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Ocean steams in for the big number one - page 3

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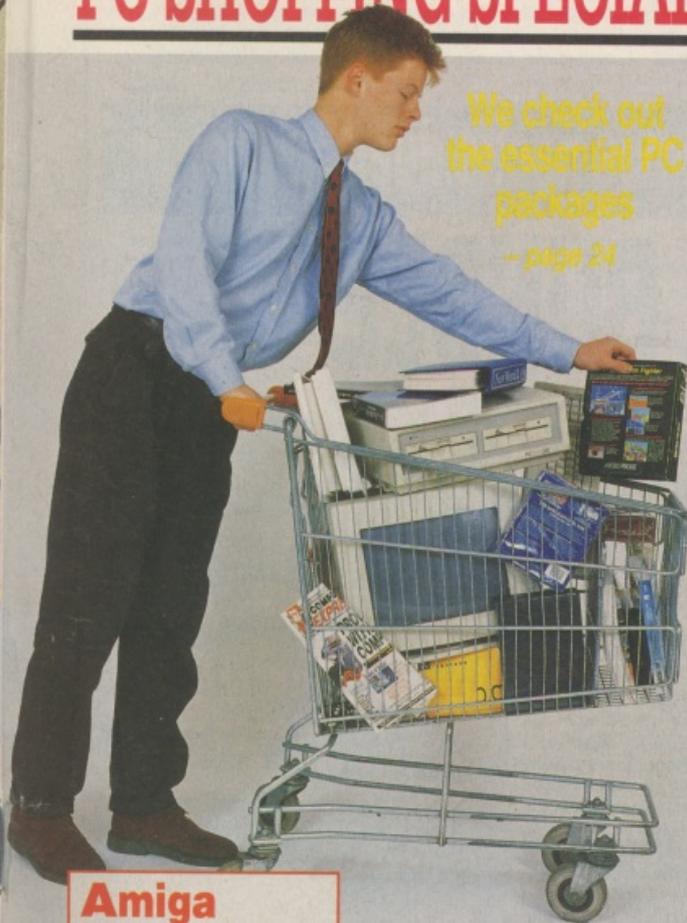


Psion organises its

first laptop

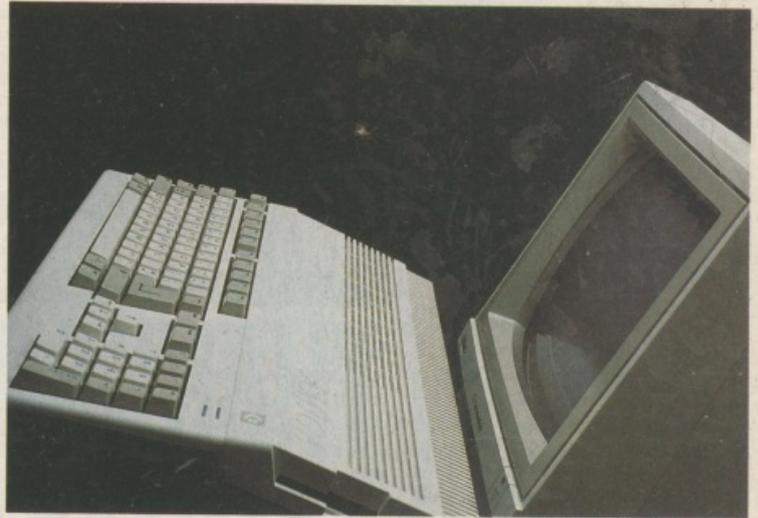
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PC SHOPPING SPECIAL



We check out the essential PC packages

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AMIGA SHOCK

Commodore surprises with new offers! - page 2

Amiga
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BBC
C64
CPC
MSX
PC
PCW
QL
Spectrum

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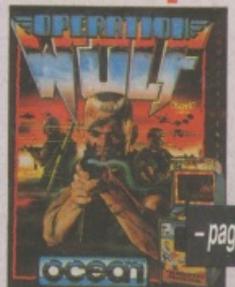


WE ARE THE CHAMPIONS?

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

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 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.

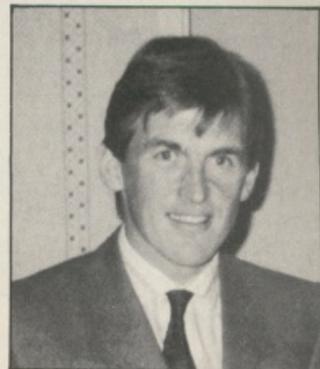
Grandslam announced that it had secured the official Liverpool licence late last year and that a game would be appearing "some time in '89". However, a small company called Video Images last week claimed that it had secured the Liverpool licence and that a budget game would be appearing by Easter.

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!

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 1Mg 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



• Amiga: Two bundles due

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 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*.

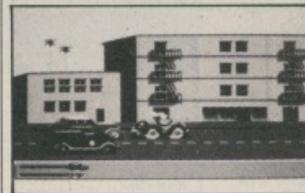
"It's nice to win the top spot and it makes all the overtime worthwhile," said Ocean's Tracey Crook. "But we didn't get any personal satisfaction out of kicking US Gold off the top."

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

GAMES TOP TEN BUDGET

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

COMPILED BY GALLUP

NE - new entry
RE - re-entry

CLIK AMIGA SPECIALISTS

CLIK CHRISTMAS PACK 1 £395.00
 CLIK CHRISTMAS PACK 2 £410.00

TITLE	HOUSE	S.S.P.	OUR PRICE
Aaargh	Melbourne House	19.99	13.50
Adventure Con Set	Electronic Arts	29.99	20.50
Alien Syndrome	Softtek	24.99	16.50
Annals of Rome	P.S.S.	24.99	16.50
Arcade 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	24.99	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
Battleships	Elie	19.99	13.50
Bermuda Project	Mirrosoft	24.99	16.50
Better Dead Than Alien	Elektra	19.99	13.50
Beyond the Ice Palace	Elie	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	Elie	24.99	16.50
Bubble Bobble	Firebird	19.99	13.50
Bubble Ghost	Ere Int.	19.99	13.50
Buggy Boy	Elie	24.99	16.50
Capone	Actionware	29.99	19.50
Carrier Command	Rainbow Arts	24.99	16.50
Championship Golf	Gamesart	17.99	13.50
Chessmaster 2000	Electronic Arts	24.99	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	24.99	13.50
Craps Academy	MicroIllusions	24.99	16.50
Crash Garret	Infogrammes	24.99	16.50
D.Thomps Olympic Challenge	Ocean	24.99	16.50
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Deja Vu	Microscope	29.99	19.50
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Ebonstar	MicroIllusions	24.99	16.50
Elf	Ocean	24.99	16.50
Emerald Mines	Tynesoft	14.99	10.25
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Enlightenment	Domark	19.99	13.50
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Firepower	MicroIllusions	24.99	16.50
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Football Manager II	Addictive	19.99	13.50
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Fortress Underground	Anco	14.99	10.25
Fusion	Electronic Arts	24.95	17.50
Garrison II	Rainbow Arts	24.99	19.50
Gee Bee Air Rally	Activision	19.99	13.50
Geysberg	S.S.I.	29.99	19.50
Giganoid	S.C.A.	14.99	10.25
Ice Hockey	Mindscape	24.99	16.50
Ikari Warriors	Elie	24.99	16.50
Interceptor	Electronic Arts	24.95	17.50
Indicon	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
Kampfruppe	S.S.I.	29.99	22.50
King of Chicago	Mirrosoft	29.99	19.50
Lancelot	Level 9	19.99	13.50
Leatherneck	Microdeal	19.99	13.50
Leatherneck 4 Player Adapter	Microdeal	5.50	4.50
Legend of The Sword	Rainbird	24.99	16.50
Major Motion	Microdeal	19.99	13.50
Marble Madness	Electronic Arts	24.95	14.50
Mean 18	Accolade	24.95	17.50
Menace	Pygnosis	19.99	13.50
Mindfighter	Abstract	24.99	16.50
Moon Man	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
Ohello	Robtek	9.99	5.50
P.O.W.	Actionware	29.99	19.50
Pandora	Firebird	19.99	13.50
Passengers of The Wind	Glens	24.99	13.50
Phalanx II	Anco	14.99	10.25
Phantasia III	S.S.I.	24.99	19.50
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Platoon	Ocean	24.99	16.50
Plundered Hearts	Infocom	29.99	17.50
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Return to Atlantis	Electronic Arts	24.95	17.50
Return to Genesis	Firebird	19.99	13.50
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Romantic Encounters	MicroIllusions	24.99	16.50
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Scrapshoper	Players	14.99	10.25
Sargon III	Sublogic	19.99	13.50
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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	24.95	10.25
Shadowgate	Mindscape	24.99	16.50
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Sinbad and The Throne of Falcon	Mindscape	29.99	19.50
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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	24.95	17.50
Starry	Logotron	24.99	16.50
Stir 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
Strikeforce Harrier	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.S.P.	OUR PRICE
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Summer Olympiad	Tynesoft	19.99	13.50
Swooper	Robtek	19.99	13.50
Tanglewood	Microdeal	19.99	13.50
Temple of Apshai	U.S. Gold	24.99	19.50
Terrapods	Pygnosis	24.99	16.50
Tetraquest	Microdeal	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	Time	19.99	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
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World Darts	Mastertonic	14.95	10.25
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Chronoquest		29.99	19.50
Battle Chess		24.99	17.50
Basketball		19.99	13.50
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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
Thunderblade		24.99	16.50
Mini Golf		24.99	16.50
Elite		19.99	13.50
Helibent		19.99	13.50
UMS		24.99	16.50
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Eliminator		24.99	16.50
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Arkanoïd II		24.99	16.50
Computer His 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		19.99	13.50
Chackie 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		24.99	16.50
President is Missing		19.99	13.50
Maria Whittaker's Xmas Box		14.99	10.25
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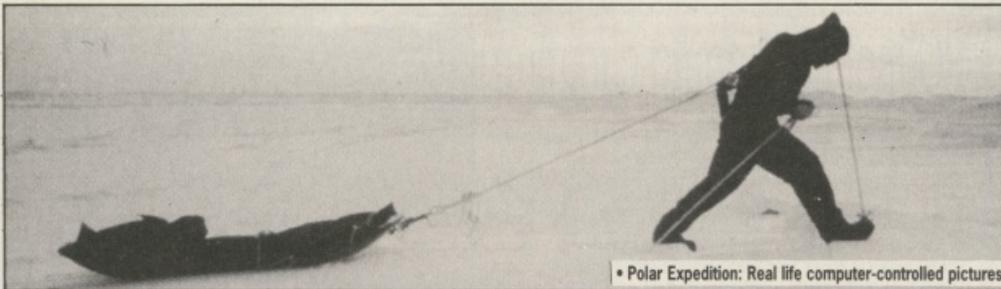
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• Polar Expedition: Real life computer-controlled pictures

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 RMLL 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.

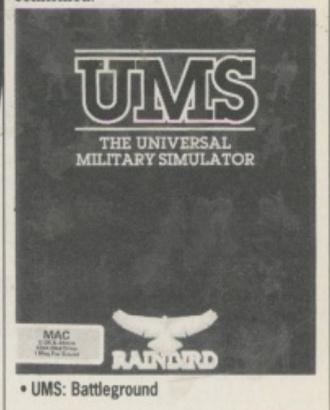
The game is sourced from Iowa-based Intergalactic Development but is published by Rainbird. However, the follow up, *UMS II*, is to be sold around the world by Birmingham-based US Gold.

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 Esra 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.



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.

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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*.

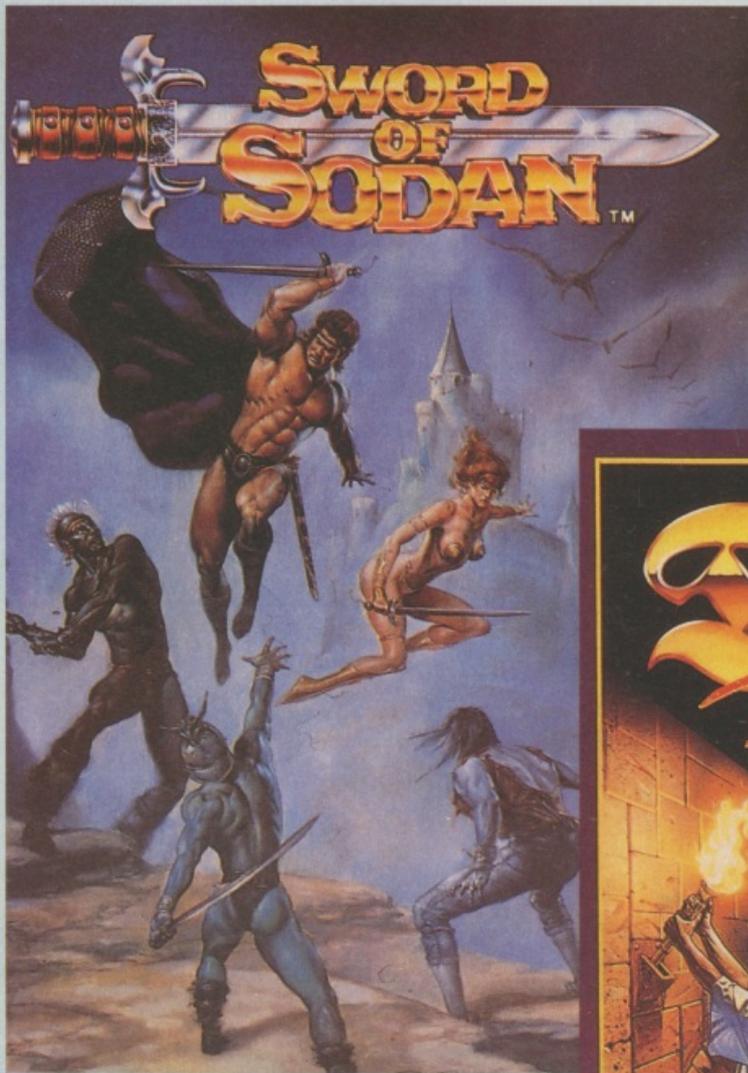
"Despite problems in the past Basic is still the best language to learn on and you can use that experience with other languages," said HiSoft's Andy Pennell.

"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.



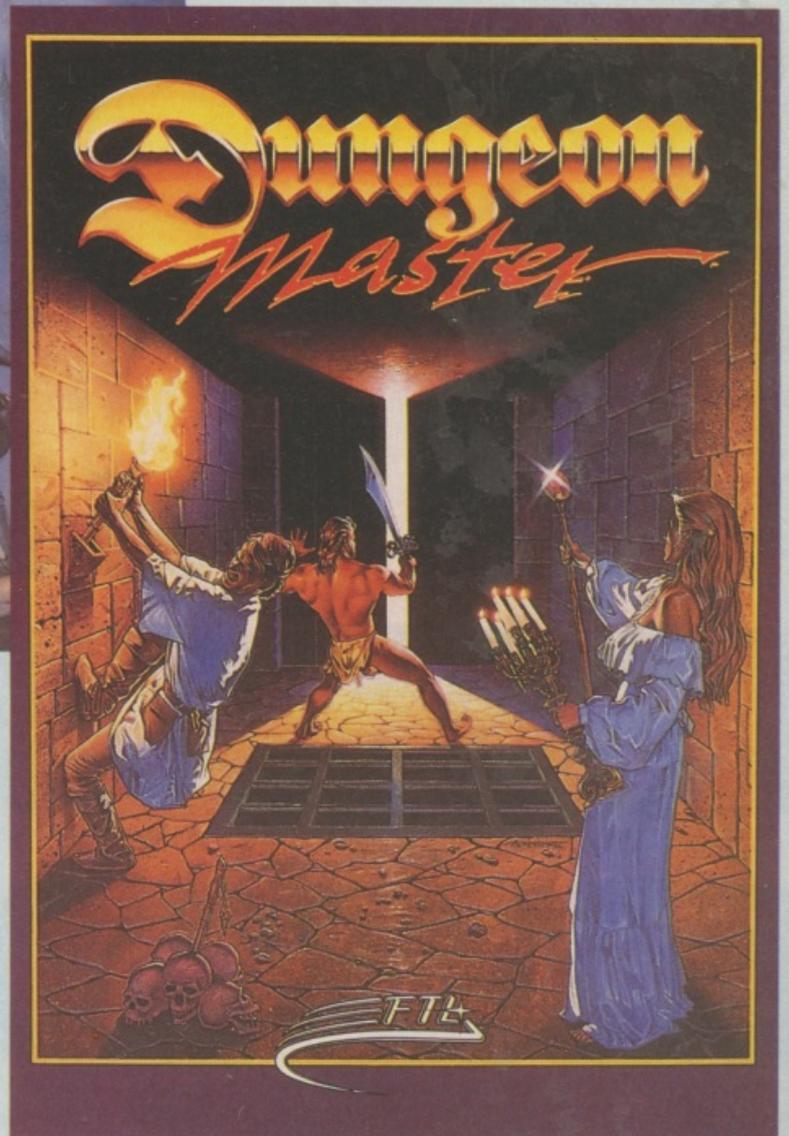
• HiSoft Basic: Sparring with GFA

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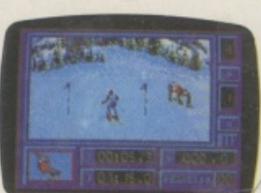
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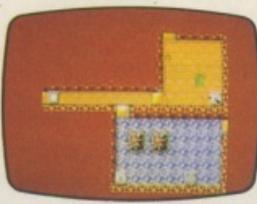
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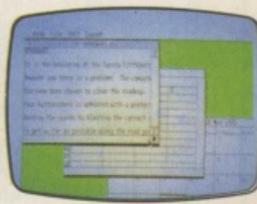
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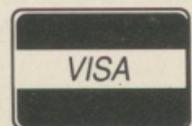
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16 BIT CENTRE

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

Mystery
WINNER
prize

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.

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-biters... 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

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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 any way 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

?sdrakcab sgnit gnitnirp 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 cross.**

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

XThis 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 neglectfully 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

XThough 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

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...

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

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.

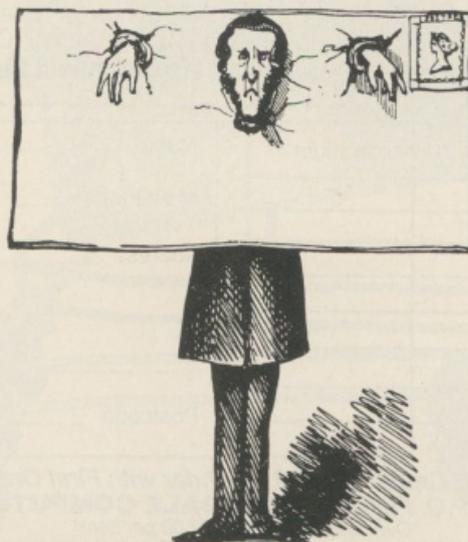
Both games are very good considering that they are written in Basic.

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 whit: R-Type on the *Spectrum*.



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

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 **Protex** (£60, Armor, 0733 239011). *Protex* 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, **Multewriter 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, *Multewriter 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!

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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 analyster. 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.)

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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 overheats" tale doing the rounds in autumn '86. The machines were said to be incapable of supporting certain types of power-hungry networking cards.

The story 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 backlight 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



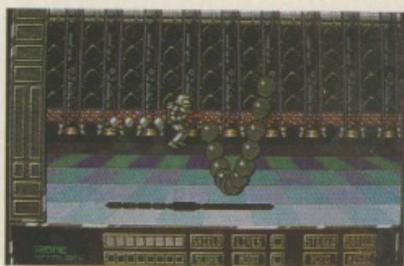
BILLIARDS SIMULATOR INFOGRAMES

Out on the ST later this month is the first Billiards sim we know of, from French graphic geniï 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

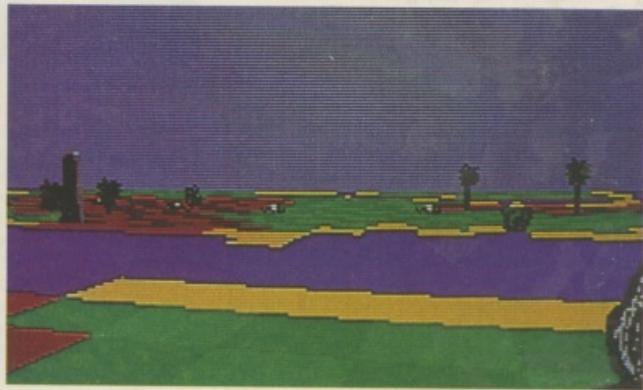
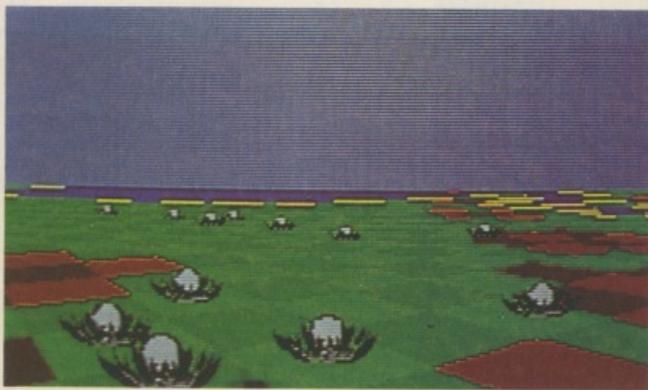
A varied five-stage multi-directional blaster featuring parallax scrolling and interstage animated graphic sequences that include 40 on-screen colours at any one time, *Guardian Moons* certainly sounds superior. With an additional level called *Ridiculous* - a complex demo of animated horizontal scrolling - 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, interdicator 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.



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"
```

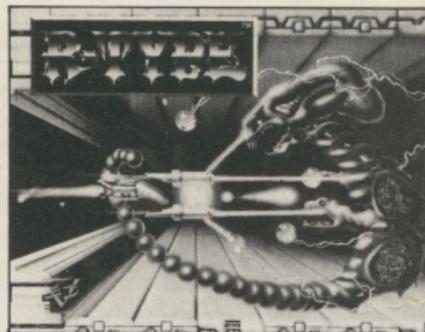
Spectrum owners wanting to take a shot at the last level of *Op Wolf* can do so by loading the 128K version in 48K mode. Strangely, the program runs - and starts on level six!



● 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
90 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
```

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

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

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
```



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

Zak McKraken 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

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	Psygnosis/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	Psygnosis/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	Silmarils
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!	D	24.99	End Jan	Rainbird
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ARCHIMEDES

Fish!	D	24.99	End Jan	Rainbird
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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	Psygnosis/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	Silmarils
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
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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	Silmarils
Rack'em	5.25	24.95	Out Now	Accolade/EA
Speedball	3.5+5.25	24.99	January	Image Works
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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!	D	34.99	End Jan	Rainbird
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MSX

The Munsters	T	9.99	Out Now	Again Again
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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
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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

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ZAK McKRACKEN

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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, microbes turning into space shuttles...

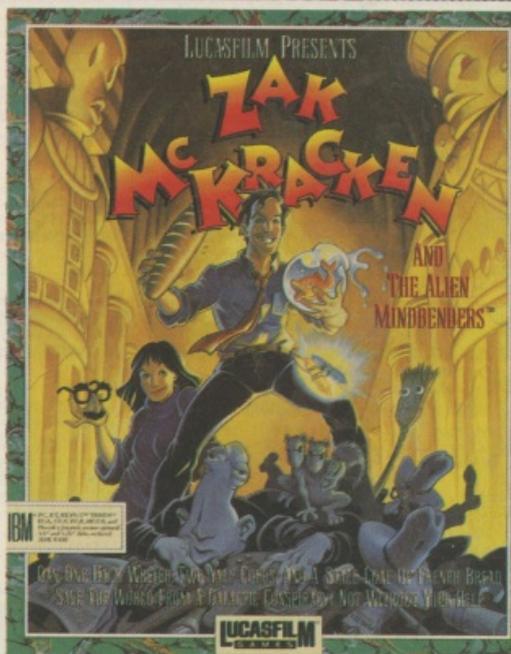
● **GRAPHICS AND SOUND**

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**

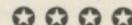
The C64 version has a good standard of audio-visuals – with the ST and Amiga versions promising substantial improvements in the audio departments and superior visuals (or course!).



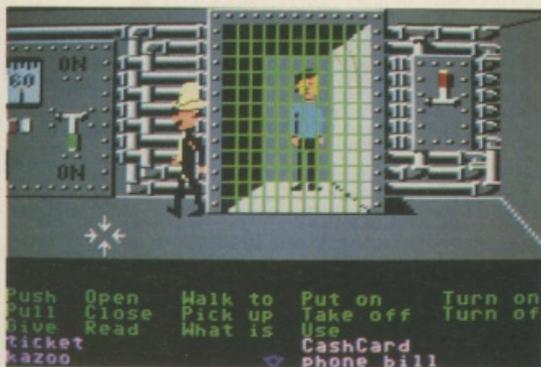
Are you good (bad) enough to be a *Sunday Sport* type hack?

● **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.

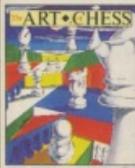
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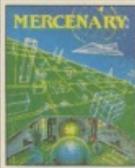
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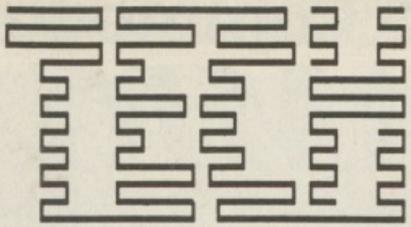
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If so, which one do you own?



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 Digitask 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.

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



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+] = JSR$A659 - initialise Basic [L][CBMS][CBMM] = JMP$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.

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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.

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 A500: 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

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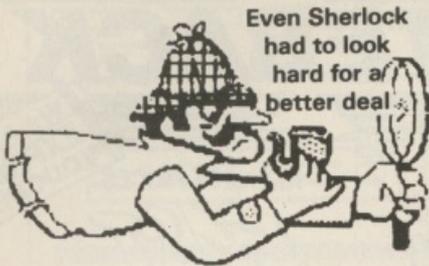
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The word

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 keypress 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

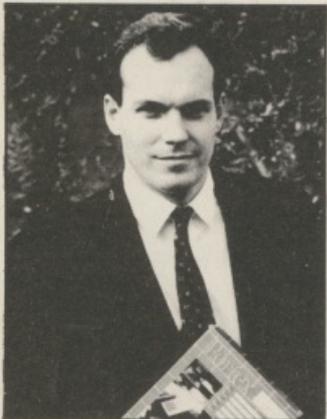
Join the Professionals

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 BASIC 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

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Motorola 68000 Programmers Reference Manual (Motorola)	£9.95p
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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, Incognito, 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 *VideoScope 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.

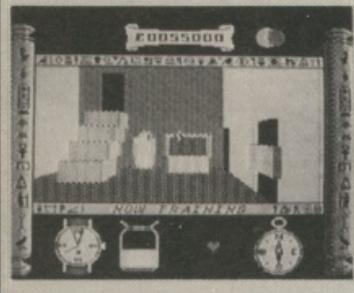
In the dark

Call me a square, stick-in-the-mud, party-pooing 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 Filmmation* (Knightlore, 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 Specky 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 Specky 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 Specky, 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 Specky 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?

Specky 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

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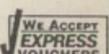
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SECTOR 64 SECTOR

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

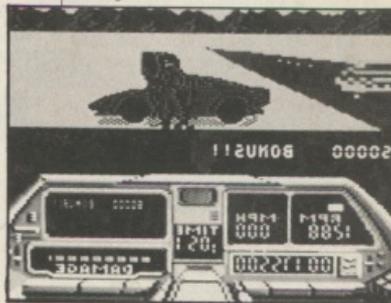
If you have entered the data incorrectly the program will tell you. Lines 200-270 are the data for the inertia of the wiggle. You can change it yourself, making sure you stay inside the data boundaries. Wiggle effect is also like the ripple effect on water. The program runs under Interrupt, so you can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

1989 releases

Hot C64 games heading your way this year are:

Technocop • Gremlin

Due out any day now, Technocop 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.



• Technocop: Due soon

Bob's Full House • Dornak

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=0T069: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<-9075 THENPRINT"DATA ERROR":END
180 B=49408
190 FORL=0T050: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=0T050: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
```

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- 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.

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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 the 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

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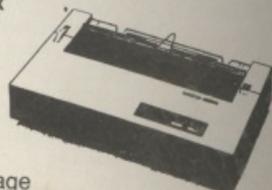
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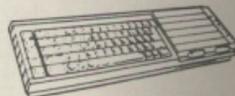
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New Office

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

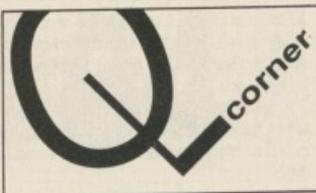
Ten things you never knew about PCWs:

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 thoughts 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

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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.

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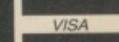
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BEEB BOX

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 character 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 LAIPPKBK
- For 72 lives on Level 3, type DADHHMMM
- 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



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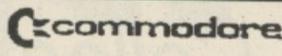
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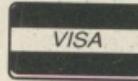


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PSsst!

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.

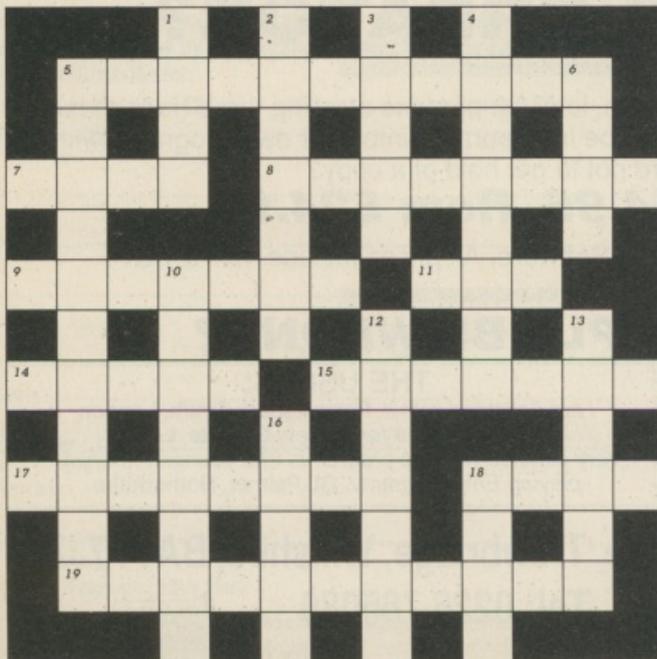
ACROSS

- 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* dish-ing 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

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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

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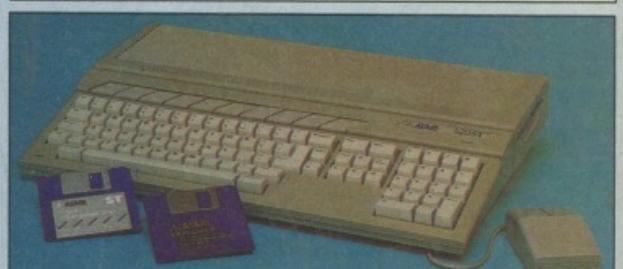


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