005,0000,203C
120 DATA 0000,55FA,20D9,51C8,FFFC,4EF8,0408
```



guardian with the force at the rear. As the eye appears it contacts the force not the ship. Also, the snake cannot touch the ship in this position, but keep firing to destroy the snake's segments.

3) Completely destroy the underside of the ship, and then stay near to the yellow block, close to the ground. This way the mothership passes overhead without crushing the R-9. At the far end of the vessel, blow up all

GENERAL TIPS

(Spectrum version)

- 1) Reflective lasers are the most useful. The circular lasers are more powerful, but merely fire ahead and really only as effective as bullets.
- 2) On the fourth and fifth levels, it's best to stay near the middle of the screen, since aliens attack from all sides.
- 3) Homing missiles only home in on objects in front of the ship, so if a target cannot be hit, move to the left of it.
- 4) Keep collecting the reflective laser icons; the laser beams grow in length and are thus more useful.
- 5) The large robots on level six cannot be destroyed; they must be avoided.

END OF LEVEL GUARDIANS

- 1) Destroy the guardian's eyes, and then detach the force so that it lies against the head in the monster's stomach. It is this small creature which must be destroyed, and the concentrated firepower soon sees it off.
- 2) Hover directly above the middle of the

the blue guns and wait for the ship to stop. Switch the force to the rear of the R-9 and despatch it along the top of the mothership, finally guiding it down to destroy the purple piston.

4) Destroy all the pods before the guardian appears. Put the force on the rear of the R-9, then wait in the bottom right hand corner. As one section of the guardian drops down the left side, shoot the dome with reflective lasers or despatch the force when it is in line. When the first part has blown up, move quickly across to the left hand corner and deal with the second section in the same way. The third section is then easily dealt with.

5) The guardian approaches from below, so watch out. A series of white blobs appear, and these are best dealt with by despatching the force into the centre of them, dodging any that come near. When all the blobs have been removed, a ship is revealed beneath. Simply hit the flashing square to blow up the craft.

● BATMAN

Ocean's *Batman* game is a tricky arcade adventure which profits from a healthy POKeing.

The following C64 listing should be typed in, saved for future use, and RUN. At the prompt, simply enter '1' or '2' for the correct mission, and make sure that the right game is loaded or the program crashes.

```
10 PRINT CHR$(147)
20 FOR X=364 TO 400:READY:C=C+Y:POKE X,Y:NEXT
30 IF C<4096 THEN PRINT "ERROR IN DATA":END
40 INPUT "DO YOU REQUIRE INFINITE EVERYTHING FOR PART 1 OR 2?";B
50 IF B=2 THEN POKE 394,210:POKE 395,126
60 SYS364
70 DATA 169,128,133,157,32,86,245,169,32,141,84,3,169
80 DATA 134,141,85,3,169,1,141,86,3,96,72,77,80
90 DATA 72,169,181,141,159,125,104,173,32,208,96
```



AT £9.95

WE'RE REALLY TALKING!

FREE MODEM
with annual subscription

Now, you can turn your computer into a communications terminal that will download free software, access up-to-the-minute computing information, play exciting multi-user games, talk to other people (and computers) – and a lot more – all for just £9.95.

In other words, you can now join Miconet* – and discover a whole new world – for less than half the normal price if you apply before March 31st 1989.



FREE SOFTWARE

On Miconet you can browse through and extensive software library of free programs, select one and then download it.

We now have software for all popular machines, from the Spectrum to PC compatibles, including the Atari ST and the Amiga.



INFORMATION

Miconet is also a computer magazine. Our computer news area is updated every day, so there's no better way to stay up-to-date, and our software reviews and features for all popular micros mean Miconet members are

always better informed.

Add to this Prestel's massive database and you'll have all the facts at your fingertips.



ENTERTAINMENT

Miconet is not just informative, it's also a lot of fun! As a member you'll have access to a range of games, including the UK's most popular multi-user game, Shades, where the action is live and so are your opponents!



COMMUNICATIONS

Join Miconet and use your computer to communicate with thousands of other users. From electronic mail, telex and fax to chatlines and teleconferencing, Miconet lets you do the talking.

Low Cost

And the good news is that at £9.95, not only is your first quarter's membership to Miconet now less than half price, but using

Miconet starts at just 50p an hour – and that includes telephone charges! Wherever you are, Miconet is just a local phone call away.

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: _____



NCE/SP 12 01 89

MICONET

* 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.

● This week we review six of the best titles currently available for the PC.

Zak McKracken and Looking For Love (not forgetting *California Games* on the Amiga) go for an amusing approach, while *Battle Chess* and *Strike Fleet* offer more sedate challenges.

It looks like 1989's going to be a great year for PC owners!

BATTLE CHESS

ELECTRONIC ARTS

PC • £24.95dk
Also on Amiga

After debuting on the Amiga, *Battle Chess* was met with great acclaim for its graphics and sound, tempered by an average gameplay verdict. So, given the vast gulf between PC and Amiga specs, is a purchase worth the risk?

● GAMEPLAY

Featuring ten levels of difficulty and an opening library of 30,000 moves along with over three megabytes of 3D animation, *Battle Chess* sets out to beef up what might be termed the most active aspect of chess – namely the taking of pieces. Here, animated combat accompanies all captures and adds an element of humour to strategic seriousness.

As with most chess programs worth their salt, you can move by keyboard or mouse, reload and save games, set up positions for problem-solving, force, take back and suggest moves and replay whole games. In addition, you can also play games by modem, thus adding a new dimension to games by post or telephone.

Considering that on level 9 the computer takes over 21 minutes to make its move you can be assured of some strong competition.

● GRAPHICS AND SOUND

We could only test *Battle Chess* on a CGA card but at the end of the day, graphics are not that important in Chess in any case. The pieces are nevertheless well defined and animation smooth enough, although once you've made a move you won't necessarily always want to sit through the sometimes painfully slow animated sequences.



CGA graphics: just about adequate

Luckily there's a 2D view of the board too, which dispenses of the more indulgent aspects of the game. Sound, which can be turned off and on, is not all that fantastic, and concentrates on supplying cartoon spot-effects to the animated action.

● OTHER VERSIONS

The Amiga version does of course leave the PC one standing. In both graphics and sound there's a whole world of difference, but then you'd expect that wouldn't you?

● EXPRESS VERDICT

Not bad for a souped chess prog for beginners. While the strength of play is relatively weak compared to, say, *Colossus X* on the ST, *Chessmaster* on the Amiga or *Sargon* on the PC (with its library of 67,000 moves), there's still enough here to impress.



Andy Storer

CALIFORNIA GAMES

EPYX/US GOLD

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

California Games is another in the long line of very successful Epyx sports sims, involving six Californian-based sports events: Half Pipe Skateboarding, Foot Bag, Roller Skating, BMX Bike Racing, Flying Disk (frisbee to you and me) and the obligatory Californian pursuit – Surfing.

● GAMEPLAY

California Games allows one to eight players to compete or practise in individual or all six events in a bid to achieve the accolade of Californian Champion and win loads 'a' trophies.

Each event involve differing tactics with the basic theme of joystick-waggling at the right time and the right place, with the skill factor being on how successful you are at making these decisions. The events are in true laid-back Californian style, with debonair and skillful manoeuvres helping you achieve far better scores and bonuses.

Half Pipe Skateboarding and Foot Bag place you on a static screen, while the other events are played over a horizontally-scrolling backdrop. Each event contains many nice little touches, such as sharks making an appearance when you get wiped out on the Surfing event, which help to enliven the game and add to its overall interest.



W-w-wipeout ...

● GRAPHICS AND SOUND

Audio-visuals are best described as competent but not outstanding. They certainly don't exploit the Amiga's graphics and sound hardware to the full.

The sprites and backdrops seem to be straight conversions from the C64 version, albeit with better resolution and colour. Surprisingly, the audio comprises non-sampled sound effects and tunes, making them sound clearer but a little simplistic when compared to the more conventional sound-sampling method.

● OTHER VERSIONS

The 8-bit versions can now be found on the compilation *Giants* by US Gold, which also includes *Out Run*, *Gauntlet II*, *720°* and *Rolling Thunder*.

● EXPRESS VERDICT

California Games is quite an enjoyable game, but it has got problems – namely a lack of lasting interest (due to its limited number of events), and each event being rather too easy to complete. Therefore *California Games* is probably best suited to the younger Amiga gamer.



Rik Haynes

HOTBALL

SATORY

ST • £24.95dk
Also on Amiga

Hotball is a football simulation from a French software company called Satory, and includes its own



Computer controlled player about to score an own goal?

four-player joystick adaptor (which doubles as an anti-pirating device).

● GAMEPLAY

Not much to say, except that the game is viewed in an overhead fashion on a vertically-scrolling pitch, with you playing against an opponent (either computer controlled or one of the possible three human players) in a timed match of football.

During play you have a range of possible moves such as kicking the ball at ground level, at 45° angles or into the air, which you have to master if you fancy your chances as footballer of the year.

Perhaps the worst feature of the game is the infuriating wait before play continues after scoring a goal – you want to get straight back into the action, not witness a crowd cheering.

● GRAPHICS AND SOUND

Audio-visuals are barely adequate, including jerkily-moving sprites with only a few frames of animation and very simple sound spot-effects.

Of particular note is the annoying sampled sound-track which continually repeats a few bars of music and will either drive you mad or have you quickly reaching for the volume control.

● OTHER VERSIONS

Hotball is also available on the Amiga, but we haven't got our hands on a copy yet.

● EXPRESS VERDICT

Despite *Hotball* being supplied with its own four-player adaptor, it fails to provide an enjoyable game of football and isn't blessed with state-of-the-art audio-visuals to compensate for this deficiency.

Overall we'd go for *International Soccer* by Microdeal which is a better football sim in gameplay and audio-visuals, is £5 cheaper, and also has a four-player option (the adaptor allowing this costs an extra £6).



Rik Haynes

NIGHT HUNTER

UBI SOFT/ELECTRONIC ARTS

ST • £19.99dk
Out in March on Spec, C64, CPC, Amiga, PC

Night Hunter allows you to take on the persona of a member of the living dead, i.e. a vampire, in a frantic search to seek out some holy medallions. These protect the general public from your blood-sucking exploitations. All this so that that old vampire, Count Dracula, can rule the world and live (die?) happily ever after.

● GAMEPLAY

Unfortunately for you, Professor Van Helsing, ace vampire-hunter, has heard about your little adventure and has formed an army of vampire-killers and laid anti-vampire



Night Hunter can drive you batty at times!

traps which you'll have to negotiate in this platform exploration type game.

Luckily, as a vampire you can change shape into either a bat or a werewolf and back to a vamp again, depending on what type of hazard you encounter in your travels. On your travels you pass through some Gothic-style buildings, looking like something out of a Hammer horror movie.

● GRAPHICS AND SOUND

The graphics aren't too bad and contain some nice backdrops and sprites, although the sprites are a little on the small side.

The sampled sound spot-effects are simple but appropriate.

● OTHER VERSIONS

No details on the other versions are currently available.

● EXPRESS VERDICT

Night Hunter is an agreeable release, which conjures up a good atmosphere with its audio-visuals and gameplay, and will appeal to the expert and novice explorer alike.

★ ★ ★

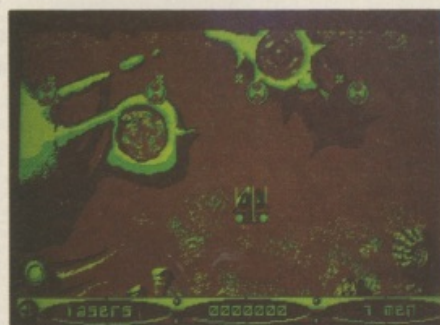
Rik Haynes

PHANTOM FIGHTER

EMERALD SOFTWARE/MARTECH

PC • £24.99dk
Also on Amiga

Phantom Fighter is another scrolling shoot-em-up, one which supports some great backdrop graphics backed up by tough gameplay. It's designed and programmed by a new Ireland-based software design team called Emerald Software.



Vertically-scrolling shooting mayhem in level one

● GAMEPLAY

You've been given the task of controlling a spacecraft, and must travel through sand storms, volcanoes and lunar surfaces wiping out any alien craft that you meet along the way.

Fortunately, some of these aliens yield collectable pods which'll give you more powerful weaponry; which you'll need if you're going to take out the well-armed and armoured alien guardians at the end of every level.

● GRAPHICS AND SOUND

Visuals consist of very well designed backdrops, slightly marred by the average sprite designs that accompany them.

Audio supports the usual range of weapon and explosion sound spot-effects.

● OTHER VERSIONS

Phantom Fighter makes a superior audio-visual outing on the Amiga (of course) but don't hold your breath for the ST version because Martech considers that 'the ST can't handle the graphics'...

● EXPRESS VERDICT

For a scrolling shoot-em-up, *Phantom Fighter* doesn't provide a fast enough response to your control movements, which can be very frustrating at times. Having said that, the backdrop graphics are very attractive and the game is a tough nut to crack.

At the end of the day *Phantom Fighter*'s yet another shoot-em-up without any truly outstanding features. Nothing more, nothing less.

★ ★ ★

Rik Haynes

LOOKING FOR LOVE

SIERRA

PC £29.99dk
Already out on ST

Given its full title, *Leisure Suit Larry Goes Looking For Love (In Several Wrong Places)*, you'd expect the sequel to 1987's adventure fantasy of the year to be well worth a look-in.

Judging by the original's recent popularity in *The City*, where viruses made justifiable amends for the masses of pirated copies on the loose, this one's already got a guaranteed following. Which is, presumably, why it's appearing on the PC first.

● GAMEPLAY

For adult adults only. Larry wears Grecian 2000 and a white suit with shirt open to the waist and a gold chain round his neck. He's the original blind date nightmare, the most negligible bachelor of the year.

Your aim is to make Larry score and, appropriately enough, you do this by using the joystick. Mouse, keypad or direction keys will also move Larry from encounter to encounter, though, and once in position (ho hum) you're able to enter commands in English to interact with other characters.

As with Infocom adventures, the parser is very smart and humorous, and once you've adopted the practice of looking and examining everything you come across you're easily hooked. As the parser understands Flirt, Give, Grip, Hold, Kiss, Lift, Play, Push,



A seedy and amusing reflection of life as a nerd in America

Smell, Swing, Taste and Touch, you can guess your main objective. And they're only some of the documented keywords!

You have to be outrageous to succeed in this game and, as the author states in the introduction, no-one ever caught a social disease from a keyboard. Using pull-down menus you can adjust Larry's speed or the volume of the accompanying music. Crucially, you can also adjust the Filth level. Seeing as how this will usually default to the max, it's fortunate you can save games when you're exhausted.

● GRAPHICS AND SOUND

A 3D animated adventure which takes you from jet airliners to TV dating shows to South Pacific Islands, Larry's graphics are above average for the machine and, even with the usual negligible sound effects of the PC, add an element of humour to the mass awaiting you in the parser.

● OTHER VERSIONS

There might be an Amiga version out later this year, but for the time being only an ST version is definite.

● EXPRESS VERDICT

Great fun even for those who've never touched a bottle of Grecian 2000 in their lives. *Looking For Love* is a stylishly packaged descent into the seedier realms of Raunchville, USA. As the cover states, 'In the War between the Sexes, don't be an unarmed innocent bystander'.

★ ★ ★ ★

Andy Storer

STRIKE FLEET

LUCASFILM/ELECTRONIC ARTS

PC • £24.95dk
Also on C64 (disk only)

Strike Fleet allows you to take on the role of a strike fleet commander in a naval wargame simulation involving various scenarios, each with its own tasks and objectives. Your ultimate goal is to become Fleet Admiral (picking up any awards along the way) should your strategic skills be sufficient.

● GAMEPLAY

During play you'll have complete control over your fleet, from choosing your flagship to deciding which missile you're going to use to take out an enemy vessel; all controlled by clearly displayed menu options and in-game screens.

Adaptability is the name of the game, though, because the enemy will throw attacks at you from the air, on and below the sea's surface, therefore forcing you to adopt differing tactics as the game progresses.

● GRAPHICS AND SOUND

Visuals are up to scratch with varied and attractive screens featuring a good use of definition and colour throughout (especially EGA graphics), although the view-

port section of the screen is rather small.

Audio is of the usual low quality due to the limited sound hardware found on the PC standard.

● OTHER VERSIONS

Strike Fleet is also available on the C64, where it fares better in the audio department but is only available on disk.

● EXPRESS VERDICT

Strike Fleet offers PC owners the chance to play a slightly different scenario from the average simulation, with a realistic and compulsive representation of the myriad of tasks involved in being a strike fleet commander. It should keep the avid simulation fan occupied for quite some time.

★ ★ ★ ★

Rik Haynes



Getting set-up in the ship yard

THE RELEASE SCHEDULE

AMIGA

20000 Leagues			
Under The Sea	19.95	Out Now	Coktel Vision
Amiga Gold Hits 1	24.99	Out Now	U.S. Gold
Baal	19.95	Early Jan. Psychosis/Psyclapse	
Barbarian II	19.99	Jan/Feb	Palace
Batman	24.95	Mid Jan	Ocean
Billiards	19.95	Mid Jan	Ere/Infogrames
California Games	24.99	Out Now	Epyx/U.S. Gold
Captain Fizz	14.95	Early Jan. Psychosis/Psyclapse	
Circus Games	24.95	Out Now	Tynesoft
Cosmic Pirate	19.99	Jan/Feb	Outlaw
Crazy Cars II	24.99	Imminent	Titus
Dark Fusion	19.99	February 7	Gremlin
Deluxe Paint II			
& Deluxe Print	69.95	Out Now	Electronic Arts
F-16 Falcon	29.99	Out Now	Mirrorsoft
Freedom	19.95	Out Now	Coktel Vision
Galactic Conqueror	24.95	Out Now	Titus
Galdregon's Domain	19.99	Mid Jan	Pandora
Gary Lineker's Hotshots	19.99	February 14	Gremlin
Gauntlet II	19.99	Out Now	U.S. Gold
Hellbent	19.95	Out Now	Novagen
Hotball	24.95	Out Now	Satory
Incredible			
Shrinking Sphere	24.99	End Jan	Electric Dreams
International Karate+	24.99	Mid Jan	System 3
Kennedy Approach	24.95	January 17	Microprose
Manhattan Dealers	24.95	Out Now	Silmaris
Purple Saturn Day	24.95	Imminent	Exxos
Super Hang-On	24.99	Imminent	Electric Dreams
Superman - Man of Steel	24.95	Out Now	Tynesoft
Technocop	19.99	Out Now	Gremlin
Teenage Queen	19.95	January	Infogrames
The Munsters	19.99	Out Now	Again Again
Tiger Road	24.99	January 13	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	February	Melbourne House
Zero Gravity	19.95	Out Now	E.A.S.

AMSTRAD CPC

Afterburner	D	14.99	Imminent	Activision
Afterburner	T	9.99	Imminent	Activision
Barbarian II	D	14.99	Jan/Feb	Palace
Barbarian II	T	9.99	Jan/Feb	Palace
Chuck Yeager's				
Adv Flight Trainer	D	14.95	Early Feb	Electronic Arts
Chuck Yeager's				
Adv Flight Trainer	T	8.95	Early Feb	Electronic Arts
Crazy Cars II	D	14.99	Imminent	Titus
Crazy Cars II	T	9.99	Imminent	Titus
Dark Fusion	D	14.99	February 7	Gremlin
Dark Fusion	T	9.99	February 7	Gremlin
Galactic Conqueror	D	14.95	Out Now	Titus
Galactic Conqueror	T	9.95	Out Now	Titus
Gary Lineker's Hotshots	D	14.99	February 14	Gremlin
Gary Lineker's Hotshots	T	9.99	February 14	Gremlin
Incredible				
Shrinking Sphere	D	14.99	End Jan	Electric Dreams
Incredible				
Shrinking Sphere	T	9.99	End Jan	Electric Dreams
Mini Office 1	T	2.99	Out Now	Summit
R-Type	D	14.99	Out Now	Electric Dreams
Technocop	D	14.99	Out Now	Gremlin
Technocop	T	9.99	Out Now	Gremlin
The Archon Collection	T	8.95	Out Now	Electronic Arts
The Munsters	D	14.99	Out Now	Again Again
The Munsters	T	9.99	Out Now	Again Again
Tomcat	T	1.99	Mid Jan	Players
War in Middle Earth	T	9.99	January 19	Melbourne House

AMSTRAD PCW

Fish!		24.99	End Jan	Rainbird
-------	--	-------	---------	----------

ARCHIMEDES

Fish!		24.99	End Jan	Rainbird
-------	--	-------	---------	----------

ATARI ST

20000 Lgs Undr The Sea	19.95	Out Now	Coktel Vision
Barbarian II	19.99	Imminent	Palace
Batman	19.95	Mid Jan	Ocean
Billiards	19.95	Mid Jan	Ere/Infogrames
Bismark	24.99	Out Now	PSS
Captain Fizz	14.95	Early Jan. Psychosis/Psyclapse	
Circus Games	24.95	Out Now	Tynesoft
Cosmic Pirate	19.99	Jan/Feb	Outlaw
Crazy Cars II	19.99	Out Now	Titus
Dark Fusion	19.99	February 7	Gremlin
F-16 Falcon	24.99	Out Now	Mirrorsoft
Freedom	19.95	Out Now	Coktel Vision
Galactic Conqueror	19.95	Out Now	Titus
Galdregon's Domain	19.99	Mid Jan	Pandora
Game Over II	24.95	Out Now	Dinamic
Gary Lineker's Hotshots	19.99	February 14	Gremlin
Hellbent	19.95	Out Now	Novagen
Hotball	24.95	Out Now	Satory
Incredible			
Shrinking Sphere	19.99	End Jan	Electric Dreams
Iron Lord	24.99	Late Jan	Ubi Soft
Manhattan Dealers	19.95	Out Now	Silmaris
Night Hunter	19.99	Out Now	Ubi Soft
Purple Saturn Day	24.95	Out Now	Exxos
Spitfire 40			
& Strike Force Harrier	24.99	Out Now	Mirrorsoft
Superman - Man of Steel	24.95	Out Now	Tynesoft
Technocop	19.99	Out Now	Gremlin
Teenage Queen	19.95	January	Infogrames
The Munsters	19.99	Out Now	Again Again
Tiger Road	19.99	January 13	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	February	Melbourne House
Zany Golf	24.95	Late Jan	Electronic Arts
Zero Gravity	19.95	Out Now	E.A.S.

COMMODORE 64/128

Action Service	D	14.95	January	Cobra/Infogrames
Action Service	T	9.95	January	Cobra/Infogrames
Circus Games	D	14.95	Out Now	Tynesoft
Circus Games	T	9.95	Out Now	Tynesoft
Dark Fusion	D	14.99	February 7	Gremlin
Dark Fusion	T	9.99	February 7	Gremlin
Exploding Fist +	D	12.99	Out Now	Firebird
Exploding Fist +	T	9.99	Out Now	Firebird
Fish!	D	19.99	End Jan	Rainbird
Gary Lineker's Hotshots	D	14.99	February 14	Gremlin
Gary Lineker's Hotshots	T	9.99	February 14	Gremlin
Grand Prix Circuit	D	14.95	Late Jan	Accolade/EA
Grand Prix Circuit	T	9.95	Late Jan	Accolade/EA
Hostages	D	14.95	Mid Jan	Infogrames
Hostages	T	9.95	Mid Jan	Infogrames
Incredible Shrinking				
Sphere	D	14.99	End Jan	Electric Dreams
Incredible Shrinking				
Sphere	T	9.99	End Jan	Electric Dreams
Iron Lord	D	19.99	Late Jan	Ubi Soft
Iron Lord	T	12.99	Late Jan	Ubi Soft
Jordan vs Bird				
One on One II	D	14.95	Out Now	Electronic Arts
Mini Office 1	T	2.99	Out Now	Summit
Project Firestart	D	14.95	Early Feb	Electronic Arts
R-Type	D	14.99	Out Now	Electric Dreams
Rocket Ranger	D	14.99	January	Cinemaware
Serve and Volley	D	14.95	Out Now	Accolade/EA
Serve and Volley	T	9.95	Out Now	Accolade/EA
StarRay	D	14.95	Out Now	Logotron
StarRay	T	9.95	Out Now	Logotron
Street Gang	T	1.99	Mid Jan	Players
Superman - Man of Steel	D	14.95	Out Now	Tynesoft
Superman - Man of Steel	T	9.95	Out Now	Tynesoft
T.K.O.	D	14.95	Out Now	Accolade/EA
T.K.O.	T	9.95	Late Jan	Accolade/EA
Tank Attack	D	14.99	Out Now	CDS
Tank Attack	T	12.99	Out Now	CDS
Technocop	D	14.99	Out Now	Gremlin
Technocop	T	9.99	Out Now	Gremlin
The Double	T	2.99	Out Now	Summit
The Munsters	D	14.99	Out Now	Again Again
The Munsters	T	9.99	Out Now	Again Again
Tomcat	T	1.99	Mid Jan	Players
War in Middle Earth	D	19.99	February	Melbourne House
War in Middle Earth	T	9.99	February	Melbourne House

BBC

Football Director	D	12.99	Out Now	CDS
Football Director	T	9.99	Out Now	CDS
Mini Office 1	T	2.99	Out Now	Summit

ELECTRON

Mini Office 1	T	2.99	Out Now	Summit
---------------	---	------	---------	--------

IBM & COMPATIBLES

20000 Leagues				
Under The Sea	5.25	19.95	Out Now	Coktel Vision
Abrams				
Battle Tank	3.5+5.25	24.99	Early Feb	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	Mid Jan	Ere/Infogrames
Circus Games	5.25	24.95	Out Now	Tynesoft
Crazy Cars II	5.25	24.99	Imminent	Titus
F-16 Combat Pilot	5.25	24.95	End Jan	Digital Integration
Fast Break	5.25	24.95	Late Jan	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	Early Jan	SSG
Hostages	5.25	24.95	Mid Jan	Infogrames
Manhattan Dealers	5.25	24.95	Out Now	Silmaris
Rackem	5.25	24.95	Out Now	Accolade/EA
Speedball	3.5+5.25	24.99	January	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
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	January 17	Microprose
War in Middle Earth	5.25	24.99	February	Melbourne House
Wasteland	3.5+5.25	24.95	Early Feb	Electronic Arts
Zany Golf	3.5+5.25	24.95	Out Now	Electronic Arts

MACINTOSH

Fish!		34.99	End Jan	Rainbird
-------	--	-------	---------	----------

MSX

The Munsters	T	9.99	Out Now	Again Again
--------------	---	------	---------	-------------

SPECTRUM

Barbarian II	T	9.99	Imminent	Palace
Captain Blood	T	9.95	Mid Jan	Exxos
Circus Games	T	8.95	Out Now	Tynesoft
Dark Fusion	T	7.99	February 7	Gremlin
Exploding Fist +	T	7.99	Out Now	Firebird
Gary Lineker's Hotshots	T	7.99	February 14	Gremlin
Incredible Shrinking				
Sphere	T	9.99	End Jan	Electric Dreams
Mini Office 1	T	2.99	Out Now	Summit
Skateball	T	8.99	Out Now	Ubi Soft
Street Gang	T	1.99	Mid Jan	Players
Superman - Man of Steel	T	8.95	Out Now	Tynesoft
Tank Attack	T	12.99	Out Now	CDS
Technocop	T	7.99	Out Now	Gremlin
The Double	T	2.99	Out Now	Summit
The Munsters	T	9.99	Out Now	Again Again
War in Middle Earth	T	9.99	January 19	Melbourne House

SPECTRUM+3

Barbarian II	D	14.99	Imminent	Palace
Captain Blood	D	14.95	Mid Jan	Exxos
Dark Fusion	D	12.99	February 7	Gremlin
Fish!	D	15.99	End Jan	Rainbird
Gary Lineker's Hotshots	D	12.99	February 14	Gremlin
Mini-Putt	D	14.95	Late Jan	Accolade/EA
Skateball	D	14.99	Imminent	Ubi Soft
Technocop	D	12.99	Out Now	Gremlin
The Archon Collection	D	14.95	Out Now	Electronic Arts
The Munsters	D	14.99	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.

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 1022 14" TV/Monitor inc. full remote control, c/w ST or Amiga cable	£199.00
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/w
★ 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

NEW LOWER PRICE

only £89.95 inc. 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

DISector 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 21MEG	DD 21MEG	SD 32MEG	DD 32MEG
EVESHAM UPGRADED MODELS							
MONO 1512	384.35	484.35	N/A	583.48	683.48	600.87	700.87
	442.00	557.00	N/A	671.00	786.00	691.00	806.00
COLOUR 1512	509.57	608.70	N/A	708.70	807.83	726.09	825.22
	586.00	700.00	N/A	815.00	929.00	835.00	949.00
MONO 1640	474.78	574.78	854.78	673.91	773.91	691.30	791.30
	546.00	661.00	983.00	775.00	890.00	795.00	910.00
CGA COLOUR 1640	614.78	714.78	994.78	813.91	913.91	831.30	931.30
	707.00	822.00	1144.00	936.00	1051.00	956.00	1071.00
EGA (ECD) 1640	764.35	864.35	1124.35	963.48	1063.48	980.87	1080.87
	879.00	994.00	1293.00	1108.00	1223.00	1128.00	1243.00
2086 MONO	578.26	686.96	917.39	777.39	886.09	794.78	903.48
	665.00	790.00	1055.00	894.00	1019.00	914.00	1039.00
2086 CD	717.39	825.22	1056.52	916.52	1024.35	933.81	1041.74
	825.00	949.00	1215.00	1054.00	1178.00	1074.00	1198.00
2086 12" HRCD	808.70	920.00	1147.83	1007.83	1119.13	1025.22	1136.52
	930.00	1058.00	1320.00	1159.00	1287.00	1179.00	1307.00
2086 14" HRCD	900.87	1012.17	1241.74	1100.00	1211.30	1117.39	1228.70
	1036.00	1164.00	1428.00	1265.00	1393.00	1285.00	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! External 3.5" floppy drive (720K) to suit ANY Amstrad 1512 1640 including DD and HD models! Uses no expansion slots £114.95

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 its 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

star

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 ..	£219.00
Star LC10 7-colour version of above printer, inc. 2 extra black ribbons	£269.00
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 DMP3160/3250DI 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

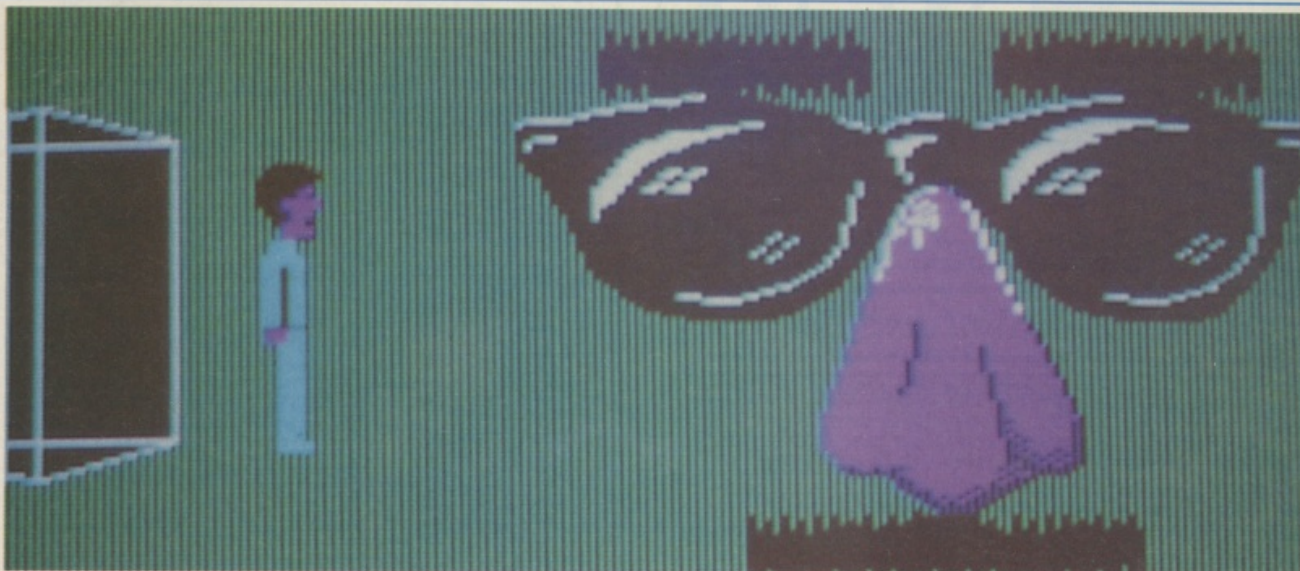
How to order

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



ZAK McKRACKEN

LUCASFILM/US GOLD

PC £24.99 dk
Already out on C64, ST, Amiga

First of the 1989 outings from Lucasfilm, and bringing with it a whole range of cut-down Industrial Light and Magic for the small screen.

Along with *Looking For Love*, reviewed elsewhere in this issue, and all the recent Infocom adventures, this release just goes to prove that America takes its interactive entertainment seriously. That's not to say the subject matter can't be hilarious, just that it's light years ahead of the tired old D&D that passes for adventure over here.

● GAMEPLAY

Zak's a reporter with the *National Inquisitor*, a Sunday Sport type paper. Reporter is probably the wrong term, since most of the stories are fictional, and so when Zak discovers that aliens have built a stupidity machine designed to reduce human IQs, no-one will believe him. That is except for three other nutters who offer to help him solve the game's dozens of puzzles, unmask the aliens and destroy the machine.

You control Zak and command the other characters by constructing sentences with your mouse composed of the verbs and nouns on display. Movement of characters is effected by clicking on Walk and pointing to where in the animation screen you want the character to move to. Punctuating the action are 'cut-scenes' which provide clues and information about characters encountered.

As with all adventures, it's very important to pay

attention to every location and object/character you come across. Unlike most other adventures, though, there's no real way you or any of your colleagues can get killed; your only worry is the amount of cash you have in your pocket.

The accent is firmly on exploring scenarios and puzzles and enjoying the wacko humour. And wacko certainly is the word for the unfolding storyline. You only have to read the accompanying spoof newspaper to get the drift: Alien amusement parks found on Mars, two-headed squirrels, Bigfoots winning records for non-stop kissing, microbuses turning into space shuttles...

● GRAPHICS AND SOUND

The screen is divided into a message line at the top where data and conversation is displayed, and a sentence line at the bottom where you construct sentences that tell all characters what to do. This bottom area also displays an inventory.

Between the two is the animation window, where a camera's eye view of proceedings is relayed. All action is punctuated by a great range of wipes, dissolves and pans, giving the whole game a filmic feel. Animation is fast and, even on a CGA card, sprite design and action hold up well.

● OTHER VERSIONS

The C64 version has a good standard of audio-visuals – with the ST and Amiga versions promising substantial improvements in the audio departments and superior visuals (or course!).



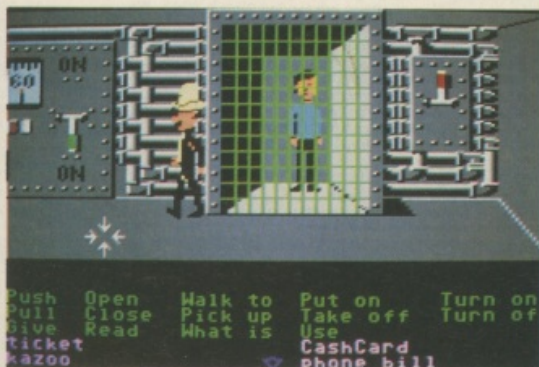
Are you good (bad) enough to be a Sunday Sport type hack?

● EXPRESS VERDICT

It's great to see a company releasing product which advances the scope of interactive fiction. Although the action is let down a little by the graphics and the almost unmentionable sound of the PC, the game is very funny, highly original and worth a look. Once Lucasfilm begin to transfer its film skills to disk there's no knowing where it'll all end.

★★★★★

Andy Storer



C64 Zak: not bad graphics and sound



Trouble in-store for our reporting hero as he confronts the Ed.

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

When you buy your Amiga 500 from Silica Shop, we want to make sure you get the best deal possible. That is why we are giving away the TENSTAR GAMES PACK worth nearly £230, absolutely FREE with every A500 purchased from us. The TenStar Games Pack includes ten titles for the A500, each individually packaged in its own casing with instructions.	
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

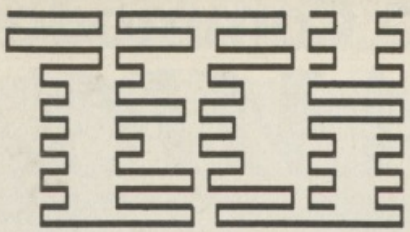
PLEASE SEND ME FREE LITERATURE ON THE AMIGA

Mr/Mrs/Ms: Initials: Surname:

Address:

Postcode:

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



The place for your questions and suggestions

HELP!

Memory problem I

I have a Sanyo 555-2 machine, which I have used for some time. I have become used to it, and it has proved to be very satisfactory. It was originally 128K and I have updated by adding the 16 further memory chips provided by the makers so that it is now 256K. I have also put in a video board so that is now more or less IBM-compatible.

I have recently started to learn C programming and would like more memory. At one time Sanyo had a video board which provided an extra 256K, and they also sold a hard disk drive. Unfortunately, neither of these is available now.

I would appreciate your comments (or those of fellow readers) on these or any other options that may be open to me:

1. Fit larger chips. I have read about 150ns chips. Would these fit in the same sockets as my present chips? Would they all have to be replaced? Where could I get them from?
2. The Zortech compiler manual says: "fit a larger RAM disk". Is this something I could do myself? Could you suggest a source for the disk and what sort of cost might be involved?

DW Wilcock, Oxford

• Unless I'm mistaken, the Sanyo was one of the earliest "PC-compatibles" which – unfortunately – wasn't very compatible at all. However, it does run MS-DOS and offered pretty good value for money.

Unfortunately, being MS-DOS compatible and PC-compatible are two entirely different things. PC-compatibility means you can avail yourself of the enormous range of memory boards, video adaptors, hard disk drives, and other desirable peripherals. As DW has discovered, the Sanyo doesn't qualify.

Expanding memory may be more diffi-

cult than you imagine. Fitting larger chips is a possibility, but you're obviously a little confused: the designation 150ns refers to the speed of the chips, not their capacity.

The first thing to do is to carefully peruse your manuals and find out if the Sanyo is capable of addressing 512K. It ought to be but designers have done stranger things. Next, find out the speed of your existing memory chips.

You can do this by reading the legends printed on their tops. If you used 16 chips to add 128K of RAM, it sounds like you've got 64K-bit chips, eight of which provide 64K-bytes. They'll probably carry a legend something like 4464-12 or 4164-12, or 4164-15. The 64 part tells you they are 64K-bit chips, and the 12 stands for 120 nanosecond, and 15 for 150 nanosecond.

Although it's possible to use faster memory chips, you'll be safer using replacements of similar speeds.

So, assuming your machine can address 512K, and your chips are 150 nanosecond DRAMs, you can try using bigger memory chips. What you want are 256K-bit chips which will be designated 41256-15. (If your chips are 120ns, you need 41256-12s, and so on)

On most PC-compatibles you need not only the obvious eight chips but also a ninth for parity checking, but from what you say the Sanyo apparently doesn't. Make sure. You'll need 16 (or 18) of these to provide 512K.

These will cost about £8 or £9 each, depending on speed, and are available from most serious suppliers, but try Digita-task on 0293 776688.

On your second point, RAM disks are not usually physical objects but part of your main memory set aside for use as a very fast disk drive. So this is simply another aspect of your memory expansion problems.

Finally, for-practical as well as moral support, you probably ought to get in touch with the Sanyo MBC users group.

Write to **MH Syed, Wistaria, 53 Acacia Grove, New Malden, Surrey, KT3 3BP.**

TIP

C64 coders

As each character has an ASCII value, the character with the same value as the required machine code operands can be placed one after the other in a Basic line after a REM statement. For example:

```
1 POKE 770,21:POKE 771,8:REM
[SPACE][Y][CBM+][L][CBMS][CBMM]
```

Type as normal up to the REM statement, then to enter the code:

Press [SPACE] then [Y], next the Commodore key and the [S] key and then the Commodore key and the [M] key.

The line must be the first line of the program. Do not put any spaces in the line other than the one after the REM.

When you list the line it will look very different to when you typed it in, so if you make a mistake you can only change it before you list it.

The two pokes tell the computer where to go if the [STOP] key is pressed.

```
[SPACE][Y][CBM+] =
JSRSA659 – initialise Basic
[L][CBMS][CBMM] = JMP$A7AE – run
J. Raybould, Chesterfield
```

HELP!

Memory problem II

Many thanks for your wonderful magazine which has left the competition behind. I would be grateful if you could help me to understand some things about my computer.

I have a Pioneer PX-7 MSX which has 32K RAM. When I switch it on I get a message on screen saying "28751 bytes free", which changes to "24450 bytes free" when the disk drive is connected.

Why the difference, and why not "32000 bytes free"?

Another question is, when I use the 32K expansion RAM pack to make a total of 64K RAM, why do I get the same bytes free messages as above?

A Munir, Thornton Heath, Surrey

• To begin with, 32K is not 32000 bytes but 32,768 (each kilobyte equals 1024 bytes). So your free memory at power on is little less than 4K short of that.

As to why, I don't know for sure in the case of the PX-7, but all computers provide less free memory than they have total memory. The reason is simply that other things have to map into the memory space.

For example, your Basic interpreter, and the computer's operating system, use up some of your precious memory. Also, screen displays use up at least 1,000 bytes (40 x 25 characters), and more for higher resolution displays, or for colour screens.

So your shortfall in free memory is not at all unusual (Commodore Amiga owners are even worse off – their free memory is usually more than 100K short of the theoretical 512K).

Similarly, when you add a disk drive, you lose roughly another 4K. Some of

this is probably the disk operating system, some of it will be buffer space.

However, the situation with your expansion pack is more difficult to explain. The first question must be: are you sure it's working? If you have some software that you know for certain makes use of more than 32K of RAM then you can test it that way. Or you could write a Basic program to dimension a large array (200 x 200 ought to do it). If Basic runs this, again your RAM expansion is working.

The only other explanation may be that whoever wrote the PX-7 operating system didn't expect anyone to be using more than 32K of RAM, so the free memory messages don't reflect the true amount of memory in the system.

Win a sub!

We want to hear your problems, but we also want helpful hints and tips. As well as the eternal glory of helping out your fellow sufferers,

you could even scoop the weekly best-tip prize of a free 26-issue subscription to this magazine!

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,

TIP

ST freeze

ST owners whose favourite game doesn't have a pause mode may well be interested in this handy little tip.

First make sure you haven't got a printer connected, then press [ALTERNATE] and [HELP] at the same time. Your computer will then freeze up for approximately 20 seconds while it works out why it can't send any data to the printer.

This doesn't work with every program, but when it does it gives you that little bit of time to switch on the video, take the phone off the hook or rescue your leg from the jaws of your pet Doberman.

Steve Baxter, Norwich

HELP!

Budget DTP

Do you know of any good PD or shareware programs that would enable me to try out desktop publishing on a small scale without spending a fortune (I have an Amstrad PC1512)?

Iain Arnell, Portsmouth, Hants

• DTP software is among the most complex you can buy: it needs to understand graphics and graphic actions like scaling and cropping; all about fonts and typefaces including proportional spacing; and it has to be easy to use, providing a comprehensive array of command options including menus, key commands and mouse-control.

And it had better be written in something fast – like pure machine code.

That means no-one is likely to write a DTP program unless they've got a reasonable chance of getting some reward for their efforts. In other words, don't hold your breath waiting for suitable software to reach the public domain.

TIP PC file catalogue

Here's a useful tip for PC owners. To make a file containing the names of all your files (ie, to make a catalogue of disks) make sure that each disk is labelled, both physically and under DOS.

Then, create the catalogue file by typing DIR A: *.* > CATALOG.FIL. Then for your other disks, put each disk in turn into the B drive if you have one (or use DOS's disk-swapping facility if you have only one drive) and type DIR B: *.* >> CATALOG.FIL.

The catalogue file can then be searched using a word processor, or DOS's TYPE command, to find a specific filename and the disk it is on.

Hugo Minney, Witton Gilbert, Durham



TECH TIPS

HELP

Your cheapest option at the moment is *Timeworks Lite*, a slightly cut-down version of the highly-regarded *Timeworks DTP* package, which sells for £49.95. It runs under GEM and provides most of the facilities you'll need (no laser printer support, though).

It's available from Electric Distribution (0954 61258).

TIP

Friendly Amiga

Ever fancied getting a nice, personal welcome from your Amiga every time you boot it up? Here's how.

When the Amiga starts up it automatically reads the *STARTUP-SEQUENCE* file in the *S* directory of the boot disk. This file contains a set of ordinary CLI command lines like:

ECHO "Workbench 1.2"

This makes the Amiga echo the text in quotes to the screen.

First, though, you'll need to make a copy of the *Workbench* disk, since the original has no space for extra files. Insert the copy, restart your Amiga, and get to the CLI prompt as described.

Now make some space by typing
DELETE UTILITIES ALL
DELETE DEMOS ALL

You can now modify the startup process. At the CLI prompt type:
ED S/STARTUP-SEQUENCE

You are now in the (undocumented!) text editor, and can use the cursor and delete keys to modify the text on the screen.

Those of a jolly disposition can even make their Amiga talk to them. Simply press [RETURN] to open up a blank line at the start of the file, then type in the following:

SYSTEM/SAY "Greetings Master. Your slightest wish is my command."

Then save the file by pressing [ESC] and typing [X] for eXit and [RETURN]. You're then back at the 1> CLI prompt.



• Amiga 500: Will it talk to you?

Wait for the disk drive light to go out, then reboot your Amiga and...it speaks to you!

You can put any text you like inside the quotes of the SAY command and have any number of lines of SAY commands.
Brian Templar, Sidmouth

HELP!

Star driver

Having just bought a Star LC-10 colour printer, I eagerly awaited the great colour print-outs that all the reviews spoke so highly of. To my horror not an inkling (pun intended) of colour could I squeeze out of this impressive piece of equipment.

Monochrome print-outs using *Degas* (not *Elite*) were excellent but I

was visualising Bugs Bunny in glorious Technicolor.

Can you suggest where I can find a printer driver for the wonderful LC-10, or any art packages that would run the printer to its full dumping facilities.

Justin Basini, Thames Ditton, Surrey

• Another victim of the great printer driver saga.

First, check your list of printer drivers in *Degas*. Although you're not likely to find the LC-10 (it's a recent printer and *Degas* is old software), you can try any driver for a colour printer. There's a reasonable chance that one of them will work (but it must be a colour printer driver).

Second, get in touch with any of the national ST user groups or public domain libraries - these are the best source of non-commercial software like printer drivers.

Third, you could try the *Cyber* series from Antic (distributed by Electric Distribution, tel 0954 61258). Part of the series includes a library of printer drivers for a variety of printers including Star.

TIPS

Amiga file handling

Ribbons rejuvenated

Here are some tips for the Amiga 500. As single-drive users know, to copy files from one disk to another you must first copy them to RAM. For example:

To copy all the files in the 'C' directory to another disk

Copy C all ram
then

Copy ram: all mydisk:

But I have RAM included in the path, so I also have some commands in RAM which I use for accessing other disks without inserting *Workbench* all the time. So to copy files from RAM to a disk means that the commands are copied too, which I don't want. To avoid this I do

Makedir ram:store

Then I lock or protect store to prevent it being deleted

Lock ram:store

Then to disk

Copy ram:store all to mydisk:

The I delete the files in store so that I can use it again

Delete ram:store all

Store itself is not deleted as it is locked.

Type delete ram: all

and it won't work as RAM is a device.

Type delete ram:#? all and it will work.

In issue 6 there was a tip about printer ribbons. Well something similar can be done with the ribbons of an Okimate 20 printer, colour or black and white. When the ribbon is nearly finished, the used ribbon is wound up on the left reel. It then pushes a lever and stops any further advance. To get that extra bit of ribbon, which can last quite a while, you must prise open the cartridge. It's quite easy - just insert a small screwdriver or something into a hole in the side of the cartridge and twist it a bit. When it's open, take the larger reel of ribbon off the plastic wheel and discard it. Tape the end of the remaining ribbon onto the wheel, wind it on a few turns, and that should do it.

I have lots of Fish and PD disks. If anyone wants a copy, just send a disk plus a stamp for return postage.

P.S. Can anyone send me a printer driver for the NEC Pinwriter P2200. I've tried lots of drivers and none are good enough for graphics as they're all for 9-pins.

George Garven, Kilmarnock

BYTEBACK

KEENESEST PRICES

FAST

DELIVERY SERVICE

We're programmed to help, so ring us now.

WE ACCEPT EXPRESS VOUCHERS

SPECIAL CHRISTMAS BARCAINS

ONLY!

ATARI ST SUPER PACK.....£359
ATARI 520STFM Computer - including 1MB Disk Drive, Mouse, Manual. Plus FREE Atari Joystick, 21 Arcade Games and Organiser Programs.

ATARI ST BUSINESS PACK.....£449
ATARI 1040 STFM Computer - including Mouse, Manuals. Plus: FREE VIP Professional, SuperBase Personal & Microsoft Write.

AMIGA A500 Computer.....£399
Including 1MB Disk Drive, Mouse, Manuals, Deluxe Paint, Tutorial Plus: Buggy Boy, Barbarian, Thundercats, TerrorPods, Mercenary, Ikari Warriors, Wizball, Art of Chess, Amegas and Insanity Fight !!

STAR LC10 Mono Printer.....£229
STAR LC10 Colour Printer.....£269
STAR LC24/10 24 Pin Printer.....£339
Cumana Disk Drive (ST or Amiga).....£39

ST and AMIGA Software

Operation Wolf	Am: 15.90	ST: 12.90	Thunderblade	Am: 19.90	ST: 15.90
Driller	15.90		Space Racer	12.90	
Mini Golf	15.90		Bombazal	12.90	
Fish	15.90		President is Missing	15.90	
Chuckie Egg	12.90		Circus Games	15.90	
Heroes of the Lance	15.90		Falcon	Am: 19.90	ST: 15.90

DREAMZONE	15.90	ELITE	15.90
Lombard RAC Rally	15.90	Double Dragon	12.90
Afterburner	15.90	U.M.S.	15.90
Menace	12.90	Star Goose	12.90
Shoot Em Up Construction	15.90	Dungeon Master	15.90

TURBO CUP (with FREE model Porsche!).....16.90

Triad (3 Game Pack!)	19.90	Megapack (6 Game Pack)	15.90
Hostages	16.90	Ultimate Golf	15.90
Pacmania	12.90	Speedball	15.90
Chrono Quest	19.90	Starfighter 2	15.90
Daley Thompson Olympics	15.90	Virus	12.90
Leaderboard BIRDIE	15.90	JET (F16 Falcon)	29.90
Nebulus	15.90	Flight Simulator II	29.90
Chessmaster 2000	16.90	* Western Europe Scenery	12.90
Captain Blood	15.90	* Japan Scenery Disc	12.90
Carrier Command	15.90	* Scenery 7 or 11	15.90
Alternate Reality	12.90	Garfield	12.90
Scrabble Deluxe	12.90	Shadowgate	15.90
Bards Tale	15.90	Corruption	15.90

ST Software

ONLY!		ONLY!	
Purple Saturn Day	15.90	Colossus Chess X	15.90
Kennedy Approach	15.90	Track Suit Manager	12.90
Flying Shark	12.90	Rambo III	12.90
Questron II	19.90	Times of Lore	19.90
Iron Lord	16.90	SDI	12.90
Return of the Jedi	12.90	Live and Let Die	12.90
STOS [Arcade Game Creator]	22.90	ACTION ST (5 Game Pack)	15.90
Powerdrome	16.90	Overlord	12.90

AMIGA Software

Roger Rabbit	15.90	Phantom Fighter	12.90
California Games	15.90	Superman	15.90
Technicop	15.90	4x4 Off Road Racing	15.90
Sex Vixens from Space	19.90	Pioneer Plague	16.90
Battle Chess	16.90	Rocket Ranger	19.90
SUPERLIX (6 Game Pack)	19.90	TV Sports Football	19.90
Capone	16.90	Ferrari Formula 1	13.90
Interceptor	16.90	Bards Tale 2	16.90

ST and AMIGA Accessories

3.5" DISKS SS/DD (x10)	10.95	3.5" Disks DS/DD (x10)	11.95
Media Box (Holds 150 disks)	19.95	Joystick /Mouse Extension	4.95
Mouse Mat (Best Quality)	5.95	Keyboard Cover	5.95

The Original FURRY MOUSE COVER! (Your mouse is naked without one!).....6.95

Ergostick (Hand Held!)	19.95	Quickshot II Standard	7.95
Navigator (Hand Held!)	16.95	Quickshot II Turbo	12.95
Competition Pro 5000	15.95	Comp Pro Extra (Clear!)	16.95

The above is just a small selection of our VAST stock of 16 BIT software!
Please state which computer you have and where you saw the advert!
All Stock items sent by RETURN OF POST - FIRST CLASS!

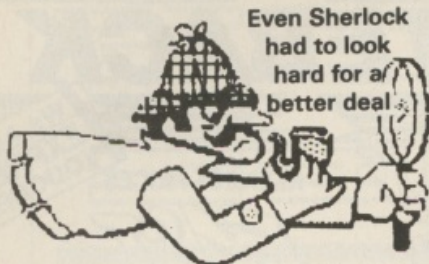
BYTEBACK

DEPT NCE6 MUMBY CLOSE
NEWARK, NOTTS NG24 1JE

PAY BY CHEQUE,
POSTAL ORDER OR USE
YOUR CREDIT CARD
0636-79097



24 HOUR SERVICE



2-BIT COMPUTERS COMPUTER BARGAINS

PC COMPATIBLES

Full Range of Amstrads From **£399**
The New Commodore PC1 From **£290 + VAT**
The Avalon Turbo (IBM Compatible) From **£490**

PC SCART TVRGB INTERFACE

Allows an IBM PC Computer or compatible fitted with a colour graphics adapter card to be connected to a normal TV set which has an RGB Scart input socket
£59.99

WE NOW HAVE THE NEW RANGE OF SCHNEIDER PC COMPATIBLES

*** CALL US NOW *
* FOR DETAILS ***

Commodore Amiga
OR
Atari STFM Super Pack
***£399.00**
with 1 Year Trade Price Software
OR
A Cash Deal (Hardware Only)
FOR
£350.00

MICRO PERIPHERALS

— 135 + —

- IBM + Epson Compatible
- Tractor + Friction Feed
- NLQ

*** £125.00 + VAT**

Commodore 64c **£79.99**
(Computer Only)
Amstrad 464 and Modulator **£125**
Sinclair Spectrum + **£49.99**

MICRO MATE PSU £19.99
Commodore Modems **£15.00 + VAT**

A Selection of portable Audio is now
available
Call us for details

Branded Disks
5 1/4" - (10) **£7.50**
3 1/2" - with labels **£1.10** each

2-BIT COMPUTERS

26-30 Bowesfield Lane, Stockton-on-Tees, Cleveland TS18 3ER

Tel: 0642 604768. Ask for Department MM

WE ALSO REPAIR COMPUTERS



MICRO MOUNTAIN



Telephone **0525 853333**
24 Hour Orderline

UNBRANDED DISCS

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

	D SIDE 48 TPI	PLUS DP 100 DISC BOX	D SIDE 96TPI	PLUS DP100 DISC BOX	D SIDE HD 1.6	PLUS DP100 DISC 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 DISC BOX	D SIDE 135 TPI	PLUS DP080 DISC BOX	D SIDE HD 2.0	PLUS DP080 DISC 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

NO HIDDEN
EXTRAS

VAT INCLUDED

FREE CARRIAGE ON
ALL ORDERS OVER
£10.00

ALL PRODUCTS
CARRY OUR NO-
QUibble
REPLACEMENT
FOR LIFE
GUARANTEE

DISC 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
DP140	140 x 5.25"	7.95

Anti-Static including Index Dividers

LABELS

To Order Telephone:
0525 853333
3 1/2 x 17/16
Tractor/Friction
£4.99/1000



BRANDED DISKS, TOP BRANDS, BEST PRICES, SHIPPED TODAY

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

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.

**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**

£100

**EXPRESS
VOUCHER**

£4.00

**EXPRESS
VOUCHER**

£10

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.

The word

Word processing is more than just bashing out words on screen. Peter Worlock explains the subtleties, complexities and infinite varieties of wp features

Just about every business PC in the world gets used for word processing at some time, and many business PCs do nothing else.

And at home, just about everyone writes something every now and then – and you don't have to be an author or journalist. Employees in all kinds of business occasionally have reports to write, teachers and lecturers write up course material, students write essays, and we all write letters – to magazines and newspapers, begging letters to the bank, torrents of abuse to credit card companies etc.

For most writers, the first requirement is a printer. Although it is possible to send floppy disks, we're still a long way from the paperless existence that computer manufacturers used to talk about. The second requirement is some suitable software.

There are WP programs costing several hundred pounds, and there are others in public domain libraries that will cost little more than the cost of a blank disk. But if all you're doing is putting words on paper, via the computer's screen and memory, why the gulf in pricing?

As always, you get what you pay for, and although all word processing programs will let you compose and print a bit of text, the ease and speed with which you can do it varies enormously.

The basics

Just about all programs will let you type at the keyboard and show you what you've typed on the screen. By various combinations of control keys, menus and mouse actions, you will be able to edit what you have written; delete some words or sentences; insert new material; correct mistakes; break sentences and paragraphs into shorter units; or join existing portions of the text.

Generally, you can get your text reading right, and looking good. You can then save it to tape or disk for future reference, and/or print out your document on your printer.

At this stage, what you're gaining over using a typewriter is the ability to edit, revise and correct without having to use a lot of Tippex or using up reams of paper in re-typing the same text over and over.

However, WP programs also automate a lot of minor aspects of writing. For example, on a typewriter a bell rings to let you know you're getting near the end of a line. This is so that you can work out whether your next word or two will fit, or whether you should start a new line. WP programs handle this automatically through a facility called word wrap.

Also on a typewriter, it's possible to get so engrossed in your work you suddenly find yourself typing off the end of the paper, producing ugly pages in the process. With a

word processor this ceases to be a problem because the software lets you put page breaks wherever you want.

These and other aspects come under the heading of document presentation – how your text will appear on the finished pages. When using a typewriter you have to bear these things in mind as you type, which can be extremely distracting. And mistakes in typing can cause you a lot of extra work.

With the word processor you can concentrate on what you're writing, leaving the presentation side until after you've finished creating the text.

Paying for power

As you move up the price scale you're paying for extra power. These extra features fall into a number of different categories.



• "There's little excuse for poorly written, badly spelled text."

Some are additional controls that make using the software easier. For example, you find more ways of moving around your document. Obviously you can move forward and backwards a letter at a time, or up and down a line at a time. But more flexibility makes a program easier to use, so some packages provide ways of moving by word, sentence, paragraph, screen and page.

Other enhanced features include more powerful editing facilities. Among the most useful here are cut & paste, and search & replace.

Cut & paste allows you to mark a block of text, which can be anything from a single word up to several pages. Such a block can then be deleted (much quicker than deleting a character at a time), or cut from one place and pasted into the

Easier can be better

It has been said that word processing can make writing easier, but it can't make writing better. In fact it can, in certain ways.

For example, even the best writers have certain blind spots when it comes to spelling, and poor spelling tarnishes your image as a writer. So an automatic spelling checker can do wonders for your image – as well as being easier than reaching for the dictionary (usually buried on a distant bookshelf) and looking up the correct spelling – which can be difficult if you don't know how to spell the word in the first place!

An automatic thesaurus can add even more gloss to your printed documents. If you're struggling for just the right word, a quick key-press will bring up a range of possibilities, saving you long stretches of agonised staring at the screen. Or if you find you've used the word 'awful' too many times in your letter to the credit card company, the thesaurus will point out that you could also use 'unpleasant', 'appalling' and 'atrocious', not to mention 'terrible' and 'ghastly'.

document somewhere else (hence the name), or copied without deleting the original block and pasted elsewhere.

Search & replace is an extremely useful tool, especially if you create long documents. Imagine a multi-page business report, or an essay in which – when you thought you'd finished – you find you've misspelled a key name. With search & replace you specify the misspelling and the correct version, and the software then automatically goes through your document correcting every instance of the mistake.

Other features fall into the category of document presentation, starting with the ability to use basic type variations like bold, italic and underlined type. Some primitive WP packages use special codes which appear on screen but not in the printed document, which means that you can be misled as to how your printed pages will look.

A better solution is to show such effects on screen by display effects like inverse characters, or by using different colours. Best of all are those packages (usually on the ST, Amiga and Macintosh although also found on the PC) which actually use bold, italic, or underlined type on screen.

Also in the category of document presentation are headers and footers. These two devices are more or less identical except that, as their names suggest, one appears at the head of a page, and the other at the foot. Headers and footers are pre-set pieces of text – often only one line but sometimes more – which are to appear on every page. They can include your name, address and telephone number, for example. Or a running title, or chapter and page numbers.

One feature that not everyone needs in their WP program is a word counter, but you'll often see a package panned in computer magazines because it doesn't have one. The reason for this is that professional writers live and breathe numbers of words. In the case of freelance writers, you get paid by the word so it's vital to know how much you've written.

But even salaried writers whose pay is secure need to know how much they've written. Journalists and authors who turn in work that is consistently longer or shorter than an editor wants become very unpopular.

Designer docs

Any word processor worth the name will let you produce neat, properly written documents. With the usual clutch of editing facilities at your disposal there's little excuse for poorly written, badly spelled text.

However, the more advanced WP programs go much further, allowing you to turn out pages that are things of beauty, a joy to gaze upon.

• **Multiple fonts:** Although too many fonts are like too many cooks, the ability to use one or two font changes in a document really lifts your pages out of the ordinary. However, being able to do so depends on your printer having the facility, and your WP software being able to drive your printer. (We've talked at painful length about this in the last two instalments of the Learning Curve.)

• **Multiple columns:** The ability to create text in two or more columns, newspaper style, is not one that you'll want to employ in your business letters. But in reports it can be useful, and a good word processor with this facility may save you the cost of a desktop publishing program.

• **Imported graphics:** This is a definite plus for many word processing applications. In business you can import charts and graphs, others can use drawings and sketches to illustrate a point, or you can create your own headed stationery, or simply brighten up a personal letter. And again, if your WP software can do this, you may not need a dedicated DTP program.

• **Footnotes:** One for the academics, and not to be confused with footers. A footnote is an explanatory piece of text at the bottom of the page which contains the thing being explained. ●

PC UPDATE

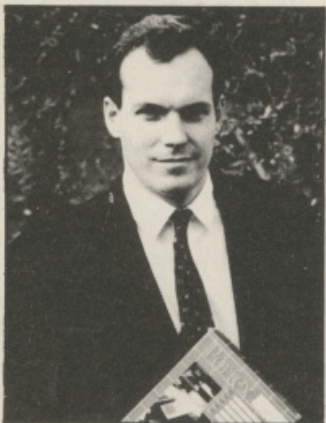
Join the Professionals

As it's the new year, let's forget all the yuppy jokes about Filofaxes and concentrate instead on how useful Portex can be. In the last couple of years this product has impressed more than most on the PC, because it's quite simply very useful. It combines a pocket organiser with a computer diary, database and word processor, so you can store and update most of the personal information you need to keep, and print it out directly onto organiser paper.

It's designed very logically and works with 9-pin or 24-pin printers. It's intelligent enough to sort addresses by company name and still display contacts as the lead item in each address, and it will print on address labels just as happily as organiser pages.

The best thing of all is that Portex has just been reduced by £50 to £49.95, making it more affordable. This has a secondary benefit for Showering Business Systems, its creators, in establishing a differential between the original package and Portex Professional. The new program, coming in at £149.95, includes a number of added features like an autodialler for your modem, with stopwatch and call logging, a desk calculator, password protection, foreign language support, filtering, and keyboard macros.

The most valuable feature of Professional to dedicated Portexers, though, is its ability to run memory resident. This means that you can call up addresses, diary dates or whatever from within other programs. You can also upgrade from Portex to Professional for £49. Showering can be contacted on 01 922 8821.



• Francis Showering, MD of Showering Business Systems, modelling the latest in computerised organisers for people with specially-modified suit pockets

PM vs PS

In a surprise move (well I was surprised, anyway) IBM and Microsoft have offered to license GPI - the graphics engine at the core of its new Presentation Manager user interface - to printer manufacturers.

There appear to be two reasons for this move. Firstly, licensing should boost sales of OS/2 micros, which are ideally suited to running Presentation Manager, and secondly it will put PM firmly into competition with Adobe's PostScript graphics language, which is currently the industry leader. This is more confusing as last year IBM gave Adobe a leg up by endorsing PostScript for its own users.

So what are PostScript and GPI, anyway? They are graphics description languages

By any other name

Do you have trouble naming text files? - I know I do. There are so many different letters you can use, and it's only too easy to forget the words you thought up only a few weeks ago. Well, why not use a simple coding system, like those that can be had from your local haberdasher for just a few pence. Here's one I prepared earlier: NCE0301.COL

As you can see, it uses both the file-name and filetype to provide specific information which makes the file unique. The first three characters are a three letter code for the subject of the file, in this case New Computer Express. The next four characters represent the date on which the file was created, two for the day and two for the month - the example is for the third of January. The three characters of the filetype are used to describe the type of document, in this case a column, but LET for letter or REP for report would work just as well.

The advantage of this type of coding, which takes little setting up, is that you can isolate particular files very quickly. This is especially true if you have a search routine which will look through a complete directory tree hunting out any file matching a given search specification. There are several in the public domain, and our sister magazine PC Plus supplied one on its March '88 SuperDisk. You can easily pull out all letters on your disk by specifying *.LET as the file spec, but you can also select all files connected with New Computer Express using NCE*. or all files produced in January with ?????01. The only point to ponder is what to do with the washing-up liquid bottle.

which can hold details of a page layout and its content in a more compact form than a complete bit-map of a screen or a 300 x 300 dpi laser printer page. If the printer has its own PostScript or GPI interpreter, it can turn the details back into a bit map for printing, while the computer to which it's connected gets on with something else.

The penalty, currently, is the extra cost of the interpreter and license fee in an 'intelligent' printer of this type.

An extra twist to the tale is that Adobe has recently released Display PostScript, most notably on Steve Job's NEXT super-micro. This is a version of the same graphics language, but designed to run computer screens rather than printers. The advantage of using the same description language for both is that files are completely compatible between screen and printer and you then get true WYSIWYG.

Presentation Manager, designed originally as a front end for OS/2, presumably has these dual-functions built in from the start.

It remains to be seen, of course, if Presentation Manager and GPI, which have been a long time coming, are free of bugs.

PCs on PCs

If you're looking for an unusual application for your PC or have an interest in electronic design and construction, you'll probably want to know about a new book from TAB Press called *How to Draw Schematics and Design Circuit Boards with Your IBM-PC*. It's basically two documented BASICA programs which let you design circuit schematics and pcb layouts on your PC.

You can also buy a disk with the programs and sample libraries of electronic components from the same source. Contact TAB Software Department, Blue Ridge Summit, PA 17294-0850. The book is priced at \$13.95.

Simon Williams

EXPRESS EXPRESS EXPRESS SALES

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
SPECIAL OFFERS TO COMPUTER EXPRESS READERS ONLY
Amiga 500 with TV Modulator, 10 Top games ONLY £379
Amiga 500 with A1084S STEREO MONITOR,
games pack £599
Amiga 500, A1084, printer & software £769
Cumana 3 1/2" Disk Drive - £95 A501 RAM & CLOCK £129
Citizen 120D Printer & cable £159
Cumana 5 1/4" disc drive £139
Full range of games at 25% Discount
SEND TO: P.O. Box 2, Skegness, Lincs, PE252QL
Tel (0754) 610217

★ DISCOUNT SOFTWARE ★

Up to 25% OFF RRP for Atari, Commodore, Spectrum,
Amstrad, BBC, MSX and IBM PC. Ring for
information pack on any of the above machines
24 hour Hotline:
0455 613377, 0455 637221
Full after-sales support on Atari ST and 8 bit
B.Bytes Computer Systems
19 Southfield Road, Hinckley,
Leicestershire. LE10 1UA.
Atari Specialists

ATARI ST PUBLIC DOMAIN

Wordprocessors, Utilities, Games,
Music, Languages, and Stunning
Graphics. Why not TRY BEFORE BUY.
No one is disappointed so send a 19p
stamp for our Unique FREE Premier
PD list.
ALPHA COMPUTING
32 Meadow Drive, Halifax, W. Yorks, HX3 5JZ

JOHNS COMPUTER STORE

HOME AND BUSINESS SYSTEMS

Full Range Of Commodore PC's In Stock
Commodore Amiga A500 - £379.00 inc VAT
Atari 520 STFM Super Pack - £359.00 inc VAT
Phone for details of all stock



JOHNS COMPUTER STORE
93 GRAHAM STREET, AIRDRIE, SCOTLAND ML6 6DE
TELEPHONE: 0236 47097

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?

COMPUTER-WIZE

10 Wiseman Grove, Sutton
Coldfield, Birmingham. B23 5YG

Authorised-Atari, Amstrad, Acom, Commodore, Citizen Dealer
Atari Game Centre
Atari 520 STFM Super Pack (inc. £450.00 Free
software) £349.00
Atari 12" High Res Mono Monitor £134.95
Amiga A500 Packs from £370.00
Ring for details
Cumana 1MB 3.5" disk Drives from £89.95
Citizen 120D Dot Mat Printer £149.00
Vision 4200 14" Colour Monitor with cable £199.00

If Software, Hardware and Peripherals supplied
Dust Covers from £4.50

ALL PRICES INCLUDE VAT & FREE DELIVERY ON
ALL ORDERS OVER £50
DISKS - 3 1/2" DS/DD Branded inc Labels. Please add
£1.00 P&P £10.00 for 10

Contact our Mail Order Dept (E1) now

021-377-6698

FREE CATALOGUES - FRIENDLY FAST SERVICE

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.

ROM IMAGE EMULATOR

Converts Basic programs into
ROM images.
For BBC B/B+/MASTER with SWR
Disk 5.25 40 track
(80t available, specify)
£3.99

Cheques/Postal Orders:
BEEB SOFTWARE,
21 Dirdene Gardens, Epsom, Surrey KT17 4AZ

16-BIT SPECIALISTS

AMIGA 500 SUPER PLUS PACK

Only £399
(Inc. VAT)

AMIGA 500 ECONOMY PACK Only £369 (Inc VAT)

AMIGA 500 + 1084 STEREO MONITOR AND SUPER PLUS PACK ONLY £625 (Inc VAT)

COMMODORE PC-1
£310 + VAT

With FREE Television Modulator, Mouse, 35 Top Games inc. Art of Chess, Barbarian, Buggy Boy, Mercenary, Ikari Warriors, Insanity Flight, and any more! Photon Paint*, Amiga Tutorial, Workbench V1.3, and Amiga BASIC disks, + 2 Manuals.

With FREE TV Modulator, Mouse, Mouse Mat, Photon Paint*, Amiga Tutorial, Workbench V1.3, Amiga BASIC disks, + 2 Manuals.

With FREE Mono Monitor, Able One-integrated Spreadsheet, Database and Word Processor, 10 Blank Disks, GW-Basic V2.3, MS-DOS V2.3.

OTHER HARDWARE

Philips CM 8833 Stereo Colour Monitor inc. Lead Amiga/ST	£225.00p
Commodore 1084 Stereo Colour Monitor inc. Lead Amiga/ST	£229.00p
Seikosha SP-180 Printer inc. Lead Amiga/ST	£139.00p
Citizen 120-D Printer inc. Lead Amiga/ST	£139.00p
Star LC-10 Printer inc. Lead Amiga/ST	£219.00p
Star LC-10 Colour Printer inc. Lead Amiga/ST	£259.00p
CAX 354 Amiga Cumana Disk Drive with on/off Switch	£97.50p
CSA 354 Atari ST Cumana Disk Drive	£99.00p

PERIPHERALS

Mouse Mat (Economy)	£2.99p	Mouse Mat (Luxury)	£6.99p
Amiga 500 Dust Cover	£5.95p	50 Lockable Disk Box	£7.95p
Parallel Printer Cable	£7.95p	A500 Modulator Shifter	£9.95p

GAMES SOFTWARE

Chronoquest (Amiga/ST)	£17.95p	Menace (Amiga S/T)	£11.95p
Lombard Rally (Amiga/ST)	£15.95p	Thunder Blade (Amiga/ST)	£14.95p

AMIGA BOOKS

Motorola 68000 Programmers Reference Manual (Motorola)	£9.95p
1001 Things To Do With Your Amiga (Tab - NEW!)	£9.95p
Amiga for Beginners (Abacus)	£11.95p
Kickstart Guide to the Amiga (Ariadne)	£12.95p
Kids and the Amiga (Compute!)	£12.95p
Elementary Amiga BASIC (Compute!)	£12.95p
Amiga Machine Language (Abacus)	£12.95p
Amiga Programmers Guide (Compute!)	£14.95p
Amiga Tricks and Tips (Abacus)	£14.95p
Amiga DOS Reference Guide (Compute!)	£14.95p
Amiga DOS - Inside & Out (Abacus - NEW!)	£14.95p
Inside Amiga Graphics (Compute!)	£14.95p
First Book of the Amiga (Compute!)	£14.95p
Amiga Applications (Compute!)	£16.95p
Advanced Amiga BASIC (Compute!)	£16.95p
Amiga BASIC - Inside & Out (Abacus)	£16.95p
The Amiga Microsoft BASIC Programmer's Guide (Scott-Foresman)	£16.95p
Amiga Machine Language Programming Guide (Compute!)	£17.95p
Amiga User's Guide to Graphics, Sound, Telecom (Bantam)	£17.95p
Becoming an Amiga Artist (Scott-Foresman - NEW!)	£17.95p
Using Deluxe Paint II (Compute!)	£17.95p
Learning C - Prog. Graphics on Amiga & Atari ST (Compute!) (D)	£17.95p
Inside the Amiga with C (Sams)	£19.95p
68000 Assembly Language Programming (McGraw-Hill)	£19.95p
Amiga Disk Drives - Inside & Out (Abacus - NEW!)	£22.95p
68000 Assembly Language (Addison-Wesley - NEW!)	£22.95p
Amiga Hardware Reference Manual (Addison-Wesley)	£22.95p
Amiga Intuition Reference Manual (Addison-Wesley)	£22.95p
Amiga ROM Kernel Reference Manual: Exec (Addison-Wesley)	£22.95p
Amiga DOS Manual (Bantam)	£22.95p
Programming the 68000 (Sybex)	£22.95p
Programmers Guide to the Amiga (Sybex)	£24.95p
Amiga Programmers Handbook (Sybex)	£24.95p
Amiga Programmers Handbook, Vol 2 (Sybex)	£24.95p
Amiga System Programmer's Guide (Abacus - NEW!)	£24.95p
Amiga ROM Kernel Ref. Manual: Libs & Devices (Addison-Wesley)	£32.95p

OTHER BOOKS AVAILABLE ON REQUEST - PLEASE TELEPHONE 0706 43519

* 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 & EO

Add £6 for Two Day Courier Delivery for All Hardware Items. Disk Drives, Software and Book prices are inclusive of P&P.



ACCESS/VISA OR MASTERCARD
ORDERS/ENQUIRIES TEL. 0706 43519



NEW SHOWROOM NOW OPEN! - Come and have a Demo at: 1st Floor Drake House, 160 Yorkshire Street, Rochdale, Lancs.



Hours of Business - 9.30 am to 6 pm Mon - Sat
24 Hours Ansaphone in operation outside hours
SEND ALL MAIL ORDERS TO: 16-Bit Software, Dept J1, 24 Brankfield Lane, Rochdale, Lancs., OL11 5RJ

YOUR FORMAT

MACHINE-SPECIFIC COLUMNS

AMIGA BLIT

Commodore on top of the World

According to one of the leading market research organisations, Commodore is emerging as Europe's second largest supplier of computer hardware, second only to the mighty IBM corporation.

Dataquest, the research group in question, reported that sales of the Amiga range of computers are booming and Commodore's range of PC compatibles are also in great demand.

According to Dean Barrett, UK marketing manager, first quarter profits to September 30 1988 were up by 92 per cent to £9.6 million compared to the same period the previous year. Much of this rise can almost certainly be credited to the rise in popularity of the Amiga.

See the Light!

Graphics have always been the Amiga's most powerful facility but of all the different graphic applications and techniques available, Ray Tracing must surely be one of the most popular.

Ray Tracing is one of those applications revolutionised by the arrival of the Amiga, and already several heavy weight packages exist - including the now famous *Sculpt 3D* (and now *Sculpt 4D!*) and *TurboSilver*.

The latest arrival on the scene is a package called *Opticks*, distributed in this country by the Amiga Centre Scotland (031 557 4242). Taking everything with a pinch of salt, Inconito, the American producer, claims that the package is the most powerful ray-tracing program of its time.

The program uses a flowchart-like menu system which takes you step-by-step through

Snippets.....

* Rumours from the States indicate that Commodore may be on the verge of standardising AREXX, a command line language originally developed on the IBM mainframes. AREXX is a vastly superior command line environment similar to the CLI which allows complex programs to be developed easily. Many commercial packages such as CygnusEd already incorporate facilities to link with the AREXX environment.

* Very Early test versions of the new Workbench/Kickstart release, 1.4, are already being distributed to software developers in the States, who are participating in beta-testing. Don't get too excited, though, we're not likely to see 1.4 before the end of '89 at the earliest.

* Rumours (yes more!) circulating around the Amiga scene indicate that Commodore US may produce a games console based around the Amiga. This move seems very much a retaliation against the recent announcement by Atari of its plans to produce a sub-£100 console based around the ST. This would in fact be quite ironic when you consider that the Amiga was originally designed as a games console.

the usually complicated process of designing three dimensional scenes. Other powerful features include comprehensive surface mapping facilities, generation of pictures of upto 24 bit-planes in depth (you'll need a frame buffer for those though!) and the ability to import graphic objects from the popular VideoScape 3D. Contact the Amiga Centre Scotland for further details.

What! Another Elite Cheat?!

Yep, another cheat for Firebird's classic space opera *Elite*. The man to blame for this little beauty is a certain Nick Taylor who is a regular reader of *Express* and, in particular, *AmigaBLIT* (wise chap!).

This tip allow you to modify most of the attributes of your galactic commander with a handy 'hack' screen kindly provided by Firebird but until now hidden from view. This hack screen lets you modify the individual bytes that determine the status of your commander and his ship.

To access this handy screen, when you're asked to enter the code to enter the game, enter SARA and then once prompted a second time, enter the correct code to enter the game. When prompted 'Load New Commander?', type 'N' and then press the 'Help' key and you will find yourself in the *Elite* hacker screen.

Message Port

If you have any comments about any issues raised within this column or the Amiga scene in general, why not drop me a line? Equally, if you have any tips that will help other readers get the most from their Amigas then why not share them with your fellow Amiga owners? Write to: AMIGA BLIT, New Computer Express, 4 Queen Street, Bath BA1 1EJ.

You will be prompted for the byte to change and then the new value to be assigned to that byte. By changing the values of particular bytes, you can customise your ship and your status. Once you've finished being underhanded, simply press the 'Escape' key and you're away. Below is a table of the major bytes.

ITEM	BYTE TO CHANGE	NEW VALUE
Missiles	21	Not more than 4
Large Cargo Bay	23	01
ECM System	24	01
Fuel Scoops	2A	01
Escape Capsule	2D	01
Energy Bomb	2F	01
Extra Energy Unit	31	01
Docking Computers	32	01
Galactic HyperSpace	35	01
Retro Rockets	3A	01
ECM Jammer	3C	01
Cloaking Device	3E	01
Unhappy Refugees	88	01
Thargoid Document	8C	01
Rating		
(Harmless to Elite)	97	00 TO 08
Fugitive	90	01
Offender	91	01
Loadsamoney	18	FF
	19	FF
	1A	FF
	1B	FF

A word of warning when hacking away. The value of byte number 21 must never be set to a value greater than four or the machine will complain bitterly in the way it knows best - by crashing.

Other attributes, such as your ship's laser type, can also be changed by modifying the value of the particular byte; but I'll leave that for you to discover. Experimentation is the key!

Jason Holborn

SPEX

Spec-ted soon

It's encouraging to see us Spectrums aren't being left out of all the fun in these days of 16-bit mega-games. Some of the ST and Amiga titles which have turned you a shade of envious green at a hundred yards are due for conversion to our not-so-humble computer.

Probably the most drool-inducing title for me is *Carrier Command*. The original ST version received huge critical acclaim and used up whole books of reviewers' 'good game' phrases. It's an innovative mix of simulation, strategy and shoot-em-up as you take the helm of the ACC Epsilon, an advanced aircraft carrier with a tasty selection of weaponry.

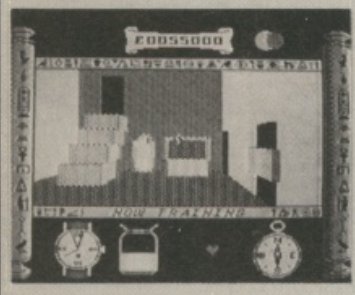
In the dark

Call me a square, stick-in-the-mud, party-poopng old cynic if the urge takes you, but personally I think the whole computing industry has become decidedly boring of late.

The only company coming up with original and innovative Spectrum software is Incentive. Software houses are constantly inventing new, revolutionary features which supposedly change the face of computing, yet few do. *Freescape* must rank alongside *Ultimate's* *Filmation* (Knightmare, Head Over Heels etc) as one of the truly ground-breaking programming techniques.

Its latest *Freescape* outing *Total Eclipse* has already received more than its fair share of plauds, but here's another teensy weensy little mention for the game which helped preserve my sanity over the Christmas period (no mean feat when they show *The Snowman* for the sixth consecutive year).

Out of the three games to employ the *Freescape* concept, this Egyptian-inspired jobbie is my favourite. Why so? Well, the playing area's much more confined, which means you don't get lost quite so regularly, and the screen updates slightly faster than in *Dark Side*. The whole shebang is more exciting. In short, it's one of the best Speccy titles of 1988. Now all I need is for some kind, considerate and generally wonderful human being to send in a solution.



I have had a short blast on a friend's ST (don't worry, I washed my hands afterwards) and despite being determined not to like it, after a few minutes' play I was hooked. Make no mistake, *Carrier Command* won't be converted without a struggle. Super-fast 3D filled graphics, multiple viewpoints and a playing area which makes almost everything else look postage stamp sized are not going to be easily fitted into 48K.

Realtime Software was put on the case and if anyone can do it, these are the guys. Remember, they've produced classics like *3D Starstrike* and *Starglider* in the past.

Preview versions look impressive, but at the end of the day a game's worth can only be

judged by how it hangs together and plays as a whole. Due out at the end of January, I want to be first in the queue to see how CC fares.

Also due on the Speccy screen in '89 is *Starglider II*. This was another 3D filled graphics mega game, and a sickeningly good one at that. It came in just after *Carrier Command* in the 'Express Greats of '88' feature (issue 7/8) and in my worthless opinion that's about right.

It relied more on visual brilliance than gameplay, which hardly bodes well for a Spectrum conversion. Not many details yet, save that it's likely to consist of wire-frame graphics rather than filled 3D ones.

In its 16-bit incarnation, *Xenon* was arcade quality. It had beautiful, gleaming chrome structures and finely shaded aliens. On the Speccy, everything looks decidedly blue. The demo version I played was smooth and quite addictive, but on the whole it's a fairly unremarkable horizontally-scrolling shoot-em-up.

Other titles set to make the transition from 16-bit to 8-bit are *Captain Blood*, a graphically superb space opera, and *Eliminator*, a 3D scrolling blaster from John Phillips (of *Nebulus* fame).

The fact that so many seemingly risky and difficult conversions are being attempted really does show the commercial clout the Spectrum's still got.

Come again?

Jet Set Willy, the game that stunned your granny some time in the prehistoric days of computing and gave plenty of opportunity for double entendre jokes, is back on the shelves, thanks to Mastertronic.

If you admit to buying this one first time around, you're really going to show your age! Anyone too young to remember it need only know that it's one of the forerunners of the whole platforms and ladders genre. JSW has got a lot to answer for.

Spiritual exercise

Whilst most other companies have abandoned Speccy owners of an adventurous persuasion, Level 9 deserves a hefty pat on the back for unparalleled support. Having just about exhausted the possibilities as far as gnomes are concerned, its next game, called *Spook*, sees you play a ghost trying to avenge his murderer. Wacky or what?

Speccy Mac emulator...

I have just heard from one of my spies in the industry (OK, so I exaggerated). It was a friend who went to the December Microfair that Kempston has launched a very interesting package which could allow your Spectrum to do a passable impression of the Apple Mac. *Finder*, priced at £49.99, lets you have an icon-driven front end and includes a Kempston mouse. And this is on the machine they call humble! Details from Kempston on 0908 677886

MGT's DIY

MGT has stepped in to combat some of the +2A incompatibility problems mentioned in *Express* 6 with the release of the *Fixit*, a small widget that should allow successful connection with a host of add-ons. MGT's own +D and *Disciple* interfaces are catered for as well as the *Opus* *Discovery* and *Microdrive*. MGT's attitude is commendable, but I can't help thinking it should be Amstrad itself providing a remedy.

The *Fixit* costs £7.95 direct from MGT, Lakeside Technology Park, Phoenix Way, Swansea SA7 9EH.

Robin Alway

MEGABYTE COMPUTER CENTRE

12 ETTRICK SQUARE, TOWN CENTRE,
CUMBERNAULD, G67 2TT
0236 738398

Scotland's Atari 8 / 16 Bit Computer Centre
Full Range of Software And Peripherals In Stock

Atari STFM £279.00

Atari STFM Superpack £379.00

COMMODORE AMIGA

Amiga A500 £379.00

Amiga A500 + Software £399.00

We Are Main Stockists Of Electronic Arts
Electronic Software, Cumana, Philips, Microprose

We Carry A Full Range Of Commodore 8 Bit, Atari 8 Bit,
Sinclair, Amstrad, IBM, Atari ST, Amiga, Sega,
Atari 2600, Software and Peripherals

3.5" Disks From £12.95 Per 10

5.25" Disks From £8.95 Per 10

ALL PRICES QUOTED ARE FOR MAIL ORDER ONLY AND ARE SUBJECT TO
INCREASE AT ANY TIME



0236 738398



AMIGA CENTRE SCOTLAND

41 HART STREET LANE, EDINBURGH
EH1 3RN. TEL: 031-557 4242



ALL PRICES INCLUDE VAT & P&P

NEW PRODUCTS IN STOCK NOW!

SCULPT 4D £368.00

Fabulous New Features, Truly Professional Software

FORMS IN FLIGHT 2 £79.00

Surface Mapping. Surface Patches and more.

Critics Choice

Superb Integrated WP/Spreadsheet/Database System.

20 - 100Mb Hard Disc Cards P.O.A

The very latest cards - attractive prices

CMI Accelerator Board £179.00

Double Speed 68000 Plus Co Processor Slot

F-BASIC SOURCE LEVEL DEBUGGER (SLDB)

The only debugger quick enough for the F-Basic system only £115

KINDWORDS VERSION 2 £49.95

Includes the Thesaurus, new fonts and English Dictionary

Mini GEN

Genlock for only £113.85

DIGI-VIEW GOLD £129.95

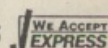
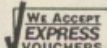
All new! Hardware and Software designed for A500/2000

PAGE FLIPPER + FX

Full Screen image and special effects £119.95

MAIL ORDER DEPARTMENT

OPENS TUES -SAT 10-6PM Trade Enquiries Welcome



SECTOR 64 SECTOR

CLR HOME keys while inside the speech marks. That also goes for [RVS ON].

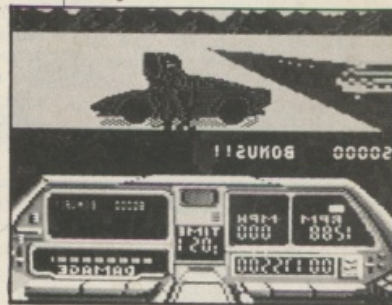
If you have entered the data incorrectly the program will tell you. Lines 200-270 are the data for the inertia of the wiggle. You can change it yourself, making sure you stay inside the data boundaries. Wiggle effect is also like the ripple effect on water. The program runs under Interrupt, so you can still move your cursor and code.

1989 releases

Hot C64 games heading your way this year are:

Technocorp • Gremlin

Due out any day now, Technocorp takes you on a very high speed car chase against the bad guys. You also get the chance to step outside and fight fist to fist.



• Technocorp: Due soon

Bob's Full House • Dmark

Due out early this year. You must all know how boring the TV program is, so let's not say too much about the game. Could be good family entertainment, though, so keep an eye open.

X-Men, Doctor Doom, Spiderman

• Microprose/Paragon Software

This series of comic characters should soon be making their computer debut on the C64.

Thanks a million

We've got thoroughly out of synch these past few weeks what with shooting off to Germany, so a big thank you to Rik Numa, who helped us out in issue 9. Thanks also to Jason Holborn for his kind comments on our Amiga demos in AmigaBlit.

Printing error

In the Christmas bumper issue we put together a little computer teaser. Unfortunately, there was an error. The answer to question 2 should have been 2 bytes to a word, not 16.

Hubbard love

An American friend phones to tell us that Rob Hubbard has composed plenty of tunes since he left England for California. One of them was for a game called *One on One*, which I heard over the phone. Being Rob Hubbard it sounded 100 per cent cool, with very clear samples. He's also done tunes for other games, but we'll probably never hear them as only the best American software is imported over here.

Cheats

Here's where you the reader can contribute. If you have any cheats, pokes or tips, send them to C64 CHEATS, New Computer Express, Future Publishing Ltd, 4 Queen Street, Bath BA1 1EJ.

Ian + Mic

European view

Germany has a large user base for the C64, and this is hardly surprising since every electronics store supports mainly the C64 and Amiga. Even walking through tiny villages, there will be a shop window C64 in sight.

Most items in Germany are expensive, but I'm glad to say electronic gadgets are very cheap. You could pick up a C64 with all the necessary bits and pieces for under £99 and an Amiga for under £320. That's the advantage of having Commodore's European base in the same country.

One fact worthy of mention is that even though there were machines everywhere, they didn't have much software. It was mainly Powerhouse and other budget titles, although software for the Amiga was pretty new.

Passing through France we picked up quite a few French computer mags. Many of them seem to borrow ideas from British ones - or is it the other way round? I'll give you a clue.

They all feature lots of smiling or groaning faces.

Wiggle listing

This listing will make your whole C64 display wiggle with inertia. The program also has a few instructions: for example, [CLR HOME] means that you must press the SHIFT and

Wiggle listing

```
0 PRINT"[CLR HOME]PLEASE WAIT"
10 RESTORE:B=49152
20 FORL=0TO69:READA:POKEB+L,A:D=D+A:NEXTL
30 DATA 120,169,192,141,21
40 DATA 3,169,13,141,20
50 DATA 3,88,96,169,48
60 DATA 141,18,208,162,0
70 DATA 173,114,193,238,21
80 DATA 192,141,22,208,160
90 DATA 9,136,208,253,232
100 DATA 224,176,208,237,169
110 DATA 207,141,21,192,238
120 DATA 40,192,169,27,141
130 DATA 17,208,169,1,141
140 DATA 25,208,169,127,141
150 DATA 13,220,169,129,141
160 DATA 26,208,76,49,234
170 IFD<=9075THENPRINT"DATA ERROR":END
180 B=49408
190 FORL=0TO50:READA:POKEB+L,A:NEXTL
200 DATA 200,201,202,202,203,203,203
210 DATA 204,204,204,204,205,205,205
220 DATA 205,205,206,206,206,206,206
230 DATA 206,207,207,207,207,207,207
240 DATA 207,206,206,206,206,206,206
250 DATA 205,205,205,205,205,204,204
260 DATA 204,204,203,203,203,202,202
270 DATA 201,200
280 FORL=0TO50:POKE49459+L,PEEK(49408+L):
POKE49510+L,PEEK(49408+L)
290 POKE49561+L,PEEK(49408+L):
POKE49612+L,PEEK(49408+L):NEXTL
300 PRINT"[CLR HOME]"
310 PRINT"[RVS ON]"
320 PRINT"[RVS ON]"
330 PRINT"[RVS ON]"
340 PRINT"[RVS ON]"
350 PRINT"[RVS ON]"
360 PRINT"[RVS ON]"
370 PRINT"[RVS ON]"
380 SYS49152:POKE49663,200
```

The Instant Catalog

ALL TITLES IN STOCK

SPECTRUM	CASS	COMMODORE 64	CASS	DISK	ATARI ST	DISK
10 Great Games Vol 3	8.95	10 Great Games Vol 3	9.99	11.99	5 Star Compilation	14.75
4 Soccer Simulators	6.45	Afterburner	6.95	9.99	Action ST Compilation	11.99
After Burner	6.45	Armalyte	6.45	8.75	After Burner	13.99
Batman - Caped Crusader	5.95	Barbarian II	6.45	8.75	Bombuzal	14.75
Cybernoid II	5.50	Batman - Caped Crusader	6.45	9.45	Chrono Quest	17.49
Echelon	6.95	Bombuzal	6.45	8.75	Daley's Olympic Challenge	11.99
Fists "N" Throttles	8.75	Captain Blood	6.45	9.99	Double Dragon	11.99
Frank Bruno's Big Box	8.75	Caveman Ugh-Lympics	7.25	10.50	Dungeon Master	14.75
Game Set and Match 2	8.75	Cybernoid II	6.45	9.99	Eliminator	13.99
Giants	9.99	Echelon	9.99	10.99	Elite	14.75
Gold Silver Bronze	9.99	Emlyn Hughes Int Soccer	6.45	8.75	Falcon	14.75
Guerilla War	5.25	Fists "N" Throttles	8.75	9.99	Flying Shark	14.75
History in the Making	16.95	Frank Bruno's Big Box	8.75	9.99	Garfield	11.99
In Crowd - Compilation	8.75	Game, Set and Match 2	8.75	11.99	Heroes of Lance AD&D	17.25
Laser Squad	6.25	Games: Summer Edition	9.99	11.99	Hostages	14.75
Last Ninja II	8.95	Giants	9.99	11.99	International Karate (IK+)	11.99
Leader Board Par 3	9.99	History in the Making	17.99	21.99	Leaderboard Birdie	13.99
Maria's Christmas Box	6.99	Last Ninja 2	8.75	9.99	Lombard RAC Rally	14.75
Mega Games Vol 1	9.95	Leader Board Par 4	10.99	12.99	Mickey Mouse	13.99
Mickey Mouse	5.25	Maria Whittaker's Big Box	6.45	8.99	Munsters	11.99
Operation Wolf	5.50	Mega Games Vol 1	9.99	10.99	Nebulus	13.99
Pacmania	5.95	Menace	6.75	12.95	Night Raider	13.99
Question of Sport	9.99	Mickey Mouse	6.45	9.99	Obitator	14.75
R-Type	6.45	Microprose Micro Soccer	9.95	12.99	Operation Wolf	11.99
Rambo III	5.95	Operation Wolf	6.45	9.99	Pacmania	11.99
Return of the Jedi	6.45	Pacmania	6.45	9.99	Powerdrome	17.25
Road Blasters	5.99	Pool of Radiance AD&D	N.A	17.99	Puffy's Saga	17.25
Robocop	5.25	Question of Sport	9.50	12.50	Purple Saturn Day	14.75
Roy of the Rovers	5.25	Rambo III	6.45	9.99	R-Type	17.25
Savage	5.95	Return of the Jedi	6.45	8.75	Rambo III	11.99
Spitting Image	6.45	Robocop	6.45	9.99	SDI	13.99
Supreme Challenge	8.75	SDI	6.95	10.99	STOS - Games Creator	19.49
Taito Coin-op Hits	8.95	Spitting Image	6.45	8.75	Speedball	14.75
Techno Cop	5.50	Sports World 88	9.99	10.99	Spitting Image	11.99
Thunder Blade	6.50	Supreme Challenge	8.75	11.50	Star Ray	11.99
Tiger Road	6.25	Taito Coin-op Hits	9.99	12.99	Thunder Blade	13.99
Total Eclipse	6.45	Thunder Blade	6.95	10.99	Trad Vol 1	17.49
Ultimate - The Champions	8.95	Tiger Road	6.95	10.99	Trivial Pursuit - ANB	11.99
We are the Thorns	6.95	Total Eclipse	6.45	8.75	Where Time Stood Still	17.25



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.

Railway Games for the PC

Model railways without the mess or expense! Run a railway on your PC! Absorbing railway-based games for IBM PC or compatible (including Amstrad PC and PPC). All games have a save game feature - you will need it! (3.5" or 5.25" disks).



** NEW !! **

- Glasgow Queen Street 1987 - a busy morning in this Scottish terminus, with West Highland and Inverness services as well as Edinburgh and local traffic and holiday extras. Your task includes resolving problems caused by occasional non-availability of class 47/7 for push-pull services.

Other recent games

- Kings Cross 1978 - in the early days of the HST, when most services were still loco-hauled, often by Deltics. The challenge here is to keep enough platforms free for incoming trains, while refuelling locos when necessary, all in a layout with very limited shunting space.
- ShedMaster Finsbury Park - manage servicing and maintenance in this busy depot before the days of the HST. Diesels of many classes must be fuelled, serviced and sometimes repaired in time for their booked duties.
- ShedMaster Bounds Green - see how the task of maintenance has changed since the introduction of this purpose-built HST depot. Manage the overnight shift on four consecutive weeknights, handling routine servicing as well as running repairs, and producing usable sets in time to take up the scheduled morning duties.

Special offer - both ShedMaster games for only £23!

Other games available - send SAE for complete list (sent with each order)

Price £14.95 per game incl. VAT, postage & packing (UK or overseas). Payment with order please.

SIAM Ltd. (Dept. NCE01), 1 St. David's Close, Leverstock Green, Hemel Hempstead, Herts. HP3 8LU

CPC Centre

Firm - where?

The good news of CPC sales makes it all the more regrettable that, as reported here before Christmas, Amsoft has allowed the Firmware manual to go out of print, and has replied with a simple 'No' to enquiries about a reprint. If anyone knows where copies can still be found, I'd be grateful to hear from you. Write to CPC Centre, NCE, 4 Queen St, Bath BA1 1EJ.

Let's get serious

The CPC did jolly well this Christmas, contrary to what might have been predicted. Comet, Laskys, Dixons and the appallingly named Toys'R'Us (after boss Lazarus) were among the high street chain-stores offering discounts, and shifting considerable numbers of boxes with "CPC" written on them. In isolated cases you could have got as much as £70 off a 6128 - which, as independent retailers bitterly pointed out, was less than they could buy in for!

Sales of software and peripherals have also been encouraging, taking stockists by surprise. Ken Fairhurst of K&M Computers, the CPC mail order people, claims that "sales over Christmas were 3,000 per cent up on last year". Disk drives and modulators were selling well until supplies ran out in December, and TV tuners, speech synthesizers and printers were all shifting quickly. He claims too to be selling ten copies of Mini Office II a day, and 5,000 (that's three zeros) 3" disks a month. "Sales are phenomenal and going up," Ken added. By way of explanation, he could only suggest that Amstrad had had spare capacity at the right time and had produced a batch just when it was needed.

The story from Mike Cooper of MJC Supplies is similar, with claims of selling "twice or three times as much" as the previous Christmas. "There are signs that Amstrad and some of the software manufacturers may be losing interest in the CPC", he complains, "but the truth is the demand is still very strong, and there's no reason to expect it to dry up in the foreseeable future. At least, I hope not!" Hear, hear.

Sound of silence

When I first bought my 6128 (seems like centuries ago - how did I ever manage without it?), I foolishly imagined that all I had to do was plug a pair of headphones straight in, and I could enjoy a massive improvement in sound quality. When I tried it, I thought I'd been struck deaf. Silence.

The reason, of course, is that the CPC doesn't have an inbuilt amplifier of sufficient power. You can buy the Soundblaster, an all-in-one amplifier plus speakers from Siren Software (061 228 1831) for £30.

A cheaper alternative (and the one that appealed to me, penniless journalist that I am), is simply to connect your computer to a stereo through the latter's input sockets. The connections for wiring cables are in the manual, and conform to a central earth with two signals. And that is enough for electrical bods to make a working cable - honest!

Bah humbug!

Enjoying your new year? Good, I'm glad. Spare a thought, though, for the eight

Amstrad staff given the sack (as reported in NCE last week). And I'm not talking about the swag-bag Santa carries around full of pressies for the kids.

It seems to have been confined to Amsoft, which hasn't produced a decent CPC program in ages, concentrating instead on bundling deals.

Amstrad is describing the move as a clean sweep of its less productive elements. Could it be, however, Alan's subtle (?) way of showing these stocks 'n shares chappies he won't let hugely increased profits turn him soft?

Cannon and Ball's up in the air

Operation Hormuz took a fair slice out of my Christmas holiday, being an altogether more interesting way to spend the Yuletide vacation than stuffing the Carey cakehole with cold turkey and sitting slumped in front of the

Cannon'n'Ball Festive Frolix (rpt.). Still, my time was not entirely wasted, since it enables me to bring you, dear reader, the exclusive playing tips listed herewith:

- Always do a reconnaissance of a stretch of land and water before attacking the ships and land installations thereon. That way you don't needlessly waste lives crashing into radar towers (a fate I've suffered on numerous occasions - hence the shape of my nose, but that's another story).

- Keep an eye on the fuel gauge, and get back to the carrier more often than you need to. Otherwise the Exocets can sink it before you've noticed they're there.

- When attacking the bases, use a medium to high level run, as opposed to the diving mentioned in the instructions. It does naturally take a little longer, but at least you'll avoid the radar towers.

- Even selection of Exocets, never mind actually firing the bally things, should always be done while pointing away from your carrier. The self-inflicted wound occasioned by neglecting this simple piece of advice is, believe me, the saddest of all. I know, I was that idiot.

Flying Camel

Users of Mini Office II, among whom I count myself, will be interested in Camel Micros' Interceptor. It's not, as it



• Mini Office II gets a bit of tailoring, courtesy of Camel's Interceptor

sounds, an FA-18 simulator, but a kind of bolt-on program that takes the tedium out of using Database's money-spinner by allowing you to change parameters (screen inks, disk catalogues etc.) much quicker. It could prove rather useful, and I'll bring you my evaluation just as soon as I've seen a finished copy...

Steve Carey

LAPTOP BONANZA

Goupil Club



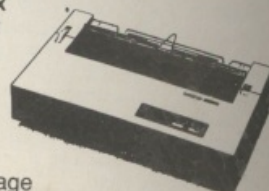
A highly engineered French made LapTop offering a host of advanced features. Twin 3.5" 720KB drives, detachable 77 key keyboard with 10 function keys, SuperTwist LCD screen with 25 x 80 characters - 640 x 200 pixels, 768KB RAM. Interfaces include RS232C, Parallel, RGB & NTSC. With switchable power supply, rechargeable battery, soft case, MS-DOS 3.2 & GW BASIC.

PRICE £485.00

+VAT & POSTAGE £5.00 TOTAL £562.75

☆ BROTHER HR5 PRINTER ☆

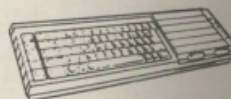
- ☆ 30 CPS ☆ 9-pin dot matrix
- ☆ Very quiet and lightweight
- ☆ Epson compatible
- ☆ Battery or mains
- ☆ Thermal or ink print
- ☆ Standard Centronics



£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



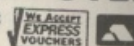
We also stock QL Software at discount prices. Send today for our list!

£99.95

+ £4.05 postage

UK HOME COMPUTERS

82 Churchward Avenue, Swindon, Wilts
Tel: (0793) 695034



☆☆☆ SPECIAL OFFER ☆☆☆

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**

It's easy to make horse racing pay once you know how

Our racing software is **A PROVEN WINNER**.

Any **NATIONAL HUNT** race can be analysed **EASILY** and with **INCREDIBLE ACCURACY**.

Last National Hunt season **62% PROFIT** on recommended races.

DOZENS OF TESTIMONIALS from delighted customers.
"brilliant" ... "many good priced winners" ... "won over £4000" ... "results have to be experienced to be believed" ... "amazed by the accuracy" ... "my sole means of selecting horses to back"

BRIMARDON NATIONAL HUNT FORMULA - uses data from ANY daily paper - **PRICE £25.00**
Brimardon National Hunt Formula **PLUS** - uses a daily racing paper - **£35.00**

Complete with full instructions and betting guidance - **NO RACING KNOWLEDGE NEEDED**.

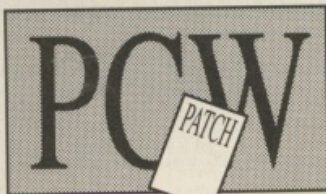
Send a cheque or postal order and your make of computer too!



Brimardon
Computer Racing Services



75 COCKERTON GREEN, DARLINGTON, DL3 9EG. (0325) 288483



New Office

Details of the new version of *Mini Office* are now being smuggled out of Database's Manchester HQ by a team of highly trained industrial espionage agents.

Mini Office Professional Plus will consist of the same modules that made up *Mini Office*, together with a spelling checker module with a 50,000 word dictionary, and a thesaurus. The checker works either on *Mini Office* documents in the working memory or separately on *LocoScript* and *Protext* documents. The Thesaurus is also promised as a stand-alone module which will please a lot of writers, journalists, authors, hacks, wordsmiths...

There are also a lot of additions promised to the comms package (which had quite a few bugs in earlier versions) such as autodialling and easier text saving. Shame they didn't add a phone bill calculator to top it off.

Just like certain Chancellors of the Exchequer, an acute lack of exports caused a lot of embarrassment. Exporting will now be possible from the spreadsheet and database. Also, import facilities are being provided in the database - so that data from *LocoFile* can be used in *Mini Office*.

The manual of the first version drew a lot of criticism. Many people dismissed it as useless, which was rather unfair: it at least listed all the commands and everything, almost all in the right order, and made an excellent door stop. The new version will also come with a whole new manual, written by John Hughes. It will largely be the *All in One Computing* book on *Mini Office* released last year but will have extra sections to cope with the new additions.

Mini Office Professional Plus will cost £39.95; details from Database on 0625 878888.

Well what do you know

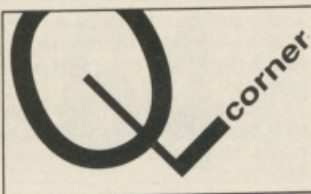
Ten things you never knew about PCWs:

1. They have sold over a million throughout the world and three quarters of a million in Britain.
2. There are seven in Czechoslovakia.
3. A higher proportion of women own PCWs than any other computer.
4. They cost over £1,000 in New Zealand.
5. It is the only machine for which a commercially released Welsh word processor exists.
6. You can claim them against tax if you use it to write for business, but only a decreasing proportion of the cost price for each year.
7. A 9512 keyboard works on an 8000 machine and vice versa.
8. Jeffrey Archer had two given to him but doesn't like them so still writes his novels out longhand.
9. Kylie Minogue does not have a PCW.
10. There are no mentions of PCWs in either the Bible or Shakespeare.

Rob Ainsley

A real tip

To erase a group name completely in *LocoScript*, erase the file whose name is the group name plus .GRP (it never shows on the disc manager). It reverts to a name like 'group 0'.



A better Basic DOS!

Wouldn't it be wonderful if, unlike as with CP/M, MSDOS, AtariDOS, AmigaDOS etc, the Basic language itself constituted an integral part of the operating system? You could then use all the operating system commands within the language itself, including them in your programs as needed.

There would be no need to have two sets of commands differing in syntax and substance, one for use 'at DOS level' and the other for use within the interpreted (or compiled) Basic environment. There would be no need to toggle between Basic and DOS with commands like *BASICA* or *SYSTEM*.

Two at a time

It would be wonderful if you could run more than one program, or more than one copy of the same program, at the same time. By chopping up time into exceedingly brief slices, and allocating these slices on a semi-cyclic basis to these programs (alternatively called tasks), SSR (smooth simultaneous running) would be achieved.

In reality, the CPU chip is only running one program at any one time, then suspending that program and starting another. But because the slices, or chunks, of time are so

tiny, the illusion of simultaneity is created. In much the same way that persistence of vision in the eye creates the illusion of motion when slightly differing images are 'rapidly' (i.e. faster than about 15 switches per second) presented to the retina, all the programs will appear to be running simultaneously as the CPU switches between them thousands or tens of thousands of times per second.

On our dream computer there would be the facility to alter the 'priority' or time-importance of the tasks by instructing - from Basic in the case of our Basic/DOS/BIOS concurrent machine - the CPU to spend relatively more or fewer slices of time on a particular task than its proportionate share.

Pipe dreams?

This week I thought I'd do a little day-dreaming. Specifically, about a dream computing machine. Read on...

This would permit the concurrent operation of, say, several copies of a word-processor together with a desktop publisher and a structure analyser, maybe.

Independence at last

Surely it would be wonderful if you could have device independence, so that the system, transparent to the user, took care of all operational differences between I/O devices (consoles, keyboards, screens, windows, printers, modems, files, floppy drives, RAM drives, hard drives etc) enabling the user to use the same (command) verbs irrespective of the (destination) noun...

Wouldn't it be wonderful?

More next time. Keep guessing as to the identity of the dream machine.

Eric Simmonds

SECTOR SOFTWARE

TEL: 0772 454328

WE ACCEPT EXPRESS VOUCHERS

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

SPECIAL AMIGA OFFER

AMIGA A500 Including FREE
modulator, work bench, extras, mouse,
photon paint and ten star pack
(containing ten commercial games
value £229) **£390**

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.....	10.00
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

All the above QL software is produced by Sector software. Ask for our full guide/pricelist of our QL software.

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.

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, QL, 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.

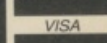
Tel: 0772 454328

SECTOR SOFTWARE

Fax: 0772 454328

39 Wray Crescent, Ulnes Walton, Leyland, Lancashire, PR5 3NH

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



BEEB BOX

Serious stuff

I always breathe a sigh of relief when the festive season ends. OK, I know kids love it, but for most adults it's just one stressful round of expense and hassle after another. Furthermore you can never get any serious work done until school starts, and you can reclaim the computer.

In this back-to-work spirit I have been scrutinising an impressive educational package, the second part of the BBC's Technology and Design course, which gives you no fewer than three disks and manuals.

A + DFS

There must be many people with an ADFS system who only ever use DFS mode. Why?, after all many BASIC programs can be changed to work just by changing *DRIVE to the equivalent *DIR command.

The software is designed to be used alongside the radio series of the same name, and as such is pure courseware.

I gave the package to a Craft Design and Technology (CDT) teacher for review, and the following edited comments are his.

"The Bus Game is based upon the effective use of information to solve problems in running a bus company. I found putting in the information a little tedious. It was good for the 'hands on' experience it gave, and it

brought home sensible utilisation of money, time and scheduling.

"An Adventure Of Sorts uses physical statistics as the basis for an adventure game in which various physical logical and technological problems have to be solved. Generally entertaining and well thought out. My children and I enjoyed playing it very much.

"Pack-It highlights problems encountered in industry every day in placing boxes on pallets, and looks at the design of cardboard packaging. The program uses 3D views of various packing systems, and while there are no particular goals to achieve there are general exercises to complete.

"All the programs are well presented, with good manuals, although there is no consistent user interface throughout.

New beeb-em-ups

As mentioned last week, while I was talking to programmer Peter Scott, he outlined two new projects he's working on. The first, which should be complete as you are reading this, being *Barbarian 2*.

In this sequel you can play either character, which should please feminists (possibly) and MCPs with unnatural interests. The game is in four levels with 20-25 screens, and six monsters in each level. The biggest monster will be an earth-shattering 9 x 4 characters in size x 20 frames of animation.

As soon as that is out of the way Peter will be starting work on *Predator*.

How does he get the work? Well, as he said, 'I hit the deadlines'. Peter was also chipper about the future of the BBC games market, and he predicted it would hold up well throughout 1989. That's good news indeed for the new year.

Andrew Brown

MSXTRA

After...bomber

One game I have just received for evaluation is *Afterburner* from Activision (Mediagenic). Unfortunately, despite trying three data recorders and two copies of *Afterburner*, I only managed to load the game once. The one time it loaded was when I used my personal stereo!

Obviously the levels on the tape are wrong, as this is the first piece of software I have had loading problems with. Due to the Christmas and New Year Holidays I have been unable to contact Activision to obtain replacement copies, but I can tell you from the brief chance I had to play *Afterburner* that the MSX version is as good as, if not better than, any of the 8-bit versions. Graph-



ics are adequate rather than brilliant, but the feel and speed of the game has been well captured. If I can obtain a version of this

game that will load constantly I will be able to tell you how the game plays in later levels.

Regal blunder

In the rush to get a double-sized article for the Christmas issue, one or two errors crept in regarding the *Kings Valley 2* tips. All the codes for this game should consist of eight letters, so if you tried to enter a couple of the codes as listed, you would find that the pro-

CP/M emulator – the address

For those of you who own an MSX 2, use a Spectravideo SV1 or use the Spectravideo 80-column adaptor, I now have the address for the CP/M Plus emulator program. Write to R.V.S. Datentechnik GMBH, Hainbuchenstrasse 2, D 8000 Munchen 45, West Germany.

gram would not accept them. I apologise for this, and include some new codes for this game. They are as follows:

- For 37 lives on Level 2, type LAIPKKBK
- For 72 lives on Level 3, type DADHHMM
- For 43 lives on Level 4, type ACCCDJON
- If you want to start on a much higher level, try BIECGACK on Level 25

Also mentioned in the Christmas issue was the *Neos Mouse* and *Cheese* software. It should have said (It's a fair cop – Ed) that the *Cheese 2* software is for the MSX 2, and is available separately (most MSX 2s are supplied with mouse included).

Keith Neal



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

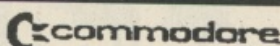
ONLY £585.00

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

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

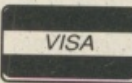
CUMANA 1MB EXTERNAL
DRIVE WITH
ENABLE/DISABLE SWITCH
FOR AMIGA

ONLY £95.00

COMMODORE HI-RES STEREO
MONITOR MODEL 1084S

ONLY 253.00

New Titles will be despatched
on confirmed date of release.



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

PERIPHERALS

Competition Pro Ex Joystick	11.50
Competition Pro 5000 Joystick	11.35
Cheetah Mach + Joystick	9.50
Cheetah 125+ Joystick	6.80
Cheetah Starfighter Joystick	11.50
Xenix Speeding Joystick	9.70
Quickshot II Plus Joystick	6.99
Quickshot II Turbo Joystick	10.55
Konix Navigator Joystick	12.50
Konix Speeding Joystick	10.20
Suncom 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. 3.5" 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)
PO BOX 49
LEYLAND LANCASHIRE
PR5 1DG
TEL: 0772 452414

All Prices include VAT &
Postage per item. Courier
Service Available

37, Seven Stars Road, Leyland.

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, PSst, 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

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 13th 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, Somerset TA11 7PY. No stamp required if posted in the UK.

YOUNG BRIGHT COMPUTER PROGRAMMERS WANTED!

To program games, graphics, software etc. on the Amiga, Atari and IBM PC compatibles.

If you have written any games we would like to hear from you as soon as possible.

For further details please telephone Michael on
(0252) 877431

or write to:

GAINSTAR

Unit 1, Rear of 7 Wellington Road,
Sandhurst, Surrey, GU17 8AW

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**

Sentient Software Ltd.

(Established 1984)

Require

In-House Programmers

Fully Conversant In At Least One of the Following:

Z-80 (Spectrum/Amstrad/ MSX)

6502 (Atari ST/Commodore Amiga)

68000 (Atari ST/Commodore Amiga)

8086 (IBM PC & Compatibles)

We Offer State Of The Art Development Systems,
Experienced Back-Up
and Good Remuneration For Your Services.

If You Are Looking For A Change, Or A Chance To Break Into The
Ranks Of Professional Programming Then Contact:

TONY FAGELMAN on 0532 791136

Or Write Enclosing Your C.V. And Examples Of Your Work To:

**TONY FAGELMAN
SENTIENT SOFTWARE LTD
BRANCH HOUSE
18 BRANCH ROAD
ARMLEY, LEEDS
WEST YORKSHIRE
LS12 3AQ**

WHAT?!!

YOU HAVEN'T BOUGHT THE MICRO MUSIC CREATOR?

The **Micro-Music Creator**, for all Amstrad CPC computers, lets you produce startling three-track musical compositions and digitised sound effects. The results can be incorporated into your own programs with the minimum of fuss. Can you afford not to get hold of a copy?

Tape £9.95, Disk £14.95, Rom £24.95

Please make cheques/PO's payable to First Byte Software. All prices include VAT & P&P

CAN ALL THESE PEOPLE BE WRONG?

THE REVIEWERS:

Friendly, packed with options... wonderfully priced. Amstrad Computer User
User-friendly, fast... easy to use. Amstrad Action
Value for money... 10 out of 10. Computing With The Amstrad

THE USERS:

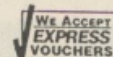
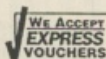
I am delighted with it. Peter Asbury-Smith, London
Very good value for money. G Waite, Leeds
Very pleased with the programs. The youngsters enjoy playing Empty Tummy. GL Palmer, Rotherhithe



**FIRST BYTE
SOFTWARE**

71 Barn Glebe, Trowbridge, Wiltshire, BA14 7JZ

Tel: 0225 765086



PSsst!

A final page stupidly handed over to cynical old hack, Private I

MEGASCOOP!

The PSsst! crossword

After weeks of research I'm delighted to present the ultimate computer crossword. You should be aware that there are absolutely NO silly clues (especially not 18 across), no giveaway answers (especially not 5 down) and most definitely no prizes beyond the enormous personal satisfaction I am sure you will feel at completing it.

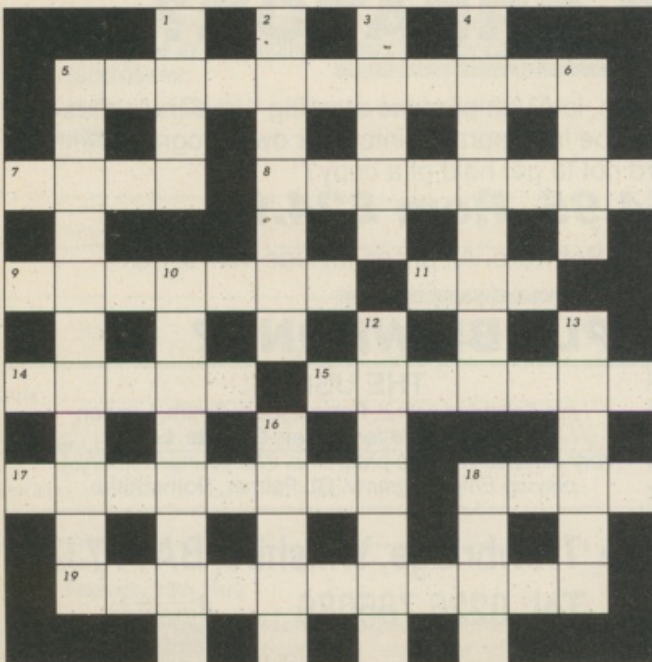
ACROSS

- 5 How Amstrad's boss disciplines his staff? No, he munches them for breakfast (5, 6)
- 7 Electronic Rats in a maze (4)
- 8 Accounting software firm is wise and cuddly (8)
- 9 Error message in naughty document (3,4)
- 11 Memory of a sheep! (3)
- 14 On following up Greek letter computer firm organises hand-held machines (5)
- 15 Graphics chip in the Amiga - b***** mess! (7)
- 17 Essential piece of wood? Both a piano and a computer have one (8)
- 18 Ha! You won't get this one. No one outside of the trade knows the first name of Electronic Art's boss, and being American, Mr Hawkins has not got the sort of monicker you could easily guess. A wee clue: it's a verb that has something to do with drugs and travel (4)
- 19 'It's for you-hoo' should be this software house's slogan - having left Comet so muddled (11)

DOWN

- 1 Japanese console firm rises over a long period of time (4)
- 2 Cast your mind back four or five years to the early ZX Microfairs, and it's from tables like these that software houses used to

- bawl out their wares (or even mix up letters) (7)
- 3 I hear I'm eager to know more about the machine that Commodore so loves to bundle so many times (5)
- 4 Behave cleverly when alternating current flips an ST over a small market (3, 5)
- 5 This type of business package is so dull (but oh so necessary) that you can have the answer without further ado. It's spread-sheet. No, it's not a trick. Imagine you've solved the anagram of 'Shape deters' if you feel the need for a challenge. Or if you prefer, it's what you do before starting a picnic (11)
- 6 It's not hard for a programmer to produce this type of ware (4)
- 10 Spot the link between International Soccer and Matchday and a popular field sport in which 22 grown men kick around a leather sphere (8)
- 12 Gamesweek categorically denies that it would ever base a review on an odd mole that's become confused (3, 4)
- 13 Nasty male tendency found in games existing today (6)
- 16 Of all the many, many thousands of Archimedes games, this one from Superior was the first (5)
- 18 A useful piece of software which, unfortunately, appears to have some sort of mildly rude meaning. But we're not going to mention that (4)



Shoot from the Lip... the week's most quotable sayings

"It's an extremely lucrative embarrassment and an anachronism. Like your Aunt Ethel it never seems to go away." Commodore on the dear old C64.

"In a hundred years' time it will become apparent that games programmers are the chimney sweeps of our generation." Industry commentator Mike Scialom on the plight of the underpaid whizz kids.

"Keep an eye out for names such as Enterprise, MSX, QL, Tandy Colour Computer and the Commodore Plus

Four. These are all among the industry's walking dead and should not be approached unless you contemplate opening a computer museum."

Geof Wheelwright of The Times dishing out some buying advice.

"About this time every year numerous organizations seeking publicity target the toy industry with sensationalist charges that garner media coverage. This year is no exception."

Nintendo's Peter Main on allegations that Nintendo games cause children to become more aggressive.

NEXT WEEK

Essential printers

Just which printers are the best for your needs? Express presents a fact-packed guide

Virgin territory

We explore the interactive computer/video package from Virgin which recreates the trek to the North Pole

Ten things you never knew...

...about programming languages. Let Express help explain away the mysteries of programming, in the company of Grey Matters

So farewell then, Alan Sugar

The mammoth Alan Sugar series comes to an end, with our very own wp William Poel looking forward to what the future holds for Amstrad

PLUS

All your favourite Express regulars, including another bumper letters section, beginners, tech tips, machine-specific columns, reviews, previews, news and all the rest - PLUS, of course, the Express crossword solution

On sale on
Thursday
January 19th
Don't miss it!

Only
48p!

520ST-FM SUPER PACK



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

£399

INCLUDING VAT

With SM124 mono monitor: £498 INC VAT

With SC1224 colour monitor: £698 INC VAT

1Mb DISK DRIVE £450 OF SOFTWARE

ARCADE GAMES

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

SPORTS SIMULATIONS

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

PRODUCTIVITY SOFTWARE

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

JOYSTICK

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

FREE ATARI BUNDLE VALUE: £458.97

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 Seiko-Sharp SR-180A 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

ONLY
£2.51
PER WEEK
RETURN COUPON
FOR DETAILS

+VAT=
£299

+ 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 1288, 1-4 The Mews, Hatherley Road, Sidcup, Kent, DA14 4DX
PLEASE SEND FREE LITERATURE ON THE ATARI ST

Mr/Mrs/Ms: Initials: Surname:

Address:

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

Postcode:

DTP ☐

AVAILABLE
NOW!

**BAD
BUDES**

VS.

DRAGONNINJA

T.M.

**DATA
EAST**

Imagine
...the name
of the game

Your Opponents in your
battle for supremacy are

four types of Evil Ninja star-throwing Assassins whose skills are manifold and dangerous. Also out to spoil your day are Acrobatic Women Warriors and vicious Guard Dogs. At the end of each level you must

SPECTRUM	AMSTRAD	COMMODORE
8.95	9.95	9.95

overcome the
Ninja Master in order to progress -
some examples of these superhuman villains
are: A fire-breathing Fat Man, an Armour

Clad Giant Ninja - who has a disconcerting habit of
suddenly multiplying into an army!

**ATARIST
19.95**

**AMIGA
24.9**

IMAGINE SOFTWARE · 6 CENTRAL STREET · MANCHESTER M2 5NS
TEL: 061 929 4422 · TELEFAX: 061 929 4422 · FAX: 061 929 4422